

Virginia Information Technologies Agency



Information Technology Investment Board

RECOMMENDED TECHNOLOGY INVESTMENT
PROJECTS (RTIP) REPORT
FOR THE 2008-2010 BUDGET BIENNIUM,
SEPTEMBER 1, 2008, SUBMISSION

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA





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1.0 RTIP Report

1.1 Summary of Board Project Recommendations

The Commonwealth Information Technology Investment Board (Board) recommends 48 technology investment projects listed in Appendix A of this report for new or continued funding. Twenty of the 48 projects are currently active, with an estimated total project cost of \$484,788,977, and are recommended for continued funding. All active projects are fully funded.

Twenty-eight new projects are recommended for funding. All new projects have received CIO planning approval and the estimated total investment is \$251,968,017. If all new projects are fully funded, \$182,474,042 will be required to support planned expenditures in the 2008-2010 budget biennium as outlined in Appendix B of this report. Nineteen of the 28 new projects are fully funded from either general or non-general funds while three are partially funded, accounting for \$129,068,479 of the total planned expenditures. Six projects are currently unfunded and an additional \$53,405,563 would be required in the 2008-2010 biennium to fund those projects.

Exhibit 1 summarizes the Board recommendation for new or continued technology investment project funding. As agreed to by the Board, the recommended list of active projects does not include the projects in the Virginia Information Technology Infrastructure Partnership, which implements the Northrop Grumman partnership and supporting contract. The Board fully supports the continuation of the partnership as a long-term Commonwealth program initiative. In recognition of the complexity, cost and significant impact of the infrastructure transformation on the operation of state government, the Board has established a dedicated committee to provide program governance and oversight.

Secretariat	Recommended for Continued Funding		Recommended for Funding		Total Recommended Projects		
	No.	Project Cost	No.	Project Cost	No.	Project Cost	Percent of Cost
Administration	0	\$0	2	\$1,000,000	2	\$1,000,000	0.1
Agriculture & Forestry	1	\$ 1,309,618	0	\$0	1	\$1,309,618	0.2
Commerce and Trade	1	\$ 2,959,705	1	\$45,000,000	2	\$47,959,705	6.5
Education	2	\$25,555,129	4	\$16,537,440	6	\$42,092,569	5.7
Finance	0	\$0	1	\$10,000,000	1	\$10,000,000	1.4
Health & Human Resources	2	\$6,309,134	11	\$97,687,527	13	\$103,996,661	14.1
Natural Resources	1	\$ 2,251,837	0	\$0	1	\$2,251,837	0.3
Public Safety	4	\$380,404,660*	6	\$36,750,000	10	\$417,154,660	56.6
Technology	0	\$0	0	\$0	0	\$0	0.0
Transportation	9	\$65,998,894	3	\$44,993,050	12	\$110,991,944	15.1
Totals	20	\$484,788,977	28	\$251,968,017	48	\$736,756,994	100

Exhibit 1: Summary of 2008 Major IT Projects Recommended for Funding

* The Recommended for Continued Funding amount for Public Safety includes the STARS project, accounting for \$357M of the total cost for that Secretariat.

In making these recommendations, the Board re-emphasizes its intent to give increased priority to IT projects that have statewide application or a potential for an enterprise solution. Projects with statewide application benefit multiple agencies within the Commonwealth or localities and can take the form of applications or contract vehicles. Enterprise solutions are generally implemented across all state agencies.

1.2 Report Background and Purpose

The Board serves as the supervisory board for the Virginia Information Technologies Agency (VITA). The Board is also assigned responsibility for the planning, budgeting, acquiring, using, disposing, managing and administering of information technology in the Commonwealth. In this role, the Board is required to submit a prioritized list of recommended technology investment projects for funding to the Governor and General Assembly by September 1 of each year.

In developing the 2008 Recommended Technology Investment Projects (RTIP) Report, the Board employed IT Investment Management (ITIM) best practices to select the right mix of technology investments (projects) from the Commonwealth Major IT Project Portfolio. Only projects supported by a strong business case, based on Board-established selection and ranking criteria, were considered as priorities for funding. In making its recommendations, the Board placed increased emphasis on IT projects offering enterprise solutions and projects with statewide application. The Board focus on enterprise projects and projects with statewide application is discussed in Section 1.5 of this report.

