NOTICE

Please note that this bid from IQ Business Group Inc. for STO2000000002 was received at the Purchasing Division office prior to the established bid opening date and time on January 13, 2020. The bid was properly stored with the other bids. However, at the time of the bid opening, the time stamp was not affixed to the box that contained the bid.

Samantha Knapp

Samantha Knapp

Acting Assistant Purchasing Director

ORIGINAL

Technical Proposal

West Virginia State Treasurer's Office

Comprehensive Records Assessment Consultant

Solicitation No.: CRFP STO2000000002

Due 01/13/2020 @ 1:30 P.M.

1410 Spring Hill Road, 4th Floor
McLean VA 22102
DUNS: 173064267, TIN: 04-3581891
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Submitted to:

Bid Clerk
Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305

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Cover Letter

January 13, 2020

State of West Virginia
Melissa Pettrey
Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305

Subject: Solicitation No. CRFP STO2000000002 Comprehensive Records Assessment Consultant – Technical Proposal

Ms. Pettrey,

The IQ Business Group, Inc. (IQBG) is pleased to submit this response to the State of West Virginia, Department of Administration, on behalf of the West Virginia State Treasurer's Office, for Solicitation No. CRFP STO2000000002 Comprehensive Records Assessment Consultant. Clearly, based on the issuance of this RFP, the Agency realizes the importance of a well thought out, designed and implemented Enterprise Records Management (ERM) program; and, understands that the challenges related to document and records storage, retrieval, version control, protecting confidential and vital information, record holds, and retention and disposition management are not trivial ones.

Founded in 1998, IQBG is a leading provider of Enterprise Content and Records Management (ECRM) solutions to highly-regulated industries and the public sector. Our core competencies include enterprise content management (ECM), enterprise records management (RM), information governance (IG), business process improvement, and litigation or public record discovery and response. Our subject matter experts (SMEs) and engineers combine industry intelligence with leading technologies to provide best practice, end-to-end records lifecycle management, and organization/change/program management.

There are many ways in which IQBG differs from the competition beyond our large number of satisfied clients. IQBG's ECRM practice is comprised of some of the industry's leading content and records management authorities. Our people helped write professional certification training materials for the Association of Information & Image Management (AIIM), have served as the former US technical expert to the International Standards Organization (ISO), chaired AIIM's Emerging Technologies committee, have served on the AIIM and ARMA Boards, and teach Records Management related courses at various universities. IQBG professionals are frequently asked to write articles for numerous periodicals and speak at industry conferences.

Of significant relevance to the Agency, IQBG personnel developed the ERM Assessment methodology adopted by AIIM as its industry standard. IQBG is proposing to use this same methodology – called our ERM/ECRM High-Level Assessment (HLA) – to perform the requested professional services for the Agency that will provide the Agency with a detailed roadmap for records retention and handling; an improved retention schedule; a change management policy related to records; an action plan to implement the ERM program; delivery of staff training requirements; policy recommendations to guide the modernization of the records program.

The HLA accomplishes all deliverables specified in the Agency's RFP scope of services including assessing the feasibility and benefits from acquiring a records management software solution. IQBG's has performed our proposed HLA for many clients, including over thirty (30) State and Local Government clients similar in size and requirements scope to the Agency's project. IQBG's HLA is a direct match for the scope of work defined and the deliverables requested in the Agency's solicitation. As our consultants reviewed the Agency's RFP, we were pleased with how directly your requested deliverables matched our proven HLA methodology and approach.

The team members being proposed for the Agency's project are the same team members that have completed multiple ERM Assessment projects over the last several years. We believe our proposal reflects our competence to perform the required services requested in the Agency's RFP, as evidenced by our proven methodology; our team's training, education, experience and overall knowledge of ERM/ECRM; how well our HLA – ERM/ECRM Assessment methodology matches the Treasurer's Office requirements; and, how well our similar ERM/ECRM Assessment and Roadmap engagements have gone with many similar clients.

IQBG is recognized in the industry as a top unbiased ERM/ECRM advisory services firm with deep government sector experience. Important to the Agency when it comes to recommending ECRM solutions that might be a good match to Agency ERM requirements, IQBG has been involved in nearly $5B of ECRM procurements for clients in the public sector (including the IRS, U.S. Postal Service, U.S. Department of the Interior) and private sector (including Coca-Cola Enterprises, American Express, Intel).

Without knowing your budget requirements, we have done our best to scope a proposal that delivers all requested deliverables with a high value to cost ratio. However, we consider our client projects as teaming engagements (as evidenced by the long-term nature of our client relationships), and we can suggest ways to reduce the budget by sharing responsibilities, streamlining deliverables or eliminating those not specifically requested, and working as more of a guide to the Agency if that approach is desired.

IQBG is very excited about the Agency's strategic ERM initiative. We look forward to having an opportunity to discuss our proposal with you and Treasurer's Office representatives; and, would welcome the opportunity to participate in Oral Presentations if the Agency determines that is appropriate. If you have any questions, please do not hesitate to contact us.

We look forward to being given the opportunity to work with the State of West Virginia and the Treasurer's Office, and we welcome any questions you may have.

Respectfully,

Eric Wadsworth
Chief Executive Officer (CEO)
The IQ Business Group, Inc.
857-277-4870 | ewadsworth@iqbginc.com

1.0 Introduction

IQBG commends the Agency's desire to implement an Enterprise Records Management (ERM) program to support a formalized, agency-wide approach to governance, storage, retention, retrieval and appropriate disposition (destruction, archival, permanent storage) of physical and electronic records and documents. IQBG supports this vision and envisions a comprehensive ERM solution that supports end-to-end governance and the automated management of records.

Records management is the systematic control of all records (regardless of storage media) from creation or receipt through processing, distribution, use, retrieval, and maintenance to their ultimate disposition. The policies, procedures, and rules that govern the control of records comprise a records management program.

A comprehensive program addresses all aspects of records management for the Agency, thereby providing maximum cost efficiency. Although records management is not an organization's primary mandate, it adds significant value. Increases in efficiency, compliance, and economy resulting from the application of procedural controls on the creation, flow, distribution, use and disposition of information provide the institution with valued savings in staff time, litigation costs, and overall budget. When decision-makers are not aware of the benefits, they treat records management as an administrative expense and abdicate responsibility for records management to the department level.

When RM is integrated tightly with every day processes and tools (including O365, and digital content stored on Windows Servers), staff do not have to take extra steps to declare records, manage retentions, archive records to a secondary system, search multiple places for a comprehensive set of documents to support operations and decision making, learn multiple platforms, deal with much redundant and duplicative storage and timely processes to archive inactive records.

In an appropriately designed approach, Treasurer's Office staff should simply store business records in a standardized taxonomy and RM rules behind the scenes, including predefined disposition events (such as case closed, contract ended, policy superseded – determined by metadata or standard naming) will drive retention and disposition actions.

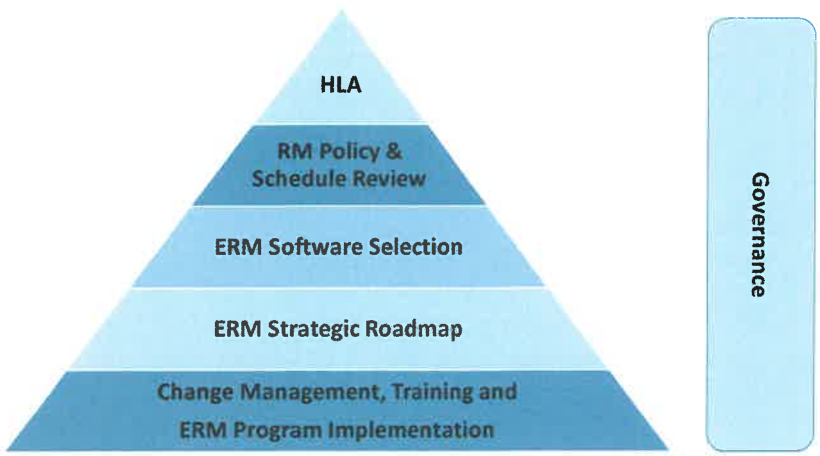
IQBG uses very senior consultants to support the discovery phase, with the results in terms of assessment and recommendation quality invaluable for building the appropriate basis for the Agency's ERM program. In addition to determining the actions necessary for implementing a strong ERM program, and developing an ERM program roadmap, the Agency will be provided recommendations for an ERM solution that best meets its unique requirements based on industry best practices. The developed ERM Strategic Roadmap and solution recommendations will be based on a comprehensive set of Agency requirements. If the feasibility of an automated ERM solution is supported by the assessment, IQBG will deliver a draft ERM/ECRM RFP and requirements matrix to support the agency's solicitation. The draft RFP will be delivered within the fixed price cost proposed for the Agency's Discovery, Assessment and Roadmap project.

IQBG consultants understand that the benefits and requirements of the records and information management program must be communicated to all employees from the top down, and we make change management related and on-going communication a significant part of our engagement through our proven methodology and approach, and our facilitation of heavy user participation; and, we include change management and communication tasks on the Agency's ERM roadmap.

IQBG is proposing that we use a tailored version of our High-Level Assessment (HLA) to perform the requested Records Management Consulting services that will provide the Agency with a detailed roadmap for records retention and handling; an improved retention schedule; a change management policy related to records; an action plan to implement the ERM program; delivery of staff training requirements; policy recommendations to guide the modernization of the records program. (**please see Section 3.1 for more details related to the HLA process and approach**).

IQBG has used our proven HLA methodology and approach to assist tens of satisfied clients in their assessment of ERM/ECRM requirements, the development of an ERM/ECRM program roadmap, and the selection of ECRM/ERM software (when appropriate) that best meets those requirements. IQBG consultants, as they reviewed the Agency's RFP, were pleased with how well the RFP deliverable requirements matched our HLA methodology. IQBG's HLA methodology (as shown in Figure 1.0-1) produces all deliverables requested by the Agency.

FIGURE 1.0-1. IQBG'S HLA STANDARD METHODOLOGY



The business processes analyzed during the HLA will be documented and redesigned to support end-to-end records management and so that they can be converted to representative evaluation use cases; and the requirements gathered can be quickly converted to a comparison matrix to use for vendor evaluations. IQBG will guide the Agency's ECRM/ERM vendor selection and procurement process if appropriate. **IQBG has more source selection experience than all our competitors – combined.**

Because the IQBG personnel proposed for the Agency's Comprehensive ERM Assessment Project have used our HLA approach and proven methodology for numerous state and local government clients like the Treasurer's Office, we are able to anticipate and avoid problems, minimize risk and maximize success. We understand what information needs to be gathered to review records policies and schedules, to develop new policies to deal with the many different types of records that organizations like the Agency now need to manage, to bring outdated schedules up-to-date, and to make ERM Program enhancement recommendations based on industry best practices and IQBG's years of RM program design and implementation experience.

IQBG consultants have been leaders in the market place in terms of developing strategies for effectively managing an organizations' paper and digital records; and, team members proposed for the Agency's project average more than 20 years of experience implementing and enhancing

ERM programs each. Adding another success factor for the Agency's project, the project team members proposed to the Agency have worked together as a team on many similar projects (**Section 2.1.3.1 presents bios for each of the team members proposed for the Agency's ERM project**).

IQBG believes we are an excellent and unique match for the services requested in the Agency's RFP for consulting services related to an ERM Assessment, Strategic Roadmap, and possible ERM software solution recommendation/selection - to implement a comprehensive ERM program for the State of West Virginia Treasurer's Office. Our competence to perform the required services is indicated by the technical, educational and experience qualifications of the team we are proposing; and, the many similar projects that we can reference that demonstrate our thorough knowledge of ERM (**please see representative projects in Section 2.1.2 and references in Section 2.1.4**).

IQBG is very excited about the Treasurer's Office strategic ERM initiative; and, we feel that our years of experience helping other clients similar to the Agency (**see more detail on our qualifications in the next section – Section 2.0**) make us a very good match to the Agency's requirements. We look forward to having an opportunity to discuss our proposal with Treasurer's Office and State of West Virginia representatives.

2.0 Qualifications and Experience (RFP 4.3)

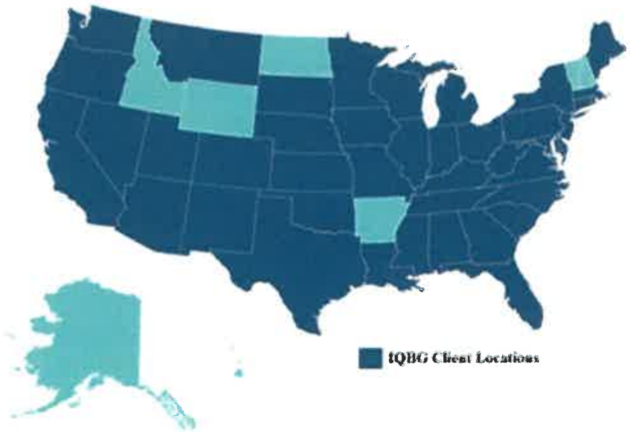
Headquartered in McLean, Virginia, IQBG has approximately 65 employees positioned across the United States (US). IQBG was founded in 1998 to provide business and information technology (IT) services to government and commercial customers. In 2010, IQBG made a strategic decision to focus solely on delivering enterprise document, content and records management solutions (and related technologies). While these solutions were always a part of our services portfolio, they were merely some of the many services offered. Since redefining our focus, we have made significant investments to expand our capabilities around Enterprise Records Management (ERM) and Enterprise Content and Records Management (ECRM) programs and software solutions specifically.

IQBG is led by experienced ERM/ECRM practitioners that have invented technologies, set standards, and helped build the industry. We understand how to redesign business processes to take advantage of source capture of content and optical/intelligent character/intelligent document recognition (OCR/ICR/IDR) technologies to eliminate the need for keying information, automated workflows to support more efficient and effective review and collaboration processes, and integration with existing systems to achieve faster return on investment (ROI). IQBG solutions help customers become more efficient and profitable; and, to raise levels of records management compliance, through the design and implementation of best practice records management programs, process improvements and the provision of best-in-breed technology.

We have worked with leading ECRM vendors to implement solutions, including the integration of e-forms and capture technologies and records management (RM) systems within ECRM suites or third-party tools; we have helped organizations realize substantial cost savings while raising service levels by streamlining their business processes; and our engineers have migrated terabytes of content from legacy to new environments without compromising data integrity or security.

IQBG is a primary Information Governance, ERM and ECRM advisor to private sector clients and federal, state & local governments throughout North America. In fact, we have been involved in nearly $5B of ERM/ECRM procurements and have guided projects for clients in the public sector (including the US Department of Transportation, Internal Revenue Service, Pennsylvania Retirement Systems, Virginia Department of Environmental Quality, and North Carolina Department of Transportation) and private sector (including Wachovia, Verizon, Coca-Cola Enterprises, American Express). Figure 2.0-1 shows the states in which IQBG has assisted state and local government clients with ERM/ECRM related consulting.

FIGURE 2.0-1. IQBG ERM/ECRM PROJECTS



IQBG developed the industry's first ERM/ECRM assessment and strategy methodology. Our people are not only well versed with the latest ERM/ECRM functionality and industry best practices but are respected thought leaders in the field of Information Governance and ERM/ECRM. Our recent projects have addressed many leading-edge ERM/ECRM issues including "big bucket", "Capstone" and flexible records (as defined by NARA) scheduling, autoclassification of records, Freedom of Information Act and eDiscovery response, email archiving, transparent records declaration, SharePoint / ECRM integration, enterprise taxonomy design, and social media records management.

ERM/ECRM Services. IQBG provides services relating to virtually every aspect of Enterprise Content and Records Management, from advising on strategy and governance, to performing needs assessments, to developing policies and procedures, through acquisition, implementation and on-going support. IQBG's ERM/ECRM services include records management inventories and audits, retention plan development, retention plan simplification using new industry practices such as flexible scheduling and the "big bucket" approach, the development of policies and procedures, the analysis to link business process with records declaration, Information Governance Maturity Assessments, the design of ERM/ECRM Programs to guide increased compliance, and the implementation of automated document management and records management systems.

Our needs analysis efforts include cost justification, procurement services, as well as implementation assistance and oversight services. Our design and audit experience is heavily focused on large, complex systems. Because many of our designs are for systems costing over $5M, vendors work very hard to keep us informed about emerging technologies. Our first-hand knowledge of vendor bid strategies is very helpful when we negotiate contracts for our end-user customers.

Clients. IQBG has worked with numerous commercial and government organizations in various operations and across most industry sectors. Our clients include some of the world's leading companies including Verizon, Campbell Soup, Intel, Coca Cola Enterprises, and Wachovia. In addition to numerous State and Local governments across North America, among our public sector clients are the U.S. Department of the Interior, U.S. Department of Transportation, the General Accountability Office (GAO) and many other agencies. The graphics on the next page display some of our satisfied public and private sector customers.

FIGURE 2.0-2. IQBG PUBLIC SECTOR EXPERIENCE

FIGURE 2.0-3. IQBG COMMERCIAL EXPERIENCE

2.1 Qualifications and Experience Generally (RFP 4.3.1)

RFP 4.3.1 Qualification and Experience Information: Vendor should describe in its proposal how it meets the desirable qualification and experience requirements listed below.

The combination of our ERM/ECRM experience and the fact that IQBG has helped governments throughout the US with their ERM/ECRM program projects provides us with the appropriate understanding of the unique challenges faced by the State of West Virginia Treasurer's Office.

The partial list of IQBG's State Government ERM/ECRM clients includes:

- North Carolina Department of Transportation
- Washington Department of Transportation
- Washington Department of Ecology
- Kansas Department of Transportation
- Pennsylvania Retirement Systems
- Ohio State Teachers Retirement System
- California State Teachers Retirement Systems
- Michigan State Housing and Development Authority
- Mississippi Department of Finance and Administration
- New Jersey Department of Transportation
- Tennessee Comptroller of the Treasury
- Virginia Department of Transportation
- Virginia Department of Health
- Virginia Department of Juvenile Justice
- Virginia Department of Environmental Quality
- Virginia Department of Taxation
- Virginia Department of Health Professions
- Virginia Retirement System
- Virginia State Corporation Commission
- Virginia Information Technologies Agency
- Virginia Enterprise Application Program
- Virginia State Bar
- Virginia State Board of Elections

IQBG's local government ERM/ECRM clients include:

- Raleigh, NC
- Union County, NC
- Wake County, NC
- Orange County, NC
- Spotsylvania County, VA
- Albemarle County, VA
- Chesterfield County, VA
- Hanover County, VA
- Fairfax County, VA
- San Diego County, CA
- Orange County, CA
- City of Tempe, AZ
- City of Philadelphia, PA
- City of Virginia Beach, VA

- Clark County, NV
- Howard County, Maryland
- Wayne County, Michigan

IQBG was awarded the GSA SmartBUY contract for content and records management making us the mandatory source of these services within the federal government space. We were also responsible for the ECRM implementation at Camp Victory in Iraq.

The IQBG's US Federal government ERM/ECRM clients include:

- US Department of Transportation
- US Department of State
- US Department of Defense
- US Department of Justice
- US Department of Energy
- US Department of Agriculture
- US Department of Education
- US General Accountability Office (GAO)
- US Department of the Interior
- US Internal Revenue Service
- US Forest Service
- US Architect of the Capitol
- US Senate

IQBG has vast experience with ERM/ECRM-related consulting, ERM/ECRM Program design and implementation, and with providing oversight to ERM/ECRM Programs and ERM/ECRM software deployments. Most recently we assisted the US Forest Service with the implementation of a central ECRM platform to handle the secure storage of images and documents, and to apply records management rules and retention policies. This project involved the management of an ECRM program that included integration of multiple content repositories, a design that would consolidate them over time, and the use of automated tools to perform content and metadata migration to the new ECRM platform. IQBG assisted the Forest Service with a review and update of its records schedules, its policies and procedures, its design of file plans and the mapping of metadata and records management structure and functionality.

IQBG provided design expertise and project oversight for the Virginia Department of Environmental Quality (VA DEQ) ECRM project that included migration from an older imaging system and enterprise taxonomy development. The VA DEQ project earned the Governor's award for "IT as an Efficiency Driver."

IQBG Culture – gather the best people from around the World. IQBG recognizes that our clients want ERM/ECRM services and solutions built around their unique needs and provided by a team of professionals with deep expertise related to industry best practices and approaches and methodologies proven through actual project experience. We believe that our clients' requirements translate into the IQBG approach to building our consulting team: gather the best thinkers related to ERM/ECRM from around the world and then deliver solutions locally. With a vast base of intellectual capital and staff that bring years of experience and a thorough knowledge of industry best practices, we have built a professional services company to achieve these important ERM/ECRM-related goals.

Experienced People. Our personnel are exceptionally experienced – they have an average of more than 20 years of experience each. They have worked on numerous functional applications in the public and private sectors. IQBG professionals are frequently asked to speak at industry conferences, author white papers, contribute to analyst reviews, and to develop and document industry standards and certification requirements.

ECRM Industry Clout. We work very closely with trade associations such as Association for Information and Image Management (AIIM), Association of Records Managers and Administrators (ARMA), The Association for Work Process Improvement (TAWPI), and the Workflow Management Coalition (WfMC). In fact, many of our staff has held offices at local and national levels within these associations.

IQBG consultants carry considerable clout in the industry, allowing us to gain leverage over vendors and get the best value for our customers. Our people appear on the mastheads of many document-related publications in the industry, and have also appeared in such publications as Forbes ASAP, PC Week, and USA Today.

Standards. As members of industry associations, IQBG staff have worked diligently to craft many of the standards established in the realm of content and records management.

Highlights of IQBG certifications and qualifications include:

- Some of the nation's most experienced ERM/ECRM leaders: multiple CEOs/CIOs; CTO for Documentum RM, CEO of DeepBridge Content Solutions
- AIIM and ARMA Fellows, AIIM Pioneer: multiple distinguished service awards
- Former US Technical Expert to ISO
- Two Smithsonian Computing Hall of Fame
- Multiple chairs of standards committees for ISO, ARMA, AIIM, Sedona Working Groups, and AIIM EmTAG
- Co-author CDIA+ certification
- Multiple Certified Records Manager (CRM), Project Management Professional (PMP), and Certified Information Professional (CIP) certifications
- Co-author Content Management Professional certification
- First ERM/ECRM Needs Analysis Methodology
- First RM and ECRM audit
- Members of the Sedona Working Group for eDiscovery process standards
- IQBG was the OpenText Integration Partner of the year for 2012
- IQBG is a Microsoft, SAP, OpenText, M-Files, ThinkSmart (eForms) and IBM partner.

ERM/ECRM Implementation Expertise. In the past five years, IQBG consultants have implemented over 30 ERM/ECRM solutions. Our consultants have designed and implemented ERM/ECRM solutions for large, enterprise deployments; successfully integrating ERM/ECRM solutions with line of business and ERP systems. IQBG has designed, implemented and now supports the largest ECRM deployment for a Public Sector client (the U.S. Department of Interior and multiple of its bureaus) that hosts 30,000 users and auto-classifies over 72 million content objects a month.

2.1.1 IQBG Experience with Microsoft Records Environments – Office 365 and Windows File Server

RFP 4.3.1.1 Vendor should list any experience with Office 365 and Windows File Server

The majority of the records management consulting, ERM/ECRM program and ECRM related projects that IQBG undertakes (greater than 90%) are focused on Microsoft records environments that include O365 on-premise, O365 online and Windows File Servers. These same projects require that tight integration with O365 tools be implemented to support management of the capture, management, presentation, retention and preservation of born digital content: management of the full end-to-end records lifecycle.

IQBG is a Microsoft Partner and our Microsoft (O365/SharePoint/Windows File Server) Practice achieved through a strategic partnership with the Mint Group is an industry leading provider of technical and professional services in support of Microsoft environments like that of the Agency. Our practice has two ALM Rangers out of 103 globally and our technical staff hold many certifications with over a thousand exams practice-wide. Our Microsoft Practice holds 6 Gold and 2 Silver Competencies.

IQBG is recognized as a leader in designing and implementing a full-featured records management solution using Microsoft O365/SharePoint tools, and has developed a repeatable taxonomy process that is used to define taxonomy models that map business folders (or containers like SharePoint hubs and sites) to our client's records retention schedules so that retention is managed unobtrusively 'behind the scenes' and client staff simply store records where it is most appropriate for their business needs.

Many of our projects include the eventual implementation of an ECRM solution to handle automated retention, approval, disposition, litigation and public record response, and legal hold processes. For these projects, the repeatable taxonomy process is used to define the taxonomies within the ECRM solution; however, the repeatable taxonomy process itself can also be used to standardize the taxonomy structures used by business units who continue to store their O365 (and other) content on shared drives on Windows File Servers.

Where content is moved into a central ECRM repository (versus management in place), IQBG consultants support the definition of metadata models and approach to migrate records from Windows File Servers into the ECRM repository. Many of our projects involve IQBG consultants being responsible for or guiding client actions related to content cleanup, classification, and/or content migrations where source records are being stored on network drives in a Windows File Server Environment.

2.1.2 Other ERM Assessment Projects Similar in Scope to the Agency's Project

RFP 4.3.1.2 Vendor should list and provide at least two (2) other projects that they have completed similar in scope as requested in this solicitation. Examples should include projects completed within the last three (3) years. Vendor should include samples of records roadmaps and training material from those projects.

As mentioned earlier in this Section, IQBG has performed numerous projects that are similar in scope to the services requested by the Agency in its solicitation for a Comprehensive Records Management Consultant. In Subsections 2.1.2.1, 2.1.2.2 and 2.1.2.3 below, IQBG presents three of our more recent projects (within the last two years) that very closely match the requirements and deliverables of the Agency's project. In Subsection 2.2, later in the document where mandatory requirements are addressed, we provide a partial list of other projects that also match the scope of services requested by the Treasurer's Office.

Also, as requested, several deliverables from the example projects are provided within the relevant subsections where they are mentioned or discussed.

2.1.2.1 The Virginia Port Authority – Records Management Program Assessment

Completed in January 2019, IQBG assisted the Virginia Port Authority (VPA) to develop a comprehensive Records Management Program by establishing best practice processes for managing the end-to-end records management lifecycle and implementing a governance framework to ensure regulatory compliance and minimize risk while also improving efficiencies and preserving corporate history. IQBG consultants performed a legal and regulatory review, updated VPA's retention schedule and revamped records management policies and procedures to address the many types of digital records now being managed by VPA staff.

Using our proven High-level Assessment (HLA) methodology – the same that is being proposed to the Agency, IQBG consultants conducted a records inventory and business process analysis across all VPA business Units. Through HLA tasks, IQBG assisted with the creation of VPA-specific retention and disposition schedules by identifying port-specific records and gathering required information to submit to the Library of Virginia (LVA - the approving Records Management Administrator for the Commonwealth of Virginia) for approval. IQBG assisted VPA to:

- Identify records eligible for disposition or requiring conversion
- Create a master records inventory to track updates and dispositions
- Perform a Legal and Regulatory review to enhance retention rules
- Conduct a review and assessment of current document management and storage systems, and their policies and processes
- Analyze work flows to ensure they are appropriate and compliant
- Develop a process to tag record holds that become part of an audit, and/or pending or active litigation or investigation
- Develop a sustainable process for managing records and deleting non-records to include developing a filing structure for the various document management systems (DMS), as well as Outlook, consistent with the LVA and/or VPA-specific retention and disposition schedules
- Develop a file naming policy to be used consistently throughout the organization
- Develop a Records Management (RM) Roadmap of prioritized tasks for implementing the RM Program enhancements recommended
- Provide training in the various records and information management policies and processes developed.

HLA produced deliverables for VPA included:

- Revised RM Policies and Procedures
- Revised Records Retention Schedules
- Recommendations related to an automated ECRM Solution
- Specifications for the Retention Disposition/Approval Workflow to be implemented in the Recommended ECRM Solution
- A five-year Strategic Roadmap for the continued evolution and deployment of the ECRM solution and the VPA's ERM Program

- Training Materials to support RM Training to VPA staff
- Delivery of initial Training Sessions to selected VPA staff.

Figure 2.1.1.1-2 provides the Table of Contents from the Final ECRM Program Roadmap prepared by IQBG for the Virginia Port Authority.

The Final Report prepared for VPA contained three volumes as shown in Figure 2.1.2.1-2. Volume 3 was the final volume of a three-volume set; and, completed the documentation produced from an agency-wide RM Program Assessment of VPA. It was based on an analysis of the business requirements and review of current operations contained in Volume 1, High-Level Business Process Summaries; and, Volume 2, Findings and Recommendations. Each Volume is a further synthesis and higher-level summary of the Volume that preceded it. This iterative refinement involved the receipt of feedback from VPA on each volume before developing the next and is represented by Figure 2.1.2.1-2 below.

FIGURE 2.1.2.1-2. PROGRESSIVE AND ITERATIVE REFINEMENT FROM VOLUME 1, TO VOLUME 2, TO VOLUME 3

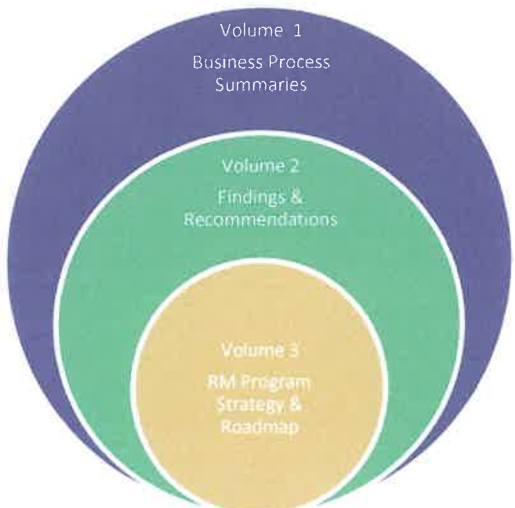


FIGURE 2.1.2.1-2. ECRM PROGRAM STRATEGIC ROADMAP REPORT – TABLE OF CONTENTS

THE PORT OF VIRGINIA

ECRM Strategy and Roadmap

Virginia Port Authority

Records Management Program Assessment

December 3, 2018

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Submitted to:

Elizabeth Saxby
Director of Records and Information Governance
Virginia Port Authority

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FIGURE 2.1.2.1-2. ECRM PROGRAM STRATEGIC ROADMAP REPORT – TABLE OF CONTENTS (CONTINUED)

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FIGURE 2.1.2.1-2. ECRM PROGRAM STRATEGIC ROADMAP REPORT – TABLE OF CONTENTS (CONTINUED)

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The business process summaries in Volume 1 were developed from interviews and records inventories conducted with representatives from each business unit across the VPA organization. Figure 2.1.2.1-3 below shows the ECRM functionality required by the business units that participated in the ERM/ECRM discovery and assessment.

FIGURE 2.1.2.1-3. VPA BUSINESS UNIT FUNCTIONALITY REQUIREMENTS (GATHERED DURING ERM DISCOVERY AND ASSESSMENT)

ECRM Functionality Requirements by Department

Virginia Port Authority Divisions / Departments:	**ECRM Requirements:** Imaging & Scanning	Shared Repository	Workflow	Line of Business Integration	Tracking	eForms	email Mgt.	Records Mgt.	Pub Rec Discovery
Administrative Services and Compliance									
Contracts & Real Estate		X	X	Cobblestone?	X	X	X	X	X
Risk Management		X	X		X	X	X	X	X
Small, Women and Minority (SWaM) Business Program		X		Ms Dynamics	X		X	X	
Executive Offices									
Executive Staff	X	X	X		X		X	X	
Legal - General Counsel		X					X	X	X
Finance Division									
Billing / AR / AP	X	X	X	PeopleSoft	X	X	X	X	
Financial Reporting	X	X	X	PeopleSoft & Cobblestone	X	X	X	X	
Payroll	X	X	X	ADP/PeopleSoft?	X		X	X	
Procurement		X	X	SharePoint & PeopleSoft?	X	X	X	X	
Budgeting		X		PeopleSoft	X		X	X	
Audits		X		ADP/PeopleSoft?	X		X	X	
Finance / Accounting		X	X	ADP/MS Dynamics	X		X	X	
Human Resources									
Human Resources	X	X	X	ADP/PeopleSoft?	X	X	X	X	
Records Management	X	X	X	SharePoint		X	X	X	X
Innovation Division									
Marketing Communications (MarComm)		X	X	InMotionNow, SharePoint	X	X	X	X	X
Process Excellence		X			X	X	X	X	
Strategic Planning & Analysis		X		SharePoint	X		X	X	
Information Technology and NIT/VIG Project Management									
Cyber Security		X		SharePoint			X	X	
EDI		X			X			X	
Enterprise Applications & Enterprise Operations Support		X			X	X	X	X	
Technical Services		X	X		X	X	X	X	X
Port Police	X	X		SharePoint & CAD	X	X	X	X	
Public Affairs Division									
Government Affairs		X		SharePoint	X	X		X	
Economic Development		X		SharePoint	X	X	X	X	
MIRT and Emergency Operations		X		SharePoint		X	X	X	
Sustainability		X			X		X	X	
Programs/Groups Requiring Functionality	**7**	**26**	**12**	**18**	**22**	**15**	**24**	**26**	**6**
% Requiring Functionality	**27%**	**100%**	**46%**	**69%**	**85%**	**58%**	**92%**	**100%**	**23%**

Figure 2.1.2.1-4 on the next page prioritizes the ECRM functionality based on the number of departments requiring the functionality. Specifically, the percentages relative to each functionality requirement are presented below from highest to lowest.

FIGURE 2.1.2.1-4. FUNCTIONALITY PERCENTAGES ACROSS VPA DEPARTMENTS

ECRM Functionality / Priority	Ranking	%
Shared Repository	1	100%
Records Management	1	100%
E-mail Management	2	92%
Tracking	3	85%
Line of Business Integration	4	69%
eForms	5	58%
Workflow	6	46%
Imaging and Scanning	7	27%
Public Records / Litigation Records Requests	8	23%

In addition to the three volumes presented in the Final Report for VPA, a department-by-department taxonomy effort was initiated (and will be completed over time – using a repeatable taxonomy process that IQBG trained VPA staff to use) that used the records identified in the Business Process Summaries (Volume 1), and an actual inventory of the content existing on selected VPA Shared Drives and other digital storage repositories to develop tailored divisional record schedules: a list of record series from the Library of Virginia General Agency schedules that relate specifically to a department's records. Where the inventory process identifies records not on a General Agency schedule, a proposed Agency-Specific Records Schedule was submitted to the Library of Virginia for their approval.

After examining the business unit summaries, studying the findings and analyzing requirements found across VPA's enterprise IQBG consultants developed a multi-year roadmap of proposed implementations to support the continued enhancement of VPA's RM Program and, not necessarily required for the Agency, the use of an ECRM solution to support it. The recommendations for VPA included staffing necessary to support the proper design, implementation and rollout of ECRM software; and, the training and continued operational support necessary to achieve success.

Important to the Agency, IQBG's experience is that most leading technology solutions have been well tested and proven and failures of ERM/ECRM program rollouts are most often not for technology reasons. We often see failure where:

- Not enough time is spent in performing upfront design; or, where the upfront design activities don't include significant user participation
- Not enough training is provided to all audiences – management, technical and end user
- Training provided is not contextually relevant – it doesn't include training specific to a users' content or business processes
- Implementation is performed by staff lacking experience designing and implementing ECRM solutions and/or the specific ECRM solution chosen
- Executive and upper management support is weak or missing
- Solution designs do not leverage industry best practices (such as retention rule inheritance at a folder level)
- Governance bodies including a Community of Practice, Records Manager, Records Liaisons, and a Center of Excellence are missing, poorly organized, or not appropriately active.

Heavy user involvement is necessary during all phases of the program and the 'ownership' of the ECRM program by a Community of Practice is so important as a success factor. IQBG will help the Agency establish a Community of Practice to support its ECRM program if it is decided that an automated records management solution makes sense for the Agency.

For VPA, general training across was developed and initial training related to RM concepts provided at the beginning of the recommended ECRM roadmap and contextually specific training templates were developed so that training could be provided to each department as they were implemented using IQBG's department-by-department repeatable process that IQBG consultants performed for initial departments and then taught VPA staff to continue performing.

For VPA, IQBG recommended that to meet business goals, improve both productivity and levels of service, and raise records management compliance, VPA take advantage of ECRM software that it already owned (we recommended that they upgrade and use the repeatable process that we taught them to roll out the solution across the organization). For many of our clients ECRM solutions provide a way to channel increasing volumes of unstructured information into meaningfully organized, governed, and digitally delivered data that is available to the right stakeholders at the right time. Having the correct sequence of projects and a documented roadmap that everyone has agreed to and is working toward in concert can be critical to the ultimate success of an ECRM program.

The introduction of the "right" technology platform can be the catalyst to change from making separate but equally expensive investments focused on business unit (program and/or service section) solutions, into a strategy and blueprint that can improve the productivity of the entire agency. The correct implementation sequencing can also reduce the exposure to risk of litigation and/or fines and fees associated with public records compliance; and, enable staff to perform their daily tasks more efficiently.

In its entirety the Volume 3 document presented a recommended ECRM Strategy and Roadmap to VPA to enable them to accomplish a future ECRM vision, improved business processes, and a more robust RM Program. Volume 3 of the report was made up of the following sections:

- Section 1 presented the ECRM vision and described business process improvements that could be accomplished for VPA over time using ECRM Functionality
- Section 2 discussed a recommended ECRM strategy and approach that could be used by VPA
- Section 3 presents the actual implementation sequence of projects that applied the strategy and brought the recommended ECRM Vision into reality.

As part of the recommendations made to VPA, IQBG consultants recommended that VPA develop and implement the following RM Approval and Disposition process (including the automated generation of the 'RM-3' form required by LVA to approve destruction of records based on the approved records schedule.

