The project definition describes the attributes of the records management system (RMS) selection and implementation project. It is a result of a RMS analysis commissioned by the Minnesota Department of Natural Resourced, Enforcement Division.
**Enforcement Division**

**Records Management System (RMS Analysis)**

**Project Definition**

**Background**

The Department of Natural Resources (DNR), Enforcement Division is a large, geographically disbursed law enforcement agency with statewide jurisdiction. Its primary responsibilities include ensuring public safety and compliance with state game and fish, recreational vehicle, environmental and natural resource commercial operations laws.

Specifically, the DNR Enforcement Division is responsible for law enforcement, public safety, and education in the following areas: hunting and fishing seasons, methods of taking animals and fish, bag and possession limits; public safety, especially where it concerns alcohol use while hunting or operating recreational vehicles and watercraft; commercial use and possession of natural resources and products; the protection of the state’s land, air, and water; and youth and adult safety training and hunter education classes. (MN DNR, 2005)

The Enforcement Division currently has no automated records management system to support these important responsibilities and consequently, is unable to effectively share data electronically with state and local business partners.

While it has been recognized as a vital need of the Enforcement Division for quite some time; the need for bringing automation to the DNR Enforcement Division was acknowledged and received preliminary support during the 2011 Legislative session. As a result, in late 2012, a Records Management System (RMS) analysis was commissioned to: identify and document the core business functions of DNR Enforcement Division, identify critical system features needed as well as to examine options and determine a recommended approach, cost estimate and risks associated with acquiring an automated records management system (RMS).
Approach

This initiative will be approached in two major phases in order to achieve both the short term and long term vision for creation, collection, visibility and access to natural resources data statewide. The first phase (Phase I) is to acquire and implement an automated records management system to support the work of the DNR Enforcement Division. This phase of the effort is discussed in detail throughout this document.

The second phase (Phase II) is the longer term vision to create a data “clearinghouse” for natural resource incident and offense data generated by the DNR Enforcement Division as well as other law enforcement agencies statewide. This clearinghouse will serve as a central source for all natural resource incidents and offenses to be interfaced with and accessed by all law enforcement agencies statewide, in order to provide a comprehensive and holistic view of natural resource incidents and offenses throughout the State of Minnesota. The information in this clearinghouse will be queried for investigative purposes, analyzed for statewide trends and emerging issues and reported on to meet a variety of information needs that are unable to be fulfilled today due to the lack of electronic incident and offense data from DNR Enforcement and the inability to share natural resources data across law enforcement agencies. While this document focuses primarily on the details surrounding Phase I; the completion of both phases is necessary to achieve the ultimate goal and satisfy expectations to increase visibility to and raise awareness of natural resource incident and offense data statewide.

Objectives

The objective of Phase I of the project is to select an “off-the-shelf” records management systems solution which supports the core business functions and critical system features as identified by the DNR Enforcement Division, RMS Analysis team (See “Needs Assessment Report”) and successfully implement it statewide across the Minnesota DNR Enforcement Division.
Project Stakeholders

Organizations and individuals both internal and external to the DNR will be affected by the Enforcement Division’s project to select and implement an automated records management system. Some impacts will be direct while others will be more indirect. It is anticipated that many will benefit from the DNR Enforcement Division’s ability to create, collect, store, organize, retrieve, report on and share data electronically. Project stakeholders, both internal and external to the DNR Enforcement Division, have been identified as follows:

Internal Stakeholders

DNR Enforcement Division:
- Conservation officers
- Supervisory and Management staff
- Investigative staff
- Administrative staff
- Training staff

DNR Commissioner

MN IT technology professionals

Minnesota DNR Divisions:
- Fish & Wildlife Division
  - License Center
- Parks and Trails Division
- Forestry Division
- Ecological & Water Division
- Lands & Minerals Division
- Operations Support Division

