

Virginia Information Technologies Agency



# Quarterly Status Report

January 1, 2004



*expect the best*

*October – December 2003*

In keeping with our commitment to cost savings, this report was produced in limited quantities, in-house, utilizing an existing color printer and binding equipment.

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### About the Cover:

VITA equals people first, customer-driven and customer-focused, and is committed to growing its people through ongoing training/re-training throughout their professional careers. In our logo, we highlight individuals of our agency that make VITA a success seven days a week, 365 days a year. We are currently featuring the following outstanding VITA employees in our logo (from left to right): C. Austin Matthews, Chief Financial Officer; Gloria D. Dandridge, Customer Support Services; George F. Williams, Project Management Specialist; and Leslie Carter, Director of Computer Services.



## COMMONWEALTH *of* VIRGINIA

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January 1, 2004

The Honorable John H. Chichester, Chair  
Senate Finance Committee

The Honorable Walter A. Stosch, Chair  
Senate General Laws Committee

The Honorable Vincent F. Callahan, Jr., Chair  
House Appropriations Committee

The Honorable Joe T. May, Chair  
House Science and Technology Committee

The Honorable John S. Reid, Chair  
House General Laws Committee  
Virginia General Assembly

Gentlemen:

Governor Mark R. Warner's Executive Order 50 (03) directs the Chief Information Officer (CIO) to prepare Quarterly Reports, beginning July 1, 2003, providing the status of IT reform implementation in the Commonwealth. The Final Virginia Information Technologies Agency (VITA) Operating Plan, delivered on August 29, constituted the delivery of the Quarterly Report for the period of July 1 to September 30, 2003. This document represents the quarterly submission due January 1, 2004, covering activities occurring from October 1 to December 15, 2003 (except where noted).

Over the past three months, substantial progress has been made in all areas of VITA operations. The Information Technology Investment Board, which supervises VITA and oversees major IT investments in the Commonwealth, has also established its initial organizational structure, and has launched a nationwide search for a Chief Information Officer. Thanks to the cooperation of customer agencies, the Virginia Department of Transportation, and VITA staff, we have successfully transitioned 35 organizations classified as small agencies to VITA services and support. Furthermore, Virginia received the 2003 Recognition Award for the State Information Technology Management Initiative category from the National Association of State CIOs (NASCIO), recognizing the innovative IT transformation initiative and the creation of VITA.

Reflecting these intensive activities and accomplishments, this Quarterly Report is organized into six major topics, including phased transition of agencies, the VITA organization, infrastructure initiatives, project management, a financial update, and Information Technology Investment Board actions.

At the end of the quarter, the Auditor of Public Accounts (APA) completed a review to determine whether internal controls and automated systems at VITA are sufficient to provide the Information Technology Investment Board and the CIO with timely and accurate financial information. The final report along with VITA's response and an aggressive plan of action are expected to be released in early January. We anticipate this will be a forward-looking and constructive analysis resulting in actions VITA will undertake to strengthen existing foundations and governance structures.

As we look forward to the challenges and opportunities 2004 will bring, I thank you for your continued support and cooperation as we continue to partner in transforming IT service delivery in the Commonwealth. While we have made great progress in just six short months, much significant work lies ahead to ensure the successful transition of medium and large agencies, the financial stability and long term viability of VITA, and the cultural shift toward enterprise management which must take root across all agencies if enterprise benefits are to be achieved.

I wish you every success in the upcoming General Assembly session, and all the best in the New Year. As always, I would welcome the opportunity to discuss with you any aspects of VITA and the IT consolidation efforts underway. Please contact me with any questions or suggestions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cheryl F. Clark', with a stylized flourish extending to the right.

Cheryl F. Clark

Attachment

cc: The Honorable Mark R. Warner  
The Honorable William H. Leighty  
The Honorable George C. Newstrom  
Information Technology Investment Board Members  
The Honorable Kevin G. Miller, Chairman, Joint Legislative Audit and Review Commission  
The Honorable Janet D. Howell  
The Honorable Samuel A. Nixon, Jr.



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# Section 1: Quarterly Summary of Activities

## Introduction

Governor Mark R. Warner’s Executive Order 50 (03) directs the Secretary of Technology or the Chief Information Officer (CIO) to prepare Quarterly Reports, beginning July 1, 2003, providing the status of IT reform implementation. The Final VITA Operating Plan, delivered on August 29, constitutes the delivery of the Quarterly Report for the period of July 1 to September 30, 2003.

This document represents the quarterly submission due January 1, 2004, covering October 1 to December 15, 2003 (except where noted). The initial Operating Plan submission dated August 29, 2003, which includes extensive base and reference documentation not repeated in this Quarterly Report, can be seen at <http://www.vita.virginia.gov/docs/operatingPlan/operatingPlan.cfm>.

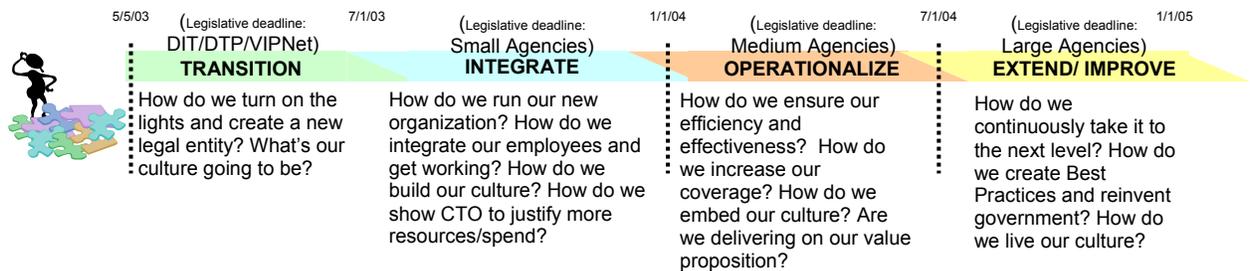
Over the past three months, substantial progress has been made in all areas of VITA operations. The Information Technology Investment Board, which supervises VITA and oversees major IT investments in the Commonwealth, has also established its initial organizational structure and is actively functioning in all aspects of its responsibilities. Thanks to the cooperation of small agencies and the assistance of the Virginia Department of Transportation, 35 small agencies were transferred to VITA services and support.

Reflecting these extensive activities and accomplishments, this Quarterly Report is organized into six major topics. These topics and their quarterly highlights are outlined below. Further detail on each topic is then provided in the remaining sections of this document and the accompanying appendices.

## Quarterly Highlights

### Phased Transition of Agencies

The legislation creating VITA calls for a phased transition of agencies to VITA services and support over an 18-month period, beginning with the creation of VITA in July 2003. The transition is divided into the following phases:



As seen in the chart on the previous page, VITA is completing the integration phase, including the transition of 36 small agencies (having fewer than 100 employees) to VITA support and services, and initiating the operational phase, including the transition of medium agencies (between 100 and 400 employees).

A full description of agency transition activities is located in Section 2 of this document. Highlights from the quarter include:

- **As of December 30, VITA successfully transitioned 35 of the 36 small agencies to VITA support and services.** The remaining small agency, the Board of Accountancy, voted in its November meeting not to transition to VITA. The matter has been referred to the Chairman of the Information Technology Investment Board.
- **The transition plan for medium and large agencies was developed, approved, and published.** The Medium Agency Transition Team (MATT) has been chartered to provide input and guidance to the medium agency transition process between January and July 2004, and will offer workshops for medium and large agencies in January 2004.
- **Funding for ongoing support of several small agencies remains an open issue.** Though VITA restored the anticipated savings that were swept from small and medium agency budgets, many small agencies are concerned about paying ongoing costs for VITA support.
- **The Virginia Department of Transportation, a large agency, has requested early transition (first quarter of 2004).** VDOT has assisted VITA in the establishment of the VITA organization and the transition of small agencies. Early transition by VDOT would facilitate ongoing support of the overall transition effort.

## VITA Organization

The VITA Organization continues to grow and evolve throughout the transition effort, and will eventually include approximately 887 employees transitioning to VITA from small, medium, and large agencies. As can be seen in the chart below, the vast majority of employees comes in the final phase (large agencies include agencies with more than 400 employees).

Agency Size	Personnel Scheduled to Transition
Small	5
Medium	61
Large	820

More information about the VITA organization, including training initiatives, organizational chart, and employee “onboarding” process can be found in Section 3. Highlights for the quarter include:

- **Onboarding activities for all five employees mapped to VITA from small agencies has been completed or is underway.** The first two employees were welcomed to VITA on October 25, 2003. Two of the remaining three positions have

transferred to VITA's payroll effective December 25, 2003. Due to the holidays and vacation schedules, the transfer of the final position and the orientation portion of the onboarding process will be completed after the first of the year.

- **The Acquisition Services Directorate changed its name to Supply Chain Management and was reorganized to be better aligned with Procurement Reform initiatives.** "ProReform" is aimed at leveraging the Commonwealth's significant buying power, entering into innovative partnerships with suppliers, and supporting enterprise-wide procurement of IT-related products and services.
- **All staff members initially assigned to the Resource Development & Projects office have been reassigned and redeployed to other parts of the VITA organization.** Staff was assigned to the RDP in July, at the time the Department of Information Technology, the Department of Technology Planning, and Virginia Information Providers Network Authority were abolished. VITA is committed to providing state IT employees with career opportunities through training and re-skilling, and redeployment elsewhere within the VITA organization.
- **The VITA Staffing Plan was developed and approved for fiscal year 2004.** The Plan calls for attrition management and monthly reviews of new positions.

## Infrastructure Initiatives

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VITA is investing in its infrastructure to provide foundational services to its customers, to prepare for consolidation of equipment and services, and to provide excellent customer service to existing and newly transitioned VITA customers.

See Section 4 for additional information on VITA infrastructure initiatives, including base service improvements, telecommunications, and networking. Highlights for the quarter include:

- **VITA established two critical, foundational services—the VITA Customer Care Center and Agency Customer Contacts.** The VITA Customer Care Center (VCCC) is the single point of contact for customer agencies to resolve service problems, order new services, and seek assistance. The Agency Customer Contacts service provides customer support leadership throughout the Commonwealth.
- **VITA signed the four-year COVANET contract for a wide array of voice and data services, with more than \$12.5 million in savings.** Other base service improvements are underway, and are detailed in Section 4.
- **VITA is meeting or exceeding most performance metrics for service availability and responsiveness.** VITA systems and services remained fully operational throughout Hurricane Isabel and the storm aftermath.

## Project Management

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The legislation establishing VITA also created the Project Management Division within VITA to implement an integrated approach to the management of information technology investments for the Commonwealth. Quarterly activities related to the oversight and governance of IT projects, the Project Manager Development Program, and IT strategic planning can be found in Section 5.

Quarterly highlights include:

- **VITA submitted a list of prioritized technology investment projects for the 2004-2006 budget biennium to the IT Investment Board and the General Assembly.** The projects represent a broad range of initiatives across the Commonwealth.
- **VITA deployed the Commonwealth Project Manager Development Program.** The program is designed to provide information, resources, and affordable training opportunities to project managers throughout the Commonwealth.
- **On behalf of the CIO, VITA promulgated the Project Manager Selection and Training Standard.** The standard will help assure that project managers have the appropriate education, experience, and skills to manage projects successfully.
- **VITA provided initial Commonwealth Project Management Overview Training at no cost to participating agencies.** The training included an overview of project management in the Commonwealth, qualification testing, and affordable training opportunities.
- **Interim processes for IT Strategic Plan Amendment and Major IT Project Approval were implemented.**
- **VITA developed the Project Portfolio Database to facilitate IT Portfolio maintenance and reporting.**

## Financial Update

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Information on VITA's budget, projected revenues and expenses, rates for new services, and billing systems is available in Section 6. Highlights for the quarter include:

- **Interim rates for new services were reviewed and approved by the IT Investment Board and the Joint Legislative Audit and Review Commission.**
- **FY04-FY06 revenue and expense estimates were developed for all VITA services.** Internal Service Funds represent 67 percent of VITA's revenues, with 30 percent coming from special funds and the remaining 3 percent from general funds.
- **FY04/06 biennium budget requests were approved by the IT Investment Board.** Nine project or program requests, representing \$55.4 million above base funding, were submitted to the Department of Planning & Budget. A number of those requests are reflected in the Governor's Executive Budget.

- **FY 04 general funds for start-up costs have been received.** \$4 million in start-up costs have been shifted from general funds to internal service funds.
- **Revised VITA revenue and expense projections indicate an \$8.3 million shortfall in FY 04 and surpluses of \$1.8 million and \$3.4 million, respectively, in FYs 05 and 06.**

## Information Technology Investment Board Actions

The legislation creating VITA calls for the creation of the Information Technology Investment Board and charges it with oversight of technology investments in the Commonwealth and responsibility for the planning, budgeting, acquiring, using, disposing, managing, and administering of information technology in the Commonwealth. The IT Investment Board has met monthly since its inception in August 2003. Actions of the Board are described in Section 7. Highlights for the quarter include:

- **The Initial Board organizational structure was established,** including the election of the vice-chair and the formation of several sub-committees.
- **The Board has undertaken an extensive nationwide search for the Chief Information Officer for the Commonwealth.** The Board approved the appointment of Cheryl Clark—VITA’s Deputy CIO—as Acting CIO, until such time as a CIO is appointed by the Board, in the event that the Board is unable to conclude hiring negotiations prior to January 1, 2004.
- **Board oversight of Commonwealth IT investments at the budget, project planning, and project development levels, has begun.**
- **The Board reviewed, amended, and approved the FY 05 and 06 biennial budget requests for VITA.** The requests were forwarded to the Department of Planning & Budget.
- **The Board reviewed and approved interim rates for new VITA services.** The Joint Legislative Audit and Review Commission (JLARC) approved the interim rates December 8, 2003.

## Revisions to the Draft Quarterly Report

On November 25, 2003, VITA published the VITA Draft Quarterly Report reflecting activities and data from October 1 through November 15, 2003. VITA provided copies to the Information Technology Investment Board at its December 1 meeting and sought public comment and feedback through December 15. This Final VITA Quarterly Report includes revisions and updates. Significant changes include the following:

- Updated data on the small agency consolidation process (Section 2);
- Updates to plans for the medium and large agency consolidation processes (Section 2);

- Updated information on employee “onboarding” activities through the small agency consolidation process (Section 3);
- Information on the VITA Leadership Retreat held on December 15 (Section 3);
- Interim rates for new VITA services, as approved by JLARC on December 8 (Section 6);
- Information on the December 1 and December 10 meetings of the Information Technology Investment Board (Section 7).

## Auditor of Public Accounts Review

The Auditor of Public Accounts (APA) completed a review to determine whether internal controls and automated systems at VITA are sufficient to provide the Information Technology Investment Board and the Chief Information Officer with timely and accurate financial information. The APA provided a draft report on December 15, with the final report anticipated in January 2004. In accordance with standard procedures for such reviews, VITA will provide a formal response to the findings to the APA.

The draft report provides recommendations in the areas of finance, governance, and planning to build upon best practices, and promotes a forward-looking, productive dialogue between the APA and VITA. Based on the draft report, VITA is comfortable with its ability to address the recommendations in an appropriate timeframe that is in keeping with the schedule for transition of medium and large agencies.

## Comments and Questions

Comments and questions from the members of the IT Investment Board, the General Assembly, and other interested parties, are welcomed and encouraged. Comments may be conveyed electronically to [ContactUs@vita.virginia.gov](mailto:ContactUs@vita.virginia.gov). Please submit written correspondence to:

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Deputy Chief Information Officer  
Virginia Information Technologies Agency  
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Richmond, VA 23219

## Updates and Publications

Consistent with Executive Order 50 (03), VITA will deliver Quarterly Reports to the General Assembly on a calendar quarter basis (January 1, April 1, July 1, and October 1). Quarterly Reports are published to the VITA Web site at <http://www.vita.virginia.gov/docs/docs.cfm>.



## Section 2: Phased Transition of Agencies

### Activities/Milestones Last Quarter

#### Transition Schedule

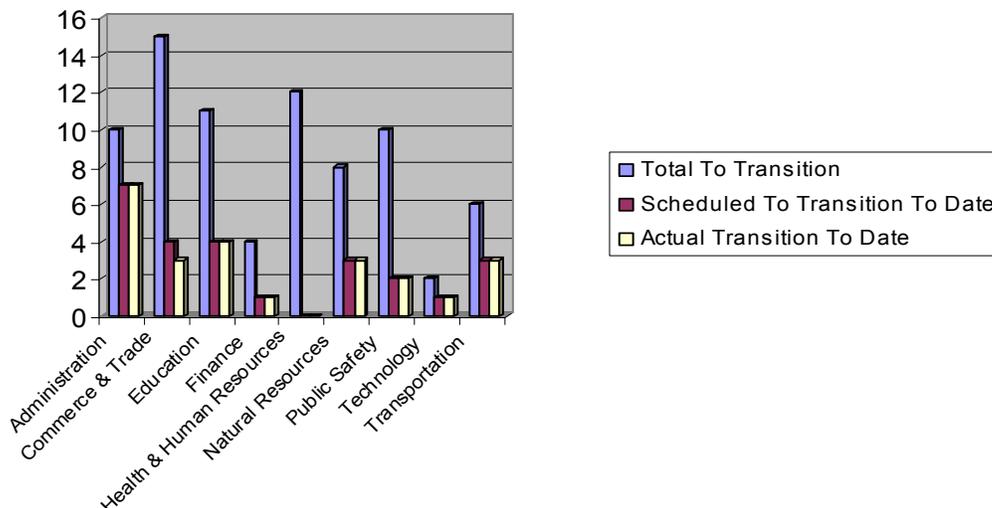
As of December 30, 2003, 35 of the 36 planned agency transitions have occurred. The Board Of Accountancy voted on November 13, 2003, to not transition to VITA support at that time. The Board plans to revisit the benefits of transitioning in Spring 2004 when their desktop management contract expires. The matter has been referred to the Chairman of the Information Technology Investment Board.

#### Section Highlights:

- Transitioned 35 small agencies and Secretariats to VITA support and services.
- Transition plan for medium agencies developed, approved, and published.
- Funding for ongoing support of several small agencies remains an open issue.
- The Virginia Department of Transportation, a large agency, is requesting early transition (1<sup>st</sup> qtr 2004) to facilitate ongoing support of overall transition effort.

The original schedule required two to three agencies to be transitioned per week between September 15 and December 12, with the remainder of December held in reserve for contingencies and in recognition of the holiday period. The actual schedule varied somewhat as several agencies requested delays due to unanticipated business reasons, or additional time was required to complete transition documents.

**Exhibit 2-1  
Actual vs. Planned Small Agency Transition**



Two small agencies, the Virginia Board for People with Disabilities (VBPD) and the Department for the Deaf & Hard of Hearing, are among four disability services agencies that have received their IT support services from the Department of Rehabilitative Services (DRS)—a large agency—for the last six years. In response to a request from the Secretary of Health and Human Resources, transition scheduling of these four agencies will occur in concert with DRS in the fall of 2004.

Consistent with this approach, the following small agencies will transition with the larger organizations from which they currently receive IT support:

- **Commonwealth's Attorneys' Services Council** (Support from William & Mary; may be rolled into Department of Criminal Justice Services);
- **Department of Aging** (will transition with Department of Health);
- **Comprehensive Services for At-risk Youth and Families** (will transition with Department of Social Services);
- **Chippokes Plantation Farm Foundation** (will transition with Department of Conservation and Recreation).

With a total of only five agency staff positions transitioning from small agencies, VITA has relied on collaboration from the Virginia Department of Transportation (VDOT) and its district office IT staffs, and assistance from the Department of Rehabilitative Services (DRS) and Department of Mental Health, Mental Retardation & Substance Abuse Services (DMHMRSAS) and their field locations, for much of its small agency support to date. These agencies are to be commended for their cooperative spirit and teamwork in making significant contributions to VITA's successes to date.

## Standardization and Optimization

An essential step in the transition process is "Standardization and Optimization"—ensuring that agency infrastructures being brought into VITA meet initial standards sufficient to allow VITA to provide appropriate support. "S&O" involves not only the capabilities and capacities of hardware and software but also how systems and networks are set up and tuned for operation. S&O activities ask the following three questions of the computing environment:

- Is it secure?
- Is it supportable?
- Is it legal?

Appendix 2-1 details these initial standards.

S&O costs for the small agencies totaled \$153,000. Funds for these one-time costs were paid out of monies returned to small agencies to cover projected VITA cost savings deducted from their FY 04 budgets in the 2003 Appropriation Act. VITA start-up funds were used to cover costs where the refund did not cover S&O activities. In addition, VITA will refund VDOT nearly \$400,000 for various management and support activities provided throughout this transition period.

On an ongoing basis, the costs of providing VITA’s standard levels of service are reflected in the VITA rate schedule, approved by the Joint Legislative Audit and Review Commission (JLARC) on December 8, 2003. IT costs for several small agencies are not currently delineated in a manner to determine how the VITA rate schedule will impact agency expenditures. Although initial financial analysis of the VDOT budget indicates a ‘break-even’ status when VITA rates are applied, it is not clear if this status is consistent throughout the Commonwealth. It is commonly believed that those agencies that have traditionally under-funded IT will experience a cost increase. Further discussion of this issue and potential resolutions are in progress.

## Service Quality and Responsiveness

VITA continues on the path of Operational Excellence. ‘Expect The Best’ is more than our motto; we track, measure, analyze, and improve our processes to meet aggressive performance measures. Prior to the creation of VITA’s performance measures, small agencies had no means by which to measure service delivery and effectiveness. As a result of the performance measurements, agencies will have consistent, performance-based data on customer service and support and a means to measure VITA’s effectiveness.

VITA established performance measures for determining the quality and timeliness of service, as well as targets (“goals”) for each metric during the overall transition period for all agencies. Exhibit 2-2 provides these measures and their associated goals. With no meaningful baseline data, VITA chose to establish aggressive performance measures versus setting easily obtainable, less-than-desirable goals. Future Quarterly Reports will include actual measurements based on the first quarter of small agency support.

Prompt and effective responses to service requests are vital to VITA’s success; as such, we continue to listen to our customers and monitor services to identify opportunities for improvement.

### Exhibit 2-2 Service Quality & Responsiveness Performance Measures

Performance Measurement	Goal
<b>Service Quality</b>	
1 <sup>st</sup> call resolution percentage	55%
<b>Service Timeliness</b>	
Work completed within priority guidelines	
• Critical Priority	90%
• High Priority	90%
• Medium Priority	90%
• Low Priority	95%
Phone call answered within designated timeframe (30 sec.)	70%

## Activities/Milestones Next Quarter & Beyond

### Agency Transition

The following chart shows the level of effort required for medium and large agency transition assuming the effort is proportional to the small agency effort. Although the exact number of personnel required to perform medium and large agency transition may not be proportional to that required in small agencies, the magnitude is evident.

Agency Size	Personnel Scheduled to Transition	Number of Supported Locations	Tech Staff required in 11 functional areas to perform transition	Admin Staff	Management Staff	Total transition staff required
Small	5	82	20	4	2.5	26.5
Medium	61	149	36	7	4.5	47.5
Large	820	1,266	308	62	38.5	408.5

The small agency transition was most challenged by availability of appropriate resources and funding sources for Standardization and Optimization (S&O) activities. Partnering with VDOT and using their extensive resources enabled VITA to fulfill small agency transition requirements, but it became clear that the detailed approach used for small agency transition would not be workable for medium and large agency transition.

Based on lessons learned from the small agency transition and the magnitude of the medium and large agencies, the approach to transition will be altered to reflect a self-serve model. Consistent with small agency transition, the S&O activities previously mentioned will be used as the foundation for transition. These activities are key to obtaining future VITA cost savings.

A core team of agency and VITA personnel have been assembled to guide the medium and large agency transition. A larger advisory group of agency IT leaders has also been assembled to provide input and insight to transition plans. Exhibit 2-4 provides milestone dates.

Of special note, pending approval by the IT Investment Board, one of the early transitions during this period will be VDOT, requested for 1<sup>st</sup> Quarter 2004. In virtually every measure, VDOT represents about one-fifth of the total IT resources that will transition to VITA from all in-scope agencies. Its early formal entry into VITA will provide critical mass to help ensure the smooth transition of the medium and large agencies to follow.

**Exhibit 2-4**  
**Schedule for Medium Agency/VDOT Transition.**

Event	Date
Transition Workshop Series	January 14, 2004
Transition Workshop Series	January 21, 2004
Proposed VDOT Transition	February 10, 2004
Engage agencies for specific transition discussions	February 9, 2004 through April 15, 2004
Cabinet Transition Update (ongoing every other week)	February 16, 2004
All Medium Agencies complete S&O activities and sign transition acknowledgement	March 30, 2004
VITA begins spot checks for S&O compliance	April 05, 2004
Cabinet Transition Update	May 3, 2004

A key component to successful self-serve transition will be attendance at the Transition Workshop Series that will be offered on two separate dates. The workshop series will include the following topics:

- Rate definition and importance of Asset Management;
- Service Delivery Workbook and Standard Operating Procedure;
- VITA mission, vision, functions, values, and culture;
- Incident reporting and the VITA Customer Care Center (VCCC);
- Project life-cycle;
- Standardization and optimization activities, road to transition; and
- Role of the Service Level Director.

After an agency completes one of the Workshop Series sessions, VITA will engage participants for specific discussions pertaining to their agency's transition. This will be the agency's opportunity to raise special concerns and situations.



## Section 3: VITA Organization

### Activities/Milestones Last Quarter

#### Staffing Planning

One of VITA's most significant transition challenges is establishing a cohesive, service-oriented organizational structure that also accommodates the 887 IT staff/contractor positions mapped to come to VITA from the "in-scope" agencies. To accomplish these dual objectives while also remaining within the total position count requires careful management of vacant positions, whether they occur as mapped positions transferred to VITA or via attrition within the agency.

Under a planning approach approved by the CIO, the VITA Leadership Team jointly administers this process. Existing and projected vacancies are tracked by VITA Human Services on behalf of all directorates. A list of needed positions across the agency, also maintained by Human Services, is reviewed monthly by the Leadership Team to determine priorities to which vacancies will be allocated.

#### Recruitment and Employment Levels

A total of 21 positions are currently in some phase of recruitment. While these positions are spread across several directorates, Customer Support Services (CSS) has been consistently viewed by the Leadership Team as a focal point during the early stages of the 18 month transition period. Six of the positions currently being recruited are for CSS, including four Enterprise Service Directors, who will be assigned to support specific Cabinet Secretariats. Establishing a strong customer-facing organization is key to effectively managing the dispersed IT personnel and infrastructure that is in the process of moving to VITA.

At this point in the transition, VITA's authorized MEL (Maximum Employment Level, or position count) for classified state employees is 371. The current classified staffing level (filled positions) is 347. In addition, there are 44 contractors and 33 wage employees, for a total of 424 employees in all categories.

Exhibit 3-1 on the following page illustrates VITA current classified staffing and recruitment activities during the quarter.

#### Section Highlights

- All five employee positions mapped to VITA from small agencies have been successfully transitioned.
- The Acquisition Services Directorate changed its name to Supply Chain Management and was reorganized to be better aligned with Procurement Reform initiatives.
- All staff members initially assigned to the Resource Development & Projects office have been reassigned and redeployed within VITA.
- The VITA Staffing Plan was developed and approved for fiscal year 2004.

**Exhibit 3-1  
Position Levels and Recruitment**

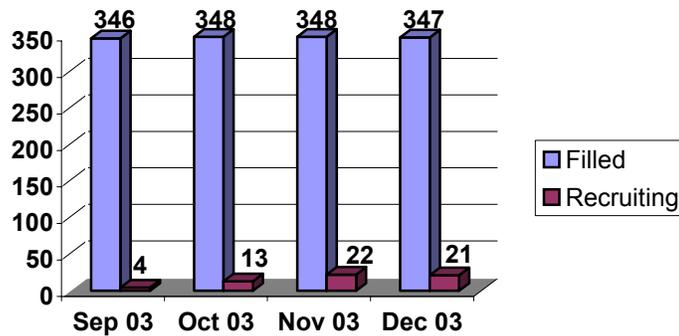
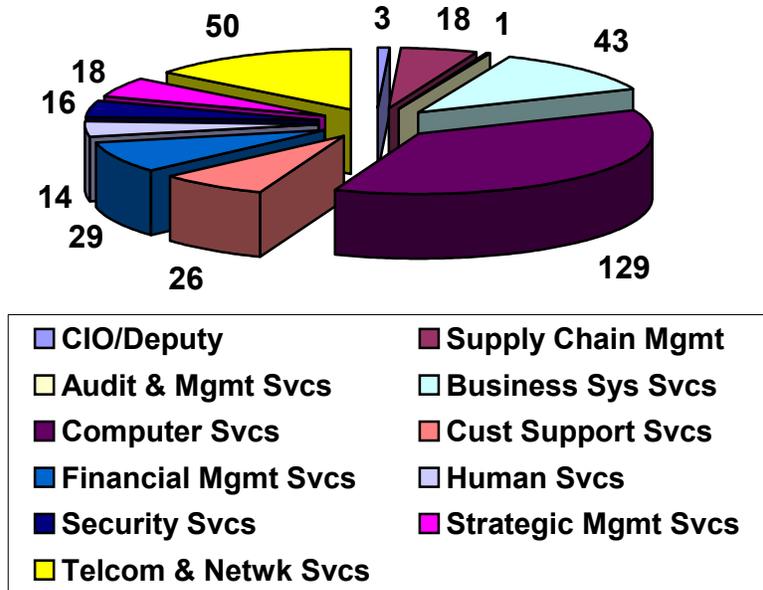


Exhibit 3-2 illustrates the classified staffing by each directorate for the quarter. The organization charts in Appendix 3-1 reflect VITA's current structure as of November 2003.

**Exhibit 3-2  
Classified Employment Levels by Directorate**



**VITA Headquarters**

In October, VITA headquarters at 411 East Franklin Street moved from temporary offices to its permanent location in Suite 500. VITA now has workers (classified, part-time, and contractors) in five different locations, with 23 at headquarters, 392 at the VITA Operations

Center in the Richmond Plaza Building, six at various locations on the Capitol Campus, and three in Roanoke.

## Employee “Onboarding” Activities

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In addition to transferring services and IT equipment to VITA, agencies and VITA are working together to confirm and transition the classified employees, wage workers, and contractors who were mapped to VITA from customer agencies last spring. Because most small agencies do not have dedicated IT staffs for ongoing support and service, most small agencies did not have employees to transfer—nine employees were originally mapped for transition.

VITA worked with agency leadership to confirm the status of positions mapped to VITA. As a result, three of the positions were vacant, reducing the number from nine employee transfers to six. VITA also worked with agency leadership to confirm employees were mapped to VITA properly. As a result, one employee originally mapped to VITA was determined to be out-of-scope and remains in service to the customer agency.

The first employee transfers to VITA were effective on October 25, 2003. On that date, two employees from the State Council of Higher Education for Virginia became VITA employees, known as “VITAzens.” Two of the remaining three employee transfers—from the Department of Planning and Budget and the Department of Aviation—were effective on December 25, 2003. Due to holiday schedules, the transfer of the final position from the Department of Rail and Public Transportation as well as the orientation portion of the onboarding will be completed after the first of the year.

The process of onboarding new employees begins after the establishment of a tentative transition date by the small agency transition team. Based on these dates, VITA human resources staff contacts the HR staff at the transitioning agency to discuss and coordinate employee transition, including items such as leave balance transfers and paycheck distribution. Other items discussed include the completion of performance evaluations (interim or annual evaluations), reimbursable training requests already approved and other onboarding paperwork required for the transition. VITA has worked with the Department of Accounts payroll service bureau to reduce the amount of paperwork that each employee must complete.

After the transitioning agency has signed the appropriate transition documents, a date is confirmed for the official transfer of employees to VITA. In order to complete the required onboarding paperwork and welcome the new employees to the agency, VITA human resources staff travels to the employee worksites and meets with transitioning employees.

Each employee receives information on VITA policies and procedures, including payroll forms, leave slips and instructions, overtime and on-call policies, security policies, and the Employee Benefits Association. Employees also receive an employee welcome kit, a VITA security badge, and a VITA lapel pin and t-shirt.

## Organizational Changes

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### Leadership Team

In accordance with requirements in the VITA legislation, the Information Technology Investment Board continues its recruitment of a new Chief Information Officer. At its December 10, 2003 meeting, the Board approved the appointment of Cheryl F. Clark, VITA Deputy CIO, as Acting CIO until such time as a CIO is appointed by the Board, in the event that the Board is unable to conclude hiring negotiations prior to January 1, 2004. (see Section 7).

While several promising candidates were interviewed, the last cycle of recruitment for the vacant Security Services Director did not result in a hiring decision. The position will be re-advertised nationally, and Human Services is optimistic that an appropriate pool of qualified individuals will be available.

Velma Ballard, VITA's Director of Human Services, has decided to return to her former position with the Department of Housing and Community Development, effective mid-December. This position will also be posted, and will be open to both state employees and the general public.

### Acquisition Services Becomes Supply Chain Management

With the creation of VITA on July 1 the Acquisition Services Directorate (ASD) began implementation of Procurement Reform ("ProReform"). During the past quarter, ASD redesigned itself into an organization based on the concept of procurement teams (e.g., Networks & Telecommunications; Applications, Middleware & Tools; Distributed Computing; Central Computing). The Directorate's name was changed to Supply Chain Management (SCM) to better reflect the new organizational structure and the principles of ProReform. The revised organizational units within SCM are:

- **Strategic Analysis**—an analytical group that identifies opportunities and provides data and methodologies to identify value, risks and priorities;
- **Integrated Sourcing**—a process-oriented group, organized around categories of expertise; leaders of cross-functional sourcing teams, managing major suppliers within categories, including sourcing process, decision analysis, and contract formation;
- **Contract Management**—an efficiency-oriented service group, providing optimal value from contracts via tracking, reporting, analysis and record-keeping for all IT contract obligations;
- **Supply Chain Operations**—an effectiveness-oriented service group that provides transactional services and systems support, maximizing the efficiency of these services; and
- **New Initiatives**—supports new approaches, new procedures design, and acquisition of associated tools and training.

### Resource Development and Projects (RDP)

This unit within VITA has been set up to facilitate the appropriate placement of personnel who, during the transition period, have no immediate organizational assignment. Individuals who come into this unit will be given opportunities for temporary assignment in

special projects associated with IT transformation, as well as for training and re-skilling to enhance their value and placement options.

At the initiation of VITA on July 1, six individuals were assigned to the RDP. All of these staff members have now been assigned to established positions within the VITA organization. As medium and large agencies transfer into VITA over 2004, further cycles of ebb and flow into and out of RDP will likely occur.

### Training and HR Development Activities

Although VITA's Professional Development Division is relatively small in staff, consisting of one part-time staff and one support position, creative partnerships enable VITA to have an aggressive schedule of professional training and development. A Training Manager position was approved and posted during the quarter and is expected to be on board on during the next quarter.

Exhibit 3-3 outlines the extensive professional training and development activities now underway.

#### **Exhibit 3-3** **VITA Professional Development Division (PDD)** **Training and Development Projects**

**Project Manager Development Program:** In support of the Project Management (PM) standard, PDD has worked with VITA's Project Management Division to develop an online knowledge test, certify training partners, negotiate contracts with J. Sargeant Reynolds for testing and training, and coordinate delivery of mandatory PM training. Over \$33,000 has been spent to support this effort, resulting in six classes attended by 193 internal and external employees. Additional classes are scheduled in December and January.

**ITIL Essentials Service Management Training:** To support best practices and standardization of terminology, PDD procured an on-site ITIL (Information Technology Infrastructure Library) certification course. Out of 16 attendees, 14 were ITIL certified.

**Mandatory Security Awareness Training:** With the departure of the third party contractor that initially provided this training, PDD continues to work with the developer of the online course software to upgrade the course for release, pending inclusion of current security policies.

**Learning Management System (LMS):** PDD is currently serving on the evaluation team for this statewide procurement. VITA is a Tier One agency with significant input at all levels of this initiative.

**Skills Assessment Tool:** In conjunction with a VDOT training professional and VITA Business Systems Services, PDD has designed a Web based survey for in-scope employees to complete. This survey will yield proficiency levels to accommodate best fit to VITA and related training needs.

### VITA Leadership Retreat

VITA hosted the first of a series of VITA Leadership meetings on December 15, 2003, which included nearly 70 leaders and managers from all directorates. The purpose of the retreat was to engage VITA leadership in creating a common vision for VITA, determining roles in implementing that vision, learning from the past to help move the agency forward, and finding ways to support one another in this time of significant change and organizational flux.

The agenda for the retreat included a historical assessment exercise, where participants described the history of VITA and its predecessor organizations since 1970. The participants then analyzed patterns to determine how the past influences the present and future, in terms of ongoing issues and consistent, positive momentum that has been maintained. Participants also worked on articulating VITA's vision, and identified seven elements. These elements are:

- Recognized service delivery leader;
- Model for government IT;
- Full service IT provider of choice;
- The best managed business in state government;
- Achieving cost savings while delivering value;
- Premier employer; and
- Adaptive, proactive organization.

As a result of the retreat, VITA has a more cohesive leadership team, a common vision for the agency, strategies for ongoing communication and support among the leadership team and staff, and plans for future leadership development. A half-day leadership retreat is being planned for January 2004 to create VITA's mission and develop the agency's mission statement.

### Activities/Milestones Next Quarter & Beyond

#### Employee "Onboarding" Activities

The VITA Organization continues to grow and evolve throughout the transition effort, and will eventually include approximately 887 employees transitioning to VITA from small, medium, and large agencies. As can be seen in Exhibit 3-4 below, the vast majority of employees comes in the final phase, scheduled for July 1, 2004 to January 1, 2005.

**Exhibit 3-4**  
**Employee Transitions to VITA by Phase (Agency Size)**

Agency Size	Personnel Scheduled to Transition	Number of Supported Locations
Small (100 employees or less)	5	82
Medium (101-400 employees)	61	149
Large (>400 employees)	820	1,266

The chart above also illustrates the dispersal of employees and IT assets throughout the Commonwealth. VITA will ultimately be a highly distributed organization, with the majority of VITA employees located on-site at customer agencies. Coupled with significant organizational changes at VITA and in customer agencies, this presents unique challenges to the successful and smooth transition of employees to VITA.

To ensure the transition to VITA for employees is as smooth and painless as possible, VITA is developing an extensive "Onboarding" process for the medium and large agency transition phases, which combines the elements of HR administration with a comprehensive orientation. The goals of onboarding are to:

- Help future VITAZens feel valued and welcomed;
- Increase knowledge and understanding of VITA and its vision, mission, values, functions, and culture;
- Set expectations and help employees understand their roles;
- Fulfill all administrative and human resource requirements in terms of paperwork, policies, and forms;
- Communicate opportunities for training, career advancement, and participation in VITA activities; and
- Provide points of contact within the VITA organization for taking care of VITA business and getting assistance.

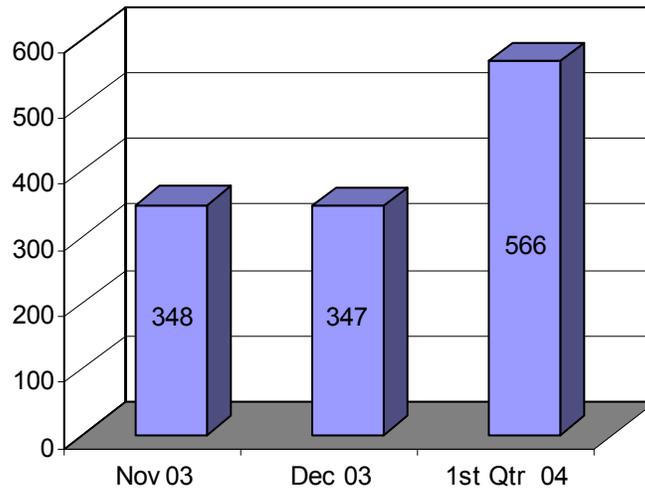
More detailed information on the onboarding process will be provided in future Quarterly Reports.

It is anticipated that several key positions will be filled during the next quarter. The hiring of the Chief Information Officer, Security Director, and replacement of the Human Services Director will complete the leadership team.

Also in the next quarter, the Human Services Directorate will complete the onboarding process for small agencies and begin the process of onboarding medium agencies. With the approval of the IT Investment Board, the Virginia Department of Transportation may onboard early during the next quarter. While the total of IT staff to be transitioned from all medium agencies is 61, VDOT alone will add 219 employees to VITA. The agency will then have staff at an additional 13 locations throughout the state, including 11 VDOT sites. Exhibit 3-5 illustrates the projected MEL for the next quarter, assuming an early VDOT transition.

On-site meetings are being planned in each VDOT district. During these meetings, VITA HS staff will process the necessary onboarding paperwork for payroll, explain VITA policies and procedures and provide employees with necessary tools needed to communicate with supervisors and staff at other locations. Employee badge pictures are currently being made and other issues related to parking and training opportunities and benefits are being resolved. Several logistical adjustments have been made to internal procedures and processes to ensure a smooth transition of VDOT employees.

**Exhibit 3-5  
Projected Employment Level**



It is expected that, during the next quarter, applications will be developed to support and change internal administrative processes to ensure that staff in remote areas have online access to forms, policies, procedures, benefits, etc.

It is anticipated that substantial work will be done to complete the overall VITA training strategy. The skills inventory assessment will be conducted and analyzed. Additional classes will be conducted for the Project Management Development Program during the next quarter. In addition, change management classes, leadership development, stress management and a second leadership retreat are being planned for next quarter.



## Section 4: Infrastructure Initiatives

### Infrastructure Transitioning

VITA is investing in its infrastructure to provide foundational services to its customers, to prepare for consolidation of equipment and services, and to provide excellent customer service to existing and newly transitioned VITA customers.

The following pages provide information on VITA infrastructure initiatives, including base service improvements, telecommunications, and networking.

#### VITA Customer Care Center

##### Description and Benefits

A central customer service center for all agency IT related incidents, service orders and information is essential. The goals of the center are to have a single point of contact for all users, reduce the number of IT help desks in the Commonwealth, and have standard methods for reporting and completing incidents and service orders.

The VITA Customer Care Center (VCCC) brings immediate value through its ability to track incidents from initiation to closure. By trending and analyzing this single view into the Commonwealth's IT-related incidents, VITA will identify training opportunities, detect underlying infrastructure or applications weaknesses, and measure the impact of significant IT-related implementations.

A larger value is realized when the VCCC is able to "see" into its customer's network environments. This capability is highly dependent on implementation of the VITA Secure Network Project (VITANet), discussed below. With this secure network the VCCC can most effectively support and control the desktop environment.

##### Schedule and Costs Update

The VCCC opened for business on September 15, 2003. While further functionality continues to be added, VITA can respond to incidents from transitioned agencies and provide the needed services. VITA systems development and software licensing start-up costs are still projected at \$1,473,000. VITA and Virginia Department of Transportation (VDOT) personnel are working together to provide the needed services to agencies.



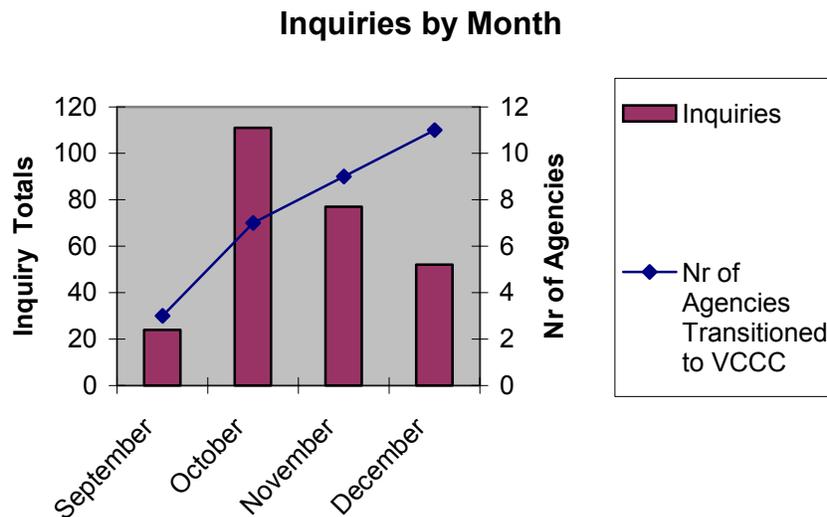
##### Section Highlights:

- Foundational services in place, including VITA Customer Care Center and Agency Customer Contacts.
- The Centralized Monitoring project is underway.
- Base Service Improvements have occurred, with savings of more than \$12.5 million from the new COVANET contract.
- VITA's Data Center and COVANET are meeting or exceeding most performance metrics.

## Staffing

Initial staffing for the VCCC consists of help desk professionals from VDOT and VITA. As agency transition occurs, staff will be added to the VCCC as needed. VDOT partnered with VITA to provide project and management personnel to jump-start the project. More than 20 full time staff members currently support the VCCC. Half of these employees play a dual role, servicing VDOT employees and transitioned VITA agencies. Exhibit 4-1 shows the number of VCCC inquiries received between September 15 and December 19, 2003.

**Exhibit 4-1**  
**Number of VITA Customer Care Center Inquiries**



\*The 11 Cabinet Offices have dedicated support and are not reflected in this total.

For more information about the VCCC, please visit <http://www.vita.virginia.gov/vccc>.

## Agency Customer Contact

### Description & Benefits

VITA must establish and maintain close bonds with agencies to fulfill IT requirements and move the Commonwealth forward. This is essential to success in effectively transitioning the first wave of small agencies to VITA. In addition, as medium and large agencies migrate to VITA, it is required that VITA provide a conduit for continuous, positive working relationships with every agency. VITA will assign Enterprise Service Directors (ESDs) to each Secretariat to build these strong partnerships. The ESDs will optimize labor across their assigned areas to meet requisite performance measures. In addition, agencies will be assigned Service Level Directors (SLDs) who will work daily to ensure VITA is meeting the needs of agencies.

### Schedule & Costs Update

VITA's Director of Customer Support Services came onboard July 16 and has assumed lead responsibility for building the VITA Customer Care Center. The schedule for filling out the remaining customer support leadership is currently as follows:

- **Acquire Small and Medium Agency Service Level Directors**  
VDOT and VITA staffing have fulfilled this role during the transition period.
- **Acquire Enterprise Service Directors**  
Recruitments are in process and scheduled for completion by January 2004 for seven Enterprise Service Level Directors.
- **Acquire Service Level Directors for Large Agencies**  
January 2004 to January 2005.
- **Acquire an Associate Director to focus on Enterprise Desktop Management and VCCC services**  
January 2004.