FIGURE 2.1.2.1-5. SAMPLE WORKFLOW EXAMPLE – RECORDS MANAGEMENT RETENTION AND DISPOSITION PROCESS (INCLUDING RM-3 GENERATION)

1.
   - Records Coordinator initiates workflow
   - Identify scope of workflow – parent folder
2.
   - Generate list of records that are candidates for disposition action – have met their retention requirements
3.
   - Review and approve/disapprove records for destruction
4.
   - Generate data necessary to support entry of records into the online RM-3 Form on the LVA website
   - With a row for each series to be included in disposition action and the series, series title and size in bytes of records to be destroyed
   - Schedule number, date range (mo/yr) and destruction method included for each series row
5.
   - The Routing of the RM-3 for appropriate approvals – Department Head then Records Officer – is handled by the LVA application
6.
   - Perform Digital destruction for approved records
7.
   - Records Coordinator confirms destruction
8.
   - Store the RM-3 detail list (used to enter series information) and audit trail information in the Laserfiche Repository
   - Print digital copy of the RM-3 from the LVA website and store in the Laserfiche Repository

Based on the Analysis of the first two report Volumes prepared for VPA: Volume 1 – Business Process Summaries and Volume 2 – Findings and Recommendations, IQBG identified many projects that could represent action to rollout the RM Program and positively impact the organization. Of course, they could not be done at once. For VPA, IQBG consultants identified a set of viable alternatives as presented in Figure 2.1.2.1-6 on the next page.

FIGURE 2.1.2.1-6. ANALYSIS OF ECRM PROJECT SEQUENCING FOR VPA

ECM Alternative Projects	Evaluation Criteria: VPA's Strategic Mission			Project Related Factors:						
	VPA's Mission	High ROI	Risk Mitigation	Required Foundation	Line of Business Integration	Constituent Level of Service	Low Complexity	Breadth of Impact	Reusable Component	Relative Score
Implement Enterprise ECRM software solution with enterprise taxonomy and central repository	X	X	X	X		X	X	X	X	10
Department-by-Department Taxonomy and Records Management Mapping for Laserfiche Implementation	X	X	X	X			X	X	X	7
Automated Records Retention and Disposition Workflow (approval, RM-3 and destruction)	X	X	X	X				X	X	6
eForms Pilot		X		X		X		X	X	5
PeopleSoft Integration		X		X	X			X	X	5
Policies and Procedures Publishing Process (Enterprise Folders)	X		X				X	X	X	5
Perform Departments Shared Drive Cleanup and Migrations	X		X				X	X	X	5
SharePoint to Laserfiche Integration Pilot		X		X	X			X	X	5
Develop Automated Public Records and Litigation Requests Process	X		X			X		X	X	5
ESRI Integration				X	X				X	3
Pilot 'Request' workflow - that can be repurposed to other similar ptocesses (bond requisition, contract requests, MarComm requests, hiring requisition, purchasing requisition, funds availability requests, etc.)							x	x	x	3
Pilot 'Approval' workflow - that can be repurposed to other similar processes (grants, contracts, MOUs, etc.)							x	x	x	3
Budget Submission Process							x	x	x	3
Board Agenda Submission Process							x	x	x	3
Monthly Financial Reporting and CAFR Proecess							x	x	x	3
HR Onboarding and Exiting Processes							x	x	x	3
Implement an Email Archiving solution			X					X	X	3
Integration with ADP's HRIS solution (depends on scope of PeopleSoft implementation)					x			x		2

Notes:
- The ECRM Community of Practice once formed will take over the management of the ECRM Roadmap and the setting of priotities and scope for projects
- SharePoint integration, PeopleSoft integration using Web Services, eForms, will all be implemented as pilot projects and then rolled-out to others
- Taxonomy, Shared Drive Migration, Scanning (OCR), workflow, and Records Schedule enhancement will be done department by department using a repeatable analysis, design, and migration strategy

IQBG consultants also realize that Change Management is a critical success factor for the implementation of any RM Program. For VPA, IQBG recommended that the ECRM Community of Practice establish an ECRM Working Group to identify and document specific actions that can be taken to address change management issues related to establishing its ECRM Program. The Change Management program included the development of user training and communication plans.

Resistance to Change can take many forms:

- Fear of new processes and systems
- Not wanting to give up paper
- Fear that jobs are going to be lost
- Being close to retirement and just not wanting to change.

Making sure that a communications plan that identifies appropriate messages, their associated timing and audiences is developed and managed; and, that it addresses all audience levels from Executive to clerical staff is critical. IQBG will assist the Agency with its Change Management program so that all staff are evaluated in terms of their needed training and that a training plan that includes audience mappings to training options is documented. Figure 2.1.2.1-7 shows an example of the matching of change issues to themes and messages.

FIGURE 2.1.2.1-7. CHANGE MANAGEMENT THEMES AND MESSAGES

Consistent Messaging to Address:	
User Trepidation	How will it impact my work?
User Anxiety	Will I look inept when forced to use new technology?
User Fear	Will I ever find my documents again?
User Misgivings	Imposed Retention Periods
User Distrust	They say it will help but it only adds complications
Change is Hard - so address what's-in-it-for-me	
Automated declaration, retention and archival	
Automated disposition and deletion	
Reduced Duplication	
Easier to find information	
Workflow and automated tracking	
Correct some of the problems with Share Drives / SharePoint	

To support the RM Program Rollout, IQBG assisted VPA to develop a program website/portal where news and status items are continuously published; and, a knowledge base related to ECRM topics and links to good sources of content such as AIIM and ARMA are made readily available to all staff.

Resistance to digitization, cleanup of digital files (e.g., shared drives prior to move into Laserfiche) and/or destruction of paper is often best met with a slow, methodical education process. As with the VPA, for the Agency a Communications Plan will develop an evolving set of messages tailored for the different audiences across the Treasurer's Office. IQBG will assist the Agency with determining both the messages and the audiences and will identify the communications methods and media for their delivery. Messages will, among other topics, be used to define what the benefits of the program are to the users, what the benefits are for the Agency, to communicate status, and to communicate key 'wins'.

The Change Management Plan developed for VPA also included education that related to all aspects of the ERM/ECRM program – including a contextual continuation of records management training, as well as training related to other aspects of ECRM, tailored to different audiences including their technical staff and Records Coordinators, training related to different software components (as applicable), and related to business productivity improvement or public records response processes as appropriate. Figure 2.1.2.1-8 below shows the first 15 slides of RM Concept training developed by IQBG consultants for delivery of VPA training.

FIGURE 2.1.2.1-8. FIRST 15 SLIDES OF VPA RM CONCEPTUAL TRAINING

Figure 2.1.2.1-9 below shows the Table of Contents for the RM Procedures developed by IQBG for VPA.

FIGURE 2.1.2.1-9. VPA RECORDS MANAGEMENT PROCEDURES – TABLE OF CONTENTS

Table of Contents – VPA RM Procedures

2.1.2.2 Halifax Regional Municipality – ECRM Implementation and Governance Roadmap

The ERM/ECRM Program Implementation and Governance Roadmap with recommended tasks for improving and implementing Halifax Regional Municipality's Records Management and Information Governance Program was delivered in November 2019. The Halifax Regional Municipality, Nova Scotia, Canada (HRM) selected IQBG to assist with the development of an Enterprise Content and Records Management (ECRM) Implementation and Governance Plan. HRM's unstructured information assets include both paper and digital content; records and non-records; and contain HRM's key government and operational records. These records are difficult to manage, share, retrieve and preserve over time (as required by law). With increasing volumes of unstructured information, HRM faces challenges that include:

- Decreased productivity and longer time periods to complete work because of difficulty finding and sharing information; and, lack of support for collaboration and co-authoring
- Difficulty performing Intra and Inter-Departmental and Organizational Communications
- Higher constituent expectations for on-demand information and services
- Accessibility challenges related to heterogenous storage methods and disorganization of information
- Inability to securely share records internally and externally
- Wasteful and inefficient business processes
- High risk of loss and/or exposure of confidential information
- Non-compliance with legal and regulatory requirements
- Poor decision making because of inaccurate or incomplete information
- More time consuming and expensive efforts to respond to Freedom of Information and/or litigation discovery requests.

ECRM solutions, when properly designed and implemented "understand" the entire lifecycle of content, apply appropriate information control and governance, and provide additional support for users during each phase. Content is managed during creation, capture, and storage; and, ECRM solutions include such features as version control, check-in/out, collaboration and workflow, highly functioning search, security and automated records management to minimize risk. ECRM functionality helps distribute, publish, classify and retain, expire, and apply retention and disposition actions to records.

The core to business process improvements revolves around HRM's standardizing on a centralized content repository involving the use of ECRM technology. However, currently there is no enterprise standard at HRM, and much content still resides on networked shared drives and individual hard drives.

Like the Agency's RM Assessment project, the first phase involved the conduct of multiple on-site assessment and discovery interview sessions, with teams or individuals from each business unit across the entire Municipality. The analysis, among other things, gathered information necessary to understand the types of records generated, the business processes around those records, how the records were stored, and the business value associated with the records (as well as legal and regulatory requirements associated with them. Figure 2.1.2.2-1 on the following pages present a summary of the requirements identified during the discovery phase of the HRM RM Assessment project.

FIGURE 2.1.2.2-1. HRM BUSINESS UNIT FUNCTIONALITY REQUIREMENTS

ECRM Requirements Business Unit / Process	Imaging & Scanning	Shared Repository	Workflow	Collaboration	Highly Functional Search	Tracking	Line of Business Integration	eForms	Email Management	Records Management	FOIPOP Discovery	Markup & Redaction	External Collaboration	Constituent Web Access	Remote Access	Digital Signature
Chief Administration Office (CAO)																
Access and Privacy Section	X	X	X	X	X	X		X	X	X	X	X				
Corporate and Customer Services																
Contract Creation and Renewal	X	X	X	X	X	X				X						
Intranet / Content Search Requirements		X		X	X		X			X						
Customer Contact Center Services (CCS)		X	X	X	X	X	X		X	X	X		X			
Regulatory Modernization		X		X	X	X		X		X	X		X			
Office of Performance Excellence		X	X	X	X	X	X	X	X	X						
Council																
Report Center Product and Process	X	X	X	X	X	X			X	X	X					X
Finance and Asset Management (FAM)																
Revenue/Treasury - Local Improvement Charges (LICs)		X	X	X		X	X		X	X			X			
Revenue/Treasury - Tax and General Revenue Process	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
Corporate Planning - Service Catalog		X		X	X		X			X						
Representative Coordinator Responsibilities		X	X	X	X	X		X	X	X	X					X
Corporate Planning - Business and Budget Planning		X	X	X	X	X	X	X	X	X				X		
Corporate Real Estate	X	X		X	X	X	X		X	X	X		X			X
Procurement	X	X			X	X	X		X	X						
Payroll	X	X			X	X	X	X	X	X						
Fire and Emergency																
Business Document Sharing	X	X		X	X		X	X	X	X	X		X		X	
Emergency Management Organization	X	X	X	X	X	X		X	X	X	X					
Fire Operations	X	X		X	X		X	X	X	X	X				X	
File Room	X	X			X		X			X						
Human Resources																
Client Services	X	X			X	X	X	X		X	X	X	X			
Employee Services (New Division)		X	X	X	X	X	X	X	X	X				Employees	X	
Information and Communication Technology (ICT)																
Coordinator Processes	X	X		X	X	X	X	X	X	X	X					
Program Management Office (PMO)		X	X	X	X	X		X	X	X			X			X
Portfolio Management		X		X	X		X	X		X						
SAP Program Management	X	X		X	X	X	X		X	X						
Legal, Insurance and Risk Management																
Disclosure Requests/By-law Infractions		X	X			X	X	X		X						
Preparation of Planning for Appeals Process	X	X		X	X	X			X	X			X	X		X
Delinquent Property Tax Collection and Property Sales Process	X	X	X	X	X	X		X	X	X			X	X		X

FIGURE 2.1.2.2-1. BUSINESS UNIT FUNCTIONALITY REQUIREMENTS (CONT'D)

ECRM Requirements / Business Unit / Process	Imaging & Scanning	Shared Repository	Workflow	Collaboration	Highly Functional Search	Tracking	Line of Business Integration	eForms	Email Management	Records Management	FOIPOP Discovery	Markup & Redaction	External Collaboration	Constituent Web Access	Remote Access	Digital Signature
Parks and Recreation																
Capital Projects Process		X	X	X	X	X	X	X	X	X	X				X	
Coordinators: Information Flow / Finding Content	X	X	X	X	X	X	X	X	X	X	X		X	X		X
Public Incident Reports / Workplace Inspections	X	X	X	X	X	X		X	X	X	X			X	X	
Planning and Development																
Construction Permitting / Inspection Processes	X	X		X	X	X	X	X	X	X	X		X	X		
Current Planning	X	X	X	X	X	X	X	X	X	X			X	X		X
Regional Planning - GIS	X	X			X	X	X		X	X	X			X		
Building Permitting Process	X	X	X	X	X	X	X		X	X			X			
Planning Data – Social & Economic Research	X	X		X	X	X	X			X	X			X		
Subdivision Approval Process	X	X			X	X	X		X	X			X			X
Police																
Courts and Records	X	X		X	X		X		X	X	X		X			
Finance and Human Resources	X	X	X		X	X	X	X	X	X	X	X			X	
Operational Planning		X			X				X	X	X	X				
Transit																
Attendance Support Program		X		X		X			X	X						
Resource Support and Development	X	X			X	X	X	X	X	X						
Organizational Change Action		X		X	X	X	X		X	X						X
Planning and Scheduling	X	X	X	X	X	X			X	X	X		X		X	X
Low Income Transit Program		X			X			X	X	X			X	X		
Training		X			X	X		X		X						
Incident and Accident Reports	X	X			X	X		X	X	X						
Technical Services		X		X	X		X		X	X			X			
Operator Personnel Files	X	X			X				X	X						
Transit and Public Works (TPW)																
Road Operations and Construction		X		X	X	X				X	X		X			
Project Development Process	X	X		X	X				X	X			X			
Encroachment Agreements	X	X		X	X		X		X	X			X			X
Infrastructure Assessment and Maintenance		X			X	X	X	X	X	X	X					
Parking Services	X	X			X	X	X			X	X					
TPW Personnel Files	X	X			X	X	X		X	X						
Procurement Contracts Management and Renewals	X	X		X	X	X			X	X						
Survey Services	X	X		X	X	X	X	X	X	X	X	X				

Note: The fact that an ECRM functionality element is not marked as required by an HRM business unit/division doesn't mean that it is not a requirement, just that it wasn't specifically discussed during the RM Assessment interviews.

Figure 2.1.2.2-2 below prioritizes the ECRM functionality based on the number of HRM business unit/divisions requiring the functionality. Specifically, the percentages relative to each functionality requirement are presented below from highest to lowest.

FIGURE 2.1.2.2-2. FUNCTIONALITY PERCENTAGES ACROSS HRM BUSINESS UNITS

ECRM Functionality / Priority	Ranking	%
Shared Central Repository	1	100
Records Management	1	100
Highly Functional Search	2	95
Email Management	3	79
Tracking	4	77
Collaboration	5	70
Line-of-Business Integration	6	65
Imaging and Scanning	7	63
eForms	8	51
FOIPOP / Litigation Response	9	46
External Collaboration	10	39
Workflow	11	37
Digital Signature	12	23
Constituent Web Access	13	21
Remote Access	14	12
Markup & Redaction	15	11

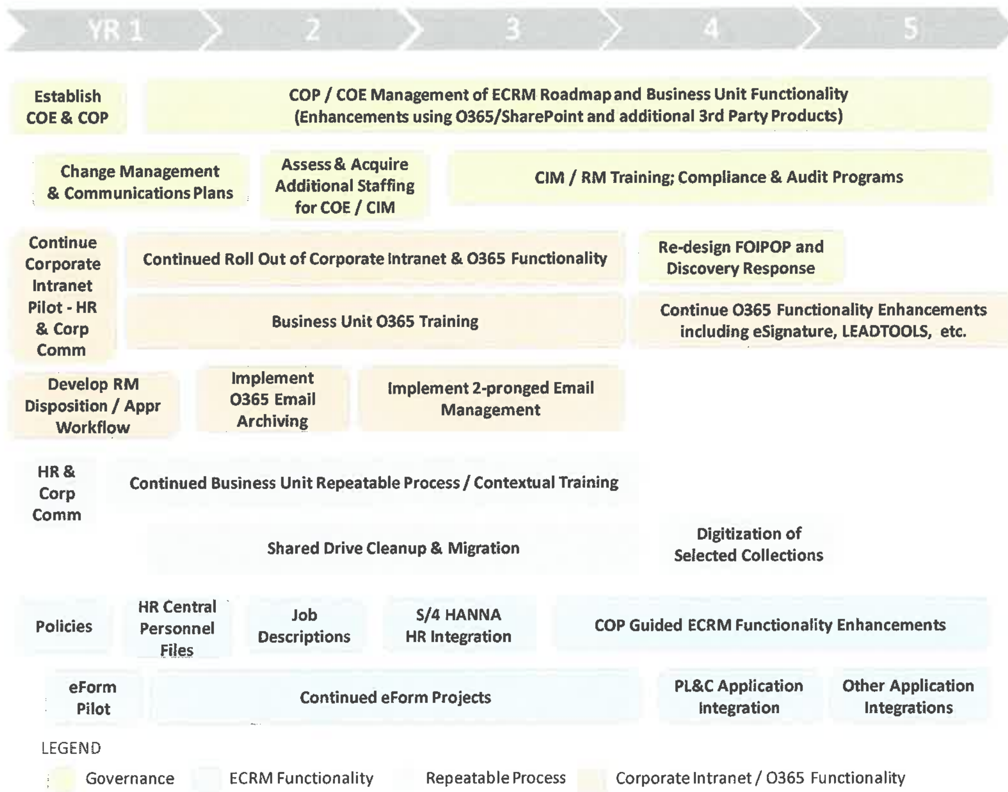
From the percentages presented in Figure 2.1.2.2-2 it became immediately clear that there was a substantial need for most functionality provided by an ECRM solution across all HRM business units/divisions; and, also that unobtrusive records management was a ubiquitous need.

IQBG used its proven High-level Assessment (HLA) methodology – the same that is proposed to the Agency - to analyze business and records management requirements across all business units. The Final Report provided by IQBG provided an ECRM solution recommendation for HRM that provided for replacement of shared drives, support for digitization of paper, improved business workflows, integration with current business systems to store unstructured content, support for multiple capture methods including eForms, and the automated application of retention and disposition requirements for all content items stored in the central ECRM repository.

To successfully distribute information, share knowledge, collaborate on projects and teams, and improve HRM's Corporate Intranet, the chosen ECRM solution(s) supported the design and implementation of an enhanced HRM Corporate Intranet that is arranged as a series of hubs - each with specific intent, audiences and content.

Figure 2.1.2.2-3 on the next page shows a pictorial representation of the RM Program Roadmap recommended to HRM by IQBG consultants.

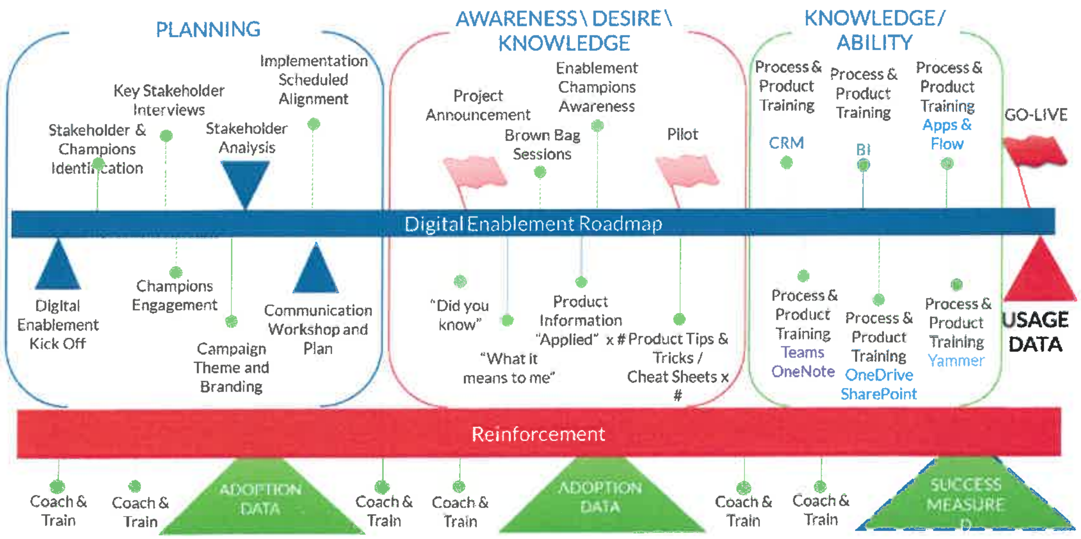
FIGURE 2.1.2.2-3. RECOMMENDED RM PROGRAM 5-YEAR STRATEGIC ROADMAP



IQBG recommended that HRM standardize on Microsoft's O365 and SharePoint Online to provide its ECRM solution. The ECRM solution will be used for the management of active records, and the recommended Roadmap includes a disciplined effort using a business unit/division-by-business unit/division process to place content into HRM's ECRM solution. Utilization of the ECRM solution will be promoted by informing HRM users of the benefits it offers for information security, governance and automated records (retention and disposition) management; and developing and helping to deliver both general RM and context specific business process training.

Training developed and initially delivered by IQBG for HRM includes training for SharePoint that at a minimum will relate to the Corporate Intranet. The best technology in the world is worthless if people don't know how to use it, or don't want to use it. Figure 2.1.2.2-4 on the next page shows IQBG's recommended approach to iterative enhancement/training related to continued roll-out and enhancement of HRM's Corporate Intranet.

FIGURE 2.1.2.2-4. TRAINING TO SUPPORT CONTINUED ENHANCEMENT OF HRM CORPORATE INTRANET



As a crucial element of the process pictures above, two tiers of training were recommended by IQBG consultants for HRM employees; as well as, post-launch training.

- General Office365 Product Training - training on Teams, SharePoint, Planner, Outlook, Word/PowerPoint/Excel, Dynamics365, Delve, Forms, Yammer and OneDrive training. This inch-deep-mile-wide training effort will seek to lay a foundation for the next tier of training by ensuring that all employees have a thorough basic understanding of the Microsoft Office365 platform – including best practices for document authoring, collaboration, co-authoring, sharing, communication, planning, communication and productivity best-practices.
- Scenario-based Training - training that builds on top of the general product training by identifying business-relevant scenarios and role-playing the execution of these business processes across the Office365 suite. The objective here is to facilitate interactive sessions which standardize the expedition of these scenarios in an efficient and engaging manner so that all team-specific processes which might span several different tools, are conducted effectively.

Post-launch Training – this specifically addresses increased user adoption - and related communications are critical steps to initiate in parallel with the technology deployment.

2.1.2.3 University of Massachusetts – MassHealth RM Retention Schedule Legal, Regulatory and Similar Agency Review

IQBG decided to include this example project because it demonstrates IQBG consultants developing a framework for a client's ERM program, including a new records schedule for a client that did not have one; and, the project included a full legal and regulatory review, as well as comparative analysis of other State schedules in the development of the recommended records retention schedule that IQBG developed for the University (for the University in their role as the Records Administrator for the State's MassHealth Program). This example demonstrates that IQBG consultants support ERM discovery and assessment efforts even when an ERM/ECRM software solution is not part of the project focus.

MassHealth and its contractors maintain large quantities of paper and electronic records, which, by law, must be retained and destroyed pursuant to approved schedules. Other than the Massachusetts Statewide Record Retention Schedule common to all state agencies in Massachusetts, MassHealth had not developed an approved agency-specific retention schedule focused on the MassHealth program and the program's financial records. The University selected IQBG to provide Records Management Consulting services that included developing a Records Retention Schedule for the MassHealth Program.

A retention schedule is essential to MassHealth's effective management of records – to ensure that records are kept for as long as legally and operationally required; to dispose of obsolete records in a systematic and controlled manner; and to provide its employees with policies and guidance to consistently adhere to recordkeeping requirements.

As the volume of retained records expands, so do the burdens of achieving legal and regulatory compliance and associated risks of not having a retention schedule. Irregularity or inconsistency in its records program or the absence of a credible program can damage MassHealth's reputation and assumptions of 'good faith'[1]. Absent a viable reason, keeping records for longer or short times than guidelines dictate exposes MassHealth and its executives to unnecessary risk.

MassHealth realized that an approved record retention schedule serves as the legal authority to retain and purge records; and, that a retention schedule must be developed and applied in a systematic manner, as part of a MassHealth corporate-wide records management strategy.

They also realized that both development and implementation of a retention schedule are important elements in establishing a 'good faith' effort and ensuring a sound records management program to:

- Improve the overall utilization of resources
- Control the unrestrained growth of records volume and the associated costs of storage and retrieval

[1] A comprehensive records-management policy not only will help ensure that a company meets its preservation obligations, but it may insulate a company from sanctions. Federal Rule of Civil Procedure 37(f) provides a limited "safe harbor" prohibiting the imposition of sanctions. Courts will more likely than not deem an organization as operating in 'good faith' when a well- constructed records-management policy undergirds their management and disposition of records. In addition to thwarting spoliation sanctions, having an effective records-management policy is rapidly transforming from a best practice to a required one. Indeed, the Internal Revenue Service (IRS) recently revised Form 990 - the annual information return filed by most publicly supported exempt organizations, to include several questions regarding information governance.

- Demonstrate compliance with statutory and regulatory recordkeeping requirements
- Enforce the consistent implementation of recordkeeping policies
- Improve the ability to locate and retrieve records when required
- Reduce litigation risks and discovery costs
- Reduce risks of loss of records or breach of PHI or PI.

MassHealth requested that the University assist it in developing a proposed records retention framework and designated retention periods for its records to facilitate the orderly coordination of retention and destruction of its vast quantity of records, while at the same time maintaining compliance with regulatory and audit requirements. Through a competitive procurement, the University selected the IQ Business Group, Inc. (IQBG), a firm specializing in assisting organizations with the creation and development of records management programs, to develop a proposed record retention schedule that specifically addresses MassHealth Program records.

IQBG worked to propose a record retention schedule that is simple to administer yet forms a complete framework that aligns with the federal and state law, the Massachusetts Statewide Record Retention Schedule and existing MassHealth policy; and, that will provide guidance to all MassHealth programs: especially those that have the highest volume of records. While best practice recommends interviewing MassHealth staff and conducting an inventory and review of actual records prior to developing a proposed schedule, several constraints made such an approach infeasible. Instead, IQBG used a logical and systematic approach that consisted of:

- Identifying, reviewing and analyzing relevant state and federal statutory and regulatory retention requirements, guidance, and best practices related to Medicaid program record retention time frames
- Performing a review and comparative analysis of other state's Medicaid record retention schedules relevant to Massachusetts's Medicaid programs and services
- Reviewing and incorporating into the deliverables the CMS Records Retention Schedule for Medicaid documents and reaching out to CMS contacts, as appropriate, to clarify expectations
- Developing a retention chart that identifies record collections, and their potential cut-off (when retention period measurement starts) dates, that can be consolidated into the eventual series recommended for the MassHealth record retention schedule
- Weighing the ability of the MassHealth agency to adequately respond to federal and state audits including, but not limited to CMS, Office of Inspector General, Office of the State Auditor, and other external entities, against the added risks and costs to retention of records beyond periods required by auditors; and, proposing retention recommendations accordingly
- Applying best practices and industry standards to the interim retention matrix to consolidate records into series based on MassHealth business functions
- Developing a proposed MassHealth Record Retention Schedule that in content and format aligns with the current Massachusetts Statewide Records Retention Schedule, incorporates, in large part, the Records in Common sections and is like other agency specific schedules.

IQBG performed the requested consulting services and delivered the proposed Records Retention schedule to MassHealth executives for their approval. The proposed retention schedule formed a records management framework that MassHealth staff can easily implement to manage appropriately the retention and disposition of their records in a way that ensures compliance with applicable state and federal regulations.

Importantly, the proposed retention schedule was developed using larger 'bucket' series that aligned with the CMS record retention schedule series; and, also with other state schedules. The state environmental review conducted as part of the project involved reviewing and analyzing the schedules developed to define retention rules for similar records by nine (9) other states: Kentucky, Michigan, Nebraska, Ohio, Oregon, Pennsylvania, Rhode Island, Texas and Wisconsin.

The regulatory review revealed that the overarching regulation relating to Medicaid records establishes no specific period, but simply references periods required by the Secretary. HIPAA sets a federal base line of six years for records it covers; however, both state and other federal law may, and do, impose longer periods. For example, regulations addressing record retention for Medicare Advantage organizations, ACOs, and State or Federally-facilitated Exchanges all employ a 10-year framework. CMS largely relies on a 7 to 10-year retention period for its 9-bucket retention schedule (with some permanent records).

The retention periods recommended in the proposed MassHealth agency-specific schedule were aligned with the retention ranges used by other states, and for the most part were developed to be conservative recommendations in comparison. Particular attention was paid to Rhode Island, which had most recently revised their schedule and divided its records into three buckets – Program Development and Review Records; Provider Records; and Beneficiary Records; and, with few exceptions used permanent and 10-year retention rules.

IQBG recommended a slightly higher number of 'buckets' – eight versus three – because we believed that approach provided more clarity to MassHealth staff by separating the functions that Rhode Island chose to further consolidate. Additionally, the 8 buckets IQBG recommended closely tracked to the 9 CMS buckets.

In the case of MassHealth Financial Records, IQBG recommended a retention period of seven (7) years, in alignment with CMS and several states; however, Rhode Island and several other states use ten (10 years for some of their financial documents). Lacking any regulatory or legal authority requiring the longer retention, IQBG recommended a shorter retention period in keeping with industry best practice: to reduce the cost of storing and managing records, and of presenting records in the case of a public records or litigation discovery request. This was one of several areas where IQBG consultants requested and used input from MassHealth before finalizing the recommended schedule.

The format of the proposed retention schedule was developed such that upon approval by MassHealth it could be submitted to the Record Conservation Board (RCB) for inclusion into the Statewide Retention Schedule as an Agency specific schedule. Figure 2.1.2.3-1 on the next page presents the Recommended MassHealth Schedule developed by IQBG.

FIGURE 2.1.2.3-1. PROPOSED MASSHEALTH PROGRAM RECORDS RETENTION SCHEDULE

Proposed MassHealth Agency-specific Record Retention Schedule

This records retention schedule governs retention and disposal of records created, used and maintained by MassHealth. This schedule, once approved by the Record Conservation Board (RCB) for inclusion into the Statewide Retention Schedule as an Agency-specific schedule, will provide the legal authority for MassHealth to request the destruction of the records listed, after the appropriate retention periods have passed.

MassHealth personnel should use this agency-specific schedule in combination with the Massachusetts Statewide *General* Agency Records Retention Schedule to manage their records. The General Schedule applies to records that are created, used and maintained by staff at all or most state agencies, which, to a limited extent, is incorporated into the specific recommendations. Agency-specific retention schedules are used only by the specific agency for which it is approved. The General Schedule and the agency-specific retention schedule should cover all records for MassHealth.

This retention schedule applies to all MassHealth records from creation to final disposition, regardless of the medium. Records management practices encourage cost-effective information governance through accurate retention scheduling and legal destruction of records.

All MassHealth employees are responsible for maintaining records according to the retention schedule, whether those records are stored electronically or in paper. Information must be accessible to the appropriate parties until all legal, fiscal, and administrative retention periods are met, regardless of the records storage medium.

Key Records Management Points:

- Retention periods reflect minimum time periods. MassHealth may retain records for longer periods of time as needed or required
- Do not destroy any records while they are subject to litigation, audit, investigation, or where investigation is probable
- Agencies may request review of potentially historical materials by the Archives regardless of stated retention periods.
- A ***Retention Cutoff*** defines the event that causes the retention period to be triggered. Cutoff events are defined for each Record Series included in the Agency-specific schedule.

Records Management best practices allow ***Disposition Actions*** to be taken in a way that does not overly burden MassHealth staff. For example, a record series with a Cutoff event defined as Creation Date, that triggers a seven (7) year retention period, can have disposition actions (e.g., destruction) taken on a quarterly or annual basis instead of daily. MassHealth personnel should consistently apply disposition actions for a given records series.

<table>
<tr><td colspan="2">1. Leadership and Operations

MassHealth Program Policy Records, documentation of significant actions of agency officials, agency governance documents, agency policy statements and director-level communications including records related but not limited to:
Program Establishment
State Plan; State Plan Amendments
Regulations, guidelines and bulletins
Legislative Records
Executive-level communications with oversight bodies and partnering agencies
State Medicaid Director Letters
Official guidance and executive-level communications with oversite bodies including CMS and the Legislature and partnering agencies
Waivers and Waiver Demonstration Projects
Applications
Evaluations
Official reports.</td><td>A01-01 – Program Establishment (Permanent)

A02-03 – Policy and Procedure
(a) manuals/ publications/substantive support - Permanent
(b) all other records - 3 years

A02-04 – Executive Orders, Directives and Bulletins
(a) final/substantive support- Permanent
(b) all other records-3 years

A02(05) - Rules and Regulations
(a) final accepted rules/substantive support - Permanent
(b) all other records-3 years

A02-06 – Legislative Records
(a) summary/substantive support- Permanent
(b) all other records-3 years</td></tr>
<tr><td>Proposed Retention</td><td></td><td></td></tr>
<tr><td>(a) Leadership and Operations Records: Final Product, Summary and Substantive Support Materials -</td><td>Permanent</td><td></td></tr>
<tr><td>(b) Leadership and Operations Records: All other records</td><td>Retain 3 years from Creation Date</td><td></td></tr>
</table>

<table>
<tr><td>2. MassHealth Program Administrative Records

MassHealth Program Management Administrative and Communications Records, supporting documents for policy records, non-substantive rulemaking records, lower-level leadership records, program-related agreements, and general program administrative records that are related, but not limited to:
Work by committees or managers below the Director to address issues relating to agency functions
Financial accountability</td><td>References inserted below</td></tr>
</table>

• Work papers, reports and work products and related correspondence • Routine administrative practices, operational and communication records that do not create policy or procedure • Hearings and appeals related to enrollment or service coverage denial of all kinds: and documents include hearing transcriptions, appeals, hearing proceedings, and related documentation and correspondence) • MassHealth contractors other than health plans and providers including UMMS (these include solicitation documents, proposals, contracts, ISAs, and related communications) Note: • Member Communications (includes notices to beneficiaries that would be filed in many TPL areas like Premium Assistance, communications with legal representatives related to casualty and estate recovery events, etc.) may be filed in Series 5 - MassHealth Beneficiary Records. • Financial Records related to (claims, expenses, premiums, charges, etc.) are stored in Series 3 - MassHealth Financial Records.		
Proposed Retention		
(a) MassHealth Program Management Administrative and Communication Records: (i) Substantive records (ii) Routine records	**Retain 7 years from Creation Date** **Retain until administrative use ceases**	A11-03 Policy Development Correspondence (3 years)
(b) MassHealth Appeal and Hearing Records: (i) Landmark Cases, Summary Dockets and Logs, Final Findings and Recommendations. (ii) All other appeal and hearing records	**Permanent** **Retain 7 years from Creation Date**	B05-02: Administrative Law Appeals (a) summary dockets and logs/final findings and recommendations - Permanent- (b) all other records-6 years after final case activity F04-03(c) Hearing and Testimony Tapes (3 years) K02-04 Social Services Appeals Case Files (3 years)

(c) MassHealth Contractor Records: Contracts, Agreements and substantive supporting documents.	**Retain 7 years from date of contract or agreement end, roll-over, amendment, renewal or superseded date**	B01-07: Contracts & Agreements c) all other records- 6 years after close of contract and after date of last payment D1-03 Contract & Agreement Negotiations (a)- finalized contracts and agreements -6 years following contract expiration (b) All other documents – until administrative use ceases D01-14 – Bid and Procurement Records (a) Awarded bids – 6 years after last payment or litigation (b) Non-awarded bid records or small procurements – 3 years from bid close or appeal final determination.

