

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Administration

Agency: Department of General Services (DGS)

Project Formal Title: DPS VDC Warehousing System Modernization

Investment Status: Approved for Planning

Project Description:

The Virginia Distribution Center (VDC) has statewide responsibility for purchasing goods in bulk and distributing the goods to state agencies, universities, institutions, and local governments. The current Distribution and Warehousing application is 9 years old and is no longer supported by the vendor. Subsequently, opportunities to improve the business processes that rely on the application have been limited. In addition, the technology does not meet VITA security standards, and does not meet the reliability standards required from the business. Failure of the application would reduce the volume of purchased goods, increase the personnel costs required to procure and distribute critical products, and delay their delivery. The Warehousing System Modernization Project will replace the existing system with a system that meets VDC system security, reliability, support, and functionality needs.

Project Scope:

The VDC Warehousing System will:

- Replace the existing system
- Duplicate or improve current Distribution and Warehousing application functionality
- Reduce processing errors in picking, putting, and distributing goods
- Streamline invoice processing and adjustments
- Bring application and hardware to VITA compliant standards including security
- Provide a self-contained processing environment with 24-by-7 reliability during a statewide disaster or government continuity event
- Provide for integration with customer agency systems
- Capture business unit performance measures

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Administration

Agency: State Board of Elections (SBE)

Project Formal Title: Campaign Finance Management System

Investment Status: Identified for Preliminary Planning

Project Description:

The project will implement a commercial-off-the-shelf (COTS) system to manage e-filed campaign finance reports that include customization services and an on-going license and support agreement.

Project Scope:

The Campaign Finance Management System will:

- Integrate seamlessly with SBE management software
- Post reports to the SBE website
- Meet all legal requirements
- Allow localities to accept e-filings

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Agriculture and Forestry

Agency: Department of Forestry (DOF)

Project Formal Title: Integrated Forest Resources Information System – Forest Protection & Mobile Computing

Investment Status: Approved for Development

Project Description:

The project will augment existing Geographic Information System (GIS) infrastructure that supports key DOF programs. Enhancements will be made to the Agency's Integrated Forest Resource Information System (IFRIS). IFRIS is a web-based information management system for the program areas of wildfire suppression, water quality law enforcement, and forest health. In addition to information management enhancements, new mapping technology, in the form of mobile devices with mapping-grade GPS, will be introduced to replace current paper-based data collection forms. Paper-based data collection for IFRIS severely impedes DOF's ability to deliver the program services managed by the agency. Systems will be developed primarily at contractor facilities, but ultimately will be integrated with the IFRIS application hosted by VITA. The project includes training staff on the use of the mobile devices and the new IFRIS functionality.

Project Scope:

The Integrated Forest Resources Information System – Forest Protection and Mobile Computing System will provide:

- Improvements to IFRIS data collection, management, and storage
- Enhanced reporting of information critical to the business areas of wildfire incident tracking, water quality law enforcement and forest health monitoring
- Deployment of mobile devices for data collection

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Commerce and Trade

Agency: Department of Business Assistance (DBA)

Project Formal Title: Business One Stop Phase II

Investment Status: Approved for Planning

Project Description:

Phase I of the project provided a proof-of-concept model for determining the feasibility and practicality of a portal approach to business registration for new businesses within the Commonwealth. Phase II will migrate the functionality of Business One Stop Phase I to a more robust and scalable technology platform. It will also add functionality, including fee collection services to existing businesses, and data integration to other agencies involved in business registration activities. The development approach is to have two releases; Release 1 will provide a 'core' product (the intake screens for common elements, data store, web services for data sharing, fee collection module) along with data integration to DMBE, Taxation and DGS. This will be followed by a Release 2 that will add some features for servicing existing businesses.

Project Scope:

Business One Stop Phase II will:

- Upgrade the existing system
- Simplify the process of business registration in the Commonwealth of Virginia
- Add fee collection services
- Include a registration module
- Provide a Customer Relationship Management (CRM) module
- Improve web services for data sharing across agencies

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Commerce and Trade

Agency: Department of Professional and Occupational Regulation (DPOR)

Project Formal Title: EAGLES (Electronic Access to the Government Licensing and Enforcement System)

Investment Status: Approved for Development

Project Description:

EAGLES will be a web-enabled application implemented to replace two legacy systems, CLES and ETS. EAGLES will also support the agency's new business requirements. This project is in line with the Commonwealth's electronic government initiative, which requires that the Department be aligned closely with the Digital Signatures and COVA PIN initiative.

Project Scope:

This project scope includes the development of the EAGLES web-enabled application to replace the legacy systems, CLES and ETS, and the expansion of the system to include the Department's new business requirements. The new requirements are:

- License renewal
- Filing of licensure applications
- Alignment with the Digital Signatures and COVA PIN initiative

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Commerce and Trade

Agency: Virginia Employment Commission (VEC)

Project Formal Title: Financial Management System

Investment Status: Approved for Planning

Project Description:

The Financial Management Accounting System will replace the current mainframe batch system. The new system will include modules for accounts payable, accounts receivable, general ledger, cost allocation, time distribution and procurement. Financial data will be processed in an on-line, real-time environment. These features will greatly improve efficiency in financial processes, availability of management information, and the accuracy of accounting reports, thus reducing the potential for audit findings.

Project Scope:

The VEC is participating in a study commissioned by the Virginia Enterprise Application Program (VEAP) to identify a solution for those agencies that need to replace their financial systems in the immediate future. The study is being conducted by North Highland. The need for this study arose as a result of discontinued funding for the VEAP program that was intended to replace the Commonwealth's "Central Systems" (CARS, PMIS, CIPPS, Probud, etc.). The VEC had been a participant in that project. VEC's new financial system will modernize the 40 year old financial system, eliminating significant risk and enabling new capabilities.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Commerce and Trade

Agency: Virginia Employment Commission (VEC)

Project Formal Title: Unemployment Insurance Modernization

Investment Status: Approved for Planning

Project Description:

The VEC needs to modernize the Unemployment Insurance Benefits and Tax (UIBT) system. The current system is based on VEC priorities identified in the mid-1980s. Since that time, the statutory environment and the business processes have changed. The current UIBT system is difficult to upgrade and costly to maintain when compared to systems that are available in today's market. As a result of these concerns, VEC has identified two goals for the Unemployment Insurance Modernization Project:

- Replace the existing UIBT applications using a foundation of new technology and improved design methods to improve flexibility and maintainability. This includes the ability to add new features and to incorporate system changes resulting from future law and policy changes.
- Improve the UIBT business processes to meet unemployment insurance business needs that have changed since the mid-1980s. The new business processes are targeted to be significantly more efficient and adaptable to wide swings in workload.

Project Scope:

The UIBT System will provide:

- Implementation of a Benefit Audit, Reporting and Tracking System that will support the prevention, detection, and processing of both fraudulent and non-fraudulent unemployment insurance overpayments. The system will facilitate several types of audits and help automate case management.
- Implementation of an Appellate Hub for Appeals that will provide end-to-end service for conducting conference call hearings, digitally recording hearings, archiving and retrieving hearings for review, and purging old recordings.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Education

Agency: Jamestown-Yorktown Foundation (JYF)

Project Formal Title: Yorktown Museum Replacement – Technology

Investment Status: Identified for Preliminary Planning

Project Description:

This project will install the requisite technology components for the Yorktown Museum replacement project, including exhibit technology, audio visual components, wireless, data and telecommunications. The Yorktown Museum Replacement project will improve the necessary IT infrastructure in order to accommodate expected future visitation.