### Staffing Update

VITA has maintained its commitment to the state IT workforce by providing technical resources through the use of existing state employees. This has taken place through posting of positions as state only or through the transfer or temporary assignment of individuals from state agencies.

## VITA Information Center (VIC) Centralized System Monitoring Project

### Description and Benefits

VITA will be establishing standard processes and implementing standard tools for managing the infrastructure and monitoring systems centrally. This will set the stage to cross-train employees to support multiple agencies, allow remote monitoring and controlling of systems to reduce staff time on processes, and result in increased availability by having system operations monitored 24x7. These tools are the foundation to monitor and report on service levels at the device level.

The Cisco Information Center is the product chosen to support the foundation for monitoring and managing all devices under the responsibility of VITA. The system not only provides asset tracking but also collects critical information used in determining the service levels for individual devices and complete services for customers. Reporting and tracking service levels has been a cornerstone of the VITA initiative. This system will also allow the VITA organization to manage and monitor services remotely, thus allowing fewer technical staff in fewer locations in the future. Without this system, VITA will not be able to report accurately or to the level of detail required by the service levels expected by agencies. In addition, staff will have to continue to be deployed in numerous locations around the state to monitor and manage equipment and services at agency locations.

### Schedule and Costs

The total estimated cost of the project is \$4,373,619. FY 04 funds totaling \$3.3 million are available for the first two project phases. Phase One, funded at \$2,617,000, delivers all of the major functional requirements of the core system and sufficient software licenses to

cover all of the small agencies. The project was initiated on September 29, 2003. Phase One completion is planned for February 16, 2004.

Phase Two will provide software licensing, hardware, maintenance, support and training sufficient to implement system monitoring in the medium agencies. The cost for Phase Two of the project is \$650,419.

Phase Three of the project, estimated at \$1 million, will cover the costs to bring in the large agencies. Alternative FY 05 funding sources are being considered for this phase.

### **Staffing Update**

VITA will use consulting services to implement the initial system and then develop internal staff to maintain support, incorporating state employees already at the agencies. With this approach no new costs will be attributed to the Commonwealth. Openings may be filled via posting of positions as state only or through the transferring of individuals as agencies transition to VITA.

### **Dependencies and Risks**

The success of the VIC project is highly dependent on implementation of the VITA Secure Network Project (VITANet), discussed below. VITA's ability to centrally manage and monitor devices depends on its ability to "see" into its customers' network environments. VITANet is essential to providing this capability on a secured network.

## **VITA Secure Network Project (VITANet)**

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### **Description and Benefits**

Network security is the foundation for VITA to provide reliable and secure environments for all agencies in the Commonwealth. Currently, agencies' networks are not standardized and vary in their vulnerability to threats of all kinds. This variability leads to the Commonwealth's inability to move toward major consolidations to support citizen services such as a single e-mail system, standard directories, and other consolidations of enterprise systems.

In addition, the administration of networks in the current, decentralized manner is highly duplicative and costly. By establishing a centrally managed, secure network infrastructure the Commonwealth will accomplish the following:

- Reduce the risks and vulnerabilities to security threats by having a standard secure infrastructure for all agencies;
- Reduce the current resource drain in managing and administering many separate networks with many different configurations; and
- Enable the Commonwealth to build statewide-centralized application services for e-mail directories required to support enterprise systems.

Without an initial investment in a secure network environment, the VITA organization will bear the risks of network vulnerabilities in the current environment and the Commonwealth will be stalled in its efforts to use technical resources efficiently and move forward with its

consolidation efforts. VITANet is a requirement to complete the remote monitoring of services.

### **Schedule and Costs Update**

Finalization of the schedule and costs for this project are dependent upon funding approvals that are still pending. Estimated time to completion is 150 days from funding approval. Hardware and software start-up and support costs for the new core network, including provisions for disaster recovery, are currently estimated at \$2.7 million.

### **Staffing**

VITA will be using existing state employees and contract staff to support this function. Openings may be filled via posting of positions as state only or through the transfer of individuals as agencies transition to VITA.

## **Additional Projects for VITA Planning and Implementation**

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The following projects have also been identified as important to IT consolidation efforts in terms of cost savings and/or enterprise-wide service improvements. More detailed information on these initiatives will be reported in future VITA Quarterly Reports.

- Data center back up, consolidation of data centers, and server consolidation;
- Unified e-mail;
- Statewide desktop support;
- Web accessibility standards;
- Centralized directory services; and
- Security notifications and alerts.

## **Base Service Improvements**

VITA continues to provide additional services and service improvements even during the transition process. Activities relating to existing services that improve efficiencies of existing services or reduce costs now and in the future are identified and acted upon in a timely manner. Below are highlights of service improvements that have been completed or are substantially underway.

## **New COVANET Contract**

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### **Description**

VITA recently completed the procurement to replace existing Long Distance and Data Networking services with a new contract. After competitive negotiations, the contract was awarded to MCI, the incumbent provider. The new COVANET contract was effective as of

November 7, 2003 and resulted in immediate savings to the Commonwealth, with \$12.5 million in savings over four years. The contract term is for four years, with six optional one-year renewals.

### **Accomplishments**

VITA created a flexible four-year contract with up to six one-year renewals that will take the Commonwealth to a converged data and voice network in a planned and cost-effective manner. Features of the new contract are:

#### **1. Significant cost reductions in core data network services and voice services.**

- Immediate savings of \$3.13 million or 11.21 percent per year upon contract execution;
- \$12.5 million savings over the four-year term of the contract;
- Reduced rates for Frame Relay and ATM data network services (core data network services);
- Reduces rates for Outbound Long Distance calling within the Commonwealth, domestic, and international calling;
- Reduced rates for Inbound 800 services, Automatic Call Routing and Interactive Voice Response services;
- Free dedicated access T1's for Centrex's and PBXs, with four-year cost avoidance of \$1.67 million;
- No installation costs for all data and voice services that remain in place for at least 12 months; and
- Simplified "other fees and charges" to reduce the number of ongoing billing issues and disputed invoices.

#### **2. A path for transitioning to new technologies.**

- Provides new Private IP Intranet network services that are available at contract signing and can assist VITA in achieving a simpler, more cost-effective Commonwealth enterprise network design;
- Access to Internet II through MCI's VBNS+ network;
- Converged Data and Voice Networking;
- IP Version 6 support;
- Multicast services; and
- Fixed-Dish Satellite-based Internet access for remote locations.

#### **3. Improved Richmond-based network monitoring and management services.**

#### **4. Improved installation intervals for most services.**

#### **5. Improved Service Level Agreements with credits for not achieving objectives.**

See *Appendix 4-1: Telecommunications Services Available under the New COVANET Contract* for a complete list of services provided under this contract.

## Telephone Inventory Services

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### Description

VITA has developed a Telephone Inventory contract with Asyncrob and Associates, Inc., to provide an inventory service for voice services. The business partner will compare VITA and telecommunication provider bills to ensure the Commonwealth is receiving what it pays for. If the pilot is successful, the partner will "touch" each voice line of the "in-scope" agencies to ensure all features are operational and necessary. Unused lines will be disconnected. The partner will make recommendations for cost-savings improvements to agency configurations (consistent with overall state telecommunications plans). The objective is to update the inventory, correct errors, and identify ways of saving money.

### Milestones

This contract has been awarded, pilot agencies have been selected, and a protocol has been developed. Pilot projects are anticipated to begin shortly.

## Mobile Satellite Service Internet Services

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### Description

VITA has established a contract with GROUND CONTROL for mobile and fixed satellite Internet-access services. This service can serve as a backup for land-based wired or terrestrial wireless data capacities. A state vehicle can be fitted with a portable satellite dish, data equipment, and services. For on-site emergency data applications, the vehicle can be driven to a site and uplink vital data to a satellite for rebroadcast to other locations. In the event of a disaster or emergency, locations with fixed satellite services have a backup link to disseminate information. If traditional land-based wired or terrestrial wireless data facilities are compromised, this capacity can be used to access the Internet or other information distribution networks.

Access to these facilities will provide data applications throughout the Commonwealth by either mobile or fixed means to provide a variety of administrative and emergency response resources. Applications will include mobile medical facilities, emergency operations, and temporary facilities such as VDOT construction sites. Known requests/requirements are from the Department of Health and the Department of Emergency Management. This service could also serve as Internet access to traditionally under-served areas (such as rural, valley areas).

### Accomplishments

Potential savings are unknown, but this capability will be invaluable in emergencies where traditional communication modes are compromised. Also, for services that require access to state IT applications, the mobile service can enable service delivery to citizens at remote locations while avoiding expensive investments in permanent infrastructure at multiple sites.

### Milestones

The contract became effective September 8, 2003. The contract term is two years with three optional one-year renewals. Several agencies are interested in beginning projects using the mobile technology, but have not begun.

## Streaming Video- Web casting Services

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### Description

VITA is in the process of reviewing bids on an RFP for streaming video services. Once awarded, this new service will provide a variety of Web streaming resources to state government. For example, citizens throughout the state could view events live or information can be archived for later retrieval. It can also be used for training and dissemination of any information, such as the Governor's State of the Commonwealth speech, or a major summit from a Virginia location or university.

Potential savings are unknown. However, it is anticipated that this contract will provide high quality, cost-effective Web casting and video streaming options to end users, making unnecessary the expense of building a permanent infrastructure. Information will thereby be more available to a larger number of citizens.

### Milestones

The procurement is still in progress and should conclude in January 2004.

## Nextel Contract Modification

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### Description

Nextel Commonwealth customers deal directly with Nextel for services and billing. VITA completed a modification to the current Nextel wireless contract to improve services.

### Accomplishments

Potential savings are unknown. However, there are many potential uses and benefits of the new arrangement:

- All customer billings for Nextel service will be consolidated by VITA with the customer's VITA telecommunication bill. This will simplify billing and payment processes for the customer and provide VITA with an accurate summarization of the costs associated with these services. (There are approximately 1,600 plus units in service today.)
- The new agreement provides for 12 voice plans instead of the current five, providing customers with more cost-effective choices.
- Wireless data services have been added that can be used either with laptops or phones. This service can provide access to corporate data or email systems and should greatly enhance field staff productivity. The Nextel version of the Blackberry PDA device (IDEN wireless protocol-based) is now available, which adds to the Commonwealth's options for email access through wireless technologies.
- Nine of the plans add about \$5.00 more per plan, but they have unlimited direct connect minutes, long distance, voice mail and caller ID included. These plans also can share minutes with other users. As a result, VITA is expecting a net reduction in usage-based costs.
- There are three government plans that share minutes between telephone and direct connect and provide different levels of free night and weekend minutes.

- For an extra fee nationwide direct connect can be added. This feature provides two-way radio, push-to-talk capability on a national network.

### Milestones

The contract modification was completed on October 17, 2003, making all new options available immediately. The conversion to VITA consolidated billing should be in effect in the next quarter.

## Shared Unix Platform for the Commonwealth

VITA plans to acquire a Fujitsu PrimePower 1500 platform with partitioning features that will help in consolidating Solaris UNIX platforms and standardizing their management. The PrimePower 1500 is compatible with the Sun Solaris operating system and can support up to fifteen domains or separate Solaris operating system images.

Initially, the new platform will run seven domains for central system and network monitoring software modules that require separate dedicated servers or domains. In order to minimize the number of Oracle licenses needed, there will also be a domain for consolidating VITA Oracle applications such as those used for the VITA Customer Care Center and VITA Information Center. The benefits of this approach over seven smaller dedicated servers include greater flexibility in allocating capacity resources, increased hardware redundancy features, 40 percent lower floor space requirements, and the ability to add up to seven more domains in the same footprint by adding processors and memory.

Console management and remote console access can be simplified by sharing consoles with another PrimePower 1500 supporting Department of Social Services applications. Longer-term, domains on the two PrimePower models could be repositioned so that a Solaris domain could fail over to a domain on a separate physical platform and thereby improve application availability.

## Statewide Storage, Media, and PC Printer/Accessories Contracts

Assisted by Silver Oak Solutions, VITA coordinated input from universities, municipalities, and agencies to determine statewide requirements for storage media. VITA is currently evaluating bids on a Request for Proposals (RFP) to establish a statewide catalog contract for enterprise disk and tape storage devices. The scope of the RFP includes storage area networks, network attached storage, direct attached storage for mainframes and large servers, tape systems, and automated tape libraries. The goals of the RFP are to achieve lower pricing by showing the aggregated statewide storage demand and to reduce the time and effort spent in acquiring storage hardware by having most items available by ordering from a contract.

VITA, again with assistance from Silver Oak, has also issued an Invitation for Qualification (IFQ) to pre-qualify storage media suppliers for online reverse-auctions to be held in January 2004. The IFQ responses will be used to evaluate suppliers selling media such as DLT, LTO, DDS, and AIT as well as other types that are used statewide. After responses to the IFQ are evaluated, suppliers deemed eligible and qualified will be invited to participate

in the online reverse-auctions. The results of the auctions will lead to statewide contracts for the most widely used media products.

As part of the Virginia Partners in Procurement program, a Request for Proposals has been sent to 22 potential suppliers of PC printers and accessories. Proposals have been received from 17 suppliers and evaluation and negotiations are expected to be completed in late January 2004. This category includes printers and other PC accessories and is estimated to include approximately \$28.7 million in spending across state agencies, institutions of higher education, and local governments. Price savings from leveraging across the Commonwealth are estimated in the range of 15 percent.

## Infrastructure Quarterly Status

VITA has also instituted measures to ensure services remain at a high quality level. Metrics are essential to managing the process and ensuring excellent service delivery to customers. The current VITA Infrastructure Services Dashboard is shown in Exhibit 4-2.

**Exhibit 4-2**  
**Infrastructure Services Dashboard**

Description	Target Period Jul – Sept 2003	Actual Period Jul-Sept 2003	Status
Production Mainframes (MVS & Unisys) Availability	99.9%	100.00%	Green
Production VITA Central Data Center Unix Server Availability	99.8%	99.76%	Yellow
Production VITA Central Data Center Windows Server Availability	99.8%	99.92%	Green
Availability of VITA-installed COVANET Circuits	99.9%	99.00%	Yellow

In this Dashboard, availability measures the percentage of time the production servers supporting the environment are available. VITA has met or exceeded nearly all service availability metrics. Scheduled maintenance and downtime is not included in the availability measurement. The above measurements only reflect the status of servers and systems at the VITA central data center or controlled by the VITA network staff. This does not include servers and networks at agency locations. These will be measured after the VIC and VITANet are installed and operational.



## Section 5: Project Management

### IT Investment Management

#### Activities/Milestones Last Quarter

##### IT Strategic Planning/IT Portfolio Management

Each executive branch agency and public institution of higher education is required to submit an agency IT Strategic Plan through their proponent Secretary to the CIO, based upon guidance issued by the CIO. The Agency IT Strategic Plan is used by agencies to align agency technology investments, the agency budget, Commonwealth technology initiatives, and agency organizational priorities, goals, and objectives.

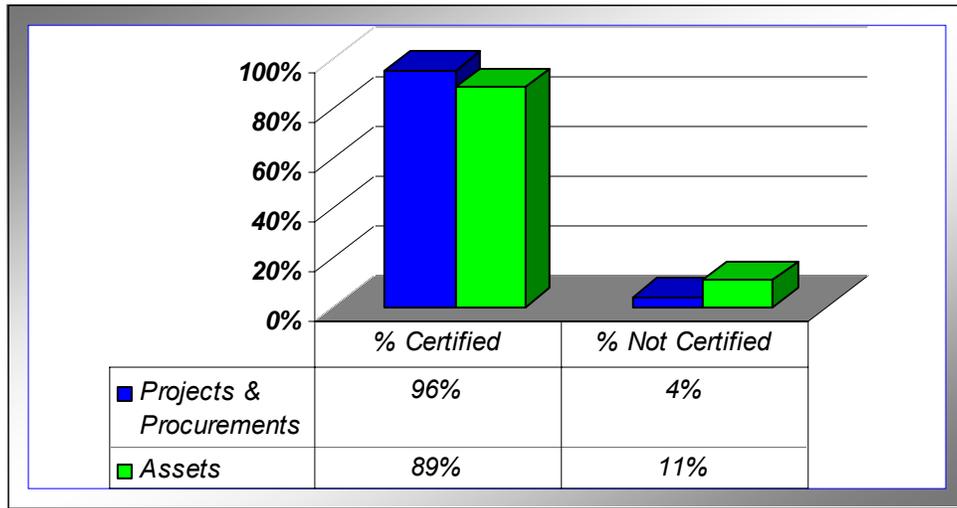
Parts 1 and 2 of this year's IT Strategic Planning process focused on planned projects and procurements required to address agency strategic goals and critical issues for the two-year budget biennium. Part 3 of the plan required agencies to update the agency technology asset portfolio. Each agency head was asked to certify that all information requested as part of the IT Strategic Planning process was submitted and was deemed to be an accurate presentation of the information provided by the agency. The status of agency IT Strategic Plans certifications is provided in Exhibit 5-1, below.

VITA's Project Management Division (PMD), on behalf of the CIO, reviews submitted IT plans for completeness, adherence to planning guidelines, and compatibility with the Commonwealth's Strategic Plan for Technology and Enterprise Architecture standards. Based upon plan reviews, PMD recommends approval or disapproval of the agency plan to the CIO. Preliminary recommendations are categorized as "Approved", "Approved with Comment", or "Disapproved" to the CIO. Upon CIO approval, a formal notification of the agency ITSP approval status is distributed to each agency head. Agencies with plans that are "Approved with Comment" or "Disapproved" will be required to work with PMD to achieve an "Approved" status for their plans.

#### Section Highlights:

- Priority technology investment projects for the 2004-2006 budget biennium submitted to IT Investment Board and General Assembly.
- Commonwealth Project Manager Development Program implemented.
- Project Manager Selection and Training Standard promulgated.
- Commonwealth Project Management Overview Training initiated.
- Interim processes for IT Strategic Plan Amendment and Major IT Project Approval implemented.
- Project Portfolio Database to facilitate IT Portfolio maintenance and reporting developed.

### Exhibit 5-1 Agency IT Strategic Plan Certification Status



Accomplishments and key milestones met in the last quarter were:

- Completed review of the Agency IT Strategic Plans certified to date;
- Presented an Overview of the IT Strategic Planning process and Planning Cycle to the ITIB; and
- Implemented an Interim ITSP Amendment Process as part of the Interim Major IT Project Approval Process (see Appendix 5-1).

The proposed Performance Measure for the IT Strategic Planning process is to have 100 percent of Agency IT Strategic Plans certified and Approved, without comment, by the CIO by April 1, 2004.

## IT Investment Board & Investment Management

During the last quarter, the Information Technology Investment Board (ITIB) began execution of its investment management responsibilities, supported by the CIO and VITA. The ITIB met five times in the quarter, receiving several reports on current and proposed processes for planning and development approval of major IT projects. The Board's IT Project Review Subcommittee was established, supported by PMD, to refine the criteria and metrics for project management, as well as recommend major IT project approvals to the Board.

Last quarter IT Investment Management accomplishments include:

- Launched an ITIB Web site, on the VITA Web site, to support board activities.  
<http://www.vita.virginia.gov/ITIB/ITIB.cfm>
- Presented the "Recommended Technology Investment Projects for the 2004-2006 Budget Biennium" report to the ITIB for its concurrence at the September 25 meeting.

The report was submitted to the General Assembly on August 29 with an update on September 9 (see Appendix 5-2).

- Presented the “Priority Technology Investment Projects and Technology Management” presentation to the ITIB at their October 15th Meeting (see Appendix 5-3). The presentation covered the following areas:
  - √ Commonwealth Priority Technology Projects (Top 26);
  - √ Review of Interim Procedures for IT Project Approval;
  - √ Proposed Evaluation Criteria for ITIB Development Approval; and
  - √ Board approval of specific VDOT projects.
- Submitted and obtained ITIB approval of the Priority Technology Investment Projects Report to the ITIB. The report was approved by the ITIB and subsequently sent to the Governor and the General Assembly (see Appendix 5-4).
- Developed proposed project evaluation criteria, the “Interim Balanced Scorecard Decision Criteria for Proposed Information Technology Investments,” for consideration in ITIB development approval of major technology projects (see Appendix 5-5).

## Policies, Standards, and Guidelines

In support of the *Code of Virginia* mandates to the CIO, the PMD developed additional IT Investment Management-based policies, standards, and guidelines to promote effective technology and project management in the Commonwealth, including:

- The Project Manager Selection and Training Standard (Appendix 5-6);
- A draft Revised Commonwealth Technology Management (CTM) Policy, updated to align it with the VITA legislation (Appendix 5-7); and
- An Interim IT Strategic Plan Amendment Process and Interim Major IT Project Approval Process (Appendix 5-1).

## Activities/Milestones Next Quarter

### IT Strategic Planning/IT Portfolio Management

During the next quarter, approved Agency IT Strategic Plans will be published on the Commonwealth Technology Portfolio Web site. It is important at this point to evaluate the IT Strategic Plan process and perform a “lessons learned” evaluation to identify opportunities for improvement. To support this effort, a focus group comprised of agencies’ IT representatives and VITA PMD staff will be established.

Strategic planning is a dynamic, iterative process that drives investment management. As business needs change, agencies must have a process to incorporate these changes into their strategic plans. Currently, the process to amend strategic plans is manual.

Implementation of a Web-based IT Strategic Plan amendment process is planned for the next quarter to improve response times to requested business changes.

In preparation for the next budget cycle, the CIO will need to issue IT Strategic Plan update guidance to the agencies. At a minimum, this will be a certification of existing information within each agency technology portfolio.

The 2004-2006 IT strategic planning cycle was the first planning cycle to capture agency information electronically within a database that could be used for analytical purposes. As VITA management and staff work with the current information within the Commonwealth Technology Portfolio, new operational and strategic requirements have surfaced. A gap-analysis to determine the scope and focus of Phase 2 of the Commonwealth Technology Portfolio Project will be completed.

## IT Investment Board and Investment Management

The following goals in support of the ITIB are targeted for next quarter:

- Obtain final approval from the ITIB on proposed balanced scorecard evaluation criteria and major IT project approval processes;
- Schedule upcoming major project reviews by the CIO, ITIB Project Review Subcommittee, and the Board itself.

## VITA Project Management Division

PMD will continue to provide support to agencies, the CIO, and ITIB, as staffing levels and commitments permit. The possibility of PMD staff augmentation in the next quarter, due to the possible early transition of VDOT staff, will be incorporated into preliminary VITA/PMD staffing plans. The PMD Budget Decision Package submitted by VITA for the 2004-2006 Budget Biennium requesting additional resources (including staff) to address recognized resource shortfalls, was not included in the Governor's Executive Budget presented to the General Assembly on December 17.

In the absence of additional resources, available PMD staff will continue to be focused on basic *Code* mandates in IT Investment Management, strategic planning, and project management and oversight. Other *Code*-related responsibilities in IT project consulting, best practices promulgation, agency IT budget reviews, and project auditing will receive only very limited attention, at best.

Development will continue on Version 2 of the Commonwealth Major IT Project Status Report Dashboard. Anticipated enhancements include improvements to the project status reporting process and a change management history that will provide the ability to track project baseline and document changes over the life of a project.

## Policies, Standards, and Guidelines

The following IT Investment Management-related policy and standards will be promulgated in the next quarter, pending CIO and ITIB approval:

- Revised Commonwealth Technology Management Policy (see Appendix 5-6);
- IT Strategic Planning and Portfolio Management Standard; and
- Commonwealth Project Management Standard.

Proposed policies and standards will be posted to the VITA Online Review and Comment Application (ORCA) for 30 days of public comment before final CIO and ITIB action.

## Commonwealth IT Project Portfolio Quarterly Status

### Activities/Milestones Last Quarter

## IT Project Portfolio

The Commonwealth IT Project Portfolio is a dynamic collection of proposed and active major technology projects. Currently projects within the IT Project Portfolio are divided into eight categories to support analytical review and life-cycle management of the portfolio. Exhibit 5-2 is a tabular depiction of the project portfolio showing the number of projects in, and dollar value of, each category. Appendix 5-8 is a listing of all proposed and active projects in the IT Project Portfolio by category.

**Exhibit 5-2**  
**Commonwealth Major IT Project Portfolio Summary**

	No. of Projects	Project Cost (Estimate At Completion)
Identified for Preliminary Planning	35	\$245,640,461
Recommended for Planning	89	\$280,943,725
Approved for Planning (by CIO)	1	\$800,000
Recommended for Development Approval (by Secretarial Oversight Committee & CIO)	0	\$0
Approved for Development (by IT Investment Board)	3	\$22,689,037
Active Projects	33	\$985,431,050
Projects Pending Closeout	2	\$20,700,000
Suspended Projects	<u>2</u>	\$2,600,000
<b>Commonwealth Totals</b>	<b>165</b>	<b>\$1,558,804,273</b>

The previous view of the IT Project Portfolio which was presented to the Governor and General Assembly in the August 29 report, Recommended Technology Investment Projects for the 2004-2006 Budget Biennium, segmented the portfolio into 3 categories and included only major IT projects requiring funding in FY05/06. The current view includes all planned and active major IT projects, divided into the eight categories listed in Exhibit 5-2.

Dividing the IT Project Portfolio into eight categories facilitates tracking projects through the project life cycle and periodic reporting to the IT Investment Board. The projects in the "Approved for Development" category are delineated separately to specifically highlight quarterly actions by the IT Investment Board.

Exhibit 5-3 provides summary statistics by category of net changes to the IT Project Portfolio since the August 29 report to the Governor and General Assembly.

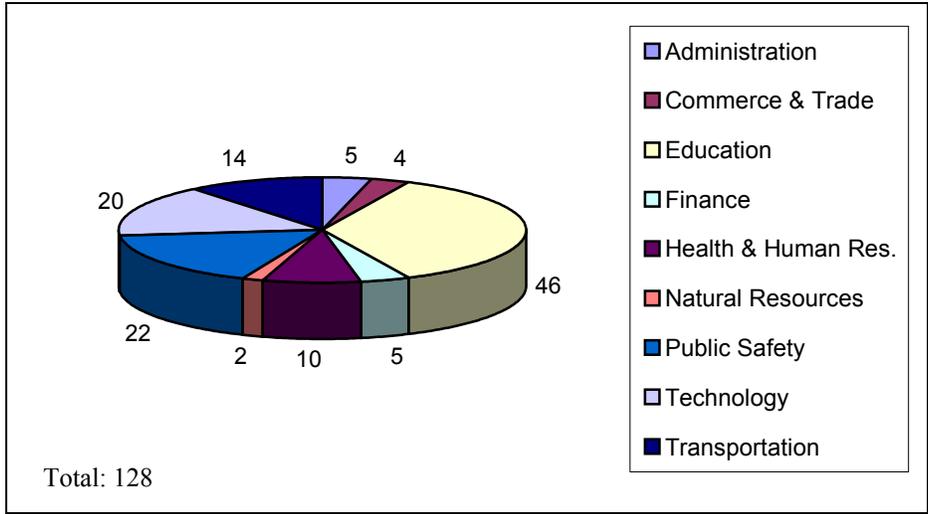
### Exhibit 5-3 Changes in the IT Project Portfolio September-November 2003

Portfolio Category	Net Change in # of Projects	Net Change in \$\$ Value* (in millions)
Identified for Preliminary Planning	+8	+\$88.10
Recommended for Planning	+4	+\$0.07
Approved for Planning (by CIO)	+1	+0.80
Recommended for Development Approval (by Secretariat Oversight Committee & CIO)	None in Category	NA
Approved for Development (by IT Investment Board)	+3	+\$22.69
Active Projects	+7	+\$361.37
Pending Closeout	+2	+\$20.70
Suspended	+2	+\$2.60

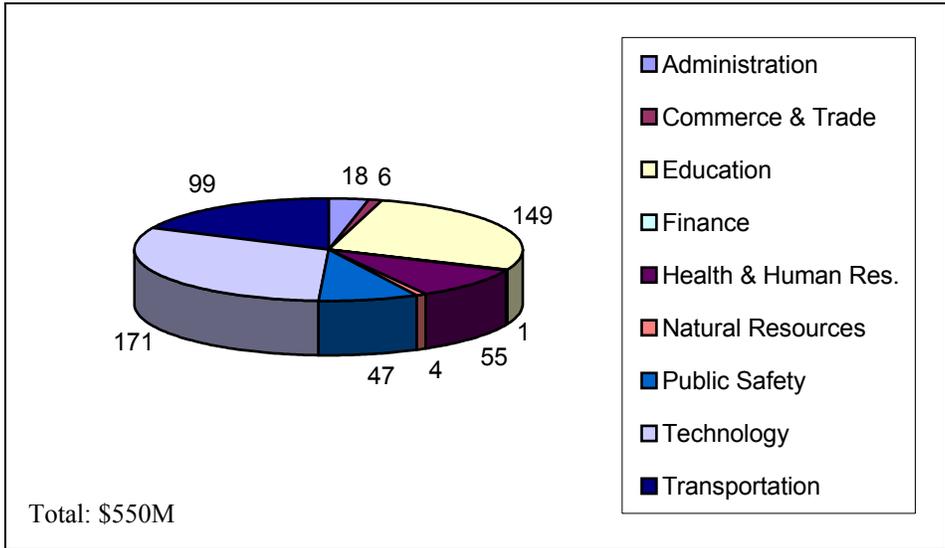
\* Change in Total Dollar Value of Project Cost (Estimated at Completion)

Additional views of the IT Project Portfolio by Secretariat are provided in Exhibits 5-4 and 5-5 for proposed projects, and in Exhibits 5-6 and 5-7 for active projects.

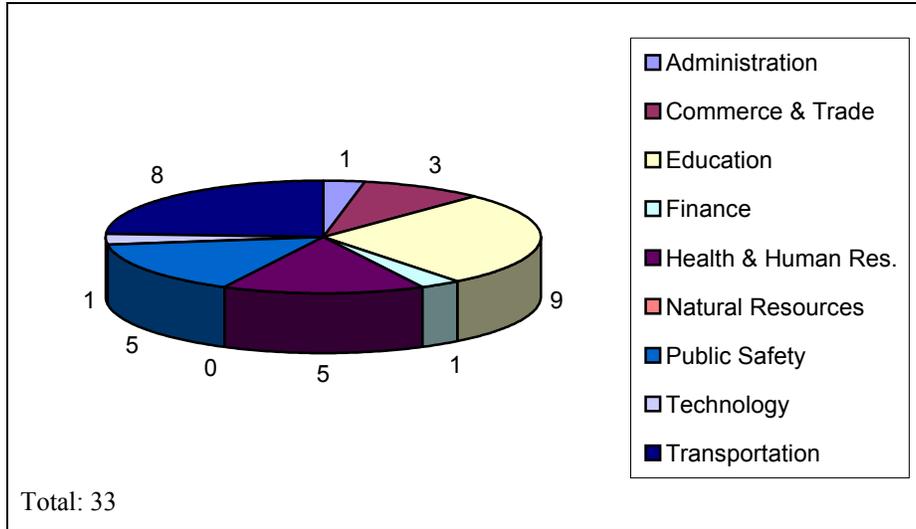
**Exhibit 5-4  
Proposed Major IT Projects By Secretariat  
(Number of Projects)**



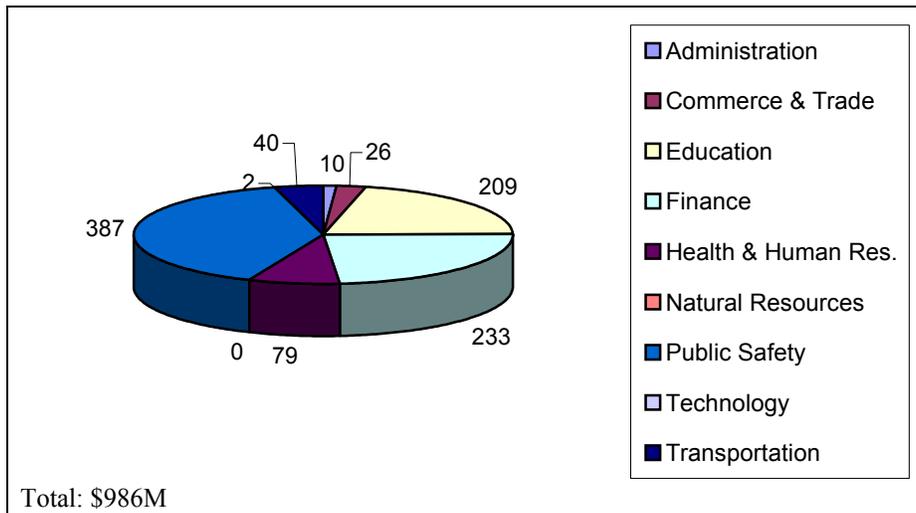
**Exhibit 5-5  
Proposed Major IT Projects By Secretariat  
(Cost of Projects in Millions)**



**Exhibit 5-6  
Active Major IT Projects By Secretariat  
(Number of Projects)**



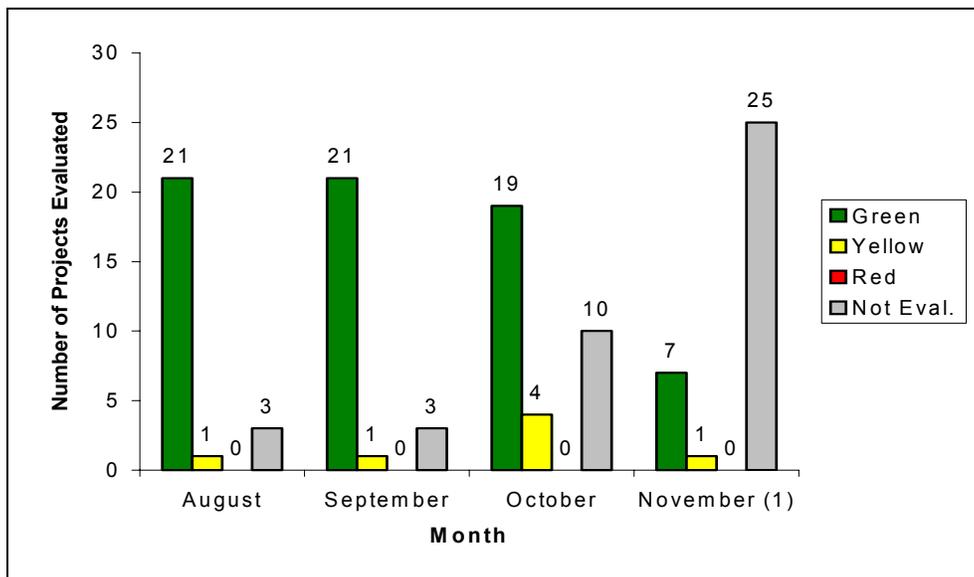
**Exhibit 5-7  
Active FY 05 & 06 Major IT Projects By Secretariat  
(Cost of Projects in Millions)**



## Commonwealth Major IT Project Status Report Dashboard

The Commonwealth Major IT Project Status Report Dashboard presents the CIO, sponsoring Secretariats, and proponent state agencies with a succinct and timely summary of the status of their major information technology projects. Each month the overall status of a project is evaluated as Green (On Track), Yellow (Warning, consider corrective action or monitor previous corrective action), or Red (Problem, immediate corrective action required). Continuing a trend during the previous quarter, an increasing majority of projects were evaluated as Green (see Exhibit 5-8).

### Exhibit 5-8 Major IT Project Status Report Dashboard Evaluation Summary for the Quarter



(1) Status reports are entered into the Dashboard in the month following the reporting period. Status report figures for November reflect Secretariat evaluations completed through December 15, 2003.

## Activities/Milestones Next Quarter

### IT Project Portfolio

During the coming quarter, VITA PMD staff will continue to maintain the IT Project Portfolio to support tracking of project progress through the project life cycle and reporting of project activity to the IT Investment Board.

## Commonwealth Major IT Project Status Report Dashboard

As noted above, a new version of the Dashboard is planned for implementation in the next quarter. PMD staff will present to the CIO recommendations for improving the timely evaluation of monthly status reports. An expanded public view of the Dashboard is also scheduled for implementation.

## Project Manager Development Program (PMDP)

### Activities/Milestones Last Quarter

#### Project Manager Selection and Training Standard

The Project Manager (PM) Selection and Training Standard establishes minimum qualifications and training requirements for all Commonwealth of Virginia IT project managers. The standard has five components: PM testing and training; mandatory PM qualifications; PM mentoring; a PM qualification and selection process; and an implementation schedule for the standard. The CIO approved the standard on September 24 and directed its promulgation to Commonwealth Executive Branch agencies.

#### Project Manager Qualification and Testing

Project Management Knowledge testing is a required qualification standard for project managers of IT projects with a value exceeding \$100,000. The testing is divided into Core and Facilitating Processes Tests. The passing score baseline is 80 percent overall with a 75 percent minimum on any individual topic area. VITA has contracted with J. Sargeant Reynolds Work Force Alliance to develop and administer the testing for project managers. Key milestones met in the last quarter were:

- Test Database of 460 questions established September 5;
- Practice test established and operational October 1;
- Initial/final user testing of test environment conducted mid-October to mid-November; and
- Testing system fully operational November 24.

#### Project Manager Development Web site

The Project Manager Development Web site is the principal communications vehicle for disseminating information and implementing the Project Manager Development Program (PMDP). The site provides access to the project manager qualification standards; program and mandatory training registration; a secure individual qualification record; instructions

and access to qualification testing; a list of training partners; and access to the Project Management Information Clearinghouse. The Web site went live on September 30 and immediately began generating significant activity. To date, online PM Qualification Records have been established for over 459 program participants.

## Training Partners Identified

To assist agencies and project managers in locating appropriate cost effective PM training, part of the PMDP Web site has been dedicated to training partners who wish to advertise their project management training opportunities and classes. Training partners are required to have regularly scheduled classes in which individuals or groups can enroll. Training partners are also asked to provide a government rate or discount and to map their curriculum to the Commonwealth's project manager knowledge standards. A Request for Information (RFI) and the Web site were used to communicate this opportunity to potential training partners. The response was very favorable. To date:

- A total of eight training partners have responded to the RFI and Web site;
- Seven were qualified for listing on the Web site (ESI, Systemation, PPI, Management Concepts, Phase 3 Performance, I/Tech Computer Services, and New Horizons); and
- One is pending qualification following establishment of a class schedule (James Monroe Center-Mary Washington College).

## Commonwealth Project Management Overview Training

All project managers and project sponsors of Commonwealth IT projects must attend the Commonwealth Project Management Overview Training. VITA's Project Management Division and Professional Development Division coordinate and provide this training at no cost to agencies. Commonwealth Project Management Overview Training addresses the Commonwealth Technology Management Policy, the Commonwealth Project Management Guideline, and the Project Manager Selection and Training Standard.

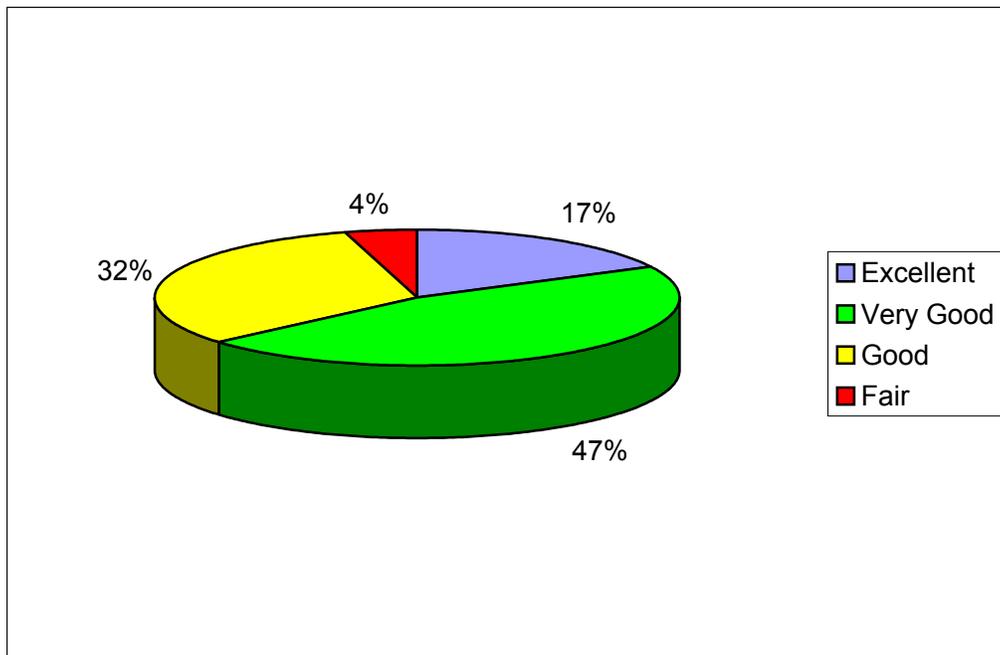
The initial round of classes for Commonwealth Project Management Overview Training took place October 22-28. The demand for this training has been higher than expected. To accommodate the increased demand for training, the following additional sessions were added to the training schedule:

- November 12 – VITA staff;
- December 4 – All agencies;
- December 9 – Southwest Virginia Region, hosted by Virginia Tech; and
- December 11 and 16 – Department of Motor Vehicles.

During the first quarter of the Project Manager Development Program, more than 300 participants attended Overview Training.

Students are asked to rate the Overview Training on a scale of Excellent, Very Good, Good, or Fair. As can be seen in Exhibit 5-9, feedback has been very positive, with a majority of students rating the training as Excellent to Very Good. The performance goal for the training is that at least 65 percent of students rate the training overall as Very Good or Excellent.

**Exhibit 5-9**  
**Student Evaluation Of Mandatory Commonwealth**  
**Project Management Overview Training**



### Program Participants Meeting Qualification Standards

The requirement for project managers to meet qualification standards for Commonwealth IT projects is being implemented on a phased schedule. After February 2004, all **new** major IT projects must be managed by a project manager that meets qualification standards. **All** major IT projects must have a project manager that meets qualification standards by August 2004. On an exception basis, with the recommendation of the Proponent Secretariat Oversight Committee, and approval of the CIO, agencies may request a six-month waiver of qualification standards for a named project manager.

VITA's Project Management Division is monitoring the number of project managers of active major IT projects enrolled in the Project Manager Development Program. The goals are:

- By February 2004, 70 percent of project managers for active major IT projects are enrolled in PMDP.
- By August 2004, 100 percent of project managers for active major IT projects are enrolled in PMDP.

**Currently, 56 percent of the project managers for active major IT projects have enrolled in the program.** PMD recently sent a message to all project managers of active major IT projects who have not enrolled in PMDP, reminding them of the qualification requirements.

PMD is also monitoring the number of project managers of active major IT projects attending mandatory Commonwealth Overview Training. The goals are:

- By March 2004, 70 percent of project managers for active major IT projects will have completed mandatory Overview Training.
- By August 2004, 100 percent of project managers for active major IT projects will have completed mandatory Overview Training.

**Currently, 44 percent of project managers of active major IT projects have completed the Overview Training.**

Most importantly, PMD is measuring the number of project managers for active major IT projects who have met the qualification standards established in the Project Manager Selection and Training Standard. The goal is:

- By August 2004, 80 percent of active major IT projects will have project managers that meet the qualification standards established in the Project Manager Selection and Training Standard (with the CIO granting waivers to no more than 20 percent of active major IT projects).

**Exhibit 5-10  
PMDP Participants Meeting Qualifications**

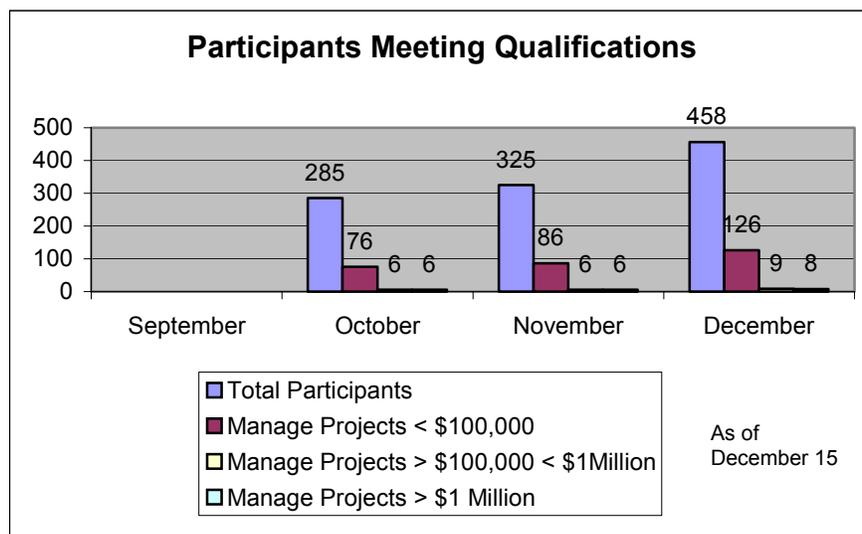


Exhibit 5-10 illustrates the number of PMDP participants meeting the three qualification standard levels. None of the project managers currently managing active major IT projects have fully satisfied all qualification requirements outlined in the Project Manager Selection and Training Standard.

In the overall PMDP participant pool, eight participants have met qualification requirements for Major IT projects—those costing more than \$1 million, or are mission critical, or have statewide application. Nine participants have met qualification standards to manage Non-Major projects costing more than \$100,000. One hundred twenty-eight participants have met minimum required standards for projects smaller than \$100,000.

## Activities/Milestones Next Quarter

### Project Manager Qualification and Testing

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During the next quarter, there will be an increased emphasis on PMDP participants completing testing requirements. The percentage of participants successfully completing the qualification test will directly impact the percentage of participants who have met project manager qualification standards.

### Project Manager Development Web Site

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The Project Management Information Clearinghouse will become operational during the upcoming quarter. The Clearinghouse will provide project managers with access to: information on best practices and lessons learned in project management; project background information on Commonwealth IT projects; training partner information; news and recognition (of achievements); a project manager bulletin board; a project manager mentor list; and the capability to search across the site for information related to IT project management. PMD will continue enhancement of the Web site application functionality on an as-needed basis.

### Commonwealth Project Management Overview Training

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PMD will continue to provide Overview Training and to measure the quality of training for attendees. Sessions are already scheduled for Virginia Community College System participants in January and for all agency participants from March 2-4.



