CASE STUDY

North Carolina Department of Transportation (NCDOT)

Enterprise Information Management for Innovative Transportation Solutions

SOLUTION SUMMARY

North Carolina's experiencing tremendous population growth as well as new challenges and opportunities. More emphasis than ever before is on transportation, and that means leveraging all state's transportation infrastructure to ensure a vibrant and healthy economy for future generations. That in turn means that having easy, quick, and reliable access to complete and accurate information is critical. The IQ Business Group Inc (IQBG) along with members of NCDOT's IT group implemented an Enterprise Information Management solution with components from Microsoft, OpenText, Bentley and SAP to manage the combined structured and unstructured content supporting North Carolina's transportation needs that in addition to the Division of Motor Vehicles includes responsibility for maintaining approximately 80,000 miles of roadways and 13,000 bridges and culverts and implements rail, aviation, ferry, public transit and bicycle and pedestrian transportation programs.

WORKLOADS

Digitization

Design

Implementation

Integration

Compliance

WORKSTREAMS

OpenText Capture Center

OpenText Content Server / Records Manager

OpenText eForms / Workflow

OpenText Extended ECM for SAP

OpenText Advanced Governance & Archiving for SharePoint

OpenText Extended ECM for Engineering

SERVICES

Automated Capture

Automated Workflow

Engineering and SharePoint Collaboration

Compliance and Management

SAP Integration

Search and Reporting

CHALLENGE

NCDOT was dealing with ever increasing volumes of both paper and digital records resulting in:

- Overwhelmed business processes
- Processing backlogs
- Impediments to delivering service levels demanded by constituents
- Difficulties finding information needed for daily work tasks and knowing if the information found was current or complete

- Costly and time-consuming to respond to public information requests
- Low compliance applying records management policies

Information governance was difficult to implement on an enterprise basis because of siloed departmental systems, paper-laden business processes, lack of standards in how information was named or stored, issues applying security, outdated governance policies, and no consistent compliance of records retention or disposition.

SOLUTION STRATEGY

IQBG consultants developed a strategy for EIM and ECRM that 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. 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. Importantly, given the size of the agency and the volume of the content it managed the resultant solution had to be both scalable and extensible.
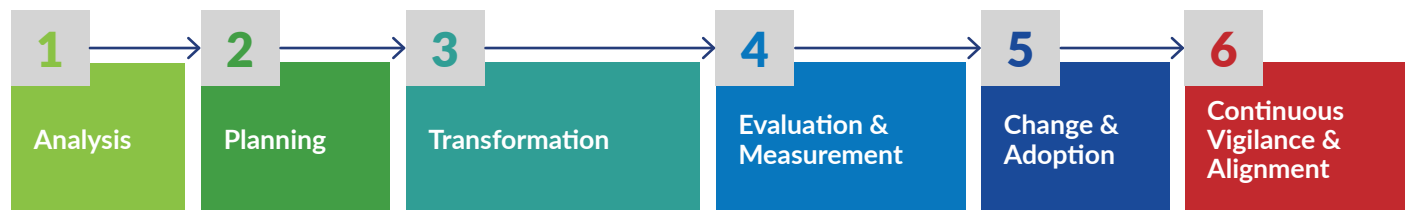
Services were delivered in a multi-phased program. For Phase One, IQBG conducted our proven high-level assessment (HLA) of NCDOT's current and future ECRM opportunities. Interviews with NCDOT personnel and a study of the current systems and projected applications growth provided the background information necessary to develop recommendations. To create the strategic roadmap, IQBG consultants collected information from over 200 business unit representatives in more than 50 departments. The EIM/ECRM Roadmap included:

- A Content Inventory and Back File Conversion Plan

- Scanning Approach including OCR/ICR and forms processing

- Documentation of Business Processes and Future Process Recommendations

- Technology Assessment, Enterprise Reference Architecture and GAP Analysis

- Business Case, Cost Justification and ROI Analysis

- Information Model and Security Roles

- Roadmap project and task Implementation Sequencing Recommendations

- Governance Framework - Community of Practice, Center of Excellence, knowledge repository, Core Taxonomy, Communications and Training plans

The HLA was followed by Requirements Analysis that produced Functional Descriptions (FD) to support the first set of implementation projects and determine requirements and approach related to SharePoint integration, engineering workflows eSignature and eForms requirements.

IQBG guided NCDOT's evaluation of software solutions and eventually negotiated with OpenText to treat the acquisition as an upgrade of already owned legacy software and crediting maintenance payments to the new purchase. IQBG was then asked to assist with the implementation phase following NC ITS system development lifecycle (SDLC) guidelines for planning, design, and implementation; and, along with these tasks included establishing the governance organization and authoring records management policies.

IQBG'S ECRM PROCESS:

1 Analysis	2 Planning	3 Transformation	4 Evaluation & Measurement	5 Change & Adoption	6 Continuous Vigilance & Alignment

OPENTEXT CONTENT SERVER (OTCS) SUITE

The OpenText suite of products is a market leading ECRM solution incorporating a full scope of enterprise information management capabilities and providing end-to-end content and records lifecycle governance. Following the implementation of OTCS, NCDOT is achieving higher productivity, higher service levels to constituents, improved eGovernment (self-service), shorter processing times, and greatly improved records management and regulatory compliance.

Extended ECM for SAP provided out-of-the-box integration with HR and Accounting systems, leveraging higher return on current investments while also raising productivity levels. Using the eForms module, NCDOT was able to enable self-service applications that collected needed information without requiring staff entry and automatically initiating workflows greatly reducing processing times, providing immediate acknowledgements, and raising levels of service.

Extended ECM for Engineering (MicroStation Connector) and the use of eSignature functionality allowed engineering collaboration and approval processes to be re-engineered to provide better tracking and reduce project backlogs. OpenText's Advanced Governance & Archiving (AGA) for SharePoint was used to allow MS SharePoint to act as a collaboration platform and a 'window' into the OpenText repository. IQBG helped implement this EIM strategy of work-in-progress content being managed, but with less strict governance, automated integration supporting unobtrusive retention and disposition management with longer-term records stored in the Content Server repository.

RESULTS:

Improved enterprise information management using ECRM: the entire content lifecycle from capture through disposition or archive was redesigned using OCR/ICR, eForms, born-digital capture, automated workflow, integration with CAD and business systems, and highly functional search. ECRM functionality combined with best practice design and standardized taxonomy and architecture moved NCDOT to a much higher level of digital processing and regulatory compliance. NCDOT (staff, partners, and constituents) now takes advantage of:

- Self-service applications and access to associated records
- Greater transparency across all business processes
- Highly functional search capabilities
- Less time spent entering metadata or declaring records and more time doing work tasks
- Easier access to information and support for collaboration
- Automated retention and disposition processes
- Better management and tracking of engineering processes
- Alignment between information governance tools, organization, and policy.