This year marks the sixth year for submission of the RTIP Report by the Board. While the purpose of the 2008 RTIP Report is to fulfill a mandated reporting requirement, it is the Board's desire that the report add value to the Commonwealth's technology investment decision-making process. To this end, the report reflects changes made by the Board in the past year to the technology governance process, which places increased emphasis on strong investment alignment to the Commonwealth's strategic goals and objectives as established by the Council on Virginia's Future, the Governor and the 2007-2011 Commonwealth of Virginia Strategic Plan for Information Technology.

Significant improvements in the Commonwealth's strategic planning process have occurred in the past year due to more consistent collaboration between agency business leaders and their supporting IT staff. The end result of this collaboration is a more tightly integrated agency strategic plan and IT strategic plan. An agency strategic plan sets priorities for an organization's technology investments and directs development efforts based on an organization's mission, goals, and objectives. Only one project (Virginia Department of Transportation's (VDOT) Financial Management System) that was not included the 2007 RTIP report was granted both planning and development approval since November 2007. Supported by a new Commonwealth portfolio management system (ProSight), the Board is now able to maintain better visibility into the Commonwealth IT investment portfolio, including regular portfolio reviews conducted as part of the Board's quarterly meeting agenda. Closer, regular scrutiny of the portfolio by the Board has reduced last-minute agency projects being submitted between RTIP reports.

1.3 Projects Recommended for Funding

The Board recommends funding be continued for 20 currently active projects, as listed in Appendix A. The estimated total investment in active projects is \$484,788,977. As of June 30, 2008, all active projects are fully funded and have reported cumulative expenditures of approximately \$277 million, or 57% of the estimated total investment.

The Board also fully supports continuation of the Virginia Information Technology (IT) Infrastructure Partnership between the Commonwealth of Virginia and Northrop Grumman Corporation to modernize and transform Virginia's IT infrastructure. The partnership and the transformation program are managed by the Virginia Information Technologies Agency (VITA), with oversight from the IT Infrastructure Committee of the Board. The 10-year partnership agreement is valued at \$1,986,304,000, with \$455 million in non-general funds committed through the end of the 2006-2008 biennium and planned expenditures of \$460 million in the upcoming 2008-2010 biennium.

The Board reviews the status of active projects at each meeting through the ITIB Major IT Project Status Report. The July 2008 status report shows 10 projects with a green status, ten with a yellow status, and zero reported as red. Projects with a yellow status are considered under control but are being closely watched by the CIO as agencies address minor project performance, schedule, cost, risk or scope issues. Because all active projects are under control or appropriate corrective actions are being taken, the Board recommends their continued funding. The Board retains the right to terminate any active project, based on the recommendation of the CIO, if the situation warrants.

The Board recommends funding for 28 new investment projects, as listed in priority order in Appendix A. The projects, which have received planning approval from the CIO, represent a potential investment of \$251,968,017. The 2008 Board recommendation contains 25 projects included in last year's report, but not initiated because of funding shortfalls or delays.

The estimated expenditure for the 28 planned projects in the 2008-2010 budget biennium is \$182 million. This accounts for 72% of the \$252 million total investment. For detailed information on planned expenditures and funding needed through the 2012-2014 budget biennium, please refer to Appendix B – 2008 Major IT Projects Approved for Planning Forecasted Expenditures and Funding. To fully fund the estimated project expenditures for all planned projects for the 2008-2010 budget biennium, an additional \$53 million is required. Twenty-two of the 28 planned projects, accounting for \$129 million of the estimated expenditures for the 2008-2010 budget biennium, are either fully funded or partially funded.

Exhibit 2 summarizes the funding source distribution of the 28 planned projects for the 2008-2010 biennium across general and non-general funds, as well as the specification of non-general funds from federal, state and other sources. The Non-General Other category is typically used when funding is available from internally generated savings, such as improved tax collection or reimbursements, or from fundraising.