## Section 6: Financial Update

### Activities/Milestones Last Quarter

#### FY04/06 Biennium Budget Request for General and Special Funds

For its general and special funds, VITA developed its FY04/06 biennium budget requests, which were approved by the Information Technology Investment Board at its November 5, 2003 meeting. The approved initiatives, shown with associated dollar estimates at Appendix 6-1, include:

- CIO compensation;
- Agency transition funds, to support transition costs in the agencies;
- Continued VITA start-up costs;
- Statewide acquisition services support;
- Start-up equipment out-year costs;
- Project management requirements, to support *Code* requirements;
- Administrative support for general and special fund programs;
- Server consolidation investment, to achieve savings; and
- E-911 technology improvements (based upon approval by the Wireless E-911 Services Board, which occurred on November 12, 2003).

These requests were considered along with all other agencies' requests in the development of the Commonwealth's proposed biennial budget. The following VITA requests were included in the Governor's Executive Budget submitted to the General Assembly on December 17, 2003:

- Continued VITA start-up costs (\$4.874 million in general funds in FY05);
- Start-up equipment out-year costs (\$0.519 million in general funds in FY05 and FY06);
- E-911 technology improvements (\$1.0 million in non-general funds in FY05 and FY06).

#### Section Highlights:

- *Interim rates for new services were reviewed and approved by the IT Investment Board and JLARC.*
- *FY04-FY06 revenue and expense estimates were developed for all services.*
- *FY04/06 Biennium Budget Requests were approved by IT Investment Board and submitted to the Department of Planning and Budget. A number of those requests were included in the Governor's Executive Budget.*
- *FY 04 general funds for start-up costs have been received.*
- *Revised VITA revenue and expense projections indicate an \$8.3 million shortfall in FY 04 and surpluses of \$1.8 million and \$3.4 million, respectively, in FYs 05 and 06.*

In addition to the above, the Executive Budget included the following two changes:

- An increase of \$1.9 million in general funds in FY05 to consolidate e-mail systems throughout Commonwealth agencies;
- A decrease of \$1.644 million in general funds in FY06 from the achievement of efficiency savings.

These funds, if approved by the General Assembly, will allow VITA to continue its consolidation efforts in FY05 and FY06. In regards to initiatives that were not included in the Governor's Budget:

- CIO compensation costs will be funded through VITA's internal service funds.
- Agency transition funds will be addressed in partnership with the Secretary of Finance in mid-year amendments to the FY05 – FY06 state budget that will be prepared and presented for the 2005 General Assembly session.
- Statewide acquisition services support will continue to be funded through VITA's Industrial Funding Adjustment program.
- Project management requirements will be funded through means yet to be determined or through reductions to the scope and/or pace of these improvements.
- Administrative support for general and special programs will be funded through means yet to be determined.
- Server consolidation investment will be considered using internal service funds.

## Revenue and Expense Estimates

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VITA has three basic fund types (general funds, special funds and internal service funds), each of which is described in further detail below. Appendix 6-2 provides revenue and expense estimates for all funds.

### General Funds

General funds are appropriated by the General Assembly and provide funding for:

- Project management and enterprise-wide strategic planning and policy programs (Strategic Management Services Directorate);
- Statewide coordination for geographic information systems and related applications (VGIN Division); and
- VITA start-up initiatives, including the establishment of the VITA Customer Care Center for help desk and service desk customer support, security and disaster recovery, the VITA Information Center for products to analyze and manage VITA's statewide data network, and limited desktop services.

Because general funds must be used in the year appropriated and expenses may not exceed appropriations, revenues and expenses are equal. For FY04, general funds provide \$7.5 million, or 3 percent, of VITA's total projected expenses.

## Special Funds

Special funds are also appropriated by the General Assembly, and provide funding for the following specific purposes:

- Web portal and web services (VIPNet);
- Supplemental funds for geographic information systems and related applications (VGIN Division);
- Grants to Virginia localities for deployment of enhanced emergency telecommunications systems (E-911 localities fund);
- Grants to wireless system providers to support deployment of enhanced emergency telecommunications systems (E-911 providers fund); and
- Operating support to the E-911 program (Public Safety Communications Division).

For FY04, VITA is projecting Special Funds spending to account for \$67.7 million, or 30 percent, of its total projected expenses.

## Internal Service Funds

Internal service funds are used by VITA to recover the costs of the services it provides to its customers. VITA charges for the services it provides through rates that are approved by the IT Investment Board and the Joint Legislative Audit and Review Commission (JLARC).

For VITA's internal service funds, projections have been revised since the August 2003 Operating Plan for planned revenues and expenditures associated with both existing and new services. New services include desktop and laptop support, server support, and network equipment and other hardware. Projections for these new services are based on the transition schedule shown in Section 2 of this report.

Shortfalls are now projected in Fiscal Year 2004 based on additional VITA staffing and related expenses in FY04 necessary to gear up for the statewide IT consolidation effort, reduced revenues and increased expenses associated with the new COVANET telecommunications contract, and elimination of an anticipated under-spending estimate that was included in the previous projection. Fiscal Years 2005 and 2006 project a small surplus each year. VITA financial staff is continuing to refine these estimates as new information becomes available.

For FY04, VITA is projecting to spend \$152.2 million in its internal service funds, which accounts for 67 percent of total spending.

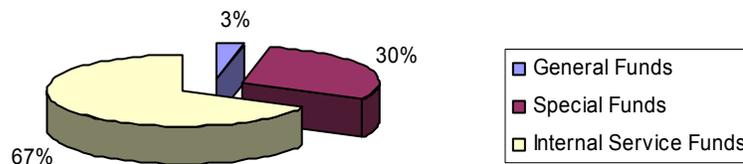
As previously reported in the August 2003 Operating Plan, \$14 million in general funds was provided for "start-up" costs in the 2003 Appropriation Act. These funds are being expended as follows:

- \$3.7 million to hold harmless small and medium agencies for FY04 IT savings deducted from their budgets in the 2003 Appropriation Act;
- \$3.3 million for the VITA Information Center;
- \$3.2 million for the VITA Customer Care Center;
- \$2.7 million for network security, including VITANet;
- \$0.2 million for desktop services;

- \$0.6 million for VDOT transition support; and
- \$0.3 million for agency standardization and optimization needs.

Of these amounts, approximately \$1 million in equipment purchases will be financed over the FY05—06 periods. Additionally, the Secretary of Finance and the Secretary of Technology have agreed that approximately \$4 million for these start-up expenses will be charged to VITA's internal service funds accounts in lieu of a \$4 million transfer for IT savings from these same accounts. The net effect to VITA is zero, but \$4 million in expenses will be shifted from general funds to internal service funds in FY04.

**Exhibit 6-1**  
**FY 04 Expenditure Estimates by Fund**



## Rates for New Services

VITA has developed interim rates, shown in Appendix 6-3, for new services that it will provide to its customers for desktop and laptop support, server support and network equipment and other hardware. These rates were approved by the Information Technology Investment Board on December 1, 2003 and by JLARC on December 8, 2003. JLARC placed the following conditions on its approval of these interim rates:

- The rates shall be effective from November 1, 2003 to September 30, 2004.
- VITA shall develop a policy for implementation of equipment credits and budget savings assessed in the adopted budget by January 15, 2004.
- VITA shall not negotiate reduced rates, discounts or variations from the approved rates with individual agencies.
- VITA shall not accelerate from the statutory schedule the consolidation of any agency prior to the deployment of a billing system that has been approved by the Auditor of Public Accounts.
- VITA shall provide to the Joint Legislative Audit and Review Commission and the Auditor of Public Accounts a monthly report on profit and loss showing actual retained earnings.

Failure of VITA to comply with any of the conditions set out in JLARC's approval of rates will be cause for an immediate review and reconsideration of the rates by the Commission.

Further, a commitment has been made to JLARC by VITA to review these interim rates based on June 30, 2004, information and provide recommended changes as necessary.

Based on information gathered by VITA during its "due diligence" inventory efforts earlier this year, VITA will be supporting and charging customers through this interim rate structure for 2,968 servers; 49,588 desktops; 8,133 laptops; 5,841 telecommunications data devices; 1,868 telecommunications voice devices; and 122 other hardware devices. The proposed rates include service support personnel, VITA Customer Care Center (help desk and service desk) support, security hardware and support, annual licensing, hardware replacement and maintenance, server operating system software, desktop standard software suite (operating system, anti-virus, email, and office automation products), LAN shared peripherals, and disposal service support.

## **Billing Systems**

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VITA is in the process of defining and implementing both short- and long-term plans to upgrade or replace its billing systems in order to accommodate its new services.

In the short-term, VITA will use its Miscellaneous Billing System to support billing for small agencies while upgrading one of its automated systems in order to bill all agencies for new services. For the longer term, new commercial-off-the-shelf billing applications will be explored early in 2004 to replace existing systems for all services, as well as to integrate with an asset inventory system and the agency's procurement system, creating a seamless process for ordering equipment, updating inventory data, and creating bills from the same database.

## **Savings, Cost Avoidance, and Productivity Gain Initiatives**

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VITA is committed to producing savings associated with the Commonwealth's information technology consolidation as quickly as possible. Key to achieving those savings is to transition first, transform second. A number of initiatives are under review while others have been accomplished.

Exhibit 6-2 lists the annualized savings amounts projected from the major initiatives that have been accomplished thus far in FY04.

**Exhibit 6-2**  
**VITA Savings Initiatives Accomplished To-Date**

Initiative	Annualized Savings/Cost Avoidance
Procurement Initiatives	\$10,700,000/cost avoidance
Cell Phone Plan Analysis	\$1,186,000/savings
Voice and Data Service Contract Rate Reductions	\$528,000/savings
COVANET Contract Savings	\$3,084,800/savings

An additional \$5 million in savings will be achieved in FY06 related to efficiency efforts and technology enhancements.

The following major savings initiatives are under review:

- Centralized system/network management;
- Consolidation of COVANET infrastructure;
- Enterprise message consolidation;
- Help Desk consolidation;
- Software license consolidation;
- Standard desktop imaging;
- Interactive voice response system;
- E-mail consolidation;
- Local telecommunications service rate reductions; and
- Statewide call center.

It is important to note that savings generally accrue in the agencies that VITA supports. As VITA lowers information technology costs, they are passed along to the agencies in the form of rate reductions. Savings are not maintained at VITA. Both Secretary of Technology and VITA staff are in discussions with senior Commonwealth leadership and the Information Technology Investment Board on ways to redirect savings for future technology investments.

### Auditor of Public Accounts Review

The Auditor of Public Accounts completed its review of VITA's internal controls and automated systems to determine if they are sufficient to provide the Information Technology Investment Board and the Chief Information Officer with timely and accurate financial information. A draft of the report has been received by VITA and it will be reviewed and discussed with the Information Technology Investment Board. A final report is expected to be issued in early 2004.

## Activities/Milestones Next Quarter & Beyond

### Finance Initiatives

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In the coming quarter, several initiatives are being undertaken in the financial arena:

- Continued refinement of the internal service fund financial plan;
- Finalization of plans to upgrade or replace VITA billing systems and related asset inventory systems;
- Approval of revised VITA directorate budgets to reflect final FY04 decisions and increases necessary for support of transitioned agencies;
- Continued review of savings, cost avoidance and productivity gain initiatives; and
- Establishment of an agency performance indicator monitoring process.

### Performance Indicators

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VITA will be utilizing the following monthly performance indicators to monitor financial performance for the agency:

- Budget versus actual variances;
- Prompt payment performance;
- Percent of reports completed according to schedule;
- Percent of billings provided to agencies according to schedule;
- Receivables aging; and
- Percent of telecommunications vendor invoice amounts withheld by VITA.



## Section 7: Information Technology Investment Board Actions

During the reporting period for this edition of the VITA Operating Plan, the Information Technology Investment Board (ITIB) held five meetings. A summary of actions taken at each meeting is provided below.

### September 25, 2003

- Engaged the services of The McCormick Group (pro bono) to conduct the process of recruiting a Chief Information Officer. Worked with Department of Human Resource Management and The McCormick Group in developing and posting a job description (internally and externally) and compensation/benefits package.
- With a vote of 6-1, the Information Technology Investment Board passed an amended Delegation of Authority, delegating certain enumerated powers and duties to the Interim Chief Information Officer, to be reviewed at the time a new Chief Information Officer (CIO) is hired.
- Reviewed the Commonwealth Technologies Priority Report, in response to the Joint Legislative Audit and Review Commission (JLARC) Report.

#### Section Highlights:

- Initial Board organization structure established, including vice-chair and sub-committees.*
- CIO search undertaken.*
- Board oversight of Commonwealth IT investments at the budget, project planning, and project development levels, has begun.*
- VITA FY 05 & 06 Biennial Budget request reviewed, amended, and forwarded to the Department of Planning & Budget.*
- Interim rates for new services approved by Board and recommended to JLARC.*

### October 15, 2003

- Discussed progress of the CIO Search to date.
- The ITIB invited Senator Walter Stosch, Delegate Joe May, and Delegate Sam Nixon to the October 15 meeting to review and discuss the legislative intent regarding the creation of VITA and the Board.
- The ITIB elected Dr. Mary Guy Miller as Vice-Chairperson of the Board.
- The Chairman of the ITIB, on behalf of the Board, recommended that VITA send the revised Priority Technology Investment Projects for the 2004-2006 Biennium Budget

listing to the Governor and General Assembly. This information was also forwarded to the JLARC.

- The ITIB granted development approval for the Virginia Department of Transportation (VDOT) Financial Management System Phase II Project.
- In addition to the CIO Search Sub-Committee, the ITIB developed three additional sub-committees: Finance, Legislative Review, and Technology Priority Sub-Committees.

## November 5, 2003

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- Updated progress of CIO Search to date.
- With a vote of 6-0, the ITIB agreed to submit the VITA Budget Briefs for the 2004-2006 Biennium to the Department of Planning and Budget, with recommended changes discussed.
- Provided information on interim rates to be submitted to JLARC. Consideration of rates discussion was deferred until additional information and recommendations were received from the ITIB Finance Sub-Committee. This discussion would take place at the December 1 meeting.

## December 1, 2003

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- Approved Interim Rates for the time period November 1, 2003 through September 30, 2004.
- Approved two VDOT Project Development Proposals: Asset Management and EZ Pass Implementation
- Endorsed the continuation of the work between VDOT and VITA to reconcile (1) final Due Diligence personnel mapping in light of VDOT budget cuts, and (2) pending final assessment of the value of VDOT infrastructure transfers to VITA. Both items are to be reported on at January 7, 2004 meeting.
- Went into Executive Session to discuss hiring of the CIO.

## December 10, 2003

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- Approved the appointment of Cheryl F. Clark, VITA Deputy CIO, as Acting Chief Information Officer until such time as a CIO is appointed by the Board, in the event that the Board is unable to conclude hiring negotiations prior to January 1, 2004.
- Went into Executive Session to discuss hiring of the CIO.

## January 7, 2004

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The agenda for this upcoming meeting includes the following items of business:

- Executive Session
- Public Private Educational Facilities and Infrastructure Act (PPEA) Presentation
- Adoption of ITIB By-Laws
- Sub-Committee Reports:
  - CIO Search
  - IT Project Review
  - Legislative Review
  - Finance



## Desktop and End User Services

Recommendation	Action	Estimated Resources
<p>The following should be done to ensure the Agency meets the VITA desktop standards:</p> <ol style="list-style-type: none"> <li>Implement break-fix on client PC's or deploy seat management as applicable.</li> <li>Change agency email address to fit new VITA standard.</li> <li>Coordinate with business staff (Owen Tyler) the change on agency Web presence address to match new VITA standard.</li> <li>Verify applicable OS security patches have been installed on the client PC's as defined by the Windows update page (<a href="http://windowsupdate.microsoft.com">http://windowsupdate.microsoft.com</a>).</li> <li>Verify virus scanner is routinely updated on the PC's to meet VITA standards.</li> <li>Implement VITA standard E-mail attachment blocking.</li> <li>Supply surplus process to the agency for unneeded and non break-fixable hardware and be sure the agency removes it from FACCS as necessary.</li> <li>Create a plan to patch office product applications as appropriate. Implement plan within 60 days of agency transition.</li> <li>Verify application licensing for all installed applications.</li> </ol> <p>VITA needs policy and procedure for maintaining the security and virus scanners updates on the local PC's. In lieu of an existing policy virus signature updates should be controlled from a server and updated on at least a weekly basis as new files come out. Full client virus scans should be scheduled weekly on all client PCs.</p>	<p>Standardize</p> <p>Post SOP</p> <p>Post SOP</p> <p>Post SOP</p>	<p>2 Hours per PC/Account</p> <p>Should be done by Agency with VITA help as necessary. Varies by agency.</p> <p>Varies by agency.</p>
<p>Routine PC maintenance. Routine maintenance can be performed remotely with the proper tools.</p>	<p>Ongoing</p>	<p>1 Hours monthly per PC/Account</p>

## Security

Recommendation	Action	Estimated Resources
<p>The following should be done to ensure the Agency meets the VITA security standards:</p> <ol style="list-style-type: none"> <li>Evaluate the configuration of the Agency Firewall; ensuring inbound and outbound access-lists are in place. Ensure that the configurations meet VITA requirements.</li> <li>Review remote connectivity capability (dial-up) and Remediate as necessary with VPN solution or review existing VPN configuration to ensure it meets VITA security standards. VPN will need to be replaced by centralized VITA VPN solution once VITANet is available.</li> </ol>	<p>Standardize</p>	<p>12 Hours per location</p>

# VITA Organization as of December 2003

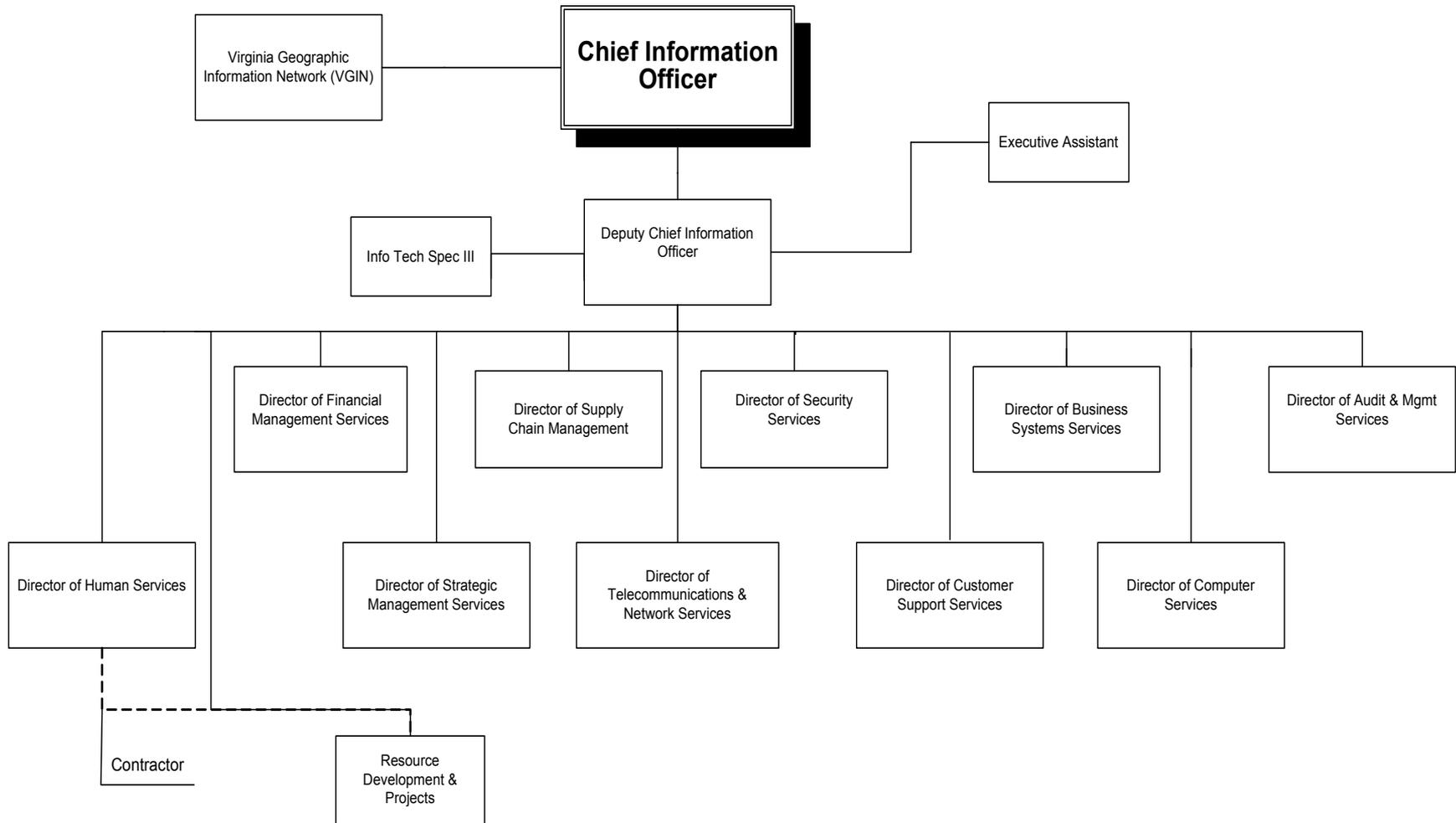
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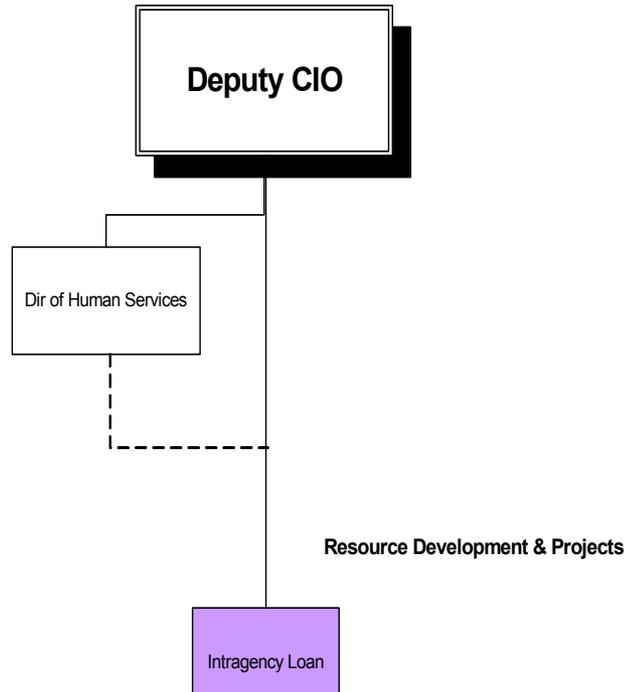
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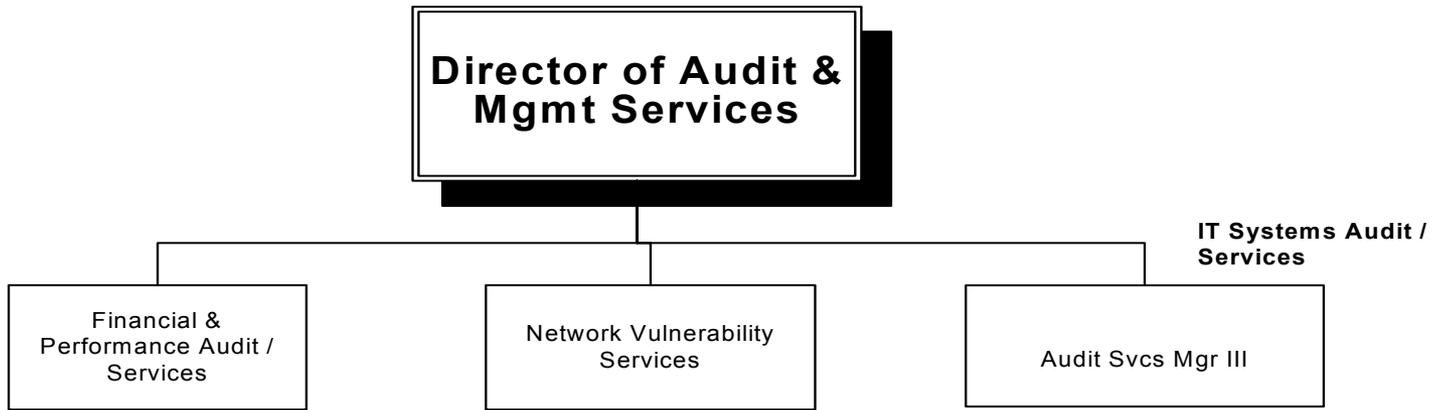
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Position

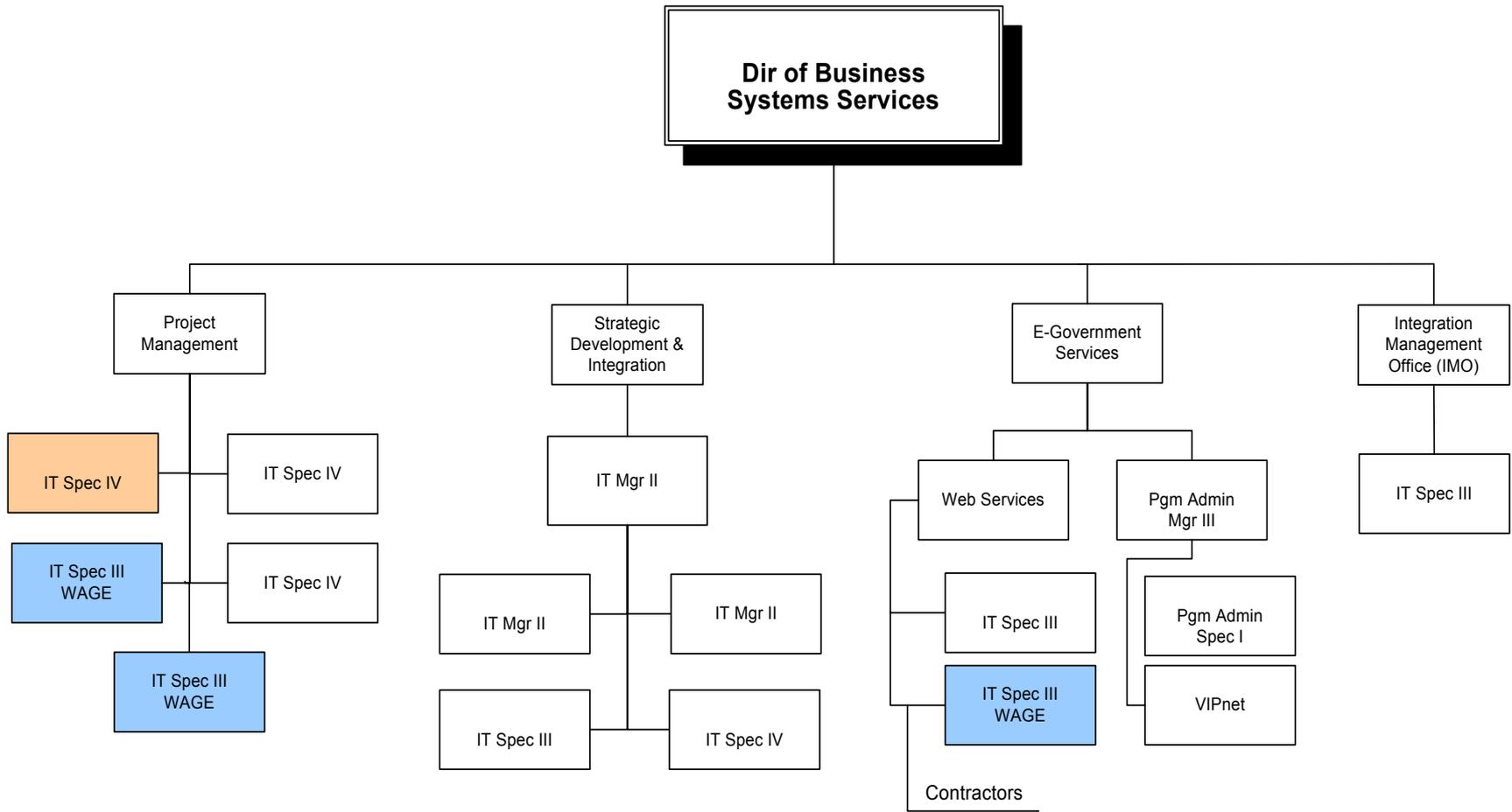
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Loan Position

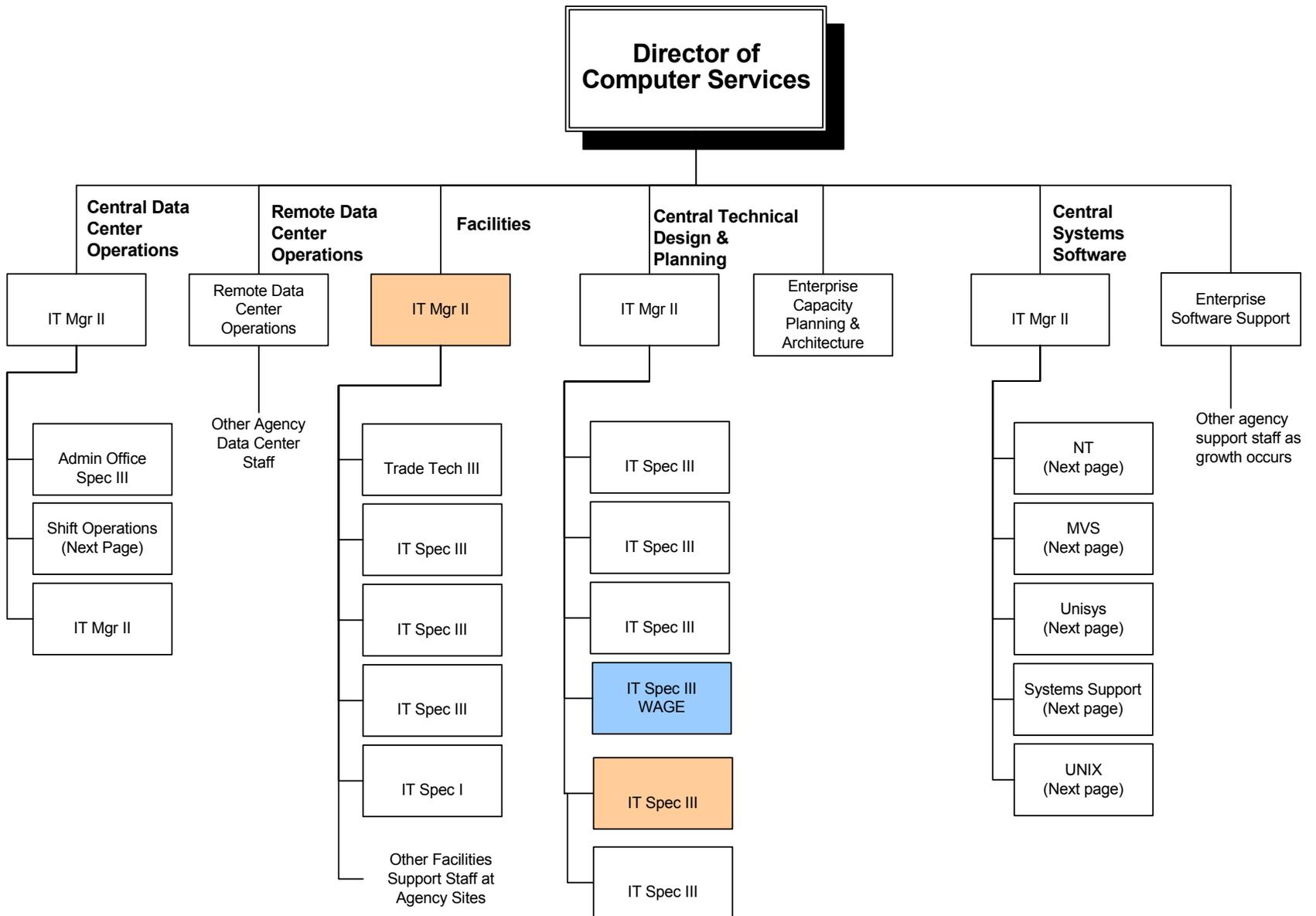












**Dir of Computer Services**

IT Mgr II  
Data Center Operations  
From Previous Page

Technical Support  
on Next Page

IT Mgr II  
(Next Page)

Shift Operations

IT Mgr II

First Shift

Comp Ops Mgr II

Second Shift

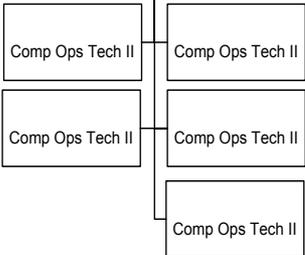
Comp Ops Mgr II

Third Shift

Comp Ops Mgr II

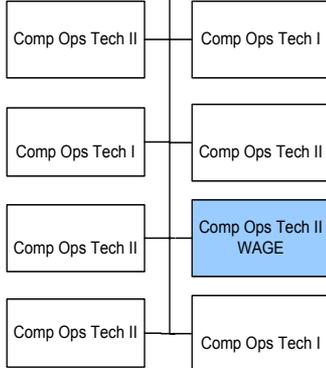
MVS

Comp Ops Mgr I



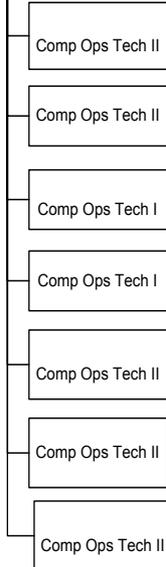
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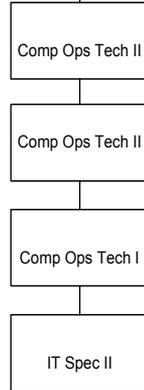
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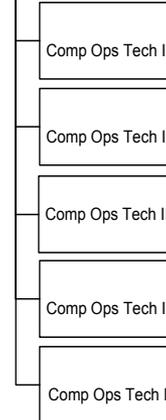
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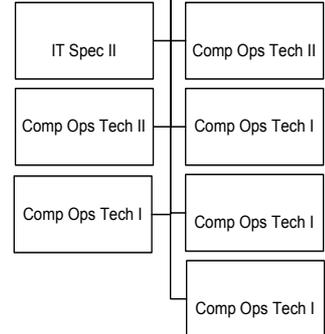
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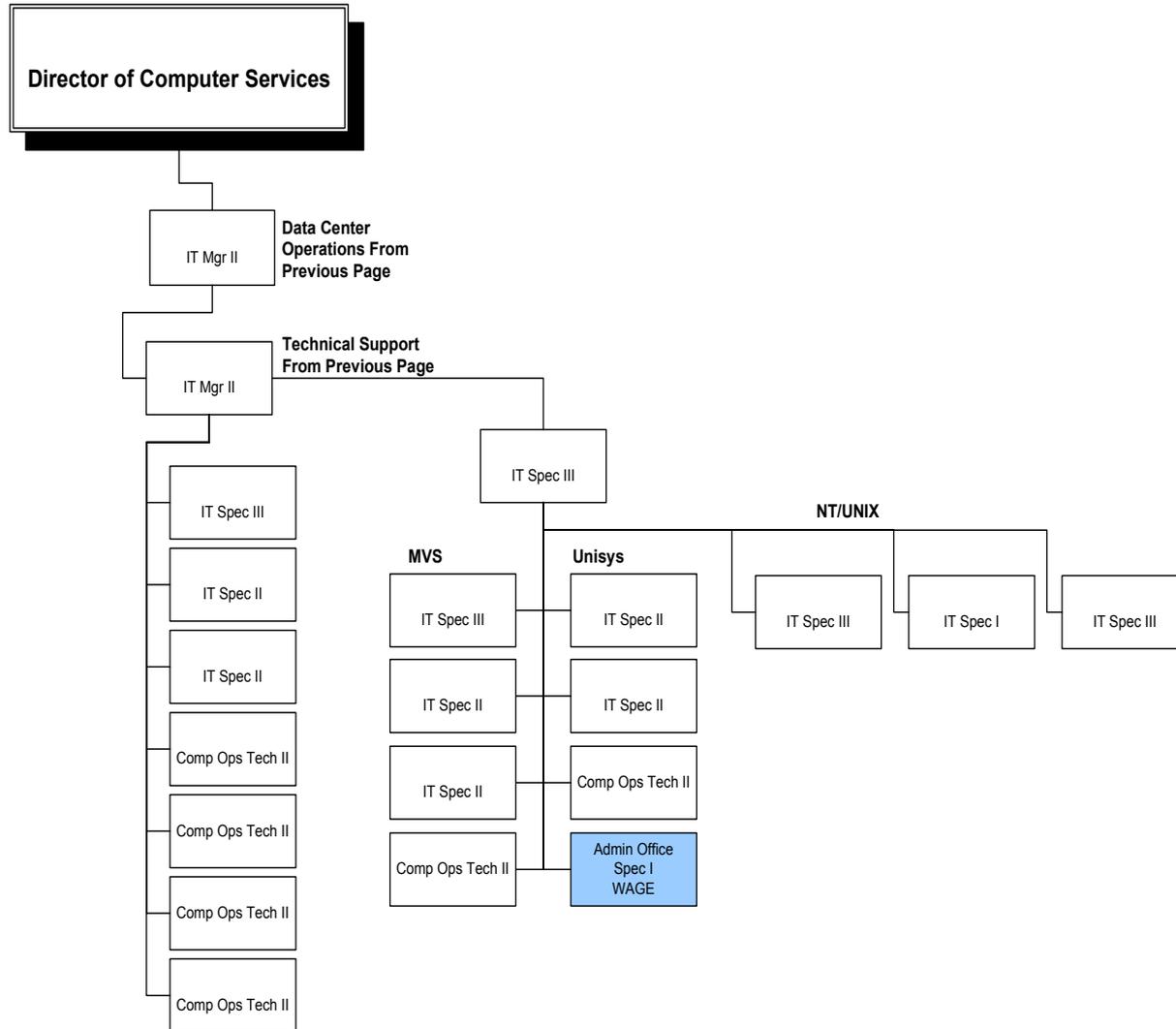


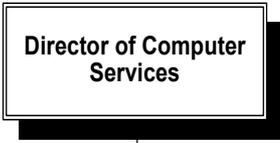
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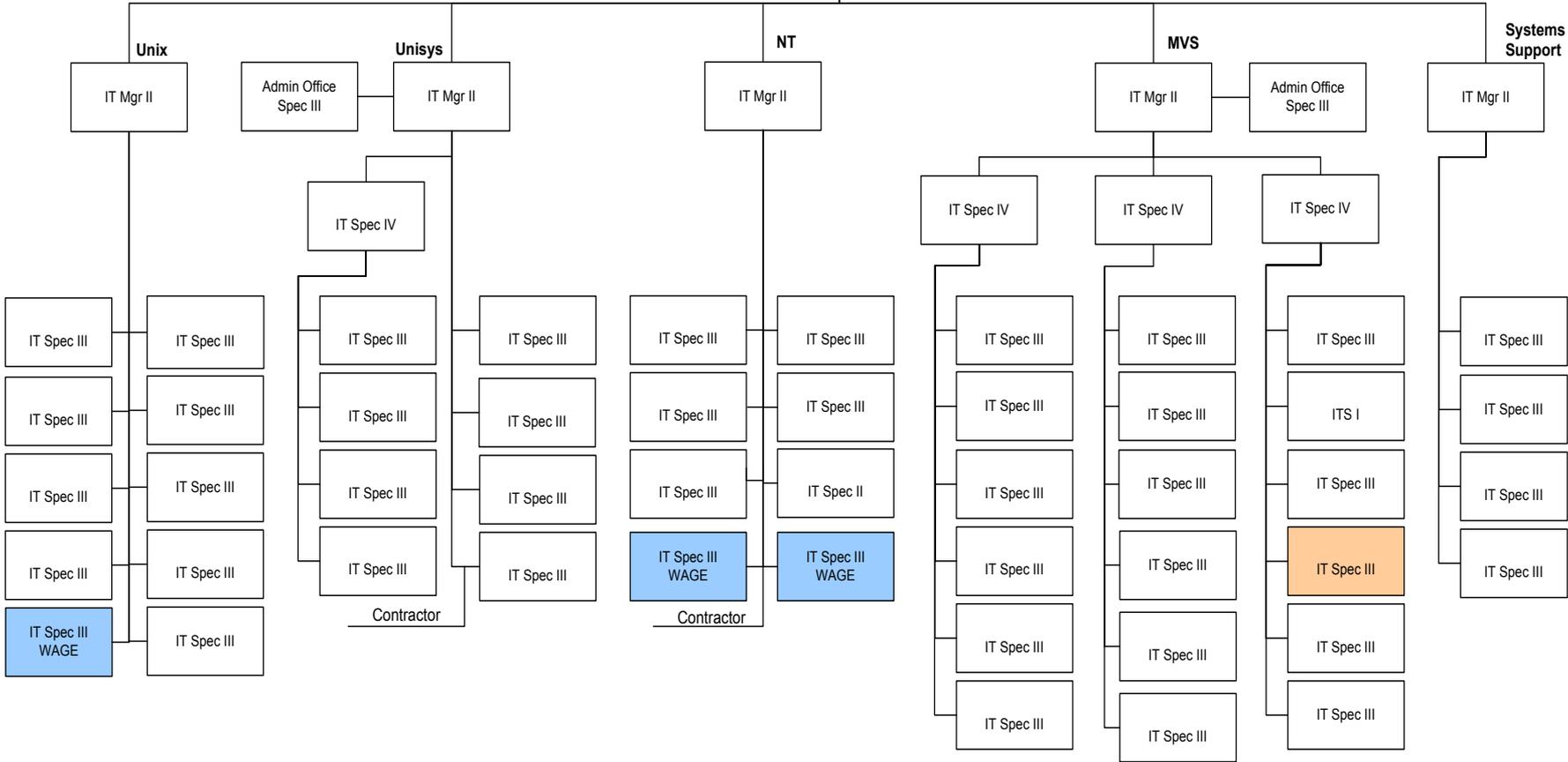
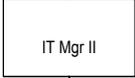