Project Scope:

The museum replacement project will:

- Replace the exhibitory that has exceeded its useful life
- Provide a properly sequenced visitor experience and eliminate troubled visitors attempting to find their way in the museum
- Provide an adequately sized changing gallery to provide a more effective impetus for repeat visitation. By maximizing the potential of the museum, the agency will achieve its educational and revenue generating potential.
- Include requisite technology components: data and telecommunication wiring; storage racks; relocation of servers, routers and workstations; audio visual systems; wireless network; kiosks; peripherals for point-of-sale terminals; building security; and exhibit audio visual and technology.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Education

Agency: Radford University (RU)

Project Formal Title: Radford University Information System Project

Investment Status: Approved for Development

Project Description:

Radford University (RU) is implementing SunGuard Banner applications for Student Records, Financial Records, and Human Resources. EstimateRU will install the same computer systems already operational at 10 other Virginia higher education institutions. Web-based systems provide better service to students, faculty, staff, parents, the community, alumni, business and ultimately to all taxpayers, while delivering operational efficiencies to the institution.

Project Scope:

The project scope includes the procurement and implementation of new web-based ERP Administrative System software with Student Records, Financial Records, and Human Resources modules. The project scope includes the installation of a web-based ERP system that will:

- Provide better service to students, faculty, staff, parents, the community, alumni, business and ultimately to all taxpayers
- Deliver operational efficiencies to the institution

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Education

Agency: Virginia Community College System (VCCS)

Project Formal Title: Human Resources Management System (HRMS)

Investment Status: Approved for Planning

Project Description:

The project is an implementation of a Human Resources System for the Virginia Community College System (VCCS) and 23 Colleges. Currently VCCS does not employ an automated enterprise solution for human resources management. Dependence on manual processes and dated external systems negatively impacts the VCCS' ability to remain competitive in today's higher education market and to meet VCCS business, educational, and public service missions. To address these problems, VCCS plans to implement the PeopleSoft HR modules. The proposed system will provide self-service access and business process support to students, faculty, and staff and improved workflow for major human resources functions performed throughout the VCCS colleges and Central Office. Enhanced interoperability with other VCCS internal and external application systems will provide additional benefits from information sharing.

Project Scope:

The project scope is the implementation of the PeopleSoft Human Resources modules and includes HR, Base Benefits, Benefits Administration (portion), portal, self service, and data conversion interfaces to CIPPS, EPAS and PMIS. The implementation includes modules for employee self service, time and labor, and recruiting. The project scope includes all phases of the project lifecycle. The specific lifecycle methodology to be employed will include Fit/Gap analysis, design, development, testing, training, and quality assurance reviews.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Finance

Agency: Department of Planning and Budget (DPB)

Project Formal Title: Performance Budgeting Solution

Investment Status: Approved for Development

Project Description:

The project is the implementation of a performance budgeting system to replace the current budgeting and strategic planning applications (PROBUD, WebBEARS, Budgetwise and Expendwise). Today the Commonwealth's strategic planning and budget development processes use a wide range of disparate systems. These systems have limited integration and interfacing capabilities. A common problem shared throughout the enterprise is the need for the same budget data to be entered multiple times. Because of this, a great amount of time and effort is spent double-checking and verifying data to make sure it is "in balance."

Project Scope:

The Commonwealth currently relies on numerous systems, applications, and processes to support the Performance Budgeting business process. The recommended Performance Budgeting solution would include the following elements:

- A service delivery organizational structure that recognizes the wide range of differences among the various Commonwealth
- A phased implementation approach that gives the Commonwealth the opportunity to carefully control costs and risks, and to make implementation and rollout decisions based upon both project performance and other future conditions.

In the future, performance budgeting will be enhanced through six key process and policy changes:

- Extending the strategic planning horizon to three biennia
- Establishing strategic priorities
- Applying measurement and evaluation
- Initiating performance reviews
- Realigning base budgets
- Linking budgets, expenditures, and performance

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Finance

Agency: Department of Tax (TAX)

Project Formal Title: Audit Case Management Integration with Advantage Revenue

Investment Status: Identified for Preliminary Planning

Project Description:

This project will focus on the migration of Taxation's Audit Case Management (ACM) system from its current platform within Siebel to be integrated with Advantage Revenue. This includes designing & developing the ACM system within the AR PowerBuilder Application and designing and developing interface points with the Compliance Repository, PASS, and the Auditor Workbench, plus resizing Advantage Revenue servers. In addition, this project will incorporate new functionality to improve case selection and case manageability.

Project Scope:

Taxation's current Audit Case Management system is based in its Siebel Customer Relation product. While the application functions, its separation from the agency's enterprise application results in a significant degradation of performance, both from a systemic and an auditor performance standpoint. In addition, the significant overhead with Siebel, and the proprietary nature of the application severely limit TAX's ability to enhance the application.

The use of Siebel for ACM has significantly increased the complexity of maintaining and upgrading the Siebel product due to the large amount of customization that was needed to retrofit Siebel with an Audit Case Management system. This project will allow for significant more flexibility for the agency to enhance and improve the Audit Case Management application. It will improve audit throughput thereby increasing compliance revenue. In addition, it eliminates an interface point, and significantly improves TAX's ability to upgrade and maintain its Siebel application.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Finance

Agency: Department of Accounts (DOA)

Project Formal Title: Financial Management Enterprise Rollout

Investment Status: Identified for Preliminary Planning

Project Description:

This project will replace the Commonwealth's (Department of Accounts) current financial system, Commonwealth Accounting and Reporting System (CARS). It will be an Enterprise Resource Planning (ERP) implementation of General Ledger and Accounts Payable, the two accounting features currently contained within CARS.

Project Scope:

The system will be deployed to all current day CARS users and interfaced with the financial systems that currently interface to CARS. The scope of this project also includes the Change Leadership and Training required to migrate off of CARS.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department for the Aging (VDA)

Project Formal Title: No Wrong Door Initiative

Investment Status: Approved for Development

Project Description:

The vision of No Wrong Door (NWD) is to create a virtual web portal for state and private adult health and human services providers to access services for clients and exchange client information. The goal of NWD is to make it possible for every consumer to understand their choices and to easily access the services that meet their long term care needs no matter where they begin the process. This is a shared initiative of VDA, DSS, DRS, DBHDS, DMAS, and VDH. The project will create a new service model under the NWD banner. The key components of the project are:

- Collaboration between service providers
- Identification of all service options
- Automation and streamlining of eligibility and enrollment processes

Project Scope:

This project will revise agency service models to create a virtual No Wrong Door web portal for adult health and human services in the Commonwealth. NWD will include:

- Secure information sharing across multiple Agencies
- A service model that facilitates Agency staff routing of client requests to the appropriate service provider
- Access to both Commonwealth and private service providers

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Health (VDH)

Project Formal Title: Electronic Death Registration (EDR)

Investment Status: Approved for Planning

Project Description:

The Electronic Death Registration (EDR) system is a proposed web-based system that would allow for the electronic capture of death data from funeral service licensees, state medical examiners and state physicians. The system would allow the VDH Division of Vital Records (DVR) and local health departments to issue and retain death certificates electronically as opposed to the manual process that is currently used. The Electronic Death Registration system is expected to reduce reporting delays, improve data quality, and increase the utility of death data.