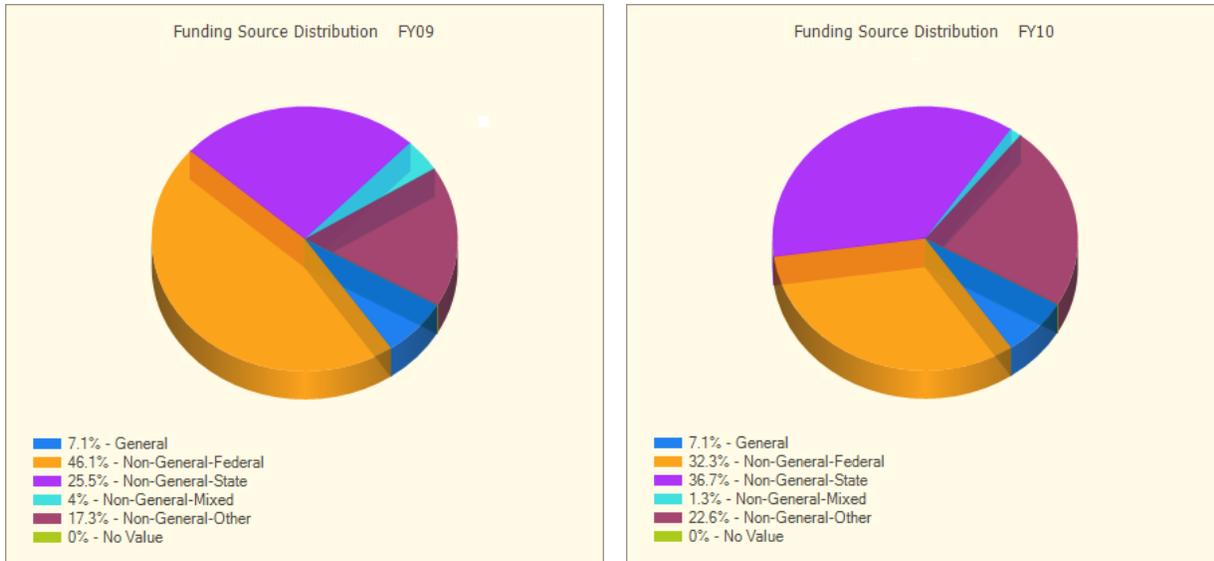


Exhibit 2: Summary of Funding Source Distribution for 2008-2010 Biennium

Regardless of funding status, none of the projects can proceed until they are granted development approval by the Board. An agency initiates development approval for a project by conducting an analysis of project solutions, preparing an economic feasibility study or cost benefit analysis, and developing a proposal and charter for the selected solution. The project documentation is reviewed by the Commonwealth Project Management Division (PMD) and the proponent Secretariat Oversight Committee, which recommend approval, disapproval or modification of the project to the CIO. Development approval follows an affirmative CIO recommendation and review by the Board. Projects must be fully funded to receive development approval from the Board.

As discussed in Section 1.5, the Board continues to place increased priority on IT projects that have statewide application or potential for an enterprise solution. Appendix B identifies 19 of the 28 recommended projects as having statewide application or enterprise solution potential. The Board strongly recommends that the Governor and General Assembly give consideration to collaboration or enterprise solution potential when considering agency funding requests.

1.4 Recap of 2007 Key Themes, Progress and Next Steps

The Board proposed four process-based recommendations in the 2007 RTIP Report to improve the overall governance and oversight of technology investments in the Commonwealth. In these recommendations, the Board requested that the Governor and/or General Assembly address the following key themes:

- Alternative governance, oversight strategies and processes to improve the ROI of the Commonwealth IT investment portfolio
- Auditable processes for reporting and review of total agency IT spend to include ongoing operations and maintenance investments
- Deployment of enterprise solutions

- A stronger quality IT strategic planning process to better align technology investments to overall agency business strategy, associated goals and objectives