Contractors assigned to 1st, 2nd & 3rd Operational Shifts

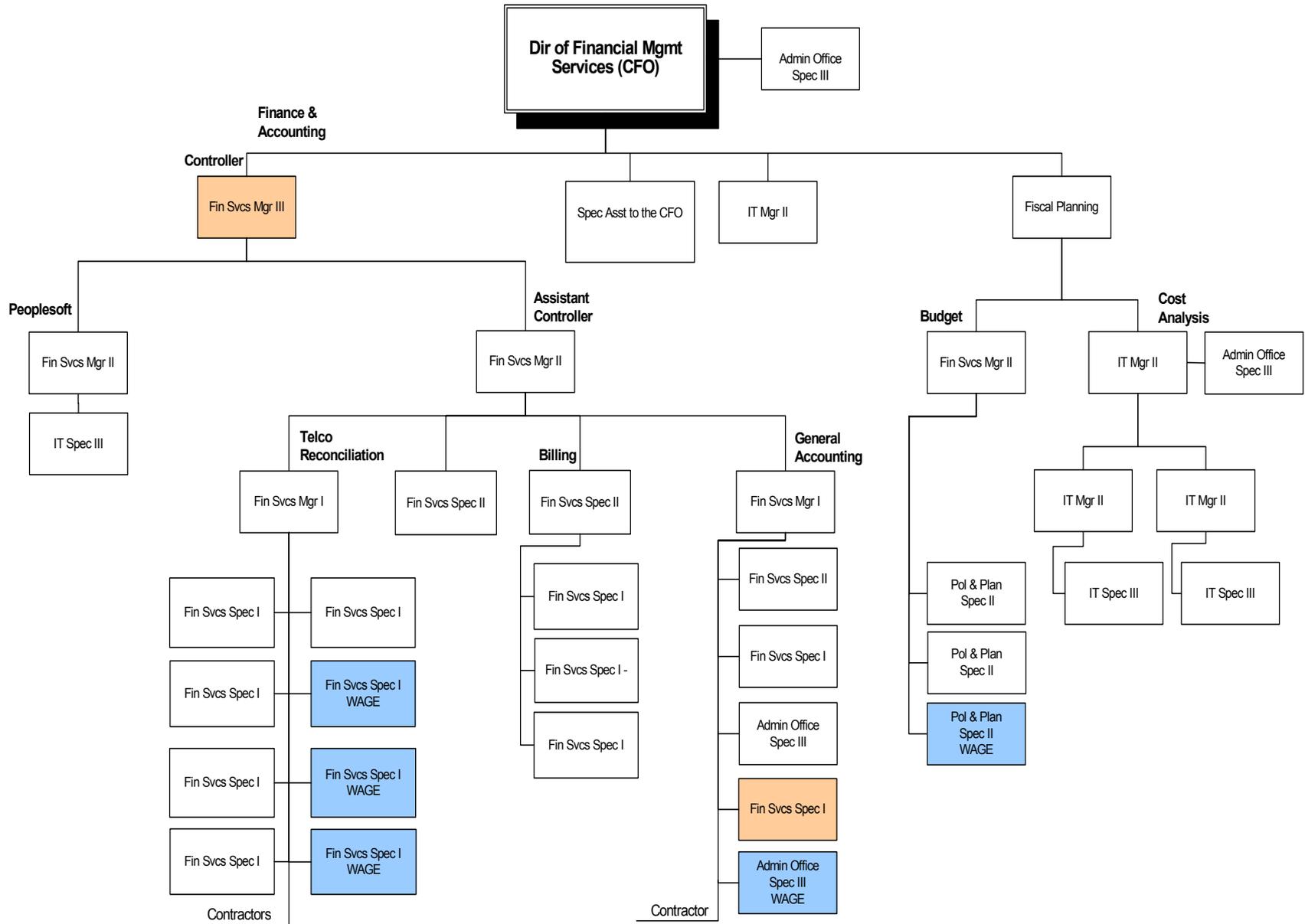


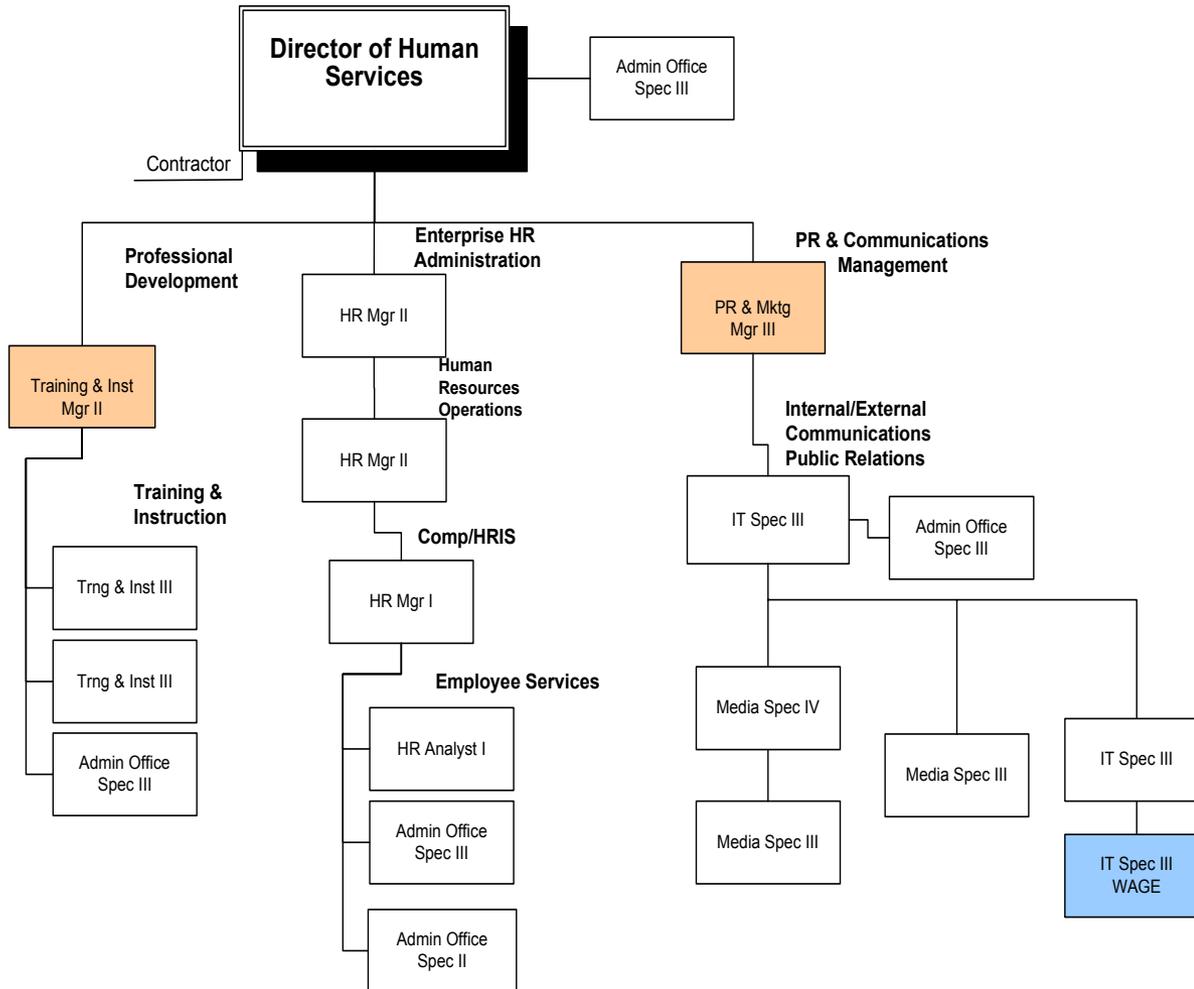


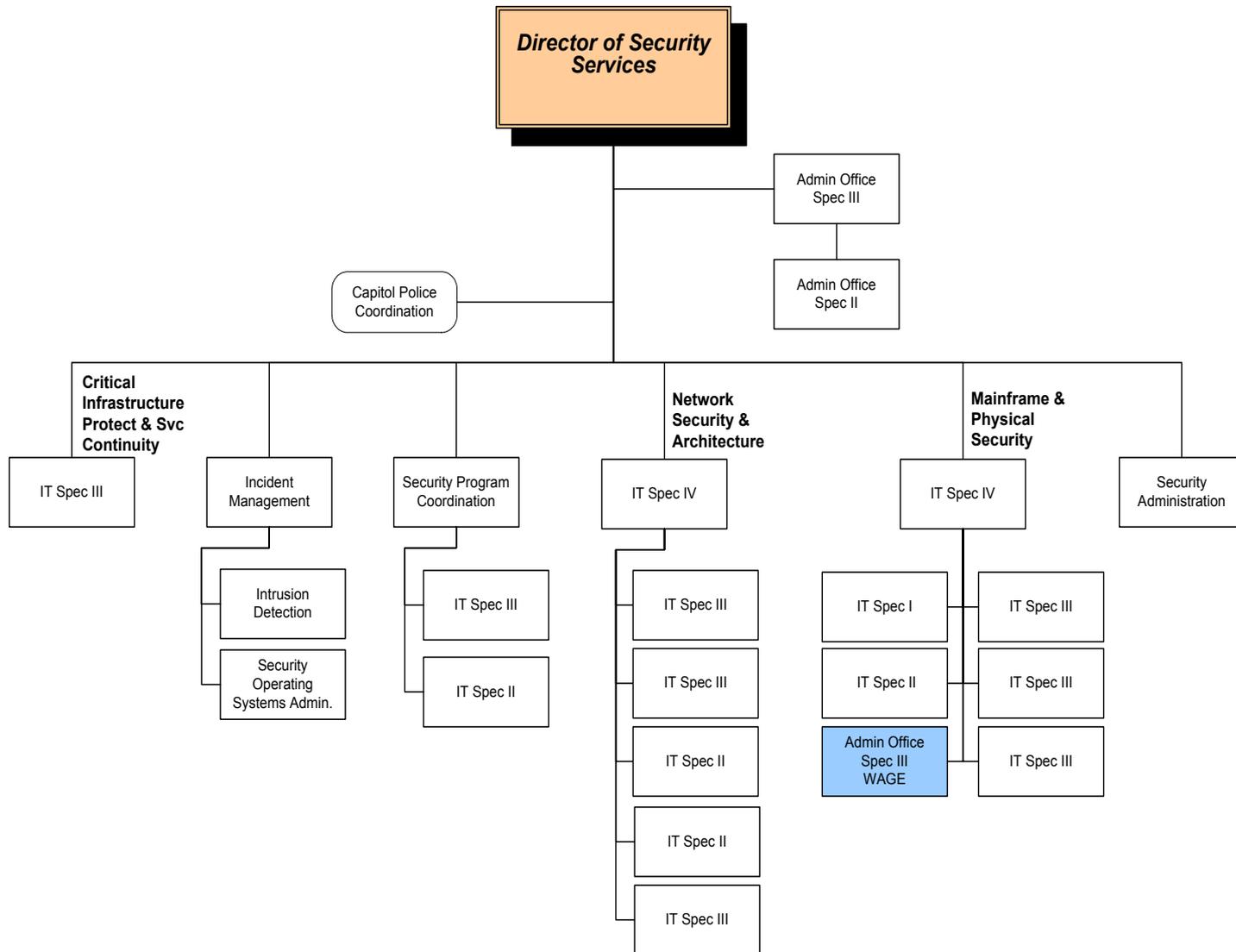
Central Systems Software  
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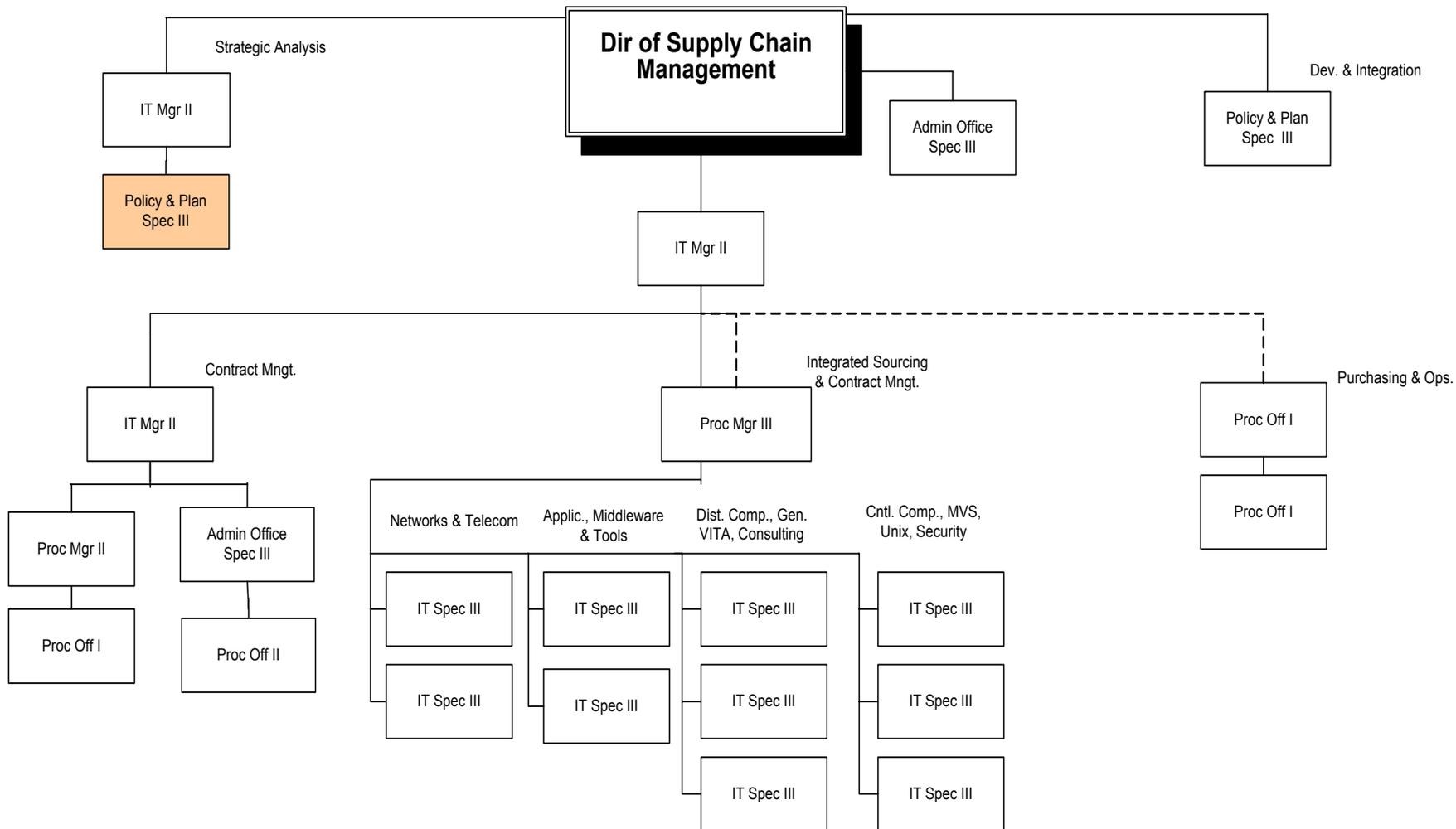


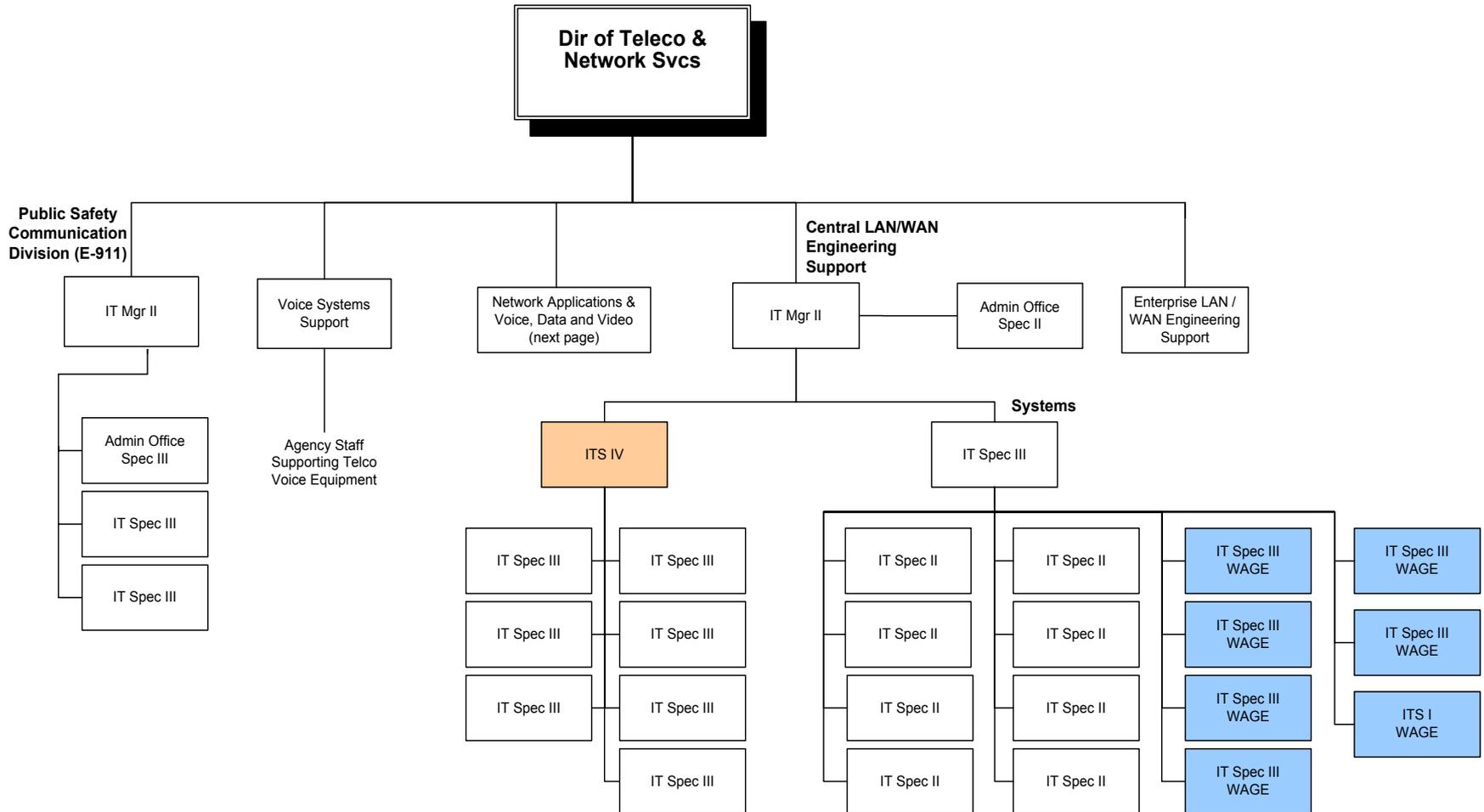


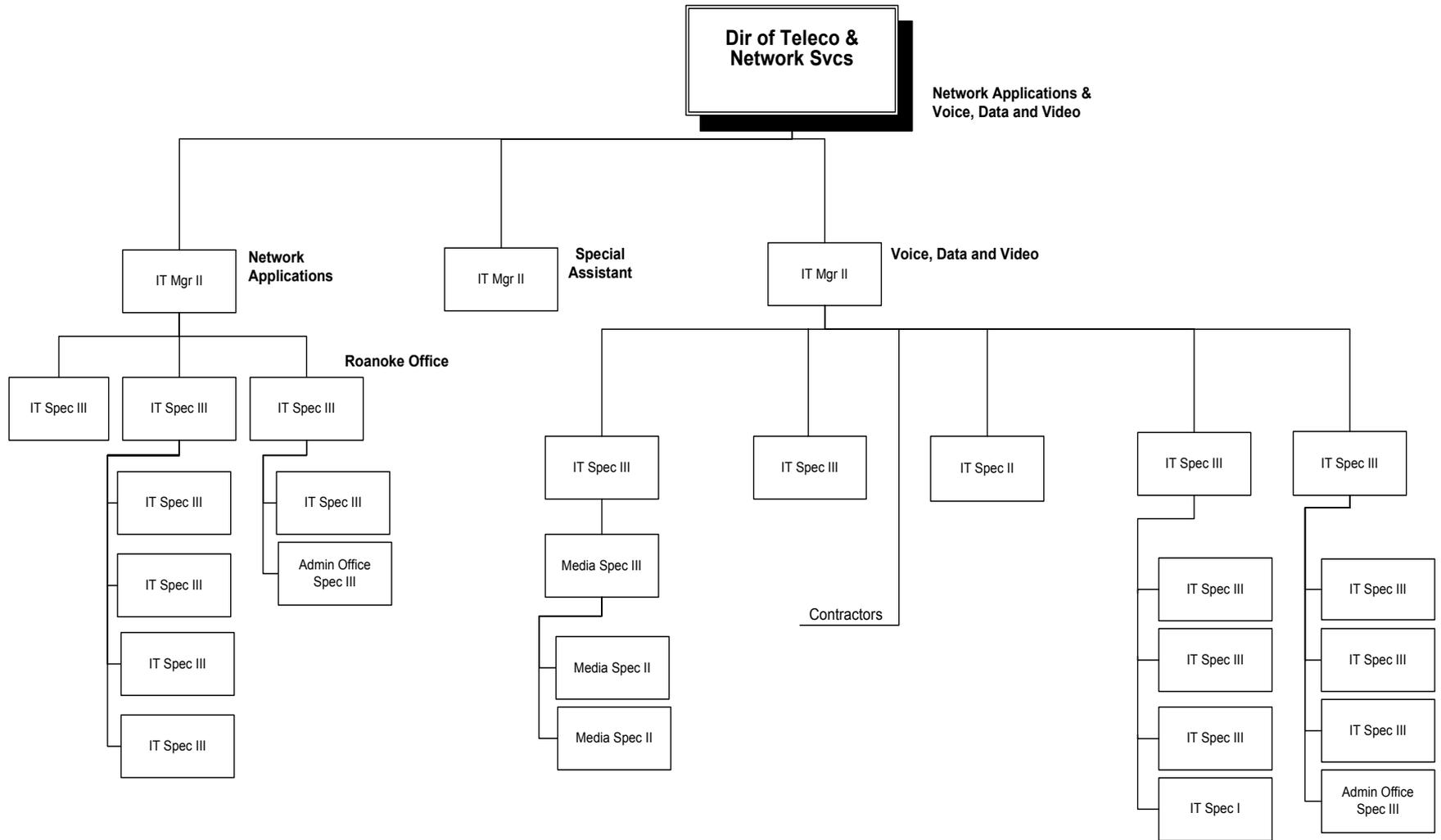














## COVANET Services

### Data Services

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- Private Line Data and Voice Services
- Switched Data Services
- Integrated Services Digital Network (ISDN)
- Private Frame Relay Services
- Private Asynchronous Transfer Mode (ATM) Service
- COVANET Private IP layer three networking via Frame Relay or ATM Access
- Public Frame Relay Service
- Public ATM Services
- Digital Subscriber Line (DSL) Service
- Internet Services Via
  - COVANET Gateway Internet Services via existing Frame Relay, ATM or DSL access
  - Dedicated Internet
  - Internet DSL
  - Dialup Internet
  - VSAT Satellite based Internet (equipment installed and provided as service)
- Electronic Data Interchange (EDI) Services
- Managed Virtual Private Network Services
- Disaster Recovery Services (Network redirect to SunGard)
- MCI Managed Intrusion Detection Services
- Enterprise Security Service (Assurance and Certification program)

### Voice Communications Services

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- Outbound Long Distance
- Inbound Domestic Toll Free Service (Toll Free "800")
- Inbound Toll Free "800" Service- Based Voice Processing Services
- Translation Services (third party Translation – 200 languages)
- T-1 Digital Gateway Service (Channelized T1 services)
- Operator/Public Payphone Service (Commission Plan)
- Calling Card Services
- ImagePort Fax Service (Fax Broadcast service)
- Prepaid Calling Cards
- Audio Conferencing Service (Backup to Primary VITA services)
- Video Conferencing Bridging Service
- Voice Portal Services (suite of automated speech applications)
- Web Center (Network-based contact center offering)



**COMMONWEALTH OF VIRGINIA**  
*Office of the Governor*

**George C. Newstrom**  
Secretary of Technology

(804) 786-9579  
Fax: (804) 786-9584

September 3, 2003

MEMORANDUM

**TO:** Cabinet Secretaries  
Heads of State Agencies and Institutions of Higher Education  
Agency Information Technology Resources (AITR)  
Agency/Institution Purchasing Officers

**FROM:** George C. Newstrom  
Chief Information Officer

**SUBJECT:** Interim Procedures for the Initiation and Approval of Major and  
Non-major Information Technology (IT) Projects

The Chief Information Officer of the Commonwealth of Virginia is authorized by the *Code of Virginia* to direct the development of policies and procedures for review and approval of information technology projects with a value equal to or exceeding \$100,000. The attached instructions are effective immediately and supersede that part of the April 12, 2002 Memorandum "Procedures for the Review and Approval of Information Technology and Telecommunications Procurements (and Projects)" pertaining to major and non-major IT projects.

The Commonwealth Information Technology Management Policy (COV ITRM Policy GOV 2003-02.1) describes the lifecycle phases for projects within the Commonwealth. The Commonwealth Project Management Guideline (COV ITRM Guideline GOV 2003-02.2), provides specific information and document templates that support the initiation, planning, execution, control, and closeout of IT projects. A new Project Management (PM) Standard is presently under development. The PM standard will establish the required agency processes and documentation for major and non-major IT projects across the entire project management lifecycle. In the interim, the attached procedures identify the requirements for agencies to initiate IT projects.

Questions regarding the attached procedures should be addressed to George Williams (804-371-2771, [george.williams@vita.virginia.gov](mailto:george.williams@vita.virginia.gov) ) or Michael Sandridge (804-371-2762, [michael.sandridge@vita.virginia.gov](mailto:michael.sandridge@vita.virginia.gov)) in the VITA Project Management Division.

#### Attachment

C: The Honorable William H. Leighty, Jr.  
Members of the Commonwealth IT Investment Board

## Instructions for Initiation of Commonwealth Information Technology Projects with a Value Equal to or Exceeding \$100,000

### A. Major IT Project Initiation

The following procedures apply to all Major IT Projects, which are defined in the *Code of Virginia* as information technology projects that are: mission critical; have statewide application; or, have a total estimated cost of more than \$1 million.

1. Project Planning Approval (*Code of Virginia, § 2.2-2018*)
  - a. Major IT projects are approved as part of the Agency IT Strategic Plan (ITSP). If a project is not part of the Agency ITSP, the agency will submit an Agency IT Strategic Plan Amendment Request Form (expandable Word template attached) to the VITA Project Management Division (PMD). The amendment must: outline the business need; identify the solution, if known (Part C - Description); and, explain how the project supports the agency business objective and Commonwealth technology plan (Parts D, E, and F).
  - b. PMD reviews the ITSP amendment request and recommends approval or rejection to the CIO.
  
2. Project Development Approval (*Code of Virginia, § 2.2-2019*)
  - a. After approval of the Agency ITSP or ITSP amendment by the CIO, the agency will conduct an analysis of the project solutions as described in the Commonwealth Project Management Guideline (COV ITRM Guideline 2003-02.2), Section 2 – Project Initiation.
  - b. The agency will prepare a detailed project proposal and project charter using the templates found in Section 2 – Project Initiation, of the Commonwealth Project Management Guideline. In the Charter, the agency will propose the membership of an Agency Internal Oversight Committee for CIO approval (*Code of Virginia, § 2.2-2021. Project Oversight*). The Oversight Committee organization must include a representative from the PMD of VITA.
  - c. The agency forwards to the PMD the completed project proposal and a project charter signed by all of the following:
    - i. Agency Head
    - ii. Project Sponsor
    - iii. Project Manager (Designee)
  - d. PMD will coordinate a Proponent Secretariat Oversight Committee meeting to review the project proposal and charter. The committee recommends approval or rejection of the project to the PMD and the CIO. If the committee recommends approval, the proponent secretary or deputy secretary signs the charter.
  - e. PMD completes a final review the project proposal and project charter and recommends approval or rejection of the project to the CIO.

- f. When the CIO determines that a project should be approved, the CIO will sign the charter and forward the proposal and charter to the IT Investment Board (ITIB).
  - g. Upon approval of the ITIB, the Chair of the ITIB will sign the charter.
3. Procurement Approval for Major Information Technology Projects. (*Code of Virginia, § 2.2-2020*)
- a. The agency will submit to PMD a copy of any Request for Proposal (RFP), Invitation for Bid (IFB), or other procurement request exceeding \$100,000.
  - b. PMD will review and recommend approval or rejection of the procurement document to the CIO.
  - c. The CIO has final authority to release an RFP or IFB, or to approve a procurement request.
  - d. When a contract has been prepared, the agency will submit the proposed contract to the CIO for approval through the PMD and VITA Acquisition Services.
4. Timeline
- a. Agencies should allow at least 15 workdays for review and approval of a strategic plan amendment. (A.1. Project Planning Approval)
  - b. The agency should allow sufficient time to conduct the technical and economic analysis of the project solutions and to develop the project proposal and charter.  
Project proposals and charters to be considered by the ITIB must be submitted to the VITA Project Management Division no later than 30 workdays prior to the Board meeting. Proposals and charters received within 30 workdays of a scheduled Board meeting will be considered at the following meeting. The IT Investment Board meets quarterly. Specific meeting dates are posted on the ITIB Web site (<http://www.vita.virginia.gov/ITIB/ITIB.cfm>). (A.2. Project Development Approval)
  - c. Agencies should allow at least 10 workdays for review and approval of an RFP, IFB, or procurement request, and an additional 10 workdays for review and approval of a proposed contract. (A.3. Procurement Approval for Major Information Technology Projects)

#### B. Non-major IT Project Initiation

The *Code of Virginia, § 2.2-2007.A.9* directs the CIO to develop policies and procedures for review by VITA of projects equal to or exceeding \$100,000. Based on the recommendation of the VITA PMD, the CIO approves or disapproves projects between \$100,000 and \$1,000,000. The following procedures apply to all Non-major IT Projects with a cost equal to or exceeding \$100,000.

1. Project Planning Approval
  - a. Non-major IT projects are approved as part of the Agency IT Strategic Plan (ITSP). If a project is not part of the Agency ITSP, the agency will submit an Agency IT Strategic Plan Amendment Request Form (expandable Word template attached) to the VITA Project Management Division (PMD). The amendment must: outline the business need; identify the solution, if known (Part C - Description); and, explain how the project supports the agency business objective and Commonwealth technology plan (Parts D, E, and F).
  - b. PMD reviews the ITSP amendment request and recommends approval or rejection to the CIO.
  
2. Project Development Approval
  - a. After approval of the Agency ITSP or ITSP amendment by the CIO, the agency will conduct an analysis of the project solutions as described in the Commonwealth Project Management Guideline (COV ITRM Guideline 2003-02.2), Section 2 – Project Initiation.
  - b. The agency will prepare a detailed project proposal and project charter using the templates found in Section 2 – Project Initiation, of the Commonwealth Project Management Guideline.
  - c. The Agency forwards, to the PMD, the completed project proposal and a project charter signed by:
    - i. Agency Head
    - ii. Project Sponsor
    - iii. Project Manager (Designee)
  - d. PMD reviews the project proposal and charter and recommends approval or rejection of the project to the CIO.
  - e. When the CIO determines a project should be approved, the CIO will sign the charter and return it to the agency through PMD.
  
3. Timeline
  - a. Agencies should allow at least 15 workdays for review and approval of a strategic plan amendment. (B.1. Project Planning Approval)
  - b. The agency should allow sufficient time to conduct the technical and economic analysis of the project solutions and to develop the project proposal and charter.  
Agencies should allow at least 15 workdays for review and approval of the project proposal and charter. (B.2. Project Development Approval)

## AGENCY IT STRATEGIC PLAN AMENDMENT REQUEST FORM

AGENCY: \_\_\_\_\_ AGENCY CODE: \_\_\_\_\_

<b>A. IF THERE IS A CHANGE IN THE AGENCY MISSION OR IT VISION, DESCRIBE THE CHANGE IN THE BOX BELOW.</b>	
<b>B. IF THERE IS A CHANGE IN AGENCY CRITICAL ISSUES, DESCRIBE THE CRITICAL ISSUE CHANGE IN THE BOX BELOW. IF THIS IS AN ADDITIONAL CRITICAL ISSUE, PROVIDE A COMPLETE DESCRIPTION OF THE ISSUE.</b>	
<b>C. MAJOR AND NON-MAJOR PROJECTS AND PROCUREMENTS</b>	
<b>IS THIS A (mark the appropriate block):</b> <input type="checkbox"/> NEW PROJECT <input type="checkbox"/> NEW PROCUREMENT <input type="checkbox"/> CHANGE TO A PLANNED PROJECT <input type="checkbox"/> CHANGE TO A PLANNED PROCURMENT	<b>DOES THIS PROJECT OR PROCUREMENT REPLACE AN EXISTING PROJECT OR PROCUREMENT?</b>  <p style="text-align: center;">YES <input type="checkbox"/> NO <input type="checkbox"/></p> <b>IF YES, IDENTIFY THE PROJECT OR PROCUREMENT BY ITS FORMAL TITLE IN THE ITSP</b>
<b>FORMAL TITLE</b>	<b>PROJECT OR PROCUREMENT COST</b>
<b>IS THIS A (mark the appropriate block):</b> <input type="checkbox"/> MAJOR PROJECT  <input type="checkbox"/> NON-MAJOR PROJECT	<b>PRIORITY</b> (identify shifts in project priority between current planned projects):
<b>DESCRIPTION:</b>	
<b>D. RELATED COMMONWEALTH TECHNOLOGY INITIATIVES AND STRATEGY</b>	
Type:	Description:
Type:	Description:
Type:	Description:
<b>E. RELATED CORE BUSINESS ACTIVITIES</b>	
Core Business Activity Title	Sub-function Title
Core Business Activity Title	Sub-function Title
Core Business Activity Title	Sub-function Title
<b>F. CRITICAL ISSUES</b>	
Description	Critical Issue Category

*Definitions of key terms are provided on the following page.*

\_\_\_\_\_  
**SIGNATURE OF AGENCY HEAD**

\_\_\_\_\_  
**PRINTED NAME AND TITLE**

\_\_\_\_\_  
**DATE**

# AGENCY IT STRATEGIC PLAN AMENDMENT REQUEST FORM

## Definition of Key Terms

**Commonwealth Enterprise Business Strategies** - The Commonwealth Enterprise Architecture outlines Enterprise Business Strategies (EBS), also known as business drivers, which are those highest priority strategies that significantly influence programs across the enterprise.

**Commonwealth Technology Initiatives** - The significant information technology initiatives for the Commonwealth of Virginia as defined in the Strategic Plan for Technology.

**Core Business Activities** - Core Business Activities (CBA) are agency cross-functional processes that produce the agency's primary products and services, or support their production. The CBA designations are based upon agency program codes as established by Department of Planning and Budget.

**Critical Issues** - Critical issues are opportunities or challenges that may significantly impact an agency's ability to accomplish its mission. Critical issues are categorized according to the following:

- Operational/administrative/organizational issues
- Statutory issues
- Regulatory issues
- Budgetary issues

**Major IT Project** - In the Commonwealth of Virginia, a Major IT Project is any state agency information technology project that (i) is mission critical, (ii) has statewide application, or (iii) has a total estimated cost of more than \$1 million.

**Non-major IT Project** - In the Commonwealth of Virginia, Non-major IT Projects are those technology projects with an estimated total project cost of less than \$1 million and not deemed to be mission critical or designated as having statewide application.

**Procurement** - The procedures for obtaining goods or services, including all activities from the planning steps and preparation and processing of a requisition, through receipt and acceptance of delivery and processing of a final invoice for payment.

**Procurement Cost** - The total estimated cost of the goods or services being purchased.

**Project** - A temporary endeavor undertaken to deliver a unique product or service.

**Project Cost** - The total cost to provide the business driven, technology-based product or service. The costs include the hardware, software, services, installation, management, maintenance, support, training, and internal staffing costs planned for the project. Internal staffing costs are the apportioned salaries and benefits of the project team members.

**Project Formal Title** - The complete, formal name given to a project. The title should not include acronyms without definition.

# ERRATA SHEET

for

A Report Issued by the Information Technology Investment Board on

## Recommended Technology Investment Projects for the 2004 – 2006 Budget Biennium

Attached is a revised report on *Recommended Technology Investment Projects for the 2004 – 2006 Budget Biennium*, dated September 9, 2003. This version replaces the August 29, 2003 report. Incorporated in the revised report are the following changes:

- Appendix A - Project “Planned Start Date” and “Planned Completion Date” information has been updated to reflect changes requested by agencies in their most recent Project Proposal documents. Where available, the proposal “Project Charter Approved” date has been substituted for the original agency planned start date and the proposal “Project Closed Out” date has been substituted for the original agency planned completion date.
  
- Appendices A and D - Project title information has been updated to reflect changes requested by agencies.

**REPORT OF THE  
INFORMATION TECHNOLOGY INVESTMENT BOARD**

*RECOMMENDED TECHNOLOGY INVESTMENT PROJECTS  
FOR THE 2004-2006 BUDGET BIENNIUM*

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**

**COMMONWEALTH OF VIRGINIA  
August 29, 2003  
Revised: September 9, 2003**

## **Introduction**

The *Code of Virginia*, Section 2.2-2458, requires the Commonwealth Information Technology Investment Board (ITIB) to submit a list of recommended technology investment projects and priorities for funding such projects to the Governor and General Assembly by September 1 of each year. The ITIB held its first meeting on August 5, 2003 and elected George Newstrom, CIO, as the Board Chairman. The Board Chairman, acting on behalf of the ITIB, hereby submits the Recommended Technology Investment Projects Report to the Governor and General Assembly for the 2004-2006 Budget Biennium.

The Agency Information Technology Strategic Planning (ITSP) Process for the 2004-2006 Budget Biennium was used to collect the information necessary to construct the report and as a vehicle for the CIO to approve the planning phase of the recommended technology investments (*Code of Virginia*, Sections 2.2-2008 and 2.2-2018). Staff from the VITA Project Management Division (PMD) assisted the CIO with information collection, analysis, and report compilation.

In July, Secretary Newstrom provided each Cabinet Secretary a status of the ITSP data collection effort and outlined a process for incorporating recommendations from the Secretaries and the Department of Planning and Budget in the final report. Major technology project proposals from agencies served as the basis for determining which investments were evaluated for recommendation. A preliminary project list was provided to the Department of Planning and Budget (DPB) for review and comment prior to individual meetings with each Secretariat. The DPB review alerted the Secretary of Finance to pending project recommendations and provided the VITA PMD staff with information regarding possible budget issues.

In August, the Deputy Secretary of Technology and VITA staff conducted a series of meetings with each Secretariat. At the meetings, preliminary project recommendations and rankings for the Secretariat were reviewed and discussed. Where applicable, the Secretariat reports identified potential collaboration opportunities for technology investments. The results of each Secretariat review were considered in the final report to the Governor and General Assembly approved by the Chairman of the ITIB.

## **Major Technology Investment Projects by Rank**

Appendix A - *Major Technology Investment Projects by Rank* - is a ranking of project proposals received as part of the Strategic Planning Process. The evaluations were performed as a two-step process. First, the PMD analysts reviewed the project proposals and completed an assessment for each proposal to determine if the project should be recommended to the Governor and General Assembly. For all recommended projects with adequate proposal information, ranking criteria were applied to prioritize the projects within each Secretariat. The recommendation criteria are listed in Appendix B and the ranking criteria are listed in Appendix C. Both sets of criteria were developed from proposal evaluation criteria specified in the *Code of Virginia* and established as IT investment management best practices.

Appendix A - *Major Technology Investment Projects by Rank* - divides the projects into three categories.

- **Recommended for Planning** – projects recommended for planning in the 2004-2006 Budget Biennium, ranked within each Secretariat. This provisional recommendation constitutes approval to undertake only the planning phase of each project. Subsequent development approval will be subject to the review and approval of the ITIB.
- **Identified for Preliminary Planning** - projects identified for preliminary planning that will be initiated in the 2004-2006 Budget Biennium. Projects in this category must submit a project proposal to the CIO at the conclusion of preliminary planning. Subsequent development approval will be subject to the review and approval of the ITIB.
- **Active Projects** - technology projects which will continue in the 2004-2006 budget biennium and are currently active on the Commonwealth Information Technology Major Projects Dashboard or previously approved for planning by the CIO. This category of projects does not require a proposal submission or recommendation; however, continuation of active projects is subject to the recommendation of the CIO and the review and approval of the ITIB.

The Project Descriptions Report (Appendix D) contains the project description for each project on the list of Major Technology Investment Projects by Rank. The Project ID field on both reports can be used to associate the project to the description. Projects are listed in Project ID sequence.

Table 1 through Table 4 (below) summarize the information contained in Appendix A. The project costs contained in this document are preliminary estimates provided by the proponent agency, and are subject to varying degrees of uncertainty. It should be noted that projects are funded from multiple sources (e.g., GEN, NGF, FED, ISF, MIX, OTH) and they span multiple biennia. The Project Cost (Estimate at Completion) is defined as the expected total cost of the project when the defined scope of work has been completed. Consequently, the costs shown in the column “Project Cost (Estimate At Completion)” should not be misconstrued as the funding requirements for the 2004 - 2006 biennium.

<b>Commonwealth Major Technology Investment Projects Requiring Funding for 2004 - 2006 Biennium</b>		
	<b>Number of Projects</b>	<b>Project Cost (Estimate At Completion)</b>
Recommended for Planning	85	\$280,871,559
Identified for Preliminary Planning	27	\$157,535,811
Active Projects	<u>26</u>	<u>\$624,058,844</u>
<b>Commonwealth Totals</b>	<b>138</b>	<b>\$1,062,466,214</b>

**Table 1: Commonwealth Totals**

Commonwealth Major Technology Investment Projects Requiring Funding for 2004 - 2006 Biennium by Secretariat		
	Number of Projects	Project Cost (Estimate At Completion)
<b>Secretary of Administration</b>		
Recommended for Planning	4	\$17,241,800
Identified for Preliminary Planning	1	\$500,000
Active Projects	0	\$0
<b>Secretary of Commerce &amp; Trade</b>		
Recommended for Planning	3	\$3,419,895
Identified for Preliminary Planning	0	\$0
Active Projects	2	\$6,420,160
<b>Secretary of Education</b>		
Recommended for Planning	41	\$162,139,496
Identified for Preliminary Planning	2	\$2,657,539
Active Projects	8	\$148,965,399
<b>Secretary of Finance</b>		
Recommended for Planning	3	\$1,206,370
Identified for Preliminary Planning	2	\$170,000
Active Projects	1	\$31,000,000
<b>Secretary of Health &amp; Human Resources</b>		
Recommended for Planning	8	\$40,683,789
Identified for Preliminary Planning	2	\$14,500,000
Active Projects	3	\$17,025,000
<b>Secretary of Natural Resources</b>		
Recommended for Planning	2	\$3,700,000
Identified for Preliminary Planning	0	\$0
Active Projects	0	\$0
<b>Secretary of Public Safety</b>		
Recommended for Planning	18	\$43,868,709
Identified for Preliminary Planning	3	\$2,960,000
Active Projects	3	\$377,731,522
<b>Secretary of Technology</b>		
Recommended for Planning	2	\$3,238,000
Identified for Preliminary Planning	9	\$55,843,000
Active Projects	1	\$2,206,966
<b>Secretary of Transportation</b>		
Recommended for Planning	4	\$5,373,500
Identified for Preliminary Planning	8	\$80,905,272
Active Projects	8	\$40,709,797

Table 2: Project Categories by Secretariat

Commonwealth Major Technology Investment Projects Requiring Funding for 2004 - 2006 Biennium Largest Five By Cost			
P000468	VSP	Statewide Agencies Radio System	\$370,000,000
P000014	DOE	Web-based Standards Of Learning (SOL) Technology Initiative	\$124,000,000
P000009	DMV	Integrated Systems Redesign	\$50,000,000
P000062	TAX	Public Private Partnership Project	\$31,000,000
P000211	VITA	Email Consolidation	\$24,306,000
<b>Total Cost of Five (5) Most Expensive Projects</b>			<b>\$599,306,000</b>
<b>Total Cost of Remaining 133 Projects</b>			<b>\$463,160,214</b>

Table 3: Largest Five By Cost

Commonwealth Major Technology Investment Projects Requiring Funding for 2004 - 2006 Biennium Percentage of Total Investment Cost by Category by Secretariat				
	Recommended for Planning	Identified for Preliminary Planning	Active Projects	Total
<b>Secretary of Administration</b>	<b>2%</b>	<b>0%</b>	<b>0%</b>	<b>2%</b>
<b>Secretary of Commerce &amp; Trade</b>	<b>1%</b>	<b>0%</b>	<b>1%</b>	<b>2%</b>
<b>Secretary of Education</b>	<b>13%</b>	<b>1%</b>	<b>14%</b>	<b>28%</b>
<b>Secretary of Finance</b>	<b>1%</b>	<b>0%</b>	<b>3%</b>	<b>4%</b>
<b>Secretary of Health &amp; Human Resources</b>	<b>3%</b>	<b>2%</b>	<b>2%</b>	<b>7%</b>
<b>Secretary of Natural Resources</b>	<b>1%</b>	<b>0%</b>	<b>0%</b>	<b>1%</b>
<b>Secretary of Public Safety</b>	<b>3%</b>	<b>1%</b>	<b>35%</b>	<b>39%</b>
<b>Secretary of Technology</b>	<b>1%</b>	<b>4%</b>	<b>0%</b>	<b>5%</b>
<b>Secretary of Transportation</b>	<b><u>1%</u></b>	<b><u>7%</u></b>	<b><u>4%</u></b>	<b><u>12%</u></b>
<b>Percent by Project Category</b>	<b>26%</b>	<b>15%</b>	<b>59%</b>	<b>100%</b>
<b>Cost by Project Category</b>	<b>\$280,871,559</b>	<b>\$157,535,811</b>	<b>\$624,058,844</b>	<b>\$1,062,466,214</b>

Table 4: Percentage of Total Investment Cost by Category by Secretariat

### **Collaboration Opportunities for Recommended Technology Investment Projects**

Analysts from the Project Management Division reviewed Agency IT Strategic Plans and project proposals for potential collaboration opportunities. General categories for collaboration were identified and projects were associated with the appropriate categories. In all, fourteen collaboration categories were identified. Examples of the collaboration opportunities, where multiple agencies submitted similar projects, include:

- Voice Over IP (Internet Protocol) – replacing existing telephone and data lines with voice over IP technology
- Web-enablement – web-enabling customer facing components of application systems using an enterprise standard for web applications
- Infrastructure – acquiring or upgrading technology infrastructure components employing enterprise architecture standards and collective procurements
- Application system upgrade, acquisition, or development – acquiring, upgrading, or developing application systems for similar functions such as financial management, grants management, human resource management, etc.

The CIO will identify potential collaboration opportunities to Secretaries and agency heads when approving each Agency IT Strategic Plan. Plans containing projects associated with potential collaboration opportunities will be given qualified plan approval. The qualified plan approval will require the agency to evaluate the collaboration opportunity as an alternative during the development of the final project proposal. Agencies will be required to address collaboration opportunities when seeking development approval from the Information Technology Investment Board.

### **Contact Information**

If you have questions or comments about the Recommended Technology Investment Projects Report, please contact Jo Jo Martin at 786-0505, [JoJo.Martin@VITA.virginia.gov](mailto:JoJo.Martin@VITA.virginia.gov) at the VITA Project Management Division.