3. MassHealth Program Financial Records MassHealth program financial records include records related but not limited to: • Financial operations of all agency programs e.g., claims, checks, banking records, pricing records, payment processing systems, and loan records • Program-level budgets, statement of expenditures, funding and payment recoveries • Financial and cost performance reporting • Financial records related to the MassHealth Program, Contractors, Providers • Member Financial Records that include statements of expenditures, claims, member premiums and charges, prior authorizations, and records that document the mixture of payments to cover all services costs. • Claims for FFP and cost allocation plans created for federal reimbursement.		References inserted below
Proposed Retention		
MassHealth Program Financial Records	**Retain 7 years from end of calendar year in**	D01-11 Claims and Disbursements

	which they were created	6 years after contract closes and after final payment, unless longer period is specified in contract D02-01 Fiscal Planning, Reports, and Survey Documents Until Administrative use ceases D02-03 Budget Preparation and Monitoring Records (a) Primary copy of budget guidelines and submission letter – permanent (b) All other records – until administrative use ceases K1-06 Medicaid Utilization Review Records 8 years
Rate Setting and Cost Reports (a) Final hearing Transcripts –Permanent (b) All other records – 10 years	**Permanent** **Retain 10 years from Creation Date**	K08-04 Medical Rate Setting Case Files (a) Final hearing Transcripts – Permanent (b) All other records – 10 years
Cost Reports		K1-03 Long Term Care Cost Reports Retain 20 years

4. MassHealth Enrollment & Beneficiary Records MassHealth Program Enrollment records for all CMS programs related but not limited to: • Certifications • Questionnaires, surveys, and all other records related to enrollment into entitlement programs • Member Eligibility records including applications and all supporting documentation • Overall coverage approvals • Eligibility determination • Member beneficiary records that facilitate the management of beneficiaries for all eligible MassHealth programs.	K2-05 Social Services Case Files – referral, application, issuance of services 6 years after last activity K2-02 Social, Medical and Economic Assistance Case File Retain 3 years

Proposed Retention		
MassHealth Enrollment Records: Approved.	**Retain 10 years from end of Calendar Year**	
MassHealth Enrollment Records: Denied.	**Retain 3 years from end of Calendar Year**	
MassHealth Beneficiary Records	**Retain 10 years from end of Calendar Year**	

5. MassHealth Provider and Health Plan Records	
MassHealth provider and health plan records include but are not limited to: • Records related to health plans (e.g. ACOs, MCOs) • Records related to health care providers (e.g. revalidation records) • Records include solicitation documents, proposals, contract, certifications, and related communications • Fee Schedules, Rate Setting and Cost Report documents • MassHealth Health Plan and Provider contract management records: quality, performance, cost and utilization monitoring and reporting records including financial, contractual and statistical program evaluation of the provider/plan including audits, reports and findings • MassHealth Member and Member Services Quality, Performance, Cost and utilization Monitoring and Reporting Records	B01-07: Contracts & Agreements c) all other records- 6 years after close of contract and after date of last payment D1-03 Contract & Agreement Negotiations (a)- finalized contracts and agreements -6 years following contract expiration (b) All other documents – until administrative use ceases D01-14 – Bid and Procurement Records (a) Awarded bids – 6 years after last payment or litigation (b) Non-awarded bid records or small procurements – 3 years from bid close or appeal final determination

Proposed Retention		
MassHealth Provider and Health Plan Records	**Retain 10 years from Creation Date**	

6. MassHealth Research and Program Evaluation Records	
MassHealth Research and Program Evaluation that support research and analysis of MassHealth programs including but not limited to: • Systems used for analysis and reporting (Data Warehouse)	A10-02 Special Projects, Studies, Initiatives. (a) Summary Records and substantive materials – permanent (b) All Other Records – 3 years after completion unless part of

• Demonstration and pilot records and records related to participation in MH-sponsored research projects • Data sets that support current and future research and program evaluation activities. • Data Use Agreements		grant or contract – 6 years after close
Proposed Retention		
MassHealth Research and Program Evaluations Records: Landmark	**Permanent**	
MassHealth Research and Program Evaluations Records: Summary and Substantive	**Retain 10 years from Creation Date**	
MassHealth Research and Program Evaluations Records: Supporting documents	**Retain 3 years from Creation Date**	

7. MassHealth Outreach and Engagement Records MassHealth Outreach and Engagement records are primarily final products that document outreach services to individuals and providers or document MassHealth's outreach interactions with providers or members. Includes records formally created and disseminated which document MassHealth policy, events, program information, mission activities, and the like. Includes but is not limited to, new and press conference files, records of new and press conference, press releases, and education publications created for beneficiaries. Includes photographs, videos, audio and other rich media content used in outreach and training records; records that support the creation of formal products; website records, educational publications, and other outreach, educational and training records.		A05-03 Program Outreach and Training (a) Substantive planning documentation and summary presentation materials – permanent (b) All other records – until administrative use ceases A08-02 Media Advisories and Final Official Releases (a) Final official releases – permanent (b) All other records – until administrative use ceases A12-11 Training Materials- for members of public bodies Until superseded
Proposed Retention		
MassHealth Outreach and Engagement Records (a) Final official documents (b) All other records	**Permanent** **Until Administrative Use Ceases/records superseded**	

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8. MassHealth Program Compliance and Integrity		References inserted below
MassHealth Program Compliance and Integrity records that document MassHealth Program oversight, compliance, and integrity operations and processes. Records include: • Audit reports and findings (Provider and Financial Compliance) • Fraud Complaints and Referrals to AG • Complaint records that document investigations into MassHealth member complaints about Program, Contractor and/or provider conduct or actions. Includes records that document complaints received and/or investigated relating to MassHealth actions.) • Audits of MassHealth (Includes federal and state audits of MassHealth as the single state agency).		
Proposed Retention		
a) MassHealth Program Compliance and Integrity Records (i) Provider and Financial Audits (ii) Fraud complaints and referrals to AG • Final Referral Letter • All other records	**10 years from Creation Date** **Permanent** **7 years from Creation Date**	B03-01 Investigation Case Files (a) letters referring cases to AG –Permanent (b)Landmark cases – Permanent (c) Non-jurisdictional or lack of probable cause – 3 years (d) All other Records – 6 years after final case closure or referral to AG B06—10 Attorney General Litigation File (d) Medicaid Fraud Cases – retain 25 years after final action
b) MassHealth Member Complaints	**7 years from resolution**	B04-06 Complaints Against Agency (a) Lead to change in policy – permanent (b) All other records – 6 years
c) Records of Audits of MassHealth by Oversight Agencies: (i)Final Audit Report and Responses (ii) Background Materials and Work Papers	**Permanent** **6 years from Creation Date**	D02-04 Fiscal Audit Records (a) Primary copy of final audit reports and response – permanent (b) Background materials and work papers six years

2.1.3 IQBG Proposed Treasurer's Office ERM Project Team Members

RFP 4.3.1.3 Vender should include resumes of all staff that will be assigned to this project. Include any certifications in the records or IT field.

Because the IQBG personnel proposed for the Agency's Records Management Project have used our proposed approach and proven methodology for numerous state government projects like the ERM/ECRM Program Assessment and ERM/ECRM Strategy engagement requested by the Agency, we are able to anticipate and avoid problems, minimize risk and maximize success. We understand what information needs to be gathered to review records policies and schedules, to develop new policies to deal with the many different types of records that organizations like the Agency now need to manage (including Outlook), to bring outdated schedules up-to-date, to identify and examine current workflows for document management, to analyze document usage by identifying stakeholders, creators, editors, approvers and publications of documents and records, and create recommendations based on industry best practices; performing a regulatory and legal authority review to enhance schedules, pointing out where there are gaps between the current state and future ECRM/ERM visions; and, identifying where there are legal or security risks.

IQBG consultants have been leaders in the market place in terms of developing strategies for effectively managing an organizations' paper and digital records including engineering plans and specifications, plant documentation, facility diagrams and blueprints, building plans, solicitations, proposals, permits, multi-layered CAD drawings, multi-layered GIS documents and files, policies and standards, email, web, as well as related social media, audio and video content. As required by the Agency, IQBG consultants have experience performing RM Program tasks that include:

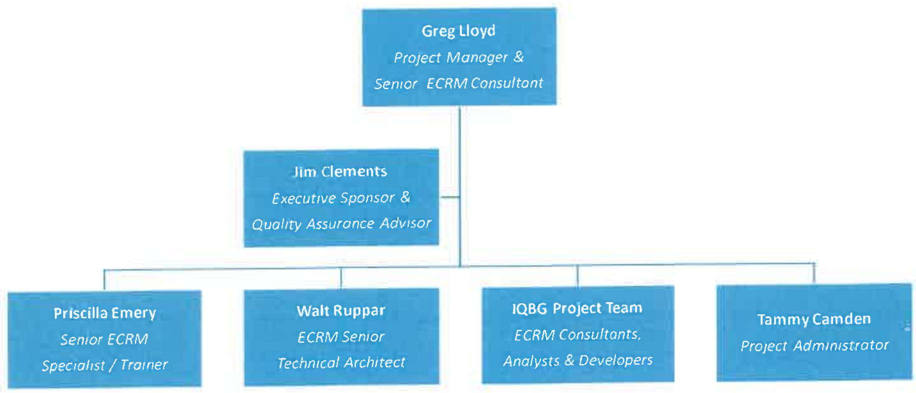
- Assessing RM training needs; developing and delivering RM training
- Performing RM Schedule development or enhancement that includes Federal, State, Local and Industry regulatory and legal reviews
- Developing digitization plans for the scanning of paper records that are based on information value and retention requirements
- Designing and implementing RM programs for our clients that reduce risks associated with non-compliance, provide legal holds, include efficient processes for responding to FOIA requests and litigation-related eDiscovery requests
- Developing information governance processes that include RM compliance audits
- Assist with the evaluation and selection of ECRM software for automated RM solutions.

The IQBG team has carefully reviewed the Agency's RFP and have put together a team that can deliver the services required in a way that ensures high quality at a reasonable cost. By utilizing our very senior and experienced personnel, our standard High-Level Assessment (HLA) can be tailored to interview representatives from the Agency's 16 divisions and associated business units/functional areas, and produce the deliverables requested.

IQBG believes we are an excellent and unique match for the services requested in the Agency's RFP for consulting services related to providing the Agency with a detailed roadmap for records retention and handling; improved retention schedule; change management policy related to records; action plan; staff training requirements; and policy recommendations to guide the modernization of the Agency's RM program. Our competence to perform the required services is indicated by the technical, educational and experience qualifications of the team we are proposing; and, the many similar projects that we can reference that demonstrate our thorough knowledge of RM/ECRM best practices program design and implementation.

IQBG's team of very experienced RM/ECRM consultants to support the Agency's initiative, and the management structure of the team, is presented in Figure 2.1.3-1.

FIGURE 2.1.3-1. IQBG STATE OF WEST VIRGINIA, TREASURER'S OFFICE PROJECT TEAM ORGANIZATIONAL CHART



The following personnel will be responsible for the roles identified in the IQBG Project Team organizational chart above:

Executive Sponsor and QA Advisor	Jim Clements
Project Manager and Senior RM/ECRM Consultant	Greg Lloyd
RM and Information Governance Expert Advisor	Priscilla Emery
RM/ECRM Senior Consultant	Addie Mattox
RM/ECRM Technical Architect	Walt Ruppar
RM/ECRM Analyst and Developer	Todd Varel
RM/ECRM Analyst and Developer	Rick Molique
Administrative Support	Tammy Camden

All proposed IQBG consultants will be available to work onsite at the Agency's offices as directed by the IQBG and Agency Project Managers. Jim Clements will provide executive sponsorship and will be responsible for quality assurance of all deliverables to the Agency. Jim has years of experience assessing RM programs; developing and enhancing policies, procedures and records schedules; and evaluating ERM/ECRM software solutions and will participate in identifying and evaluating ERM/ECRM candidates for the Agency to consider as appropriate., Greg Lloyd will lead the project, be responsible for managing project deliverables, serve as the Agency's main point of contact and participate as part of the RM Assessment and Roadmap team. Priscilla Emery is the Records Management and Information Governance Expert Advisor for the Agency's RM project and will provide Quality Assurance reviewing appropriate deliverables and guiding their development prior to delivery to the Agency PM. Greg Lloyd and some combination of Addie Mattox, Priscilla Emery, Todd Varel, and Rick Molique will be onsite to conduct interviews during the RM Assessment and Discovery interviews (High-Level Assessment - see Section 3.1 for a more detailed description of IQBG's proven HLA process as proposed to the Agency) used to determine the state of current operations and perform the analysis as well as gather the data necessary for developing the other deliverables required by the Agency (as specified in the RFP).

The entire IQBG team will be involved in the preparation of the Agency's Current State Assessment, recommendations related to business process flow and collaboration improvements, Future Vision, Budget and Implementation Roadmap that supports the Agency's RM program. The detailed roadmap delivered detailed tasks necessary to define the RM Roadmap required to action the Agency's record retention and handling; improved retention schedule, change management activities, staff training, policy implementation: in effect, modernization of the Agency's RM program.

Greg Lloyd, the IQBG Senior Project Manager for the Agency's project, will be engaged as PM on only up to two projects at a time (the State of West Virginia Treasurer's Office and one other); and, the combination of Greg's and Addie's allocation to the project will provide more than 100% PM coverage for the project.

Much of the technical review will be performed offsite using information that Greg and the onsite team gather and provide. Jim Clements, Priscilla Emery and Walt Ruppar will be very active in the development of best practice approaches to end-to-end records management and the redesign of processes to take advantage of increased use of digital records and digitization efforts. Jim, Priscilla and Addie Mattox have considerable ECRM/ERM sector knowledge to present industry and market information that can guide the Agency's software selection if so desired.

Greg, Priscilla, Addie, Todd and Rick will be heavily involved in the review and analysis of business processes and will be critical to the development of more efficient and effective business processes, workflows, integrations with existing ERP and line of business solutions, the development of high-level taxonomy and metadata requirements, the identification of the more significant Agency content collections and requirements related to taxonomy, security and confidentiality to support improved records management.

Todd, Priscilla and Rick have developed and provided RM and ECRM related training to many of the referenced clients in Sections 2.1.2 and 2.1.4; and, Priscilla is known internationally for providing best practice and conceptual records management and information governance training.

Additional experts will be used as needed by Greg Lloyd for analysis tasks related to the development of the set of deliverables specified in the Agency's RFP. Appropriate staff will be available for all stakeholder and management presentations. Greg Lloyd will be responsible for all management responsibilities related to our proposed RM project for the Agency including, but not limited to:

- All coordination of services with the Agency
- Ensuring any substitutions in proposed team personnel given project timing are approved by the Agency (the team has been proposed given our estimated timing of the Agency's project; but, substitutions of equally qualified IQBG consultants may occur depending on actual timing of the Agency's project)
- Provision of reporting as required by the Agency to include:

- Providing copies to the Agency's project manager (PM) of all correspondence related to the project, including agreements reached on behalf of the Agency related to schedule and scope
- Development of any decision and/or change requests driven from the engagement or requested by the Agency
- Obtaining sign off from the Agency PM of all Decision or Change Requests
- Obtaining sign off on all deliverables (see the list of proposed deliverables in Figure 3.2.2).

Priscilla Emery will be extremely valuable to IQBG's proposed Agency RM team because of her recognized industry leadership and strong knowledge of ECRM/RM principles and concepts including:

- Records Management best practices
- Alignment to the Agency's Records Schedule
- Management of all implemented file plans
- Administration of records archive processes and compliance processes
- Supporting FOIA, Public Records and eDiscovery requests
- Secure access and control of records and their distribution including and not limited to emailing, printing and viewing
- Electronic Signatures
- Retention and disposition requirements
- Legal and Regulatory compliance, security and confidentiality requirements

Summaries (bios) for each of the key IQBG personnel proposed for the Agency's ECRM/RM project are provided in the next subsection. More detailed resumes for each proposed team member are provided in Appendix B. Additional staff of similar quality may be used as required dependent on the timing of the tasks, and how much eventual overlap of tasks is desired during collaborative project planning between Greg and the Agency PM.

2.1.3.1 Bios for IQBG Team Members Proposed for the West Virginia Treasurer's Office RM Program Assessment Project

Jim Clements is a Vice President and Senior ECRM/RM Consultant/Program Manager for IQBG and has been involved in the delivery of enterprise-scale ECRM systems for over 20 years. His experience includes project management, logical data modeling, records management, taxonomy design, training, governance, and the use of structured methodologies for both government and commercial clients. He has authored textbooks and written articles on systems analysis and design, project management, relational database design, logical requirements modeling, business intelligence, and ECRM approach and strategy.

Jim managed the ECRM/RM High-Level Assessment and Roadmap projects for NCDOT and the Virginia State Bar; and, led the development of the ECRM Roadmap for Denver RTD (although Priscilla Emery led the HLA portion of the project). He performed the 'big bucket' analysis for update and implementation of records schedules for the Architect of the Capitol, and the development of records management policies, procedures and schedules for the Federal Home Loan Banks (FHLB) Office of Finance. Currently, Jim is working on several ECRM/RM projects including enterprise ECRM design, email archiving, 'big bucket' records management, and FOIA response for various clients; and, continues to provide executive guidance to several of the projects referenced in Section 2.1.4 of this RFP. Jim has been personally involved in the implementation of ECRM/RM Programs and the establishment of ECRM/RM Governance programs for tens of IQBG clients. Prior to joining IQBG, Jim served as CEO of DeepBridge Content Solutions, a professional services firm specializing in ECRM strategy/guidance, technical architecture/design, and integration/implementation. DeepBridge worked with over twenty different ECRM vendors from 1999 to 2007 and was the EMC/Documentum integrator of the year for 2005.

Jim has led successful ECRM/RM High-Level Assessment (HLA) projects similar to that proposed to the Agency for twelve clients in the past eight years.

Greg Lloyd, Senior Project Manager and ECRM/RM Consultant will be the Project Manager for the Agency's RM project. Mr. Lloyd has more than 20 years of experience serving as program manager, PM, applications development manager, lead consultant, and customer relationship manager for business and technology management initiatives. His strong technical, operational, and strategic alignment skills enable the delivery of innovative and efficient solutions, and he has the proven ability and demeanor to interact with internal and external management at all levels.

Mr. Lloyd has recently managed ECRM/RM Discovery, Assessment and Roadmap projects like what is being proposed to the Treasurer's Office for the City of Philadelphia; the American Association of Certified Public Accountants; Harris County, Texas; the Intouch Group (Pharmaceutical); Tennessee Comptroller of the Treasurer, and the Regional Municipality of Halifax, Canada. Greg has also served as the Project Manager and Technical lead for tens of ECRM design and implementation projects over the last five years including ECRM engagements for Fairfax County, Virginia; Texas DSHS; the North Carolina Court System; the Regional Municipality of Peel; and, others.

Mr. Lloyd will be onsite to provide project management and to participate in the HLA Discovery and Assessment analysis, using the information collected during the during the HLA interviews, and the analysis of the information to develop the required deliverables of the Agency's project. He will work collaboratively with the Agency PM to make sure that all deliverables are produced according to the plan and to the highest quality standards.

Priscilla Emery is an ECRM/RM, Information Governance and eDiscovery Specialist, Trainer and Expert Advisor with a recognized reputation for leading the development and implementation of Enterprise Content, Document, and Records Management programs; Information Governance Frameworks; and, providing guidance, processes, and tools to assure information compliance with business, legal, and regulatory requirements. With over 20 years of business and Information Technology experience, she is particularly effective with understanding, bridging, and managing the needs of business clients and technology providers to assure the successful implementation of enterprise-wide solutions for managing corporate compliance and information assets.

Priscilla has provided records management and ECRM compliance and eDiscovery tools and guidance for many government agencies, public companies and professional associations. She has developed systems that are HIPAA, PHI and PII compliant and related governance frameworks, and has provided compliance and discovery related consulting and advisory services.

Priscilla wrote the Electronic Records Management Software Buyer's guide that is available for purchase through the Association of Information and Image Management (AIIM). She has provided ECRM education on an international basis on a variety of records management subjects including business continuity planning, email management, managing electronic records and developing ECM and RM governance processes and procedures. She has provided consulting services related to records retention and destruction to many state and local government entities like the Treasurer's Office. Priscilla led the HLA, IG Maturity Assessment, and development of the IG/ECRM/RM program for the City of Denver, Regional Transportation District (see the Reference in Section 2.1.4).

Priscilla holds a Bachelor of Arts Degree in Mathematics from Lehman College, and completed post graduate work at Rutgers University. She is an AIIM Fellow, ERM Specialist, and Certified Information Professional (CIP). She received the Master of Information Technology from AIIM in 1998 and Laureate of Information Technology (LIT) in Electronic Imaging from AIIM in 1999. Priscilla was recognized as the ARMA Chapter Member of the Year (Central Florida Chapter) in 2009.

In 2017, Priscilla received the highest industry recognition that AIIM bestows when it awarded her the AIIM Award of Merit for her contribution to the ECRM industry sector.

Addie Mattox is a Senior ECRM/RM Consultant, Analyst and Project Manager; and, has been an information management consultant since 1976. Addie has worked extensively with government agencies including federal, state, city and county entities, Canadian municipalities, districts, and the military. Many of these clients required end-to-end RM solutions for both office documents and technical documentation, such as project files, drawings and maps; as well as, rich media assets such as pictures, audio and video content.

Addie's consulting experience has focused on developing strategic plans for integrating Records and Document Management into clients' wider information management strategies. She has extensive experience identifying requirements for RM programs, implementing information governance frameworks, evaluating records management technologies, as well as implementation planning and assistance. She has functioned as project manager and senior consultant on dozens of client projects. Addie worked with Jim Clements, Greg Lloyd and other members of the proposed IQBG team as a Senior ECRM/RM Consultant for the HLA Assessment and Roadmap projects that IQBG conducted for the City of Denver RTD, NCDOT, Washington State Department of Ecology, City of Raleigh, North Carolina, Halifax Regional Municipality, the Virginia State Bar, Halifax Regional Municipality (Nova Scotia), and others. Her skills include:

- Identifying business requirements for digital-based processes, and unobtrusive records management
- Developing user profiles for RM related retention and disposition processes; and, ECRM solutions
- Taxonomy and index/retrieval development
- Strategic planning to incorporate imaging, document and records management into information technology strategies

- Feasibility studies for ECRM and records management systems
- ECRM and records management risk assessments of clients' business processes
- Cost/benefit analyses. (Addie has developed a well-respected methodology for measuring benefits. AIIM International hired her to write their white paper on this subject.)
- Workflow/re-engineering studies that identify current flows and projected flows illustrating the potential impact of document management technology
- Request for proposal preparation and vendor selection
- Implementation planning and assistance: project management, procedures, training, implementing, and measuring pilot installations.

Addie has participated in over twenty HLA projects like that being proposed for the Agency; and of relevance given the Agency's Microsoft environments, she developed the 'Best Practices for Automated Records Management in SharePoint" whitepaper published by AIIM.

Walt Ruppar is a Senior ECRM Technical Architect for IQBG who has been involved at all levels and stages of ECRM solutions including the design of overall architectures and the development of multi-year implementation plans. He architects and implements solutions, leading both IQBG and client teams to project success, drawing on his years of experience with the both cloud and on-premise product sets over many years, Walt does not just follow best practices, he often leads the way as he offers best ideas for a specific client's engagement requirements and environments.

Walt has worked over the years on a variety of engagements, including very large million record implementations, data migrations, and multi-phased, enterprise scale ECRM deployments. He served as the Technology ECRM Manager for Astyra Corporation where his responsibilities included the coordination with client Information Retention Policy department to manage existing Official Record classifications and retention schedules, to identify and implement HIPAA, PHI, PII, legal and RM compliance requirements; and, to automate the RM retention and disposition management processes.

Walt has supported our recent ECRM projects for many state and local government clients like the Agency; and, our long standing and successful implementation and support of the ECRM implementation for the U.S. Department of the Interior. Walt has architected solutions that involved the O365 platform, SharePoint, SAP integration, public facing portals, and integrations with other business solutions including CRM, GIS and off-the-shelf-products such as Cityworks, Hansen, POSSEE, and others typically found in local government clients.

Walt's experience with the integration of ECRM solutions and line of business and ERP solutions for many clients and multiple ECRM solutions will also likely prove valuable to the Agency as we determine the approach to integrate and future ECRM solution (if the Agency moves in this direction) with other State and Federal government systems and databases; and, as we evaluate ECRM solution capabilities during vendor evaluations for the final recommendations from the RM Assessment.

Todd Varel is a Senior ECRM and RM Analyst, Business Process and Training Specialist and will be involved in the HLA discovery interviewing and business requirements assessment for the Agency. Todd will also develop the records management requirements and review current RM policies and procedures, develop new or enhanced policies and procedures; and, perform records to retention mappings in preparation for any new ECRM solution potentially implemented for the Agency.

Todd is a senior-level professional with over 20 years of experience developing business processes and system solutions from conceptualization to implementation. He adds value to ECRM/RM projects by designing and developing processes around customer needs to provide user-friendly solutions and designing and delivering context specific training related to those processes and metadata models. He was heavily involved in the redesign of business processes as part of the ECRM/RM implementation including integration with a case management solution on a Microsoft platform for the Virginia State Bar (VSB). Todd was responsible for the design of work processes around membership and mandatory continuing legal education business processes, including registration, license validation, membership renewal, certification, and status changes. His expertise includes business analysis, requirements elicitation, business process development, usability testing, and effective user training.

For the Virginia State Bar, he and Rick Molique (see next bio) were responsible for designing and delivering both ECRM solution overview and functional training; Records Management concepts and best practices; and, context specific formal training and on-going coaching. They also managed User Acceptance Testing activities for these (and for many other) ECRM implementations.

For the Bureau of Reclamation (BOR – U.S Department of Interior), Todd has recently been designing a very complicated taxonomy design that allows work-in-progress (like contracts being developed) to be secure within one of eighteen business units, while opening access to final approved documents to a wider audience based on an automated approval process; and, designing the related retention and disposition processes related to this content.

Rick Molique, is a senior ECRM/RM and IT professional (ECRM Technical Lead, Consultant and Developer) with experience in all phases of the ECRM development lifecycle, including system design, implementation, and administration, and he has proven success enhancing systems architecture with new features and performance improvements. As a senior developer and architect, Mr. Molique has implemented solutions leveraging ECRM workflows, integration with SharePoint, Web Services integration with ERP and line of business solutions, and taxonomy and records retention management implementations with ECRM solutions.

Rick served as the technical lead for both the Virginia State Bar (VSB) and NCDOT project design and implementation phases. For NCDOT this included integration with SharePoint and for VSB integration with VSB Integrated case management solution (Integrated Bar Information System – IBIS). Rick is also familiar with XML data exchange and the design and implementation of paper and digital content for capture and migration into newly implemented ECRM solutions. For both VSB and NCDOT, Rick helped design and implement the capture and migration of existing content through ECRM scanning modules and tightly integrated capture and search with the MS Office suite of products.

Rick was also a member of the ECRM/RM Discovery, Assessment and Roadmap (HLA) projects referenced in Section 2.1.4; including and in addition, the Virginia State Bar, NCDOT, Washington Department of Ecology, the City of Raleigh, the City of Philadelphia, Denver RTD and many others working with both Jim Clements and Greg Lloyd.

Rick was instrumental in designing an enterprise taxonomy for NCDOT that allowed local department work-in-progress content (that could only be seen by a specific local department) to feed an enterprise taxonomy view when documents were finalized, where retention and disposition management processes were automated – for content including policies procedures, standards, budgets, contracts, etc.

2.1.3.2 Team Experience/Skills

As evidenced by Section 2.1.3.1 above, the key difference that IQBG offers the Treasurer's Office can be explained in one word: People. As important as the skills and experience of individual team members are, the overall team experience and cohesiveness can provide greater value to IQBG clients. The project team members being proposed to the Agency have worked together as a team on many similar projects. In fact, these team members have worked together on the references provided below in Section 2.1.4 and many of the projects listed in the ECRM/RM Assessment and Roadmap projects listed in Table 2.1.2.4-1 (not to mention many others). Figure 2.1.3.2-1 below, the experience of our proposed team members working together on projects is presented.

FIGURE 2.1.3.2-1. PROPOSED IQBG CONSULTANTS' PRIOR TEAM EXPERIENCE

IQBG Team Member	Referenced Projects: City of Raleigh	VSB	NCDOT	WA Ecology	Denver RTD
Jim Clements	X	X	X	X	X
Greg Lloyd		X		X	X
Priscilla Emery				X	X
Addie Mattox	X	X	X	X	X
Walt Ruppar		X			X
Rick Molique	X	X	X	X	X
Todd Varel		X	X	X	X

2.1.4 IQBG ERM Project References

RFP 4.3.1.4 Vendor should include at least three (3) references with their contact information, including the entity name, primary contact person, contact person telephone number, email address, and a description of the work provided to the entity.

Descriptions of relevant IQBG references for projects of similar nature, scope and size are provided below. The first three – Denver Regional Transportation District, U.S. Department of the Interior, and the Virginia State Bar - represent RM projects that have been completed within the last 36 months. Two others have been included because aspects of the tasks/deliverables produced for the clients are of relevance to the agency – NCDOT and Washington Ecology -- and provide evidence of this experience to the Agency's evaluation team. IQBG has performed over 30 RM projects with similar scope of products/services requested by the Agency: in most cases, the scope of services requested by clients was broader and included recommendations and evaluations of automated RM solutions; and, often the scope was on an enterprise basis.

2.1.4.1 Reference #1

Denver, Colorado – Regional Transportation District (RTD)

Ms. Lisa Dorrance, (Acting) Manager, Information Management & Governance (IMG) Division
1600 Blake Street, Denver, CO 80202-1399
(303) 299-6920 / Lisa.Dorrance@rtd-denver.com

Denver's Regional Transportation District (RTD) serves over 2.6 million constituents in eight counties (the country's 21st largest metropolitan area) and expects both its constituent base, and the content that is involved in all of its daily processes to continue to grow – clearly demanding a true enterprise solution to facilitate its management of content and files of all types including reports, correspondence, facility and transportation plans and blueprints, facility and asset as-builts, engineering (CAD – both MicroStation and AutoCAD) drawings and specifications, maps, GIS files, email, policies, contracts, forms, documents, audio, video, pictures, etc.

RTD asked IQBG to guide a project to formulate a digital content and records management (Enterprise Content and Records Management [ECRM]) strategy, which would enable employees to fulfill information requests, improve business processes, raise levels of service, and increase compliance by utilizing digital capture, storage, records retention, retrieval and workflow functionality. Primary goals were to assess RTD's maturity related to information governance; and, to identify an *Enterprise* solution that could address current issues around paper, electronic content, processes, collaboration, records management, security and remote access. The resultant solution needed to be both *scalable* and *extensible to* provide an ECRM solution to meet the diverse needs that were found across the entire agency.

IQBG consultants used a tailored version of our standard High-Level Assessment (HLA) (that is the methodology being proposed to the Agency) to meet the requirements specified by the RTD in several planning meetings. IQBG conducted a high-level review of current RTD operations and an assessment of requirements related to paper-based processes and collaboration; electronic content storage, retrieval workflow and processing; records management; collaboration with internal and external parties; and integration with line of business systems. Interviews were conducted with over 80 representatives from selected business units (see the list below) to collect business workflow, records management, current system, and document processing and volume requirements necessary to make a recommendation for an ECRM strategy, implementation sequence and potential product solutions.

Departments interviewed in Denver RTD's ECRM/RM HLA interviews included:

- Administration
- Board Office
- Bus Operations
- Capital Programs
- Communications
- Contracts
- Executive Office
- Facilities
- FasTracks
- Finance
- Human Resources
- Information Technology

- Legal
- Planning
- Rail Operations
- Safety and Security

The specific goals of the High-Level ECRM/RM Assessment and Roadmap project included:

- Assess RTD's current status as related to information governance and content/records management and identify future requirements;
- Assess the current level of RM-related understanding by RTD staff and determine the information governance maturity of the organization (using the ARMA maturity model);
- Recommend best practices to provide end-to-end records management including retention and disposition management, legal hold processing, and eDiscovery/FOIA response;
- Assess current systems in place that relate to document and records management, business process and workflow;
- Review current records management policies, procedures, schedules and support organizations;
- Conduct a high-level content collection inventory;
- Recommend a strategy that represents industry best practices;
- Recommend a list of ECRM Vendor solution's that can address requirements for RTD based on ECRM requirements, number of users and volume of content;
- Develop both a high-level business case and cost justification;
- Develop an Enterprise Reference Architecture (ERA) and identify functionality gaps
- Ensure that the resultant system has the capability to add and manage future application requirements; and
- Develop and document an ECRM/RM/IG Roadmap that would guide RTD's IG and RM Program over the next five (5) years
- Include information governance and training/education tasks in the 5-year roadmap.

As part of our approach, IQBG staff collected information regarding operations, costs, technology, and cultural issues as they relate to selected RTD business unit operations. This proven approach (the HLA methodology proposed to the Agency) is designed to provide information regarding current operations, which is then compared to experience-based models maintained by IQBG and is used to develop ECRM requirements and guide the identification of ECRM Vendor candidates.

The primary information gathering technique used during RTD's ECRM Assessment was small group interviews with representatives from departments, and functional groups and business areas within those departments. During each interview, RTD staff were asked to describe important business process and identify the content that was used, shared and collected during each process. IQBG consultants documented these discussions first in interview notes, and then in the Business Process Assessment, Content Inventory and Technology Assessment reports.

Analysis of the information gathered during the interview process was used to guide an inventory of content and records across RTD departments. The content inventory and the resulting business process analysis were used to revise records policies, identify gaps in records schedules, review records retention policies, and eventually to develop an ECRM/RM Strategy. Meetings with representatives of RTD's IT Group helped provide additional information necessary for a technology assessment that identified key integration points with line of business systems and also developed current state and future vision Enterprise Reference Architecture diagrams.

Specific Deliverables that were produced during the process of delivering the final ECRM/RM Roadmap for the RTD included:

- An Analysis of Current Operations
- Content and Records Inventory
- Business Process Analysis and Best Practice Improvement Recommendations (for end-to-end records retention and disposition)
- ECRM/RM Strategy
- Enterprise Reference Architecture
- Technology Assessment
- Enhanced Records Management Policies and Procedures
- Revised Records Retention Schedules (and associated legal, regulatory and business review)
- Revamped policies and approach to managing retention, holds and discovery processes
- Taxonomy and metadata modeling for digital content and for digitization of paper documents
- Information and Security Model
- Business Case and Cost Benefit Analysis
- Prioritized and Sequenced Implementation Tasks to Implement the ECRM/RM program.

The culmination of these deliverables was the development and presentation of an Information Governance Management Report that documented best practice recommendations related to a formal RM Program, Information Governance Framework, and a five-year ECRM/RM/IG Roadmap for RTD that detailed projects and tasks for implementing the RM Program. The highlights of the HLA Findings and Recommendations, and the ECRM/RM Strategy and Roadmap were presented to RTD's Executive Committee, and included a comparison of vendors, an ECRM requirements matrix, and a technical specifications matrix to be used in the preparation of a follow-up RFP. IQBG also developed a detailed project plan to support the first-year tasks associated with the ECRM Roadmap, IG and RM Programs.

IQBG consultants were subsequently engaged by RTD to guide development of an enterprise taxonomy, the evaluation and selection of an ECRM solution, the evaluation and recommendation of an approach to support enterprise/federated search, and other ECRM/Information Governance tasks defined on the ECRM/RM/IG roadmap.

The project was performed on a fixed, not-to-exceed basis estimated to be $670,000. The project was completed, after some collaboratively negotiated changes in scope over the project's life for $590,000 (the scope of the project was changed after IQBG advised RTD to standardize on already owned ECRM components rather than doing a formal procurement for a new ECRM solution).

RTD continues to focus on best practices across all of its business processes and endeavors to find the right way to incorporate technology into the agency's operations. RTD believes that using technology to improve the customer experience and increase efficiencies will be an important challenge in the coming years. The RTD Board has a stated goal of selecting technology projects that will ensure that RTD has a technology infrastructure that can be built upon and that supports disseminating real-time information to support business operations and decision making.

IQBG provided Project Management, Technical Architecture, Requirements Analysis, Procurement Assistance, and Technology consulting related to an ECRM Strategy and Roadmap, Recommended Software Solutions, and made recommendations related to the design and establishment of an Information Governance program. IQBG consultants also performed an information governance maturity assessment which drove the recommendations and tasks that formed the ECM Strategy and Roadmap; and, made recommendations (and presented a technical analysis to support it) for the tools and approach that RTD should take/use to implement Enterprise Search across all platforms (Federated).

2.1.4.2 Reference #2

U.S. Department of the Interior, Bureau of Land Management (BLM)

Mr. David Alspach, Office of the Secretary's, Office of the Chief Information Officer
Records and Document Management Consulting
(202) 219-8526 / david_alspach@ios.doi.gov

(Note: this is the most recent of over a dozen document and records management related engagements that IQBG has performed for DOI, and various DOI Divisions and Agencies. For DOI, IQBG implemented (and continues to support) the largest enterprise document and records management system currently installed for the Federal Government (eDRMS). The eDRMS system automatically classifies over 72 million objects a month with the correct records declaration and automatically applies retention and disposition rules.)

The Office of Directives is a program within the Washington Office, Bureau of Land Management (BLM) under the Department of Interior. BLM's Directives System sets forth the policy regarding preparing, approving, distributing, and maintaining the various types of directives for BLM use.

These directives provide BLM employees with authoritative instructions and information to implement BLM programs and support activities and provides BLM officials with the means to effectively and efficiently convey instructions to users and to document BLM's policies and procedures.

In August of 2012, the Archivist of the United States and the acting director of the Office of Management and Budget (OMB) released the Managing Government Records Directive. The Directive specifically states that by the end of 2019, Federal agencies will manage all permanent electronic records in their native format. In addition, on April 12, 2017, OMB released the Comprehensive Plan for Reforming the Federal Government and Reducing the Federal Civilian Workforce which sets forth guidance on government reform including the leverage of technology to aid increased efficiency and budgetary savings.

DOI turned to IQBG as an industry recognized RM consulting firm to assist BLM in meeting these requirements, and to actually implement a pilot project to test revised workflow, business processes, and RM procedures to achieve compliance with these new requirements.

BLM currently uses Microsoft Office to create directives and the Directives Tracking System (DTS) for the approval process. Directives are stored on a shared drive and made available to employees on an internal website and the public on an external website using Drupal. BLM has a need to leverage an information system to migrate, manage and govern Directives, and realize applied RM (records management) for record content.

To effectively meet the needs of BLM, a three-phased approach was used -- a high-level business and information analysis was used to:

- Analyze document processes to establish appropriate roles and processes for applying RM retention and disposition policies
- Design digital processes where possible to apply industry best practices to effectively collaborate in document life cycles and reduce redundancy
- Make recommendations related to capture points, management and archival format standards, eForms and templates where appropriate, taxonomy and metadata requirements
- Design and integration of document and data workflows and eDRMS storage with existing web and line of business sources of content
- Recommend and deliver training (including the development of training materials) for RM and end-user process training for BLM staff to bring processes and content into compliance with RM regulations.

IQBG consultants conducted a file plan analysis that assisted with defining taxonomy, identification of where mission records and content would reside, and defined structure and metadata to support BLM business organization and function. The file plan analysis was used to:

- Identify locations of required documents
- Map documents to records series
- Identify user roles generating and managing content
- Automate role assignments, record declarations, and retention and disposition management.

The result of IQBG's efforts allowed BLM to meet the following goals:

- Improve Records Management, and be well-positioned for MGRD 1.1
- Improve Directives Management
- Provide users the ability to easily search and retrieve directives by a number of features such as office code, keyword, subject, program area, subject code, expiration date, etc.

In addition, the functionality designed into the eDRMS solution allowed BLM users to:

- Support the defined BLM Directives Information Model
- Provide a Searchable Repository for BLM Directives Information
- Access multiple Workspaces to organize Content and Records
- Leverage design flexibility to gain User Adoption
- Collaborate through a System of One for users across the organization
- Apply specific DOI/BLM Directives Records Management across the organization
- Realize Information Governance across the organization
- Reduce storage costs and the risk of information loss.

Like the Agency, an important aspect of the RM program implementation was assessing the training needs of BLM staff – both for RM concepts and contextual training on the newly designed RM retention and disposition processes; developing and providing the training to BLM staff.