To date, substantial groundwork has been laid to address these concerns. The Office of the Chief Applications Officer (CAO) was established by a letter from the Governor to address both application governance and enterprise solutions. In general, the Commonwealth lacks an enterprise governance and investment management program over total IT spend. Enterprise solutions benefit multiple agencies and a much broader stakeholder population, often resulting in significant economic returns or ROI. To align responsibilities between the offices of the CIO and CAO, the Board directed that an operational plan be developed for role sharing and to delegate *Code*-mandated CIO responsibilities for application governance and oversight to the CAO. Three main initiatives were generated from the operational plan. The first initiative, data management, begins the task of standardizing administrative data within the Commonwealth and will include standardizing data exchange protocols, determining authoritative data sources and streamlining redundant data. The second initiative, portfolio management, specifically focuses on capturing the applications portfolio within the Commonwealth. The third initiative will begin to determine "to be" governance of the applications as enterprise shared environments and services are implemented within the Commonwealth. For more information, go to the CIO/CAO Operational Plan on the Virginia Enterprise Applications Program (VEAP) website at http://www.veap.virginia.gov/documents/CIO-CAO_Operational_Plan_20040423.pdf

In order for the Board to track and oversee enterprise investments, a separate portfolio in the Commonwealth portfolio management system (ProSight) was established for VEAP. The portfolio currently contains a procurement for an enterprise business intelligence tool as well as planned enterprise financial management rollout initiatives. Additional enterprise investments will be added to the portfolio as they are identified by the CAO and the supporting agencies.

Additional projects of enterprise significance are underway within the agencies. The Virginia Department of Transportation (VDOT) Financial Management System project, recently approved for development, will replace the existing VDOT Financial Management System and will be the base financial system to replace the existing Commonwealth central financial system, CARS. One aspect of the project will be to create a new chart of accounts (COA) which will provide the flexibility necessary to better track the Commonwealth's expenditures and reporting requirements. The Department of Business Assistance, with VEAP's support, rolled out a Business-One-Stop pilot on the web in the second quarter of 2008. The pilot provides citizens with step by step processes for establishing a company within the Commonwealth. This pilot, while providing a direct service to citizens today, is allowing VEAP to further collaborate with agencies to provide better front-end editing of citizen data, to add new voluntary leads for citizens-agency cooperation, and to register and track minority based companies. Through the CAO's office and the VEAP program, competency centers, shared services and shared environments will be put in place during the 2008-2010 budget biennium to continue to drive towards a long term vision of data centric, integrated solutions.

The 2008-2010 budget biennium strategic planning process revealed a more tightly coupled IT strategic planning process with agency business planning through the Department of Planning and Budget's (DPB) guidance and strategic planning training. Eighty-five agency IT plans were closely scrutinized by PMD and by the CIO, resulting in higher quality IT plans and improved data quality in the 2008 RTIP Report. In the past, the APA has had difficulty determining not only the direction and objectives of the projects

underway in some agencies, but also whether these projects constitute individual small undertakings or are part of a larger more comprehensive agency IT strategy. Going forward, PMD and the CIO will reinforce agency responsibility to accurately self-report IT procurements and projects as part of agency ITSP and will communicate to agencies that early CIO involvement in IT procurements and projects results in timely review and decision. PMD and the CIO will also consider the implementation of agency "completion reporting" of approved Agency Procurement Requests to validate execution of agency strategic plans and supporting IT strategic plans. This evaluation is already in place for Commonwealth projects as part of the project close-out and post-implementation review conducted by PMD following the completion of a project.

During the 2008-2010 budget biennium, additional actions are planned to continue to address recommendations in the 2007 RTIP Report. In FY09, the CIO/CAO Operational Plan will initially focus on transitional actions for the Commonwealth, including the publication of a "to-be" business vision and strategy document intended to drive IT strategic planning. In addition, an initial set of enterprise data standards will be defined and adopted. This will address the ongoing issue of the implementation of disparate systems across the Commonwealth due to a current lack of standards.

To continue the theme of improved portfolio management, an initial inventory of applications in production throughout the agencies will be collected, consolidated and analyzed. This application inventory will also include operations and maintenance costs in order to better track total Commonwealth IT spend. Recent APA audits and inquiries indicate that agencies continue to implement technology investment projects using operations and maintenance funding that is not visible to the CIO and Board. The bulk of an agency's total IT spend is attributed to ongoing operations and maintenance tasks, and without an auditable accounting of how these funds are being spent, it is difficult for the CIO and Board to make informed investment decisions. In order to drive effective portfolio management at the agency-level, an IT Investment Management (ITIM) standard will be finalized and published to guide agencies on managing IT investments. Agency input into the ITIM Standard was gathered through the ITIM Customer Council, comprised of IT agency leaders from thirteen large and small agencies. The ITIM Customer Council is a body of agency business leaders chartered by the Board to provide a forum for continuous consultation on Commonwealth IT investment management practices.