Project Scope:

The Electronic Death Registration (EDR) system will allow DVR to go from a paper-based reporting system to an electronic filing system. The EDR will be a web-based system that will allow the many participants of the death registration process to remotely submit; register; and certify deaths occurring in the Commonwealth of Virginia. Electronic registration of deaths will gradually replace the current paper-based system. DVR is mandated by the Code of Virginia §32.1-273.1 to fully automate the system of vital records. The development of the EDR system will help fulfill this mandate and improve response time to customers, thus enhancing customer service and helping the division fulfill proposed federal mandates that will be set forth in the Intel Reform Act. This federal reform will impact the issuance and retention of all vital records across the nation. The proposed EDR system will also help DVR address their physical storage issues by helping to alleviate the growing need for more space to address the concern of retaining paper copies on site.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources
Agency: Department of Health (VDH)
Project Formal Title: EMS Registry
Investment Status: Approved for Development

Project Description:

The EMS Registry project is designed to replace the current Pre-Hospital Patient Care Reporting (PPCR) system. The current program is technologically outdated and currently not assisting the Office of Emergency Medical Services (OEMS) to fully meet its Code mandates. The current PPCR program is cumbersome and requires manual data entry of flat files; has few upfront validations; has no compliance monitoring tools; and data can only be used retrospectively with a delay in analysis being a minimum of 120 days. The new EMS Registry will be a web-based data collection tool that utilizes electronic medical record technology and eliminates the current paper based system. By converting to a web-based electronic patient care report (e-PCR), data submission will no longer be a separate function for the over 700 hundred EMS agencies. Instead, data submission will occur as a normal part of medical record charting through an e-PCR. Also, by converting the current outdated technology with the proposed program, data will become near real time (within 24-48 hours) and therefore a degree of health care surveillance will be added to the system. In addition, EMS treatment can be assessed and new implementations in emergency care and systems issues can be initiated sooner. Poor compliance will also be resolved by having an electronic data collection system, as transcribing patient encounters manually will no longer be required.

OEMS and EMS agencies are required by Code and regulations to carry out performance improvement (PI) processes. The project will include PI modules for a state level PI program using data mining. Most importantly is the fact that with the initiation of this project, OEMS will put into place the national dataset as agreed to in a 2003 MOU with the National EMS Information System (NEMESIS). This monumental effort is to assure the each data element collected by localities; regions, the state, and the national database are exactly the same, for more reliable analysis.

Project Scope:

The EMS Registry project will allow OEMS to fulfill the requirement of Code of Virginia § 32.1-111.3; promote continuing improvement of the EMS system; and improve the quality of emergency care being provided both in the pre-hospital and in-hospital environments through a comprehensive performance improvement program. VDH, with OEMS as its designee, is mandated by the Code of Virginia §§ 32.111.3, 32.1-116-1 to develop a comprehensive, coordinated, emergency medical care system incorporating facilities, transportation, manpower, communications, and other components as integral parts of a unified system that will serve to improve the delivery of emergency medical services and thereby decrease morbidity, hospitalization, disability and mortality.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Health (VDH)

Project Formal Title: Hospital Interoperability Communications Upgrade Project

Investment Status: Approved for Planning

Project Description:

The Hospital Interoperability Communications Upgrade Project (HICUP) is designed to upgrade and expand the existing Hospital Emergency Alert Radio (HEAR) VHF radio system. The HEAR system was designed to facilitate radio communications between hospitals and Emergency Medical Service, EMS, and hospital to hospital. Currently, approximately 50% of the hospitals can reach their Regional Hospital Communication Center (RHCC) using the HEAR radio when attempting to make requests for supplies or divert patients. The project includes upgrading radios, feed lines, antennas, and controls at each site as appropriate. In some cases, only the radio will require an upgrade. The radios currently being used do not meet the FCC narrowband mandate which starts in 2013. Each HEAR radio will be programmed with additional VHF statewide interoperability frequencies which can be used during an emergency. The HICUP also includes installing radio interoperability gateways.

Project Scope:

The implementation of the HICUP will:

- Provide each hospital and RHCC with a radio system for backup communications with their Public Safety partners that is not dependant on commercial service providers
- Allow VDH to fulfill the EP&R Strategic Plan requirement “Ensure a continuous flow of critical information is maintained among emergency responders, command posts, agencies, and government officials for the duration of an emergency response operation”
- Provide interoperable communications between eighty two (82) hospitals, twelve (12) RHCCs and two (2) VDH sites
- Upgrade all HEAR radios to meet the FCC mandated narrowband transmission requirements
- Provide new or upgraded gateways consisting of a radio, telephone, network and satellite access at each RHCC site: Norfolk, Newport News, Richmond (2), Bristol, Charlottesville, Winchester, Fairfax, Roanoke, and the VDH’s Disaster Recovery site in Petersburg
- Provide a terrestrial free satellite based redundant backbone between the RHCCs and VDH across the Commonwealth
- Satisfy the Department of Homeland Security grant requirement to provide and improve interoperable communications between hospitals and their local EOCs, EMS, the RHCCs and VDH

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Health (VDH)

Project Formal Title: Women, Infants, and Children (WIC) Electronic Benefits Transfer (EBT) Project

Investment Status: Approved for Development

Project Description:

The Women, Infants, and Children (WIC) Electronic Benefits Transfer (EBT) Project will develop and implement the business processes and associated technology to provide electronic WIC (e-WIC) issuance, redemption, payment, and reconciliation services to distribute food benefits in the Virginia WIC Program. The manual, paper-based system introduces numerous inefficiencies into the process. The project will require procurement of a number of services including support for the development of an Implementation Advanced Planning Document (IAPD), as required by the United States Department of Agriculture Food and Nutrition Service, Quality Assurance and Monitoring, and Design, Development, and Implementation of the selected e-WIC solution. The project will implement an online, outsourced EBT technology. A critical task of e-WIC will be to work with the retailer environment to seek feasible solutions for point-of-sale equipment and maintenance.

Project Scope:

The implementation of the WIC EBT project will:

- Provide Electronic Benefits Transfer (EBT) issuance, redemption, payment, and reconciliation services to distribute food benefits in the Virginia WIC Program
- Serve several customers including the Virginia WIC Program State and local agencies; WIC authorized retailers; and WIC participants
- Allow the SWO to more accurately monitor the food benefit issuance, redemption, and payment processes; ensure that participants purchase only allowable foods; and that retailers charge no more than the shelf price for WIC food items
- Reduce opportunities for fraud and increase accountability for the entire program.
- Reduce the time and effort local WIC agencies spend performing manual benefit issuance, void, and replacement processes allowing; and eliminate the waste created by misprinted food instruments and stub records
- Streamline the process for modifying or replacing food benefits in an emergency
- Allow policies for managing benefit changes to be programmed into the system alleviating the need to manually calculate prorated benefits
- Develop and implement EBT business policies, processes and procedures
- Interface with the Crossroads WIC management information system currently under development by a consortium of state WIC agencies including the Virginia WIC agency
- Use an electronic food prescription that specifies particular food items, quantities of the food items that can be purchased, the time period within which the food items must be purchased, and the maximum value associated with these food item purchases

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Medical Assistance Services (DMAS)

Project Formal Title: Fiscal Agent Competitive Re-Bid

Investment Status: Approved for Development

Project Description:

DMAS must take steps to competitively re-bid the Fiscal Agent contract for the operations and support of the Medicaid Management Information System (MMIS). As part of the due diligence effort, DMAS has determined that it is in the best interest of the agency and Commonwealth to exercise the two remaining option years of the current contract until June 30, 2010. This will allow the needed time for DMAS to competitively re-bid and award a new MMIS contract.