2.1.4.3 Reference #3

The Virginia State Bar

707 East Main Street, 8th & Main Building, 15th Floor, Richmond, VA 23219

Mr. Bill Dickinson, IT Director, 804-775-0511 / Dickinson@vsb.org

The Virginia State Bar (VSB) was created in 1938 by the General Assembly as an administrative agency of the Supreme Court of Virginia. The creation of the agency unified Virginia's lawyers in a mandatory State Bar. The VSB is governed by its Council and Executive Committee, whose members are elected or appointed from every judicial circuit in the Commonwealth. The mission of the Virginia State Bar, as an administrative agency of the Supreme Court of Virginia, is to regulate the legal profession of Virginia; to advance the availability and quality of legal services provided to the people of Virginia; and to assist in improving the legal profession and the judicial system. VSB acts as the professional regulation and compliance arm of the Legal profession in Virginia, and actually performs trials and issues disciplinary action against attorneys who perform in a nonprofessional manner.

Client Objectives: VSB's objective was to move from a paper-intensive work environment to one that employed ECRM to reduce paper and improve efficiency, where possible; and, to bring the organization into compliance with Commonwealth of Virginia Records Retention requirements. VSB was interested in finding an information governance, document management and records management specialist that could update its records management policies and schedules, make recommendations related to the best formats in which to store digital content (that would be needed for evidentiary content) including how to handle digital signatures and clerk's office certifications of originality.

VSB was also interested in a consultant that could evaluate its workflow and business processes, to better incorporate information governance and provide industry best practice recommendations related to standardizing capture methods, metadata capture, storage format standards, and consistency in retention and disposition management processes. VSB's records schedules were out of date and needed updating, and they were interested in recommendations related to establishing a records management program, including necessary roles and staffing requirements. IQBG assisted with the identification of a Records Manager from existing staff and provided knowledge transfer during a review and update of records schedules; and, recommended and helped establish a digitization process and record liaison positions in each VSB business unit.

As part of the RM review process IQBG made recommendations related to compliance processes for ensuring that required records are audited, retained, and otherwise handled according to the industry, supreme court, RM and other legal, and business unit requirements. IQBG staff developed new RM policies and procedures to cover email and social media content.

Approach: IQBG first provided VSB with a High-level Assessment (HLA) (the same approach and methodology being proposed to the Agency) that determined overall functionality requirements related to document and records management (RM), potential business process improvement (BPI) and process standardization opportunities, integration points with line of business systems, email management requirements, eForms requirements, scanning requirements and approach, performance and scalability issues. Upon completion of the HLA, IQBG made recommendations regarding ECRM software that could meet current and projected system requirements for multiple VSB groups.

The HLA delivered a deployment roadmap that provided a five-year strategic plan for ECRM and a detailed roadmap for ECRM for the first two years. The HLA was performed by conducting interviews with selected representatives from each VSB department. The final HLA report contained the following content and was presented to the VSB Executive Board:

- A review of current operations
- A records inventory and review of current records retention schedules

- Revision of RM Policies and Procedures
- Findings and Recommendations for business process improvements
- A justification discussion (included costs)
- Proposed approaches to functionality including automated records retention and disposition management processes
- IQBG recommendations for an ECRM solution, to include implementation sequencing related to projects and tasks to implement a RM program and the ECRM solution
- Vendor solutions that should be evaluated

The VSB then asked IQBG to assist with the evaluation and selection of ECRM software. IQBG managed the solicitation and evaluation process, provided the script for vendor demonstrations, and helped guide VSB's evaluation of software functionality. The two finalists were IBM FileNet and OpenText. VSB selected the OpenText solution due to its out-of-the-box functionality and its best-value cost.

In implementing the ECRM solution, IQBG developed detailed requirements, including taxonomy, metadata modeling, workflow analysis, and the mapping of taxonomy to retention requirements to support automated retention and disposition management. The functional requirements were then turned into detailed design specifications for implementation on the OpenText ECRM platform.

IQBG also assisted VSB in conducting an inventory of paper documents and developed and documented a back-file scanning plan that accounted for retention requirements and frequency of use to determine how far back to go in scanning older paper files. IQBG developed the scanning profiles for scanning back-file paper related to:

- Member registrations and renewals
- Member suspensions and reinstatements
- Mandatory continuing legal education certifications
- Corporate counsel files
- Professional regulation formal orders
- Professional regulation case files

Using the OpenText Capture Center scanning component, IQBG developed scanning routines that used barcoded cover sheets to separate content collections and optical character recognition (OCR) to reduce metadata entry and developed integrations with line of business systems to automatically pull index values from the systems, including VSB's integrated case management system, to populate metadata in the OpenText system (e.g., complainant, attorney, respondent, type of case, case status and outcome) to allow for robust searching of digitized case documents. A complete case taxonomy and metadata model was developed to allow the intake and bar counsel staff to manage cases digitally, including the sharing of case documents remotely with field investigators. Only bar counsel and their immediate teams were allowed access to case folders they were working on.

Very relevant to the Agency, IQBG implemented the ECRM solution to allow seamless integration (search, save, find) with the complete Microsoft Office suite of products. For example, attorneys creating a brief or opinion simply save the Word document into the correct case folder. IQBG designed the folder structure within the ECRM solution in such a way that metadata to support searching is inherited from the folder that a document is stored in as part of the normal business process, enabling high functionality without requiring users to manually enter metadata and to perform unobtrusive records declaration .

Users now have the ability to search the full case repository to find past cases of a similar nature and to look at whether they were ruled as 'true' misconduct or not, and, if so, what discipline was imposed. Users can search documents by full text or can use the solution's metadata-driven search functionality.

In 2018 IQBG continued defining improved business processes around professional regulation case intake and evaluation, and the entire professional regulation process – including, the definition of automated retention and disposition rules.

Since initially performing the original HLA, IQBG has continued to support VSB adding ECRM functionality and bringing additional business areas into the ECRM environment including executive, human resources (HR), finance, accounting, ethics, and public relations, among others. Plans for next year include the integration of the ECRM solution with the newly implemented state-wide (Commonwealth of Virginia) financial and accounting solution.

2.1.4.4 Reference #4

N.C. Department of Transportation (NCDOT)

401 Oberlin Road, Suite 250, Raleigh, NC 276052

Ms. Missy Pair, Staff Engineer, Project Development and Environmental Analysis Branch, 919-707-6065 / mpair@ncdot.gov

November 2011 – March 2012 (*IQBG was asked to perform additional enhancement projects through 2015)

North Carolina Department of Transportation and Division of Motor Vehicles (the NC DOT houses both DOT and DMV) is the second largest DOT in the U.S. NCDOT has over 15,000 employees and over 300 facilities statewide. The technology environment is heterogenous with multiple line of business and ERP solutions, two different CAD programs, and multiple networking and database platforms.

The work performed by IQBG for North Carolina Department of Transportation's (NCDOT) also used a tailored version of our HLA methodology that is being proposed to the Agency. NCDOT wished to formulate a digital content and records management Enterprise Content and Records Management [ECRM]) strategy, which will enable employees to fulfill information requests, improve business processes, raise levels of service, and increase compliance by utilizing digital capture, storage, records retention, retrieval and workflow functionality. A primary goal was to identify an Enterprise solution that would address current issues around paper, electronic content, processes, collaboration, records management, security and remote access. The resultant solution must be both scalable and extensible to provide an ECRM solution to meet the diverse needs that were found across the entire agency.

IQBG conducted a high-level assessment (HLA) of NCDOT's current and future electronic document and records management opportunities. Interviews with NCDOT personnel and a study of the current systems and projected applications growth have provided the background information necessary to make the recommendations contained in this document.

IQBG consultants collected information about the current operations from over 200 business unit representatives. This information was used to gain a better understanding of NCDOT's current operations in order to be compared with similar organizations.

Users from the following departments were interviewed:

- Audit Group
- Aviation
- Board
- Bridge Management
- Communications
- Construction Contracts
- Construction Materials
- DCR - State Publications
- Design Build
- Design Miscellaneous
- DOH Mobility and Safety
- DOH Operations
- Engineering Contract Services
- Federal Funding
- Ferry
- Fiscal
- Fleet Management
- Federal Funds Management
- Funding -- State Unit
- General Services
- GIS
- Governance and Performance
- HBCU/MIHE
- Human Resource Services
- Information Technology
- Legal
- Local Programs
- Location and Surveys
- Pavement
- PDEA
- Program Development
- Project Store Subcommittee
- Public Trans, Bike & Ped
- Purchasing
- Quality Enhancement
- Rail
- Records Retention
- Right of Way
- Roadway CADD
- Roadside Environmental
- Secondary Roads
- Strategic Planning
- State Road Maintenance
- Secretary's Office
- Traffic Engineering
- Traffic Infrastructure
- Traffic Safety
- Transportation Planning
- Turnpike
- DMV - CRASH/TEAAS/LITES/IRP
- DMV – SADLS
- DMV - Digital DL System
- DMV – ImagePlus
- DMV – Operations

Deliverables from the ECM Assessment included:

- A review of RM policies, procedures and schedules – with an update to schedules primarily written for physical documents; to focus more on digital content including email and social media (new policies were written)
- The identification of RM roles, position description, and organizational structure for an Information Governance structure (Community of Practice and Center of Excellence groups); and, a Records Management staff
- Development of a staffing plan for currently non-existent positions, job descriptions for needed positions; and, guidance and support during the interviewing and hiring processes
- Training and knowledge transfer of the individual hired to fill the Records Management role
- A Content Inventory and Back File Conversion Plan

- Recommendations related to scanning hardware, software and capture approach including OCR/ICR and forms processing; standards for image capture and image formats; and, an identification of and evaluation of digitization vendors so that NCDOT business units could get 3rd party support for digitization without a solicitation
- Documentation of Business Processes and Future Process Recommendations; including the approval of engineering plans, and the use of digital signatures during the approval process of engineering documents across multiple planning/environmental and compliance analysis/build/review/operational departments
- Technology Assessment, Enterprise Reference Architecture and GAP Analysis
- Business Case, Cost Justification and ROI Analysis
- Information Model and Security Roles
- ECRM Strategy and Roadmap including Implementation Sequencing Recommendations
- The Establishment of a Governance Framework that includes a Community of Practice, Center of Excellence (still being established), a knowledge repository, Core Taxonomy and Communications and Training plans.

IQBG used information gathered during the HLA to conduct Requirements Analysis for pilot projects and delivered the Functional Description (FD) for the first set of implementation projects. Proof of Concepts were developed to determine requirements and approach related to integration with SharePoint, the use of CAD Connectors, eSignature and eForms requirements. Much work was done to determine the appropriate workflows around the development of plans, including CAD drawings, the definition of 'final' stages for snapshot records, the use of PDF/A to capture final documents, the publishing of plans to the internet to support procurement activities, and the receipt of 3rd party engineering documents in response to solicitations in a way that could 'lock them down' against change for RM requirements.

IQBG assisted NCDOT with ECRM product evaluation and helped them determine a solution that built on currently owned ECRM assets while adding components that would introduce a 'state of the art' ECRM platform capable of supporting enterprise needs.

NCDOT contracted with IQBG to continue work related to Records Management automation, Taxonomy development, technical architecture and Technical Design.

The initial Program Assessment and Roadmap project, Procurement Assistance, Requirements Analysis and 1st Projects Design and Implementation were all fixed price projects completed on time and on budget.

IQBG provided a Program Manager, a Project Manager, and Executive Advisor, and a technical team of from 3 to 6 consultants who were responsible for the overall delivery of the ECRM projects and the IQBG Project Manager acted as the co-manager of a blended IQBG/NCDOT team.

As ECRM Subject Matter Experts, the IQBG consultants acted as regulatory and compliance advisors to ensure that records management retention and Department of Defense (DoD 5015) certification requirements were adhered to in the solution implementation.

2.1.4.5 Reference #5

Washington State Department of Ecology
300 Desmond Drive SE, Lacey, WA 98503

Ms. Debbie Stewart, CIO, (360) 407-7048 / DSTE461@ECY.WA.GOV

May 2013 – October 2013

The Washington Department of Ecology (http://www.ecy.wa.gov/) employs approximately 1,550 people located in six major offices and a number of smaller offices throughout the State of Washington. Ecology's headquarters is in Lacey. The mission of the agency is to protect, preserve, and enhance Washington's environment, and promote the wise management of air, land, and water for the benefit of current and future generations. The agency is organized into ten environmental programs plus one administrative program with six divisions. The agency provides products/services in the areas of: environmental permitting; technical assistance; inspections and enforcement; contracts, grants, and loans; environmental monitoring and analysis; policy and rule development; and education and outreach.

Ecology's Broad Content Management Challenge:

Ecology continues to accumulate and store paper and electronic documents and intranet/internet content, using a variety of methods and technology solutions including: unstructured folders on shared network drives with different levels of access control, two major SharePoint site collections, internet and intranet web sites, email and email attachments, binary objects in databases, and an unknown number of collections of scanned documents. Ecology staff also routinely prepares documents in offline mode using agency laptop computers which in online mode, synchronize with network file shares. Offline synchronization with SharePoint is not currently implemented. These documents need to be shared with the public at large.

Ecology's Public Disclosure Challenge:

Washington State Department of Ecology responds to over 20,000 public disclosure requests per year and has suffered legal judgments because of inconsistent responses. Washington State's public disclosure is similar to the federal Freedom of Information Act (FOIA), but more restrictive in many ways. Ecology has not conducted requirements gathering and needs from public disclosure, however has conducted a "Lean" improvement event. The Lean event demonstrated Ecology's current environment to be very de-centralized with lots of inconsistencies in process, lack of search and package tools, and need for better guidance.

Ecology's Challenges with Record Search:

Ecology attempted to use Windows client search technologies for "Records Identification", but, found problems in this approach. Identification sets depend on several variables and results were often inconsistent. Their desktop search technology could not index and search the breadth of electronic documents Ecology staff manage.

Current Status:

Ecology did not have any enterprise search or e-discovery technology. A designated certified records manager started in 2010 and had made progress in three years developing records policies, conducting a high-level records inventory, redeveloping the retention schedules, and training employees in a classroom setting. Ecology had also established a fulltime content management architect position (in May 2012) to help make progress on strategy.

Ecology selected IQBG as a vendor neutral Records Management and Discovery Consulting firm to develop a roadmap and provide recommendations related to approach, possible software solutions, and staff approach to its eDiscovery and Public Records Requests response efforts.

IQBG conducted a high-level review (using a tailored version of the HLA methodology proposed to the Agency) of current Ecology operations and an assessment of requirements related to paper-based processes and collaboration; electronic content storage, retrieval workflow and processing; records management; collaboration with internal and external parties; public record disclosure and e-discovery requests; and integration with line-of-business systems. Interviews were conducted with over 150 representatives from selected business units to collect business workflow, current system, and document process and volume requirements necessary to make a recommendation for an ECRM strategy, implementation sequence, and potential product solutions. The specific goals of the study included:

- Assess and document Ecology's ECRM requirements for both paper and digital records;
- Develop both a high-level business case and cost justification;
- Recommend a strategy that represents improvements based on industry best practices;
- Develop a roadmap for incremental progress to implement recommended improvements;
- Ensure that recommendations balance recordkeeping requirements, information technology investments, and Ecology's needs and opportunities;
- Recommend a list of ECRM vendor solutions that can address requirements for Ecology based on ECRM requirements, number of users, and volume of content; and
- Ensure that the solutions recommended have the capability to add and manage future application requirements.

As part of IQBG's proven High Level Assessment (HLA) approach, IQBG consultants collected information regarding operations, costs, technology, and cultural issues as they relate to selected Ecology business unit operations. The HLA is designed to provide information regarding current operations, which is then compared to experience and models maintained by IQBG. IQBG uses the HLA to develop ECRM requirements and guide the identification of ECRM solutions, vendor candidates, and technology components. Unlike some technology consultants for whom every problem is most easily resolved by technology, our experience has shown that examining and revising the business process prior to recommending any technology results in even lower costs and better acceptance than alternative approaches.

The primary information gathering technique used during Ecology's ECRM Assessment was small group interviews with representatives from across all thirteen programs, and functional practices and services groups within those programs. During each interview, Ecology staff was asked to describe one or more important business processes and identify the content that was used, shared, and collected during each process. IQBG consultants documented these discussions first in interview notes. They then translated the interview notes into three volumes, each representing an additional level of analysis and refinement as shown in Figure 2.1.4.5-1 below.

Documentation of the ECRM Assessment was provided in Volume 3 below and focused on the assessment of records management and business processes, content collections used in those processes, and evaluation of technology solutions against business process and content management requirements of the Department. After review by appropriate Ecology management and staff, further analysis and synthesis of the assessment of these three areas and the detailed findings and recommendations from Volume 3 were used to develop the ECRM Strategy and Roadmap presented in Volume 1.

FIGURE 2.1.4.5-1. THE ECRM HIGH LEVEL ASSESSMENT DOCUMENTATION VOLUMES

A summary of the Volumes produced by IQBG and their content is presented below:

- Volume 1: ECRM Strategy and Roadmap – represents the synthesis of the more detailed assessments, findings, and recommendations documented in Volumes 2 and 3.
- Volume 2, Section 2: High Level Business Unit Summaries – documents the business processes, content and records management related issues for each of Ecology's Programs.
- Volume 3: Presents the ECRM High level Assessment – which includes the following:
  - Section 3 – Records Management and Functional Requirements
  - Section 4 – Business Case and Cost Justification
  - Section 5 – Detailed Findings and Recommendations
  - Section 6 – Enterprise Reference Architecture – identifies gaps in Ecology's software solutions and ECRM software components necessary to fill or reduce them.
  - Section 7 – Records Management Program, Public (Records) Disclosure Requests (PDRs) and Litigation Discovery Recommendations.

After completion of the RM Program and ECRM Roadmap project, IQBG was asked to provide additional consulting related to SharePoint and Records Management Governance. IQBG consultants also made recommendations as to the approach and staffing that would be required for a dedicated team to handle a non-self-collection approach for responding to eDiscovery and Public Records Disclosure (PRD) Requests; and, also recommended a solution and an approach to email archiving to support both PRD and discovery requests.

Relevant to the Agency's project, as part of the deliverables from the HLA, IQBG consultants reviewed and update RM policies, procedures and schedules; and, developed policies and procedures that didn't currently exist around CAD, email and social media. IQBG consultants also developed RM role and staffing requirements for the enhancement of the RM organization to support Ecology's Information Governance and RM Programs.

IQBG provided Project Management, Technical Architecture, Requirements Analysis, Procurement Assistance, and Technology consulting related to an ECRM Strategy and Roadmap, Recommended Software Solutions, and made recommendations related to the design and establishment of an Information Governance program. IQBG consultants also made recommendations related to:

- The selection of an email archiving solution (a separate component from the ECRM solution) and a two-pronged approach to email archiving records retention
- The redesign of the process for responding to Public Records Requests – utilizing the newly acquired ECRM and Email Archiving software; and, moving away from a self-collection process.

The project was performed on a firm-fixed-price basis, and was completed on time, to Ecology's satisfaction, for the promised fixed price.

2.2 Exceeding Mandatory Qualification/Experience Requirements (RFP 4.3.2)

RFP 4.3.2 Mandatory Qualification/Experience Requirements-The following mandatory qualification/experience requirements must be met by the Vendor as a part of its submitted proposal. Vendor should describe how it meets the mandatory requirements and include any areas where it exceeds the mandatory requirements. Failure to comply with mandatory requirements will lead to disqualification, but areas where the mandatory requirements are exceeded will be included in technical scores where appropriate. The mandatory qualifications/experience requirements are listed below.

RFP 4.3.2.1 Vendor shall have previously conducted a full scope assessment and training, as outlined in this project, within an organization of similar size and complexity or larger.

In addition to the example projects described in Section 2.1.2 and the referenced projects in Section 2.1.4, IQBG has literally performed tens of projects that include the full scope assessment and training as outlined for the Agency's project in its RFP documents.

Table 2.2-1 below presents a partial list of additional HLA projects completed within the last nine years (since 2010, when IQBG turned its focus entirely to Records Management, Information Governance and ECRM) that closely match the Agency's requirements and that included interviewing representatives from all of their business units; and, had as deliverables the provision of an ECRM/ERM Roadmap to support implementation or enhancement of their Records Management programs. Many also included the development of software selection criteria to support potential software purchase; information about available ECRM candidates and their software capabilities, requirements, strengths and weaknesses; and, industry and market information are relevant to the possible procurement of an ECRM/ERM solution. Many of the projects also included developing the RFP and guiding or performing the procurement and selection processes.

Just as importantly, not all of our Records Management Consulting projects involve ECRM software. Many times, our projects focus on implementation/enhancement of Records Management programs completely independent of ECRM software (as was the case with the MassHealth project discussed above in Section 2.1.2.3). Other times, already owned software (this was the case for both VPA and HRM examples discussed in Sections 2.1.2.1 & 2) can be leveraged to provide unobtrusive, automated records management.

For each of the projects listed, a description of deliverables that are relevant to the Agency's requirements is provided.

TABLE 2.2-1. IQBG PROJECTS RELEVANT TO THE AGENCY'S RM CONSULTING PROJECT

Project	Brief Description	Relevant Deliverables
City of Raleigh, North Carolina	ECRM High Level Discovery, Assessment – Strategy and Roadmap	▪ ECRM Strategy & Roadmap: - Business Process Analysis - Current Operations Analysis - Content Inventory - ECRM Functional Requirements - Business Case and Cost Justification (ROI) - Technology Assessment o Evaluation Matrix o High Level Vendor Comparison o ECM Candidate Recommendations o Contract negotiations with selected vendor - Enterprise Reference Architecture - Information Model & Security Roles - Roadmap & Implementation Sequencing ▪ Requirements Analysis: - Taxonomy – folders and metadata - Records Series Mapping - Permission Groups and Roles - Integration Parameters - Implementation Project Plans
The Virginia State Bar	ECRM High Level Discovery, Assessment and Roadmap; Records Management Inventory and Study; RFP and Vendor Selection	– ECRM Strategy & Roadmap – Business Process Analysis – Content Inventory – Revision of Records Retention Schedules including legal and regulatory review – Development of Records Management Policies and Procedures – ECRM Functional Requirements – Business Case and Cost Justification (ROI) – Technology Assessment o Evaluation Matrix o High Level Vendor Comparison

Project	Brief Description	Relevant Deliverables
		o ECRM Candidate Recommendations – RFP Development – Management of the ECRM Procurement and Vendor Selection process – Enterprise Reference Architecture – Information Model & Security Roles – Roadmap & Implementation Sequencing – Back file conversion plan – Review and enhancement of Records Schedules – Taxonomy – mapping of permissions and records retention
NCDOT	ECRM High Level Discovery, Assessment – Strategy and Roadmap; ECRM Software Selection; Requirements Analysis; Systems Design; Implementation Support	▪ ECRM Strategy & Roadmap - Business Process Analysis - Content Inventory - ECRM Functional Requirements - Business Case and Cost Justification (ROI) - Technology Assessment - Enterprise Reference Architecture - Information Model & Security Roles - Roadmap & Implementation Sequencing - Back file conversion plan - Review and enhancement of Records Schedules, Policies & Procedures - Taxonomy – mapping of permissions and records retention ▪ Requirements Analysis - Taxonomy – folders and metadata - Records Series Mapping - Permission Groups and Roles - Integration Parameters - Implementation Project Plans ▪ Vendor Comparison and Recommendations ▪ ECRM Design - Category & Classifications - Metadata Model

Project	Brief Description	Relevant Deliverables
		- Taxonomy - Security Model - Workflow and Business Rule - Specifications ▪ Implementation Support - Automated ingestion and metadata population - Category and Classification creation and mapping - Groups and roles - Active Directory Integration - SharePoint Integration - Workflow Development
Federal Home Loan Banks - Office of Finance (FHLB-OF)	ECRM High Level Discovery, Assessment – Strategy and Roadmap; Records Management Inventory and Study; Requirements Analysis; ECRM Product Selection; Design and Implementation	- ECRM Strategy & Roadmap - Business Process Analysis - Content Inventory - Revision of Records Retention Schedules including legal and regulatory review - Development of Records Management Policies and Procedures - ECRM Functional Requirements - Business Case and Cost Justification (ROI) - Technology Assessment - Enterprise Reference Architecture - Information Model & Security Roles - Roadmap & Implementation Sequencing - Back file conversion plan - Review and enhancement of Records Schedules - Taxonomy – mapping of permissions and records retention - Records Management - RM Policy and Procedures - RM Governance - Back file Conversion Plan - Records Schedule - RM Training Material - Executive Training - Records Liaison Training - Staff Training

Project	Brief Description	Relevant Deliverables
		- Requirements Analysis - Taxonomy – folders and metadata - Records Series Mapping - Permission Groups and Roles - Integration Parameters - Implementation Project Plans - Vendor Comparison and Recommendations - ECRM Design - Category & Classifications - Metadata Model - Taxonomy - Security Model - Workflow and Business Rule - Implementation Support - ECRM Installation - Taxonomy – Folders and Metadata - Category and Classifications - Permissions – User Groups and Roles - Active Directory Integration - Integration with Trading Systems - Workflow and Business Rule Implementation(s) - Acceptance Testing
Architect of the Capitol	ECRM High Level Discovery, Assessment – Strategy and Roadmap; Records Management Study; Product Selection; Implementation;	- ECRM Strategy & Roadmap - Business Process Analysis - Content Inventory - Revision of Records Retention Schedules including legal and regulatory review - Development of Records Management Policies and Procedures - ECM Functional Requirements - Business Case and Cost Justification (ROI) - Technology Assessment - Enterprise Reference Architecture - Information Model & Security Roles - Roadmap & Implementation Sequencing - Back file conversion plan

Project	Brief Description	Relevant Deliverables
		- Review and enhancement of Records Schedules - Taxonomy – mapping of permissions and records retention - Records Management - RM Policy and Procedures - RM Governance - Back file Conversion Plan - Records Schedule - RM Training Material - Executive Training - Records Liaison Training - Staff Training - Requirements Analysis - Taxonomy – folders and metadata - Records Series Mapping - Permission Groups and Roles - Integration Parameters - Implementation Project Plans - Vendor Comparison and Recommendations - ECRM Design - Category & Classifications - Metadata Model - Taxonomy - Security Model - Workflow and Business Rule - Implementation Support - ECRM Installation - Taxonomy – Folders and Metadata - Category and Classifications - Permissions – User Groups and Roles - Active Directory Integration - Integration with Trading Systems - Workflow and Business Rule Implementation(s) - Acceptance Testing
Executive Office of US Attorney (EOUSA)	ECRM High Level Discovery, Assessment – Strategy and Roadmap; Records Management Study; Requirements	- ECRM Strategy & Roadmap - Business Process Analysis - Content Inventory - Revision of Records Retention Schedules including legal and regulatory review

Project	Brief Description	Relevant Deliverables
	Analysis and Design; ECRM Implementation	- Development of Records Management Policies and Procedures - ECRM Functional Requirements - ECRM Product Evaluation and Selection - Business Case and Cost Justification (ROI) - Technology Assessment - Enterprise Reference Architecture - Information Model & Security Roles - Roadmap & Implementation Sequencing - Back file conversion plan - Review and enhancement of Records Schedules - Taxonomy – mapping of permissions and records retention - Requirements Analysis - Taxonomy – folders and metadata - Records Series Mapping - Permission Groups and Roles - Integration Parameters - Implementation Project Plans - Vendor Comparison and Recommendations - ECRM Design - Category & Classifications - Metadata Model - Taxonomy - Security Model - Workflow and Business Rules - Implementation Support - ECRM Installation - Taxonomy – Folders and Metadata - Category and Classifications - Permissions – User Groups and Roles - Active Directory Integration - Integration with Trading Systems - Workflow and Business Rule Implementation(s) - Acceptance Testing

Project	Brief Description	Relevant Deliverables
City of Philadelphia	ECRM High Level Discovery, Assessment – Strategy and Roadmap; Records Management Study; Requirements Analysis and Design; ECM Implementation	▪ ECRM Strategy & Roadmap - Business Process Analysis - Content Inventory - ECRM Functional Requirements - Business Case and Cost Justification (ROI) - Technology Assessment - Enterprise Reference Architecture - Information Model & Security Roles - Roadmap & Implementation Sequencing - Back file conversion plan - Review and enhancement of Records Schedules - Taxonomy – mapping of permissions and records retention ▪ Requirements Analysis - Taxonomy – folders and metadata - Records Series Mapping - Permission Groups and Roles - Integration Parameters - Implementation Project Plans ▪ Vendor Comparison and Recommendations ▪ ECRM Design - Category & Classifications - Metadata Model - Taxonomy - Security Model - Workflow and Business Rule ▪ Implementation Support - ECRM Installation - Taxonomy – Folders and Metadata - Category and Classifications - Permissions – User Groups and Roles - Active Directory Integration - Integration with Trading Systems - Workflow and Business Rule Implementation(s) - Acceptance Testing
Howard County, Maryland	ECRM High Level Discovery, Assessment –	- ECRM Strategy & Roadmap - Business Process Analysis - Content Inventory

Project	Brief Description	Relevant Deliverables
	Strategy and Roadmap; Requirements Analysis; RFP preparation and Vendor Selection; ECRM Design and Implementation	- Revision of Records Retention Schedules including legal and regulatory review - Development of Records Management Policies and Procedures - ECM Functional Requirements - Business Case and Cost Justification (ROI) - Technology Assessment - Enterprise Reference Architecture - Information Model & Security Roles - Roadmap & Implementation Sequencing - Back file conversion plan - Review and enhancement of Records Schedules - Taxonomy – mapping of permissions and records retention - Requirements Analysis - Taxonomy – folders and metadata - Records Series Mapping - Permission Groups and Roles - Integration Parameters - Implementation Project Plans - Vendor Comparison and Recommendations - RFP Preparation and Vendor Selection - ECM Design - Category & Classifications - Metadata Model - Taxonomy - Security Model - Workflow and Business Rule - Implementation Support - ECRM Installation - Taxonomy – Folders and Metadata - Category and Classifications - Permissions – User Groups and Roles - Active Directory Integration - Integration with Trading Systems

Project	Brief Description	Relevant Deliverables
		- Workflow and Business Rule Implementation(s) - Acceptance Testing
Wayne County, Michigan	ECRM High Level Discovery, Assessment – Strategy and Roadmap; Records Management Study; Requirements Analysis and Design; ECRM Implementation	- ECRM Strategy & Roadmap - Business Process Analysis - Content Inventory - Revision of Records Retention Schedules including legal and regulatory review - Development of Records Management Policies and Procedures - ECRM Functional Requirements - Business Case and Cost Justification (ROI) - Technology Assessment - Enterprise Reference Architecture - Information Model & Security Roles - Roadmap & Implementation Sequencing - Back file conversion plan - Review and enhancement of Records Schedules - Taxonomy – mapping of permissions and records retention - Requirements Analysis - Taxonomy – folders and metadata - Records Series Mapping - Permission Groups and Roles - Integration Parameters - Implementation Project Plans - Vendor Comparison and Recommendations - ECRM Design - Category & Classifications - Metadata Model - Taxonomy - Security Model - Workflow and Business Rule - Implementation Support - ECRM Installation - Taxonomy – Folders and Metadata - Category and Classifications

Project	Brief Description	Relevant Deliverables
		- Permissions – User Groups and Roles - Active Directory Integration - Integration with Trading Systems - Workflow and Business Rule Implementation(s) - Acceptance Testing
City of Virginia Beach, Virginia	ECRM High Level Discovery, Assessment – Strategy and Roadmap	▪ ECRM Strategy & Roadmap ▪ Business Process Analysis ▪ Content Inventory ▪ ECRM Functional Requirements ▪ Business Case and Cost Justification (ROI) ▪ Technology Assessment - Evaluation Matrix - High Level Vendor Comparison - ECRM Candidate Recommendations ▪ Enterprise Reference Architecture ▪ Information Model & Security Roles ▪ Roadmap & Implementation Sequencing ▪ Back file conversion plan ▪ Review and enhancement of Records Schedules ▪ Taxonomy – mapping of permissions and records retention

In addition to the list of sample projects provided above, the duration of each of several ECRM HLA discovery, Assessment, Strategy and Roadmap projects is provided below in Table 2.2-2, along with a representation of the participation by client representatives and extent of effort.

TABLE 2.2-2. REPRESENTATIVE ECRM HLA – DISCOVERY, ASSESSMENT, STRATEGY AND ROADMAP PROJECT DURATIONS

Project	# of Departments	# of Interviews	# of Participants	HLA Duration
Virginia State Bar	16	27	50+	4 months
Harris County, TX	5	14	20+	5 months
City of Denver	16	37	80+	8 months
City of Raleigh	18	84	200 +	6 months
NCDOT	54	200 +	500+	8 months
WA Ecology	15	62	150+	7 months

IQBG is very pleased to propose team members for the Agency's Records Management project that worked together on many of the projects listed above. While not all deliverables produced for the clients above are being requested by the Agency, the HLA methodology was used, and a majority of the deliverables produced using this proven approach are relevant to the Agency's project.

3.0 Project Goals and Proposed Approach (RFP 4.2)

3.1 Approach & Methodology to Goals/Objectives (RFP 4.2.1)

IQBG is proposing a tailored version of our proven High-Level Assessment (HLA) to perform the Records Management consulting services desired by the Agency: to provide a comprehensive Assessment of the Agency's records generation, storage, retrieval and destruction processes. Agencies Records Generation, Storage, Retrieval and Destruction practices; both in electronic and paper records. The HLA includes an ongoing methodology for assessing the value of records, a digitization plan, a RM Program roadmap that prioritizes tasks (and provides estimated costs) for program implementation and ongoing records management activities and presents a future vision for the Agency's RM Program; and, of possible solutions that could apply automation and address all records regardless of media.

Under the guidance of the IQBG Project Manager, Greg Lloyd, IQBG consultants will conduct an assessment of documents/records that are currently being stored and shared among the 16 divisions throughout the Agency. IQBG will use meetings with identified representatives from Agency divisions to guide the discovery, assessment, and cataloging of documents/records being stored by the divisions onsite and offsite. IQBG consultants will both meet with the Agency's division representatives to accomplish this task; and visit the actual storage facilities (as directed by the representatives) to conduct an inventory of the Agency's most significant records collections. Based on the Agency's solicitation IQBG recognizes that records are stored across Agency work and program locations within close proximity (approximately six (6) miles away from) the State Capitol Complex area known as the Kanawha City complex in Charleston, West Virginia. And, of course, interviews during the Assessment and Discovery phase will be done on-site.

IQBG consultants will meet with representatives from each division – likely multiple meetings for many divisions where several different functional and/or business areas and associated records need to be addressed. The consultants will be interested in identifying all documents/records used by the division in the conduct of its daily businesses; and, will also want to discuss the business processes surrounding the documents/records – what is their source, how are they used, where are they stored, how often are they referred back to, is their collaboration around them, are they shared with multiple departments/external parties, etc. This not only helps define the ownership of records but determines their value to the Agency. Records that are vital to ongoing operations will be identified and record collections containing confidential information such as PII or PHI will be identified also.

Using the discussions with representatives, and their direction as to the location of records, IQBG consultants will physically inventory records stored both in the departments and at offsite storage locations. A record inventory will be developed as an excel spreadsheet that shows the document type, the periods (months and years) for which the documents exist, the quantities by period), other taxonomy related information that documents how the documents are currently stored (e.g., how the folders are labeled, how the documents are cataloged and stored, what subfolders have been created, in what order the records are stored, etc.). In one column of the spreadsheet the condition of the documents will be noted; a different row will be created on the spreadsheet for each class of condition for a given document type so that different digitization approaches can be planned and costed for records of different conditions.

As records are being inventoried, they will be matched against the Agency's current Records Retention Schedule. If identified records cannot be matched to the schedule, a survey of legislative rules, industry standards, a review of WVa. Code §12-4-17 and W.Va. Code §SA-8 other local government schedules, advice from the West Virginia Municipal Clerks and Recorders Association, along with business requirements will be used to recommend a retention schedule and appropriate documentation completed to have the series added to the schedule to fill the gap. The end goal will be to have each document type identified in the inventory matched to a retention rule so that the inventory can act as one guide to the development of the digitization plan and enhancement of the Agency's records schedule.

Along with the retention mapping to each inventoried document type found during the physical inventories, notations will be made identifying the other document attributes related to value – frequency of business use, historical value, vital records; and, ownership, confidential data, etc.

For each inventoried item, a taxonomy will be developed to support ongoing filing activities that support and facilitate the cataloging and retention management of records going forward. For example, if the event that starts the retention period is end-of-year, then records will be cataloged by year (as well as possible other taxonomy elements); if the retention event is 'case close', then there will be a defined process of moving the folder to a separate area to indicate active vs. closed cases as part of the case-close process.

Overall naming conventions that apply to all records going forward will be developed and documented; along with taxonomies for each content collection to facilitate cataloging, management and ease of finding records going forward. For each department, a department specific schedule will be documented so that department staff can easily identify the retentions associated with each document type. Procedures for naming and storing records will be documented.

IQBG consultants will drafts a set of recommendations that accompany the records inventory related to:

- A Digitization Plan – considering cost constraints, value of content, and retention requirements to develop a digitization plan for scanning physical records.
- A Disposition Plan that identifies records that have reached their retention periods and are do not need to be retained for other business or historical reasons; and, provides a prioritized plan for accomplishing approved destruction of records.
- The development of a taxonomy for the storage and management of records that need to be retained along with recommendations related to the best means for storing and for cataloging and maintaining records (including establishing format standards for long-term preservation).
- Roadmap recommendations will clearly establish a prioritized, sequenced implementation plan mapped to a calendar schedule and with associated costs identified.

Although not a specific requirement of the Agency's solicitation, IQBG's HLA will assess the Agency's current information technology infrastructure, information technology system tools and unstructured data, existing document management (or related) software solutions and to recommend how to enhance the Agency's RM practices through an investment in automated document/records management software. Based on business processes discussed, record types, volumes, and number of users IQBG consultants will present pros and cons of certain automated solutions and make recommendations. The HLA includes a Current State Assessment, an IG/RM

Strategy, Future State Vision, and IG/RM Roadmap (that is projects and tasks to accomplish the goals listed in the previous paragraph).

Our methodology is built so that the high-level functional use cases associated with content creation, retrieval, modification and content delivery to appropriate channels developed during the HLA phase provides the basis for identifying solution gaps not being met by current software and storage solutions. The business use cases defined as part of the HLA 'plug' directly into our RFP framework to save our client's time and money if it turns out that an RFP is required to fill any functionality gaps. Our consultants then use their broad knowledge of required Enterprise Content and Records Management (ECRM) functionality and of the leading ECRM vendors to facilitate the evaluation of ECRM/RM solutions. Our depth of experience in evaluation of ECRM solutions over many years will enable IQBG to provide a list of relevant software solution candidates for the Agency as part of the HLA deliverables.