1.5 Board Emphasis on Enterprise Projects and Projects with Statewide Application

In the 2008 RTIP Report, the Board continues to emphasize enterprise technology projects and projects with statewide application. Enterprise technology projects are projects requiring either vertical or horizontal integration within the Commonwealth, a Secretariat or agency, or between multiple Secretariats, agencies and/or localities. Projects with statewide application are defined as either enterprise technology projects or IT projects that implement a unique technology application or solution within an agency that also is accessed or utilized by other agencies in the Commonwealth.

Since enterprise and statewide application projects potentially benefit more than one agency and share resource demands, they generally are more cost effective and should provide a better return on investment than projects benefiting single agencies. The CIO and the CAO continue to screen all Commonwealth investments for enterprise and collaboration opportunities. Giving high priority to IT projects that may have benefits

across agencies is an important investment strategy that can more efficiently utilize scarce Commonwealth resources.

This continued emphasis on enterprise projects and projects of statewide application is reflected in the current Commonwealth portfolio. In coordination with the Secretary of Technology, two programs are in place to handle large, complex enterprise technology initiatives for the Commonwealth: the Virginia Information Technology Infrastructure Partnership and VEAP. In addition, the collaborative implementation of a web-based enterprise resource planning (ERP) administrative system known as Banner continues to be a successful effort in higher education. Following is a description of each of these significant enterprise and collaboration initiatives.

The IT Infrastructure Partnership is a program providing a modern, standardized IT infrastructure "utility" with improved services at predictable costs. The innovative program has been featured in *Governing*, *Government Technology*, *Public CIO* and *CIO* publications and has received recognition from the National Association of State CIOs and the Center for Digital Government. Since 2006, VITA and the partnership vendor Northrop Grumman have:

- Significantly increased security and reliability of IT operations and data, constructing two modern, custom-built data center facilities with advanced physical security monitoring and redundant power and utilities. Data center operations were moved successfully out of a facility that was rated a security risk into the primary data center in 2007, with disaster recovery capabilities fully tested and transferred from out-of-state facilities to Virginia in 2008.
- Modernized much of Virginia's infrastructure, replacing half of the aging, inefficient infrastructure at more than 2,000 locations for 85 executive branch agencies with a consistent, standards-based platform that is consolidated and centrally managed with industry best practices.
- Measured IT infrastructure performance across the enterprise, replacing "best effort" IT management with consistent, enterprise metrics. The first phase of service levels, with incentives and penalties, was implemented in July 2008, with all 159 service levels expected by July 2009.
- Increased transparency of IT infrastructure spending as a planned, budgeted and predictable expense. Rather than purchasing commodities, agencies are purchasing services and service levels, with installation, maintenance and replacement built into the service fees, resulting in infrastructure investments that are aligned with agency strategic planning objectives, adequately protected, and routinely serviced and replaced.
- Assisted southwest Virginia by opening the back-up data center and primary help desk in rural Russell County in 2007, which has created more than 400 high-tech jobs and encouraged Virginia natives who left the region in search of better jobs to return to their roots. An Associated Press article highlighting job-creation in southwest Virginia was picked up by media outlets across the nation and around the world in July 2008. Northrop Grumman invested more than \$200,000 in higher education curriculum development and workforce preparation initiatives in southwest Virginia.

Over the next biennium, the program will complete IT infrastructure transformation projects and complete the transition to a managed services environment, with emphasis on workforce transition and re-alignment activities and implementation of service level agreements. The program has continued dependency on and heightened coordination with the 85 customer agencies' business processes and applications owners, and

significant emphasis on internal business support processes, such as asset inventory and billing, purchasing and requests for new services.