**Appendix A**  
**Secretary of Administration**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000143	SBE	Virginia Election and Registration Information System (VERIS)	\$12,000,000	9/15/2003	12/15/2005	FED
2	P000051	DGS	Laboratory Information Management System (DCLS)	\$1,587,000	8/1/2003	1/1/2005	FED
3	P000034	DGS	Seat of Government Voice Over Internet Protocol (VoIP)	\$3,639,800	3/1/2004	9/30/2006	MIX
4	P000413	DEDR	Videoconferencing	\$15,000	7/1/2005	12/1/2005	NGF
<b>Identified for Preliminary Planning</b>							
	P000473	SBE	Campaign Finance Management System	\$500,000	1/1/2005	6/30/2006	-
<b>Active Projects</b>							
None							

**Appendix A**  
**Secretary of Commerce & Trade**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000035	DOF	Private Land Mobile Radio Replacement	\$1,992,704	9/15/2003	6/30/2008	GF
2	P000125	VDACS	Reengineering/Conversion of Legacy Applications	\$800,000	8/30/2003	6/30/2006	MIX
3	P000003	DOF	Integrated Forest Resource Information System (IFRIS)	\$627,191	5/1/2000	2/1/2005	MIX
<b>Identified for Preliminary Planning</b>							
None							
<b>Active Projects</b>							
-	P000217	VEC	Mid-Atlantic Career Consortium (MACC) Workforce Application	\$5,800,000	1/20/2000	7/1/2004	-
-	P000148	DMME	Automated Utility Tracking System	\$620,160	4/3/2003	4/1/2005	-

**Appendix A**  
**Secretary of Education**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000007	VSU	Re-engineer Core Business Processes	\$5,422,857	10/1/2003	5/1/2007	MIX
2	P000057	UVAH	Clinical System Implementation	\$19,900,000	12/30/1998	9/1/2005	OTH
3	P000017	CNU	Centralized IT Services for use by faculty and students	\$2,064,656	3/1/2003	12/1/2005	MIX
4	P000153	LC	Ruffners Technology	\$970,000	7/2/2003	4/1/2004	GF
5	P000150	DOE	Education Information Management System (EIMS)	\$14,900,000	7/31/2003	6/30/2006	GF
6	P000458	GMU	Telecommunications/Infrastructure Project	\$4,625,000	9/1/2003	6/30/2006	GF
7	P000120	LVA	Find It Virginia	\$5,000,000	10/1/2000	12/1/2006	GF
8	P000162	ODU	Enrollment Growth	\$20,000,000	7/1/2004	6/30/2008	MIX
9	P000149	VCU	Network (VCUnet) Infrastructure Maintenance and Experimental Networking	\$1,677,000	10/1/2003	8/1/2006	OTH
10	P000128	VCA	Replace the current computer network system.	\$50,000	7/1/2004	6/30/2005	GF
11	P000257	NSU	Firewall Implementation	\$83,000	5/1/2003	1/1/2004	GF
12	P000018	RU	Voice Over Internet Protocol (VoIP) Telephone System Project	\$1,414,094	3/1/2003	4/1/2005	MIX
13	P000134	VIMS	Critical IT Infrastructure Project	\$1,150,000	7/1/2004	6/30/2006	GF
14	P000027	JMU	Technology Infrastructure	\$10,775,000	5/19/2003	6/30/2008	GF
15	P000139	JYF	JYF Ticketing Improvements	\$267,345	4/1/2004	6/30/2005	GF
16	P000025	CNU	Workstation and Information-Interface Upgrades	\$1,420,000	9/1/2001	6/1/2006	MIX
17	P000050	CNU	Mitigation of Risk-related Down-Time of Campus Computing	\$1,500,000	3/1/2003	12/1/2007	GF
18	P000010	CNU	Classroom Technology and Faculty Understanding of its Use	\$1,863,700	9/1/2003	2/1/2006	GF
19	P000061	VSU	Student IT Services	\$1,347,500	3/1/2004	1/1/2007	MIX
20	P000005	VSU	Distance Education Initiative	\$1,515,000	1/1/2004	12/1/2005	MIX
21	P000013	VSU	Network Infrastructure Upgrade	\$3,154,844	7/31/2003	6/30/2007	NGF

**Appendix A**  
**Secretary of Education**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
22	P000060	LC	Purchase and Install Enterprise Resource Program (ERP)	\$3,800,000	7/1/2004	8/1/2005	GF
23	P000147	VCU	Modernization of Communications Infrastructure	\$11,450,200	1/1/2004	12/30/2006	MIX
24	P000121	LVA	Circuit Court Records Preservation Grants	\$1,900,000	9/1/2001	3/1/2013	NGF
25	P000008	VSU	Classroom Instruction Enhancement	\$1,540,000	5/1/2004	6/1/2007	MIX
26	P000036	RU	Storage Area Networks (SANs) Project	\$262,300	6/1/2003	3/1/2005	MIX
27	P000156	VCU	Administrative Systems Replacement	\$11,400,000	4/1/2004	10/1/2008	OTH
28	P000111	GMU	Mason Enterprise Security Architecture (MESA)	\$1,599,000	7/1/2003	12/1/2005	MIX
29	P000086	NSU	Voice over Internet Protocol (VoIP) Telephony	\$1,250,000	6/1/2004	8/1/2005	MIX
30	P000151	ODU	Digital Library	\$3,641,000	7/1/2003	4/1/2007	GF
31	P000438	LC	Replace end-of-life network equipment	\$860,000	3/1/2004	7/1/2006	GF
32	P000231	LC	Replace Private Branch eXchange (PBX)	\$710,000	3/1/2004	12/1/2005	MIX
33	P000465	NSU	RISE Network Connectivity	\$1,800,000	10/1/2003	1/1/2005	GF
34	P000161	ODU	Research Computational Infrastructure	\$8,735,000	7/1/2003	10/1/2007	MIX
35	P000073	JMU	Technology Classrooms	\$4,762,000	5/19/2003	6/1/2008	GF
36	P000464	NSU	Community Hospital Building Renovation	\$1,000,000	10/1/2003	1/1/2005	GF
37	P000466	NSU	Residence Hall Connectivity	\$3,620,000	12/1/2003	1/1/2005	-
38	P000022	LC	Centralized Storage Server	\$435,000	3/1/2004	12/1/2005	GF
39	P000138	NSU	Establish Open Access / Instructional Computer Labs	\$1,125,000	9/1/2003	8/1/2004	GF
40	P000421	NSU	Mediated Classrooms	\$2,150,000	6/30/2002	6/30/2010	MIX
41	P000224	NSU	Data Center Relocation	\$1,000,000	8/3/2003	8/1/2004	GF

**Appendix A**  
**Secretary of Education**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Identified for Preliminary Planning</b>							
	P000012	VCCS	J. Sargeant Reynolds Community College Phase IV Building	\$2,000,000	7/1/2004	6/30/2005	-
	P000154	LC	Science Building	\$657,539	1/15/2005	12/15/2005	-
<b>Active Projects</b>							
	P000024	CNU	Web-Accessible, Integrated Administrative Software System	\$2,190,000	2/1/2002	12/31/2005	-
	P000014	DOE	Web-based Standards Of Learning (SOL) Technology Initiative	\$124,000,000	7/1/2004	6/30/2006	-
	P000063	DOE	Teacher Education and Licensure (TEAL)	\$800,000	7/1/2004	6/30/2005	-
	P000030	GMU	Patriot Project (Student Information System)	\$5,325,899	7/1/2001	12/31/2004	-
	P000011	MWC	Administrative System Implementation (EagleLink II)	\$4,625,000	5/1/2003	12/31/2006	-
	P000107	RBC	Complete implementation of new Enterprise Resource Management (ERM) system	\$1,674,500	7/1/2002	6/30/2006	-
	P000019	CWM	Mastering Administrative Systems and Technologies	\$6,450,000	1/1/2002	1/1/2005	-
	P000028	UVA	Oracle 11i Database Upgrade	\$3,900,000	7/1/2003	7/1/2004	-

**Appendix A**  
**Secretary of Finance**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000158	DOA	Geac Software Upgrade	\$391,370	1/10/2002	2/1/2005	GF
2	P000131	DOA	Hardware Upgrade and Software	\$300,000	8/1/2003	12/31/2005	GF
3	P000032	TD	Infrastructure Update & Disaster Recovery	\$515,000	11/1/2003	3/1/2005	MIX
<b>Identified for Preliminary Planning</b>							
-	P000020	DOA	Commonwealth Integrated Payroll/Personnel System (CIPPS) FINDS Web	\$85,000	9/15/2003	11/15/2004	GF
-	P000059	DOA	Lease Accounting System (LAS) Replacement	\$85,000	10/1/2003	8/15/2004	GF
<b>Active Projects</b>							
-	P000062	TAX	Public Private Partnership Project **	\$31,000,000	7/1/1998	7/31/2005	-

\*\* The Project Cost (Estimate at Completion) reflects only continued contract support from AMS to include the Tax Amnesty Project.

**Appendix A**  
**Secretary of Health & Human Resources**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000106	DSS	Child Care System	\$9,500,000	9/1/2003	12/1/2005	FED
2	P000183	VDH	WebVISION – Private Provider Immunization	\$3,060,000	9/1/2003	4/1/2007	FED
3	P000146	DMHMR	Health Insurance Portability And Accountability Act (HIPAA) Security Rule	\$1,200,000	8/6/2003	5/1/2005	GF
4	P000119	DMHMR	Hewlett-Packard e3000 Computer Replacement	\$64,000	7/14/2004	11/29/2004	GF
5	P000145	DMHMR	Clinical Apps/EMR	\$11,843,000	7/14/2004	6/30/2008	GF
6	P000144	VDH	WebVISION Lab Module	\$5,445,952	12/31/2004	12/31/2008	-
7	P000118	VDH	Financial & Administrative System Rewrite	\$2,440,837	10/1/2003	12/31/2006	-
8	P000124	DMHMR	IT Infrastructure Upgrade	\$7,130,000	7/14/2004	7/1/2006	GF
<b>Identified for Preliminary Planning</b>							
-	P000110	DSS	Integrated Social Services Delivery System **	\$7,000,000	1/1/2004	12/1/2011	MIX
-	P000117	VDH	Women, Infant, and Children's Nutrition Program II (WIC-II)	\$7,500,000	9/1/2004	7/1/2008	-

\*\* The \$7,000,000 Project Cost (Estimate at Completion) includes only Phase I which ends in FY06

**Appendix A**  
**Secretary of Health & Human Resources**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Active Projects</b>							
-	P000053	DRS/ VDBVI	Integrated Case Management (ICM) Project **	\$3,200,000	12/1/2000	6/30/2006	-
-	P000103	DSS	Automated Program to Enforce Child Support (APECS)	\$4,100,000	11/1/2002	9/1/2005	-
-	P000471	DMAS	Medicaid Management Information System (MMIS) (Maintenance and Enhancements) ***	\$9,725,000	7/1/2004	6/30/2006	FED

\*\* The ICM Project was submitted by both DRS and VDBVI. The project number for the VDBVI submission is P000130.

\*\*\* The MMIS Project is an active project. The costs and project dates reflected on this report are for major procurements associated with the project which have been tentatively designated as Phase II of the MMIS Project.

**Appendix A**  
**Secretary of Natural Resources**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
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**Recommended for Planning**

1	P000015	DGIF	Point of Sale License System	\$1,500,000	8/1/2004	1/31/2006	NGF
2	P000091	VMNH	Adventure Classroom	\$2,200,000	1/2/2004	12/31/2005	GF

**Identified for Preliminary Planning**

None

**Active Projects**

None

**Appendix A**  
**Secretary of Public Safety**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000052	DOC	Offender Management System	\$17,000,000	7/1/2003	6/1/2006	GF
2	P000056	VSP	Enhancement of the Automated Fingerprint Identification System <sup>21</sup> (AFIS <sup>21</sup> )	\$700,000	7/1/2004	6/30/2005	-
3	P000461	VSP	Enhancement of the Automated Fingerprint Identification System <sup>21</sup> (AFIS <sup>21</sup> ) - Palm Print Search	\$2,000,000	9/1/2005	2/1/2007	GF
4	P000002	DCJS	Virginia Integrated Justice Program	\$3,000,000	5/31/2004	8/30/2006	GF
5	P000055	VSP	Enhancement of the Live Scan System	\$400,000	7/1/2004	6/1/2005	MIX
6	P000459	VDEM	IT Infrastructure for the Joint Virginia Emergency Operations Center	\$3,529,109	8/15/2003	12/30/2005	MIX
7	P000141	VSP	Upgrade of Virginia Criminal Information Network software	\$100,000	11/1/2003	6/1/2005	GF
8	P000045	VSP	Disaster Planning	\$2,200,000	9/1/2004	6/1/2006	GF
9	P000033	VSP	Conversion of Master Fingerprint File to Electronic Archive	\$1,600,000	4/1/2004	9/30/2006	GF
10	P000101	VSP	Dissemination of Department of Motor Vehicles photos	\$980,000	11/1/2003	6/1/2005	-
11	P000462	VSP	Enhancement of the Automated Fingerprint Identification System <sup>21</sup> (AFIS <sup>21</sup> ) - Wireless Access	\$2,000,000	8/1/2004	6/30/2006	GF
12	P000142	VSP	Sex Offender Registry/Livescan Interface for Mugshots	\$109,600	7/1/2004	7/1/2005	-
13	P000058	VSP	Sun Microsystems SUN Fire 6800 Midrange Server upgrade project	\$2,250,000	11/1/2004	6/1/2006	GF
14	P000044	VSP	Re-Write the Automated Workflow for Fingerprint Submissions	\$420,000	11/1/2004	6/1/2006	-
15	P000042	VSP	Statewide Mug-shot and Other Images Repository	\$725,000	11/1/2003	6/1/2005	-
16	P000046	VSP	Conversion of Database Systems on New Platform	\$4,000,000	1/1/2004	7/1/2006	-
17	P000037	VSP	Consolidated Billing System	\$855,000	10/2/2002	3/10/2005	NGF
18	P000463	VSP	Criminal Justice Information System (CJIS) Master Name Index	\$2,000,000	1/1/2005	6/1/2007	-

**Appendix A**  
**Secretary of Public Safety**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Identified for Preliminary Planning</b>							
-	P000423	DCJS	Replace Phone Systems at Division of Forensic Science	\$1,000,000	7/15/2005	6/30/2006	GF
-	P000435	DCJS	Replacement of Building Access System for Division of Forensic Science	\$1,000,000	7/15/2005	6/30/2006	GF
-	P000104	DCJS	Grants Tracking	\$960,000	7/15/2005	6/30/2006	GF
<b>Active Projects</b>							
-	P000468	VSP	Statewide Agencies Radio System **	\$370,000,000	7/1/1999	10/1/2006	-
-	P000469	VSP	Mobile Computer Terminal Upgrade Project	\$3,731,522	7/1/2001	12/31/2004	-
-	P000470	VSP	State and Local Preparedness IT Disaster Recovery	\$4,000,000	1/1/2003	6/30/2005	-

\*\* Total appropriations to date - \$8 million (\$5 million during the 2000-2002 biennium and \$3 million during the 2002-2004 biennium) for the planning, engineering, RFP, and assessment & testing. The project contract is currently being negotiated and will be presented for funding at the 2004 Session.

**Appendix A**  
**Secretary of Technology**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000201	VITA	VITA Information Center (VIC)	\$2,688,000	8/30/2003	2/15/2005	ISF
2	P000467	VITA	Procure Emergency Generator	\$550,000	7/1/2004	6/30/2005	ISF
<b>Identified for Preliminary Planning</b>							
	P000203	VITA	Consolidated Backup Center **	\$10,000,000	7/31/2004	6/30/2006	ISF
	P000202	VITA	Consolidated Richmond Data Center **	\$12,000,000	7/31/2004	6/30/2006	ISF
	P000211	VITA	Email Consolidation **	\$24,306,000	10/31/2003	10/31/2006	ISF
	P000328	VITA	Lightweight Directory Access Protocol (LDAP) **	\$1,400,000	10/31/2003	10/31/2004	ISF
	P000212	VITA	Oracle Financials **	\$1,500,000	10/31/2003	10/31/2004	ISF
	P000213	VITA	Server Consolidation **	\$1,000,000	10/31/2003	10/31/2004	ISF
	P000205	VITA	VITA Customer Relationship Management System	\$597,000	4/30/2003	6/30/2006	ISF
	P000207	VITA	Web Accessibility Standards & Content Management	\$3,100,000	7/31/2003	6/30/2006	ISF
	P000474	VITA	VIPNet Enterprise Solutions	\$1,940,000	7/1/2004	6/30/2006	ISF
<b>Active Projects</b>							
	P000206	VITA	IT Portfolio	\$2,206,966	5/31/2003	6/30/2006	ISF

\*\* These projects are a prerequisite for VITA's cost-saving objectives.

**Appendix A**  
**Secretary of Transportation**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000095	VDOT	Highway Traffic Records Information System (HTRIS) Technology Upgrade	\$3,000,000	6/1/2003	12/1/2004	NGF
2	P000102	VDOT	American Association of State Highway & Transportation Officials (AASHTO) Bridgeware Implementation	\$1,023,500	10/1/2003	6/1/2005	NGF
3	P000089	VDOT	Statewide Video Distribution Service	\$1,170,000	9/3/2003	1/5/2005	MIX
4	P000029	MVDB	Seat Management Contract Renewal	\$180,000	7/1/2003	7/12/2004	NGF
<b>Identified for Preliminary Planning</b>							
-	P000068	DMV	Redesigned Self Service Kiosks	\$675,234	10/1/2005	11/30/2006	-
-	P000009	DMV	Integrated Systems Redesign	\$50,000,000	7/1/2005	7/1/2006	NGF
-	P000094	VDOT	Violation Enforcement System	\$5,000,000	1/1/2004	6/1/2005	NGF
-	P000114	VDOT	Integrated Six Year Programming System	\$1,290,038	7/30/2003	7/1/2005	NGF
-	P000093	VDOT	Statewide Business Security System	\$1,400,000	11/21/2003	6/30/2006	NGF
-	P000090	VDOT	Statewide Traveler Information System	\$8,640,000	4/1/2003	10/1/2005	MIX
-	P000084	VDOT	"EZ Pass" Reciprocity	\$10,000,000	12/1/2004	7/1/2005	-
-	P000116	VDOT	Program/Project Management System Upgrade	\$3,900,000	8/1/2003	3/1/2006	NGF

**Appendix A**  
**Secretary of Transportation**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Active Projects</b>							
	P000123	VDOT	Asset Management System	\$2,046,794	3/1/2003	11/30/2004	NGF
	P000006	VDOT	"GEOPAK" Software for Civil Engineers	\$5,000,000	6/1/2000	4/30/2005	-
	P000085	VDOT	Financial Management System (FMS II) Upgrade **	\$18,613,003	8/4/2003	12/31/2005	NGF
	P000001	VDOT	Hampton Roads Smart Traffic	\$3,500,000	11/1/2002	11/1/2005	-
	P000129	VDOT	Pinners Point	\$3,250,000	11/3/2002	11/5/2005	-
	P000115	VDOT	Client-server "Trns*Port" System	\$3,100,000	1/1/2003	7/1/2004	-
	P000122	VDOT	Comprehensive Environmental Data Reporting System (CEDAR)	\$2,500,000	1/1/2003	8/30/2004	-
	P000472	VDOT	Coleman Bridge Automated Toll Facility	\$2,700,000	2/1/2003	12/30/2004	-

\*\* Only a \$1.5 million planning phase is approved for FMS II.

## Appendix B

### *Selection Criteria for Recommending Major Technology Projects*

Evaluation Criteria	Comment
<b>Strategic Alignment</b>	
Commonwealth Technology Strategic Plan	Supports technology strategic initiatives
Enterprise Business Strategies (EA)	Supports Enterprise Business Strategies
Agency Strategic Direction	Supports core business activities and agency critical issues
<b>Benefits to the Commonwealth</b>	
Constituencies benefitted	
Likelihood that benefits can be realized	
Positive Return on Investment if given	
Mandated	
<b>Past Performance by Agency</b>	
Overall average of all projects listed on the Dashboard for the agency.	Based on lowest overall rating average for any three consecutive months in the last year.
This project listed on Dashboard.	Based on overall project rating for the last three months reported.
Information Technology Investment Management practices reported	
<b>Funding Requirements</b>	
Reasonableness of cost estimates	
Source of funding identified	
Totally non-state funded	
Partially non-state funded	
<b>Risk</b>	
Cost of the project	Higher the total estimated cost, the higher the associated risk
Viability of project based upon description	
Agency risk management approach	

## Appendix C

### *Ranking Criteria for Recommended Technology Projects*

#### Benefits to the Commonwealth

<i>From Project Proposal Evaluation</i>
<b>Constituencies Benefited.</b> To what degree does the project anticipate improvements to internal and external customer service delivery?
<b>Positive Return on Investment.</b> To what degree will the project benefits exceed the project cost (ROI)?
<b>Enterprise Business Strategies.</b> To what degree does the project support the Enterprise Business Strategies of the Commonwealth?

#### Risk Associated With Project

<i>From Project Proposal</i>
<b>Percentage of Preliminary Risk Score.</b>
<i>From Project Proposal Evaluation</i>
<b>Agency Risk Management Approach.</b>

#### Past Performance of Agency

<i>From Project Dashboard</i>
<b>Past Performance on Major Technology Projects.</b> The default rating for this criterion is neutral. However, if the agency has received an overall average of red for any three consecutive months from their Secretarial review, the impact is negative for this category. If the agency has received an overall average of green for any three consecutive months from their Secretarial review, the impact is positive for this category.
<i>From Project Proposal Evaluation</i>
<b>Information Technology Investment Management Practices.</b> This reflects the degree to which the agency employs acceptable IT investment management practices.

#### Technical Feasibility of the Project

<i>From Project Proposal Evaluation</i>
<b>Viability of Project Based Upon Description.</b> To what degree will the proposed project utilize information technologies that will be viable for the expected life of the solution?

# **Appendix D**

## **Project Descriptions**

## Appendix D - Major Information Technology Project Descriptions

Project ID: P000001  
Agency Abbreviation: VDOT  
Project Formal Title: Hampton Roads Smart Traffic

System Integration component of construction project.

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Project ID: P000002  
Agency Abbreviation: DCJS  
Project Formal Title: Virginia Integrated Justice Program

Under the proposed system, a centralized sentence calculation module would be utilized by all correctional agencies. The centralized system would store all data relevant to sentence calculation including sentence orders, jail credits, disciplinary actions, time served, and completion of special programs.

In the Courts Automated Information System, at SCV, court orders would be stored electronically in a standardized format consistent with that currently required under court rules. Electronic signatures would be used to validate sentence order information entered into CAIS and the orders would then be transmitted electronically to the central correctional system.

Agencies with offender management systems would be able to export data in accordance with published specifications so the central system could be updated through an electronic interface. Agencies without an offender management system would enter data such as jail credits, disciplinary actions, completion of assigned programs, and time served would either be entered directly into the central system. This would eliminate the need for the paper forms that are currently used.

Agencies responsible for offenders would electronically receive updates indicating time served information, projected release dates, and dates when the responsibility for offenders is to be transferred to another agency. Courts, corrections agencies, prosecutors, public defenders and authorized private defense attorneys would have the ability to query the sentence calculation system. This system would generate better, more timely and more accurate information for users, which would result in better decisions and reduced legal liability.

This is an integration project involving multiple agencies and DCJS would provide the central coordination needed. Funds would be distributed to the participating agencies in accordance with the project budget. A requirements analysis and general and detailed design would be completed during the first year and development of the central calculation module and standardized forms would be completed during the second year. The deployment to different jurisdictions and agencies would be performed during the following year.

Additional detail is available in Appendix A. Sentence Standardization Project Proposal.

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Project ID: P000003  
Agency Abbreviation: DOF  
Project Formal Title: Integrated Forest Resource Information System (IFRIS)

Current decentralized databases will be replaced with a centralized database containing both tabular and geographic (spatial) data. Application will be web based for both front-end and reporting, including a revolutionary mapping interface. Systems analysis and requirement definition will be completed by internal staff. Database design and front-end development will be contracted out. Current system is comprised of fairly independent subsystems, which easily lend themselves to phased replacement. Microsoft SQL Server has been chosen as the RDBMS because it has proven capacity to integrate both spatial and non-spatial data. ESRI products will provide the interface between SQL Server and the web-based mapping interface. Front-end development will use ASP, VB script and Java script. Crystal Reports will be used for reporting purposes. Primary customers will be DOF employees, but virtually all agency business partners will be secondary customers. The proposed system will track agency data in each functional area. The mapping interface will allow the user to enter spatial records via a map feature and generate maps based on database information. Consolidated statewide information will be available at all agency locations.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000005  
Agency Abbreviation: VSU  
Project Formal Title: Distance Education Initiative

Distance Education Initiative is a new Distance Education service that will include VSU Radio, video and data connectivity to Randolph Farm, video conferencing, cable TV to the dormitories, Learning Technology third party support for course development, and training for the staff who will manage it. This initiative is designed to serve all customers, including students who are enrolled at VSU. It is designed with a minimum of limitations for access and will support customized service delivery according to a customer's profile needs. It is recommended that this project begin in the fall of 2003. It will require approximately three years to implement a full program, which will require continuous change to keep pace with changing technologies. The cost is estimated at \$1,564,000.

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Project ID: P000006  
Agency Abbreviation: VDOT  
Project Formal Title: "GEOPAK" Software for Civil Engineers

GEOPAK is one of the CADD software packages used for plan production and construction by the Preliminary Engineering Divisions. Drawings that are produced using GEOPAK software, create quality plans with reduce errors and omissions and improve quantity cost estimating.

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Project ID: P000007  
Agency Abbreviation: VSU  
Project Formal Title: Re-engineer Core Business Processes

The purpose of this project is to replace current VSU administrative system with technologies that enable a "just in time" information access and delivery for VSU customers, community, and at-large stakeholders. The recommendation is the SCT Banner administrative system that includes Student, Finance, Financial Aid, Human Resources, Web for Student, and Web for Faculty modules. The Human Resources module is being installed now. This solution is a mature software that has been technically proven in the higher education environment. It is widely supported by Collegis, Inc., our resource management partner. The Collegis implementation methodology is a field-tested template for implementing ERP applications in a higher education environment. Collegis provides the technical expertise on-site for the duration of the project and schedules the necessary training and knowledge transfer to VSU staff to enable independent, institution-based operation of the new ERP environment. Total cost of the project is estimated at \$5,000,000. Total implementation time for all modules is estimated to be four years from start to finish.

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Project ID: P000008  
Agency Abbreviation: VSU  
Project Formal Title: Classroom Instruction Enhancement

This project focuses on classroom instruction enhancements that will provide a wireless mobile lab, a computer programming lab, Unix and Linux labs, a Cooperative Extension outreach server, 24/7 student teaching lab, a Virtual Library website, a Model e-classroom, faculty web pages, E-commerce applications, Blackboard curriculum management software, multi-media classroom upgrades, IT for outreach programs, stocks and bonds training software, an Apple Graphics lab, an Ecology server, and program development and assessment software. The project serves a wide range of departments, functions, and customers with an equally broad range of technologies and methodologies designed to bring VSU up to industry standards in the use of technology in teaching. The project is scheduled to begin in October, 2003 with a planned completion date of March, 2005. The cost to complete is \$1,557,215.

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Project ID: P000009  
Agency Abbreviation: DMV  
Project Formal Title: Integrated Systems Redesign

Redesign DMV's information systems, including driver licensing and control, vehicle registration and titling, motor carrier credentialing services and all associated financial and security components to achieve full integration. Phase 1 focuses on driver credentialing: replacing the Digimarc contract for driver's license and ID card issuance, deployment of intelligent workstations for users currently using dumb terminals, adding biometrics criteria for identity integrity, and scanning devices for capturing, storing and retrieving information to make the issuance process seamless, secure and fully integrated. Phase 1 also

## Appendix D - Major Information Technology Project Descriptions

includes development and deployment of a new financial system that will allow "point of sale" transactions and netting functionality. Phase 2 of the project will focus on a rewrite and deployment of vehicle credentialing (registration and titling) and development of a "customer file" that will accommodate individuals and business customers. Phase 3 involves integrating motor carrier programs into the new system (IRP, IFTA etc.). Phase 4 will focus on integrating tax compliance programs (Fuels and Rental Tax). The last phase will integrate Transportation Safety into the new redesign.

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Project ID: P000010  
Agency Abbreviation: CNU  
Project Formal Title: Classroom Technology and Faculty Understanding of its Use

Sixty seven smartclassrooms will be designed and implemented by FY 06. One electronics technician and two instructional technologists will be hired to maintain equipment and train faculty and students in the use of the technology. Approximately 4,500 students and 150 faculty will be the customer base served by this project. With the interactive instructional technologies in the majority of classrooms at CNU, a dynamic learning environment will be fostered and faculty and students will be empowered to discover knowledge. Abilities and retention will increase and intellectual stagnation will decline.

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Project ID: P000011  
Agency Abbreviation: MWC  
Project Formal Title: Administrative System Implementation (EagleLink II)

The project is a three-year effort to replace obsolete core technology, business and student systems with a Web-accessible, fully integrated information system developed with maximum flexibility and growth to support the business needs and academic requirements of the College now and as a university.

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Project ID: P000012  
Agency Abbreviation: VCCS  
Project Formal Title: J. Sargeant Reynolds Community College Phase IV Building

Equipment for college's new Technology Building: Classroom and office PCs, data projectors, servers, printers, satellite dishes, etc.

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Project ID: P000013  
Agency Abbreviation: VSU  
Project Formal Title: Network Infrastructure Upgrade

The purpose of this project is two-fold: (1) to keep hardware and software used at the University current with advances in technology; and to insure IT interoperability. The project will: consolidate and upgrade servers; upgrade operating systems and CISCO; migrate from IPX- to-TCO/IP network protocols; and migrate to Microsoft Windows 2000. The importance of staying current is exemplified by the need for higher education institutions to investigate and apply emerging technologies that enable effective development, organization, and delivery of instructional materials. The University must remain current with software and hardware standards if it is to strengthen the research capabilities of faculty, graduate students, and undergraduates, both by pursuing imaginative external relationships and by improving selected campus facilities. It is recommended that this project begin as soon as possible, no later than the fall of 2003, in order to prevent falling further behind in software/hardware currency. The basis for upgrading hardware and software is determined (1) by the need to support multiple levels of security, access, and capability, (2) by the need to add improved features for users, (3) by the need to remain compatible with software and hardware from other schools and agencies, and (4) by the need to keep within the software versions and hardware models that are still supported by the vendor. The order of the network upgrades will be scheduled based on these criteria. The cost of this project is \$3,016,000. Customers are students, faculty, and staff.

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Project ID: P000014  
Agency Abbreviation: DOE  
Project Formal Title: Web-based Standards of Learning (SOL) Technology Initiative

Continued implementation of the Web-based Standards of Learning Technology Initiative to provide tools for instruction, remediation, and online administration of the Standards of Learning Assessments in High Schools. The initiative will be expanded to include middle, then elementary schools (currently a dashboard project).

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000015  
Agency Abbreviation: DGIF  
Project Formal Title: Point of Sale License System

This proposal is based on a system design which includes a combination of configurable purchased software and custom developed components. The back-end system needs to interface with client systems and other back-end processes. The proposed architecture would utilize BIZTalk-Soap-XML standards technology for the inter-process communications. The clients software would be developed using Microsoft .Net Framework software. The use of this technology will allow the development of a single code base supporting multiple channel technologies. Support could be provided to both thin client (i.e. browser based clients connected via broadband connections) and "fat" clients operating on PC or CE based platforms which would operate off-line from the backend systems and upload and download needed information on a daily schedule. Off-line clients would typically not be connected to the host systems while selling licenses. The POS system would serve the license sales needs of approximately 750 license agents throughout the state. The primary benefits include: development of an electronic customer database, increase customer satisfaction through the timely and efficient licensing function, increased back-end productivity, and better cash flow. The client software would be developed utilizing agency staff and contract developers. Initial client hardware would be bid and distributed on an extended rollout schedule. Contract and staff development effort is estimated at \$700,000. Client, server, and communication Hardware and Software is estimated at \$800,000.

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Project ID: P000017  
Agency Abbreviation: CNU  
Project Formal Title: Centralized IT Services for use by faculty and students

By August 2005 CNU will have finished constructing, staffing and equipping an expansion of its academic IT facilities, to be housed in the expansion of the Smith Library. This facility will showcase a Teaching and Learning Center, which will develop our faculty's skills in teaching with technology. This will allow faculty to reach students with diverse learning styles. The area will also house staff supporting WebCT, our online classroom supplement program. A PC lab and help desk will expand our assistance to students who need access to computers. The area will have a separate entrance and will be open 24 hours a day. The Curricular Technologies Center will host a variety of high end workstations and project rooms that will allow students and faculty to create and edit multimedia presentations.

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Project ID: P000018  
Agency Abbreviation: RU  
Project Formal Title: Voice Over Internet Protocol (VoIP) Telephone System Project

Radford University seeks to replace its existing leased Centrex telephone service with a Voice-over-IP solution that can: 1. Meet student, faculty, and staff needs and expectations; 2. Leverage the university's investment in its existing networking infrastructure; 3. Position the university to take advantage of emerging technologies such as toll bypass and Unified Messaging; 4. Result in significant cost savings to the university over the expected life cycle of the equipment.

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Project ID: P000019  
Agency Abbreviation: CWM  
Project Formal Title: Mastering Administrative Systems and Technologies

This project implements SCT Banner suite of products for higher education in the context of an enterprise resource planning (ERP) system. Implementation includes the student information, finance, and human resources systems with the related web interfaces.

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Project ID: P000020  
Agency Abbreviation: DOA  
Project Formal Title: Commonwealth Integrated Payroll/Personnel System (CIPPS) FINDS Web

CIPPS-FINDS provides a database of point-in-time snapshots of both employee profile data as well as specific payroll reports. The web based application will provide access to a similar level of information for agency usage using a standard WEB browser interface.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000022  
Agency Abbreviation: LC  
Project Formal Title: Centralized Storage Server

This project will fund the purchase of two storage servers for use by the University community. Documents critical to research, teaching, and agency operations will be stored on these servers.

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Project ID: P000024  
Agency Abbreviation: CNU  
Project Formal Title: Web-Accessible, Integrated Administrative Software System

This project will provide information technology to extend the support of administrative and student information needs of a university growing in numbers and quality. This system will add Human Resources and Development functionality to the admissions, registration, housing, finance and financial aid capabilities that are already integrated at the University.

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Project ID: P000025  
Agency Abbreviation: CNU  
Project Formal Title: Workstation and Information-Interface Upgrades

By July of 2004 three major information systems at the University will run from a common relational database--finance, financial aid and student. During the following two years we plan to add human resources and alumni systems to these three. Accessing this system in a self-service mode over the web will become a critical part of our business practices--in fact will dominate our practices. We plan to have the critical business and academic systems available on demand over the web. In order to enable the integrated information system and the extensive web-based, course-augmentation resources developed by faculty and vendors to be easily accessible, we will provide workstations, networking and software that is current.

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Project ID: P000027  
Agency Abbreviation: JMU  
Project Formal Title: Technology Infrastructure

This project will upgrade and expand the university's network infrastructure to better meet the needs of academic programs. The project will install high capacity wiring and network hardware, wireless hardware, additional Internet bandwidth, video hardware and emergency communications capability. This project is part of the university's Six-year Capital Outlay Plan for 2004-2010. A major project task is to increase the bandwidth of the campus backbone by installing single mode fiber throughout campus. The university intends to focus its efforts on expanding bandwidth to the desktop by at least a factor of ten. The network data communication electronics will also be replaced. These new electronics provide enabling technologies that will enhance the university's overall bandwidth, data security and performance management and network availability. Expanded use of technology for the university community will be enabled through (1) virtual local area networks, (2) controlled security access to the port level, (3) greater wireless capability, (4) delivery of data to only the workstations requesting it, and (5) redundant pathways for enhanced availability. As capacity to the wired network is increased, central components will be upgraded to handle the increased traffic and to provide greater fault tolerance. At the same time, expansions to the wireless network will provide additional coverage and flexibility of access. This project will also bring the JMU campus into compliance with the state wiring standard and move more of the cable paths to fiber. Fiber has significantly greater bandwidth capability. This additional capability will serve to extend the life cycle of the financial investment, in effect tripling the present useful life, and assure that JMU will not outgrow the bandwidth capability at the edge devices

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Project ID: P000028  
Agency Abbreviation: UVA  
Project Formal Title: Oracle 11i Database Upgrade

This project will upgrade the production Oracle ERP finance and human resources applications from the 11.03 versions to the 11i versions. The upgrade will improve the quality of data, enhance support and maintenance, provide new features and functionality, and leverage additional web front-end features.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000029  
Agency Abbreviation: MVDB  
Project Formal Title: Seat Management Contract Renewal

Renewal of existing seat management contract is Critical to MVDB structural IT integrity, technology refresh methodologies, and planned life-cycle. The MVDB currently uses vendor-owned assets, and procures system programming and development on this contract.

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Project ID: P000030  
Agency Abbreviation: GMU  
Project Formal Title: Patriot Project (Student Information System)

The project consists of installing an administrative student system, integrated into the finance and human resources systems. GMU selected SCT Software & Resource Management Corporation to implement its Banner student system.

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Project ID: P000032  
Agency Abbreviation: TD  
Project Formal Title: Infrastructure update & Disaster Recovery

Treasury's approach and solution to solving its aging IT infrastructure problem is to procure new equipment, including workstations, servers and networking equipment. Current IT equipment is nearing or has exceeded its useful life, is out of warranty, and staff is experiencing difficulty running newer applications and equipment failures. Risk of such failure is high as Treasury provides statewide services. Replacement of equipment will result in more efficient operations, enhancement of mission-critical services and better continuing customer service. The procurement plan, if approved and funded, will be initiated in FY 2004 and completed in FY 2005 at an estimated cost of \$515,000. This cost assumes the financing (principal and interest) of the equipment needed over its expected three-year useful life.

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Project ID: P000033  
Agency Abbreviation: VSP  
Project Formal Title: Conversion of Master Fingerprint File to Electronic Archive

The customers for this project are the agencies and staff that submit fingerprint queries and updates.

Below is the project approach:

- identify the physical facility to be used for the conversion effort.
- identify the communications set-up necessary for adequate through-put.
- identify the personnel to execute the conversion process.
- execute the conversion process which includes pulling master fingerprint cards from the bins, feeding the cards through the card scanners, monitoring the scanning process, verifying that the scanning process is successful, and returning the fingerprint cards to the bins.

The cost of this effort is \$1.00 per master fingerprint card and there are 1.5 million fingerprint cards. In addition, \$100,000 is needed for consulting services to oversee the effort resulting in \$1,600,000 for project completion.

The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000034  
Agency Abbreviation: DGS  
Project Formal Title: Seat of Government Voice Over Internet Protocol (VoIP)

The Department of General Services is upgrading state office facilities around the Capitol with the renovation of the Old State Library in 2003 and the Capitol in 2004. DGS plans to continue through 2006 with renovations of the Finance and Washington buildings, and replacement of the 8th & 9th Street Office Buildings with a new state office building. These facilities renovations provide a unique opportunity for VITA to upgrade the existing Capitol Campus Network (CCN), currently supported by DGS, and to provide consolidated data, video & voice service for the state offices located in downtown Richmond.

## Appendix D - Major Information Technology Project Descriptions

these overlay" networks has proven to be very expensive. The network of the future must offer combined voice and data communications over a single integrated platform built on packet technology. Internet Protocol (IP), the packet technology used on the Internet, has proven its ability to efficiently integrate voice traffic into the flow of data on IP networks, enabling voice and data service delivery from a single multi-service network. Now that IP networks offer the performance characteristics that voice service requires, Voice over IP is ready to provide major benefits to both service providers and enterprises:

- Sustainable cost reduction for service providers and enterprises. Lowers capital and operating costs by converging separate voice and data networks into a single, multi-service network.
  - Increased revenues for VITA by raising the value of voice service, with new applications such as video calling, unified messaging, and Web-enabled multimedia call centers. With multiple services available on a single customer link, providers have lots of opportunities to bundle, cross-sell, and up-sell services.
  - Enhanced productivity for enterprises. New applications such as collaboration and unified messaging enable enterprise employees, wherever they happen to be, to team more effectively and be more productive
- Project Concept:

This project will upgrade campus backbone fiber to support gigabyte Ethernet backbone services, upgrade existing switches to support quality of service priorities for voice services, implement redundant hardware and software to support "pbx-featured" voice service, and install up to 5,000 IP-Voice handsets. The number of individual "IP-Voice handsets" may be reduced as agency staffs realize desktop PCs can provide unified voice, video, and data services.

The current combined fiber and wireless campus network will be upgraded to single mode fiber to support gigabyte speed and distances, the network will be supplemented to form a mesh topology instead of its current ring topology for higher reliability. Existing Nortel switches will be upgraded or replaced as necessary to provide quality of service priority packet management. Redundant-balanced servers with PBX software will be installed to provide fail-over voice coverage. The network will continue to support unified campus access to COVANET via the DS3 circuit. This project is not intended to support WAN-Voice over IP to regional state offices, although the design does not preclude this option. It is expected the project will be phased to coincide with major building renovations and relocations of tenant agencies. This process begins in November 2003 with the move of the Virginia Department of Health from Main Street station to the Madison Building and continues in 2004 with the temporary relocation of legislative and governor offices to the renovated Executive Officer building (old state library), and in 2005 with the relocation of the departments of Planning & Budget and General Services to the Executive Office building and the renovations of the Washington and Finance buildings and the replacing the 8th & 9th Street Office buildings in 2005 - 2006.

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Project ID:	P000035
Agency Abbreviation:	DOF
Project Formal Title:	Private Land Mobile Radio Replacement

Upon notification of (FY04) funds availability, FCC re-licensing would begin on 130 stations and be coordinated through the Forestry Conservation Communications Association. We anticipate re-licensing will take less than one year. Concurrently, first year equipment for Regions 2 and 6 would be procured, programmed, installed, tested and placed in standby. Cutover is scheduled for September 2004 providing one month for on-air confidence testing prior to the fall fire season beginning October 1st. Upon release of FY 05 funding, equipment procurement and installation for Regions 3 and 5 will begin to coincide with the ongoing narrowband upgrade by the Jefferson and Washington National Forests. Regions 3 and 5 work in concert with the National Parks workforce to suppress wildfires in the area. We will follow the same basic procedures for each subsequent cutover however, through project feedback will make minor schedule adjustments. Target cutovers are scheduled for September 2005 for Regions 3 and 5 followed by September 2006 for Regions 1 and 4 (FY06). The final year, FY07 will be focused on replacing the remaining mobile and handheld equipment along with the procurement of remaining four (4) mobile repeaters.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000036  
Agency Abbreviation: RU  
Project Formal Title: Storage Area Networks (SANs) Project

Radford University seeks to purchase and install a SAN (Storage Area Network) to provide centralized storage and backup capabilities for Radford University's critical e-mail, web, and home directory servers. After initial installation, additional smaller servers will be added to further centralize server storage and backup needs. When and where appropriate, administrative resources will be included in a SAN environment. Customers served are students, faculty, staff, alumni, the community and friends of the university. Reference Section 3 of the included "Cost Benefit Analysis" for cost data.

- Provide consolidated high speed reliable backups
- Enhance disaster recovery options
- Ability to easily and quickly recover accidentally erased data from "snapshot" images
- Ability to create and access "business copies" of server data for testing
- Easy increase of disk capacities with no down time as user demand dictates instead of having to buy it all upfront when the server is purchased.
- Reduced management of disk drives on existing and new servers

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Project ID: P000037  
Agency Abbreviation: VSP  
Project Formal Title: Consolidated Billing System

The CBS project will follow the standard systems development life cycle (SDLC) and the Commonwealth's Project Management Guidelines. The Project Initiation Phase and requirements analysis task have already been completed, and the project is currently in the Project Planning Phase. Because there is no existing system to handle VSP's complex project billing needs (which account for the largest dollar amount of VSP billing and, subsequently, the largest dollar amount of under-billing), the first software release will be designed to automate the timesheet entry and project billing activities. The remaining CBS requirements, which will automate twenty-four other billing activities, will be included in the second software release. The project is funded through the administrative fee that VSP charges for certain billing activities. The major expense for this project is the development resources. Due to VSP Data Processing staff limitations, VSP is using contractors to supplement the existing staff. However, Data Processing staff will be used instead of contractors whenever possible, and the use of contractors will be phased out in the later stages of the project, allowing VSP staff to take ownership of the system enabling them to effectively maintain the CBS after implementation. Until VSP can link employee payments with the collection of project billing information, VSP will continue to under-bill its customers. Once VSP automates its accounts receivable functions through the CBS, VSP will be able to accurately bill its customers and be reimbursed for its expenses, thereby providing long term financial benefits to the Commonwealth.

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Project ID: P000042  
Agency Abbreviation: VSP  
Project Formal Title: Statewide Mug-shot and Other Images Repository

See Business Problem above for background information. The customers for this project are all VCIN users, which consists primarily of law enforcement officers and prosecutors.

Below is the project approach:

- Define requirements (high level draft available) and prepare RFP to bid out purchase of centralized mugshot system.
- Issue RFP and select vendor for centralized mugshot system (\$500,000 for software).
- Purchase hardware for system (\$150,000).
- Integrate solution with existing VSP systems (i.e. to receive Type-10 record from localities, interface with electronic archive system, provide query and view capabilities through VCIN) (\$75,000).

Total est. time: 12 mos. Total cost: \$725,000.

Deliverables:

- Centralized mugshot system and interfaces.

The "Project Business Objectives" above correlate to the expected benefits.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000044  
Agency Abbreviation: VSP  
Project Formal Title: Re-Write the Automated Workflow for Fingerprint Submissions

See "Business Problem" above for background information. The customers for this project are agencies and staff that submit fingerprint queries and updates. Below is the project approach:

- Develop system requirements for automated fingerprint workflow system and VSP systems that interface with the workflow system. Est. duration: 4 months. Est. cost: \$50,000. Key requirements include: 1) standard business logic for all processes that can be manipulated for each type of service (e.g. criminal, sex offender, etc.) through tables; 2) standard interfaces with each system; 3) ability to handle anticipated transaction load; 4) improved edits and error identification; 5) ability to meet known future requirements (e.g. single fingerprint searches).
  - Prepare system design, programs system and conducts unit testing for workflow system. Est. duration: 8 months. Est. cost: \$200,000.
  - Prepare system design, programs system and conducts unit testing for systems that interface with workflow system. Est. duration: 8 months. Est. cost: \$170,000.
  - Conduct integration testing. Estimates included above.
- Total est. time: 12 months. Total est. cost: \$420,000.

Deliverables:

- New fingerprint workflow computer programs for fingerprint workflow system that would reside on new VSP platform.
- New computer interfaces with VSP's Computerized Criminal History (CCH), Consolidated Applicant Tracking System (CATS), Sex Offender Registry (SOR), NATMS and other applications.

The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000045  
Agency Abbreviation: VSP  
Project Formal Title: Disaster Planning

AFIS staff at VSP would work with the current AFIS vendor to determine options for the establishment of AFIS tenprint and latent search and storage capability at the disaster site. The workflow for the disaster site tenprint and latent processing would be documented. The equipment, software and installation and maintenance services for the tenprint component would be procured from the vendor. A budgetary cost of \$1,200,000 was estimated using experiences from prior purchases. The same process would be used for the procurement and installation of the AFIS latent fingerprint capability. This capability is expected to cost \$1,000,000. These upgrades would be performed in two phases - thereby spreading out the costs - although project initiation and planning would cover both the tenprint and latent search capabilities. Both the criminal justice and applicant agency communities throughout the state would continue to be served in case of a disaster at VSP Headquarters. Below is the project approach:

- VSP researches and develops requirements for disaster site equipment and software. Estimated duration: 3 months.
  - VSP works with AFIS vendor to finalize requirements, system design, develop project schedule, and obtain contract. Estimated duration : 4 months
  - Vendor programs tenprint system and loads software: 5 months Estimated vendor cost \$300,000.
  - Vendor converts existing AFIS tenprint databases to disaster system. \$250,000
  - Vendor delivers system and VSP and vendor conduct acceptance testing on tenprint system. Estimated duration: 3 months. Cost: \$650,000
  - Vendor programs latent system and loads software. 5 months. Estimated vendor costs: \$300,000.
  - Vendor converts existing AFIS latent databases to disaster system. \$200,000
  - Vendor delivers system and VSP and vendor conduct acceptance testing on latent system. Estimated duration: 2 months. Cost: \$500,000.
- 

Project ID: P000046  
Agency Abbreviation: VSP  
Project Formal Title: Conversion of Database Systems on New Platform

See "Business Problem" above for background information. The customers for this project are all users of VSP systems.

This project is part of a continuing effort to modernize VSP applications that currently reside on older mainframe and UNIX platforms. When this project starts, most of the VSP applications will be moved to the new platform but will generally utilize

## Appendix D - Major Information Technology Project Descriptions

The cost of this effort is \$4 million over two years plus \$100,000 each year for operations and maintenance. A relatively small amount of funding will be requested in FY '07 to modernize a few small systems that are outside of the scope of the larger effort proposed here.

The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000050  
Agency Abbreviation: CNU  
Project Formal Title: Mitigation of Risk-related Down-Time of Campus Computing

By the end of 2005 CNU will have reliable, hardened systems fully capable of handling security, weather, fire, chemical, biological and limited nuclear disasters with a reasonable expectation of protecting data and system access.

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Project ID: P000051  
Agency Abbreviation: DGS  
Project Formal Title: Laboratory Information Management System (DCLS)

DCLS is currently exploring all avenues to procure a comprehensive LIMS and will follow standard system life-cycle approach for its implementation. The implementation of a comprehensive, integrated DCLS LIMS will improve services to numerous state and local customers including: Virginia Department of Health, Agriculture and Consumer Services, Conservation and Recreation, Corrections, Criminal Justice Services, Emergency Services, Fire/Hazmat Programs, Environmental Quality, Game and Inland Fisheries, Labor and Industry and the Virginia Lottery.