External Stakeholders

Other Minnesota law enforcement agencies:
- Minnesota State Patrol
- County Sheriff’s Departments
Local City Police Departments
Three Rivers Park District
Tribal Wardens
U.S. Fish and Wildlife Service
U.S. Forest Service
Bordering Natural Resources Law Enforcement Agencies
Bureau of Criminal Apprehension (BCA)
Minnesota Legislature
Minnesota Department of Public Safety, Driver & Vehicle Services Division (DVS)
Minnesota Courts
Minnesota County Attorneys
Department of Homeland Security/Border Patrol
Recreational Vehicle Stakeholder Groups
Aquatic Invasive Species Groups
Hunting & Fishing User/Advocacy Groups
Turn In Poachers (TIP) Inc.
Members of the public
Compact Violator States

Phase I – Proposed Scope:
The aspects of the proposed project scope for the RMS Implementation project covered in this section include:

- Functional Overview of Proposed Phase I Project Scope
- Conceptual Diagram of a Natural Resources Clearinghouse (Phase II)
- Description of Proposed Phase I Scope by the Following Key Areas:
  - Business Process
  - External Information System Interfaces
  - External Information System Query Capabilities
  - Data Conversion
Figure 1. below pictorially describes the functional overview and overall scope of Phase I; the DNR Enforcement Division Records Management System (RMS) selection and implementation project. The breakdown of scope by key area is described by section in further detail.

**Figure 1. (Phase I)**

![Diagram of Phase I RMS Selection and Implementation Project](image-url)

**Figure 1. Key:**

- - - - - = primary core business functions that must be included in Phase I RMS solution
- - - - = business needs supported by primary core business function data- in scope
Figure 2. below represents a conceptual design of the future state (Phase II) representing data shared among systems and accessible through the Natural Resources Clearinghouse. Here, the system depicted in Figure 1. (DNR Enforcement RMS) is represented as a primary data source for natural resources incident and offense data along with safety certification, permits and revocation data.

**Figure 2. (Phase II)**

DNR Enforcement RMS Relationships

Created by: Cindy Heinen
December 17, 2012 8:20AM
Business Process Scope
The core business functions to be supported by the RMS solution include:

- Incident Reporting (ICR)
- Citations, Warnings, Civil Citations
- Computer Aided Dispatch (CAD)
- Revocations*
- Evidence and Confiscation Tracking
- Permits*
- Safety Training*

(* Indicates core business functions that may or may not be included in scope depending on the suitability of the selected vendor’s product in meeting these specialized business needs.)

Scope of Data to be Captured and Maintained
The types of data that will be captured and maintained in the records management system include:

- Electronic citation, warnings and civil citation data, including court disposition data
- Incident report data
- Intelligence data for officer contacts including person & relationship data
- Data on calls taken at the central or in regional offices statewide (TIP calls)
- Evidence and confiscation data including inventory, tracking, status and location data
- Enforcement Division permit data
- License revocation data
- Safety training certification data
- Audit trail data

Tabular and unstructured data to be supported:

- Geographic Information System (GIS) data
- Image files
- Audio files
- Electronic documents
External Information Systems Interfaces

The external information systems which must electronically interface and exchange data with the selected RMS solution include:

<table>
<thead>
<tr>
<th>External Systems</th>
<th>Data Exchanged</th>
<th>Direction of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNR Electronic Licensing System</td>
<td>Recreational license information and status</td>
<td>Receive</td>
</tr>
<tr>
<td>IMobile (MSP CAD)</td>
<td>Incident information &amp; calls for service</td>
<td>Receive</td>
</tr>
<tr>
<td>Minnesota Court Information System (MNCIS)</td>
<td>Court disposition data</td>
<td>Receive</td>
</tr>
<tr>
<td>Driver and Vehicle Services (DVS)</td>
<td>Driver license record data</td>
<td>Receive</td>
</tr>
<tr>
<td></td>
<td>Safety certification records</td>
<td>Send</td>
</tr>
<tr>
<td>Natural Resources Clearinghouse (Phase II)</td>
<td>Incident and citation data, safety certification</td>
<td>Send</td>
</tr>
<tr>
<td></td>
<td>records, permit records, revocation information</td>
<td></td>
</tr>
</tbody>
</table>

Many of the system interfaces identified above currently exist with the DNR AS/400 and need to be built and supported through an electronic integration with the new RMS. Data received from these systems as noted above is expected to be captured and stored in the RMS solution.