And, of course, although not necessary what the Agency has planned for this project, IQBG consultants are available to assist the Agency with any procurement process, including the development of the RFP, identification of appropriate vendor candidates, requirements matrices, demo scripts, and the evaluation and selection of vendors if required. IQBG consultants have assisted our clients with over $5 billion of ECRM solution procurements – literally more than any other firm in our sector.

Our detailed project tasks include the appropriate identification of tasks to produce an 'As Is' document which will serve as the project baseline, use industry best practices to produce improved 'To Be' business processes and workflows and other RM related process improvements to increase productivity, facilitate access to content, and increase sharing and collaboration with both internal and external stakeholders. The produced RM Roadmap includes the identification and scoping of tasks and projects, as well as the implementation sequencing to accomplish digitization, taxonomy development, and disposition of records that have met or exceeded retention requirements.

The HLA is perhaps IQBG's most popular pre-packaged consulting service – of importance the Agency, our consultants have successfully performed tailored versions of our HLA for many clients with the same or similar requirements as the Agency's solicitation has requested.

3.1.1 Assessment and Discovery (RFP 4.2.1.1)

RFP 4.2.1.1.1 Conduct multiple on-site assessment and discovery interview sessions, with teams or individuals from each Division to understand the types of records generated and how those records are stored, used and business value associated with the records.

RFP 4.2.1.1.2 Assess current employee and supervisor records training level and understanding

RFP 4.2.1.1.3 Assess how each Division and the Agency as a whole, currently stores records both - electronic and paper based.

RFP 4.2.1.1.4 Assess, recognize and notate how Federal, State, Local and Industry laws, regulations and rules regulate the Agency's record retention, retrieval, use and destruction.

RFP 4.2.1.1.5 Assess the Agency's current records retention schedule.

RFP 4.2.1.1.6 Assess efficiency of current paper to image project

RFP 4.2.1.1.7 Perform a risk assessment of the Agency's records program.

RFP 4.2.1.1.8 Analyze current management and staff attitude towards records policy

RFP 4.2.1.1.9 Assess ability to provide legal holds and comply fully with FOIA requests.

RFP 4.2.1.1.10 Assess ability to conduct internal and external records audits

RFP 4.2.1.1.11 Assess the feasibility and benefits from acquiring a records management software or hardware

RFP 4.2.1.1.12 Assess ability for Agency to convert all newly generated paper records to electronic records.

The HLA is a rapid assessment of operations that results in documented RM Program and ECRM requirements: for the Agency, the HLA will be tailored to produce the specific deliverables requested in the Agency's RFP and documentation of the ECRM/ERM functionality required to meet representative Agency use cases for secure and compliant document and records capture, storage, retrieval, version control, retention management and disposition. The Agency use cases developed from the HLA assessment and discovery interviews can be used to quickly develop use case scenarios for the Agency's enhanced RM Program and for an ECRM/ERM Software RFP if the HLA finds a software acquisition to be feasible for the Agency.

The HLA will collect the basic functional business requirements related to RM across Agency programs, divisions and locations including (but not limited to) Legal Services, Cash Management, Short-term Investments, Unclaimed Property, College Savings, Internal Operations, Communications, Administration, HR, Payroll, Benefits, Accounts Payable, Cash Management, Local Government, Purchasing, Records Management, Security, Unclaimed Property, Treasury Investments, WV Retirement Plus, and others. The IQBG Project Manager will work with the Agency's Project Manager (PM) to carefully identify divisions/business areas and the representatives from across these selected business and functional areas. Our experience has shown that the key is identifying business unit staff that have the most knowledge of their business processes. Interviews will likely include representatives from multiple functional groups within each Agency division.

The Agency PM will guide the creation of an interview schedule, and the identification of those to interview in the information gathering (assessment/discovery) phase of IQBG's HLA by considering how they fit onto (and, cross) the identified divisions/business units and others in the organization who need to collaborate around and share content. The Agency's PM will help identify the functional areas for each division/business unit, as well as others (not included in the list above) that should be included in the information gathering process.

Our approach is different than most consulting firms in two significant ways. First, we use very senior staff whose only focus is ECRM/Records Management consulting, not general IT consulting. This allows us to conduct the HLA Assessment/Discovery and produce the required ECRM/ERM Roadmap deliverables more quickly than our competition. Having staff that has performed numerous ECRM/Records Management engagements (that match very closely to the Agency's ECRM/ERM Project) using our proven HLA methodology also enables us to quote fixed price proposals with confidence rather than forcing clients to rely on time and material contracts.

Secondly, IQBG believes in knowledge transfer -- teaching our clients as much as we can so that when our project is finished, they will be well equipped to support future steps and manage and evolve the Agency's ECRM/ERM program on their own. Our methodology includes focused use case discussions, in some cases technology demonstrations, knowledge transfer sessions, determination of training requirements, and development and delivery of recommended training. IQBG consultants have been successfully providing the specific services requested by the Agency for many years and have developed standard processes which are customized for each client.

As part of our proposed tailored HLA approach to the Agency's ECRM/RM Comprehensive Assessment project, IQBG consultants will, at a minimum perform the following tasks as identified in the Agency's RFP:

- Provide an evaluation of the current state of records management activities by all Agency divisions, including existing and proposed records retention policies and practices, and identification of legal and operational risks associated with current practices.
- Assess current employee and supervisor records training level and understanding
- Assess how each Division and the Agency as a whole, currently stores records both - electronic and paper based.
- Assess, recognize and notate how Federal, State, Local and Industry laws, regulations and rules regulate the Agency's record retention, retrieval, use and destruction.
- Assess the Agency's current records retention schedule.
- Provide recommendations on the development or adoption of a records classification system that recognizes the specific needs of the Agency
- Delivery of an Agency records management strategy including recommended governance and policy guidelines based on industry best practices
- Assess efficiency of current paper to image project
- Perform a risk assessment of the Agency's records program.
- Analyze current management and staff attitude towards records policy
- Assess ability to provide legal holds and comply fully with FOIA requests.
- Assess ability to conduct internal and external records audits
- Assess the feasibility and benefits from acquiring a records management software or hardware: including, estimated potential licensing, implementation, and post-implementation support costs of the recommended solution
- Assess ability for Agency to convert all newly generated paper records to electronic records.
- Development of a transition plan and roadmap for the Agency that identifies resources, costs, key milestones and other requirements associated with adoption of a comprehensive records management program
- Provide functional requirements and assistance in writing the solution RFP if so desired by the Agency.

IQBG consultants as part of our proven HLA methodology will:

- Execute discovery sessions with representatives of the Agency's 16 divisions and associated business and/or functional areas
- Determine and document functional requirements including permissions, security, document management, records management, integration requirements, workflow, eForms, search, library services (check-in/out, versioning, etc.), and other ECRM/ERM-related requirements
- Recommended changes to business processes, workflow and identification of opportunities for collaborative work that reduce processing times, improve constituent levels of service, and reduce redundant storage of documents and records

- Develop a future vision that classifies and prioritizes software and organizational constraints and objectives
- Document a full Cost Benefit Analysis / ROI that defines cost savings and efficiency opportunities that could be recognized by the appropriate implementation of an ECRM/ERM software solution
- Identify opportunities for integration into existing Agency software and other State or Federal systems; and, the production of an Enterprise Reference Architecture
- The Development of a Strategic ECRM/ERM Implementation Roadmap that identifies projects that provide quick value, represent best enterprise value; and, the prioritized sequencing of those projects (with and without a software solution)
- Develop a Requirements Matrix for the evaluation of ECRM/ERM software offerings and use IQBG's knowledge of all leading ECRM/ERM software platforms to evaluate software candidates against Agency requirements:
  - ECRM/ERM software selection criteria to support potential software evaluation and selection
  - Compilation of available document/records management software capabilities, requirements, strengths and weaknesses
  - Findings of industry and market information that may impact the Agency's procurement of ECRM/ERM software
- Make recommendations related to ECRM/ERM best practices and best fit vendors (including both the candidates' match to requirements and 5-year costs associated with acquisition and ongoing support of a solution)
- Develop Functional Designs for selected business processes that can be used as RFP use-cases during the development of an RFP for ECRM/ERM software evaluation and selection
- The Development of an RFP to be used for Software Evaluation and Selection
- Guidance of the Software and Evaluation Selection Process – including scheduling vendor demonstrations, providing scripts for vendor demonstrations, and providing scoring methodology and guidance

As stated above, IQBG will conduct requirements analysis meetings with internal stakeholders representing the Agency's 16 divisions (and selected business/functional areas within divisions) to gather requirements. As information is gathered, IQBG will allow for feedback from stakeholders to clarify any conflicting requirements, risks, assumptions and/or constraints. Requirements documentation will be provided to the Agency PM and selected management staff for review and approval of interview summaries.

To gather the best information possible, the discovery sessions / interviews must be with experienced, knowledgeable staff that are both committed to the Agency's ECRM/ERM/RM project and at the appropriate level to explain how the various functions of their office relate to functions performed by others. Some consulting firms will interview only the managers or directors of the departments. This is problematic from two points. First, the management may know what is *supposed* to be done but not what is currently *being* done which is most important. Secondly, few managers have the depth and breadth of the various business processes that are needed. IQBG will discuss this critical success factor with the Agency's project team to assist in the identification of the "right" staff to interview. A customized letter is provided to the Agency PM, by IQBG, that can be emailed to all participants explaining the purpose of the HLA, who will be involved and the timing/duration of the study.

In addition to the information collected from Agency stakeholders, IQBG consultants will apply ECRM/ERM/RM and Information Governance (IG) best practices to the way requirements are defined and to provide recommendations for change where appropriate. Specific Deliverables provided by IQBG will include:

- Comprehensive documentation of business requirements for Agency divisions for an ECRM/ERM solution, gathered from business representatives and stakeholders (including best practices for ECRM/ERM implementation)
- Documentation of a governance plan that includes a method for defining and governing enterprise taxonomy and metadata and making key decisions regarding present and future content types
- Estimated Licensing, Implementation and post-production support costs of candidate ERM solutions to support a cost justification and ROI analysis
- IQBG consultants will include strategies, approaches and potential tools related to:
  - Change Management
  - Business Process Automation
  - Records Management Automations
  - Security
  - Ongoing staffing and training requirements.

For the Agency, IQBG will conduct a more detailed Functional Design (FD) for selected business processes (selected collaboratively with the Agency's PM and business representatives) that are representative of the use cases necessary for the development of an RFP for an ECRM/ERM software solution solicitation. The FD produced from the 'deeper requirements analysis' for selected processes has been designed to be easily transformed into an RFP and/or vendor comparison matrix to facilitate the selection of software solutions that are to occur in later phases. IQBG will use its extensive knowledge of the leading ECRM/ERM platforms, both technically and organizationally, to provide expert guidance during evaluation and selection of an ECRM/ERM solution for the Agency.

Figure 3.1.1-1 provides a list of the Agency Divisions/Business Units that (at a minimum – this list was derived from a review of the State Treasurer's website and will be revised in collaboration with the Agency) will be included in the HLA discovery and assessment interviews.

FIGURE 3.1.1-1. DIVISIONS PARTICIPATING IN THE AGENCY'S HLA INTERVIEWS

West Virginia Treasurer's Office Divisions/Business Units	
Administration	Local Government
Accounts Payable	Payroll
Benefits	Purchasing
Cash Management	Records Management
College Savings	Security
Communications	Short Term Investments
Human Resources	Treasury Investments
Information Technology	Unclaimed Property
Internal Operations	WV Retirement Plus
Legal Services	

Interviews are usually between one to two (1-2) hours long and rarely involve more than two to four (2-4) staff at a time. Larger groups tend to confuse the participants or result in one or two staff dominating the discussion and therefore lose the benefit of meeting with all the others in the group. Our consultants will review and assess the current state of document and records management at the Agency and gather the necessary information to develop the deliverables required by the Agency's solicitation.

IQBG's proposed HLA yields recommendations related to an overall ECRM/ERM strategy that will maximize ROI while also creating positive "word of mouth" and high user acceptance and adherence to RM, Legal, HIPAA, and other compliance related policies, procedures and guidelines. In addition to the departmental interviews to develop a high-level business process review and analysis across the enterprise, the HLA typically includes:

- High-level records/content inventory;
- Review of records management artifacts including policies, procedures, and schedules based on any gaps discovered during the content inventory;
- Cost justification and return analysis; and
- Analysis of information collected during the interviews, observation, and document review to document:
  - The current state assessment
  - ECRM/ERM requirements
  - A Future Vision for ECRM/ERM including representative use cases for the entire document management life cycle
  - Recommendations related to ECRM/ERM projects that will provide the greatest value for the Agency
  - An ECRM/ERM Roadmap to guide the Agency's RM Program and/or ECRM/ERM implementation after software selection if appropriate
  - A management presentation that lays out the HLA findings, recommendations, proposed Strategy and Roadmap

Research by industry veterans showed that many ECRM projects were not as successful as their implementers had hoped. Intrigued by the findings, IQBG conducted our own analysis of various organizations and determined that the overwhelming reason for failure was the organizational resistance to change and the inappropriate use of technology to solve the business problems. Vendors who are performing other services for customers are often used as consultants simply because they have worked closely with those departments on other projects.

This can be a problem because these contractors have an "insider's view" and therefore cannot provide the objective, unbiased view that is critically important. Moreover, they often pick staff for projects that have not functioned as a team before, may not have the depth of RM/ERM/ECRM expertise, and may lack the rigor in their approach and necessary experience. This approach may result in the customer receiving a suboptimal recommendation that often has to be replaced within a couple of years. Unfortunately, many technology investments have simply "paved the cow path" and resulted in higher costs and more errors or problems.

ECRM, ERM and related technologies have a profound impact on individual workers. Faster throughput and a tightly integrated environment mean workers process more than ever before, thereby providing higher quality services at a lower cost. The office social structure and required staffing levels required often change as workers utilize the technology; and, implementing an RM program (whether automated or not) involves new management issues as well.

One of the critical success factors, our analysis found, is preparing for implementation through early project buy-in. IQBG consultants will facilitate this early buy-in by Agency staff by ensuring heavy user involvement and knowledge transfer during sessions with Agency staff related to industry best practices, ways that other local government organizations have benefited from ECRM/ERM/RM, how ECRM/ERM/RM can benefit them personally as well as the Agency as a whole; and, by assisting the Agency to develop a communications plan that supports each step of the ECRM/ERM/RM project with appropriate and consistent messaging.

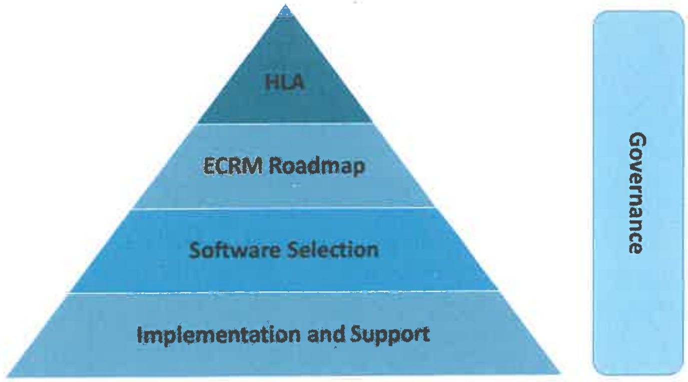
Each HLA begins with a Project Initiation Workshop (PIW) that includes two parts. The first part of the meeting is a collaborative discussion with the project team, Agency business representatives and stakeholders. Our goal for this meeting is to explain our methodology, listen to team members' concerns and goals, discuss team members' roles, establish methods of communication with the project team and generally get to know each other. At this meeting, we rely on the project team to identify division/business unit representatives to interview. We assume that each project team member will identify key individuals or small groups of users to be interviewed (group interviews are best with 2-4 people). We also set up progress meeting dates, typically every two weeks during the Discovery and Assessment phase.

The second part of the PIW is typically a collaborative session to agree on the content of a presentation about the HLA methodology, schedule, and how the recommendations will be prepared that will be provided to all study participants prior to conducting the assessment and discovery interviews. Some customers have IQBG provide an overview related to records management principles and ECRM/ERM/RM best practices. Regardless, project kickoff presentations are prepared so that study participants/interviewees and managers are exposed to the concepts of ECRM/ERM/RM. We typically discuss how other state and local governments have implemented their ECRM/ERM/RM Programs and/or implemented ECRM/ERM solutions. We also describe the interview process and explain the role of study participants. We distribute sample interview questions during these meetings, so interviewees are prepared for the interviews. ***Deliverable - copy of presentation slides and the introduction letter that includes sample interview questions, Project Charter, Detailed Project Plan.***

As stated earlier, IQBG consultants will work with the Agency's PM to carefully identify representatives from across the appropriate Agency divisions, business units and functional areas. Our experience has shown that the key is identifying departmental staff that have the most knowledge of their business processes.

The HLA process was developed to help organizations build a "roadmap" for how they will apply ECRM/ERM/RM in today's world. Because ECRM/ERM/RM can affect many functional areas and aspects of an organization, it is important to focus on prioritization and sequencing so that efforts can be placed on specific needs. The HLA is logically designed to dovetail into our other analysis services including RFP development, Source (software) Selection, Logical Design and Implementation: the interoperability of the methodologies helps keep costs low and quality high.

FIGURE 3.1.1-2. IQBG'S HLA STANDARD METHODOLOGY



For clients for whom a software solution is feasible and desired, the HLA is designed to determine which areas, applications and/or business functions are most important; what is the approximate cost and ROI for program implementation in those areas; to identify the sequence of implementation; and to specify the "roadmap" over the next several years. Not every department and/or functional area can be implemented at the same time, so the HLA provides the roadmap for ECRM/ERM implementations. Furthermore, it recognizes that departments change over time and those applications which cannot be developed right away should not waste money on a more detailed requirements analysis. In general, the HLA provides the ECRM/ERM requirements matrix to support ECRM/ERM solution selection and the deployment roadmap for the first two years and more general implementation requirements for years three through five.

The HLA uses interviews and analysis to assess current operations, identify future requirements and technology gaps, determine budget information, and recommend implementation sequencing. The HLA provides the basis for more detailed requirements and system specifications once the ECRM/ERM software selection has been made to support implementation of departments identified as first implementations on the ECRM/ERM Roadmap produced from the HLA. Based on structured interviews and industrial engineering concepts, the methodology is designed to gain user buy-in early in the project life cycle. This methodology has been taught in numerous workshops and used by hundreds of companies and government agencies.

As described earlier, for the Agency, IQBG will conduct a more detailed FD for selected business processes that are either near term in the ECRM/ERM roadmap or representative of the use cases necessary for the development of an RFP for ERM solution solicitation. IQBG consultants will focus on developing a set of business, functional and records management requirements that support initial implementations and ERM software product selection. The HLA considers present "pain-points" while still working to establish a strategic framework for future requirements.

Once a solution has been selected, if the Agency desires, IQBG is available to convert the FD into a Solution Design Document (SDD) that can be used to guide future ECRM/ERM implementation. Regardless, IQBG will work with the Agency to scope ECRM/ERM or RM/Business Process Improvement and Digitization Roadmap projects so that real value can be achieved in 90 to 120 days. IQBG will guide the determination of project scopes – using experience to resist over-customization, avoid overly complex solutions, and choose functionality that generates positive "word of mouth" around initial implementations. IQBG will act as an experienced and trusted advisor, suggesting ways to avoid failure from money, usage, or time perspectives; and helping the Agency bridge the gap between business user and IT developer.

For our clients that embark on and ECRM implementation, the development of an ECRM Center of Excellence (COE), the establishment of a user Community of Practice (COP), and the initiation of an ECRM program office and governance program are typically done in parallel with the first deployments. This not only condenses the project schedule but allows the COE and COP to become more quickly established. IQBG will include these governance tasks on the recommended ECRM/ERM Roadmap.

IQBG also recognizes that deployment of any ECRM/ERM technology requires different levels of planning at different phases of a project. IQBG has combined various long-term administration efforts into a broad category of Governance services. We provide governance services in six (6) key areas:

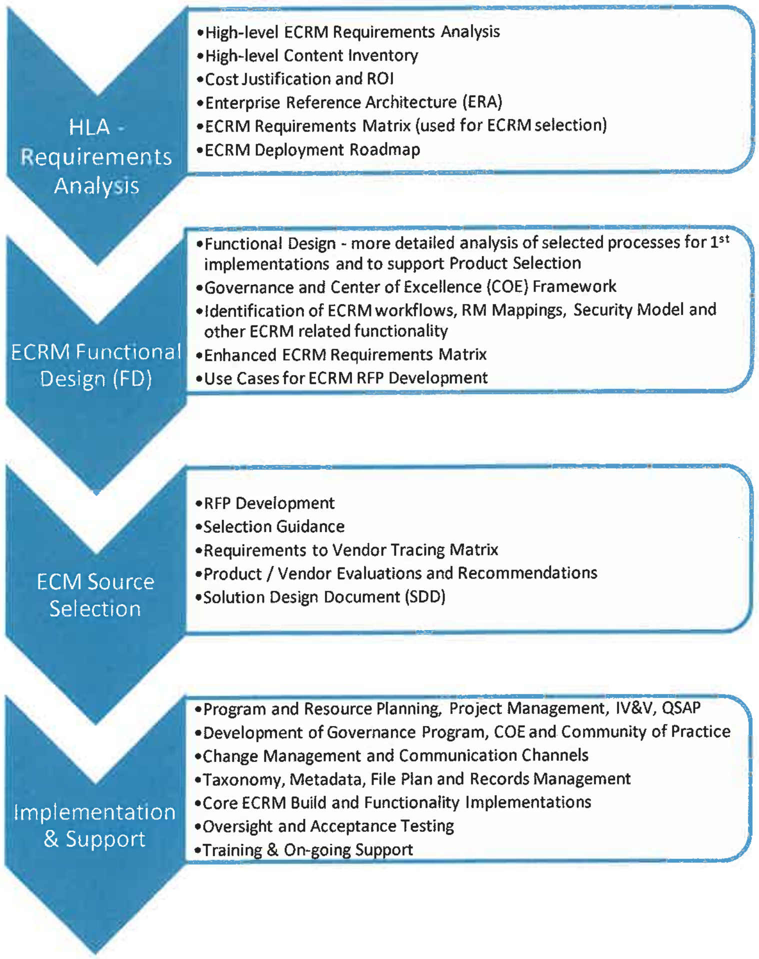
- Community of Practice
- Center of Excellence Services
- Project Management
- Change Management
- Acceptance Testing
- Taxonomy Development and Records Management Policies and Procedures

These services are designed to lower life cycle costs, reduce risks, and improve the results of how the systems are implemented. The establishment of the Agency's ECRM/ERM Program should include an appropriate governance framework. IQBG will include the steps necessary to establish the Agency's ECRM/ERM Governance Framework that follows the development and acceptance of the ECRM/ERM Roadmap in its recommendations. These recommendations will be independent of who establishes the governance program.

Figure 3.1.1-3 shows the steps in IQBG's HLA methodology and the full set of deliverables that can be provided for any client (including the Agency) as desired. Of course, for this solicitation no implementation is included for the RM Assessment project but could logically follow if a decision is made to move forward with an ECRM software solution.

The tailored HLA proposed for the Agency includes a high-level records inventory. This is valuable when a client wants to enhance or develop records management policies including records schedules that can support automated records management implementations as part of the ECRM rollout. For this deliverable, IQBG consultants will use a records inventory survey form – sent to each business unit participating in the HLA – to collect information about the larger content collections stored in paper and digitally. Instructions provided with the records inventory survey form will explain that IQBG consultants are especially interested in those larger collections that are shared among business unit staff or among multiple business units.
Deliverables – Records Survey form, Review of Records Management Policies, Procedures and Schedules.

FIGURE 3.1.1-3. IQBG'S HLA METHODOLOGY COMPONENTS AND DELIVERABLES



IQBG's proposed HLA project for the Agency includes:

- Our consultants conduct interviews and collect data in each selected department or business unit and within a business unit with groups that perform different business functions and/or deal with different content collections.
- Our structured data collection tools provide information needed to identify ECRM /ERM requirements, based on analyzing key business (especially document-centric) processes.
- Our methodology also includes identifying potential benefits in several categories: strategic/public service, regulatory compliance, staff productivity, and operational savings.
- During the interviewing process, we identify current paper and electronic document filing and RM practices and their associated deficiencies: version control, bottlenecks, retrieval/access problems (e.g. lack of space, multiple file formats, lost records, misfiles, "out-of-file" problems), duplication, electronic filing creation, storage, and retention, etc.
- We will ask users to identify vital records, content collections that contain PHI or PII, other confidentiality or compliance requirements, and identify access permissions associated with content collections.
- We typically spend two to three hours in small business units and up to 1.5 days in larger ones. Interviews with individual managers and staff representatives take 1-1.5 hours.

- We will spend time reviewing both digital and paper filing systems and examine and document the content volumes and the document types that are contained in the collections, the business processes that create and use the documents, associated retention requirements, owners and custodians of the files, and characteristics of the documents that will impact the amount of preparation required for digitization efforts.
- We will review usage of electronic filing systems at the department level, including an analysis of the types of documents being stored on them. Email content that qualifies as a record is an important factor in these discussions.
- We will analyze potential integration touch points with line of business systems used by the Agency, and document metadata required to perform potential integrations or use data repositories for metadata capture.
- We will look for ways to reduce and or eliminate paper from business processes, capture digital content closer to its source, reduce keying from paper into companion line of business or ERP systems using OCR-type functionality and/or eForms, perform collaboration and sharing digitally instead of 'passing around paper', providing better search and knowledge support, and facilitating records management functions.
- We would like to meet with Information Technology staff to ensure we understand the Agency's technical environment and practices: hardware, software, network and any standards the District has established. ***Deliverables - summary of ECRM/ERM/RM and business process analysis for each department: Current State Assessment, High-level Requirements Analysis, Future ECRM/ERM/RM Vision.***

The business process analysis will identify requirements for conversion from film and/or paper to images. Since conversion costs can be high, a careful analysis of conversion requirements is important for inclusion in the ECRM/ERM/RM Roadmap. Collaborative determination with Agency representatives will allow the IQBG consultants to determine back file conversion plans. For each content collection (grouping of related documents), retention and business use (access, reference, etc.) requirements will help determine the correct approach for back file conversion – go forward only, no digitization required, scanning or conversion only back for a predetermined number of years, conversion of all paper or film, etc. Most times, retention requirements will be important in defining how far to go back for scanning or conversion of documents. (Of course, if analysis of business, legal or regulatory requirements during the HLA determines that documents need to be kept longer, then IQBG consultants will assist with updating schedules to reflect such need). ***Deliverables – 1. Content Inventory of content collections within a business area. 2. Summary of conversion requirements by department with estimated associated costs, and sequencing recommendations to support the ECRM/ERM Roadmap, 3. Mapping of Content Collections to Retention Requirements. (See Figures 3.1.1-4 and 3.1.1-5 below as examples of the type of documentation that is captured during these analysis steps). 4. Enterprise ECRM/ERM Requirements to Support Software Selection***

FIGURE 3.1.1-4. SAMPLE CONTENT INVENTORY (IN THIS CASE FROM NCDOT STATE ROAD MAINTENANCE UNIT)

Preliminary Folder Candidates (Document Category Descriptions)	How Currently Organized	Description	Date Range	# of Documents	# of Pages	Special Requirements	Comments	# drawers	# folders
Petitions	County, year	documents & maps	1931-current	91,400	640,000	color	120,000 maps	136	47
DE (division engineer) letters	Year, division	documents	1996-2009	19,000	56,000	color, packets	vary from 3 to 35 docs per packet	7	44
Straight Line Maps	Highway number (total 12 highways)	mylar 16 X 24; older treated paper		1340	910	milar	1920-2003 already scanned		
					430	paper 30 X 14			
Project Letting Maps					18,000	color			
Field Inventory Maps	maps	county, year	1967		4,500	color	size varies 36 X 36		
Highway and Road Mileage Reports	by year	cloth or spiral bound	1978-2004	79	16,000	2 sided	reports average 200 pages		
Road Mileage Tables	by year	loosely bound	2006-current	24	1,200	long hand	14 x 15		
Official Maps					18,000	color			
Division Work Books	by year, by division, by road	shelved	1945-current		15,500	color, fragile	1946-59 brittle		
Urban Area Boundary & Fed Aid maps	by date	mylar, 28 X 16			300	color, mylar			
County Functional Classification Maps		color			300	color	20 X 36; 72 rolls with 4 sheets each		
3 and 4 Digit County Maps	by year	fragile paper, linen	1930-1980s		3600	1,600 linen	paper size varies: 16 X 16, 16 X 28,		
							linen 32 X 48		
County Road Maps	by year				18,000	color	various sizes, 18 X 32		
			Total		792,740				

FIGURE 3.1.1-5. MATCHING OF PRELIMINARY ECRM TAXONOMY (FOLDER STRUCTURE) TO RECORDS RETENTION REQUIREMENTS

State Roads Maintenance Unit (SRMU) - Partial Folder Structure (Addressing Recently Scanned Documents)				
Folders & Subfolders	**Record Series**	**Retention Set Abbreviation**	**Retention Event**	**Retention Set (Rules for retention period and disposition)**
SRMU				
Petitions	25732	P		Permanent
DE Letters	21772	Y2	Approval Date	2 years from approval date
Straight Line Maps	NR	REF5	Date of Last RM Notification	Reference
Project Letting Maps	NR	REF5	Date of Last RM Notification	Reference
Field Inventory Maps	21771	SUP5	Date of Last RM Notification, and Superseded Date	Dispose of when superseded or obsolete
Highway and Road Mileage Reports	NR	REF5	Date of Last RM Notification	Reference
Division Workbooks	23165	P		Permanent

The HLA helps organizations determine which applications are most important, the approximate cost and cost recovery period for records management related implementations, the sequence of implementation, and the 'roadmap' over the next several years. The HLA is typically used as the first step to prioritize the departments that should be examined more closely. Since every division, business or functional process, RM program enhancement, and/or ECRM component cannot be implemented at the same time, the HLA provides the 'roadmap' for implementation. The HLA provides detailed implementation requirements for the first two years and more general requirements for years three through five.

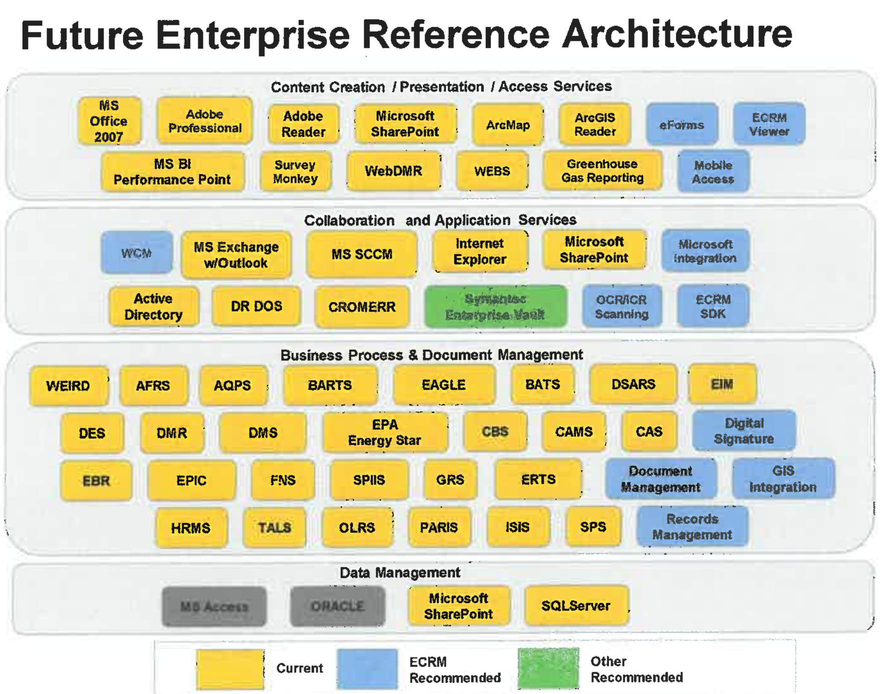
Once ECRM requirements and business process analysis is completed, IQBG consultants conduct a representative Cost Benefit / ROI Analysis for a 5-year life cycle. Our team reviews the operations and makes comparisons to other state and local government organizations of a similar size. This analysis requires specific experience and is always conducted by exceptionally experienced consultants. Our analysis looks for opportunities for improvement in the following ways:

- More appropriately categorize content to facilitate retention management

- Streamline and consolidate processes through the reduction of paper, the use of workflow, and integration with line of business and enterprise solutions where appropriate
- Reduce cost of copying and printing though out the enterprise
- Eliminate dual storage of documents and entry of data between systems; look for OCR and eForm opportunities
- Foster collaboration and sharing – including addressing bandwidth issues associated with engineering files, audio, video and 'Rich-media' assets
- Apply cost effective automation or outsourcing of technologies to provide the Agency with the "best value"
- Improve constituent response through improved services, self-service and eGovernment
- Raise compliance through automated records management and secure storage of personal, health and confidential information to meet HIPPA, legal and government requirements.

One critical component of the overall cost justification will be a reduction in the cycle times for processing transactions for certain services. IQBG will work closely with Agency personnel to optimize these processes using an effective mix of technology and process improvement. IQBG consultants determine the requirements that lead to the Enterprise Reference Architecture (ERA), gap analysis and ECRM/ERM strategy. The ERA documents the current state, future state, and gaps in technology components, including how the future ECRM/ERM components will integrate (if the Agency decides to acquire a software solution) with other applications used by the Agency, discovered during the HLA, and planned in the future. The ERA ties closely to the feasibility analysis of acquiring ECRM/ERM software, and it shows either how current technology or future software will be used to support the Agency's RM Program. Figure 3.1.1-6 below displays a sample ERA.

FIGURE 3.1.1-6. SAMPLE ERA SUMMARY DIAGRAM



After the information is analyzed and the draft results have been created, a meeting to discuss the preliminary findings is held. IQBG will review with the Agency's project sponsor to help by providing a "sanity" check against some of the observations and preliminary findings. This information is used to prepare the ECRM/ERM/RM Roadmap and related recommendations that address:

- Deployment Roadmap - creation of a road map and timeline that prioritizes ECRM/ERM deployment initiatives and tasks that are required to achieve the vision and deliver the expected benefits:
  - developing and analyzing the order of magnitude costs associated with the future state vision
  - projecting resource requirements and identifying measures to fill gaps
  - assessing staffing requirements and identifying measures to fill gaps
- A portfolio of ECRM/ERM/RM program initiatives for the Agency that includes both department and functionality priorities and addresses:
  - basic Document Library Services
  - image-processing applications and capture tools
  - improved business processes
  - workflow and collaboration
  - eForms
  - search/query; taxonomy and metadata requirements
  - Document and Records Lifecycle Management
  - records schedule updates by performing a regulatory and legal review and applying best practices related to digital records as well as paper (using knowledge of public records laws and policies of the State of West Virginia, a review of WVa. Code §12-4-17 and W.Va. Code §SA-8, other local government schedules, advice from the West Virginia Municipal Clerks and Recorders Association, review of the Agency's current records schedules, the Public Records Act and other Federal regulations, and analysis of Agency business requirements)
  - Recommendations as to policy and procedures needed or in need of enhancement
  - web publishing tools
  - security and authentication systems
  - email management and archiving
  - digital asset management of rich media (audio, video, pictures, and graphics)
  - line of business and enterprise system integration
  - best practices related to social networking and Web 2.0 tools
  - implementation and/or enhancement of the Agency's Records Management Program including the possible framework for a compliance/audit process and other RM Governance and training plans
  - Change Management Plan development including communication, marketing (user acceptance, evaluation of training alternatives

IQBG will provide onsite presentation(s) of our findings to appropriate stakeholders including the Agency Executives and Management as directed by the Agency's project manager. Typically, our presentation includes:

- Review of Current Operations
- Business Process and Collaboration Analysis

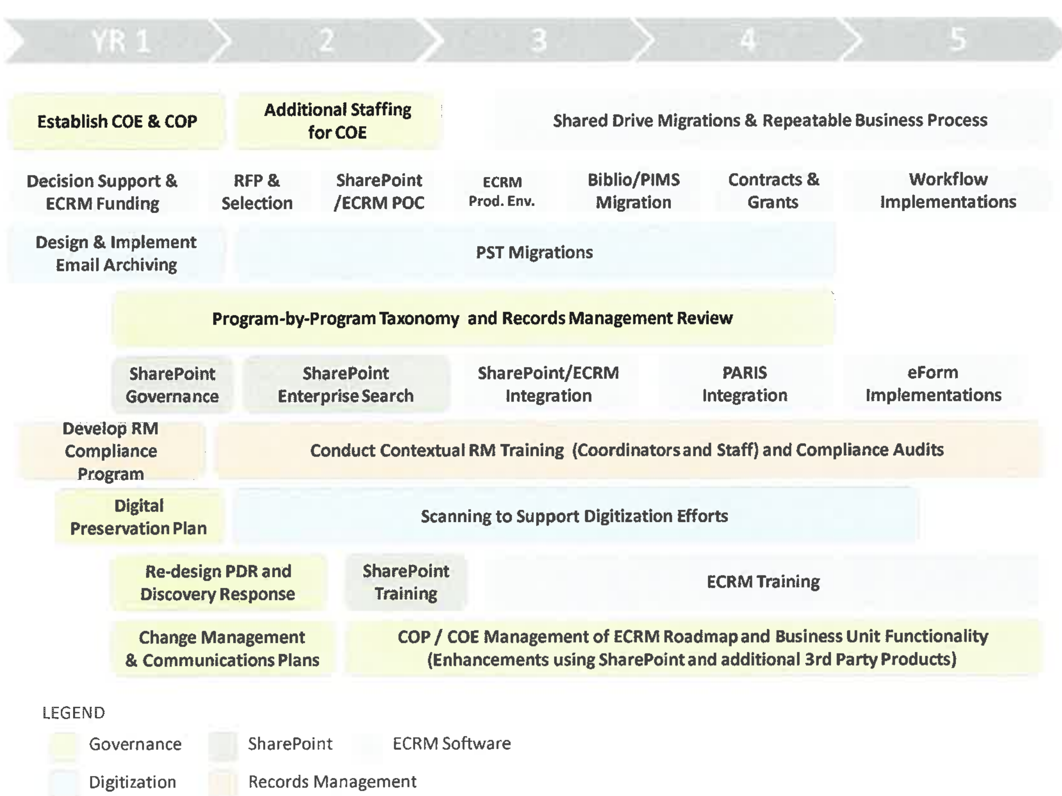
- Future ECRM/ERM/RM Vision and Strategy
- Reference Architecture & Processes
- Justification Discussion
- Records Management Program Framework
- ECRM/ERM Approaches and Tools
- Findings and Recommendations
- ECRM/ERM/RM Strategy and Roadmap
- ERM Software Selection Requirements
- Next Steps

The ECRM/ERM Roadmap developed as part of our proposed HLA includes all necessary steps for moving forward with recommendations including such tasks as delivering RM training, performing RM compliance audits, digitizing paper records collections, implementing standardized divisional taxonomies (even on shared drives if no automated ECRM software solution is planned), the RFP and conducting the solicitation and selection processes for a solution vendor (if an automated software solution is determined by the Agency to be feasible).