The DCLS LIMS will:

- Provide customers with real-time access to sample testing, test results and kit information.
  - Provide customers with better tools and reports to evaluate laboratory data.
  - Provide enhanced connection to National and International Public Health data bases to track organisms and diseases.
  - Reduce report delivery times and expands reporting capability.
  - Reduce sample collection, data entry, and analytical errors.
  - Provide faster results.
  - Provide improved quality of laboratory data.
  - Provide improved data security and comply with regulations for maintaining and communicating data using standardized data formats.
  - Provide additional web functions under the Web-enabled Government initiatives.
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Project ID: P000052  
Agency Abbreviation: DOC  
Project Formal Title: Offender Management System

The replacement of our existing systems and the integration of offender information throughout the DOC, including community corrections and institutions, will:

- Save time and money
- Replace a hodgepodge of smaller systems that are difficult to support, are not integrated, and which do not meet our needs
- Improve the quality of offender data
- Allow easier integration and interface with other criminal justice agencies
- Allow for the automation of specific business processes that can result in significant savings
- Give line staff the information they need to make good/timely decisions
- Help us all meet the Mission of the DOC.

In acquiring and implementing an OMS we will insure that the following measurable objectives are met:

- Replace OBSCIS, VACCIS, TIPS, EIS, PSI, ASI, and the Parole Board decision-making system with a single integrated solution.
- Make real time data available to all authorized users.
- Use a standard database and eliminate redundant data entry to simplify required maintenance and support, and to reduce associated costs.
- Provide system generated ALERTS to immediately notify selected staff of events occurring within the system.
- Include "workflow automation" to complement business process re-engineering that will provide significant operational

## Appendix D - Major Information Technology Project Descriptions

using DOC staff resources.

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Project ID: P000053  
Agency Abbreviation: DRS  
Project Formal Title: Integrated Case Management (ICM) Project

Promote common business practices for case management by using a single turnkey business application for 21 programs that provide services to people with disabilities. Sponsored and funded by two state agencies with shared cost.

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Project ID: P000055  
Agency Abbreviation: VSP  
Project Formal Title: Enhancement of the Live Scan System

The customers for this project are the agencies and staff of the over 100 live scan system sites in Virginia. This includes all large and medium law enforcement agencies and numerous applicant agencies such as school systems.

Below is the project approach:

VSP researches and develops requirements for changes to live scan software (due to legislation or to add features to current operations). Estimated duration: 2 months.

VSP works with vendor to finalize requirements, system design, develop project schedule, and obtain contract. Estimated duration : 2 months

Vendor programs system. 4 months

VSP and vendor conduct unit testing for VSP systems that interface with live scan systems. Estimated duration: 2 months.

Vendor with VSP support install changes on live scan systems. 2 months.

This process is repeated annually.

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Project ID: P000056  
Agency Abbreviation: VSP  
Project Formal Title: Enhancement of the Automated Fingerprint Identification System21 (AFIS21)

The AFIS21 system stores and searches fingerprints for criminal justice and employment checks. It is the basis by which Virginia's Computerized Criminal History and Sex Offender Registry systems are updated. Currently there are 1.5 million sets of fingerprints stored on AFIS and accessible from 24 remote AFIS terminals in local and state agencies and more than 100 live scan systems installed throughout the state. Periodic upgrades are important to keep the system up-to-date and functioning properly. Additionally, as the databases continue to grow, system improvements need to be made to maintain or improve fingerprint search accuracy.

System requirements are updated periodically by VSP AFIS staff and reviewed with the AFIS vendor. Vendor proposals are received and reviewed. Information is gathered from other states regarding their system operations. Upgrades are then procured for the items that have the greatest benefit to Virginia's AFIS operations. Priority is given to changes that affect fingerprint processing efficiencies or accuracy.

Legislative changes also dictate changes to the AFIS applications such as the recent change that allowed law enforcement access to juvenile fingerprints.

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Vendor with VSP support install changes on AFIS. 1 month.  
This process is repeated annually.

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Project ID: P000057  
Agency Abbreviation: UVAH  
Project Formal Title: Clinical System Implementation

(1) Business Problem: Outpatient clinics are currently handwriting patient orders for lab, radiology, pharmacy, etc and the inpatient ordering is on a 20-year old legacy system resulting in lack of cohesive information infrastructure. In order to compete at the most effective level in efficiency and quality the Medical Center must have a contemporary infrastructure.

(2) Specific solution: Implement IDX Clinical System (chosen through extensive RFP process) in outpatient clinics to replace manual ordering process and implement IDX Clinical System to replace 20 year old legacy system in emergency care and inpatient orders yielding consistent information infrastructure across the continuum of health care. The IDX Clinical System is utilized by Mayo Clinic, INOVA Health System in Northern Virginia and other leading healthcare organizations. Completion of implementation is targeted for FY 06 and major procurements will total \$14 million as documented in Part 1 submission.

(3) Customers served by this project include the UVA Medical Center patients, their families and the direct careproviders in the Medical Center. The Medical Center patients and their families will be served through the benefit of quality improvements. The clinicians and caregivers that are employed by the Medical Center will be served through the improved information flow and process efficiency.

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Project ID: P000058  
Agency Abbreviation: VSP  
Project Formal Title: Sun Microsystems SUN Fire 6800 Midrange Server upgrade project

The SUN Fire 6800 system will be approximately three years old in 2006. It will need to be upgraded with additional resources. All mission critical databases reside on the SUN system and almost all systems development is done on it. The system upgrade will be necessary to maintain the high level of service regarding dissemination of criminal justice information in Virginia. This is a long-term critical issue. The upgrade includes both hardware and software. Based on preliminary information from SUN, the cost of the upgrade of the SUN Fire 6800 system is estimated at \$1,150,000 for FY2006, and \$250,000 annual recurring cost. The TCO for a three year period \$2,250,000. This figure assumes a one-year hardware and software warranty.

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Project ID: P000059  
Agency Abbreviation: DOA  
Project Formal Title: Lease Accounting System (LAS) Replacement

The solution will be a web-based Lease Accounting System with data entry, inquiry and download functionality. The system will be developed by agency personnel using a standardized web platform. The system will make the tracking and reporting of leases more efficient.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000060  
Agency Abbreviation: LC  
Project Formal Title: Purchase and Install Enterprise Resource Program (ERP)

Purchase and install a new administrative ERP portal based on input from focus group and evaluation by technical experts and benchmarks from other universities. This will enhance the delivery of services to customers, reduce long-term expenditures and allow us to streamline our resources into leading-edge technology. Major business process improvements would be realized immediately after implementation.

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Project ID: P000061  
Agency Abbreviation: VSU  
Project Formal Title: Student IT Services

This project focuses specifically on IT installations and improvements that are student centered. It encompasses several initiatives that will enhance student services, such as wireless registration, technology improvements in the Library, expansion of the Intranet to include more information for students, space utilization, student PCs, and "anytime" availability of technology. The planned start date is at the beginning of the fall semester and will continue until May, 2004. The major procurements associated with this project are the student PCs at a cost of \$100,000. The remaining project cost is \$1,072,908.

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Project ID: P000062  
Agency Abbreviation: TAX  
Project Formal Title: Public Private Partnership Project

TAX and American Management Systems (AMS) are engaged in a six-year partnership project to perform a comprehensive reengineering initiative that enables TAX to improve operating efficiency and deliver better service to its customers.

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Project ID: P000063  
Agency Abbreviation: DOE  
Project Formal Title: Teacher Education and Licensure (TEAL)

Continued implementation of the Teacher Education and Licensure project, expanding the system to encompass the goals of the Teacher Quality Enhancement grant (currently a dashboard project for a Licensure application that leverages a previous investment by another agency and provides collaboration opportunities for other agencies). This project is funded by a federal grant.

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Project ID: P000068  
Agency Abbreviation: DMV  
Project Formal Title: REDESIGNED SELF SERVICE KIOSKS

The kiosk redesign, built and maintained by DMV staff, will be a reliable network of self-service kiosks, offering most of the online transactions already available on DMV's web site. It will provide customers with a convenient method of conducting their own transactions at a DMV customer service center as well as other locations 24 hours a day 7 days a week. The enhanced extraTeller will be eye-catching, self-marketing and will feature an interactive, easy-to-use touch screen and a keyboard. The estimated cost per unit is \$11,765 which does not include communication lines, site preparation, stock, location rental or commissions, signage, promotion, server or bandwidth. We could potentially partner with outside entities to incur the development, maintenance, and kiosk construction cost.

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Project ID: P000073  
Agency Abbreviation: JMU  
Project Formal Title: Technology Classrooms

The project expands the teaching technologies (computer, audiovisual, projection, wireless access, etc.) available to faculty and students in the classroom and encourages their use. It (1) adds 25 new classrooms to our existing technology classroom infrastructure; (2) substantially upgrades the technology in many existing rooms; and (3) adds a combination of security measures to all existing and new west and east campus technology classrooms. Necessary major facilities renovations, especially in older buildings, are included too.

## Appendix D - Major Information Technology Project Descriptions

Capital Outlay Plan for 2004-2010.

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Project ID: P000084  
Agency Abbreviation: VDOT  
Project Formal Title: "EZ Pass" Reciprocity

Provides electronic toll collection services for toll customers with out of state accounts with facilities participating in EZ Pass network.

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Project ID: P000085  
Agency Abbreviation: VDOT  
Project Formal Title: Financial Management System (FMS II) Upgrade

The approach to the project will be a two-step process. Key activities in the first phase, expected to take 12 months, will be to validate the concepts that the current Peoplesoft versions offer, develop a requirements document, select and train a core project team consisting of both business and technology resources, (including the assessment and selection of integration/consulting services), define a clear scope, and develop an accurate cost and schedule for the upgrade. The second step will include procurement and customization of the software and hardware and consulting/implementation services. The estimated period for completing this phase is 12 to 18 months.

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Project ID: P000086  
Agency Abbreviation: NSU  
Project Formal Title: Voice over Internet Protocol (VoIP) Telephony

The project will consist of a pilot phase followed by full scale implementation. The pilot phase will consist of providing IP phones for 50 users who will provide feedback on the selected system. Only enough money to support the 50 units will be spent. Assuming user feedback is acceptable, we will begin to replace all currently used phones with new IP phones. The full implementation will take about 3 - 6 months. Users will not initially receive any new features but will enjoy much faster response time to issues or changes. Once the full implementation is complete, new features not currently available will be added.

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Project ID: P000089  
Agency Abbreviation: VDOT  
Project Formal Title: Statewide Video Distribution Service

This project proposes to use a service contract approach to network together the traffic video cameras around the state and deliver that camera imagery to transit, police, fire, EMS and homeland security agencies to improve safety, mobility and emergency response. The benefits of the project include improved response times to incidents, improved allocation of resources to incidents, improved transit bus operations, and improved public safety through the sharing of traffic video imagery with other public sector agencies. The project was initiated in the Northern Virginia region with 75 VDOT traffic cameras. There are another 200 traffic cameras currently in operation in other regions of the state with another 100 or so slated for deployment over the next three years. Phase II of the project will be to integrate the traffic cameras from the Hampton Roads region, including the cameras from localities such as City of Norfolk, City of Hampton and City of Newport News into a statewide network for distribution with the cameras from Northern Virginia. This will be accomplished by December 2004. Estimated cost is \$500,000. Phase III will be to integrate the cameras in the Richmond region. This will be accomplished by June 2004. Estimated cost is \$100,000. Phase IV will be to integrate the cameras on the I-81 corridor. This will be accomplished by December 2004. Estimated cost is \$300,000. When completed at the end of 2004, we anticipate that all VDOT, and many local traffic cameras will be integrated into a single network.

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Project ID: P000090  
Agency Abbreviation: VDOT  
Project Formal Title: Statewide Traveler Information System

This project is an expansion of an existing travel information service deployed along the I-81 corridor in western Virginia. The current contract is a fee for service contract, with revenues from the listing of specific traveler services returning to the project to defray monthly service fees. To date, more than \$28,000 has been returned to VDOT to defray project costs. VDOT is currently developing a strategic plan to deploy the service on a statewide basis. The service is telephone based and uses the 511 abbreviated dialing digit to access the system. The system uses an advanced interactive voice response system that allows users to use normal speech to request information on traffic conditions, restaurants, hospital locations and points of interest.

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Project ID: P000091  
Agency Abbreviation: VMNH  
Project Formal Title: Adventure Classroom

The Adventure Classroom will be the heart of the distance education program at VMNH. It will be a state-of-the-art videoconferencing science classroom. The VMNH Adventure Classroom will be an exciting vehicle for the Museum to truly become "a museum without walls." Here, learners will explore nature from a multi-disciplinary perspective that will spark imaginations, enhance curricula, and support the Virginia Standards of Learning. From the barrier islands of Virginia's Eastern shore to the coalfields of Appalachia, the VMNH Adventure Classroom will examine Virginia's natural heritage in a global context, engaging participants with leading scientists who work with them to uncover its rich biological and geological history and development.

With the ability to connect to other videoconferencing facilities across the Commonwealth, the VMNH Adventure Classroom will connect scientists with teachers and students to solve complex science problems relevant to all Virginia citizens.

The interactive capability of this technology has produced a distance classroom that is nearly identical to a regular classroom. Teachers and students will be able to interact through both two-way video and one-way video with two-way audio systems. This initiative will also be in line with the No Child Left Behind Act of 2001 in which professional development is supported by:

1. Bringing "mathematics and science teachers in elementary schools and secondary schools together with scientists ... to increase the subject matter knowledge of mathematics and science teachers and improve such teachers' teaching skills through the use of sophisticated laboratory equipment and work space..."
  2. Promoting "...strong teaching skills for ... science teachers and teacher educators, including integrating reliable scientifically based research teaching methods and technology-based teaching methods into the curriculum."
  3. Establishing "...distance learning programs for mathematics and science teachers using curricula that are innovative, content-based, and based on scientifically based research that is current as of the date of the program involved." (No Child Left Behind, 2001. Available at: <http://www.ed.gov/legislation/ESEA02/pg26.html>). The major procurements associated with this project will be made during the time (scheduled for 6/2004) that other equipment is purchased and installed in the new museum building. The estimated costs are as follows: Voice Systems, LAN System \$350,000, WAN- Wide area network connections \$100,000, CAT-6 cable for network \$350,000, and Audiovisual and distance-learning, videoconferencing \$1,400,000.
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Project ID: P000093  
Agency Abbreviation: VDOT  
Project Formal Title: Statewide Business Security System

VDOT Statewide (Transportation) Business Security System preliminary estimated cost of \$1.4 million. Supporting project is statewide implementation of VDOT-specific access control system in place in VDOT Central Office and bridge-tunnel complexes.

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Project ID: P000094  
Agency Abbreviation: VDOT  
Project Formal Title: Violation Enforcement System

To develop a standard toll violation and collection enforcement system for use throughout the Commonwealth of Virginia.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000095  
Agency Abbreviation: VDOT  
Project Formal Title: Highway Traffic Records Information System (HTRIS) Technology Upgrade

The approach to this project consists of three component: 1) The development of the Road Inventory through GIS centerlines, 2) the extraction of the business data out of Adabase and into Oracle, and 3) web application development. The specific solution will spatially enable the data, make data accessible through relational versus hierarchical database technology, and provide interface potential to like information systems. Customers served will be the Mobility Management Division, Structure and Bridge Division, Transportation and Mobility Planning, and Asset Management. Expected benefits will include unprecedented access by internal information systems to official agency business data, improved and streamlined federal reporting, and the availability of more accurate and timely roadway characteristic information.

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Project ID: P000101  
Agency Abbreviation: VSP  
Project Formal Title: Dissemination of Department of Motor Vehicles photos

See Business Problem above for background information. The customers for this project are all VCIN users, which consists primarily of law enforcement officers and prosecutors.

Below is the project approach:

- Define and add ability for VCIN to query and send users DMV photos, using capabilities previously developed under TIPS related to DMV photo processing. The TIPS project includes an interface between DMV and VSP. Est. duration: 5 mos. Est. cost: \$30,000.
  - Replace current client software for VCIN, which cannot receive images, with client software capable of receiving images. For 2,541 users this would cost \$950,000. The software would be installed by existing VCIN support staff. Est. duration: 7 mos. Est. cost: \$950,000.
- Total est. time: 12 mos. Total cost: \$980,000.

Deliverables:

- Update to VCIN to link to DMV photo system.
- Purchased and installed VCIN client software to replace existing VCIN software.

The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000102  
Agency Abbreviation: VDOT  
Project Formal Title: American Association of State Highway & Transportation Officials (AASHTO) Bridgeware Imple

The purpose of this project is to provide computer software support for the design, rating and management of structures, specifically bridges. Although other design packages are now available on the market, BW provides the best overall solution for the Department due to the combined database included as part of the package.

BW is a comprehensive suite of programs developed by AASHTO that includes OPIS, VIRTIS, PONTIS and a combined database. OPIS provides LFRD design/analysis capability that will become the accepted method of structure design in 2007. VIRTIS provides working stress load factor and LFRD rating capability for structures. PONTIS provides input and analysis of inspection data in order to prioritize maintenance and repairs for department structural assets.

BW Implementation will consist of establishing the combined database, determining the VDOT S&B parameters and entering them into the system, testing software and installation process, and training of personnel in LFRD design theory the use of the new software system. Implementation is anticipated to start the fourth quarter of 2003 and be completed no later than the first quarter of 2005. (Note: WBS has not been generated as yet, so these are approximate dates.)

Major purchases are not anticipated at this time. The one exception may be additional server space for housing the BW database.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000103  
Agency Abbreviation: DSS  
Project Formal Title: Automated Program to Enforce Child Support (APECS)

The Virginia child support program serves more than 1 million Virginia citizens. More than one-quarter of Virginia's children are part of the child support program. The project proposes to convert the current IMS database structure to DB2, a relational and more flexible structure. It will extend the life of the current system by eliminating the size and processing constraints of IMS databases. The conversion to DB2 will increase staff productivity and collections by setting the stage for additional automation and improving access to data for performance management and analysis. The successful completion of this project will also position the child support program for potential future enhancements such web-enabling the system or moving the system to a different platform other than the mainframe. Services to complete this project will be solicited through a Request for Proposal.

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Project ID: P000104  
Agency Abbreviation: DCJS  
Project Formal Title: Grants Tracking

The approach of the project is to develop an internet based system that will allow grantees to submit grant applications including all attachments and documentation electronically to DCJS. The application information would populate a database that would be used by the agency to evaluate and manage the approved grants. The database would be used to evaluate grants proposals for funding. A database format accessible over the internet would make it easier to share information to grantees, staff in the field and funding sources. Once the grants were approved, grantees could submit additional documents including grant conditions, monetary drawdown requests, and quarterly progress reports through the internet. The database format would also allow both DCJS and our grantees access to information that will help the agency better manage and evaluate the grants we make and provide our grantees with information to help them carryout more effective grant programs.

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Project ID: P000106  
Agency Abbreviation: DSS  
Project Formal Title: Child Care System

### Background

The Child Care program has grown significantly over the past decade. Expenditures have increased from approximately \$9 million in State Fiscal Year (SFY) 1989 to over \$130 million in SFY 2002. The child care program is the single largest assistance program that is administered by the Department of Social Services, yet does not have a comprehensive automated system to support it. In SFY 2002, child care assistance was provided to over \$52,000 children. Without automation, there is no easy or efficient way to provide timely program data. Aggregate data collection is limited and inhibits efficient and effective management of the program.

Automation to support this major program has been limited. Limited case and client information has been in the Virginia Client Information System (VACIS), a system developed in the early 1980s. The present Interim Day Care System (IDC) is a MAPPER-based application that only accounts for expenditures and counts of children and families served. Although an "interim" solution when developed, the Department has used this system for over ten years.

Automation for the child care program is not currently a part of either of the department's two major systems that support local programs, ADAPT (Application Benefit Delivery Automation Project) or OASIS (On-line Automated Services Information System). ADAPT is the system for TANF, Food Stamps, and, in the future, other eligibility programs. OASIS is currently supporting foster care, adoptions, child protective services and in the future, is planned to support other child welfare and adult service programs. Item 387, L, of the Appropriation Act requests that the Department of Social Services reports on its plans for automation of child care assistance programs.

Without a comprehensive automated child care system, Virginia is able to provide only limited data to government of public entities on the demographics of families served. There is no automated way to track families or to enforce a time limit for services. Waiting lists are not easily managed by local departments, so there is no reliable statewide count of unmet need. Local departments are largely unable to accurately track trends and forecast need in order to manage local allocations for the program. In SFY 2000, some local departments of social service over-expended child care funds, causing a statewide crisis. While fraud in child care programs is estimated at 5 to 10 percent, without an automated system, fraud detection is not easily identified or pursued. Federal mandates are not easily met and in some cases, data is not provided. Section 98.5 of the Federal Child Care and Development Fund regulations requires states to maintain the list of names and addresses of unlicensed or unregulated providers. Virginia does not currently have this capability. In addition, the current method of meeting Federal reporting requirements is a manual process, which is time-consuming, labor intensive and very inefficient.

## Appendix D - Major Information Technology Project Descriptions

It may be possible to design the new Child Care system as the first module of a new Integrated Social Services Delivery System, another strategic DSS project. To achieve this, key technical guidelines required by both projects must be developed in a timely manner and a new connectivity infrastructure must be installed prior to roll-out of a Child Care system. VITA has agreed to partner with DSS on selection of infrastructure products that will meet future DSS and statewide requirements. A strategic design of Child Care may reduce later potential modification, provide a database and infrastructure for migration of other systems, and reduce overall costs to the state.

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Project ID: P000107  
Agency Abbreviation: RBC  
Project Formal Title: Complete implementation of new Enterprise Resource Management (ERM) system

RBC will complete the implementation of the student and finance modules of SCT Banner and enter the next phase of deployment, which is to expand utilization of the multitude of new features available and to continue to adapt business practices to best take advantage of these new capabilities.

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Project ID: P000110  
Agency Abbreviation: DSS  
Project Formal Title: Integrated Social Services Delivery System

The Department of Social Services seeks to develop a browser-enabled information system reengineered to reflect the best business processes and data needs for the local and state workers who provide benefits and services to Virginia citizens. The first phase of this project is a 2-year planning effort, including use of local agency staff, formal business process reengineering, requirements gathering, system design, and other project planning. If reengineered to effectively process the information needs of both citizens and workers, the resulting system can provide for one-time entry of data, provide streamlined processes for quicker service delivery, and provide a method to share data in a secure manner with other users, managers and, where appropriate, clients. Citizens could be provided the opportunity to enter and retrieve information from the system where law and regulation permit. For example, citizens could file applications online which will then be passed to the appropriate case worker for follow-up, making the processes easier as well as saving both citizens and workers valuable time. The system will also provide the capability for workers to download data needed for field work, or on to handhelds or other portable devices. An integrated system will lower systems development and maintenance costs, improve the state's ability to provide future services, and allow local agencies to effectively operate. Projects of this nature and magnitude are currently funded and active in several other states.

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Project ID: P000111  
Agency Abbreviation: GMU  
Project Formal Title: Mason Enterprise Security Architecture (MESA)

This solution was developed in conjunction with the ITU Technology Council with recommendations from the Internet2 Middleware consortium, and various experts at other universities. Specifically, we will use LDAP to maintain directory information, Kerberos to maintain authentication information, and AFS (Andrews File System) to maintain data information. In addition, we will utilize Microsoft Windows to manage existing Windows desktop systems. We will implement linkages between Banner, web servers, email, and other applications to minimize the amount of logons University affiliates need to access their computing resources. Our customers served will include all faculty, staff, students, and other affiliates of George Mason University. The first year of the project will be spent getting the technology running in production, and ensuring that it operates as expected. The next two years will be spent deploying this technology across the desktop systems located at George Mason. Expected benefits include: Higher security for all systems (desktops and servers) attached to the George Mason physical network, fewer passwords to remember, easier access from remote systems (home, etc.), simplified/reduced customer management of their desktops on campus, ability for Apple systems to participate fully with this new architecture, and the ability for our researchers to fully and natively participate with other research 'GRID's at other research institutions.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000114  
Agency Abbreviation: VDOT  
Project Formal Title: Integrated Six Year Programming System

The Programming Division and Information Technology Applications Division will be jointly involved in developing the Automated Six Year Program. The system will provide the following in high-level analysis: Identification of all construction projects that should be reflected in the SYP, Identification of every project by location and scope of work and cost by phase, Graphically depict start and end dates, for preliminary engineering, right of way, and construction phases of project development, Will addresses and force compliance with APA, JLARC and other audit findings and recommendations. Key to success is a development methodology that features the following: Incremental delivery- all work is paced for three-month delivery windows, such that a critical piece of the total project is rolled-out each 90 days. Outside-in Design – Begins with prototypes in this phase: Phase 1 iSYP · Small Teams – a team of 2-3 developers, 4 to 6 Programming Division staff working as Business Analysts, will accomplish the technical work. There are no major procurements or purchases planned as all design and coding will be completed in-house with resource expenditures the primary cost.

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Project ID: P000115  
Agency Abbreviation: VDOT  
Project Formal Title: Client-server "Trns\*Port" System

Includes C/S PES, C/S LAS, and other Trns\*Port products VDOT will use when mainframe Trns\*Port PES and LAS are sunset 6/30/2004.

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Project ID: P000116  
Agency Abbreviation: VDOT  
Project Formal Title: Program/Project Management System Upgrade

This project will upgrade/rewrite the existing Program Project Management System to facilitate the delivery of on time and on budget construction and maintenance projects. This project management system will permit resource loading and multiple project scheduling. The preliminary estimates indicate three years execution time frame at an approximate cost of \$3,900,000.

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Project ID: P000117  
Agency Abbreviation: VDH  
Project Formal Title: Women, Infant, and Children's Nutrition Program II (WIC-II)

The Women's, Infants and Children's Program is a nutrition education system that also provides specific food items that have been prescribed to meet an individual's nutrition needs. The system manages the patient encounter, provides tracking and statistical data, and creates checks which are redeemed at a grocery store. All federal funds. Estimated range is \$5M to \$10M.

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Project ID: P000118  
Agency Abbreviation: VDH  
Project Formal Title: Financial & Administrative System Rewrite

Approach: Develop a new web based system to replace the existing client server system. The new system will retain the functionality of the existing system and include the missing pieces as explained in the business problem.  
Specific solution: The application will be developed using JAVA and will be served by an Oracle database. It would be used by clients using a web browser. Designer 6i will be used to create a new Data Model.  
Timing: The overall time from design to implementation will be Approx 2 ½ years.  
Major Procurement and Purchases: Contractual staffing services of \$1.6M over several fiscal years.  
Customers Served: All the program areas and the local health districts within VDH use the F&A system.  
Benefits: This project will eliminate the current risk/liabilities related to the continued reliance on outdated technology/programming used to support all of the agency's financial and administrative functions and business needs. This includes the risk of the system ceasing to function and negatively impacting all accounting operations including prompt payment of vendors, federal time and effort reporting, etc. The project will also improve the agency's financial reporting, purchasing/obligation tracking, grants management and budget execution. Overall, the agency's stewardship of precious state resources would be enhanced and critical business support functionality would be secured.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000119  
Agency Abbreviation: DMHMR  
Project Formal Title: Hewlett-Packard e3000 Computer Replacement

Project Approach: The consulting staff and project team will identify software applications and business processes to be replaced as soon as possible and will explore options for replacements by December 2004.

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Project ID: P000120  
Agency Abbreviation: LVA  
Project Formal Title: Find It Virginia

Find It Virginia ([www.finditva.com](http://www.finditva.com)) provides a single point authenticated entry for all public library card holders to full text information databases. LVA has contracts for subscription fees for content from 3 vendors: Gale, BigChalk and SIRS. Examples of content include full text magazine and newspaper articles, encyclopedias and other reference works, TV and radio transcripts, company information and investment reports, health and wellness information, literary criticism, and homework help, plus photos, charts, maps, diagrams, and illustrations. All of the content resides on the vendors' servers; public library card holders use the Internet to connect to this content. The Library of Virginia contracts with vendors to license a variety of databases (SIRS, BigChalk, Infotrac, etc.) for public libraries, K-12 schools, and the Virginia Community College System. LVA assists libraries in providing remote access and in dealing with user authentication by partnering with VIPNet. In FY 2005 LVA is eligible for grant funds from the Bill & Melinda Gates Foundation to assist public libraries in maintaining connectivity. The grant is a matching grant.

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Project ID: P000121  
Agency Abbreviation: LVA  
Project Formal Title: Circuit Court Records Preservation Grants

The chancery records created in the circuit court clerks offices, dating anywhere from the 1600s up to the early 1900s, which have been subjects of archival processing (flat-filing, cleaning, and rehousing), will be reformatted to two formats of digital images--the master, which will be a JPEG2000 300 DPI 100 Quality, and a user image, which will be down-sampled to a JPEG 96 DPI 85 Quality encapsulated in a PDF wrapper. This reformatting will be done through outsourcing to the private sector, with statistically-sampled quality control measures undertaken by part-time staff hired into the circuit court clerk's office using grant funds, and trained by CCRP personnel. The customers served by the deliverables from this project will be local government officials, real-estate attorneys, surveyors, and land-title agents, as well as scholarly and family-history researchers. The benefits they all will receive will be greatly expanded access to the reformatted data, which now consists of a maximum four reels of microfilm, as well as a digital color copy of the record that is exponentially more readable than microfilm or photocopy. The total project time is estimated at ten years. The cost for scanning, based only on the number of documents that have been processed in 37 and are ready for reformatting, will be approximately \$4,000,000. This number will only go up as more localities are processed, the chancery records processed and housed at the Library are included, and the records already microfilmed are converted to digital.

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Project ID: P000122  
Agency Abbreviation: VDOT  
Project Formal Title: Comprehensive Environmental Data Reporting System (CEDAR)

Consolidates multiple applications to track and report on transportation environmental regulations, schedules, etc.

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Project ID: P000123  
Agency Abbreviation: VDOT  
Project Formal Title: Asset Management System

For assets where the inventory information is not available, the business approach is to perform a random sampling of assets in order to determine asset density and condition. The asset density will be extrapolated to estimate inventory statewide. The asset conditions from the samples will be applied to the extrapolated inventory to determine the estimated amount of work needed. The system will be comprised of the following modules that will be developed incrementally; Random Condition Assessment, Needs-based Budget Request, Planning & Scheduling, Work Orders, Accomplishment & Monitoring, Inventory, and Analysis Tools. Customers being served by this system are; Asset Managers, Financial Planners, Research groups, Strategic Planners,

## Appendix D - Major Information Technology Project Descriptions

and Executive Staff. Expected benefits are more accurate planning and budgeting, as well as increased efficiency and resource utilization.

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Project ID: P000124  
Agency Abbreviation: DMHMR  
Project Formal Title: IT Infrastructure Upgrade

Each DMHMRSAS facility or Central Office will determine local needs with input from the IT Steering Committee regarding design and standards. Plans should include those for future growth, changes in building configurations or possible re-locations, ability to maintain near current versions of software and hardware, and network accessibility for as many employees as possible. Implementation will be managed by local IT staff but may involve outside vendors or contractors.

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Project ID: P000125  
Agency Abbreviation: VDACS  
Project Formal Title: Reengineering/Conversion of Legacy Applications

The project approach currently being utilized is to assign staff to reengineering of specific applications based on staff availability, agency priorities, and/or legislative mandates. If funding is provided, the agency will contract with 3rd party vendors from the state contract who are able to provide the required reengineering/conversion functions. The primary expected benefits are to have web-enabled applications for users of multiple systems, and to enable the agency to dispose of the obsolete 9221 mainframe computer.

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Project ID: P000128  
Agency Abbreviation: VCA  
Project Formal Title: Replace the current computer network system.

2 Laptop Computers \$2,280, 6 Desk Computers \$6,000, 6 Monitors \$900, 6 keyboards / mice \$750, 1 server \$3,500, 2 HP printers \$4,000, 1 Scanner \$800, 1 TTD \$800, 1 Fax w/ network connection \$2,000, Novell Software \$1,156, 1 Database software \$1,500, Windows Operating System \$1,800, 6 Word Software Suite \$4,500, 6 Adobe Software \$1,314, Web Design software \$500. Approximately 25% of the staff time will be saved, which can be used to expand our services to the constituents. Staff will not have to spend time resending information 3 or 4 times and then finding other ways to disburse required information that the current computer system can not handle. The Commission will also save money approximately \$10,000 in postage and printing costs. Constituents will be able to download forms, tourbooks and guidelines that our current system can not produce. We would only have to mail guidelines, tourbooks and forms to those who do not have internet access.

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Project ID: P000129  
Agency Abbreviation: VDOT  
Project Formal Title: Pinnars Point

Smart traffic (ITS) component of the midtown tunnel construction project.

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Project ID: P000130  
Agency Abbreviation: VDBVI  
Project Formal Title: ICM Project

Promote common business practices for case management by using a single turnkey business application for 21 programs that provide services to people with disabilities.

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Project ID: P000131  
Agency Abbreviation: DOA  
Project Formal Title: Hardware Upgrade and Software

Replace all desktop system's with a more reliable hardware platform. The new systems will utilize the current version of the Windows operating system and the latest version of Office that Microsoft is offering. Replace the token ring technology used on our LAN with Ethernet. Replace our servers with new blade server technology making the system more fault tolerant.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000134  
Agency Abbreviation: VIMS  
Project Formal Title: Critical IT Infrastructure Project

This project addresses a variety of capabilities in the VIMS Network Services Infrastructure. Some items upgrade outdated or insufficient capabilities. Others offer new technologies which can offer new functionality and improved productivity to the VIMS community. It consists of five components:

1. Campus-Wide Fiber Network - A high capacity and reliable campus network will be constructed by installing approximately 5,200 feet of new underground conduit and approximately 10,400 feet of fiber optic cable in the new and existing conduit to interconnect the buildings campus wide. Multi-strand fiber optic cable will be sized to meet current and projected network bandwidth requirements. This will provide an inter-building network with minimal lightning hazard exposure.

2. 24 Hour 7 Day a Week Gigabit Ethernet Backbone With Switched Ethernet to the Desktop - The switched ethernet protocol, implemented with the appropriate hardware, provides guaranteed Quality of Service (QOS). This level of quality is required to deliver real time applications over the network such as modeling, simulations, interactive video, and voice-over Internet Protocol (IP) telephony. This is the same protocol currently used on the Virginia Broadband Network Project (known as Network Virginia), which interconnects universities, community colleges, K-12 schools, and government agencies of the Commonwealth. The project includes connectivity to desktop workstations, scientific instrumentation, distance learning systems, and servers and storage systems throughout the VIMS community.

3. Enterprise Server and Storage Resources - The mail server capability has to grow to meet the demand of a greater number of increasingly complex mail message exchanges. The web server capability has to grow to meet the demand of the greater quantities of more complex web resources. Disk capacity must grow to meet the demand as the number of data acquisition resources and their contents grow. As disk resources grow, the capacity to preserve and manage those resources must increase.

4. New Building Infrastructure for Voice-Over Internet Protocol (IP) - The new Gloucester Point Marine Research Building Complex, the Kauffman Aquaculture Center at Topping and the Eastern Shore Laboratory in Wachapreague, need to be connected to the VIMS telecommunications environment. This will better enable the VIMS community to work at those locations in the same manner they work at the Gloucester Point campus. This technology will promote easier mobility between office, lab, and research stations and ad hoc videoconference collaboration from any and all of those locations.

5. Campus-Wide Wireless Networking - This project would extend the successful Watermen's Hall wireless network pilot project to compliment the wired Ethernet connections on all VIMS campuses. Wireless network communications are also proving to be an alternative to reach areas where wired connections are cost prohibitive or otherwise unfeasible and cellular technology is not capable of the data transmission required.

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Project ID: P000138  
Agency Abbreviation: NSU  
Project Formal Title: Establish Open Access / Instructional Computer Labs

The university currently has too few labs to support the number of students enrolled. Many labs are run by departments which lack sufficient support personnel with the result that the systems in those labs are often old and/or broken. We will consolidate the various labs into fewer but larger and easier to manage and support labs. The labs will have trained personnel to support them. Some labs will support individual students as well as actual classes being taught in the labs. These classes will support both enrolled students and staff training. Also, the labs will alleviate the shortage of well-equipped classrooms by doubling as instructional space.

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Project ID: P000139  
Agency Abbreviation: JYF  
Project Formal Title: JYF Ticketing Improvements

The project consists of several components: (a) Upgrade of the Paciolan system. This upgrade includes hardware (RS/6000), the software, and professional services (Project Management, Software Installation/conversion, Setup and Training, and database work); (b) Addition of on-line and timed-access ticket purchasing; (c) the hiring of a database/web programmer for the Paciolan and related systems; and (d) the purchase and installation of 8 BOCA printers compatible with Paciolan and necessary for ticket printing requirements.

## Appendix D - Major Information Technology Project Descriptions

Project ID: P000141  
Agency Abbreviation: VSP  
Project Formal Title: Upgrade of Virginia Criminal Information Network software

The VCIN messaging server supports nearly all major criminal justice processes in Virginia. All users of criminal history, wanted persons and other systems routinely use VCIN messaging. VCIN also provide critical interfaces with the FBI and NLETS. The VCIN software will be upgraded take advantage of new functionality and features. For example, VCIN upgrades will improve VSP's ability to send mugshots and other images to FBI systems. The ability to share mugshot photos is currently a priority for the FBI and most states. The work to be performed is a straight forward software update install by the product vendor, CPI.

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Project ID: P000142  
Agency Abbreviation: VSP  
Project Formal Title: Sex Offender Registry/Livescan Interface for Mugshots

The customers for this project are all the citizens of the Commonwealth and the Criminal Justice Agencies.

This project is a continuation of the effort to utilize Live scan devices across the state for the entry of data on criminal and civil actions. Entry of data at its source reduces errors. Electronic transmission of criminal and civil activities to the state repositories provides timely responses to such requestors. It also increases the accuracy of state records.

VSP will develop the system requirements for the automated updating of the Sex Offender data received from live scan units to the Sex Offender registry. VSP will work with the vendor that provided the SOR web based programs and server to determine the requirements for automated updating of the records available to the public over the Internet. Vendor costs to perform this work are estimated at: \$50,000

Contractor personnel will then design the program changes to the current Sex Offender Registry system at VSP, program, and test the system interfaces to the live scan systems.

Contractor costs are estimated at: \$59,600.

The estimated duration of the programming and testing efforts is 6 months.  
The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000143  
Agency Abbreviation: SBE  
Project Formal Title: Virginia Election and Registration Information System (VERIS)

VITA and SBE are hiring a project manager to first perform a full technical and economic analysis of the possible solutions available. A specific solution will be selected and a proposal for a project charter will be submitted. SBE will follow the Commonwealth Project Management Guidelines. We envision the project will require development or modification of a software application, secure internet access, and, perhaps, hardware distribution and installation in 133 local registration offices. The project is funded with federal dollars and must be completed, as directed by HAVA, on January 1, 2006. The project will deliver all of the functionality of the current VVRS as well as the additional functionality necessary to meet the requirements of HAVA and to automate internal (now manual) election and registration procedures. Further, VERIS will include links to DMV (e.g., for ID verification) and other agencies (e.g., State Police to verify felons) that are not now possible. SBE expects that maintaining VERIS will be much cheaper than maintaining the current VVRS resulting in long term financial benefits for the Commonwealth.

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Project ID: P000144  
Agency Abbreviation: VDH  
Project Formal Title: WebVISION Lab Module

The LAB module will be accomplished by following the same development approach used very successfully in Web Vision. This module will be a significant addition to Web Vision. The Lab module will be a significant addition to Web Vision and will use the same technology as Web Vision, Oracle database, Designer 2000 Case tool and a three tier Web Architecture. The Lab module will also adopt the same behavior model of Web Vision so that both applications have the same look and feel. The primary customers for this system are District Health Departments and State Labs. Indirect customers are the health department

## Appendix D - Major Information Technology Project Descriptions

up the business flow between the health department and State labs due to online lab orders and results.

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Project ID: P000145  
Agency Abbreviation: DMHMR  
Project Formal Title: Clinical Apps/EMR

**Project Approach:** The agency will form an EMR Stakeholder Committee which would produce a needs analysis/requirements document which would in turn be used by the IT department to create a general design of the overall system solution. The general design document combined with the requirements document would be used to create a RFP for a COTS solution. **Specific Solution:** Ideally, at a minimum, it would include: Treatment Planning & Assessments, Ancillary Service Orders, Physician Orders, Pharmacy, Infection Control, Discharge Planning, Seclusion and Restraints Tracking, Diet/Nutrition, and Critical Incidents Monitoring and HIPAA compliance. The solution should be web-based running on Unix and be able to support 800 concurrent users. It should utilize wireless technologies for bedside processing and remote access. Report processing would utilize Crystal Reports. The software, user licenses, servers, desktops, wireless devices, service contracts, installation fees, training and documentation for all fifteen facilities should not exceed 12 million dollars. The needs analysis/design/RFP process would commence July, 2004 and end March, 2005. Actual purchasing would commence April, 2005 and end June, 2008. Implementation activities would commence April, 2005. **Customers Served:** Facility clinical departments (1500 users); administrative departments (400 users); and the patient/client (4,700). **Expected Benefits:** An electronic medical record will 1) allow data and the information it produces to be more easily accessible by decision makers at both the direct care level and administrative level, 2) reduce security risks, 3) provide business continuity for HPe3000 (HP retirement 2005) stand-alone patient care systems, 4) reduce physical risks to the patient, 5) increase staff productivity/efficiency and effectiveness.

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Project ID: P000146  
Agency Abbreviation: DMHMR  
Project Formal Title: Health Insurance Portability and Accountability Act (HIPAA) Security Rule

**Project Approach:** A HIPAA Security Committee will be formed and comprised of representatives (Facility Security Officials) from Central Office and the facilities. The Committee will interpret the ruling, assess the environment, identify the gaps, design the solutions to fill the gaps, test and implement the solutions and perform follow-up. An extremely important part of the approach calls for extensive intrusion testing (White Hat Intrusion) be performed by a reputable firm. This process would expose the vulnerabilities at each of the facilities and Central Office and allow the agency to correct the weaknesses before the federally mandated April 2005 deadline. **Specific Solution:** The chosen solution will depend upon what the ruling specifically requires and associated risk levels. The ruling covers data access, encryption; user authentication, physical security, disaster recovery/business continuity, and audit trails. Technologies that will be employed will be the establishment of public key infrastructures, virtual private networks, secure servers, and security and awareness training. **Customers:** customers include all users (internal and external) of individually identifiable health information. **Expected Benefits:** include an enhancement of many of the security mechanisms already in place. One major benefit will be the securing of Internet email which has always been a popular but insecure method of sending confidential information. Once the solutions are implemented HIPAA compliance will have been achieved.

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Project ID: P000147  
Agency Abbreviation: VCU  
Project Formal Title: Modernization of Communications Infrastructure

This project will modernize the telephony infrastructure and services at VCU. The University will implement a state-of-the-art IP PBX system to provide a higher level of service at lower cost for University and Health System customers. Sections of the data network will be upgraded to enable IP Telephony to the desktop. Implementation will occur over a 1 year period starting in the spring of 2004.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000148  
Agency Abbreviation: DMME  
Project Formal Title: Automated Utility Tracking System

Establish energy management program for Commonwealth Agencies using remote monitoring equipment.

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Project ID: P000149  
Agency Abbreviation: VCU  
Project Formal Title: VCUnet Infrastructure Maintenance and Experimental Networking

This project has two components. First, the University will continue its ongoing program of upgrading its network infrastructure to meet increasing academic and administrative needs. Second, VCU will help develop and implement experimental network technologies for high demand research projects

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Project ID: P000150  
Agency Abbreviation: DOE  
Project Formal Title: Education Information Management System (EIMS)

The Department of Education has made significant progress in understanding and implementing various aspects of the new law since the NCLB was signed into law on January 8, 2002. A major portion of this understanding was the impact of the requirements of the law on information systems. The Department also studied the implementation of longitudinal student information systems by other states, and collected other state's system requirements documents. Additionally, the department contracted with Evaluation Software Publishing (ESP), a nationally recognized expert in educational information at the school, division, state, and federal levels. ESP has identified 13 tasks that states need to complete in order to implement longitudinal student information systems. Further research was conducted to determine Virginia's implementation status. (see status chart in project analysis worksheet). The study concluded that the Virginia Department of Education had the capacity to succeed with the EIMS, given adequate resources and support. The department has a track record of successful project completion, both in-house and contracted; and a stable and standards-based technology architecture. In addition to the study by ESP, VDOE has determined that the following must be included in the detailed system requirements of the EIMS. The system must be consistent with the COVA Enterprise Architecture and the Governor's Strategic Plan for Technology. The system must adhere to COVA Policies, Standards and Guidelines for information security. Development of the system must adhere to COVA project management guidelines. The system must comply with state and federal requirements for handicap access, the Family Education and Right to Privacy Act (FERPA), the Virginia Freedom of Information Act (FOIA), and Virginia Guidelines for the Management of Student Records. The Department of Education will develop detailed requirements for the system components identified in the following chart. (see components chart in project analysis worksheet).

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Project ID: P000151  
Agency Abbreviation: ODU  
Project Formal Title: Digital Library

This effort builds upon proven innovation by ODU/VT/UVA with regard to advanced technology for handling distributed DL collections, and production-quality efforts for handling theses, dissertations, reports, and courseware. It is in accord with the current trend to build institutional repositories, such as through the MIT-led DSpace initiative. However, through this project, Virginia will be the first to move that to the state-wide level. The ODU/VT/UVA effort will be a model for using DL technology to manage the intellectual output of the Commonwealth. The proposed DL would catalog and store the entire intellectual corpora of the universities and make them available for discovery over the Web by its students, staff, faculty, and the general public.

#### Target Content

- Patents, technical reports, papers, E-journals, conference proceedings,
- Administrative reports
- Courses, reference material for courses, student portfolios
- PhD/MS theses, Accreditation material
- Requests for proposals, funded projects, project reports
- Museum collections

#### Target Audience

- Local (main campus and remote sites) students, faculty and staff
- Students and faculty from other universities

## Appendix D - Major Information Technology Project Descriptions

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Project ID: P000153  
Agency Abbreviation: LC  
Project Formal Title: Ruffners Technology

This project puts instructional technologies in the Ruffners complex. This technology is consistent with the standard for technologies in place at Longwood. These standards are proven and reliable. It will serve student, faculty, staff and community constituencies. The benefits include a more technology literate group of constituencies, and a better educated student.