Project Scope:

The scope of the Fiscal Agent Competitive Re-Bid includes:

- Competitive re-bid of the Fiscal Agent operations and support of the MMIS
- Competitively acquire the services of a Fiscal Agent to support the business processes of DMAS through the use of the MMIS
- Process health care transactions in a timely and accurate manner in accordance with all HIPAA standards
- Ensure business programs are evaluated and monitored for operational effectiveness and efficiency

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Medical Assistance Services (DMAS)

Project Formal Title: HIPAA Upgraded Transactions (5010) and Code Sets (ICD-10)

Investment Status: Approved for Planning

Project Description:

The Centers for Medicare and Medicaid Services (CMS) has proposed regulations requiring that all X12 Transactions be upgraded to the 5010 versions and that the ICD-10 version of the code sets be implemented. DMAS must implement the new versions in order to remain HIPAA compliant and continue to receive and send electronic eligibility, claims, and payment data. Implementation of the changes will require modification to the MMIS and extensive provider outreach and trading partner testing.

Project Scope:

The scope of the Upgraded Transactions (5010) and Code Sets (ICD-10) project includes:

- Updating the CMS mandated 5010 transactions and ICD-10 code sets on the MMIS
- Processing health care transactions in a timely and accurate manner in accordance with all HIPAA standards

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Behavioral Health and Developmental Services (DBHDS)

Project Formal Title: Clinical Apps/EMR

Investment Status: Approved for Planning

Project Description:

The Clinical Apps/EMR project will replace legacy systems with integrated clinical applications sharing an electronic medical record repository.

Project Scope:

The scope of the project is to implement an electronic medical record repository and clinical applications at each DBHDS facility and Central Office. The project would replace legacy systems and integrate with recent IT investments such as AVATAR for patient/resident admissions, discharges, and reimbursements.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Behavioral Health and Developmental Services (DBHDS)

Project Formal Title: Medication Management System

Investment Status: Approved for Development

Project Description:

The Medication Management System will replace the legacy pharmacy system with an integrated medication management application sharing an electronic medical record repository.

Project Scope:

The scope of the project is to implement a medication management system that utilizes an electronic medical record repository at each DBHDS facility. The project would replace legacy systems and integrate with recent IT investments such as AVATAR for patient/resident admissions, discharges, and reimbursements. The project would also replace the outdated In-Patient and Aftercare pharmacy systems.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Rehabilitative Services (DRS)

Project Formal Title: Integrated Fiscal System

Investment Status: Approved for Development

Project Description:

The Virginia Department of Rehabilitative Services (DRS) maintains responsibility for the financial processing and reporting for six Health and Human Resources service agencies. The umbrella of agencies is commonly referred to as the Virginia Disability Services Agencies (DSA). DSA includes the Department of Rehabilitative Services (DRS), the Department for the Blind and Vision Impaired (DBVI), the Virginia Department for the Deaf and Hard of Hearing (DDHH), the Virginia Board for People with Disabilities (VBPD), the Assistive Technology Loan Fund Authority (ATLFA), and the Department of Behavioral Health and Developmental Services (DBHDS). This project is to install an automated Financial Management System (FMS) for DSA at DRS.

Project Scope:

The Integrated Fiscal System includes:

- Automated interfacing with statewide systems (CARS, purchasing, eVA)
- Functionality in the modules that address cost accounting and accrual accounting requirements for Medicare and Medicaid reporting
- Reference and Budget File processing
- Daily Process – Expenditure Transactions processing
- Daily Process – Journal Voucher Transactions processing
- Accounts Receivable processing
- Receipts and Deposits processing
- Payroll processing
- Post Closeout processing
- W9 and IRS 1099 processing

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Social Services (DSS)

Project Formal Title: Automated Child Care Subsidy Payment System

Investment Status: Approved for Planning

Project Description:

Implement a Child Care Subsidy Payment System (CCSPS) for Child Care Subsidies. The CCSPS will allow for real-time documentation of attendance and enable the program to better address issues relating to improper use of subsidies. This will save local and state administrative time and costs and result in a more efficient operation of the program. A payment system will provide a mechanism to reduce program fraud through payment tracking and alerts, thus reducing program costs and the repayment of funds to the federal government. It will also save staff resources required to track the federal, state, and local shares of improper payments identified and collected. This will assure that all state and local dollars can be extracted before reimbursements are made to the federal government. The system will also assist with Federal reporting, permitting Virginia to move from sample reporting to a statewide population reporting system for mandated federal reports, which will relieve local departments of manually reporting data each month for the compilation of recipient data for Federal reports. An automated payment system will also allow for prompt payment for services to child care providers, reduce local costs associated with invoice verification and processing and reduce the possibility of human error. It is expected that the program will be able to identify all providers who receive payments through the Child Care Subsidy Program, track payments made to those providers, identify and reduce potential fraud, and relieve local departments of labor intensive provider payment procedures.

Project Scope:

The CCSPS will include:

- Real-time documentation of attendance
- Payment tracking and alerts, including tracking of the federal, state, and local shares of improper payments identified and collected
- Federal reporting, permitting Virginia to move from sample reporting to a statewide population reporting system for mandated federal reports
- Automation to relieve local departments of manually reporting data each month for the compilation of recipient data for federal reports
- An automated payment system for child care providers
- System for identifying all providers who receive payments through the Child Care Subsidy Program

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Health & Human Resources

Agency: Department of Social Services (DSS)

Project Formal Title: Dolphin Upgrade

Investment Status: Approved for Planning

Project Description:

VERSA Regulation (VR) is a web-based database which is a comprehensive, integrated package designed to administer the licensing process for individuals and organizations in compliance with regulatory rules and laws. VERSA Mobile (VM) is used to collect data and produce violation reports during field inspections. Both components are used by the Division of Licensing Programs (DOLP) inspection staff as they perform their duties inspecting and licensing adult and child care facilities as well as serving the administrative and management needs of the central and regional staff. Both applications are customized to meet DOLP business practices and needs. This project is an upgrade replacement to the current DOLPHIN system that will allow DSS to continue to capture information electronically about on-site inspections.

Project Scope:

The Dolphin Upgrade will include:

- Requirements analysis
- System design
- Java Development
- Testing
- Updated VR/VM software products
- More stable data collection devices
- Improved maintenance support
- Improved database synchronization with the License Inspection Module
- Training for system administration and operations
- Training documentation

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of Alcoholic Beverage Control (ABC)

Project Formal Title: POS Replacement FY09

Investment Status: Approved for Development

Project Description:

ABC plans to upgrade its Point of Sale (POS) hardware and software to be Payment Card Industry (PCI) compliant, and to take advantage of business process improvement opportunities provided by newer technology. The project will upgrade or replace all POS hardware and software in all stores to meet PCI security standards. Currently, ABC operates a Point of Sale (POS) hardware and software system in all ABC stores that does not meet the Payment Card Industry (PCI) standard requirements for security of sensitive information. This puts ABC at very high risk of fines and penalties should sensitive data be lost. In addition, the current hardware is at the end of its service life cycle and needs to be replaced.

Project Scope:

The POS Replacement project includes the upgrade or replacement of the current POS system in all ABC's 327+ stores. The upgraded or replacement system will meet all PCI security requirements.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of Corrections (DOC)

Project Formal Title: Electronic Records Management

Investment Status: Identified for Preliminary Planning

Project Description:

The Electronic Records Management project will purchase and implement an electronic records management system for DOC including offender paper records, and other administrative paper records utilized within the Department that can be associated with an offender, an employee, or other entity.

Project Scope:

Currently, no consolidated electronic records management system exists for DOC. The DOC is overwhelmed with paper, particularly offender records. This project will enable the Department to eliminate paper offender files at Headquarters, every correctional facility, and probation and parole office. It will also free up significant space in those locations to allow for planned growth.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of Corrections (DOC)

Project Formal Title: Financial and Human Resources ERP Package

Investment Status: Identified for Preliminary Planning

Project Description:

The Financial and Human Resources ERP Packages project will purchase and install a human resources management application and a financial systems software application to automate the DOC functions in those areas across the Commonwealth. The DOC is unable to maintain current automated data in a useable format to actively manage the large employee base (12,500 employees) and the large annual budget (\$800 million) required to operate this large public safety organization in an efficient manner.