External Information Systems - Query Capability

With the exception of the Natural Resources Clearinghouse (expected in Phase II), the following systems are routinely referenced by conservation officers today in the course of their daily work. It is expected that officers and other Enforcement Division staff will continue to have a need to query these systems. Due to the number of sources, types and dynamic nature of the data contained in these source systems, it is not expected that the Enforcement Division RMS would store data from these systems not captured or saved as part of the ICR. Officers will continue their current need to query these systems and have information returned in real-time and on demand in order to make informed decisions in the course of their conservation enforcement duties. The manner in which these systems are accessed for query purposes is anticipated to be streamlined and accessible from within the RMS without the need to leave the RMS to log into other systems.
The external systems and types of records queried are as follows:

<table>
<thead>
<tr>
<th>External System Queried</th>
<th>Types of Records Queried</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota Court Information System (MNCIS)</td>
<td>Inquiry for court filings, case history and status</td>
</tr>
<tr>
<td>Bureau of Criminal Apprehension (BCA) systems</td>
<td>Criminal History Repository, Statewide Supervision System, CJIS, etc.</td>
</tr>
<tr>
<td>Compact Violator Database</td>
<td>Violator revocation information</td>
</tr>
<tr>
<td>Natural Resources Clearinghouse</td>
<td>Inquiry for natural resource violations issued by other MN LE agencies</td>
</tr>
</tbody>
</table>

It is anticipated that a majority of the externally referenced systems as noted above will be accessible from within many of the off-the-shelf records management systems available in the marketplace today, particularly from those vendor products with current Minnesota law enforcement clients. The ability to access data from frequently referenced external systems (without leaving the RMS) is a feature specifically noted as critical by the DNR and one indicated as available from the vendors responding to the RFI.

In addition, the Bureau of Criminal Apprehension (BCA) is currently working with Minnesota law enforcement vendors to accomplish access to the BCA’s “Integrated Search Service” (ISS)\(^1\) through external company products. As of this writing, the BCA reports working with three RMS vendors with Minnesota law enforcement clients, testing access to ISS through their products. Depending on the system ultimately selected, this is a possible approach for the DNR Enforcement Division to consider for further streamlined access to external criminal justice information systems.

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\(^{1}\) The BCA’s “Integrated Search Service” (ISS) is an integrated interface that allows users to search multiple criminal justice data sources from a single location. Data sources currently include BCA products and services such as MN and NCIS Hot Files, CCH, MRAP, POR; also records from DVS, KOPS alerts & Gang Member records, MNCIS and the Statewide Supervision System are currently available through this service.
Conversion Scope

There are limited types of electronic records currently stored on the AS/400 and in Access databases within the DNR Enforcement Division. Although limited in terms of types of electronic records, there is an extensive history of certain electronic data records, particularly those records currently stored on the AS/400. A summary of current electronic records and where they are stored follows:

**Data currently stored on AS/400 includes:**

- Historical data for citations and warnings issued for conservation related offenses
  - issued by the DNR as well as other law enforcement agencies
    - 866,000 records dating back to 1984
    - 180,000 court disposition records for conservation related offenses/citations
- Civil citation data
  - generated by the DNR as well as other law enforcement agencies
- Data regarding confiscated and seized items
  - 55,000 records
- Safety Training data
  - 1,950,000 records dating back to the 1950’s
  - data collected: name and other attendee data, dates, classes and certifications earned
    - student certification records
    - student & class rosters
    - instructor certification records

**Data currently stored in Access databases includes:**

- Historical data for recreational DWI’s
  - issued by DNR Enforcement as well as other law enforcement agencies
- includes DWI on all recreational vehicles excluding watercraft
- Approximately 4,000 records dating back to the early 1990’s exclusive of BWI’s
- Information on appeal processes for civil citations
- Incident Report data

Other documents and items stored electronically include:
- Incident Reports
- Media Files (Video or Audio)

It is expected that much of the historical DNR generated data currently stored on the AS/400 will be converted into the new RMS during Phase I. The extent to which all DNR generated historical data is necessary to be converted (versus stored in another format for retrieval if needed) needs to be determined however, all types of data currently housed in the AS/400 as described above is included in the data conversion scope.