Our clients have found that for every dollar they spend with IQBG in the up-front analysis and governance efforts, they save between $1 and $10 downstream.

Figure 3.1.1-7 shows a graphic from one our recent ECRM HLA Requirements Analysis deliverables. Of course, this Five-Year Implementation Sequencing graphic was accompanied by a considerable amount of detail and rationale support for the recommended roadmap.

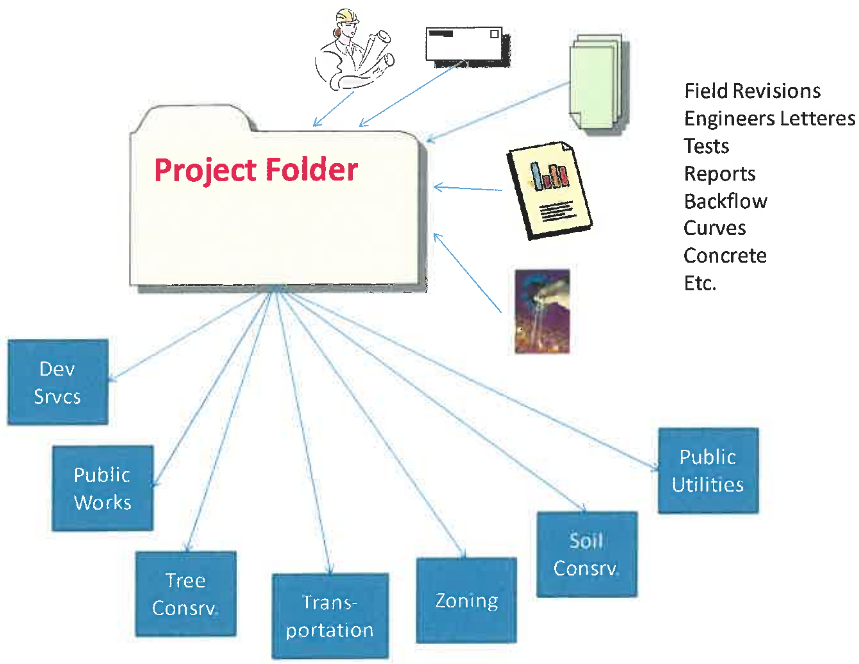
FIGURE 3.1.1-7. SAMPLE FIVE YEAR IMPLEMENTATION SEQUENCING RECOMMENDATIONS GRAPHIC



The sanitized paragraphs below (that is, any references to the specific client have been removed) show a sample of the type of recommendations that are made within an ECRM Roadmap deliverable.

The consultants' primary recommendation is for XXXXXXX to develop and maintain a single centralized content repository involving the use of ECRM technology. The ECRM solution would be an infrastructure designed to replace shared drives, support digitization of paper, provide business workflow, integrate with current business systems to store unstructured content, support multiple capture methods including eForms, and apply electronic records management to all content items stored in the central repository.

FIGURE XXX.1-1 – EXAMPLE OF A PROJECT FOLDER RESIDING IN AN ECRM REPOSITORY.



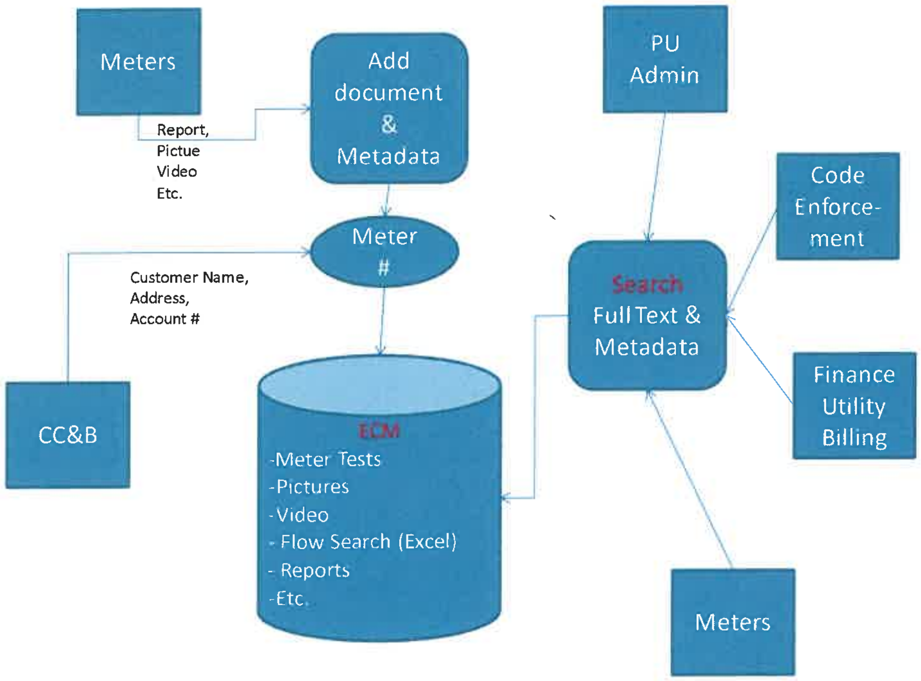
The graphic above in Figure XXX.1-1 is an example of how an ECRM repository would function as a central storage place for all the documentation about a XXXXX project. The XXXXXX plans and implements projects that impact multiple departments. For example, the land acquisition process includes the following high-level activities. The Real Estate Division:

- *Reviews and comments on preliminary plats and construction drawings*
- *Coordinates the appraisal process*
- *Prepares correspondence and legal documents*
- *Negotiates real estate property interests needed for project implementation property owners*
  - *Paper intensive: initial letter, follow up letters, offer letters*
- *Coordinates meetings with Project Engineers and consultants to address owner questions and concerns*
- *Communicates and follows up with Project Engineers regarding project status*
- *Coordinates condemnation cases with the City Attorney's Office*
  - *Prepares Council agenda items for condemnation authorizations*
  - *Primary interact with Attorney is deed documents, or deed modifications, condemnations, lease documents – property rights through settlement*
  - *The Paralegal ensures that deeds are accurate; routes through interoffice mail for attorney to check legal description*
  - *Paralegal inserts hyperlinks to photos and send to attorney electronically*
  - *Attorneys want face-to-face meetings, avoid creating public information*
  - *Public Works also signs off*

- *Coordinates with the Paralegal for recordation of property interests*
- *Hands off acquisition reports and data when the project is completed*
- *Real Estate staff uses their shared drive to collaborate on the larger projects.*

The ECRM repository will also support inter-divisional work, for example sharing information within Public Utilities. Figure XXX.1-2 below depicts the integration of ECRM with XXXXX Customer Support and Billing System as well as providing a central repository.

FIGURE XXX.1-2 – ECRM VISION WITHIN PUBLIC UTILITIES



Another example of the need of XXXX staff to share information involves customer billing. Many departments store customer letters and documents that Billing Administration needs so that they have a complete understanding of the customer's situation.

When Finance staff requests letters from other departments, they are emailed to them and placed on the shared drive:

- *Inspections*
- *Stormwater*
- *Solid Waste*
  - *Letters to customers, inspection reports*
- *Meter Operations*
- *Council and City Clerk*
  - *Citizens go beyond XXXXXX departments to ask for special consideration*
  - *City Council makes a decision, and staff finds out eventually*
- *City Council decisions go to the Clerk's Office, to Dept Heads, to Division Heads. Minutes are posted. But staff is not sure when the minutes are posted. They would like a system that pushes information to them*
- *Water Plant tests to ensure the water is clear*

Figure 3.1.1-8, 9 and 10 on the following pages are examples of Charts showing a summarization of ECRM Requirements across all business units of a previous client during discovery, to present assessment findings, and aid in the creation of the ECRM Roadmap that was prepared for them.

Figure 3.1.1-8. Sample Business Unit ECRM Enterprise Requirements Analysis

ECM Functionality Requirements by Business Unit City of Raleigh North Carolina Page 1	Image & Scanning	Shared Repository	Workflow	Line of Business Integration	Tracking	eForms	email Mgt.	Records Mgt.	Web Publish	External Collaboration	Remote Access	CADD	Electronic Signature	Rich Media / DAM
Budget and Management Services														
Office of Management and Budget (OMB)	X	X	X	X	X	X	X	X	X	X	X			
Budget and Economic Development (BED) Meetings	X	X	X		X		X	X	X					
Operating Budget Process		X	X		X	X	X	X						
Executive Work Budget Process		X			X		X	X	X	X				
Capital Budget Process		X	X		X		X	X						
Grants Management	X	X	X		X	X	X	X		X				
The Real Estate Division	X	X	X	X	X		X	X	X	X	X			X
The City Attorney's Office														
The Litigation Practice	X	X					X	X		X				
The Real Estate Eminent Domain Practice	X	X					X	X						
Environmental Law	X	X					X	X		X				
The Transactional Practice		X	X		X	X	X	X						
The Contracts Process	X	X	X		X	X	X	X		X			X	
Recurrent Issues	X	X					X	X						
Support Staff	X	X	X	X	X		X	X						
The City Clerk's Office	X	X	X		X		X	X	X		X			
City Council – Mayor Pro Tem		X				X		X	X		X			X
The City Manager's Office														
Sustainability		X	X		X	X	X	X	X	X	X	X	X	X
Community Relations	X	X			X	X	X	X	X	X				X
Emergency Management		X	X		X	X	X	X	X	X	X			X
Business Assistance including SDMWOB	X	X	X		X	X	X	X	X	X	X		X	X
City Council and Mayor's Office Support	X	X	X		X	X	X	X	X	X	X		X	X
Community Development														
Homebuyer Programs	X	X	X	X	X	X		X	X	X	X		X	
Fiscal Division & Assistant to Director	X	X			X	X		X	X	X	X			
Community Services														
Neighborhood Services Division	X	X	X		X	X	X	X	X	X	X			X
Youth Services Division	X	X	X		X	X	X	X	X	X	X			X
Volunteer and Human Services Devision	X	X	X		X	X	X	X	X	X	X			X
Other Services	X	X	X		X	X	X	X	X	X	X			X
Emergency Communications Center	X	X	X	X	X	X	X	X	X	X	X			
Finance														
Internal Audit Office		X					X	X						
Accounting and Financial Reporting Services	X	X	X	X	X		X	X						
Payroll Division	X	X	X	X	X	X	X	X	X					
Purchasing Division	X	X	X	X	X	X	X	X	X	X	X		X	X
Revenue Division	X	X	X	X	X	X	X	X	X	X	X		X	
Treasury Division	X	X	X	X			X	X		X				
Risk Management Division	X	X	X	X	X	X	X	X	X	X	X			X
Utility Billing	X	X	X	X	X	X	X	X	X	X	X		X	X

Figure 3.1.1-9. Business Unit Functionality Requirements

City of Raleigh North Carolina Page 3	Image & Scanning	Shared Repository	Workflow	Line of Business Integration	Tracking	eForms	email Mgt.	Records Mgt.	Web Publish	External Collaboration	Remote Access	CADD	Electronic Signature	Rich Media / DAM
Public Utilities														
Administration	X	X	X	X	X	X	X	X			X		X	
Inspections	X	X	X	X	X	X	X	X		X	X			
Meters	X	X	X	X	X	X	X	X			X			X
Sewer Maintenance	X	X	X	X	X	X	X	X			X			
Support Field Operations	X	X	X	X	X		X	X			X			
Water Distribution	X	X	X	X	X	X	X	X			X			
Public Works														
Design Construction Unit	X	X	X	X	X	X	X	X		X		X	X	
Administration	X	X	X	X	X	X	X	X	X		X		X	
Transportation Operations	X	X	X	X	X	X	X	X			X		X	
Construction Management	X	X	X	X	X	X	X	X			X	X	X	
Stormwater Division	X	X	X		X		X	X			X		X	
Street Maintenance	X	X	X		X	X	X	X			X			
Transportation	X	X	X		X	X	X	X	X	X	X	X	X	
Transportation - ART	X	X	X		X	X	X	X	X	X	X			
Transportation - Parklink	X	X	X		X	X	X	X	X					
Transportation - Traffic Control	X	X	X	X	X	X	X	X	X		X	X		
Transportation - Transit	X	X	X		X		X	X			X		X	
Raleigh Convention Center	X	X	X	X	X	X	X	X	X	X	X		X	X
Solid Waste Services	X	X	X		X	X	X	X	X		X		X	
Business Units Requiring Functionality Component	**81**	**92**	**79**	**54**	**83**	**68**	**85**	**93**	**55**	**45**	**74**	**6**	**32**	**42**
% of Total Units	**87%**	**99%**	**85%**	**58%**	**89%**	**73%**	**91%**	**100%**	**59%**	**48%**	**80%**	**6%**	**34%**	**45%**

Figure 3.1.1-10. Functionality Percentages across Business Units

Functionality Priorities

ECRM Functionality Components	Business Areas Requiring #	%
Records Management	93	100%
Shared Repository	92	99%
Email Management	85	91%
Tracking	83	89%
Imaging and Scanning	81	87%
Workflow	79	85%
Remote Access	74	80%
eForms	68	73%
Web Publishing	55	59%
Line of Business Integration	54	58%
External Collaboration	45	48%
DAM	42	45%
Electronic Signature	32	34%
CADD	6	6%

Figures 3.1.1-11 and 12 show cost benefit analysis presentations that were developed during an ECRM HLA for a previous client.

FIGURE 3.1.1-11. SAMPLE COST JUSTIFICATION AND ROI ANALYSIS

[redacted] Year	1	2	3	4	5	Five-Year Totals
COST JUSTIFICATION ANALYSIS						
Savings						
Paper Related Savings						
Leased Office Space Used for Paper Files		$ 94,360	$ 353,850	$ 471,800	$ 471,800	$ 1,391,810
Litigation Related Copy Costs		50,000	200,000	200,000	200,000	650,000
Paper Related Costs		55,493	110,986	110,986	110,986	388,451
Courier / FedEx		43,200	43,200	43,200	43,200	172,800
	$ -	**$ 243,053**	**$ 708,036**	**$ 825,986**	**$ 825,986**	**$ 2,603,061**
Cost Avoidance						
Productivity Gains for Selected Positions -- 4%		$ 1,698,556	$ 5,281,813	$ 4,374,053	$ 3,975,832	$ 15,330,254
Maintenance on IXOS 5.2 Software	$ 320,050	$ 329,652	$ 339,541	$ 349,727	$ 360,218	$ 1,699,188
	$ 320,050	**$ 2,028,208**	**$ 5,621,354**	**$ 4,723,780**	**$ 4,336,050**	**$ 17,029,442**
Total Savings	**$ 320,050**	**$ 2,271,261**	**$ 6,329,390**	**$ 5,549,766**	**$ 5,162,036**	**$ 19,632,503**

Both the analysis of benefits and the costs are shown over a 5-year period to appropriately reflect the ramp involved in savings, and the total cost of ownership of an automated ECRM solution over time. As can be seen by the costs section on the following chart, other costs beyond just the costs of software are used to determine the true return over time.

IQBG is very conservative in its preparation of cost benefit analysis to support roadmap recommendations – typically overstating costs and understating benefits.

Figure 3.1.1-12. Sample of Analysis Summary Used to Determine ECRM Project SEQUENCING for Roadmap

Costs						
Software						
Open Text Enterprise License Agreement - 10,000 users	$ 461,576	$ 461,576	$ 461,576	$ 461,576		$ 1,846,305
Maintenance on 10K Open Text ELA	$ 332,335	$ 332,335	$ 332,335	$ 332,335	$ 365,569	$ 1,694,909
SQLServer and other software	$ 50,000					
SQLServer Maintenance		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 40,000
	$ 843,911	**$ 803,911**	**$ 803,911**	**$ 803,911**	**$ 375,569**	**$ 3,631,214**
Hardware - maintenance not included						$ -
Windows Servers	$ 60,000	$ 40,000				
Disk Space	$ 36,000	$ 36,000	$ 36,000	$ 36,000		
	$ 96,000	**$ 76,000**	**$ 36,000**	**$ 36,000**	**$ -**	**$ 244,000**
Implementation Costs						
Base Open Text Install	38400					
Records Management Study	86400					$ 86,400
Governance (including Taxonomy)	172800					
Phase 1 Implementation	115200					
Continued Design and Implementation	230400	345600	$ 230,400			$ 806,400
Initial SharePoint Integration	115200					
Paper & Document Conversion		$ 100,000	$ 100,000			
	$ 758,400	**$ 445,600**	**$ 330,400**	**$ -**	**$ -**	**$ 1,534,400**
Yearly Operational Costs						
Open Text Technical Architect	$ 81,013	$ 162,026	$ 162,026	$ 170,127	$ 178,228	
Open Text PM	$ 60,231	$ 120,462	$ 120,462	$ 126,485	$ 132,508	
Open Text Consultant	$ 60,231	$ 120,462	$ 120,462	$ 126,485	$ 132,508	
ECM Center of Excellence - Business Lead	$ 71,454	$ 142,908	$ 142,908	$ 150,053	$ 157,199	
Records Manager		$ 120,462	$ 120,462	$ 126,485	$ 132,508	
	$ 272,929	**$ 666,320**	**$ 666,320**	**$ 699,636**	**$ 732,952**	**$ 3,038,158**
Training	**$ 90,000**	**$ 22,500**	**$ 22,500**	**$ 22,500**	**$ 22,500**	**$ 180,000**
Total Costs	**$ 2,061,240**	**$ 2,014,332**	**$ 1,859,132**	**$ 1,562,048**	**$ 1,131,021**	**$ 8,627,772**
$ Return (Benefit less Cost)	**$ (1,741,190)**	**$ 256,930**	**$ 4,470,258**	**$ 3,987,719**	**$ 4,031,015**	**$ 11,004,731**
Cummulative Return	**$ (1,741,190)**	**$ (1,484,261)**	**$ 2,985,997**	**$ 6,973,716**	**$ 11,004,731**	
Payback			**2.50**			
5-year ROI						**128%**

FIGURE 3.1.1-13. SAMPLE OF ROADMAP SEQUENCING EVALUATION CRITERIA

ECM Alternative Projects	Evaluation Criteria:								
	City's Strategic Mission:				Project Related Factors:				
	High ROI	Open Data	Green IT	Constituent Level of Service	GIS Integration	Low Complexity	Breadth of Impact	Reusable Component	Relative Score
Planning Taxonomy & Records Management Review	X	X	X	X	X	X	X	X	8
Planning Shared Drive Migration	X	X	X	X	X	X	X	X	8
Constituent Requests / Complaints	X	X	X	X	X	X	X	X	8
PeopleSoft Integration	X	X	X	X		X	X	X	7
Contracts Workflow	X	X	X	X		X	X	X	7
CC&B Integration	X	X	X	X	X		X	X	7
Land Management Integration	X	X	X	X	X		X	X	7
Real Estate Business Unit Shared Drive Migration	X	X	X	X	X	X	X		7
Central Policies & Procedures Folder	X	X	X	X		X	X	X	7
Cityworks Integration	X	X	X	X	X			X	6
City Clerk's Taxonomy & Migration	X	X	X	X	X		X		6
Central Grants Folder	X		X		X	X	X		5
Finance Purchasing Bid Process		X	X	X	X		X		5
Public Information Requests		X	X	X		X	X		5
Web Authoring & Editing Workflow		X		X		X	X	X	5
Public Utilities Meter-related Workflow	X		X	X	X	X		X	5
Central Personnel Files	X		X			X	X		4
Budget Collaboration	X		X				X	X	4
Parks & Recreation Program Registration	X		X	X				X	4
Pubic Relations News Releases		X		X	X	X			4
Real Estate Acquisition & Condemnation	Should be addressed as part of Planning/Project Taxonomy								N/A
Real Estate Recorded Documents	Should be addressed as part of Shared Drive Migration Project								N/A
eForms Pilot	Addressed by Constituent Requests – COP working group to address eForms priorities								N/A
Digital Signature Pilot	Related to Land Management Integration – should be addressed by COP working group								N/A

Notes:
- PeopleSoft Integration represents more than one project and includes CG/TAM and Personnel Action Forms
- Web authoring and Editing refers to the preparation of business content not changes to website pages through Alfresco
- Public Utilities Meter-related workflow relates to CC&B as well as CityWorks integration

In Figure 3.1.1-13 above, the Evaluation Criteria that form the columns were those collaboratively determined with the Client. Brief descriptions of each of the criterion are presented on the next page.

Evaluation Criteria Descriptions:

- High Return on Investment (ROI) – an 'X' in a cell in this column indicates that the project represents a high boost to staff productivity by reducing the time that it takes to perform their business processes. For more information related to the specific aspects of ECM that lead to a positive ROI the client was referenced to greater detail contained in the Section that presented the Business Case and Cost Justification.
- Open Data -- the Client Executives considered an Open Data policy to be an important criterion. ECRM functionality can be a positive factor in the Client's ability to meet this goal:
  - Increase in the ability for constituents to 'self-serve' and find information themselves through the use of interactive eForms,
  - Exposure of enhanced search functionality, and
  - Appropriate repository content through a web interface.
- Green IT – ECRM helps the Client by reducing the need of staff to produce paper (by printing and copying documents) because of digitization and search, workflow and collaboration capabilities built around digital content; and, the support of disaster recovery also supports the Client's sustainability, which IQBG included in its evaluation of this criterion.
- Constituent Level of Service – ECRM helps make it easier and faster for constituents of all kinds – citizens, partners, other government agencies, businesses, etc. – to perform tasks and find information as it interacts with the Client.
- GIS Integration – ECRM will support the integration of the Client's content with GIS data and a user interface that utilizes a map presentation by appropriately storing GIS-related metadata with appropriate content.
- Low Complexity – several factors impact the complexity of a project (also explained in more detail in the report itself) including:
  - Whether functionality can be accomplished using out-of-the-box functionality or requires significant configuration and/or customization
  - The degree of change it represents to Client staff in terms of current business process
  - The number of users that have to be trained
  - The number of steps or logical conditions that have to be addressed
  - The variety of content involved in the process
  - The length of time it takes to design, develop, test and implement the functionality
  - How widespread and proven the functionality is in the ECRM and/or local government marketplace
- Breadth of Impact – the most important element here is the scope of benefit that the functionality represents: how many staff and constituents benefit from the enhanced capabilities.
- Reusable Component – whether the implemented functionality can be re-used by other business units or areas within the Client's organization with little or no change.
- Relative Score – indicator that is used to help analyze the implementation priority – it is not in any way a conclusive indication of priority but is simply used to organize relative value of a given project.

Additionally, IQBG recommended for this client that whenever new functionality is introduced for the first time, a proof of concept approach be used and a business unit partner with a need for the functionality or application be chosen to participate in a pilot implementation before the ECRM functionality is then rolled out to a broader number of the Client's staff.

Figures 3.1.1-14 and 15 provide partial samples of documentation from a previous HLA Content/Records Inventory Section.

FIGURE 3.1.1-14. DEPARTMENTAL CONTENT INVENTORY DOCUMENTATION

Department Description	Format/Location	Metadata / Organization	Comments / Additional Details	Date Range	Total Pages	Special Requirements
City Attorney						
Litigation and Eminent Domain Case Files	Digital and paper	Attorney, Matter ID, Status, Document Creation Date, Parties, Close Date				
Environmental Practice Subject files, inter-local agreements, studies, presentations and accompanying notes, etc.	Digital and paper	Attorney, Matter ID, Status, Document Creation Date, Parties, Close Date, Subject Keywords	15 vertical drawers		75,000	
Environmental Review Documents	Digital and paper -- MS Word, PDF	Matter ID, Attorney ID, Document Creation Date, Title, Topic or Subject Keywords Permit ID, Document Creation Date, Attorney ID, Topic or Subject Keywords				
Public nuisance and housing files	Digital and paper	Attorney, Matter ID, Status, Document Creation Date, Parties, Close Date, Property ID	2 rolling bins, 3 vertical file drawers	2007 - present	20,000	
Contracts	Digital and paper	Vendor ID, Approval Date, Beginning Effective Date, Ending Effective Date, Target Renewal Date				
Leases	Digital and paper	Lessor, Approval Date, Beginning Effective Date, Ending Effective Date				
Inter-local Agreements	Digital and paper	Town ID, Agreement Date, Subject Description, Attorney ID				
Research Content	Digital and paper	Topic or Subject, Document Creation date, Attorney ID				
Opinion Files	Digital and paper	Topic or Subject, Document Creation date -- Topic, subtopic and sub-sub topic, Attorney ID				
Case Files	Digital and paper	Attorney, Matter ID, Status, Document Creation Date, Parties, Close Date	Includes Project and Inspection related material -- created in Astraea with companion digital and paper files			

Figure 3.1.1-15. Mapping OF Content Inventory documentation to Records Retention Requirements

Description of Documents	Location / Type of Storage	Volume	Dates		# Staff Filing	Records Series	Retention Period	Notes
Clerk's Office								
Discipline case files	File room - 28 shelves	30,800			8	101302	50 years	
Discipline case files dismissed						101303	1 yr after closure	
CRESPA discipline case files						101304	50 years	5 yrs onsite; 45 yrs at State
CRESPA discipline dismissed files						101305	1 yr after closure	
Resignations	16th floor file room- 7 boxes	15,400	01/1993	12/2010		LVA	50 years	
CPF	Clerk's office- shelves	5,400	alpha		8	8003	15 yrs after reimburse	
Receivership files	Library		1960s	present		101302	50 yrs	Bar Counsel retrieves

3.1.2 Reports and Deliverables (RFP 4.2.1.2)

RFP 4.2.1.2.1 Detailed report outlining :findings from Section 4.2.1.1

RFP 4.2.1.2.2 Comprehensive and updated Retention Schedule and Policy, based on legal and industry standards.

RFP 4.2.1.2.3 Complete Strategic Records Roadmap. Including, but not limited to, detailed steps for the Records Management and Information Technology Services (ITS) divisions to bring the records program to industry standards.

RFP 4.2.1.2.4 Change management strategy plan

RFP 4.2.1.2.5 Conduct two (2) on-site meetings in Charleston, WV to present draft findings and reports to the records committee and senior staff.

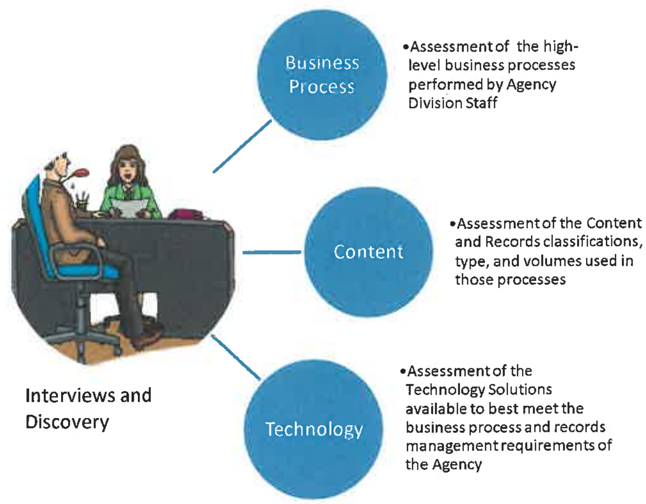
RFP 4.2.1.2.6 Assist the Agency with developing specifications for any software or hardware recommended to achieve better compliance and management of both electronic and paper records. Vendor will not be providing such software or hardware, nor can it have interest in a specific product it may assist in recommending.

IQBG's tailored HLA approach and methodology being proposed to the Agency produces all of the deliverables being requested by the Agency in its solicitation, as described in Section 3.1.1 above. As presented in several of the references, IQBG typically produces three volumes that build on each other to produce the HLA Final Report. As presented in Figure 3.1.2-1 below, IQBG use the information gathered during the Discovery and Assessment phase to produce business process summaries that apply best practice approach to business processes and to the full life-cycle management of the Agency's records. Each Volume represents an additional level of analysis and refinement. Volume 2 contains the results of analysis of the information gathered: Findings and Recommendations that apply to implementing the Agency's RM Program.

FIGURE 3.1.2-1. THE ECRM HIGH LEVEL ASSESSMENT DOCUMENTATION VOLUMES

Documentation of the RM Assessment in Volume 2 focuses on three inter-related areas that will define the Agency's ECRM/RM Program and lead to the final Strategy and Roadmap presented in Volume 1. Figure 3.1.2-2 shows the three areas that were analyzed and that together form the basis for the Agency's ECRM/RM Program.

FIGURE 3.1.2-2. ECRM/RM ASSESSMENT FOCUS ON THREE AREAS



After review by appropriate Agency management and staff, and coordination with the Agency's Records Management staff, further analysis and synthesis of the assessment of these three areas and the detailed findings and recommendations from Volume 2 will be used to develop the ECRM/RM Strategy and Roadmap presented in Volume 1.

A summary of the Volumes typically produced from the HLA and their content is presented below:

- Volume 1: ECRM/RM Strategy and Roadmap – represents the synthesis of the more detailed assessments, findings, and recommendations documented in Volumes 2 and 3; and, includes recommended tasks and the associated prioritized sequencing of tasks to implement the Agency's ECRM/RM Program.
- Volume 2: Presents the ECRM High level Assessment – which includes the following:
  - Section 2 – Current State Assessment and Functional Requirements
  - Section 3 – Business Case and Cost Justification
  - Section 4 – Detailed Findings and Recommendations
  - Section 5 – Enterprise Reference Architecture – identifies gaps in the Agency's existing Information Technology environment and ECRM/ERM software components necessary to fill or reduce them.
  - Section 6 – Records Management and Information Governance Recommendations including Public (Records) Requests (PDRs) and Litigation Discovery, Legal Holds and Retention/Disposition Management.
- Volume 3, Section 7: High Level Business Unit (Divisions, Business Units and Functional Areas – documents the business process, content, records management and digitization requirements related to each of the Agency's Divisions.
- Appendix A – Content Inventory Assessment Report
- Appendix B – Change Management Plan

- Appendix C – Digitization Plan
- Appendix D – RM (and possibly ECRM) Training Plan(s)
- Appendix E through "N" – Records Management Related Policies, Procedures, Retention Schedules, Handbook and Training Materials (as required).

As each of the Volumes are developed, they are shared with Agency representatives so that review and enhancement of the deliverables occur over the entire duration of the project and there are no surprises when the Final Report is presented.

As specified in the Agency's solicitation – the deliverables from the HLA, either included in the actual Final Report Volumes and Appendices or produced as separate deliverables include:

- Detail Report outlining Findings
- Comprehensive and updated Retention Schedule and Policy based on legal and industry standards
- Complete Strategic Records Roadmap including, but not limited to, detailed steps for the Records Management and Information Technology Services (ITS) divisions to bring the records program to industry standards
- Change Management Strategy Plan
- Presentation of (draft) Findings and Reports to the Records Committee and Senior Agency staff (conduct two (2) on-site meetings in Charleston, WV).
- Requirements Matrix and Software/Hardware Specifications (based on Agency requirements, volumes, and users) recommended to achieve better compliance and management of both electronic and paper records.

IQBG is completely independent of any ERM/ECRM software vendors and is knowledgeable of all leading software vendors. We make recommendations based on software that best matches functionality and budget requirements of our clients.

3.1.3 Training (RFP 4.2.1.3)

RFP 4.2.1.3.1 Vendor shall conduct at least six (6) training sessions on-site in Charleston, WV. Training material shall be customized for the Agency and include the review of the new retention schedule and basic overview on the importance of information governance.

RFP 4.2.1.3.2 Provide comprehensive training materials in a format that can be modified as needed and for use by the Agency to train future employees.

RFP 4.2.1.3.2 Provide separate material and training to Agency management staff. This shall include education on a new management strategy plan and how to educate employees on records management importance.

RFP 4.2.1.3.3 Provide recommendations of further in-house training after the completion of the initial project, including the use and development of an Agency webinar training delivery method with the ability to complete a fillable webinar certificate after completion for placement in personnel files.

IQBG will develop comprehensive training materials using Microsoft Office tools that can be modified as needed and for the use of the Agency to support future training requirements. At a minimum, the training materials developed will cover Records Management principles, the benefits and value of information management, and a review of the new revised retention schedule. IQBG will conduct at least six (6) training sessions on-site in Charleston, West

Virginia; and, will provide knowledge transfer (train-the-trainers) to Agency staff to prepare them to deliver the training in the future if desired.

Typically, IQBG also develops contextually specific RM-related training for our clients and their business units (in this case Agency divisions, business units, or functional areas) that relate to specific division records, taxonomy, and digitization elements and processes. Often, a training template is developed that can be tailored on a business unit-by-business unit basis (as not all taxonomy implementation and digitization tasks can begin immediately.

IQBG will develop separate training material and deliver training to Agency management staff that includes education on the new management strategy plan and techniques and material that can be used to educate their staff on RM importance and best practices.

As mentioned above in Section 3.1.2, one of the deliverables produced as part of the Final Report will be a Training Plan that provides recommendations for further in-house or web-based training that will occur over time. (Agency webinar or web-based training delivery will be designed so that a digital certificate (fillable form – possibly automated) can be produced for placement in staff personnel files after completion of training. Often IQBG develops the Records Management overview training (web based) that can be included as part of the employee onboarding process.

3.2 Approach & Methodology to Compliance with Mandatory Project Requirements (RFP 4.2.2)

RFP 4.2.2.1 The Vendor shall provide a final project timeline with key goals and milestones outlined within fifteen (15) business days from the notice of award of a contract. Timeline shall also include periods for the in-person Agency division meetings.

RFP 4.2.2.2 The proposed plan shall comply with all Federal, State and Industry laws and regulations.

RFP 4.2.2.3 The Vendor shall provide monthly updates on project progress

RFP 4.2.2.4 Vendor shall assume all cost of travel, copying expenses and any other costs associated with the project.

RFP 4.2.2.5 The Agency shall retain all rights to any material generated during this project.

RFP 4.2.2.6 A copy of all final plans, documents, work sheets, training material, etc. shall be provided to the office in an editable electronic format. Non-editable formats are permitted for presentation and other uses as long as an editable format is also provided.

The tentative Project Schedule for the Agency's ECRM/ERM Project is presented below in Figure 3.2-1. The Microsoft Project Plan and Resource Work Breakdown structure used to build the plan will be refined in collaboration with the Agency's PM during the Project Initiation Workshop (PIW), and will be used to manage all tasks and the production of the required deliverables.

FIGURE 3.2-1. PROPOSED HLA – ERM/ECRM DISCOVERY, ASSESSMENT AND ROADMAP PROJECT – PROJECT SCHEDULE

	Task Name	Duration	Start	Finish
1	WV Treasurer's Office HLA - ECRM Discovery - Assessment and Strategic Roadmap Project	112 days?	Mon 2/10/20	Tue 7/14/20
2	Pre-start efforts	5 days	Mon 2/10/20	Fri 2/14/20
9	Project Plan & Project Management	6 days	Mon 2/17/20	Mon 2/24/20
16	Task I - ECRM HLA - Assessment and Roadmap	91.5 days?	Tue 2/25/20	Wed 7/1/20
17	Review of Current Operations	25 days	Tue 2/25/20	Mon 3/30/20
22	Perform Inventory Assessment	30 days	Tue 3/24/20	Mon 5/4/20
30	Review Business Processes and Collaboration	15 days	Tue 3/31/20	Mon 4/20/20
38	Develop ECRM Software Requirements	28 days	Tue 3/31/20	Thu 5/7/20
45	Conceptual Architecture (ERA and Compliance Model)	26 days	Tue 3/31/20	Tue 5/5/20
52	Review and Revise RM Policies, Procedures and Retention Schedule	30 days	Wed 5/6/20	Tue 6/16/20
61	Develop Business Case	34 days	Tue 4/21/20	Fri 6/5/20
71	ECRM Vision and High level implementation sequencing	17.5 days	Tue 4/21/20	Thu 5/14/20
80	High-level Governance, Communications Plans and ECRM Roadmap	18 days?	Thu 5/14/20	Tue 6/9/20
88	ECRM Strategy and Roadmap Presentation	17 days	Mon 6/8/20	Wed 7/1/20
93	ECRM HLA – Findings, Recommendations and Roadmap Complete	0 days	Wed 7/1/20	Wed 7/1/20
94	Task II - Develop and Deliver RM Training	25 days	Wed 6/10/20	Tue 7/14/20
104	Task III - Develop ECRM Requirements Matrix and Draft RFP	40 days	Thu 5/7/20	Wed 7/1/20
105	Develop RFP Framework	12 days	Thu 5/7/20	Fri 5/22/20
110	Develop Functional Design for RFP Use Cases	14 days	Thu 5/7/20	Tue 5/26/20
121	Finalize ECRM Solution RFP Draft	35 days	Thu 5/14/20	Wed 7/1/20
128	WV Treasurer's Office ECRM HLA - Assessment - Roadmap - ECRM RFP Draft Complete	0 days	Tue 7/14/20	Tue 7/14/20

The proposed HLA – ECRM Discovery, Assessment, Roadmap and ERM/ECRM Selection Project Plan includes up to four weeks of onsite interviews with representatives from the Agency's 16 divisions and related business/functional areas (as collaboratively selected with the Agency's PM) and delivers all requested deliverables in the Agency's RFP. As requested, because of the seniority and experience of the IQBG consultants proposed and the experience performing similar projects, the project plan above shows how all required tasks can be completed in 150 days (5 months). If the project starts on February 17th, with pre-start efforts by conference call the week before, the ERM/ECRM Strategic Roadmap presentation to Agency Executives and Management can be completed by July 1st, RM Training (minimum of six sessions) can be completed by July 14th, and (although not explicitly requested) a draft RFP for an ECRM solution solicitation can be delivered by July 1st at no additional cost if desired.