Project Scope:

Currently, no automated single system solution is available at DOC for HR and Financial Management. As a public agency we have an obligation to the citizens of Virginia to manage our resources in the most efficient manner possible and still achieve our organizational mission.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of Corrections (DOC)

Project Formal Title: Phase 2 and 3 Virginia Correctional Information System (CORIS) Program

Investment Status: Approved for Development

Project Description:

The Department of Corrections (DOC) has established an automated Offender Management Information System (OMS) Program, now called VirginiaCORIS. This is a major technology effort and is critical to the successful accomplishment of the DOC mission. The VirginiaCORIS Program will be composed of multiple major projects, and will result in a single, fully integrated system that should replace most of the DOC's current offender-related application portfolio. The selected solution is already in production in other state DOCs, with some additional required functionality being developed and planned for deployment in the next 12 months. The first project of the VirginiaCORIS Program (the procurement and installation of the Offender Sentence Calculation application) was successfully completed. The current projects implement Community Corrections and Institution Operations components.

Project Scope:

This project will address the procurement of software licenses and implementation of the Community Corrections and the Institutional Operations components of the VirginiaCORIS Program.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of State Police (VSP)

Project Formal Title: Central Criminal Repository and Support Systems Improvement

Investment Status: Approved for Planning

Project Description:

The Virginia State Police (VSP) central repository databases are populated by law enforcement, courts, and corrections agencies statewide to meet specific Federal and state mandates. These databases are accessed by law enforcement, prosecutors, courts, and corrections agencies from across the country to facilitate criminal justice processing. This proposal would update all central repository databases, interfaces, and related applications required by VSP. The software solution will incorporate new National Law Enforcement Telecommunications Systems (NLETS) and Federal Bureau of Investigation (FBI) standards, including the Global Justice EXtensible Markup Language (XML) Data Model (GJXDM) when applicable. The central repository system will be designed to accommodate improved interfaces with related law enforcement systems within the agency, such as the Virginia Records Management System (VRMS), and throughout the law enforcement industry, such as both the National Data Exchange (N-DEx) and Law Enforcement Information Exchange (LInX).

Project Scope:

The central repository applications included in the project are:

- Wanted Persons, Missing Persons, Stolen Vehicles and Parts
- Firearms Transaction Processing
- Computerized Criminal History
- Consolidated Applicant Tracking
- Protective Orders
- Master Name Index
- Incident Based Reporting
- Task Force Investigation Processing
- Sex Offender Registry
- Mug Shots
- Concealed Handgun Permits
- Expungement Tracking
- Machine Gun Registry
- AFIS Messaging

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of State Police (VSP)

Project Formal Title: Enhancement of Communications Along Secondary Evacuation Routes I95

Investment Status: Approved for Development

Project Description:

This VSP project will establish interoperable communications between Virginia State Police, other Commonwealth Agencies and Localities during natural and man-made disasters, multi-jurisdictional law enforcement activities and other cross locality incidents. This project will meet operational requirements, a State Code under Title 9.1 and recommendations from the State Interoperability Executive Committee (SIEC) to achieve specific statewide interoperability goals by the year 2015. The VSP project will add an additional sixteen (16) COMLINC sites to the existing sixteen (16) sites. COMLINC is a set of systems that provide voice communications capability across multiple radio configurations and systems. The additional sixteen (16) sites will allow interoperability within Virginia State Police Division 1 and the Interstate 95 corridor, from Maryland to North Carolina, in support of the Hampton Roads secondary hurricane evacuation routes as well as other coordination needs.

Project Scope:

The Enhancement of Communications Along Secondary Evacuation Routes I95 will

- Provide interoperable radio communications between the STARS system and other state agencies operating on STARS, such as the Department of Game and Inland Fisheries (DGIF) game wardens, Alcoholic Beverage Control (ABC) agents, and the Virginia Department of Emergency Management (VDEM)
- Provide voice connection capability between the VSP STARS system and other localities or between localities using radio interface equipment to create patches between these systems
- Interconnect any public safety frequency and existing radio equipment and conference participant dispatchers
- Connect incompatible radio equipment and systems during mutual aid situations for law enforcement, fire and rescue
- Establish COMLINC sites in the following areas:
 - Counties: Dinwiddie, Greensville, Louisa, King & Queen, King William, Prince George, Prince William, Spotsylvania, Stafford and Sussex
 - Cities: Colonial Heights, Hopewell, Petersburg
 - Virginia State Police: Culpeper Division Headquarters, Fairfax Division Headquarters
- Establish one transportable COMLINC site

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of State Police (VSP)

Project Formal Title: Law Enforcement Activity Management System

Investment Status: Approved for Development

Project Description:

The LEAMS project will provide a comprehensive system to support the documentation of criminal investigations and related law enforcement activities and reduce the agency's dependence on burdensome paper-based workflows and difficult-to-change legacy technologies. The system will make use of up-to-date technology to upgrade process controls, management/supervisory oversight, data quality, processing timeliness, system access, analytical tools, and intra-agency and inter-agency cooperation needed to maintain quality law enforcement records as mandated under §15.2.-1722 of the Code of Virginia.

Project Scope:

The system will include the following capabilities:

- Create electronic intake documents to record and track all requests for VSP
- Create and manage electronic files for investigations
- Send and receive work using electronic workflow management
- Conduct investigative analysis
- Secure information not only to control system access, but to facilitate internal and external information sharing
- Automatically notify investigators when certain updates are made by other users that may impact their investigation
- Electronically capture incident timeline information
- Provide a comprehensive system to record and track all evidence retrieved, held, and disposed of by VSP personnel
- Record and track legal documents received by VSP personnel and link them to activities performed by VSP personnel to serve or otherwise respond to these documents
- Record and properly secure information on Confidential Sources so that they can be linked to investigative files and activities without jeopardizing their anonymity
- Expunge records when ordered by a court
- Interface with the following VSP systems: Criminal Funds Accounting System (part of FACTS), Incident Based Reporting (IBR) repository
- Interface with the following external systems: National Data Exchange (N-DEX) and the Law Enforcement Information Exchange (LInX)
- Convert data from legacy systems that is still needed by users.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of State Police (VSP)

Project Formal Title: Replacement and Enhancement of the Central Criminal History (CCH) Application

Investment Status: Approved for Planning

Project Description:

The Centralized Criminal History (CCH) application is a component of the larger Central Criminal Records Exchange (CCRE) system. CCH is more than 30 years old, and many of its capabilities are based on a proprietary emulation package, which limits the Virginia State Police (VSP) ability to use the updated infrastructure on which it resides. The project includes purchasing of consulting services to gather requirements and develop an implementation plan for either the replacement or enhancement of the CCH system. Once the requirements have been gathered, the agency will survey the market to determine whether a suitable commercial off-the-shelf (COTS) package exists or whether development will be necessary. The project also includes planning for implementation of the system, including installation and deployment of the software at VSP and training services for VSP staff and local agencies.