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Project ID: P000154  
Agency Abbreviation: LC  
Project Formal Title: Science Building

Equip new Science Building with instructional technologies.

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Project ID: P000156  
Agency Abbreviation: VCU  
Project Formal Title: Administrative Systems Replacement

The University's strategy is to replace its financial, human resource and student information systems with a vendor developed and supported solution that utilizes modern technology architectures and native internet access to provide self-service access and business process support to faculty, students and staff. The integrated solution will support workflow methodology and enable seamless electronic communication to constituents, via an internet portal and/or electronic mail. The vendor selected will be able and experienced in providing both technical and functional resources, for installation, training, process analysis and operations.

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Project ID: P000158  
Agency Abbreviation: DOA  
Project Formal Title: Geac Software Upgrade

This project requires that all software modules be replaced with the upgraded version and that all in house written programs and other systems that use data from the payroll system be modified. Any agency, institution or 3rd party user receiving data from the payroll system will be required to make changes to accommodate the increased field lengths.

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Project ID: P000161  
Agency Abbreviation: ODU  
Project Formal Title: Research Computational Infrastructure

This project will provide IT and computational infrastructure at ODU and provide administrative support to enhance core facilities and connections to research sites off-campus such as the Virginia Modeling, Analysis, and Simulation Center and

## Appendix D - Major Information Technology Project Descriptions

centers, and commercial partners in the Hampton Roads regions. The infrastructure will be designed to support distributed computing required to support a secure environment using open architecture, such as Grid Computing. The project will be phased, with campus facilities/systems first developed to directly benefit ODU researchers. The benefit will be to the research faculty and the agencies that fund them by enhancing their capabilities to perform IT and computationally-dependent research. This project will also benefit the community by increased competitive status of the institution for federal funds. Priorities for off-campus connectivity will be based on application demand. For example, existing collaborations in particle physics among ODU and Jefferson Labs create opportunities for sharing large data sets. In addition, the U.S. Navy has placed a major IT platform, network warfare command, in Norfolk and Navy and ODU leaders are discussing how systems research can be maximized. This project begins a long term effort to bring ODU and the region into a unique stature within the high tech community through excellence in specific research areas.

A center for distributed computational resources will be established at Old Dominion University with the goal of increasing research productivity and encouraging collaboration among the principles. The center will coordinate the use of the computational environment through the following:

1. Develop the administrative infrastructure required to manage a grid computing network to enable authorization and authentication as well as demonstrate utility and account for activities through standards-based grid technology.
2. Sponsor and assistance in the development of complex applications using grid computational systems.
3. Establish a cooperative research network with the institutions, federal laboratories and research centers, and commercial partners in Hampton Roads, providing for connectivity to other research networks.
4. Extend access to advanced computational capabilities to the largest possible range of Virginia educational institutions.
5. Assist research institutions in the availability of high-end computer resources to facilitate collaboration and cost effective utilization.
6. Leverage research proposals via expanded computational capabilities.

---

Project ID: P000162  
Agency Abbreviation: ODU  
Project Formal Title: Enrollment Growth

To address the increase enrollment growth in the Commonwealth of Virginia from a four-prong approach.

1. Increase growth at the main campus
2. Revised summer program as a third semester
3. Expansion of the TELETECHNET (synchronous distance learning program)
4. Implementation of a collaborative partnership with the Virginia Community College System in asynchronous (on-line) course delivery.

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Project ID: P000183  
Agency Abbreviation: VDH  
Project Formal Title: WebVISION - Private Provider Immunization

The Private Provider Immunization Registry will be accomplished by following the same development approach used very successfully in Web Vision. The Web Vision Immunization Registry will be modified to meet the needs of the private providers. The technology used are Oracle database, Designer 2000 Case tool and a three tier Web Architecture. The primary customers for this system are Virginia Private Providers. Indirect customers are Virginia patients. OIM will be establishing a user group which will consist of members from the Private Provider Community. We will start requirements gathering with this user group, an impact analysis on the existing Web Vision application, and then use an iterative approach to development. The goal is to implement the Private Provider Immunization Registry in most of the Private Provider offices in Virginia. and results.

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Project ID: P000201  
Agency Abbreviation: VITA  
Project Formal Title: VITA Information Center (VIC)

The project will 1) develop business processes for the system and build the integration points between network management, Customer Care and CRM 2) implement software and hardware to support process, event monitoring and reporting, escalations & notifications, cahnge management, service level management 3)roll out and test tools to support to small agencies, build

## Appendix D - Major Information Technology Project Descriptions

executive dashboard 4) rollout medium and large agencies and configuration of additional tools if necessary.

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Project ID: P000202  
Agency Abbreviation: VITA  
Project Formal Title: Consolidated Richmond Data Center

Consolidated Richmond data center

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Project ID: P000203  
Agency Abbreviation: VITA  
Project Formal Title: Consolidated Backup Center

Consolidated backup center

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Project ID: P000205  
Agency Abbreviation: VITA  
Project Formal Title: VITA Customer Relationship Management System

VITA customer relationship management system

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Project ID: P000206  
Agency Abbreviation: VITA  
Project Formal Title: IT Portfolio

To implement an IT investment portfolio management tool.

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Project ID: P000207  
Agency Abbreviation: VITA  
Project Formal Title: Web Accessibility Standards & Content Management

Provide agencies with a template based Web site that meets accessibility requirements and other standards and guidelines established by the state.

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Project ID: P000211  
Agency Abbreviation: VITA  
Project Formal Title: Email Consolidation

The goal of the Commonwealth Email (and File Server) Consolidation Project is to reduce IT costs and improve service to customers through the consolidation and elimination of redundant systems. Email and file server consolidation can provide the Commonwealth with a cost effective, secure, integrated solution that will reduce complexity and consolidate existing disparate systems into a single integrated platform, based on a common, standard, and modern technology infrastructure. A preliminary business case analysis identified the potential cost savings and benefits that can be expected from the project. Projected savings over a five-year period are estimated to be as high as \$64,000,000.

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Project ID: P000212  
Agency Abbreviation: VITA  
Project Formal Title: Oracle Financials

VITA will assume ongoing responsibility for the operation, support, and software upgrades to enterprise-wide business applications and databases. The economic imperative for the VITA applications' consolidation originates from the economies of scale that can be realized through aggregation of demand for software licenses, database licenses, computing power, and storage capacity. Likewise, significant personnel cost savings can be realized through consolidation while at the same time improving the timeliness of application upgrades and ongoing support of these enterprise systems.

## Appendix D - Major Information Technology Project Descriptions

To realize these savings, we must begin planning now for the eventual consolidation of enterprise-wide business applications. The first step is the development of a business case analysis of cost takeout opportunities for financial systems maintained by in scope agencies. If supported by the business case, detailed planning for the consolidation will be undertaken.

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Project ID: P000213  
Agency Abbreviation: VITA  
Project Formal Title: Server Consolidation

Server Consolidation - Place Holder - Sponsor for project unknown at this time.

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Project ID: P000217  
Agency Abbreviation: VEC  
Project Formal Title: Mid-Atlantic Career Consortium (MACC) Workforce Application

Virginia has joined with other DOL Region 2 states (DE, MD, WV, PA and DC) to develop an internet based workforce application that will satisfy the requirements of the Workforce Investment Act of 1998 (WIA) and the Wagner Peysner Act for the delivery of employment services.

---

Project ID: P000224  
Agency Abbreviation: NSU  
Project Formal Title: Data Center Relocation

All servers will be relocated to an existing building on campus. This location will have environmental and power systems installed in order to support the servers. Network equipment will be relocated to a small data center already in operation but which does not have sufficient space to house the servers. Customers served are students, faculty, staff, commonwealth citizens, alumni, and government. The expected benefits include but are not limited to the ability to continue University business uninterrupted, improved retention and graduation rates, and improved customer service.

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Project ID: P000231  
Agency Abbreviation: LC  
Project Formal Title: Replace Private Branch eXchange (PBX)

By the end of 2005, Longwood University must have completed a call for Proposals, vendor selection, installation and training is the use of a new PBX for the University telephone system.

---

Project ID: P000257  
Agency Abbreviation: NSU  
Project Formal Title: Firewall Implementation

Various proposals for effective implementation were considered and the best plan was selected. All hardware has been purchased with some of it already installed. The University citizenry is the customer and the benefits are secured data communications and improved integrity of data.

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Project ID: P000328  
Agency Abbreviation: VITA  
Project Formal Title: Lightweight Directory Access Protocol (LDAP)

LDAP (Lightweight Directory Access Protocol):

Centralized user management (authentication and authorization) in large Enterprises can be a daunting task even if managed from the start. When planning the merger of 91 separate entities, each with at least one and usually several user directories, the task becomes impossible to manage without either large numbers of user administrators or leveraging technology to centralize the process and standardize the interface among disparate systems. The best practice technical solution to this problem is the use of a centralized user directory structure and administration tools which we are commonly referring to as "The LDAP project" but is in reality shorthand for some sort of X.500 directory system that will probably use LDAP.

The LDAP project's goal is to develop a framework to centrally manage the VITA user community across disparate inherited

## Appendix D - Major Information Technology Project Descriptions

systems and to guide the development of future systems to leverage this framework.

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Project ID: P000413  
Agency Abbreviation: DEDR  
Project Formal Title: Videoconferencing

Videoconferencing will broaden EDR's dispute resolution services by providing state employees with the option of low-cost and time-efficient distance learning.

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Project ID: P000421  
Agency Abbreviation: NSU  
Project Formal Title: Mediated Classrooms

We will be installing systems in classrooms to augment traditional teaching methods. This can range from an instructor PC hooked to a video projector, all the way to handheld computers for increased classroom participation and field work. Students will be the beneficiaries of the improved services. The benefit will be higher student retention rates, higher student graduation rates, and a much better educated graduate for current and future job market.

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Project ID: P000423  
Agency Abbreviation: DCJS  
Project Formal Title: Replace Phone Systems at Division of Forensic Science

The general approach to the project is to provide enhanced telecommunication services to the Forensic Lab system. This would include direct inward dialing capabilities, voice mail, and additional extensions in the northern Virginia, Roanoke and Norfolk labs. In the central lab in Richmond we would be replacing the ISDN/analog system with one that allows for direct inward dialing and voice mail throughout the lab. Specific vendors, equipment, and procurements have not yet been identified.

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Project ID: P000435  
Agency Abbreviation: DCJS  
Project Formal Title: Replacement of Building Access System for Division of Forensic Science

The entire project approach has not yet been developed. However, it will probably include an RFP to solicit solutions from various vendors. Once a solution and vendor are chosen we would anticipate completion of the project in stages over a one year time period. Division of Forensic Science staff would serve as the project manager. Division staff will also be responsible for system management and management of the maintenance contract for the system. Customers who will benefit from the project include division staff and law enforcement whose evidence is under control of the division while it is being analyzed.

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Project ID: P000438  
Agency Abbreviation: LC  
Project Formal Title: Replace end-of-life network equipment

By the end of 2005, Longwood University must have completed a call for Proposals, vendor selection, installation and training is the use of new network routers and switches for the University LAN

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Project ID: P000458  
Agency Abbreviation: GMU  
Project Formal Title: Telecommunications/Infrastructure Project

This project seeks to fund critical telecommunications infrastructure upgrades that are required to meet current growth projections at the University's three main campuses, and to replace obsolete equipment that does not support newer, more efficient technologies such as Voice over IP and IP Multicasting. These technologies are key components of plans to accommodate additional students and researchers by meeting their voice and data needs at the lowest cost, while building in added security. The primary Internet router and much of the Fairfax campus network equipment must be replaced in late 2003 - early 2004 in order to support current enrollment. The "outside telecom plant" for the Prince William IIIa building, along with the intercampus optical fiber and some network upgrades, must be completed in 2004 so the building can be opened on schedule for Fall 2004. The firewalls and associated equipment would be installed in 2004 as well. Total outlay in fiscal year

## Appendix D - Major Information Technology Project Descriptions

2004 would be approximately \$2.8M. The PBX switchroom expansion (\$500k) must be completed sometime in 2006 in order to make room for an additional PBX that will be needed in the following biennium to support planned on-campus housing growth. University network support staff would be overseeing the project and performing much of the implementation, with consultants brought in as required for installation and configuration of some specialized network devices, and design and construction of switchroom expansion.

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Project ID: P000459  
Agency Abbreviation: VDEM  
Project Formal Title: IT Infrastructure for the Joint Virginia Emergency Operations Center

The approach will be to enlist the aid of VITA and other experts in the design, procurement, installation, acceptance, and implementation of a state-of-the-art IT and telecommunications infrastructure to support the new Virginia Emergency Operations Center (including the Fusion Center). The new VEOC will be the Commonwealth's command and control and information analysis and assurance center, designed and equipped to support preparedness, response, recovery, and mitigation operations for an all-hazards environment. The VEOC will be "connected" in a real-time environment to the Office of the Governor, other state agencies, local governments, partners in critical business and industries, various federal civilian and military agencies, and other states' emergency operations centers. There is a requirement for robust, redundant, and reliable IT and telecommunications systems to fully support operations in a worst-case environment, regardless of cause. The expected benefits are an increased coordination and information-intelligence sharing between all levels of government, using a reliable mechanism to accept, analyze, interpret, and appropriately share with others as required; a fully-capable operations center for response and recovery actions for the Commonwealth in support of localities; the reliable ability to support continuity of government operations and protection of critical staff (COOP and COG); a secure environment for the Governor and designated staff to coordinate operations with his counterparts and the federal government.

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Project ID: P000461  
Agency Abbreviation: VSP  
Project Formal Title: Enhancement of the Automated Fingerprint Identification System21 (AFIS21) - Palm Print Search

Existing VSP AFIS personnel would document the requirements for a palm print system. Other states would be contacted as to their experiences. Local fingerprint personnel would also assist in development of requirements. Cost proposals would be reviewed and the system would be procured. Additional hardware and software would need to be added to AFIS at VSP to allow these searches.

A conversion plan would be developed with local agency personnel to take their existing palm prints and convert to the state's AFIS system for searching. Conversion could be done by local agency personnel or contracted with the vendor. Setting up these prints on Virginia's AFIS system would allow statewide access to these prints. Transmission specifications would be developed and implemented where feasible for agencies with live scan palm print capabilities. Upgrades to the AFIS system at State Police benefits the entire criminal justice community and especially law enforcement. Below is the project approach: VSP researches and develops requirements for palm print equipment and software. Contacts agencies in other states regarding requirements and operations. Estimated duration: 3 months.

VSP works with selected vendor to finalize requirements, system design, develop project schedule, and obtain contract.

Estimated duration : 3 months Estimated \$25,000 in contractor expenses.

Vendor converts local palm print cards. Cost: \$300,000. Duration 6 months.

VSP and vendor conduct acceptance testing on system. Estimated duration: 3 months. Estimated \$25,000 in contractor costs.

Vendor with VSP support install central and remote systems. 3 months. Estimated vendor costs: \$1,000,000. Estimated contractor costs: \$50,000.

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Project ID: P000462  
Agency Abbreviation: VSP  
Project Formal Title: Enhancement of the Automated Fingerprint Identification System21 (AFIS21) - Wireless Access

The AFIS21 system stores and searches fingerprints for criminal justice and employment checks. Currently there are over 1.4 million sets of fingerprints stored on AFIS and accessible from 24 remote AFIS terminals in local and state agencies and more than 100 live scan systems installed throughout the state. A high speed communication line is used by all these terminals because of the size of the transmissions (almost 1 mb compressed).

Several vendors now offer single finger scanners based on PDA technology or on specialized units developed exclusively for this application. These units capture two fingers and transmit to a server that would be installed at State Police to handle these transactions. In addition to this server, a single finger database would need to be established as an upgrade to AFIS so that a quick response could be generated to the field officer. The existing 1.4 million database would be electronically converted for

## Appendix D - Major Information Technology Project Descriptions

VSP researches and develops requirements for single finger central and remote wireless equipment and software. Estimated duration: 3 months.

Cost: \$50,000 in contractor expenses.

VSP works with selected vendor to finalize requirements, system design, develop project schedule, and obtain contract.

Estimated duration : 4 months Estimated \$50,000 in contractor expenses.

Vendor programs system: 5 months Estimated vendor cost \$500,000.

Vendor converts existing tenprint database to single finger database. \$250,000

VSP and vendor conduct unit testing for VSP systems that interface with single finger search system. Estimated duration: 3 months. Estimated \$50,000 in contractor costs.

Vendor with VSP support install systems central and remote. 3 months. Estimated vendor costs: \$1,000,000. Estimated VSP contractor costs: \$100,000.

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Project ID: P000463  
Agency Abbreviation: VSP  
Project Formal Title: Criminal Justice Information System (CJIS) Master Name Index

The solution is based on a centralized criminal justice name index to be used by all criminal justice agencies. The name index would store data fields that need to be quickly compared and retrieved. The name index would largely be based on the CCH name index, which contains all fingerprinted offenders, and this name index would be expanded to handle non-fingerprinted offenders. The name index would link to more detailed information residing on other systems real-time.

Below are some of the key tasks and deliverables:

- There is an expectation that this initial effort would query systems from VSP, courts, DOC, SCB's LIDS (for jail information) and perhaps DCJS's community corrections system and DJJ to capture adult offenders who are less than 18 years old. This decision needs to be finalized in cooperation with the effected agencies.
- Messaging interfaces between the effected systems needs to be agreed upon. A key consideration is to provide users with very good response time.
- Certain CSP data standards need to be implemented on some of the systems listed above.
- While this project would benefit nearly all criminal justice business processes, some business processes should be changed to better leverage the potential benefits. Business processes that need to be examined from this perspective need to be identified and analyzed.
- A formal requirements analysis is required.
- A cooperative agreement between the effected agencies needs to be finalized. Some of the funding from this project would be allocated to other agencies to perform work necessary to interface with the new name index.
- Each effected agency develops, programs, tests and implements system components as specified in the cooperative agreement.
- Significant user education and training will be necessary to better leverage potential benefits.

It is anticipated that this project would require 24 months. The development cost is \$2 million and the annual operational/maintenance cost is \$100,000. The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000464  
Agency Abbreviation: NSU  
Project Formal Title: Community Hospital Building Renovation

The project approach is to provide campus network connectivity and internet access to all personnel that will be located in the renovated space. Fiber connectivity will be installed to the building and standarad network cabling and ports will be installed to each work unit within the building. In addition, the network equipment required to support the network architecture and interface with other network devices are included in this project estimate.

## Appendix D - Major Information Technology Project Descriptions

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Project ID: P000465  
Agency Abbreviation: NSU  
Project Formal Title: RISE Network Connectivity

The project approach is to provide internet connectivity to the RISE Center and subsequently to the NSU campus network as a leverage and redundancy path.

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Project ID: P000466  
Agency Abbreviation: NSU  
Project Formal Title: Residence Hall Connectivity

The project approach is to provide campus network connectivity and internet access to all students from both academic arena and residential areas. Fiber connectivity will be installed to the building and standard network cabling will be installed on a port per pillow basis.

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Project ID: P000467  
Agency Abbreviation: VITA  
Project Formal Title: Procure Emergency Generator

With the creation of the VITA, a growing number of state agencies will depend on the VITA Data Center as they are brought into the VITA infrastructure. In turn VITA relies more heavily than ever before on uninterrupted power in order to appropriately service its customers as they fulfill their missions to the citizens of the Commonwealth. Many outside sources pose a threat to the Data Center's electric power, including the effects of a terrorist attack. The VITA Data Center in Richmond has no power generator backup capability for its battery system. Therefore, during a power loss of greater than one hour, there will be an interruption in computer services that will exacerbate planning and recovery during a terrorist incident. This very short timeframe of service after loss of power is due to two factors. The limited capability of its uninterrupted power supply system, and the subsequent lack of air conditioning would require the computers to be powered down to avoid damage.

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Project ID: P000468  
Agency Abbreviation: VSP  
Project Formal Title: Statewide Agencies Radio System

Upgrade existing Virginia State Police Land Mobile Radio and microwave networks to create a shared network for all agencies.

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Project ID: P000469  
Agency Abbreviation: VSP  
Project Formal Title: Mobile Computer Terminal Upgrade Project

Procure, install, and maintain 487 new mobile computer terminals with wireless Cellular Digital Packet Data Service, for the purpose of accessing Virginia Criminal Identification Network and DMV records in the field by law enforcement officers.

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Project ID: P000470  
Agency Abbreviation: VSP  
Project Formal Title: State and Local Preparedness Program

This project replaces the VSP mainframe system with an enterprise server system, establishes a similar enterprise server at a "hot site" backup data center, and updates the disaster recovery plan.

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Project ID: P000472  
Agency Abbreviation: VDOT  
Project Formal Title: Coleman Bridge Automated Toll Facility

This project will develop, document, and implement software for a new Automated Toll Collection System.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000473  
Agency Abbreviation: SBE  
Project Formal Title: Campaign Finance Management System

Consolidated system to manage e-filed campaign finance reports: new software for e-filers that integrates seamlessly with SBE mgmt software, posts reports to the SBE web site, meets all legal reqs, allows localities to accept e-filings. (see SBE Strategic Plan submission) The Code requires that SBE accept e-filings. As of 1/1/04, Political Committees are required to e-file once they meet a threshold. The current system is increasingly problematic. SBE has applied patches to add functions required by the Code but report review is manual. Many states accept e-filings and provide software to clients. There are COTS options; each requires customization for VA. One COTS package offers a 1-user license at \$27,000 and annual maint. of \$5000. A 30-user license is \$135,000 with \$24,300 annual maint. Fees do not include customization. We will provide firm estimates during Project Initiation. SBE requires an additional appropriation for this project.

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Project ID: P000474  
Agency Abbreviation: VITA  
Project Formal Title: VIPNet Enterprise Solutions

VIPNet's Enterprise Solutions are a set of Web applications and services that can be leveraged across all Executive Branch entities. These are services that are common among the Executive Branch entities, but are currently not available online. These solutions are ready for immediate implementation, allowing agencies to develop and deploy more online services faster by using the VIPNet Enterprise Solutions. The VIPNet Enterprise Solutions include:

- Google Search
- Online Shopping Cart
- Online Payment Portal
- Online Licensing and Permitting
- Events Registration
- Activities Calendar
- Constituency Notification

These VIPNet Enterprise Solutions will improve the quality of Virginia's Web-based services and help government entities, as well as citizen and business users, to realize substantial gains in efficiency and significant cost avoidance. With that productivity gain, agencies effectively have more man-hours to devote to additional projects.

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# Recommended Technology Investment Projects for the 2004-2006 Budget Biennium

Presentation to the ITIB  
September 25, 2003



## Legislative Requirements

- Recommend technology investments
- Identify priorities for funding technology investments

Plus:

- Give planning approval for technology investments (by the CIO)



## Report Development Approach

- Agency IT Strategic Planning (ITSP) process – data collection began April, 2003
- Initial investment ranking based on legislative criteria
- Meetings with Cabinet Secretaries
- Re-ranking based on input from Cabinet Secretaries
- Report approval by CIO on behalf of ITIB
- Submission of Report to Governor and General Assembly (August 29, Revised September 9)

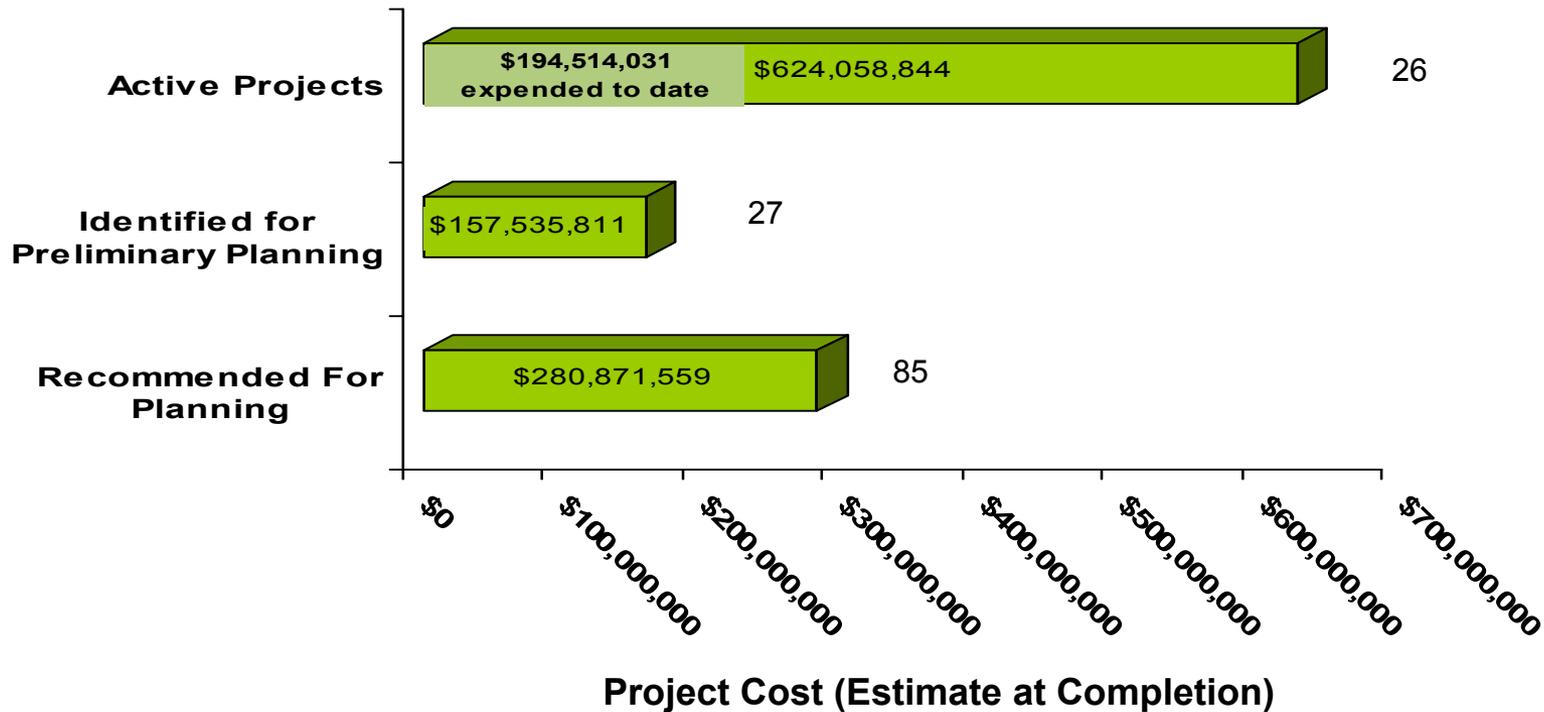


## Next Steps for Technology Investment Reporting

- Cabinet Secretaries identify Commonwealth priorities for technology investments (in conjunction with final budget)
- Commonwealth technology investment priorities reviewed by the ITIB and submitted to Governor and General Assembly



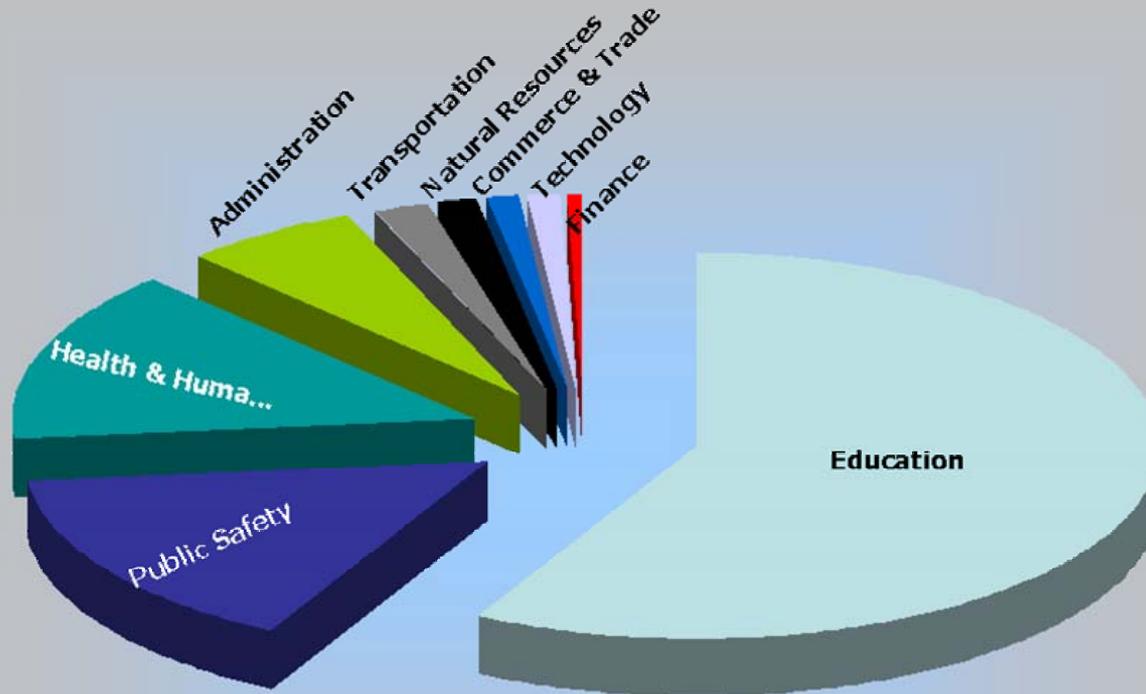
# Commonwealth Major Technology Investment Projects Requiring Funding for 2004-2006 Biennium



Total Number of Projects	138
Total Estimate At Completion	\$1,062,466,214



# Commonwealth Major Technology Investment Projects Recommended for Planning



Education	\$162,139,496
Public Safety	\$ 43,868,709
Health & Human Resources	\$ 40,683,789
Administration	\$ 17,241,800
Transportation	\$ 5,373,500

Natural Resources	\$ 3,700,000
Commerce & Trade	\$ 3,419,895
Technology	\$ 3,238,000
Finance	\$ 1,206,370

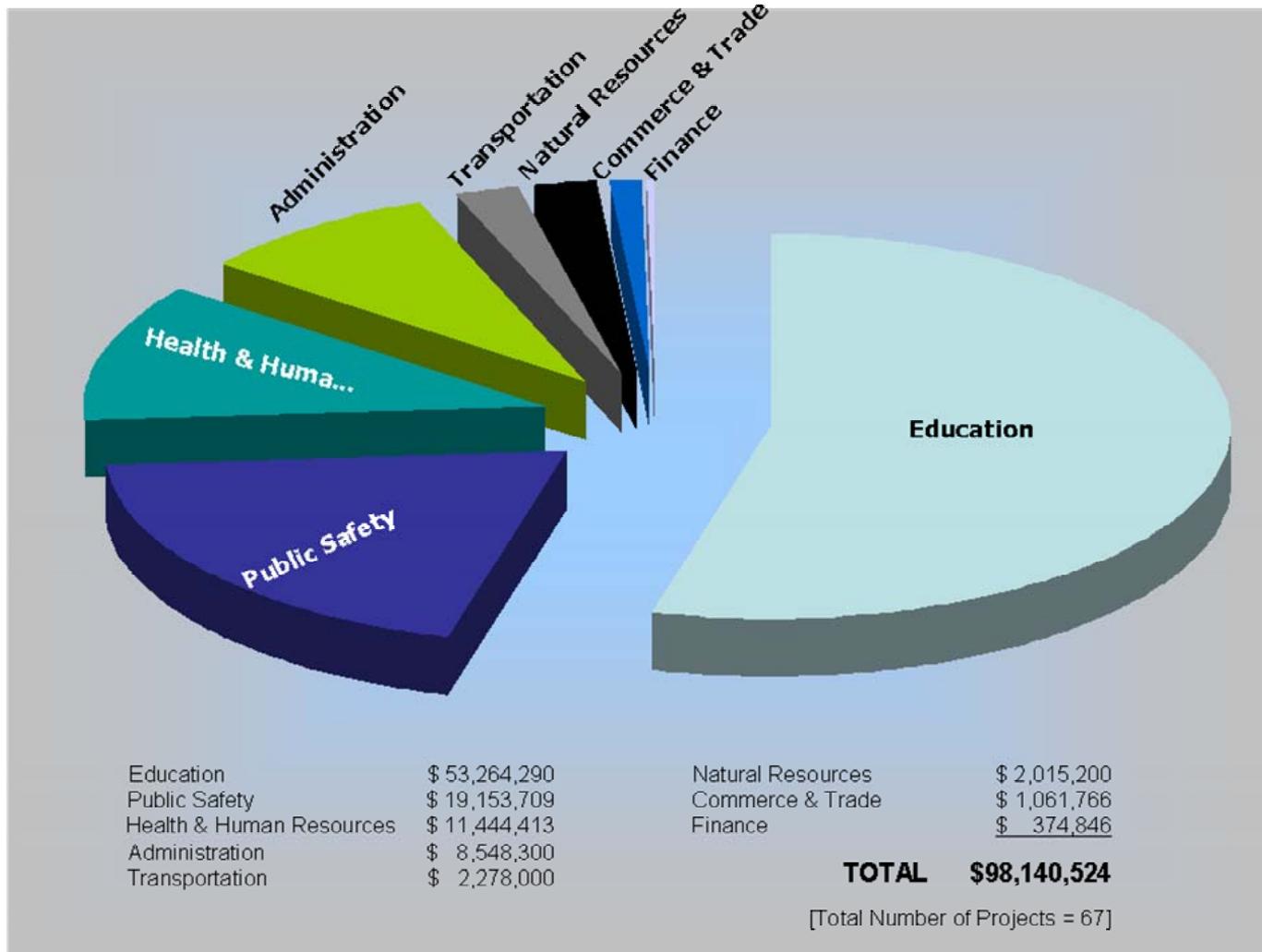
**TOTAL (EAC) \$280,871,559**

[Total Number of Projects = 85]



# Commonwealth Major Technology Investment Projects

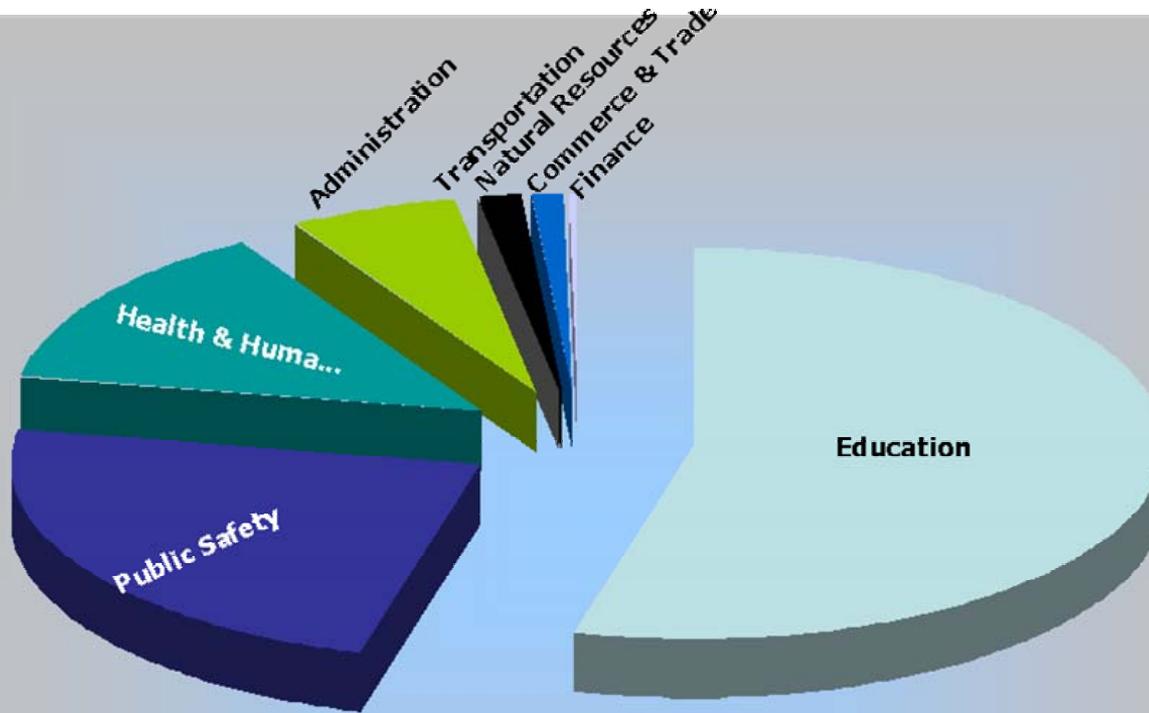
Recommended for Planning – FY05 Estimated Expenditures by Secretariat





# Commonwealth Major Technology Investment Projects

Recommended for Planning – FY06 Estimated Expenditures by Secretariat



Education	\$ 38,104,850
Public Safety	\$ 16,470,000
Health & Human Resources	\$ 9,641,590
Administration	\$ 4,117,000
Transportation	\$ 60,000

Natural Resources	\$ 984,800
Commerce & Trade	\$ 727,800
Finance	\$ 171,500

**TOTAL \$70,277,540**

[Total Number of Projects = 45]



# Commonwealth Major Technology Investment Projects Largest Five By Cost

<u>Category</u>	<u>Agency</u>	<u>Project</u>	<u>Estimate at Completion</u>
Active	VSP	Statewide Agencies Radio System	\$370,000,000
Active	DOE	Web-based Standards Of Learning (SOL) Technology Initiative	\$124,000,000
IPP	DMV	Integrated Systems Redesign	\$ 50,000,000
Active	TAX	Public Private Partnership Project	\$ 31,000,000
IPP	VITA	Email Consolidation	<u>\$ 24,306,000</u>
<b>Total Cost of Five (5) Most Expensive Projects</b>			<b>\$599,306,000 (56%)</b>
<b>Total Cost of Remaining 133 Projects</b>			<b><u>\$463,160,214</u> (44%)</b>
<b>Total Cost of All Projects</b>			<b>\$1,062,466,214</b>

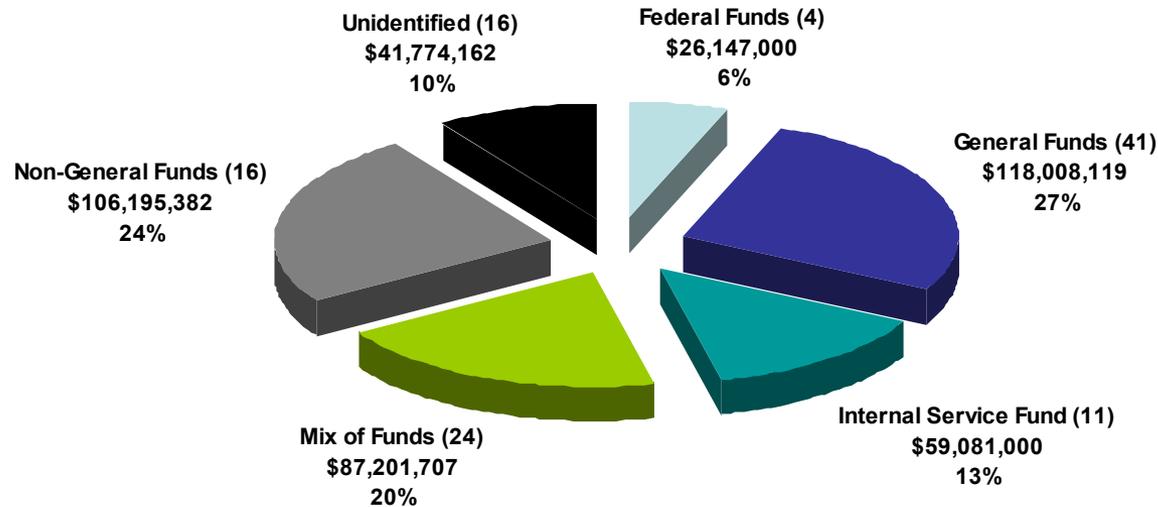


# Commonwealth Major Technology Investment Projects Largest Ten By Cost

<u>Category</u>	<u>Agency</u>	<u>Project</u>	<u>Estimate at Completion</u>
Active	VSP	Statewide Agencies Radio System	\$370,000,000
Active	DOE	Web-based Standards Of Learning (SOL) Technology Initiative	\$124,000,000
IPP	DMV	Integrated Systems Redesign	\$ 50,000,000
Active	TAX	Public Private Partnership Project	\$ 31,000,000
IPP	VITA	Email Consolidation	\$ 24,306,000
RP	ODU	Enrollment Growth	\$ 20,000,000
RP	UVAH	Clinical System Implementation	\$ 19,900,000
Active	VDOT	Financial Management System (FMSII) Upgrade	\$ 18,613,003
RP	DOC	Offender Management System	\$ 17,000,000
RP	DOE	Education Information Management System	\$ 14,900,000
<b>Total Cost of Ten (10) Most Expensive Projects</b>			<b>\$689,719,003 (65%)</b>
<b>Total Cost of Remaining 128 Projects</b>			<b>\$372,747,211 (35%)</b>
<b>Total Cost of All Projects</b>			<b>\$1,062,466,214</b>



# Commonwealth Major Technology Investment Projects Source of Funds for Planned Projects



**Total Number of Projects 112**  
**Total Estimate At Completion \$438,407,370**

Note: Funding is for Planned Projects in the “Recommended for Planning” and “Identified for Preliminary Planning” categories where funding source was identified by the agency.



## Continuing Process for Major Technology Investments

- CIO grants “Planning Approval” (Agency ITSP) and recommends “Development Approval” to ITIB
- ITIB grants “Development Approval”
- CIO grants procurement approval
- CIO establishes project oversight



# Commonwealth of Virginia Priority Technology Investment Projects and Technology Management

Presentation to the ITIB  
October 15, 2003



## Presentation Topics

- Commonwealth Priority Technology Investment Projects (Consolidated List)
- Commonwealth Technology Management Policy – Interim Procedures for IT Project Approval
- Proposed Evaluation Criteria for ITIB Development Approval
- ITIB Development Approval of VDOT Project



## Commonwealth Priority Technology Investment Projects

- Evaluated top ranked technology investments at the request of the ITIB
- Selected projects from top quintile of Secretariat portfolios (Report to Governor & GA--Recommended for Planning Category)
- Ranked projects based on report ranking scores and input from Cabinet



## Commonwealth Priority Technology Investment Projects Spreadsheet

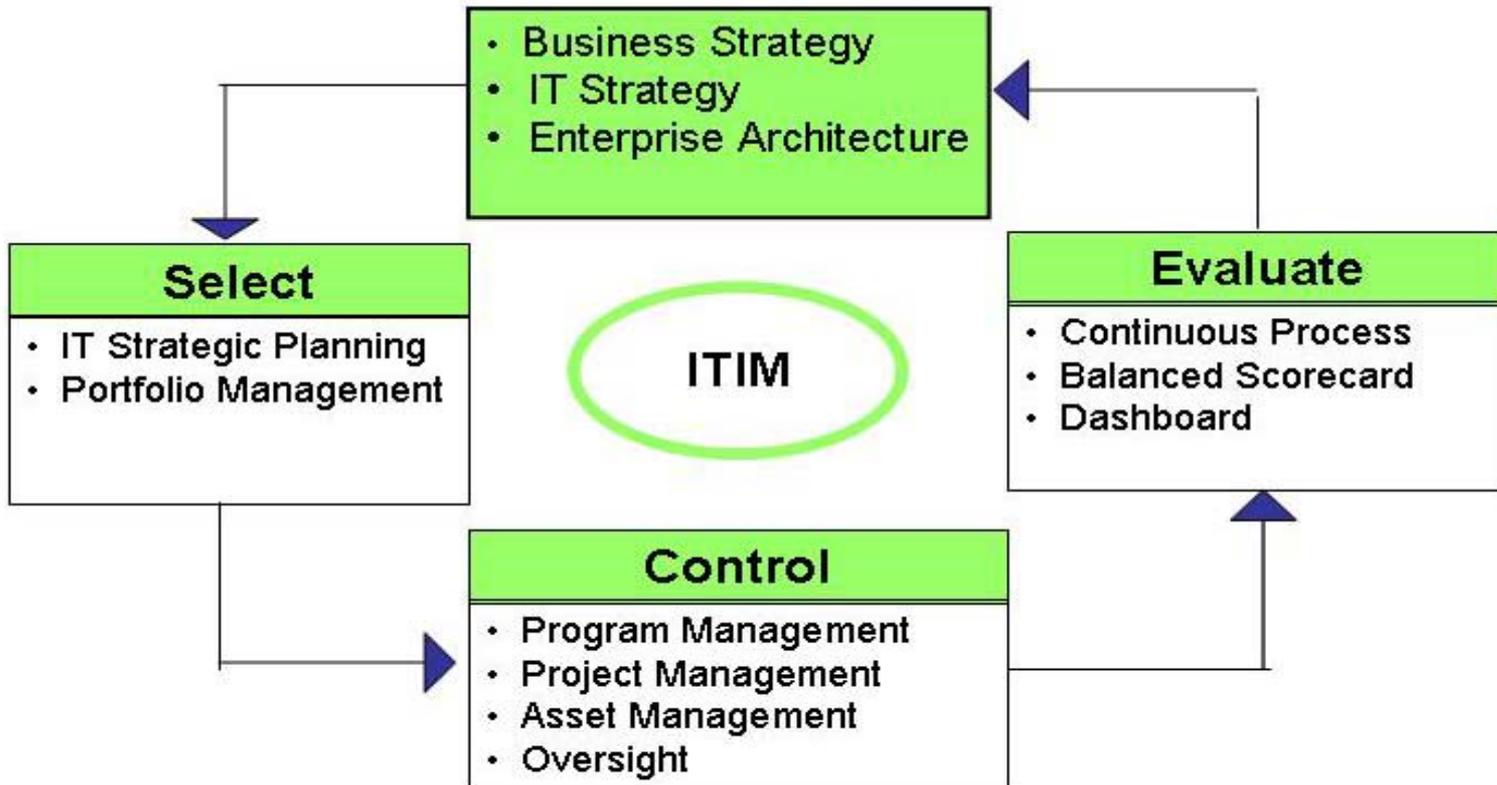
- Base data from Governor and General Assembly Report
- Fields added:
  - Project Expenditures for FY05-06
  - % of Project Expenditures from General Funds for FY05-06
  - ROI Indicator (from Proposal)
  - Funding Risk Indicator (from Agency)



## Commonwealth Priority Technology Investment Projects

Next Step(s)?