Phase I Conversion (In-Scope):
- Citation and warning data (DNR generated)
- Disposition data for DNR generated citations
- Civil citation data and appeals (DNR generated)
- Safety training data (to the extent the selected product can accommodate)
- Recreational DWI data (DNR generated)
- Incident Reports

The conversion of record of appeals (of DNR generated civil citations) currently stored in an Access database may be limited to those appeals pending at the time of system go-live. Historical appeals with a closed status may remain in the Access database for retrieval if needed.

ICR reports which currently reside on the network will ideally be programmatically converted and attached to the electronic record as a PDF. This may need to be revisited once the application and a specific conversion method are determined. For example, an alternative may
be that the RMS may include a pointer to the ICR file location. It is anticipated that videos and photos currently residing on officer laptops would be converted manually and attached to records in the RMS on an “as needed” basis.

**Phase I Conversion (Out-of Scope):**

Conversion of data generated by other law enforcement agencies and currently stored in the DNR’s AS/400 is deemed out-of-scope for Phase I. Rather, this data will remain on the AS/400 which will continue to be supported and maintained and until such time the Natural Resources Clearinghouse (Phase II) is available.

The following data is out-of-scope for conversion to the new RMS:

- Citation and disposition data for non-DNR issued offenses
- Civil citation data generated by other law enforcement agencies
- Safety training data (if the selected product cannot accommodate)
- Recreational DWI data issued by other law enforcement agencies (non-DNR)
- Appeals of civil citations issued by other law enforcement agencies (non-DNR)
- Instructor certification records

During planning phase of the RMS implementation project, data conversion scope will be re-evaluated and further defined. This may result in adjustments to the scope as described above. For example, further analysis of data conversion methods may identify that manual conversion or “on-demand” conversion may be more effective for select data elements and documents.
Project Approach
The project approach has been designed to ensure vendor selection and sufficient planning is completed before implementation processes begin. The work of the project has been divided into four high level stages as outlined below.

It is recommended that a formal review of project outcomes be conducted at the close of each stage to ensure the original objectives of the project will be met. The objective of the review will be to confirm readiness to proceed to the subsequent stage of work.

Project Timeline
The activities necessary to complete the work of each stage are described below. Current estimates indicate the vendor selection; pre-implementation planning and implementation activities will take a minimum of 2 years to complete before the incremental regional training and go-live on the new system occurs. The plan as envisioned has the training and go-live processes occurring by region. The cutover of each region is expected to occur separately but in rapid succession and take a minimum of 6 months to complete statewide. The project timeline assumes that the project will begin work on July 1, 2013.
High Level Project Activities:

Project Preparation Activities – 2 months

- Hire Project Manager
- Hire Business Analyst
- Mobilize project team

Stage I – Vendor Selection – 9 months

- Determine project governance structure
- Define new/desired processes and related business requirements for new system
- Draft and publish Request for Proposals (RFP)
- Determine evaluation processes
- Review RFP responses
- Narrow vendor preferences to short list of candidates
- Invite short list of vendors for product demonstrations
- Conduct site visits to customer sites
- Evaluate finalist vendors/products, score and rank
- Award contract
- Negotiate and finalize agreement
- Acquire product

Stage 2 – Implementation Planning – 6 months

- Determine overall project plan and milestones
- Determine project change control & escalation process
- Perform analysis between business needs and selected system functionality
  - Determine method of resolving differences
- Define system configuration tasks
• Define data conversion approach and tasks
• Confirm system interfaces needed and determine approach and tasks
• Create project communication and change management plan
• Determine system rollout approach
• Determine end-user training approach needs, location, equipment and approach
• Determine network and infrastructure needs
• Document current processes and identify business practice change candidates
• Determine test plan, testing resource needs and user acceptance criteria