Project Scope:

The scope of the project includes:

- Either the replacement or enhancement of the CCH system at VSP and at local agencies
- Either the replacement or enhancement of the Consolidated Applicant Tracking System (CATS) and the AFIS Messaging system, because they are tightly integrated with the current CCH system
- Support real time interfaces with other state agency systems such as Supreme Court and Department of Corrections
- Improve reporting flexibility through use of a standard reporting package
- Decrease the time to modify the software in response to legislative requirements
- Improve user interfaces
- Adopt national XML standards (GJXDM) resulting in improved interfaces with other state and local systems

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of State Police (VSP)

Project Formal Title: Replacement and Enhancement of the Statewide Incident-Based Reporting System (IBRS)

Investment Status: Approved for Planning

Project Description:

The project will either replace or enhance the current statewide IBRS which operates on legacy technology and does not meet the needs of the law enforcement community in Virginia. Consulting services will be used to gather the requirements for the target system. Once the requirements have been gathered, the agency will survey the market to determine whether a suitable commercial off-the-shelf (COTS) package exists, or whether development will be necessary. The project also includes planning for implementation of the system, including installation and deployment of the software at Virginia State Police (VSP), and training services for VSP and the local agencies.

Project Scope:

The Replacement or Enhancement of IBRS will:

- Provide local and state agencies with efficient access to IBR data with improved ad-hoc report generation capability developed using an industry-standard reporting tool
- Upgrade data submission standards to include Offense Tracking Numbers (OTNs), National Data Exchange (N-DEx) and the Global Justice XML Data Model (GJXDM); it is also probable that data standards related to the Law Enforcement Information Exchange (LInX) will be included
- Link IBR data with criminal history, wanted persons and other databases using incident numbers, OTNs and State IDs (SIDs)

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Public Safety

Agency: Department of State Police (VSP)

Project Formal Title: Statewide Agencies Radio System (STARS)

Investment Status: Approved for Development

Project Description:

The Statewide Agencies Radio System (STARS) Program will upgrade the existing Virginia State Police land mobile and microwave radio networks and make state of the art communications technologies available to more than 20 state agencies. STARS will create an integrated, seamless, statewide, wireless voice and data communications system designed to meet the needs of these agencies. STARS will also upgrade mobile radios, portable radios, and vehicular repeater systems. Localities and federal organizations can be added as full-time STARS users/partners when appropriate. The STARS Program will provide participating agencies with a cost-effective systems approach that enables interoperability between federal, local, and Commonwealth government agencies.

Project Scope:

The system will be shared by agencies engaged in public safety, protection, and service and will facilitate interoperability with and between localities at the county and city level. Radio communications for the Virginia components of the National Weather Service's Integrated Flood Observing and Warning System (IFLOWS) network are also being upgraded as part of this program.

The STARS program will:

- Increase capacity
- Upgrade the technology
- Enhance coverage of the land mobile radio network
- Implement statewide law enforcement mobile data
- Create disaster recovery alternate paths for the microwave radio network

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Technology

Agency: Virginia Information Technologies Agency (VITA)

Project Formal Title: Enterprise Architecture Application (EAA)

Investment Status: Approved for Planning

Project Description:

This major project, with statewide application, is estimated at \$750,000 and supports the continuing development of the Commonwealth's Enterprise Architecture (EA). It integrates appropriate EA information with the Commonwealth Project Management Division's (PMD) ProSight application. The results of the project will support the continued development of the Commonwealth's EA, eliminate the duplication of effort related to collecting and storing the same information multiple times, reduce the data collection efforts, promote data sharing, promote collaboration and sharing resources between agencies and support the ITIB and the CIO in meeting their Code mandates. This project will combine 2 existing applications, expand the capability of the combined applications and will use the existing and newly created information to support the Project Management Division's (PMD) strategic planning, project management and applications portfolio analysis efforts. The long term vision is to create a Commonwealth Enterprise Technology Repository (CETR) that captures data once and uses it many places.

Project Scope:

This project ties together the components (business, information, solutions, and technology) of Commonwealth's enterprise architecture and forms the information basis for identifying opportunities for collaboration at the enterprise level and for making informed investment decisions that are enterprise business driven. Once implemented, the Portfolio data will:

- Allow the Commonwealth to have an official repository of its IT investment data
- Allow the Comptroller to have information for the Commonwealth's annual financial report
- Allow the Commonwealth to analyze the cost of maintaining various systems and provide information to avoid allowing the continued maintenance and operations of critical systems that are becoming obsolete and expensive to maintain
- Address the Enterprise Applications Division mandates by providing information needed to support the CAO and the ITIB in the processes and procedures that will be set up to approve and oversee annual agency technology application budgets

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Motor Vehicles (DMV)

Project Formal Title: Automated Routing Solution – Hauling Permits

Investment Status: Approved for Development

Project Description:

In order to enhance the safety of the public traveling Virginia roadways, dramatically reduce the current labor intensive and time consuming manual processing of issuing hauling permits, and to improve customer service, DMV will purchase an Automated Routing Solution (ARS). The Superload Software Package, made by C.W. Beilfuss, is the only commercial routing software package available that provides a complete detailed live load bridge analysis of each bridge on the permit route, using the detailed axle configuration of the permit vehicle. This analysis occurs simultaneously with other aspects of route analysis, and incorporates data models currently used by Virginia Department of Transportation's (VDOT) Structures and Bridges Engineers. VDOT data will be integrated into the purchased ARS. The ARS will be integrated into the current DMV Internet Hauling Permit System, so that the ARS and the DMV Hauling Permit System appear as one system. The procurement, customization, and implementation of the Superload Software Package will enable the customers served by the Hauling Permits Division to apply for and receive approximately 75% of all permits within one day.

Project Scope:

DMV intends to acquire a system that would approve travel of Oversize/Overweight (OS/OW) vehicles over routes of the Commonwealth's highway network. The system shall analyze permit trips for route connectivity, turning ability, clearance availability, bridge-load capacity for the actual load configuration of the permit vehicle as it passes over each individual bridge, and temporary route restrictions. To ensure that the resulting routing system is correct for routing, and is maintained in that same correct manner, the routing system would be constructed using the same data that the VDOT gathers, maintains and updates for its normal highway description responsibilities, and for its bridge rating processes. The routing software shall include a map-based routing system that would:

- Allow users to route vehicles interactively with an electronic map
- Allow multiple route definition methods, including automated routing
- Check available live load capacity for bridges
- Check horizontal and vertical clearances
- Check temporary restrictions (i.e. highway maintenance and construction areas)
- Provide real time results
- Be fully integrated with the DMV's existing oversize/overweight permit automation so that the two systems would operate as one

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Motor Vehicles (DMV)

Project Formal Title: Customer Management Queuing System

Investment Status: Approved for Development

Project Description:

The project will replace the Department of Motor Vehicle's (DMV) current queuing system with a customer management system that will maximize CSC technology and optimize the use of CSC staffing resources. This project supports core agency functions related to customer service. It will assist with streamlining operations by offering the capability of capturing the "whole" customer experience. The Customer Management Queuing System will optimize employee productivity and enhance customer service. The system will provide the ability to assist staff with scheduling and identify customer trends allowing DMV to properly staff CSC offices and reduce wait times. The system will also provide customer scheduling capabilities, dashboard reporting, electronic distribution of reports, case management and contribute to DMV's Customer Management Relationship goals.

Project Scope:

The new CMS solution will be capable of being integrated with existing and future DMV systems based on its service oriented architecture. The Customer Management Queuing System will provide:

- Scheduling and management tools
- Enhanced reporting capabilities
- New ticket dispensers
- Web-based accessibility
- Customer relationship management tools

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Motor Vehicles (DMV)

Project Formal Title: DMV CSI System Redesign Project

Investment Status: Approved for Development

Project Description:

The CSS Redesign focuses on the fragmented processing of DMV's three major business areas: driver, vehicle, and motor carrier. The purpose of the redesign is to transform these fragmented fifteen year old systems into one modernized system that is responsive to the ever-changing needs relating to internal security, homeland security, legislative mandates, and customer relationship management. DMV has a unique opportunity to revolutionize the agency's approach to fulfilling its mission, carrying out core functions, and delivering service. DMV intends to fully integrate processing while incorporating and leveraging the full functionality and benefits of proposed technology solutions as well as the technology already in place.