While the IT transformation program focuses on the aging Commonwealth's infrastructure, the Virginia Enterprise Applications Program (VEAP) is in the process of transforming many of the Commonwealth's administrative business processes and applications. The program is achieving this vision by engaging in a series of projects and initiatives focused primarily on the Commonwealth's administrative business processes and the data required to accomplish those processes. Key among the deliverables that VEAP envisions are a best practices-based set of modern policies and procedures, common reporting tools and the consolidation of Commonwealth data. In addition to partnering with VDOT on the Financial Management System project, VEAP is:

- Working with DPB to select and implement a new performance budgeting system. This system will create a service delivery organizational structure and provide enhanced communication, reporting and security.
- Establishing a business intelligence competency center to support the rollout of a newly acquired analytical tool and to facilitate the exchange of data and knowledge sharing between agencies. This business intelligence initiative offers agencies improved reporting and decision-making capabilities.
- Sponsoring an enterprise content management initiative to provide shared services to agencies who could not otherwise afford a full content management implementation. As part of this initiative, VEAP is working with agency representatives to determine the best way to deploy the shared service.
- Initiating a digital signature pilot with the Department of Mines, Minerals and Energy (DMME) and VDOT. DMME and VDOT expressed a business need for acquiring digital signature capability that will allow companies to submit digitally signed copies of maps and other technical documents to the agency in order to reduce the costs associated with processing bulky paper documents and to improve document processing times. A memorandum of agreement (MOA) with a registered vendor on the General Services Administration Access Certificates for Electronic Services (ACES) program provides the agencies with the ability to purchase digital signatures for internal agency use and for agency vendors to purchase signatures for submission to the agencies. The results of the pilot will be used to determine the best approach going forward. Many other state agencies such as Department of Game and Inland Fisheries (DGIF), Virginia Department of Social Services (DSS), various licensing boards and the Secretary of the Commonwealth have expressed a potential use for this capability.

Over the course of the 2008-2010 budget biennium, VEAP will continue to coordinate and evaluate numerous initiatives within the Executive branch to determine when an enterprise solution will enhance numerous agencies' capabilities, not just one agency's capability. Solutions will be consistent with Virginia's position among the states as a financial and technology leader with the goal of significantly increasing the efficiency and effectiveness of the Commonwealth staff.

Currently, 11 higher education institutions share functional and technical knowledge on using the Banner ERP software. This knowledge transfer occurs at the Mid-Atlantic Banner User Group (MABUG) and through direct contact among the Banner institutions. Ten institutions have completed the implementation of Banner and one institution (Radford University) currently has an active project to implement Banner. In addition, the member institutions are also participating in a collaborative non-major IT project for interfacing Banner with the eVA procurement system. Through this collaboration, each institution will

receive a copy of the standard interface to reduce the cost of developing a unique interface.

1.6 Report Development Process

In the past, continuing issues in aligning the schedules for agency strategic planning, IT strategic planning, and the RTIP report publication date have hindered the effective integration of the RTIP process into statewide strategic planning. Last year, the Board recommended an alignment of these activities to improve integration and ensure that Commonwealth business needs drive technology solutions. The development process for last year's RTIP report consisted of two phases due to the shift in the DPB agency strategic planning dates for the update to the 2006-2008 budget biennium to the fall. The strategic planning process for the 2008-2010 budget biennium occurred on a regular cycle and only one report has been developed for 2008. Special instructions regarding the update of major project information within the Commonwealth portfolio were issued to the agencies via the DPB strategic planning process. Once data was collected in ProSight, the automated scoring and ranking process (based on Board-approved selection and ranking criteria) was used to derive an initial project ranking.

Based on the initial project ranking, the CIO presented a final recommended ranking to the Board. Following review of the CIO recommended project ranking, the Board approved the projects and priorities listed in Appendix A for the 2008 RTIP Report. Exhibit 3 summarizes the RTIP process used to develop the September 1 report.