Stage 3 – Project Plan Execution – 1 year

• System configuration
  • Confirm tasks and execute plan
• Interfaces
  • Build & test interfaces
• Data conversion
  • Execute conversion tasks, test converted data
• Project Communication and Change Management Plan
  • Execute project communication and change management tasks
• Business Process and Workflow Redesign
  • Approve, document and test redesigned business processes
• Technical Infrastructure
  • Perform any network upgrades
  • Purchase and configure server hardware and software
  • Purchase and configure desktop equipment
• System and Data Testing
  • Refine & execute test plan
• Determine go-live support needs
• Draft go-live support plan
• Determine post-implementation support and user requests for assistance

• End User Training
  • Determine training locations and equipment needs
  • Secure training resources
  • Draft training materials
  • Finalize training schedule
  • Refine rollout schedule and confirm readiness

**Stage 4 – Training and Go-Live – 6 months**

• Confirm training locations and equipment needs
• Set up training facility
• Finalize training materials
• Conduct supervisor overview training
• Execute conversion plan
  • Validate production data
• Execute end-user training plan
• Distribute desktop hardware and install application
• Execute go-live support plan
• Monitor system and processes
• Determine if follow-up training is needed
Project Resource Requirements

- **Project Steering Committee**: Governance group empowered to make directional and policy decisions, supports the project as well as removes project obstacles and barriers.

- **Project Sponsor**: Executive leader who advocates the project both internally and externally, championing the project, obtaining budgets for the project, accepting responsibility for problems escalated from the project manager, signing off documents, and supporting the project manager in managing the project.

- **DNR Project Manager**: Leads the overall work of the project by establishing expectations, providing ongoing guidance and review, facilitating information sharing and coordination, managing overall project issues, risks and the overall project plan and budget.

- **Vendor Project Manager**: Works closely with the DNR project manager and serves as the liaison between the customer and the vendor to assist in establishing and executing the project plan, provide guidance and review, managing overall project issues, risks and overall project plan and budget.

- **System Configuration Analyst**: Internal analyst works with business resources and vendor to determine system user-defined items such as system table values, user rights and roles, etc. to prepare the system for use.

- **Integration Developer**: Contract staff responsible for designing and building interfaces between external systems and the selected RMS.

- **Integration Analyst**: Internal staff working with the integration developer and business analysts to determine data to be exchanged between business entities.

- **Conversion Analysts**: Contract staff responsible for the analysis of the selected RMS and how it can be used to store converted data.

- **Technical Analyst**: Internal technology professional responsible for working with the project team on network, infrastructure and hardware needs.
• **Training Coordinator** – internal training staff responsible for defining and executing the end-user training plan working closely with business analysts to understand the training concepts and develop and deliver training for users prior to implementation

• **Communication and Change Management resources** – internal staff responsible for defining and executing the project communication and change management plan

• **Business Analyst** – internal staff members who will be involved in many critical aspects of the project including the design and testing of new system, the development of training and support materials and the design and implementation of business processes

• **Site Leads** – designated leads at each regional location who will serve as liaisons between the regional office and project team to ensure that task are completed on schedule and business needs are met
## Project Cost Estimates

### One-Time Implementation Cost Estimates:

<table>
<thead>
<tr>
<th>Item or Service</th>
<th>Perpetual Pricing Model</th>
<th>Subscription Based Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vended Software and License</td>
<td>$1,500,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Hardware (Client)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Field devices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• portable printers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• printers and barcode scanners -2 sets @ 6 locations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$377,850</td>
<td>$377,850</td>
</tr>
<tr>
<td>MN.IT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Server/server operating system = $50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• .5 FTE Infrastructure Configuration = $62,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• .5 FTE Interface Construction = $62,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• .5 FTE Data Conversion = $62,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$236,000</td>
<td>$236,000</td>
</tr>
<tr>
<td>Contract Integration Development - external support</td>
<td>$165,000</td>
<td>$165,000</td>
</tr>
<tr>
<td>(1000 hours x $165/hr.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management &amp; Business Analyst Support²</td>
<td>$250,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Contract Conversion Support Services - external support</td>
<td>$165,000</td>
<td>$165,000</td>
</tr>
<tr>
<td>(1000 hours x $165/hr.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>$2,693,850</td>
<td>$1,493,850</td>
</tr>
</tbody>
</table>