Project Scope:

The solution to the fragmentation/modernization issue may come in the form of commercial off the shelf software, and in-house development effort, or a combination of both. The expected outcomes of the project include:

- Duplication of records eliminated
- Cases of identity fraud significantly reduced
- Criminal activity risks significantly reduced or eliminated
- Secure data shared between headquarters and service centers
- Ability to more quickly respond to government mandates
- Total time of customer's visit to DMV significantly reduced
- Record management that allows the tracking of customers and their related records across all critical business areas and related platforms
- Entire libraries of information (policies, procedures, etc.) available at each DMV customer service workstation.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Motor Vehicles (DMV)

Project Formal Title: Driver License Central Issue Services Project

Investment Status: Approved for Development

Project Description:

The Virginia Department of Motor Vehicles (DMV) seeks to establish a multi-year services contract, through competitive negotiation, for a secure Driver's License/Identification Card (DL/ID) services solution including all necessary hardware, software products, design, development, customization, installation, training, personnel, supplies and maintenance. DMV has determined the following strategic points are essential in the procurement, design, development, and deployment of the new DL/ID solution:

- Establish the identity of applicants when they first enter the application facility
- Utilize security features that include tactile features that can be detected under normal conditions
- Confirm the identity for renewals using prior image retrieval
- Establish a reliable and secure delivery method for the physical document.

In addition to the strategic points identified above, DMV is seeking an improved Virginia Driver's License and State Identification Card. Considered secure and reliable when first issued in 1999, the present driver's license and ID card lack the security standards now considered as minimum requirements in U.S. jurisdictions. The DMV is seeking new solutions that address the growing demand for secure government photo identification, which has increased for many reasons including domestic airline travel requirements and the increased incidence of identity theft.

Project Scope:

In a February 2005 report to Congress, the US Department of the Treasury cited Identity Theft as the fastest growing crime in the United States. Often the weakness in security and the ability to counterfeit or modify the driver's license has contributed to this issue. The Commonwealth of Virginia Driver's License and State ID cards are issued by the DMV. In order to enhance the security, integrity, and efficiency of the current driver's license and identification card, the solution must:

- Improve the security, integrity & quality of the Driver's License & State ID card
- Reduce future risk & costs
- Improve Virginia residents privacy & security
- Improve auditing & accountability

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Motor Vehicles (DMV)

Project Formal Title: On-Demand Registration Card and Validation Sticker Program

Investment Status: Identified for Preliminary Planning

Project Description:

The On-Demand Registration Card and Validation Sticker Program will post an RFP to replace the current vehicle registration card and decal printing solution with a print-on-demand system in HQ, 43 DMV Selects, 74 customer service centers, Virginia Correctional Enterprises and potentially 1201 dealers and fleets. The print-on-demand vendor will provide hardware, supplies, and software, which will allow DMV to capture each registration and decal issued out of each service outlets. DMV will pay the vendor per transaction, and the vendor will own and maintain all hardware. The result of this project will decrease the number of FTEs used to produce decals within HQ, reduce consignment, reduce waste, eliminate a labor intensive registration and decal production, set-up a back-up decal system, increase decal security, and reduce field consignment.

Project Scope:

The On-Demand Registration Card and Validation Sticker Program will provide vendor owned and maintained hardware, supplies, and software for a print-on-demand vehicle registration card and decal printing system.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Motor Vehicles (DMV)

Project Formal Title: TREDIS (Traffic Records Electronic Data System)

Investment Status: Approved for Development

Project Description:

The Traffic Records Electronic Data System (TREDIS) Project is developing an electronic system for use by Law Enforcement, DMV, and the Virginia Department of Transportation (VDOT) for processing of the FR300P Crash Report. The new TREDIS system will be able to process traffic crash reports in three ways:

- Using paper forms utilizing bubble fields that will be used to capture the crash information
- Using electronic data entry from the law enforcement agency representative's laptop
- Using electronic data feeds transmitted from law enforcement agencies that currently have third party software implemented for the capturing of crash report data

The project will focus on Law Enforcement (State and Local), DMV, VDOT and other traffic related entities involved with traffic crash processing.

Project Scope:

The scope of the TREDIS project will include the following areas:

- Capture as many reportable FR300P Crash Reports electronically as possible; the remainder will be done using optically recognized paper reports
- Enable law enforcement to transmit the data captured electronically to the TREDIS system
- Store all the FR300P Crash Report information in a central data store in the TREDIS system
- Make information from the FR300P Crash Reports available in for traffic related entities, via the TREDIS system, to analyze the crash information

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Transportation (VDOT)

Project Formal Title: FMS Project

Investment Status: Approved for Development

Project Description:

VDOT is seeking to replace its FMS II application. The new system will serve as the agency's financial management system of record. The functional scope of the project includes General Ledger, Accounts Payable, Accounts Receivable, Project Accounting, Purchasing, and Time and Attendance. A second phase of the project will be the establishment of a second instance of the application to serve as the basis for a statewide ERP. The statewide instance, or VEAP Base, will have General Ledger and Accounts Payable functionality.

A goal of the project is to have very limited software modifications; therefore, a significant Business Process Reengineering (BPR) effort is envisioned. A key element of this project is to establish data standards for financial management. VEAP will work closely with DOA, Department of General Services (DGS), Department of Human Resources and Management (DHRM) and VDOT to implement these standards. As part of the establishment of enterprise data standards, the requirements defined in the Commonwealth Business Architecture will be reviewed to ensure consistency with any new standards.

Project Scope:

FMS II is a critical component of VDOT operations. It processes many agency-critical transactions (purchase orders, vouchers, bills, payroll files) and "touches" an estimated 18 applications (10 internal, 8 external) who require financial data to successfully process a business transaction. The system needs to be replaced in order to remove the operational risks associated with an unsupported application. There is currently no statewide standard for enterprise financial management systems. The VDOT project, with strong DOA and VEAP representation, will serve as the foundation for an enterprise solution for the Commonwealth. As a second phase of the project, VDOT will work with VEAP and DOA to implement a second instance of the ERP solution for the GL and AP functional areas. This system will serve as the VEAP "Base" for which an enterprise financial management system can be built. As additional resources are available to the Commonwealth, the system can be rolled out to additional agencies and additional functionality can be implemented to achieve all of the benefits of an ERP. These additional efforts would be part of subsequent projects - not part of the VDOT FMS Project.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Transportation (VDOT)

Project Formal Title: Highway Performance Monitoring System (HPMS)

Investment Status: Approved for Planning

Project Description:

The Highway Performance Monitoring System (HPMS) supports the Roadway Network Systems (RNS) program within the Department of Transportation (VDOT). The HPMS project includes adding new data fields to RNS for new data; adding classified public roads to the Highway Traffic Records Information System (HTRIS); building a user interface to add/edit data in RNS; and developing a means of managing and creating a file to send all required data to the Federal Highway Administration (FHWA). Currently the legacy system Highway Traffic Records Information System (HTRIS) can not accommodate the new requirements for additional fields and geospatial data. Accuracy of the reported data from the Roadway Network System (RNS) HPMS module will be improved where road data is geospatially referenced.