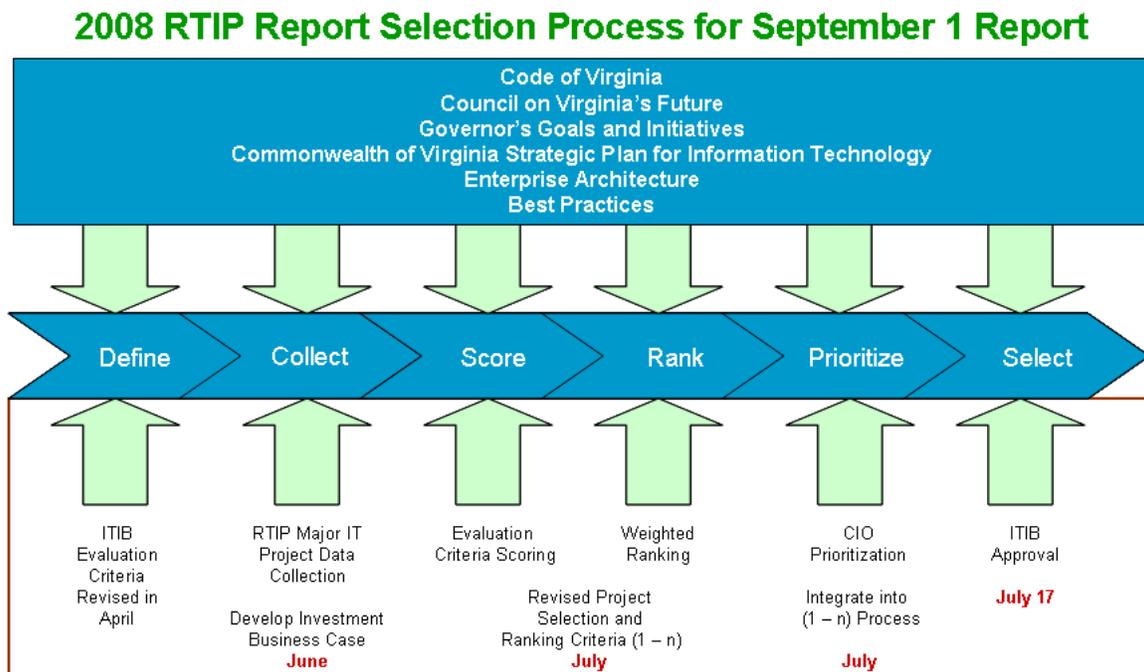


Exhibit 3: Summary of 2008 RTIP Process

1.7 Status of 2007 RTIP Recommended Projects

Recognizing the dynamic nature of the Commonwealth IT Portfolio since the publication of the 2007 RTIP Report Update in November 2007, the portfolio has continued to evolve:

- Seven projects, with a total investment of \$54 million, were successfully completed.
- Four projects, representing an investment of \$8 million, were granted development approval and are now active.
- Four projects, representing an investment of \$121 million, were reclassified in project category or approval status.
- One project recommended in the 2007 RTIP Report, with an estimated cost of \$720K, was cancelled due to consolidation or agency response to changing business needs or opportunities.
- The status of forty projects, representing an investment of \$645 million, remains unchanged.

Appendix D details the changes in the Commonwealth IT Portfolio from the 2007 RTIP Report to the 2008 RTIP Report.

1.8 Contact Information

Questions or comments about the 2008 RTIP Report may be directed to Constance Scott at (804) 416-6179 (constance.scott@vita.virginia.gov) or Nicole Helmantoler at (804) 416-6171 (nicole.helmantoler@vita.virginia.gov).

2.0 Appendices

Appendices are included as separate attachments with the report. A description of each Appendix follows:

- **Appendix A - 2008 Major IT Projects Recommended for Funding:** Presents summary information about active projects on the Commonwealth Major IT Project Status Report Dashboard recommended for continued funding (active projects are not ranked) and new major IT projects approved for planning (development approval is contingent upon funding) and recommended in order of priority for funding.
- **Appendix B – 2008 Major IT Projects Approved for Planning Forecasted Expenditures and Funding:** Presents detailed information on planned expenditures and funding needed through the 2012-2014 budget biennium for new major IT projects approved for planning (development approval is contingent upon funding).

- **Appendix C- 2008 Major IT Project Descriptions:** Presents the project description and investment status for each project recommended in the 2008 RTIP Report. Projects are alphabetized by Secretariat, agency and project name.
- **Appendix D - Status of 2007 RTIP Recommended Projects:** Presents the status, as of June 30, 2008, of major IT projects recommended for continued or new funding in the 2007 RTIP Report.
- **Appendix E – Portfolio ROI Calculations:** Presents the supporting detail calculations for Commonwealth portfolio for active major and non-major projects and the active major project portfolio.