² Business Analyst Support FTE may be a repurposed existing FTE in the Division
Overall Cost Estimate Breakdown by Project Stage:

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Perpetual Pricing Model</th>
<th>Subscription Pricing Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep Activities</td>
<td>$14,286</td>
<td>$14,286</td>
</tr>
<tr>
<td>Stage 1 – Vendor Selection</td>
<td>$814,286</td>
<td>$214,286</td>
</tr>
<tr>
<td>Stage 2 – Implementation Planning</td>
<td>$199,356</td>
<td>$199,356</td>
</tr>
<tr>
<td>Stage 3 – Implementation</td>
<td>$826,564</td>
<td>$826,564</td>
</tr>
<tr>
<td>Stage 4 – Training and Go-Live</td>
<td>$839,358</td>
<td>$239,358</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$2,693,850</strong></td>
<td><strong>$1,493,850</strong></td>
</tr>
</tbody>
</table>

Please see “Appendix A” attached for a detailed breakdown of costs by project stage and pricing model.

Annual On-Going Cost Estimates:

<table>
<thead>
<tr>
<th>Item</th>
<th>Perpetual Pricing Model</th>
<th>Subscription Pricing Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual System License, Services, Maintenance &amp; Support</td>
<td>$200,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>MN.IT FTE Support &amp; Fees (.75 FTE)</td>
<td>$95,000</td>
<td>$95,000</td>
</tr>
<tr>
<td>2 FTE: Project Manager &amp; Business Analyst³</td>
<td>$250,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Equipment Replacement Planning⁴</td>
<td>$225,000</td>
<td>$225,000</td>
</tr>
<tr>
<td><strong>TOTAL ESTIMATED ANNUAL COSTS:</strong></td>
<td><strong>$770,000</strong></td>
<td><strong>$870,000</strong></td>
</tr>
</tbody>
</table>

³ Business Analyst Support FTE may be a repurposed existing FTE in the Division

⁴ This figure includes funding in the event that exiting officer computers need to be replaced with ‘ruggedized’ machines.
Major Decisions and Challenges

A number of major decisions and challenges for the DNR Enforcement Division associated with the Records Management System implementation are anticipated and include:

- A major challenge will be to secure the funding necessary to purchase and install an automated records management system solution and associated technologies.
- There will be a need to refine the project data conversion scope once final system selection has been made.
- There will be a need to further analyze and determine the most appropriate and effective conversion approach for various records from each of the existing data sources (e.g. AS/400, Access databases) to best meet ongoing business needs related to historical data once working in the new system.
- This project definition suggests a minimum of a 2.5+ year process from the vendor selection to completion of statewide rollout.
- In purchasing an “off-the-shelf” software application, the Division will need to fit existing business processes into a largely non-customized software solution (where flexibility through system configuration is not available) resulting in business practice changes.
- The Division may be challenged to assign sufficient internal resources as recommended to ensure system setup and conversion ultimately meets business needs, if new staff resources are not approved and funded.
Assumptions

Several important assumptions were made in completing this project definition and developing the related timeline and high-level project activities. The following are the most significant of these assumptions:

- Phase I as depicted in Figure 1. (page 5 of this document) will be funded and completed first which sets the stage for Phase II. A Natural Resources Clearinghouse (Figure 2. page 6) is anticipated as Phase II of the overall effort.
- Vendor estimates for an RMS solution provided in responses to the RFI issued do not significantly increase from the time they were provided to the RFP stage of the implementation project.
- The selected vendor will provide products and deliverables as expected.
- Hardware and software necessary for the agency’s disaster recovery plan are not included in this estimate and are accounted for in another area of the IT budget.
- Limited system customization of the selected product will be needed before go-live in order to meet the core business needs of the DNR Enforcement Division.
- Interfaces identified which involve other agency resources will be accommodated.
- Conversion of DNR generated data currently stored in the AS/400 and Access databases is included in the conversion scope assuming reasonable corresponding fields to store the converted data are available in the selected system solution. If not, the decision whether to convert this data or maintain the Access database will need to be revisited.
### Appendix A: Detailed Breakdown of Costs by Project Stage and Pricing Model