Project Scope:

The scope of the project includes:

- New fields and data required by FHWA
- Producing annual data for the FHWA
- Providing geospatial capability that is mandated by FHWA
- Up-to-date technology that will allow turning off an old mainframe system
- Providing more accurate roadway information that will result in Federal funding

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Transportation (VDOT)

Project Formal Title: M5-EMS (aka FEMIS) Equipment Management System

Investment Status: Approved for Development

Project Description:

The Equipment Management System (EMS) was implemented in March 1993 to store all information related to VDOT owned equipment and provide improved internal equipment management, control and reporting at all levels. Since that time many other information systems have been developed for specific transportation needs. Many new and changing business functions have been introduced since the creation of the mainframe based EMS system. The system not longer meets the needs of the business. Modifications to this old technology based application are limited and time-consuming. Interfaces and interactions with other VDOT applications are necessary, but difficult with this current system. This project is to replace the current EMS system with a more functionally rich, new technology application, eliminating the need and costs associated with the mainframe, and to provide the business with many needed functions. The system is in scope to the Virginia Enterprise Applications Program (VEAP) but the implementation date is in the extended future and VDOT has been approved to proceed by VEAP. VDOT will evaluate potential fleet management commercial-off-the-shelf (COTS) packages as an alternative to building a system.

Project Scope:

The project approach is to define the scope of FEMIS and gather detailed business requirements, and then evaluate these requirements against the Maximus M5 COTS package. From this analysis, it will be determined how closely this package fits VDOT's Fleet Equipment Management business processes and which business processes may change to fit the industry practices incorporated into the package. The scope and requirements will incorporate current business functions and new industry recognized fleet management business standards.

Customers served by this project include: Districts, Residencies, and Area Headquarters Highway Maintenance and Construction Programs, the Asset Management Division, Equipment Section, Capital Assets and Inventory Control, Financial Management, Internal and APA Auditors, Joint Legislative Audit and Review Commission (JLARC), Employee Safety and Health Division, Operations Planning, and the Security and Emergency Management Division.

Expected benefits include: improved equipment management practices and capabilities; increased utilization of equipment, performance, and cost savings; improved reporting capabilities; data accuracy and integrity; elimination of mainframe processes; and providing a more user friendly, easier to navigate system by delivering a web enabled application.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Transportation (VDOT)

Project Formal Title: Pavement Management System

Investment Status: Approved for Development

Project Description:

This project will create a Pavement Management System (PMS) that will collect data on the composition of roadways. The system will provide analysis capability and assist in determining maintenance needs. The project fulfills several state and federal-level mandates and policy directives. These include:

- The recent state budget amendments requiring VDOT to annually report on its asset management methodology and the state of its infrastructure (HB5002 Item 444 #2c)
- Federal legislation requiring state Department of Transportation to have a skid crash reduction program that includes “*a systematic process to identify, analyze, and correct hazardous skid locations*” (23CFR 626)
- FHWA HPMS reporting requirements that include several pavement condition items
- FHWA policy directives that strongly encourage state highway agencies to have a PMS
- While a PMS is not mandated in SAFETEA-LU, FHWA division offices look for PMS capabilities in approval of use of federal highway funds for pavement maintenance

Project Scope:

The PMS will provide:

- Movement of the Pavement data maintenance module from the HTRIS mainframe to a Windows based application and database server using existing VDOT technology and infrastructure
- Development of an Oracle or Microsoft SQL Server database that will replace the pavement data portion of the current HTRIS database
- Web-based access for creation and maintenance of pavement inventory, work history, and condition/testing data
- Functionality for pavement needs assessment and treatment selection business processes through development or procurement of an appropriate system
- Interface to RNS as required for data integration and coordination of data input associated with changes to the inventory
- Interface to AMS as required for integration of PMS analysis into the broader asset management business process
- Critical data reporting, mapping, and web data viewing capability
- Training for all PMS users
- Implementation of new and improved business processes for developing and evaluating network and project-level scenarios

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Transportation (VDOT)

Project Formal Title: Roadway Inventory Management System

Investment Status: Approved for Planning

Project Description:

The Roadway Inventory Management System (RIMS) supports the Roadway Network Systems (RNS) program within the Department of Transportation (VDOT). RIMS involves a process redesign that will assist RNS in providing road inventory and attribute data on Straight Line Diagrams (SLDs) and maps. The current process and systems for capturing roadway inventory data are slow, inefficient and do not portray an accurate picture of the ground truth. No mapping capability is present today. Upon completion, RIMS will support RNS in providing streamlined business processes; timely updates to inventory; advanced inventory query and reporting; enhanced mapping functions; improved performance; and eliminate duplicate data entry for road inventory within the Database for Administering Changes in VDOT Highway Systems (DACHS) application.

Project Scope:

The scope of the project includes:

- Providing road inventory and attribute data on Straight Line Diagrams (SLDs) and maps
- Implementing multiple linear referencing methods (Intersection/Offset, Route/Mile point, Latitude/Longitude, Street Addressing)
- Providing workflow design based on streamlined business processes
- Eliminating duplicate data entry for road inventory within the Database for Administering Changes in VDOT Highway Systems (DACHS) application
- Providing timely (real-time or near real-time) updates to inventory
- Providing advanced inventory query and reporting
- Improved performance and enhanced mapping functions

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Transportation (VDOT)

Project Formal Title: Roadway Network Systems (RNS)

Investment Status: Approved for Development

Project Description:

RNS replaces the Highway Traffic Records Information System (HTRIS) with a geospatial, web-based, enterprise system to manage VDOT roadway inventory data. Overall, RNS will improve the associated business processes throughout the Agency. It replaces the outdated mainframe HTRIS, and will provide enterprise data and system interoperability. This system will move VDOT into the 21st century by making available a map-based means for managing and retrieving critical business information. It will reduce redundant roadway data entry, and eliminate data extraction and conversion processes to and from HTRIS.

Project Scope:

The project will spatially enable the HTRIS Roadway Inventory data, make this data accessible through relational database technology, migrate all existing business data and business data functionality, and provide interface potential to like information systems.

The scope of work includes the migration of all the data from the ADABAS HTRIS system to the Oracle RNS; ensuring the roadway geo-spatial data is aligned with the roadway centerlines; connecting the business data to the geo-spatial roadway data; building a web-based system for retrieving the roadway and business data; and improving business processes that have been limited due to the older HTRIS technology.

Appendix C - 2009 Major IT Project Descriptions

Secretariat: Transportation

Agency: Department of Transportation (VDOT)

Project Formal Title: VaTraffic

Investment Status: Approved for Development

Project Description:

VaTraffic will provide a fully functioning, web-based application for roadway incident management; statewide integration with the regional Smart Traffic Centers (STC) and the Transportation Emergency Operations Center (TEOC); and real time data feeds to the Virginia 511 Website and Virginia Integrated Voice Recognition (IVR) Phone Service. Due to the recent regionalization of operations management, VDOT requires an integrated solution for capturing, storing and disseminating relevant roadway information to field personnel, management and the traveling public, especially in the event of emergencies, such as severe weather. Data related to incidents, events and planned lane closures must be disseminated in an accurate and timely manner to benefit the public and internal customers. Reporting and analysis tools are also needed.

Project Scope:

Functional areas in the web application will include:

- Capturing, storing and disseminating data for Planned Events (work zones, special events, bridge openings)
- Capturing, storing and disseminating data for Unplanned Events (incidents, weather events, road conditions)
- Enhanced Mapping capabilities (point and linear events, form-driven data entry using route numbers, street names, mile markers)
- On-line Data Grid with filtering, sorting and grouping capabilities for analysis
- Canned and ad-hoc Reporting with exporting and printing capabilities
- Work Requests (window to AMS) for generating and tracking incident related work requests
- Auto-generated e-mail Notifications including forced alerts and user defined subscriptions