IQBG has designed the plan using three parallel major tasks to allow for the RM training and the ECRM Requirements Matrix and draft RFP to be developed while the deliverables from the discovery and assessment tasks are being completed. Figure 3.2-2 below shows the planned deliverables and target dates for the Agency's project.

IQBG also recognizes that February 17th is just a target date and the actual start date may differ; however, the project plan will simply slide forward from the actual start date with task durations remaining the same. The detailed tentative project plan underlying Figure 3.2-1 is provided in Appendix C.

FIGURE 3.2-2. WEST VIRGINIA TREASURER'S OFFICE /ERMECRM DISCOVERY, ASSESSMENT, ROADMAP PROJECT PLANNED DELIVERABLES AND TARGET DATES

Task / Deliverable	Target Date
WV Treasurer's Office HLA - ECRM Discovery - Assessment and Strategic Roadmap Project	
Pre-start efforts	
Project Plan & Project Management	
Revised project plan	Wed 2/19/20
Initial Interview Schedule	Mon 2/24/20
Task I - ECRM HLA - Assessment and Roadmap	
Review of Current Operations	
Interview Documentation	Mon 3/30/20
Perform Inventory Assessment	
Information Inventory Assessment Report - Includes Digitization Plan	Mon 5/4/20
Review Business Processes and Collaboration	
Business Process Assessment Report	Mon 4/20/20
Strategy Recommendations	Mon 4/20/20
Develop ECRM Software Requirements	
Technology Assessment Report - Includes Software Requirements Matrix & Recommendations	Thu 5/7/20
Conceptual Architecture (ERA and Compliance Model)	
Information ERA and Compliance Model - includes Security Roles Model	Tue 5/5/20
Review and Revise RM Policies, Procedures and Retention Schedule	
Enhanced RM Policies and Procedures	Tue 6/16/20
Revised RM Retention Schedule - Electronic Records and Gaps	Tue 6/16/20
Develop Business Case	
Business Case document	Fri 6/5/20
ECRM Vision and High level implementation sequencing	
ECRM Vision and High level implementation sequencing	Thu 5/14/20
High-level Governance, Communications Plans and ECRM Roadmap	
Change Management Plan	Tue 6/9/20
Deliver Final ECRM Strategy, Roadmap, Governance and Implementation Plan	Tue 6/9/20
ECRM Strategy and Roadmap Presentation	
Present Strategy and Deployment Roadmap to Agency Executives and Management	Wed 7/1/20
ECRM HLA -- Findings, Recommendations and Roadmap Complete	Wed 7/1/20
Task II - Develop and Deliver RM Training	
General RM - Conceptual and Best Practice Training Materials	Tue 6/30/20
RM Retention Schedule Training Materials	Tue 6/30/20
Contextually Specific Divisional RM Training Template	Tue 6/30/20
RM Training Delivered	Tue 7/14/20
Task III - Develop ECRM Requirements Matrix and Draft RFP	
Develop RFP Framework	
ECRM Solution RFP Framework	Fri 5/22/20
Develop Functional Design for RFP Use Cases	
Approved ECRM Functional Description (FD)	Tue 5/26/20
Finalize ECRM Solution RFP Draft	
Final ECRM Draft RFP Package for Agency's Use	Wed 7/1/20
WV Treasurer's Office ECRM HLA - Assessment - Roadmap - ECRM RFP Draft Complete	Tue 7/14/20

As mentioned earlier, the representative target dates are based on the 'artificial start date' of February 17th with actual target dates sliding forward (or backward) based on the actual start date determined by the Agency.

3.2.1 Project Management and Reporting

At the beginning of each project, the IQBG project manager develops a detailed project plan. This plan will be reviewed with the Agency's Project Manager (PM) and others as directed by the Agency's PM, and modifications and additions to the plan are made based upon their feedback and insights into the project.

The revised plan is then submitted to the Agency as the baseline project plan. The appropriate project plan for the tasks underway will be updated weekly and sent to the Agency's PM via email as an MS Project attachment; or, shared in a collaborative worksite. The project plan is reviewed along with the updated project report weekly or as required by the Agency (likely weekly with the Agency PM, and more formally in a monthly status for Agency Management.

Our draft high-level project plan shown below in Figure 3.2.1-1 was developed from our experience in working with similar organizations and using our proven HLA methodology to deliver the exact deliverables that the Agency is seeking. This working document will be finalized with the Agency's PM during the Project Initiation Workshop (PIW) and constantly modified to reflect the activities completed and new tasks that are uncovered during the interview process. During the PIW, IQBG will work with the Agency PM to assess the impact on scheduling of other Agency demands on staff time; and, schedule the discovery interviews so that the plan remains realistic.

Immediately upon approval to move forward with the Agency's RM Consulting project, IQBG will work with the Agency to establish and ratify a governance model to oversee the project. We will work with the Agency PM to enhance and finalize the Microsoft project plan to accomplish the proposed project tasks and develop a formal Project Charter outlining key project components, such as project scope and timelines; high-level requirements, milestones, and deliverables; known issues, risks, and key dependencies; and assumptions, among other items. Detail will be added to the Draft Project Plan, and the finalized plan will be approved by the Agency PM. All project milestones, products, deliverables, activities, subtasks, and resource requirements will be documented in the approved Project Plan, and the project will be managed accordingly.

The Project Initiation Workshop (PIW) described earlier will be held to articulate responsibilities and communicate the Project Plan and its use as the driving management tool to the team; and, important initial tasks will include developing the RM/ECRM PowerPoint presentation to be used for the interview sessions and scheduling interviews of Agency division representatives and key stakeholders.

Status Reporting. Mr. Lloyd will maintain a Project Plan and a detailed work breakdown structure (WBS) indicating project progress and will report project status on a weekly basis to the Agency PM and will maintain a real-time risk register and issues log included with the weekly status reports. The status reports will contain a listing of any significant departures from the Project Plan with explanations of causes, effects on other areas, and strategies to achieve realignment; a listing of tasks completed since the last report; a listing of tasks that were delayed, the reasons for the delay(s), and the expected revised completion date; planned activities for the next scheduled period; any risks identified and major concerns, or issues encountered, proposed mitigation strategies, and actual resolutions; cost projection and burn rate; and any other topics that require attention.

Emergency PM meetings will convene to address issues requiring immediate action. Mr. Lloyd will also develop a monthly status report documenting project progress, key issues, identified risks, and budget status for submittal to Agency management, Executive Steering Committee (ESC) or another executive group as directed by the Agency PM. Mr. Lloyd will also provide *ad hoc* and customized reports to the Agency as requested.

3.2.2 Agreement with Mandatory Project Requirements

The project timeline with key goals and milestones will be finalized within the required fifteen (15) business days from the notice of award of a contract as described above. Working collaboratively with the Agency's PM the schedule will include the plan for in-person Agency division meetings (or interviews as we've called the in earlier discussion of approach and project planning).

Also as discussed above, IQBG will provide (formal) monthly updates on project progress – with more frequent informal updates to the Agency's PM.

Additionally, IQBG agrees that:

- The proposes plan will comply with all Federal, State and Industry laws and regulations (as appropriate).
- IQBG assumes all cost of travel, copy expenses; and, other costs associated with the project.
- The Agency will retain all rights to any material generated during the project
- A copy of all final plans, documents, work sheets, training material, etc. shall be provided to the office in an editable electronic format. IQBG understands that non-editable formats are permitted for presentation and other uses as long as an editable format is also provided.

Appendix A – Addendum Acknowledgement Form

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: CRFP STO2000000002

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X] Addendum No. 1	[ ] Addendum No. 6
[ ] Addendum No. 2	[ ] Addendum No. 7
[ ] Addendum No. 3	[ ] Addendum No. 8
[ ] Addendum No. 4	[ ] Addendum No. 9
[ ] Addendum No. 5	[ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

The IQ Business Group, Inc.
Company

Authorized Signature

01/13/2020
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Appendix B – Proposed IQBG Team Member Resumes

Jim Clements – Executive Sponsor and QA Advisor

SUMMARY

Mr. Clements has been involved in various facets of information technology for over twenty-five years. His experience includes project management, systems analysis/design, technical architecture, programming, and training. His focus for the last fifteen years has been the area of enterprise scale document, digital asset and record management systems. He brings a background of academic studies, large-scale, multi-phased project experience and in-depth technical knowledge to identify and solve organizational, business and information management problems. He has co-authored textbooks on systems analysis & design, relational database design and logical requirements modeling.

EXPERIENCE

The IQ Business Group, Inc., 2007 – Present

Mr. Clements is the Vice President for State and Local Government clients and is responsible for all consulting activities in this sector related to Enterprise Information Governance, Records and Information Management Programs, Enterprise Content and Records Management (ECRM) solutions, and logical Enterprise Information Management initiatives around 'Big Data', Taxonomy, eDiscovery and Auto-classification strategies. Mr. Clements is currently responsible for several ECRM, EIM, RIM, Discovery and Governance projects for other state clients with tasks very similar to those being requested by Ecology's RIM Support Services RFP.

Representative projects include:

Commonwealth of Virginia – FileNet ECRM Working Group for Chief Applications Officer. Senior Consultant responsible for guiding the design of a Shared Services platform utilizing IBM FileNet for document and records management. Lead a community of practice working group to design and select FileNet components and functionality, common workflows, taxonomy, File Plan, records management implementation, and the development of the pricing model that would allow all agencies in the Commonwealth of Virginia to participate in a shared services offering of IBM FileNet ECRM.

Also lead the companion technical team that developed the enterprise reference architecture and the recommended hardware and software configuration to support the FileNet shared services platform.

Federal Home Loan Bank, Office of Finance – Records Management Program. Senior Consultant responsible for guiding the implementation of an enterprise records management program, using the Open Text Livelink platform. Mr. Clements developed new records management policies, procedures, an enhanced records schedule using the 'big bucket' approach. He then worked with the twelve bank divisions to develop user file plans, associated metadata and permission models.

Virginia Department of Health – FileNet Design and Implementation. Senior Consultant responsible for designing the functionality for the first three phases of FileNet implementation including functionality and workflows to handle: Human Resources leave requests and approval, Human Resources Personnel Action Forms (PAFs) processing, Constituent Correspondence tracking and response, implementation of an enterprise taxonomy and File Plan, and capture of engineering drawings and specifications for the Department of Drinking Water Quality.

Mr. Clements was responsible for developing the systems architecture and specifications for the hardware and software platforms to support the FileNet implementation.

Virginia Department of Environment Quality – FileNet Design and Implementation. Senior Consultant responsible for designing the functionality for the first phase of an IBM FileNet implementation to address the application, permitting, and enforcement activities for three programs – water, air and waste. Mr. Clements led the development of a taxonomy effort that rationalized the three programs' metadata models that were drastically different prior to the FileNet project. In a post review of the project, users pointed to the upfront taxonomy effort as a key success factor for the project.

Mr. Clements was responsible for developing the systems architecture and specifications for the hardware and software platforms to support the FileNet implementation; and, lead the creation of an ECRM Governance program that included change leadership, a Center of Excellence, and a user driven Community of Practice.

Virginia Department of Social Services – FileNet FOIA and Discovery Design. Mr. Clements led the design of a FOIA and discovery response workflow built on the FileNet ECRM system to support the Virginia Social Services system (State and local) supporting to both FOIA and litigation-related requests for information which have been steadily on the rise since the downturn in the economy.

Mr. Clements delivered a design for utilizing the FileNet business process modules to support tracking and workflow of the response processes and FileNet eForms for accepting FOIA requests and automatically initiating the FOIA related workflows.

Architect of the Capitol – Feasibility Study for Flexible Scheduling (Big Bucket) Approach to assess Enterprise Records Management. Senior Records Management Consultant -- evaluated existing record schedules for the feasibility of applying a big bucket approach that would simplify user declaration as well as records management activities required to maintain schedules and manage dispositions. Initial design consolidated 18 departmental schedules into a core general schedule with department schedules used only for unique records; and, verified that several flexible scheduling alternatives could reduce record series by greater than 50 percent.

<u>DeepBridge Content Solutions, 1999 – 2007</u>

CEO of DeepBridge Content Solutions from 1999 to 2006, a professional services firm specializing in ECM strategy, design, and integration/implementation for both government and commercial clients. DeepBridge received Integrator of the Year award from EMC/Documentum in 2005. DeepBridge had experience with over twenty different vendors in the ECM market space.

As a Senior Consultant and Principal with DeepBridge Content Solutions, Mr. Clements has performed in project management, strategy guidance, and requirements analysis roles for clients across industry sectors as evidenced by the representative sample below.

Lead Consultant and Business Analyst (2006-2007) Ferguson Enterprises, Newport News, Virginia
Requirements Definition and Technical Design for Enterprise Document Management

Senior Consultant lead for analysis and technical design of the application of enterprise document management to the Legal, HR, Acquisitions, and Distribution Divisions of Ferguson Enterprises a plumbing supply company with locations across the US and Canada.

Mr. Clements lead analysis sessions with client representatives from each of the Divisions, developed functional requirements documents, and then supervised and coordinated the conversion of functional requirements to physical design documents and project plans for phased implementation.

The technical design included integration with an enterprise document management solution with financial reporting, CRM and other business systems. Project tasks included:

- Definition and documentation of Business Goals and ROI metrics
- Leading meetings for Joint Application Design (JAD), Requirements Definition and Technical Architecture sessions
- Management of the deliverables, effort and budget related to such sessions for both functional specifications and technical design
- Presentation of risk and scope issues to client
- Designing solutions to solve complex, multidisciplinary business problems within the guidelines of long-term business goals and implications

Sr. Business Analyst and Technical Architect (2000 – 2003)
Bank-One/J.P. Morgan Chase – Affinity Credit Card Promotion, eMarketing and Acquisition Program

Sr. Business Analyst and Technical Architect for a multi-year project eventually producing the ability for end users to create and design their own credit cards and credit card offerings. Mr. Clements led the requirements definition and design sessions to define the workflows used to create and approve the digital content including both legal agreements and art work to enable a credit card holder to apply for, design the appearance of, and chose program options dependent on application data that would result in the automated mailing of the appropriate legal documents to initiate a new credit card agreement; and, then upon receipt of the signed agreement the generation and mailing of credit card and program documentation. As an example, a credit card applicant can design a card that includes different features and interest rates and terms and that has a picture of their favorite dog – the Dalmatian.

In addition, the same content was used to support eMarketing campaigns supporting the promotion of credit card offerings and to promote the affinity program to newly defined program groups. Project Management tasks included:

- Design and scheduling of meetings for Joint Application Design (JAD), Requirements Definition and Technical Architecture sessions
- Management of the deliverables, effort and budget related to such sessions

- Leading Requirements Definition for workflows related to 1) content creation, 2) application processing, 3) client acquisition and credit card delivery
- Presentation of scope issues to client – several occurred
- Management of the change order process implemented for project scope changes
- Selection and management of discovery, design and delivery teams
- Contributor to and manager of documentation comprising project deliverables

Sr. Business Analyst and Technical Lead
Deutsche Bank – High Net Worth Portal (2002-2003)

Sr. BA and Technical Lead for a 13 month requirements definition, technical design and development effort to provide a high net worth focused portal based on the BEA Platform using Documentum ECM and custom Java code to provide a unified user interface. High net worth individuals were provided the ability to see all accounts and products through a single interface, and have direct links to banking representatives based on request and context with no need to know which area or physical location the appropriate person resided in.

Mr. Clements led both the requirements definition/design and development phases. As Project Manager and Technical Lead Mr. Clements was responsible for tasks including:

- Created detailed project plans, work breakdown, and multi-project dependencies using Microsoft Project
- Led cross-functional teams to manage complex analysis
- Led extensive UI design sessions
- Guided the design of components that could report overall portfolio performance across products
- Tracked and monitored progress against defined deliverables
- Managed cost against budget using Microsoft Excel
- Developed written status reports, assimilated information summaries and presented status and findings to the Board using Microsoft PowerPoint
- Controlled budget and effort using cost and resource planning tools based on Microsoft Project
- Guided the analysis and software selection effort including the presentation of recommendations to C-level Executives.

Business Analyst and Technical Architect (1999-2000)
MasterCard International – Business Process Management and Business Intelligence System

Business Analyst and Technical Architect for an eighteen-month discovery, design, implementation and rollout project to improve informational reporting and performance of the third-party credit-card support network on an international basis. The project involved the detailed analysis of supply chain, reporting and billing requirements with the goal of raising service levels to credit card holders and improving the accuracy of billings related to their support internationally.

The project involved the introduction and integration of Business Objects BI and reporting suite of products with legacy and enterprise systems within MasterCard, and streamlining of data collection from internet applications and batch systems internationally. Mr. Clements managed the international requirements definition effort, the development effort in New York, and the international rollout of the developed system.

As Project Manager, Mr. Clements was responsible for the overall project deliverables, the coordination between subject matter experts and technical staff, the business process and supply chain improvements, and the technical solutions and system integrations performed. His tasks included:

- Jointly defining and presenting ROI and business goals to stakeholders
- Defining work-breakdown structure, deliverables and milestones, and making analysis and technical project team assignments
- Creating detailed project plans and modeling appropriate multi-project dependencies
- Leading Joint Application Development sessions and technical design sessions
- Development and documentation of schema, database model and reporting requirements
- Tracking and monitoring progress against defined deliverables
- Managing cost and effort against budget using Microsoft Excel

Inacom, 1998 – 2006

As Director of all software development consulting (350+ staff), Mr. Clements has had overall leadership responsibility and has performed in program management, quality assurance, project management, strategy guidance, and requirements analysis roles for clients across industry sectors as evidenced by the representative sample below.

Business Analyst and Lead Consultant (1998-1999)
CSFB – Workflow Improvement and Automated Publishing System to Support Analysts Reporting

Lead Consultant for a multi-year project for automated delivery of equity analysts' reports to a subscription base of CSFB clients. The project involved workflow improvement, data modeling, document management and automated collection and delivery of equity analysts reporting.
The production of equity-related reports is by nature of the market a very time sensitive process and the workflows involve not only the creation of equity related reports but the appropriate legal and compliance approval processes prior to their actual publishing. In addition, the project involved the building of the subscription database and appropriate workflows for personalized delivery of equity information to subscribers.

Mr. Clements was responsible for managing the discovery, design, implementation, training and transfer of operational responsibility to the client. The project involved personnel from operational, equity analysis, 'Chinese wall' compliance, regulatory, legal, marketing, IT and finance divisions. The project also involved the integration of the implemented solution with trading and other financial systems within CSFB.

As Project Manager, Mr. Clements was responsible for the overall project deliverables, the coordination of deliverables and schedules between personnel, the blending of technical and business as well as consultant and employee teams, and the ultimate success of the project. His tasks included:

- Jointly defining and presenting workflow improvements and project goals to stakeholders

- Defining work-breakdown structure, deliverables and milestones, and making analysis and technical project team assignments
- Creating detailed project plans and modeling appropriate multi-project dependencies
- Leading Joint Application Development sessions and technical design sessions
- Development and documentation of schema, database model and reporting requirements
- Tracking and monitoring progress against defined deliverables
- Managing cost and effort against budget using Microsoft Excel

Business Analyst and Lead Consultant (1996-1999) Prudential – Fund Management Marketing

Mr. Clements led this 3 year project implementing a custom marketing system on an Oracle Platform that allowed content to be added to a repository and appropriately tagged with a very complex set of metadata – allowing PowerPoint presentations to be automatically generated for a given audience, taking into account both the role of the person presenting (principal, broker, financial advisor – and licenses held), the position of the person being presented to, the industry involved, and the products being presented. Only appropriate content would be presented as possible inclusion based on SEC regulations and could be narrowed by product and other criteria based on the metadata design.

In a second phase the system was enhanced to provide website content based on the same selection routines and to generate content for email campaigns as well.

As Project Manager, Mr. Clements was responsible for the overall project deliverables, the coordination between subject matter experts and technical staff, the business process and supply chain improvements, and the technical solutions and system integrations performed. His tasks included:

- Jointly defining and presenting ROI and business goals to stakeholders
- Defining work-breakdown structure, deliverables and milestones, and making analysis and technical project team assignments
- Creating detailed project plans and modeling appropriate multi-project dependencies
- The presentation and explanation of complex selection logic based on the metadata model
- Leading Joint Application Development sessions and technical design sessions
- Development and documentation of schema, database model and metadata requirements
- The coordination of technical teams from several vendors

Senior Business Analyst and Technical Lead (1998-1999)
CSFB – Workflow Improvement and Automated Publishing System to Support Analysts Reporting

Lead Consultant for a multi-year project for automated delivery of equity analysts' reports to a subscription base of CSFB clients. The project involved workflow improvement, data modeling, document management and automated collection and delivery of equity analysts reporting.
The production of equity-related reports is by nature of the market a very time sensitive process and the workflows involve not only the creation of equity related reports but the appropriate legal and compliance approval processes prior to their actual

publishing. In addition, the project involved the building of the subscription database and appropriate workflows for personalized delivery of equity information to subscribers.

Mr. Clements was responsible for managing the discovery, design, implementation, training and transfer of operational responsibility to the client. The project involved personnel from operational, equity analysis, 'Chinese wall' compliance, regulatory, legal, marketing, IT and finance divisions. The project also involved the integration of the implemented solution with trading and other financial systems within CSFB.

As Senior Analyst, Mr. Clements was responsible for the overall project deliverables – functional requirements, physical specifications, technical architecture, UI design, reporting requirements, and work breakdown and project plans, the coordination of deliverables and schedules between personnel, the blending of technical and business as well as consultant and employee teams, and the ultimate success of the project. His tasks included:

- Jointly defining and presenting workflow improvements and project goals to stakeholders
- Defining work-breakdown structure, deliverables and milestones, and making analysis and technical project team assignments
- Creating detailed project plans and modeling appropriate multi-project dependencies
- Leading Joint Application Development sessions and technical design sessions
- Definition of Functional Requirements and Technical Architecture documentation
- Development and documentation of schema, database model and reporting requirements
- Tracking and monitoring progress against defined deliverables
- Managing cost and effort against budget using Microsoft Excel
- Developing written status reports, assimilating information summaries and presenting status and findings to the project steering committee

Other Distinction/Experience:

1984 - 1985 Served as Speaker and Consultant for the Worldwide Council of the U.S. Army for Relational Database Technology. Lead Consultant to the U.S. Army SICOR Division for the International Commissary System on XENIX/ORACLE platform.

1980 - 1985 Assistant Department Chairman, Department of Information Systems Virginia Commonwealth University. Coordinated and developed the Systems Analysis/Design Course offered as DPMA Model course for information system majors, Virginia Commonwealth University. Has co- authored two texts and published many articles in this subject area. Is recognized as an expert in the area of logical file design.

Currently teaching ***Enterprise Content and Records Management*** (491-92 Topics in Information Systems – Enterprise Content Management) at VCU. This course is an in-depth study of areas impacting ECRM in today's business environment including eDiscovery, practical approaches for Email retention compliance, and the management of Web 2.0 assets.

EDUCATION

BS, Virginia Polytechnic Institute and State University
MS, Virginia Commonwealth University, Information Systems

Greg Lloyd – Project Manager and Senior RM/ECRM Consultant

Current Assignment:	Director
Education:	▪ State University of NY, College at Oneonta, BA in Economics, 1985 ▪ Pace University, White Plains, NY, Master in Computer Science, 2001
Certifications/ Training:	▪ Chartered Financial Analyst and Member of the CFA Institute, 2007 ▪ ITIL Certificate - Foundation Certificate in IT Service Management ▪ Conceptual Selling - Miller-Heiman ▪ LeaderShift - VisionPoint ▪ IDS Sheer - ARIS Business Designer training ▪ Strategic Selling - Miller-Heiman ▪ ICAgile Agile Testing Certified Professional - ICP-TST

Work History

The IQ Business Group, Inc., *Director*	***May 2005 – present***

- Leader of Business Process Management services. Implementing a cloud based service offering as well as on-premise implementations.
- Process reengineering consultant for Adams County, CO Department of Human Services. Engaged to facilitate the installation of OpenText Assure Business Process Management software by an IQ team. This was an agile project with an initial scrum that delivered a Version 1.0 system in 60 days.
- Strategic advisor to the IQ team supporting the Department of the Interior Enterprise Content Management system hosted in the IQ cloud.
- Enterprise Content Management consultant at Howard County, MD. Lead technical consultant on team charged with implementing OpenText Content Server county wide.
- Process reengineering consultant and project manager for an assignment to implement OpenText content server at the Philadelphia District Attorney's office. The system replaces manual processes for redacting and distributing discovery materials. The application will interact with and tie together systems from the DA, Philadelphia Police Department and First Judicial District courts.
- Strategic advisor for a leading Pharmacy Benefit Manager with significant and frequent organizational change. Recommended an evolutionary replacement and phase out of existing processes and tools with a new system. Responsible for all phases of the SDLC for the new system from eliciting requirements to deploying the solution.
- Change management leader facilitating system and process changes required by FATCA legislation at a large US Bank. Total program is expected to cost approximately $50MM-$60MM. Leveraged core BA skills to document current vs proposed future state (swimlane diagrams), led workshops supplemented by Deloitte and PwC to gather business requirements from business lines, made strategic recommendations regarding the implementation plan to Senior Management.
- Project Manager with workstream responsibility within Dodd Frank PMO. Responsible for developing standards for the entire PMO for status reporting utilizing MS Excel, SharePoint, and PowerPoint. Standard reporting feeds management dashboard. 2012

Budget for Dodd Frank change management is in excess of $120MM. Responsible for directing business analysts in the collection and documentation of business requirements (including use cases, and SWOT, SIPOC, MoSCoW techniques).

- Responsible for designing, configuring and customizing Microsoft Dynamics CRM and SharePoint for internal use and consulting assignments. CRM is used to manage the Sales pipeline. SharePoint is used to store intellectual property and project artifacts. Programmed extensions using APIs, created custom entities, workflows, sites.
- Responsible for defining and implementing internal organizational frameworks for delivery of IQ consulting services.
- Perform project audits to ensure compliance with corporate PM standards.
- Lead consultant on assignment delivering a roadmap for mission critical software upgrade (SunGard Omni upgrade)

Towers Perrin/EDS, *Senior Health and Welfare (multiple positions*	***January 1989 – May 2005***

Director, Applications Development (July 2000 – May 2005)

- Responsible for the product development and maintenance of Towers Perrin's mission critical Health & Welfare administration module and VendorManager. Over 50 Fortune 1000 clients are administered using the system and generate revenue of approximately $125 million annually. The applications leverage a large variety of technologies.
- Coordinated annual updates to client enrollment sites and the Open Enrollment events. Monitored participant web sites during each Open Enrollment.
- Formalized software development governance (procedures for code migration, version control, maintenance windows, outage escalation, DR) and adopted Agile development methodology practices.
- Contributed to the product design and implementation of the Defined Benefit admin module. The DB module and the HW module were both accessible via single client specific participant web sites.
- Managed over 30 technical staff including but not limited to WebLogic developers and administrators, Visual Basic developers, Oracle and SQL server DBAs, web developers leveraging HTML, XML and other technologies.

Application Development/Implementation Manager/Product Manager (August 1997 – July 2000)

- Product manager for the Employer Portal, an information repository and reporting site for administration (DB and HW) clients
- Developed first client accessible web site at Towers Perrin to collect retirement estimate and commencement requests. Replaced fax requests from client HR to servicing team.
- Benefits Administration LOB Steering Committee member.

Priscilla Emery – RM and Information Governance Expert Advisor

SKILLS SUMMARY

Exceptional Enterprise Information Management expertise on both the strategic and tactical level supporting both analog and digital records, along with a deep knowledge of the EIM technologies needed to manage this information. Has demonstrated leadership in a variety of organizational settings and has a reputation for fairness, integrity and the ability to get projects accomplished on time and within budget.

EXPERIENCE

The IQ Business Group, Inc., 2012 – Present

Provide EIM migration strategies, tools and guidance for government agencies, public companies, and professional associations. Developed system migration framework governance recommendations and questionnaire for large government agency.

Conducted data gathering and other planning activities to develop functional requirements supporting migration of legacy systems to new EIM software solutions.

e-Nterprise Advisors, President and Founder, 2000 – 2012

Provided compliance- and discovery-oriented consulting and advisory services focused on knowledge, content, records, e-mail and document management.

Description of Work Performed:

EMC/Documentum/TrueArc (formerly Provenance Software), Arlington, VA: Provided this records management software vendor with an in-depth market assessment of its competitive situation as well as provided the company with an assessment of its strategic plans. Also researched and wrote up case study on one of the company's successful implementations.

AIIM International, Silver Spring, MD: During a one year retainer with this non-profit trade association provided industry-expertise and editorial guidance to its magazine, e-doc, and to its sales staff. Provided articles on a bi-monthly basis to AIIM web site. Developed E-mail Accountability and Compliance training course as part of AIIM's Level 2 EIM Certification. Have just completed a new Electronic Records Management Software Buyer's Guide that will be sold by the Association.

Ford Foundation, New York City: Provided an onsite "quickstart" session educating key organizational stakeholders on Knowledge, Records, Document and Content management issues and technologies. This involves facilitation of different departments within the company to identify process requirements, technology architectures and cultural changes needed to effectively implement content management/document management strategies. Follow-up report with recommendations generated and delivered to client.

Interquest, Charlottesville, VA: Worked jointly with this consulting company to identify key trends and issues associated with document and records management buying decisions within a variety of vertical industries including insurance, financial services and healthcare.

Chemonics International, Washington DC: Provided records management benchmark assessment of the company's paper and electronic documents. Provided the company with policy and taxonomy guidance.

Questex, Duluth, MN: Provided company with Quickstart session and assessment related to imaging, records and document management systems.

Information Engineering Systems (IES), Alexandria, VA: Provided guidance on records management systems and marketplace for some of its Federal government clients.

CMSWatch (nka Real Story), Silver Spring, MD: Completed intensive study and report of the records management marketplace for publication by this company.

Lorman Education Services, Eau Claire, WI: Provide presentation and education services to its seminar clients on Electronic Records Retention and Destruction.

Lorson Resources Ltd, Port-of-Spain, Trinidad: Provide educational workshops to its seminar clients, located in Trinidad, Jamaica and Barbados, on a variety of Records Management subjects, including Business Continuity Planning, Managing E-mails as Records, Managing Electronic Records and Developing Information Governance Processes and Procedures.

Sacramento Municipal Utility District (SMUD), Sacramento, CA: Provided consulting services on Records Retention and Destruction practices and developed internal training programs to support these activities. Developed and presented a complete records management governance process to senior management and devised policies and procedures to support it. Also reviewed records retention schedule for accuracy and compliance with changing regulations.

BP Global and North America: Provided the Global Trading Sector of this company with guidance and direction to improve and standardize its records management procedures, particularly as they relate to physical records. Created procedures and processes for managing all paper records within this division. Also advised on the appropriate procedures for managing e-mail as records and helped to develop consistent document hold procedures for the division.

AIIM International, Senior Vice President, Information Products and Services, 1994 - 2000

Moved up to this position from Vice President, Market Research and Development, and was responsible for developing, maintaining and effectively distributing the intellectual assets of this International Association. This included managing its research and publication products and services, such as a weekly electronic newsletter (one of the first electronic newsletters ever created in the industry), a bi-monthly 4-color magazine, a research library, well-respected industry studies, ANSI and ISO-based standards and coalition activities, non-serial publications and conference content planning. These products and services were meant to provide information and value to the membership, while at the same time providing revenue for the association. Succeeded in making the publications business profitable for the first time in the history of the association. Performed industry spokesperson duties when required. Also initiated and managed the development of the first taxonomy and categorization scheme needed to support the Association's content management activities.

Was also a Director of the UK-based International Office and had fiscal responsibility for operations there when the Executive Director was unavailable. Negotiated contracts with outside business partners for publications and market research both in the U.S. and in Europe. Attended all Board Meetings and contributed to strategic planning and committee activities when appropriate. Created and managed budgets in a fiscally sound manner. Managed a staff ranging from 15 to 20 people based in the U.S., the Netherlands and the U.K.

Gartner, Vice President and Research Center Director, 1991 - 1994

Managed the operations of this market research and consulting service. The company focused on providing both vendor and user organizations with management strategies and technical information on applications that support the document management process. Imaging, multimedia, e-mail, workflow processing, text retrieval, forms processing and business process redesign are just a few of the areas that were covered by the group of 10 analysts and three research coordinators that reported to me.

The company supports its clients by providing them with written research, private consultations and public presentations. Was responsible for the timely delivery of all services, defining the overall mission and strategy of the group and the attainment of sales goals for the group which amounted to over $15 million in revenue. Also participated in special client projects related to document management, e-mail management and workflow.

Blue Cross and Blue Shield of Connecticut, Manager, 1989 - 1991

Managed a staff of 15 people who assessed and implemented new systems technologies supporting business strategies. Provided all levels of management with an understandable perspective on the impact of these technologies and was responsible for development and management of budgets associated with new technology projects. Completed projects included a voice response system that provided dentists with access to insurance eligibility information; an imaging technology and work flow study; and the evaluation of Succession Planning products. Also created a Technology Strategy Plan to support a concurrent Business Systems Planning effort. The Development Center, a subgroup within the Advanced Technology Group, evaluated and used newer development methodologies in the design and analysis of systems projects. Data Administration efforts included supporting ongoing projects and the definition of data elements in the recently implemented DB2 environment.

Primerica Corp. (now CitiCorp), Manager, Technical Planning, 1985 - 1988

Provided both systems and strategic planning services to Primerica's subsidiaries. Managed the technical planning process that identified, prioritized and implemented key projects. Assessed new technologies for potential integration into the business. Hardware planning efforts managed and negotiated by myself resulted in savings of over $1 million to Primerica during the 1988 fiscal year.

Combustion Engineering, Inc. (now ABB), Manager, 1979 - 1985

Established policies and guidelines for the acquisition and use of personal computers within the corporation. Managed the installation of IBM PCs and IBM's DISOSS electronic mail system. Was in charge of the development and systems integration effort linking several midrange word processing products and a CICS-based E-Mail system on a global scale. Also managed the global conversion of over 40 networked midrange processors from the bisynchronous to SNA communications protocol.

Frito-Lay, Inc., Training Coordinator, 4/1979 – 10/1979

Created an Employee Orientation program and an automated training inventory for IT personnel.

Blue Cross and Blue Shield of Virginia (now Anthem), Analyst/Programmer and Training Coordinator, 1976 - 1979

As training coordinator created the company's first Programmer Trainee program and a series of information systems programs for end-users. As an analyst/programmer developed both Major Medical and Blue Cross/Blue Shield online query and entry programs.

Bell Telephone Laboratories, Senior Technical Associate, 1974 - 1976

Programmed both inventory and processing programs for an online service order system.

EDUCATION

B.A. Mathematics - Lehman College (CUNY), January 1974.

Post-graduate course work at Rutgers University, 1975-76.

AIIM Electronic Record Management (ERM) Specialist Certificate 2007.

Certified Information Professional (CIP), 2012

ASSOCIATIONS AND HONORS

- AIIM International Member since 1988 and named AIIM Fellow in 2004.
- AIIM Ambassador within its ERM Community.
- Vice Chairperson of the Emerging Technologies Advisory Group of AIIM International 1994.
- Member of National Capitol Chapter of AIIM, Program Chair 2001-2002 Calendar Year.
- Member and Central Florida Liaison for Florida Chapter of AIIM 2002 to 2007.
- Member of 2001, 2002 and 2003 AIIM Conference Committees. Chair of 2004 AIIM Conference Committee.
- Received Master of Information Technology (MIT) designation from AIIM in 1998 and Laureate of Information Technology (LIT) in Electronic Imaging from AIIM in 1999.
- Member of ARMA International.
- Delivered presentations focused on e-mail management of records to Greater Houston, Long Island, Gulf Coast Florida, Central Florida, Washington DC Chapters of ARMA and records management architecture presentations at ARMA International Conference.
- Received Central Florida Chapter Member of the Year award in 2009.
- Member of Xplor International since 1988 and Advisory member of the Electronic Document Systems Foundation from 1997-2007.
- Association for Systems Management: Connecticut Chapter, Communications Chairperson - 1989-90; Vice-President - 1990-91; President-elect - 1991-92; President - 1992-93.
- Four-Phase User's Association: Northeast Region, President - 1983-84; VP - 1984-85.
- Wrote and edited Knowledge Management: The Essentials published in 1999. Also contributed chapters to Excellence In Practice Volumes III and IV. Also published E-mail Management Tools: Sorting Through the Options in 2001 with second edition published 2003. Wrote Records Management Market Report for CMSWatch in 2005 and 2006.
- Named as number 10 of the 50 most influential people in the document management industry by ImagingWorld magazine (now KMWorld magazine) in 1995.
- Named by CMSWatch as One of Twenty Leaders to See in 2003.

- Published articles have appeared in Document Magazine, ARMA Information Management Journal, Beyond Computing, e-doc (now Infonomics), Imaging World (now KMWorld), SQ Magazine, e-Business Advisor, Imaging and Document Solutions (now Transform), DB2 Magazine and Business Solutions. Have been quoted in all the prior publications in addition to the Wall Street Journal, the Washington Post, InformationWeek, PCWeek, Washington Technology, Federal Computer Week, Computerworld, CIO Magazine and Software Magazine.

Addie Mattox – RM/ECRM Senior Consultant

SKILLS SUMMARY

Addie Mattox has been an independent information management consultant since 1976. Addie has worked extensively with government agencies including federal, state, water districts, city and county entities, and the military. Many of these clients require solutions for both office documents and technical documentation, such as project files, drawings and maps.