<table>
<thead>
<tr>
<th>Project Stage</th>
<th>Activity</th>
<th>Estimated Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep</td>
<td>Project Preparation Activities</td>
<td>2 months</td>
</tr>
<tr>
<td>Stage 1</td>
<td>Vendor Selection</td>
<td>9 months</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Implementation Planning</td>
<td>6 months</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Project Plan Execution</td>
<td>12 months</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Training and Go-Live</td>
<td>6 months</td>
</tr>
</tbody>
</table>

**Total Estimated Project Duration:** 35 months

### Implementation Staffing Needs - Breakdown of Costs

<table>
<thead>
<tr>
<th>Project Role</th>
<th>Stages Needed:</th>
<th>Estimated Cost:</th>
<th>Cost per Stage:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNR Project Manager</td>
<td>Prep thru Stage 4 Total: 35 months</td>
<td>$125,000</td>
<td>Prep: $7,143</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$3571/mo.</td>
<td>Stage 1: $32,143</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stage 2: $21,428</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stage 3: $42,857</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stage 4: $21,429</td>
</tr>
<tr>
<td>DNR Business Analyst</td>
<td>Prep thru Stage 4 Total: 35 months</td>
<td>$125,000</td>
<td>Prep: $7,143</td>
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<tr>
<td></td>
<td></td>
<td>$3571/mo.</td>
<td>Stage 1: $32,143</td>
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<td>Stage 2: $21,428</td>
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<tr>
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<td></td>
<td></td>
<td>Stage 3: $42,857</td>
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<td>Stage 4: $21,429</td>
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<tr>
<td>MN.IT Staff:</td>
<td>Stages 2, 3 &amp; 4 Total: 24 months</td>
<td>$186,000</td>
<td>Stage 2: $46,500</td>
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<tr>
<td></td>
<td></td>
<td>$7,750/mo.</td>
<td>Stage 3: $93,000</td>
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<td>Stage 4: $46,500</td>
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<tr>
<td>External support - Integration</td>
<td>Stages 2 &amp; 3 Total: 18 months</td>
<td>$165,000</td>
<td>Stage 2: $55,000</td>
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<tr>
<td>Development</td>
<td></td>
<td>$9167/mo.</td>
<td>Stage 3: $110,00</td>
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<tr>
<td>External Support – Conversion</td>
<td>Stage 2 &amp; 3 Total: 18 months</td>
<td>$165,000</td>
<td>Stage 2: $55,000</td>
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<tr>
<td>Support Services</td>
<td></td>
<td>$9167/mo.</td>
<td>Stage 3: $110,00</td>
</tr>
</tbody>
</table>

Staffing formula for breakdown by stage = total estimated one-time cost per role/total # stages (months) role is needed = estimated cost per month x # of months per stage
<table>
<thead>
<tr>
<th>Stage Description</th>
<th>Other (Non-Staff) Costs Breakdown by Project Stage</th>
<th>Perpetual Pricing Model</th>
<th>Subscription Pricing Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software/ License (½ in stage 1 and ½ in stage 4)</td>
<td>Stage 1:</td>
<td>$750,000</td>
<td>$150,000</td>
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<tr>
<td></td>
<td>Stage 4:</td>
<td>$750,000</td>
<td>$150,000</td>
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<tr>
<td>Hardware and Server Costs</td>
<td>Stage 3:</td>
<td>$427,850</td>
<td>$427,850</td>
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<tr>
<td>Other Costs Subtotals:</td>
<td></td>
<td>$1,927,850</td>
<td>$727,850</td>
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</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>Grand Totals (All Costs) by Project Stage</th>
<th>Perpetual Pricing Model</th>
<th>Subscription Pricing Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep Stage:</td>
<td></td>
<td>$14,286</td>
<td>$14,286</td>
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<tr>
<td>Stage 1:</td>
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<td>$214,286</td>
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<td>Stage 2:</td>
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<td>$199,356</td>
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<td>Stage 3:</td>
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<td>Stage 4:</td>
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<tr>
<td>Grand Total Estimated Costs:</td>
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<td>$2,693,850</td>
<td>1,493,850</td>
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