Addie's consulting experience has focused on developing strategic plans for integrating Records and Document Management into clients' wider information management strategies. She has extensive experience identifying requirements for records management technologies, as well as implementation planning and assistance. She has functioned as project manager and senior consultant on dozens of client projects. Her skills include:

- Identifying business requirements for electronic content management.
- Developing user profiles for ERM solutions.
- Taxonomy and index/retrieval development.
- Strategic planning to incorporate imaging, document and records management into information technology strategies.
- Feasibility studies for records management systems.
- Records management risk assessments of clients' business processes.
- Cost/benefit analyses – Addie has developed a well-respected methodology for measuring benefits. AIIM International hired her to write their white paper on this subject.
- Workflow/re-engineering studies that identify current flows and projected flows illustrating the potential impact of document management technology.
- Request for proposal preparation and vendor selection.
- Implementation planning and assistance: project management, procedures, training, implementing, and measuring pilot installations.

EXPERIENCE

Addie has functioned as project manager and senior consultant on many assignments, including:

- City of San Bernardino Metropolitan Water Department
- San Joaquin Valley Air Pollution Control District
- Public Works, Snohomish County
- Bureau of Reclamation
- California State Teachers' Retirement System – Disability Claims Division
- University of California, Office of the President – HR. Labor Relations, Accounting, Insurance
- Starbucks – enterprise-wide Records Management
- Occidental International Oil and Gas, Aberdeen, Lima, Bakersfield, Tulsa
- Dallas County Courts
- California State Department of Water Revenue
- Orange County Social Services
- Electric Power Research Institute

PRESENTATIONS & PUBLICATIONS

Addie has been a presenter at ARMA meetings and AIIM national conferences as well as spoken at many technical conferences:

- Records Management, AIIM Certification Program
- Electronic Records Management, several ARMA meetings
- Electronic Records Management, National Archives, Northern California
- Requirements Gathering for Records Management, Managing Electronic Records conferences for several years
- Bringing the Business Case for Document Management to Senior Management
- Get It Right the First Time
- Document Management Systems and Intranets
- Managing Documents on the Intranet, Documation
- Nitty, Gritty Experience with Document Management/Imaging
- White Paper, Bringing the Business Case to Management, AIIM Publications

EDUCATION & CERTIFICATIONS

MBA, Pepperdine University, Los Angeles
Graduate degree in English as a Second Language, UCLA
BA, California State University at Los Angeles
CDIA certification
Masters in Information Systems and Laureate certification from AIIM International

Walt Ruppar – RM/ECRM Technical Architect

Current Assignment:	Network Engineer/ECM Administrator – eMail Enterprise Records and Document Management System (eERDMS) – U.S. Department of Interior, Office of the Chief Information Officer (OCIO)
Security Clearance:	Security Clearance (active)
Education:	Bachelor of Science in Computer Information Systems Roger Williams University, Bristol, RI
Certifications/ Training:	▪ Microsoft Certified Systems Engineer (MCSE) ▪ CompTIA Security+ ▪ IT Service Management Foundation (ITIL/ITSMf) ▪ OpenText Livelink/Content Server Training o Livelink System Administration o Configuring and Customizing Livelink Search o Troubleshooting and Supporting your Livelink System o Advanced Schema and LiveReports o Designing and Implementing Livelink Forms o Livelink WebReports o Workflow Design I/II/III o Records Management o Archive Server Administration o Email Management

Work History

IQ Business Group, Inc., Senior System Engineer	***01-May-2016 – Present***

- Analysis of Content Server, Windows Server, and Active Directory log file output.
- Running of Nessus Scans, reviewing vulnerabilities, and taking corrective actions as required.
- Management of Windows Updates.
- Configuration/Troubleshooting/Support of Matters and Crawlers within Recommind.
- Installation/Configuration of Content Server 10.5 and Suite 16.
- Problem-solving to understand client requests/issues to provide the appropriate solution within the current product set.
- Configuration/troubleshooting of high-end scanning devices using Enterprise Scan and OpenText Capture Center (OCC).
- Assist with documenting new improvement processes, as well as, updating existing documentation.

Astyra Corporation, Livelink Records Manager	***01-August-2014 – 31-April-2016***

- Coordinate with client Information Retention Policy department to manage existing Official Record classifications and retention schedules
- Coordinate with Business Area Information Managers as necessary to review Official Records at the end of their retention schedules to determine disposition.
- Coordinate with the technical team to provide L3 support to the general user community.
- Provide support to Legal department to manage existing Legal holds, including application of new holds and removal of those no longer required.
- Support new Legal matters by creating and running custom searches as required and then packaging, downloading and delivering requested documentation to Legal as necessary.

Chemtura Corporation, *Administrator III*	***01-September-2011 – 01-July-2013***

- System Administrator & Architect for OpenText Content Server Clustered Environments, including Runtime & Core Services, Archive Server, Email Archive Bridge, Enterprise Connect, and eLink technologies.
- Coordinated the Technical Activities for Migration from LL 9.7.1 to CS 10.
- Application Packaging & Testing of Enterprise Connect and Tempo Box for Deployment to Win XP/7, Citrix XenApp, and Mobile Devices.
- Architected/Deployed Clustered Virtual Server Environments (Win2003/2008).
- System Monitoring and Response to Alerts/Notifications.
- Application Problem/Incident Management, Change Controls (ITIL).
- Authored Support Guides, FAQ's, and Operational Procedures.
- Communications with External Vendors and Internal Resources.

R U Par? Professional Services, Inc, Principal Consultant and President	***01-January-2008 – 31-August-2011***

Livelink Deployment Manager
Implemented a new global Livelink platform release management plan and process to document and control the implementation of software and hardware within multiple Livelink application environments.

- Authored deployment notes and code migration documents.
- Deployed source code from development to qualified and non-qualified environments.
- Authored and maintained a detailed deployment schedule.

Livelink SME
Provided support for an application audit of all technical components pertaining to a GxP Livelink 9.7.1 application.

- Reviewed Quality and Change Control documentation for technical consistency and accuracy.
- Reviewed technical configurations of each server in the Validation and Production environments to identify any discrepancies. Comparison of SQL database schemas, application and server logs, registry entries, and ini files.
- Generated and reviewed Livelink SysReports.

Todd Varel – RM/ECRM Analyst and Developer

SKILLS SUMMARY

Mr. Varel is a senior-level professional with over 20 years of experience developing business processes and system solutions from conceptualization to implementation. Mr. Varel adds value by designing and developing processes around customer needs, providing user-friendly solutions.

Todd has recently been involved in several state and local government EIM projects implementing the OpenText product set being proposed to DIR and has been heavily involved in their work process designs that included case management, registration, license validation, renewal, certification, and status change processes. His expertise includes Business Analysis, Requirements Elicitation, Business Process Development, Usability Testing, and Effective User Training.

EXPERIENCE

The IQ Business Group, Consultant 30 September 2013 – Present

- Provide business analysis (BA) expertise to support the implementation of Enterprise Content and Records Management (ECRM) – including imaging system customization, systems integration, data migration, and usability testing. (UT)
- Develop detailed requirement specifications to support ECRM functional design.
- Create process modeling using UML. (Use Cases, Sequence Diagrams, Activity Diagrams)
- Manage project deliverables while executing within the BA and UT roles.
- Utilize developed technical writing skills to create Business Requirements Documents (BRD), Functional Specifications Documents (FSD), and Use Cases.
- Develop business processes and system solutions for various projects from conceptualization to implementation.

Standex Engraving, LLC. , Planning and Sourcing Director, 01 January 2013 – 15 September 2013

- Managed Epicor Vantage ERP applications, interface and training site-wide.
- Demonstrated project management experience and success, specifically the development, testing and deployment of ERP solutions for the business prototyping process:
- End-user requirements → Business System → Design, Implement & Maintain
- Provided ERP data services, including database (SQL) and functionality support site-wide.
- Utilized SQL, MS Access and report generator software to provide technical reports site-wide. Leveraged data management through ERP to reduce critical component lead times by 35%.
- Leveraged data management through ERP to develop a supplier performance rating system, resulting in overall lower costs and improved quality.
- Leveraged data management through ERP to develop a facility wide planning tool improving on-time delivery by >40%.
- Improved operations performance by connecting business and software (ERP) processes.
- Leveraged data management through ERP to develop master procurement schedule to support material requirements planning (MRP).
- Acted as Operations focal point for P&L's on demand requirements.

Sonic Tools, LP. , ERP Administrator, 01 June 2009 – 23 December 2012

- Managed Epicor Vista ERP applications, interface and training site-wide.
- Leveraged data management through ERP to develop a Quality Management System (QMS) covering the entire scope of manufacturing to gain ISO 9001-2008 conformance.
- Trained and led team of 25 employees daily.

Amsted Rail, Quality Engineer, Performance Engineering, 01 February 2008 – 30 April 2009

- Managed the Performance Engineering Department, including multiple R&D test programs for Class C railcar bearings.
- Re-engineered laboratory processes pertaining to full-scale R&D tests using LEAN manufacturing principles and ISO 9001 quality standards.

Little Pete's Real McCoy BBQ, Owner, 01 October 2003 – 01 May 2008

- Developed "Real BBQ" restaurant concept that grew into two restaurants and a catering business.
- Increased sales from <$500/day to >$5000/day over a 3 year span.
- Increased profitability by 50% through process efficiency..

Ethyl Corporation, Test Area Supervisor, Friction Testing, 01 November 2001 – 15 June 2004

- Managed the European Sliding Clutch program, including the commissioning, operation, and R&D testing of a $650k full scale test rig designed to derive friction coefficients.
- Served as the ISO quality representative for the R&D Mechanical Lab.

Ethyl Corporation, Senior Engineer, Field Testing, 01 June 1997 – 30 October 2001

- Coordinated world-wide Field Testing for crankcase and driveline development.
- Certified ISO Internal Auditor.

Ethyl Corporation, Research Technician, Mechanical Lab, 01 June 1992 – 30 May 1997

- Supervised Mechanical Lab Operations staff in addition to regular assignments while preparing for relocation to Richmond, VA.
- Maintained underground fuel tank farm including bulk fuel purchase, delivery set-up, and fuel sampling for QC.

EDUCATION

- Master of Science, IT Information Systems, Virginia Commonwealth University. Richmond, Virginia.
- Master of Business Administration, MBA, Virginia Commonwealth University. Richmond, Virginia.
- Bachelor of Science, Business Marketing, University of Phoenix. Phoenix, Arizona.
- Associate of Science, Business Administration, J. Sargeant Reynolds Community College. Richmond, Virginia.
- Associate of Science, Automotive Mechanical Engineering, Ranken Technical College. St. Louis, Missouri.

Rick Molique – RM/ECRM Analyst and Developer

SKILLS SUMMARY

Mr. Molique is a senior EIM and IT professional with experience in all phases of the EIMS development lifecycle, including system design, implementation, and administration, and he has proven success enhancing systems architecture with new features and performance improvements. As a senior developer and architect for OpenText Content Server, Mr. Molique has implemented solutions leveraging WebReports, Advanced Workflow, AGA for SharePoint (2010), and Web Services integration with third-party tools as well as many of the EIM modules.

EXPERIENCE

IQ Business Group, EIM Consultant September 2010 – Present

- OpenText/Content Server developer, configuration and implementation support for various core and modules including Enterprise Connect, WebReports, Capture Center, Enterprise Scan, Importer/Exporter, SharePoint 2010 (AGA) and CAD integration. Document Pipeline tools developer for Content Server File System Archiving configuration.
- Provide high-level customer support to end users including business process analysis, knowledge transfer, documentation and training.
- Design and implement solutions for migrating shared drive and scanned content to managed EIM repositories.
- Assist in the integration of EIM solutions to Active Directory, SQL and other line of business systems.
- Solution developer for enterprise forms and form workflow using ECRM product tools and dynamic HTML5 tools.
- Integration and Solutions manager for Software as a Service (SaaS) Cloud solutions to area businesses and Commonwealth of Virginia clients including Virginia State Board of Elections, Department of Corrections and Department of Juvenile Justice.

The following are representative projects.

Virginia State Bar, Richmond, VA, 2012 – 2015

Senior Developer and Architect for Content Server (CS) 10 enterprise solution. Solution leveraged the following modules: OT Capture Center, WebReports, Advanced Workflow, and Web Services integration with 3rd party tools.

- Developed the detailed requirements for taxonomy, metadata modeling, permissions, workflow analysis, and the mapping of taxonomy to records management retention requirements.
- Configured multiple scanning routines using the OpenText Capture Center and Enterprise Scan tools that used bar coded cover sheets to separate content collections and Optical Character Recognition to reduce metadata entry; and, developed integrations with line of business systems to automatically pull index values from line of business systems.
- Developed methods for users to take ownership of multiple, related case documents in a simplified, one-click process. These processes used a combination of WebReports, metadata and reporting to create dynamic and faceted views.

- Provide high-level customer support to end users including knowledge transfer, documentation and training.

North Carolina Department of Transportation, Raleigh, NC, 2011 – 2012

Architected, designed, and developed Content Server (CS) 10 based on state requirements. Identified, evaluated and implemented Content Server and Archive Server modules: Advanced Workflow, File System Archiving; FSA Document Pipeline; Web Services; OpenText Application Governance & Archiving for Microsoft SharePoint; Advanced Attribute Management via SQL forms.

- Enabled the OpenText initial launch into production via web services and Application Governance & Archiving for Microsoft SharePoint.
- Developed custom File System Archiving tools for Archive Server. Completed FSA Document Pipeline content transition project for Stare Roads and Maintenance Units with limited resources, tight schedule and high pressure from customer, resulting in acceptance of new release through Development, Test, QC and finally Production environments.
- Configuration and integration of OpenText CAD Connector for Bentley MicroStation.
- Assist in the integration of EIM solutions to Active Directory and other line of business systems.
- Provide high-level customer support to end users including knowledge transfer, documentation and training.

Virginia Department of Corrections, Richmond, VA, 2009 – 2011

Architected, designed, and developed multiple EIM Solutions based on state Accounts Payable, Juvenile Justice, and Central Criminal Records requirements.

- Consult clients on the deploying and managing of an Enterprise Content Management solution.
- Configure and Implement components of the complete EIM solution including Taxonomies, Metadata, Permissions, Document Rules, Advanced Workflows and Web Services.
- Assist in development and documentation of client requirements regarding build of components to EIM system products.
- Design and implement solutions for migrating shared drive and scanned content to managed EIM repositories.
- Provide high-level customer support to end users including knowledge transfer, documentation and training.

Virginia State Board of Elections, Richmond, VA, 2009 – 2010

Architected, designed, and developed Spring CM SaaS/Cloud EIM Solution based on state requirements.

- Consult clients on the deploying and managing of an Enterprise Content Management solution.
- Provide high-level customer support to end users including knowledge transfer, documentation and training.
- Assist in development and documentation of client requirements regarding build of components to EIM system products.

- Configure and Implement components of the complete EIM solution including Taxonomies, Metadata, Permissions, Document Rules and Workflows.
- Design and implement solutions for migrating shared drive and scanned content to managed EIM repositories.
- Advance Workflow and Services development for SpringCM.

Bamboo Web Design, Richmond, VA, 2005 – 2009

- Web and Graphics Design
- User experience consulting

Digital Media & Database Coordinator, Ithaca College, NY, 2002 – 2004

- Review, edit and refine current structures and standardize entry of new resources and data.
- Manage and prioritize image requests from Faculty and Staff.
- Demonstrate competence and train Art History, as well as other Faculty, in Adobe applications, server access management, MS Office applications and use of the digital library collections. Provide high-level customer support to end users including knowledge transfer, documentation and training.

Leadership Training & Management Consultant, Ithaca, NY, 2001 – 2004

- Present teamwork, communication and trust ideals creatively to foster a team environment for professionals in a University setting.

EDUCATION

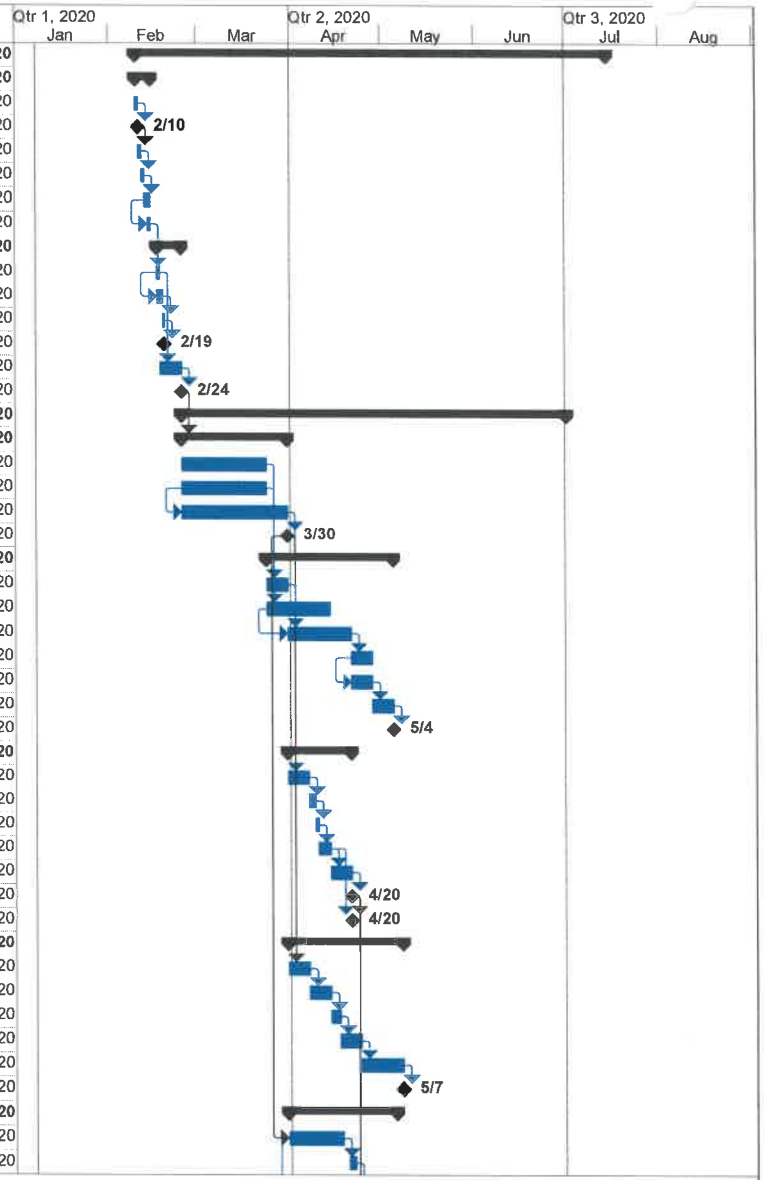
- B.A., Art History, Virginia Commonwealth University
- C.S.C., Internet Applications Development, J. Sergeant Reynolds CC
- C.S.C., Computer Programming, J. Sergeant Reynolds CC

Qualifications/Training Background:

- AIIM Old Dominion AIIM Board Member-At-Large
- Microsoft Certified Technical Specialist (MCTS): Windows Communication Foundation (WCF, Framework 4)
- OpenText Certified in Web Services
- OpenText Certified Administration
- OpenText Certified Advanced Workflow
- SpringCM Certified Advanced Workflow developer
- AIIM Microsoft SharePoint Specialist Certification
- AIIM Microsoft SharePoint Practitioner Certification

Appendix C – Detailed Tentative WV Treasurer's Office – RM Discovery, Assessment and Roadmap Project Plan

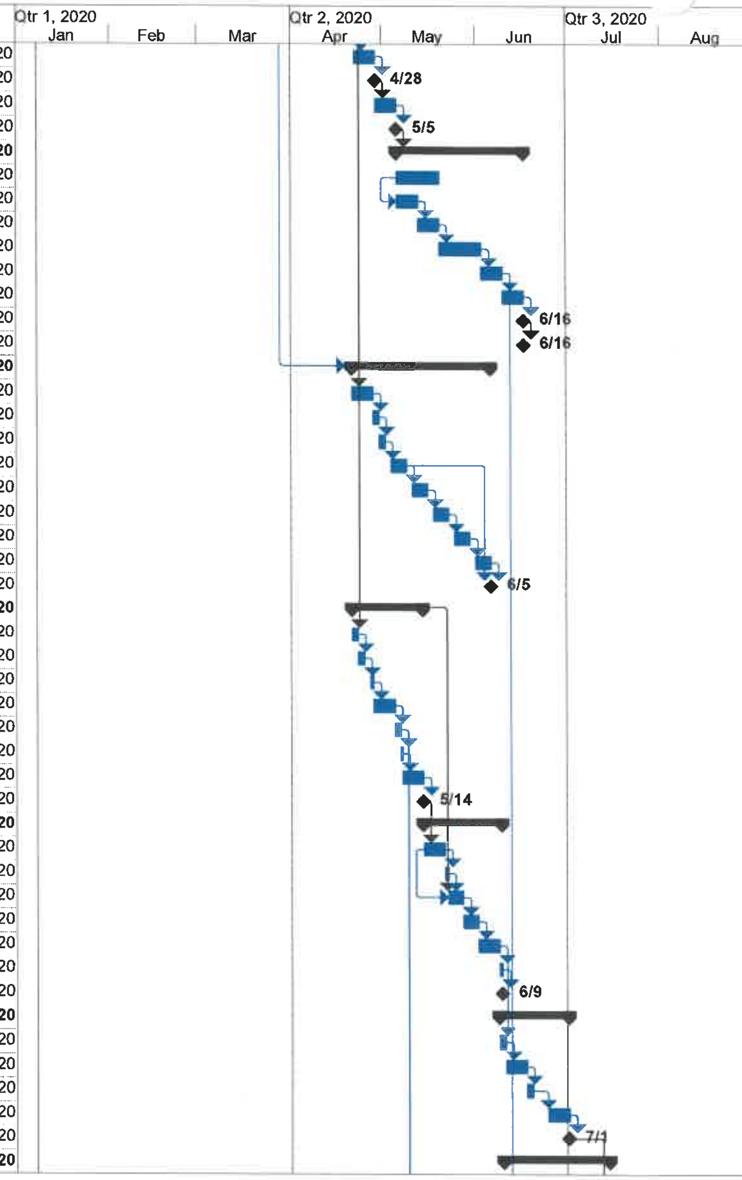
ID	Task Name	Duration	Start	Finish
1	**WV Treasurer's Office HLA - ECRM Discovery - Assessment and Strategic Roadmap Project**	**112 days?**	**Mon 2/10/20**	**Tue 7/14/20**
2	**Pre-start efforts**	**5 days**	**Mon 2/10/20**	**Fri 2/14/20**
3	Pre-planning conference call	1 day	Mon 2/10/20	Mon 2/10/20
4	Set PIW date	0 days	Mon 2/10/20	Mon 2/10/20
5	Develop draft pre-start letter	1 day	Tue 2/11/20	Tue 2/11/20
6	Customer revise draft pre-start letter	1 day	Wed 2/12/20	Wed 2/12/20
7	Develop draft PIW presentation	2 days	Thu 2/13/20	Fri 2/14/20
8	Adjust project plan	1 day	Fri 2/14/20	Fri 2/14/20
9	**Project Plan & Project Management**	**6 days**	**Mon 2/17/20**	**Mon 2/24/20**
10	Project Initiation Workshop	1 day	Mon 2/17/20	Mon 2/17/20
11	Revise draft project plan	2 days	Mon 2/17/20	Tue 2/18/20
12	Review with project team	0.5 days	Wed 2/19/20	Wed 2/19/20
13	Revised project plan	0 days	Wed 2/19/20	Wed 2/19/20
14	Collaboratively schedule interviews	5 days	Tue 2/18/20	Mon 2/24/20
15	Initial Interview Schedule	0 days	Mon 2/24/20	Mon 2/24/20
16	**Task I - ECRM HLA - Assessment and Roadmap**	**91.5 days?**	**Tue 2/25/20**	**Wed 7/1/20**
17	**Review of Current Operations**	**25 days**	**Tue 2/25/20**	**Mon 3/30/20**
18	Review Existing Documentation -- Records Scedules, File Plans, Workflows, etc.	20 days	Tue 2/25/20	Mon 3/23/20
19	Conduct User Interviews	20 days	Tue 2/25/20	Mon 3/23/20
20	Document User Interviews	25 days	Tue 2/25/20	Mon 3/30/20
21	Interview Documentation	0 days	Mon 3/30/20	Mon 3/30/20
22	**Perform Inventory Assessment**	**30 days**	**Tue 3/24/20**	**Mon 5/4/20**
23	Review Interview Findings to guide Inventory Collection	5 days	Tue 3/24/20	Mon 3/30/20
24	Distribute eForm Collection Instructions	15 days	Tue 3/24/20	Mon 4/13/20
25	Conduct Physical Inventory of selected locations	15 days	Tue 3/31/20	Mon 4/20/20
26	Document Content Inventory	5 days	Tue 4/21/20	Mon 4/27/20
27	Develop High-level backfile conversion plans	5 days	Tue 4/21/20	Mon 4/27/20
28	Review Inventory and Backfile documentation with Agency	5 days	Tue 4/28/20	Mon 5/4/20
29	Information Inventory Assessment Report - Includes Digitization Plan	0 days	Mon 5/4/20	Mon 5/4/20
30	**Review Business Processes and Collaboration**	**15 days**	**Tue 3/31/20**	**Mon 4/20/20**
31	Define and Document Business Requirements	5 days	Tue 3/31/20	Mon 4/6/20
32	Apply Industry Best Practices	2 days	Tue 4/7/20	Wed 4/8/20
33	Internal QA Review	1 day	Thu 4/9/20	Thu 4/9/20
34	Develop Draft Business Process Assessment Report	2 days	Fri 4/10/20	Mon 4/13/20
35	Review draft with Agency	5 days	Tue 4/14/20	Mon 4/20/20
36	Business Process Assessment Report	0 days	Mon 4/20/20	Mon 4/20/20
37	Strategy Recommendations	0 days	Mon 4/20/20	Mon 4/20/20
38	**Develop ECRM Software Requirements**	**28 days**	**Tue 3/31/20**	**Thu 5/7/20**
39	Develop ECRM Software Requirements Matrix	5 days	Tue 3/31/20	Mon 4/6/20
40	Develop Evaluation Scoring Model	5 days	Tue 4/7/20	Mon 4/13/20
41	Internal QA Review	3 days	Tue 4/14/20	Thu 4/16/20
42	Review draft with Agency	5 days	Fri 4/17/20	Thu 4/23/20
43	Compare ECRM Requirements to Vendor Candidates	10 days	Fri 4/24/20	Thu 5/7/20
44	Technology Assessment Report - Includes Software Requirements Matrix & Recommend	0 days	Thu 5/7/20	Thu 5/7/20
45	**Conceptual Architecture (ERA and Compliance Model)**	**26 days**	**Tue 3/31/20**	**Tue 5/5/20**
46	Develop Draft ERA and Compliance Model	14 days	Tue 3/31/20	Fri 4/17/20
47	Internal QA Review	2 days	Mon 4/20/20	Tue 4/21/20



Project: Sample ECRM Blueprint POA
Date: Wed 1/8/20

Task
Split
Milestone
Summary
Project Summary
External Tasks
External Milestone
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
Progress
Deadline

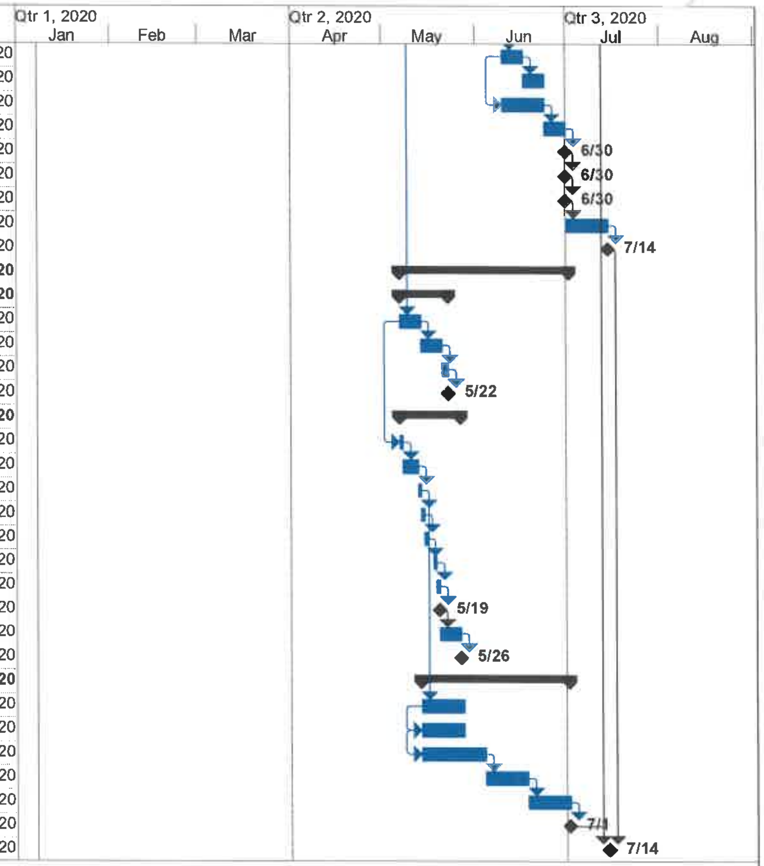
ID	Task Name	Duration	Start	Finish
48	Review draft with Agency	5 days	Wed 4/22/20	Tue 4/28/20
49	Identify Relevant Content Collections and Associated Compliance Requirements	0 days	Tue 4/28/20	Tue 4/28/20
50	Define High Level Roles and Security Model	5 days	Wed 4/29/20	Tue 5/5/20
51	Information ERA and Compliance Model - includes Security Roles Model	0 days	Tue 5/5/20	Tue 5/5/20
52	**Review and Revise RM Policies, Procedures and Retention Schedule**	**30 days**	**Wed 5/6/20**	**Tue 6/16/20**
53	Perform Mapping of High-level Records Inventory to Current Records Schedules	10 days	Wed 5/6/20	Tue 5/19/20
54	Review Current RM Policies and Procedures	5 days	Wed 5/6/20	Tue 5/12/20
55	Identify Gaps in Current RM Policies, Procedures and Schedules	5 days	Wed 5/13/20	Tue 5/19/20
56	Perform Legal and Regulatory Authority Review	10 days	Wed 5/20/20	Tue 6/2/20
57	Revise/Enhance RM Policies, Procedures and Retention Schedule	5 days	Wed 6/3/20	Tue 6/9/20
58	Identify ECRM Roadmap tasks for other RM Training and Compliance Tasks	5 days	Wed 6/10/20	Tue 6/16/20
59	Enhanced RM Policies and Procedures	0 days	Tue 6/16/20	Tue 6/16/20
60	Revised RM Retention Schedule - Electronic Records and Gaps	0 days	Tue 6/16/20	Tue 6/16/20
61	**Develop Business Case**	**34 days**	**Tue 4/21/20**	**Fri 6/5/20**
62	Review financial program metrics	5 days	Tue 4/21/20	Mon 4/27/20
63	Agree on ROI shell and concepts	2 days	Tue 4/28/20	Wed 4/29/20
64	Review permissible soft benefits	2 days	Thu 4/30/20	Fri 5/1/20
65	Develop draft budget estimate	5 days	Mon 5/4/20	Fri 5/8/20
66	Develop draft life cycle expenses	5 days	Mon 5/11/20	Fri 5/15/20
67	Develop draft hard dollar savings estimate	5 days	Mon 5/18/20	Fri 5/22/20
68	Develop draft business case section	5 days	Mon 5/25/20	Fri 5/29/20
69	Review draft with Agency	5 days	Mon 6/1/20	Fri 6/5/20
70	Business Case document	0 days	Fri 6/5/20	Fri 6/5/20
71	**ECRM Vision and High level implementation sequencing**	**17.5 days**	**Tue 4/21/20**	**Thu 5/14/20**
72	Breakdown business functions	2 days	Tue 4/21/20	Wed 4/22/20
73	Breakdown technology components	2 days	Thu 4/23/20	Fri 4/24/20
74	Evaluate Project Candidates and Identify RM/ECRM Program Tasks	1 day	Mon 4/27/20	Mon 4/27/20
75	Develop ECRM Future Vision Documentation	5 days	Tue 4/28/20	Mon 5/4/20
76	Develop draft implementation sequencing	2 days	Tue 5/5/20	Wed 5/6/20
77	Compare to business cycles	0.5 days	Thu 5/7/20	Thu 5/7/20
78	Review draft sequencing and ECRM Vision with Agency	5 days	Thu 5/7/20	Thu 5/14/20
79	ECRM Vision and High level implementation sequencing	0 days	Thu 5/14/20	Thu 5/14/20
80	**High-level Governance, Communications Plans and ECRM Roadmap**	**18 days?**	**Thu 5/14/20**	**Tue 6/9/20**
81	Develop Comprehensive Change Leadership and Communications Plan	5 days	Thu 5/14/20	Thu 5/21/20
82	Develop Governance Model and Framework Documentation	1 day?	Thu 5/21/20	Fri 5/22/20
83	Develop Draft ECRM Strategy and Information Governance Plan	3 days	Fri 5/22/20	Wed 5/27/20
84	Finalize ECRM Roadmap, Governance and Implementation Plan	3 days	Wed 5/27/20	Mon 6/1/20
85	Review Draft with Agency	5 days	Mon 6/1/20	Mon 6/8/20
86	Change Management Plan	1 day?	Mon 6/8/20	Tue 6/9/20
87	Deliver Final ECRM Strategy, Roadmap, Governance and Implementation Plan	0 days	Tue 6/9/20	Tue 6/9/20
88	**ECRM Strategy and Roadmap Presentation**	**17 days**	**Mon 6/8/20**	**Wed 7/1/20**
89	Develop draft presentation	2 days	Mon 6/8/20	Wed 6/10/20
90	Review draft with Agency	5 days	Wed 6/10/20	Wed 6/17/20
91	Revise draft presentation	2 days	Wed 6/17/20	Fri 6/19/20
92	Present Strategy and Deployment Roadmap to Agency Executives and Management	5 days	Wed 6/24/20	Wed 7/1/20
93	**ECRM HLA -- Findings, Recommendations and Roadmap Complete**	**0 days**	**Wed 7/1/20**	**Wed 7/1/20**
94	**Task II - Develop and Deliver RM Training**	**25 days**	**Wed 6/10/20**	**Tue 7/14/20**



Project: Sample ECRM Blueprint POA
Date: Wed 1/8/20

Task | Split | Milestone | Summary | Project Summary
External Tasks | External Milestone | Inactive Task | Inactive Milestone | Inactive Summary
Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only
Finish-only | Progress | Deadline

ID	Task Name	Duration	Start	Finish
95	Develop General RM Training Materials	5 days	Wed 6/10/20	Tue 6/16/20
96	Develop Retention Schedule Related Training Materials	5 days	Wed 6/17/20	Tue 6/23/20
97	Develop Contextually Specific Divisional Training Template	10 days	Wed 6/10/20	Tue 6/23/20
98	Review Training Materials with Agency	5 days	Wed 6/24/20	Tue 6/30/20
99	General RM - Conceptual and Best Practice Training Materials	0 days	Tue 6/30/20	Tue 6/30/20
100	RM Retention Schedule Training Materials	0 days	Tue 6/30/20	Tue 6/30/20
101	Contextually Specific Divisional RM Training Template	0 days	Tue 6/30/20	Tue 6/30/20
102	Deliver On-site RM Training	10 days	Wed 7/1/20	Tue 7/14/20
103	RM Training Delivered	0 days	Tue 7/14/20	Tue 7/14/20
104	**Task III - Develop ECRM Requirements Matrix and Draft RFP**	**40 days**	**Thu 5/7/20**	**Wed 7/1/20**
105	**Develop RFP Framework**	**12 days**	**Thu 5/7/20**	**Fri 5/22/20**
106	Develop RFP Framework	5 days	Thu 5/7/20	Wed 5/13/20
107	Agency Review of RFP Framework	5 days	Thu 5/14/20	Wed 5/20/20
108	Finalize ECRM RFP Framework	2 days	Thu 5/21/20	Fri 5/22/20
109	ECRM Solution RFP Framework	0 days	Fri 5/22/20	Fri 5/22/20
110	**Develop Functional Design for RFP Use Cases**	**14 days**	**Thu 5/7/20**	**Tue 5/26/20**
111	Select Use Cases for Functional Design	1 day	Thu 5/7/20	Thu 5/7/20
112	Conduct Requirements Analysis Interviews	3 days	Fri 5/8/20	Tue 5/12/20
113	Develop Detailed Use Cases	1 day	Wed 5/13/20	Wed 5/13/20
114	Develop File Plan and Metadata Model	1 day	Thu 5/14/20	Thu 5/14/20
115	Develop Permissions (Roles & Groups)	1 day	Fri 5/15/20	Fri 5/15/20
116	Develop UI Mockups	1 day	Mon 5/18/20	Mon 5/18/20
117	Complete the Functional Description Draft	1 day	Tue 5/19/20	Tue 5/19/20
118	Draft Functional Description	0 days	Tue 5/19/20	Tue 5/19/20
119	Present Functional Description (FD) to Agency	5 days	Wed 5/20/20	Tue 5/26/20
120	Approved ECRM Functional Description (FD)	0 days	Tue 5/26/20	Tue 5/26/20
121	**Finalize ECRM Solution RFP Draft**	**35 days**	**Thu 5/14/20**	**Wed 7/1/20**
122	Finalize ECRM Solution RFP Draft	10 days	Thu 5/14/20	Wed 5/27/20
123	Finalize ECRM Requirements Matrix	10 days	Thu 5/14/20	Wed 5/27/20
124	Finalize Weighting and Scoring Methodology	15 days	Thu 5/14/20	Wed 6/3/20
125	Develop Use Case Scripts for Vendor demonstrations	10 days	Thu 6/4/20	Wed 6/17/20
126	Review Final ECRM Solution RFP Draft Package with Agency	10 days	Thu 6/18/20	Wed 7/1/20
127	Final ECRM Draft RFP Package for Agency's Use	0 days	Wed 7/1/20	Wed 7/1/20
128	**WV Treasurer's Office ECRM HLA - Assessment - Roadmap - ECRM RFP Draft Complete**	0 days	Tue 7/14/20	Tue 7/14/20



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Project Summary	Inactive Summary	Start-only

Finish-only
Progress
Deadline