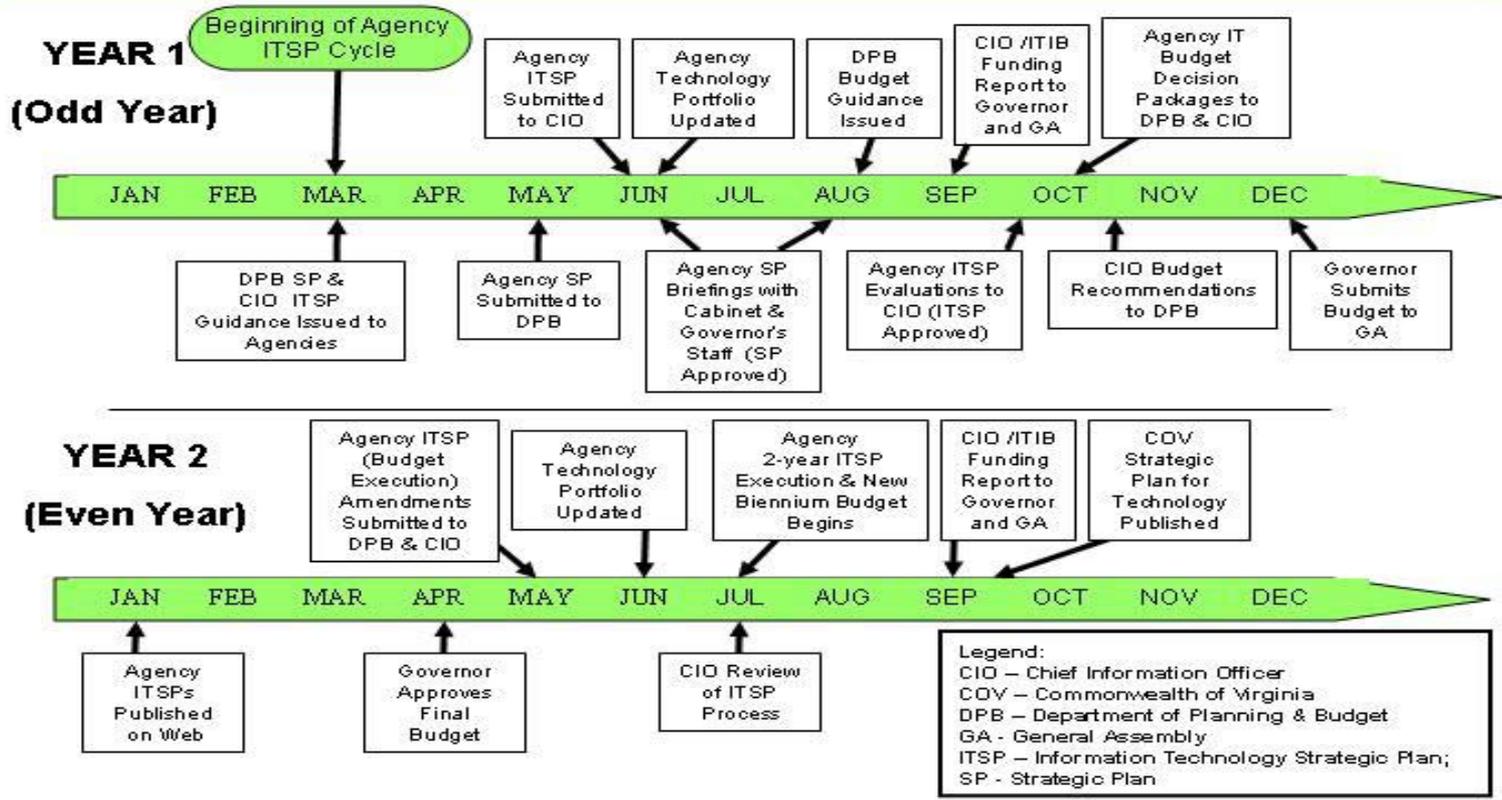
# Commonwealth Technology Management Policy



**Based on IT Investment Management (ITIM) Principles and Best Practices**

# Commonwealth Technology Management Policy

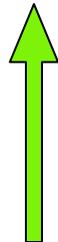
## Agency IT Strategic Planning Cycle



# Commonwealth Technology Management Policy

## Major IT Project Life-Cycle

Life-cycle Phase	Selection	Initiation	Planning	Execution & Control	Closeout	Operations & Support
Decision Points	Selection Approved	Initiation Approved	Baseline Approved	Implementation Approved	Closeout Approved	End of Project
<b>Process Roles and Responsibilities</b>						
IT Investment Board (ITIB)		Approve Project Initiation <i>(Code of Virginia - Development Approval)</i>	May Terminate Project	May Terminate Project		
Chief Information Officer (CIO)	Approve Agency IT Strategic Plan <i>(Code of Virginia - Planning Approval)</i>	Recommend Project Initiation to ITIB	- Resolve Issues as Required - Modify, Suspend, or Recommend Termination	- Monitor Project Progress - Approve Project Status Reports - Modify, Suspend, or Recommend Termination	Approve Project Closeout	
Project Management Division	Recommend Approval of Agency IT Strategic Plan to CIO	Recommend Project Initiation to CIO	Assist & Support Project Detailed Planning	- Review Project Progress - Assist & Support Project Development	- Complete Final Project Evaluation - Monitor Post Implementation Actions	Review Post Implementation Report
Proponent Secretariat	Review Agency IT Strategic Plan	Recommend Project Initiation	Resolve Issues as Requested by Agency and CIO	- Evaluate Project Status Reports - Resolve Issues as Requested by Agency and CIO	Review Project Closeout Report	Recommend Post Implementation Actions
Agency	Select Project in Agency IT Strategic Plan	Submit Project Proposal & Charter	Submit Detailed Project Plan	- Submit Project Status Reports - Evaluate Overall Project Progress	Submit Project Closeout Documentation	Conduct Post Implementation Review



Process flows bottom to top, left to right.



## Proposed Evaluation Criteria ITIB Development Approval

- Drawn from Industry Best Practices...
  - Portfolio Management
  - Balanced Scorecard
- Sources...
  - Federal CIO Council
  - U.S. General Accounting Office
  - Working Council for Chief Information Officers





## Proposed Evaluation Criteria ITIB Development Approval

### Balanced Scorecard Categories:

- Stakeholder Perspective
- Business Process Perspective
- Project Management Perspective
- Financial & Economic Perspective
- Enterprise (Commonwealth) Portfolio Perspective



## ITIB Development Approval of VDOT Project

### Financial Management System II Upgrade

- CIO Recommendation to ITIB
- Project Charter

Both documents provided, in advance, to Board members.  
VDOT Representative: John Lawson

**Commonwealth of Virginia**  
**Priority Technology Investment Projects for the 2004-2006 Budget Biennium**

Rank	Secretariat	Agency	Project Formal Title	Estimate At Completion (Total Project Cost)	Planned Start Date	Planned Completion Date	Fund Source	Project Expenditures FY05	General Fund Project Expenditures FY05	% of Project Expenditures from General Funds FY05	Project Expenditures FY06	General Fund Project Expenditures FY06	% of Project Expenditures from General Funds FY06	Positive ROI	Funding Risk
1	Administration	SBE	Virginia Election and Registration Information System (VERIS)	\$12,000,000	9/15/2003	12/15/2005	FED	\$5,500,000	\$0	0%	\$3,000,000	\$0	0%	Y	L
2	Education	VSU	Re-engineer Core Business Processes	\$5,422,857	10/1/2003	5/1/2007	GF	\$1,669,118	\$1,669,118	100%	\$1,973,983	\$1,973,983	100%	Y	H
3	Education	DOE	Education Information Management System	\$14,900,000	7/31/2003	6/30/2006	MIX	\$6,800,000	\$3,000,000	44%	\$7,400,000	\$7,400,000	100%	Y	L
4	Education	VIMS	Critical IT Infrastructure Project	\$1,150,000	7/1/2004	6/30/2006	GF(CAP)	\$825,000	\$825,000	100%	\$325,000	\$325,000	100%	N	H
5	Public Safety	DOC	Offender Management System	\$17,000,000	7/1/2003	6/1/2006	GF	\$7,630,000	\$7,630,000	100%	\$4,730,000	\$4,730,000	100%	Y	H
6	Education	LU	Purchase and Install Enterprise Resource Program (ERP)	\$3,800,000	7/1/2004	8/1/2005	GF	\$2,037,500	\$2,037,500	100%	\$1,762,500	\$1,762,500	100%	N	H
7	Public Safety	VSP	Enhancement of the Automated Fingerprint Identification System21 (AFIS21)	\$700,000	7/1/2004	6/30/2005	GF	\$350,000	\$350,000	100%	\$350,000	\$350,000	100%	Y	L
8	Public Safety	VSP	Enhancement of the Automated Fingerprint Identification System21 (AFIS21) - Palm Print Search	\$2,000,000	9/1/2005	2/1/2007	GF	\$0	\$0	0%	\$950,000	\$950,000	100%	Y	H
9	Public Safety	DCJS	Virginia Integrated Justice Program	\$3,000,000	5/31/2004	8/30/2006	GF	\$380,000	\$380,000	100%	\$1,620,000	\$1,620,000	100%	Y	H
10	Education	UVAH	Clinical System Implementation	\$19,900,000	12/30/1998	9/1/2005	NGF	\$11,905,000	\$0	0%	\$7,995,000	\$0	0%	N	L
11	Education	GMU	Telecommunications/Infrastructure Project	\$4,625,000	9/1/2003	6/30/2006	GF(CAP)	\$2,592,500	\$2,592,500	100%	\$0	\$0	0%	N	H
12	Health & Human Resources	DSS	Child Care System	\$9,500,000	9/1/2003	12/1/2005	FED	\$5,295,567	\$0	0%	\$0	\$0	0%	Y	L
13	Commerce & Trade	DOF	Private Land Mobile Radio Replacement	\$1,992,704	9/15/2003	6/30/2008	GF	\$513,032	\$513,032	100%	\$501,800	\$501,800	100%	Y	H
14	Education	LVA	Find It Virginia	\$5,000,000	10/1/2000	12/1/2006	GF	\$2,500,000	\$2,500,000	100%	\$2,500,000	\$2,500,000	100%	Y	M
15	Commerce & Trade	VDACS	Reengineering/Conversion of Legacy Applications	\$800,000	8/30/2003	6/30/2006	MIX	\$226,000	\$156,000	69%	\$226,000	\$156,000	69%	Y	H
16	Education	VCU	Administrative Systems Replacement	\$11,400,000	4/1/2004	10/1/2008	MIX**	\$1,769,004	\$0	0%	\$3,061,394	\$0	0%	N	M
17	Administration	DGS	DCLS Laboratory Information Management System	\$1,587,000	8/1/2003	1/1/2005	FED	\$706,500	\$0	0%	\$0	\$0	0%	Y	L
18	Natural Resources	DGIF	Point of Sale License System	\$1,500,000	8/1/2004	1/31/2006	NGF	\$515,200	\$0	0%	\$984,800	\$0	0%	N	H
19	Health & Human Resources	VDH	WebVISION – Private Provider Immunization	\$3,060,000	9/1/2003	4/1/2007	FED	\$895,000	\$0	0%	\$895,000	\$0	0%	Y	L
20	Finance	DOA	Geac Software Upgrade	\$391,370	1/10/2002	2/1/2005	GF	\$105,346	\$105,346	100%	\$0	\$0	0%	N	L
21	Transportation	VDOT	Highway Traffic Records Information System (HTRIS) Technology Upgrade	\$3,000,000	6/1/2003	12/1/2004	NGF	\$1,225,000	\$0	0%	\$0	\$0	0%	N	L
22	Transportation	VDOT	American Association of State Highway & Transportation Officials (AASHTO) Bridgeware Implementation	\$1,023,500	10/1/2003	6/1/2005	NGF	\$533,000	\$0	0%	\$0	\$0	0%	Y	L
23	Natural Resources	VMNH	Adventure Classroom	\$2,200,000	1/2/2004	12/31/2005	GF	\$1,500,000	\$1,500,000	100%	\$0	\$0	0%	N	H
24	Finance	DOA	Hardware Upgrade and Software	\$300,000	8/1/2003	12/31/2005	GF	\$98,000	\$98,000	100%	\$0	\$0	0%	N	M
25	Technology	VITA	Web Accessibility Standards & Content Management	\$2,422,250	1/15/2004	1/15/2005	GF	\$1,211,125	\$1,211,125	100%	\$0	\$0	0%	Y	H
26	Technology	VITA	E-Mail Consolidation	\$24,306,000	7/1/2004	12/31/2005	GF	\$16,204,000	\$16,204,000	100%	\$8,102,000	\$8,102,000	100%	Y	H
	<b>Expenditure Totals</b>			<b>\$152,980,681</b>				<b>\$72,985,892</b>	<b>\$40,771,621</b>		<b>\$46,377,477</b>	<b>\$30,371,283</b>			

\*\* General Fund request submitted for FY05-06 but not indicated in proposal.

**Commonwealth of Virginia**  
**Balanced Scorecard Decision Criteria**  
**for Proposed Information Technology Investments**

	<b>Score</b>	<b>Evaluation Source</b>
<b><u>Stakeholder Perspective</u></b>		
1. To what degree does the proposed investment result in significant tangible and intangible benefits for stakeholders?	G = significant tangible and intangible benefits identified and justification provided Y = tangible and intangible benefits identified and no justification provided R = no benefits identified	<b>Proposal</b> – F. Financial Estimate, 1. Cost Benefit Analysis Summary
2. To what degree does the proposed investment target stakeholders that have been chronically underserved by information technology investments?	G = underserved stakeholders identified and justification provided Y= underserved stakeholders identified and no justification provided or stakeholders adequately served at the present R=stakeholders are adequately served with existing assets now and over the proposed investment’s life	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
3. To what degree does the proposed investment increase public protection, health, environment, or safety?	G = does increase and justification provided Y = increase identified and no justification provided or does not increase R = decreases	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact - F. Financial Estimate, 1. Cost Benefit Analysis Summary  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope

**Commonwealth of Virginia**  
**Balanced Scorecard Decision Criteria**  
**for Proposed Information Technology Investments**

	<b>Score</b>	<b>Evaluation Source</b>
4. To what degree does the proposed investment anticipate improvements to internal and external customer service delivery (e.g., faster response, greater access to information, elimination or reduction in client complaints)?	G = anticipated improvement identified and justification provided Y = anticipated improvement identified and no justification provided or maintains current internal and external service delivery R = decreases internal and external service delivery	<b>Proposal</b> – B. Project Purpose, 3. Core Business Activity Impact - F. Financial Estimate, 1. Cost Benefit Analysis Summary  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
5. To what degree does the proposed investment increase citizen access to government services?	G = increases access Y = does not increase access R = decreases access	<b>IT Strategic Plan</b> – Project links to Related Commonwealth Technology Initiatives & Strategies (Enterprise Business Strategies)  <b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact - F. Financial Estimate, 1. Cost Benefit Analysis Summary  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
<b><u>Business Process Perspective</u></b>		
6. To what degree does the proposed investment result in information sharing between organizational units throughout the proponent agency?	G = results in information sharing Y = does not result in information sharing R = decreases information sharing	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact - F. Financial Estimate, 1. Cost Benefit Analysis Summary  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope

**Commonwealth of Virginia**  
**Balanced Scorecard Decision Criteria**  
**for Proposed Information Technology Investments**

	<b>Score</b>	<b>Evaluation Source</b>
7. To what degree does the proposed investment anticipate greater flexibility in agency responses to stakeholder requests, reduction or elimination of paperwork or manual tasks?	G = anticipates greater flexibility Y = does not anticipate greater flexibility R = decreases flexibility	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact - F. Financial Estimate, 1. Cost Benefit Analysis Summary  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
8. To what degree does the proposed investment anticipate improved use of resources, improved turnaround time, or expanded capacity of key processes?	G = anticipated improvement identified and justification provided Y = anticipated improvement identified and no justification provided or does not anticipate improvement R = degrades use of resources, turnaround time or capacity of key processes	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact - F. Financial Estimate, 1. Cost Benefit Analysis Summary  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
9. To what degree does the proposed investment support legal or regulatory requirements?	G = does support NA = not applicable	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
10. To what degree does the proposed investment synchronize with mission needs, agency critical issues, and core business activities?	G = highly synchronized (directly supports mission, critical issue, or core business activity) Y = minimally synchronized (indirectly supports mission or core business activity, but not identified as an agency critical issue) R = not synchronized	<b>Proposal</b> – D. Strategic Justification – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact  <b>Project Charter</b> – C. Project Purpose, 1. Business Problem, 2. Project Business Objectives

**Commonwealth of Virginia  
Balanced Scorecard Decision Criteria  
for Proposed Information Technology Investments**

	<b>Score</b>	<b>Evaluation Source</b>
<p>11. To what degree does the proponent agency possess demonstrated readiness and capacity to succeed with information technology investments of this magnitude and scope?</p>	<p>G = does possess demonstrated readiness and capacity Y = readiness and capacity indicated, but not demonstrated R = readiness and capacity not demonstrated or indicated</p>	<p><b>IT Strategic Plan</b> – ITIM Practices – Project Selection Criteria, Business Case Development, Risk Assessment Methodologies, Prioritization Schema</p> <p><b>Proposal</b> - Overall Quality of the Project Proposal</p> <p><b>Commonwealth Major IT Project Status Report Dashboard</b> - Assessment of other agency projects on the Major IT Projects Dashboard</p> <p><b>Project Charter</b> – F. Project Authority, 1. Authorization, 2. Project Manager, 3. Oversight - G. Project Organization, 1. Project Organization Chart, 2. Organization Description, 3. Roles and Responsibilities - H. Resources - I. Signatures</p> <p><b>Project Manager Qualification Record</b></p>
<u><b>Project Management Perspective</b></u>		
<p>12. To what degree does the proposed investment present a sound business case?</p>	<p>G = does present sound business case Y = presents marginal business case R = does not present sound business case</p>	<p><b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact - C. Project Description - D. Strategic Justification - F. Financial Estimate, 1. Cost Benefit Analysis Summary</p> <p><b>Project Charter</b> – E. Project Description, Scope, and Man-</p>

**Commonwealth of Virginia**  
**Balanced Scorecard Decision Criteria**  
**for Proposed Information Technology Investments**

	<b>Score</b>	<b>Evaluation Source</b>
		agement Milestones, 1. Project Description, 2. Scope - H. Resources
13. To what degree does the project proposal or charter adequately establish project scope, cost, and schedule baselines?	G = adequate Y = marginal (needs refinement prior to establishing baselines) R = inadequate	<b>Proposal</b> – E. Estimated Project Development Schedule (Major Milestones) F. Financial Estimate, 2. Estimate of Execution Expenditures and Funding, 3. Estimate of Operations Expenditures and Funding  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
14. To what degree does the proposed investment have executive-level sponsorship, including the appropriate cabinet secretary?	G = has executive sponsorship R = does not have executive sponsorship	<b>Project Charter</b> – F. Project Authority, 1. Authorization - I. Signatures
15. To what degree does the project charter define an effective project management organization?	G = well defined Y = indicated, but not specifically defined R = not defined	<b>Project Charter</b> – F. Project Authorization, 1. Authorization, 2. Project Manager, 3. Oversight - G. Project Organization, 1. Project Organization Chart, 2. Organization Description, 3. Roles and Responsibilities - H. Resources - I. Signatures
16. To what degree is adequate and sustained funding insured for the duration of the proposed investment?	G = funding is adequate and sustained for the duration of the proposed investment R = funding is not adequate or sustained for the duration of the proposed investment	<b>Proposal</b> – F. Financial Estimate, 2. Estimate of Execution Expenditures and Funding, 3. Estimate of Operations Expenditures and Funding  <b>Project Charter</b> - H. Resources - I. Signatures

**Commonwealth of Virginia**  
**Balanced Scorecard Decision Criteria**  
**for Proposed Information Technology Investments**

	Score	Evaluation Source
<u>Financial and Economic Perspective</u>		
17. To what degree will the proposed investment result in a positive return on investment?	G = return on investment based on tangible benefits is positive or <i>the investment*</i> is mandated by federal or state statute Y = return on investment based on tangible benefits is negative and business case <i>does justify</i> a positive return when intangible benefits are included R = return on investment based on tangible benefits is negative and business case <i>does not justify</i> a positive return when intangible benefits are included	<b>Proposal</b> – F. Financial Estimate, 1. Cost Benefit Analysis Summary  <b>Project Charter</b> – H. Resources
18. To what degree does the proposed investment target business areas that have been chronically underserved in the past by the lack of investments in information technology?	G = underserved business areas identified and justification provided Y = underserved business areas identified and no justification provided or business areas adequately served at present R = business areas are adequately served with existing assets at present and over the proposed investment’s life	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
19. To what degree does the proposed investment leverage funding from the federal government or from the private sector?	G = federal or private money is greater than or equal to 80% of the project cost Y = federal or private money is greater than or equal to 20% but less than	<b>Proposal</b> – F. Financial Estimate, 2. Estimate of Execution Expenditures and Funding, 3. Estimate of Operations Expenditures and Funding  <b>Project Charter</b> – H. Resources

**Commonwealth of Virginia**  
**Balanced Scorecard Decision Criteria**  
**for Proposed Information Technology Investments**

	<b>Score</b>	<b>Evaluation Source</b>
	80%	
20. To what degree does the proposed investment lead to increased economic development within the state?	G = increased economic development identified and justification provided Y = increased economic development identified and no justification provided or does not lead to increased economic development	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope
<u><b>Enterprise (Commonwealth) Portfolio Perspective</b></u>		
21. To what degree does the proposed investment move the Commonwealth toward an enterprise business model with business partners and stakeholders?	G = moves Commonwealth toward an enterprise business model Y = specific investment does not impact the Commonwealth enterprise business model R = impedes the Commonwealth’s movement toward an enterprise business model	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact - D. Strategic Justification, 2. (description of EA Compliance)  <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope - F. Project Authority, 3. Oversight - G. Project Organization, 1. Project Organization Chart, 2. Organization Description, 3. Roles and Responsibilities - I. Signatures (Other Stakeholders)  <b>Enterprise Architecture Review</b>
22. To what degree does the proposed investment serve multiple agencies through functional and process integration and improved data sharing?	G = serves multiple agencies through functional and process integration and improved data sharing Y = specific investment has no potential to serve multi-	<b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact  <b>Project Charter</b> – E. Project

**Commonwealth of Virginia**  
**Balanced Scorecard Decision Criteria**  
**for Proposed Information Technology Investments**

	<b>Score</b>	<b>Evaluation Source</b>
	<p>ple agencies  R = potential to serve multiple agencies, but this service is not defined within the scope of the investment</p>	<p>Description, Scope, and Management Milestones, 1. Project Description, 2. Scope  - F. Project Authority, 3. Oversight  - G. Project Organization, 1. Project Organization Chart, 2. Organization Description, 3. Roles and Responsibilities  - I. Signatures (Other Stakeholders)</p>
<p>23. To what degree does the proposed investment support the enterprise goals of consolidation of infrastructure, security, and administrative systems?</p>	<p>G = supports enterprise goals of consolidation  Y = specific investment does not impact consolidation  R = impedes the enterprise goals of consolidation</p>	<p><b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives   <b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope   <b>Enterprise Architecture Review</b></p>
<p>24. To what degree does the proposed investment help balance the amount of aggregated risk in the Commonwealth portfolio?</p>	<p>G = helps balance the aggregated risk in the portfolio  Y = minimal impact on balance  R = causes imbalance</p>	<p><b>Proposal</b> – G. Project Risk (and detailed Risk Assessment if submitted)   <b>Commonwealth IT Asset and Project Portfolio</b></p>

**Commonwealth of Virginia**  
**Balanced Scorecard Decision Criteria**  
**for Proposed Information Technology Investments**

	<b>Score</b>	<b>Evaluation Source</b>
25. To what degree does the proposed investment support the Commonwealth Enterprise Architecture?	<p>G = moves Commonwealth toward the “to be” Enterprise Architecture</p> <p>Y = compliant with Enterprise Architecture, but no movement towards the “to be” Enterprise Architecture or specific investment does not impact the Enterprise Architecture</p> <p>R = not compliant with Enterprise Architecture or impedes the Commonwealth’s movement toward the “to be” Enterprise Architecture</p>	<p><b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact</p> <p>- D. Strategic Justification, 2. (description of EA Compliance)</p> <p><b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope</p> <p><b>Enterprise Architecture Review</b></p>
26. To what degree does the proposed investment maintain the desired portfolio balance between long-and-short term information technology investments?	<p>G = maintains the desired portfolio balance between long- and short-term investments</p> <p>Y = minimal impact on the desired balance</p> <p>R = disrupts the desired portfolio balance between long- and short-term investments</p>	<p><b>Proposal</b> – B. Project Purpose, 1. Business Problem, 2. Project Business Objectives, 3. Core Business Activity Impact</p> <p>– F. Financial Estimate, 1. Cost Benefit Analysis Summary, 2. Estimate of Execution Expenditures and Funding, 3. Estimate of Operations Expenditures and Funding</p> <p><b>Project Charter</b> – E. Project Description, Scope, and Management Milestones, 1. Project Description, 2. Scope</p> <p><b>Commonwealth IT Asset and Project Portfolio</b></p>

# Commonwealth of Virginia

## Balanced Scorecard Decision Criteria

### for Proposed Information Technology Investments

G-Fully meets Criteria

Y-Partially meets Criteria

R-Does not meet Criteria

NA – Not Applicable



*\*the investment*, itself, must be mandated by federal or state statute not the program or process. For example the statute must state something to the effect, “requires the implementation of an automated process or system . . .”

# COMMONWEALTH OF VIRGINIA



## Information Technology Resource Management

### PROJECT MANAGER SELECTION AND TRAINING STANDARD

#### Virginia Information Technologies Agency

## Preface

### ***Publication Designation***

COV ITRM Standard GOV2003-02.3

### ***Subject***

Project Manager Selection and Training

### ***Effective Date***

See Section 6 – Project Manager Selection and Training Standard Implementation Schedule.

### ***Supersedes***

None

### ***Scheduled VITA Review***

One (1) year from the effective date, then every two years thereafter.

### ***Authority***

Code of Virginia, § 2.2-2007; § 2.2-2008  
(Powers of the CIO)

Code of Virginia, § 2.2-2010  
(Additional Powers of VITA)

Code of Virginia, § 2.2-2016; § 2.2-2017  
(Powers and duties of the Division of Project Management)

Code of Virginia, §2.2-2018; §2.2-2019; §2.2-2020; §2.2-2021  
(Project planning approval; Project development approval; Procurement approval for major information technology projects; Project oversight)

Code of Virginia, §2.2-2458  
(Powers and duties of the Information Technology Investment Board; the “Board”)

## ***Scope***

This standard is applicable to all State agencies and institutions of higher education (hereinafter collectively referred to as “agencies”) and to individuals providing management of information technology projects in the Commonwealth directly or under contract. This standard does not apply to research projects, research initiatives or instructional programs at public institutions of higher education. Local government entities are encouraged to consider the use of this standard for their work.

## ***Purpose***

Establish the minimum qualifications and training standards for all project managers of Commonwealth information technology (IT) projects.

## ***General Responsibilities (Italics indicate Code of Virginia requirements)***

### **Commonwealth of Virginia Information Technology Investment Board**

The Information Technology Investment Board is assigned the following general technology management responsibilities:

- *Approve strategies, standards, and priorities recommended by the Chief Information Officer for the use of information technology for state agencies in the executive branch of state government;*
- *Approve or disapprove the development of all major information technology projects as defined in § 2.2-2006.*

### **Commonwealth of Virginia Chief Information Officer (CIO)**

The CIO is assigned the following general technology management responsibilities:

- *Direct the formulation and promulgation of policies, guidelines, standards, and specifications for the purchase, development,*

*and maintenance of information technology for state agencies, including, but not limited to, those (i) required to support state and local government exchange, acquisition, storage, use, sharing, and distribution of geographic or base map data and related technologies, (ii) concerned with the development of electronic transactions including the use of electronic signatures as provided in § 59.1-496, and (iii) necessary to support a unified approach to information technology across the totality of state government, thereby assuring that the citizens and businesses of the Commonwealth receive the greatest possible security, value, and convenience from investments made in technology.*

- *Direct the development of policies and procedures for the effective management of technology investments throughout their entire life cycle, including, but not limited to, project definition, procurement, development, implementation, operation, performance evaluation, and enhancement or retirement.*
- *Establish minimum qualifications and training standards for project managers.*

#### **Virginia Information Technologies Agency**

*Additional powers of VITA:*

- *Develop and adopt policies, standards, and guidelines for managing information technology by state agencies and institutions.*

*The Division (of Project Management) shall have the power and duty to:*

- *Provide ongoing assistance and support to state agencies and public institutions of higher education in the development of information technology projects;*
- *Establish a program providing cost-effective training to agency project managers.*

#### **Executive Branch Secretaries and State Agencies (as defined in the Code of Virginia § 2.2-4001)**

Executive Branch Secretaries and State Agencies are required to:

- Comply with the policies, standards, and guidelines for the management of information technology resources in the Commonwealth.
- Provide financial and other resources required for project managers to test or attend training as defined in this standard.
- Provide information on project manager experience as required by this standard.

#### ***Related COV ITRM Policies, Standards, and Guidelines***

[Technology Management Policy COV ITRM Policy GOV 2003-02.1](#)

[Technology Management Glossary COV ITRM Standard GOV 2003-02.1](#)

[Model Standard for Large Scope Projects COV ITRM Guideline 91-3](#)

[Model Standard for Small Scope Projects COV ITRM Guideline 91-4](#)

[Model Standard for Maintenance & Enhancement Projects COV ITRM Guideline 91-5](#)

[Commonwealth Project Management Guideline COV ITRM Guideline 2003-02.2](#)

#### ***Contact Information***

For information or clarification, contact the Virginia Information Technologies Agency Project Management Division staff at 804-225-3622.

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## SECTION 1 – INTRODUCTION

### **Purpose**

The Project Manager (PM) Selection and Training Standard establishes the minimum qualifications and training standards for project managers of Commonwealth of Virginia information technology (IT) projects.

### **General Approach**

The *Code of Virginia* requires the Chief Information Officer of the Commonwealth of Virginia to establish standards for the qualification and training of IT project managers. This standard has five components that accomplish this requirement. The components include: PM Testing and Training; PM Qualifications; PM Mentoring; a Qualification and Selection Process; and, the PM Qualification and Selection Process Implementation Schedule.

Commonwealth of Virginia IT project managers are qualified for specific projects within project categories: Non-major IT Projects costing less than \$100,000; Non-major IT Projects with a total cost greater than or equal to \$100,000 and less than or equal to \$1 million; and, Major IT Projects. In the Commonwealth of Virginia, Major IT Projects are information technology projects that: are mission critical; have statewide application; or, have a total estimated cost of more than \$1 million. A project manager is not automatically qualified for all projects within a specific category of projects. To be qualified to manage a specific project, the project manager candidate must meet the qualification requirements for the project category and have the appropriate experience necessary for the specific project.

The Commonwealth of Virginia does not “Certify” project managers. Training attended, to acquire the knowledge necessary to qualify for Commonwealth project manager assignments, may assist individual applicants in obtaining PM certification by other organizations and institutions outside of the Commonwealth. Project managers are encouraged to seek such certification when the opportunity is available. The Virginia Information Technologies Agency (VITA) manages the qualification program, including PM testing and training, required for Commonwealth IT project managers.

## SECTION 2 – PROJECT MANAGER TESTING AND TRAINING

### Overview

This section defines the requirements for testing, mandatory project management training, and required project management knowledge. Training providers, training organizations, and evaluators will use these standards to develop or identify training that enables the project manager candidate to successfully pass mandatory qualification tests. All project managers of Commonwealth IT projects must pass knowledge tests to qualify as project manager candidates for specific projects as outlined in this standard (Section 3). Project manager candidates must first register in the program by completing a registration form on the Project Manager Development Web page (Section 5).

### Testing

There are two PM qualification tests, the Core Processes Test and the Facilitating Processes Test. Test questions are derived from the training standards and address required project management knowledge for one or more of the topic areas within the processes tested.

The tests are provided over the Internet using a secure on-line testing system. The tests are open book and timed. Each test is broken down into sections called topic areas. The topic areas are the same as the topics identified in the Core Processes and Facilitating Processes Knowledge Standards described in this standard. The project manager candidate's agency or company pays fees associated with testing to the test provider.

Project manager candidates register to take the test online or telephonically via a link to the testing registrar provided on the Project Manager Development Web page. The project manager candidate's supervisor or a designated proctor will receive a screen name and password that they will use to log the candidate into the test site. Project manager candidates are required to take the test while at their workplace and to read and agree to an honor code before taking the test. The project manager candidate's organization is authorized to require the test be taken in a more stringent test environment than specified by this standard.

The project manager candidate must achieve a passing score in each topic area and an overall passing score to meet the qualification standard. If a project manager candidate fails to achieve a passing score in a topic area, the project manager candidate is required to retake only that portion of the test. The project manager candidate will be allowed one retake before being required to attend the appropriate training. After the project manager candidate has attended training, they are allowed to retake those portions of the test needed to qualify.

## **Training**

In general, there are two types of training, mandatory training and optional training. Mandatory training is required for all and is directed toward Commonwealth specific information. Optional training is taken as necessary to acquire knowledge or develop skills that the project manager candidate needs to pass the knowledge test or to manage a unique project. Training is developed and provided by training partners, including private companies and other organizations from both the public and private sector. The Virginia Information Technologies Agency reviews training offered by training partners, identifies courses that meet the training objectives found in this standard, and communicates, through the Project Manager Development Web page, a list of training partners whose courses meet the knowledge standards found in this document and provide a cost effective government or discount rate. It is the responsibility of each project manager candidate to enroll in training. It is the responsibility of the agency, institution, individual, or private company to provide the appropriate funding and administrative support.

### **Mandatory Commonwealth PM Overview Training**

All project managers and project sponsors of Commonwealth IT projects must attend Commonwealth PM Overview Training. Virginia Information Technologies Agency will coordinate or provide this training at least annually. There is no qualification test that will substitute for attendance at mandatory training.

Commonwealth PM Overview Training addresses the Commonwealth Technology Management Policy, the Commonwealth Project Management Guideline, and the Project Manager Selection and Training Standard.

### **Core Processes Knowledge Standards**

All project managers, who manage Commonwealth Major and Non-major IT Projects with a total cost greater than or equal to \$100,000 will qualify by passing a qualification test on core processes. The test is based on the knowledge standards for core processes described in this document. The Virginia Information Technologies Agency will establish, coordinate, or identify training that meets the knowledge standards specified for each topic identified in the following Core Processes:

#### Project Initiation and Solution Analysis

The project manager candidate will be able to: apply the Commonwealth methodology for initiation of projects; analyze a business problem, develop multiple viable solutions, analyze the solutions, compare solutions, and recommend a specific solution; prepare a project proposal (business case) and project charter.

The project manager candidate will understand how the project charter is used and how it impacts the project.

#### Cost Benefit, Earned Value, and Return on Investment Analysis

The project manager candidate will be able to: conduct financial analysis of projects using cost benefit, earned value, and return on investment calculations; select an appropriate technique for calculating cost benefit, earned value, and return on investment; prepare reports or documents providing the data, conclusions, and recommendations.

#### Scope Definition

Given a business problem, business objective, project description, project solution, and project constraints, the project manager candidate will be able to compose a statement that describes the project scope. At the minimum, the scope statement will address the “who, what, where, when, and why” of a project and will define the sum of the products and services provided by a project.

#### Work Breakdown Structure

The project manager candidate will be able to develop and appropriately display a three (3) level Work Breakdown Structure. The project manager candidate will understand how to use the Work Breakdown Structure to define the project and how it relates to the development of resource, schedule, budget, and performance plans.

#### Organizational Breakdown Structure

The project manager candidate will be able to develop and appropriately display an organization breakdown structure (OBS). The project manager candidate will understand how to use the OBS to define the task and resources assigned to the project team and its components.

#### Activity Definition and Sequencing

Given a Work Breakdown Structure, the project manager candidate will be able to define activities and tasks and sequence them for a given project.

#### Resource Planning

Given the Organizational Breakdown Structure or Work Breakdown Structure, the project manager candidate will be able to identify needed resources and develop a Resource Plan for the project. The resource plan must identify who possesses the skills required to perform the work (labor resources), as well as the tools, equipment, facilities, and other resources needed by the project team.

### Schedule Development

Given a Work Breakdown Structure, Activity Definition and Sequencing Worksheet, and Resource Plan, the project manager candidate will be able to develop a project schedule. The project manager candidate will understand the impact of additional planning (such as risk planning) on the schedule and how to modify and adjust the schedule during the remainder of the project planning effort. The project manager candidate will understand what it means to “baseline a schedule.”

### Budget Planning

Given a Project Charter, Project Proposal, Project Schedule, and Resource Plan, the project manager candidate will be able to develop a project budget. The project manager candidate will understand the impact of additional planning (such as risk planning) on the project budget and how to modify and adjust the budget plan during the remainder of the project planning effort. The project manager candidate will understand what it means to “baseline the budget.”

### Performance Planning

Given a Project Charter, Project Proposal, Resource Plan, Project Schedule, and Project Budget the project manager candidate will be able to develop a project performance plan. The project manager candidate will be able to identify what will be measured, how the measurements will be taken or calculated, when the measurements will be made, and what standard will be used to define successful accomplishment. The project manager candidate will also be able to define deliverables and establish appropriate acceptance criteria.

## **Facilitating Processes Knowledge Standards**

All project managers, who manage Commonwealth Major IT Projects with a total cost greater than \$1,000,000, will qualify by passing a qualification test on facilitating processes in addition to passing a qualification test on core processes. The test is based on the knowledge standards for facilitating processes described in this standard. The Virginia Information Technologies Agency will establish, coordinate, or identify training that meets knowledge standards specified for each topic identified in the following Facilitating Processes:

### Risk Planning

The project manager candidate will be able to: identify and evaluate risk using a standard risk analysis process; prioritize risk based on probability of occurrence and impact; develop mitigation strategies or identify changes that can be made in the

project plan to decrease the probability of risk occurrence or impact; estimate risk mitigation cost, and develop input to the project budget related to mitigation or contingency funding.

#### Communications Planning

The project manager candidate will be able to conduct an analysis of stakeholder information needs and develop a plan to meet the information needs of stakeholders during the execution phase of the project. The communications plan must include how information is obtained, how information is presented, how information is delivered, and who will perform specific communications tasks. The communications plan must also address disposition and retention of project records.

#### Quality Management Planning

The project manager candidate will understand: the purpose and principles of quality management; the meaning and differences between product testing, project audits, and Independent Verification and Validation. The project manager candidate will be able to develop a quality management plan that provides an overview, schedule, responsibilities, and resources for product testing, project audits, and Independent Verification and Validation.

#### Procurement Planning

The project manager candidate will be able to: identify the different methods for procuring products, goods, and services; identify the most appropriate method for procuring a given product, good, or service; develop a schedule of procurement activities.

#### Change Control and Configuration Management

The project manager candidate will understand the purpose of Change Control and Configuration Management. The project manager candidate will be able to identify items that should be placed under change control or configuration management and develop a plan for managing and documenting change. The plan will include a defined process for change control and configuration management, item identification, naming and version conventions, storage and handling, and individual responsibilities.

#### Project Execution and Control

The project manager candidate will understand the responsibilities of a project manager during project execution. The project manager candidate will identify key control issues and the techniques employed to manage them. The project manager

candidate will be able to use typical measurements and calculations to evaluate project progress.

#### Reports and Project Dashboard

The project manager candidate will be able to develop and present a project status report appropriate for senior management and other stakeholders. The project manager candidate will be able to use the Commonwealth Major IT Project Status Report Dashboard to update project information and provide status reports.

#### Project Closeout

The project manager candidate will be able to: identify tasks associated with project closeout; develop a schedule and plans that support project closeout; collect and document lessons learned; develop a project closeout report; conduct a post implementation review; and, provide a report detailing findings from the post implementation review.

### **Advanced Project Manager Training**

The continued training and professional development of project managers is encouraged. Major projects often require the development of advanced skills in specific areas. The following topics are areas of concentration recommended for advanced project manager training.

- Advanced Risk Management
- Advanced Project Metrics and Statistical Analysis
- Systems Development
- Enterprise Architecture
- Financial Management for Major Projects and Programs
- Organizational Dynamics and Organizational Change Management
- Strategic Planning

## SECTION 3 - PROJECT MANAGER QUALIFICATIONS

### Overview

There are specific PM qualification standards required and desired, for each Commonwealth IT project category. Project categories include: Non-major IT Projects costing less than \$100,000; Non-major IT Projects with a total cost greater than or equal to \$100,000 and less than or equal to \$1 million; and, Major IT Projects. In the Commonwealth of Virginia, Major IT Projects are information technology projects that: are mission critical; have statewide application; or, have a total estimated cost of more than \$1 million. For a Major IT Project, the project sponsor will select a qualified project manager and the Commonwealth of Virginia Chief Information Officer will review the qualification and approve the selection of the project manager. For a Non-major IT Project, the project sponsor will qualify and approve the project manager.

### **Qualification Standard for Non-major IT Projects (Total Cost Less than \$100,000)**

#### Required:

A project manager will have 1500 hours of successful project team experience. Project team experience includes any position on a project team.

A project manager will have demonstrated team building and leadership potential.

#### Desired:

A project manager will pass the Core Processes test.

A project manager will have experience or special qualifications in an applicable functional or technical field.

A project manager will have an Associates Degree in an appropriate management or technology discipline.

### **Qualification Standard for Non-major IT Projects (Total Cost Greater Than or Equal to \$100,000 and Less Than or Equal to \$1 Million)**

#### Required:

A project manager will have passed the Core Processes tests and completed the Commonwealth Project Management Overview Training or have certification as a Project Management Professional from the Project Management Institute and completed the Commonwealth Project Management Overview Training.

A project manager will have 2,000 hours of successful project management experience as a member of the management team on a Major or Non-major IT Project or as a project manager on a Non-major IT Project. Membership on the management team is defined as serving in a position of authority and directly participating in the management of a project. Examples of management team positions include, but are not limited to: Functional (Team) Lead; Technical (Team) Lead; Business Analyst Lead; Testing Lead; and, Assistant Project Manager.

A project manager will have demonstrated team building and leadership skills.

Desired:

A project manager will pass the Facilitating Processes tests.

A project manager will have experience or special qualifications in an applicable functional or technical field.

A project manager will have a Bachelors Degree in an appropriate management or technology discipline.

### **Qualification Standard for Major IT Projects**

Required:

A project manager will have passed the Core and Facilitating Processes tests and completed the Commonwealth Project Management Overview Training or have certification as a Project Management Professional from the Project Management Institute and completed the Commonwealth Project Management Overview Training.

A project manager will have 4,500 hours of successful project management experience as a member of the management team or as a project manager on multiple Major or Non-major IT Projects. Membership on the management team is defined as serving in a position of authority and directly participating in the management of a project. Examples of management team positions include, but are not limited to: Functional (Team) Lead; Technical (Team) Lead; Business Analyst; Testing Lead; and, Assistant Project Manager.

A project manager will have successfully performed as the project manager for at least one project with a total cost over \$100,000.

Desired:

A project manager will have completed advanced training in project management.

A project manager will have experience or special qualifications in an applicable functional or technical field.

A project manager will have a Bachelors Degree in an appropriate management or technology discipline.

## SECTION 4 - PROJECT MANAGER MENTORING PROGRAM

### Overview

The purpose of the project manager mentoring program is to provide less experienced project managers with a more experienced advisor who can provide guidance, advice, or direction. The Project Manager Mentoring Program provides an opportunity for professional development outside of a formal classroom setting. Virginia Information Technologies Agency will manage and administer this voluntary program.

### Virginia Information Technologies Agency Responsibilities

The Virginia Information Technologies Agency will establish the voluntary mentoring program; solicit volunteers through a formal application process; and, identify and publish the names of appropriately qualified mentors for project managers to contact.

### Project Mentor Qualifications

Major project mentors will have substantial project management experience and have met Commonwealth of Virginia project manager qualification standards for Major IT Projects as outlined in Section 3. The mentor will have successfully managed at least one major project. A project mentor will have demonstrated:

- Substantial project management experience.
- Knowledge and use of project management methodology.
- Ability to manage projects in a cross-agency and statewide environment.
- Ability to blend creativity, problem solving, and technical skills to develop new systems approaches or seize opportunities that sustain business success.
- Ability to operate in complex management environments with multiple stakeholders.
- Experience in large-scale technology and applications projects, process improvement, and organizational change.
- Ability to conceptualize creative solutions.
- Skill in management and facilitation of meetings.
- A strong aptitude and detailed knowledge of multiple technical disciplines.
- A detailed understanding of business and financial systems.

## SECTION 5 - PROJECT MANAGER QUALIFICATION AND SELECTION PROCESS

### Overview

The process outlined below and in Figure 1 provides a guide for project manager candidates to meet the qualification standards for projects. Meeting qualification standards does not automatically qualify a project manager for a specific project or grouping of projects. Project managers are individually qualified for each project.

Project managers who have received certification as a Project Management Professional (PMP) from the Project Management Institute (PMI) may request and receive credit for Steps 3 and 4 of the qualification process. Project managers requesting credit must submit their request in writing with a copy of their certification documents to the VITA Project Management Division. Project Managers requesting PMP credit must enter the appropriate information about their project management experience into their individual qualification record using the online qualification record accessed through the Project Manager Development Web page.

### Qualification Process Description

Step 1. The project manager candidate registers in the program with the approval of their agency or private company. Registration enrolls the candidate in the program (not in training). The candidate will register online through the Project Manager Development Web page.

Step 2. The project manager candidate enrolls in and completes Part I of the basic project management training (Commonwealth Overview). This step may be completed before or after Step 3.

Step 3. The project manager candidate takes and passes Core and Facilitating Processes tests, and/or attends training as needed and then takes the appropriate test. This is a repetitive step. Project manager candidates may take only the Core Processes test in order to qualify for projects with cost less than or equal to \$1,000,000. However, a project manager candidate must pass both tests to manage any project costing more than \$1,000,000. This step may be completed before or after Step 2.

Step 4. The project manager candidate completes minimum experience requirements. Step 4 can be performed before, during, and after steps 1 through 3.

Step 5. The project manager candidate updates their qualification record with training completed, experience, or education as appropriate. Project managers should routinely

update the qualification record as they complete additional training and education or acquire additional experience.

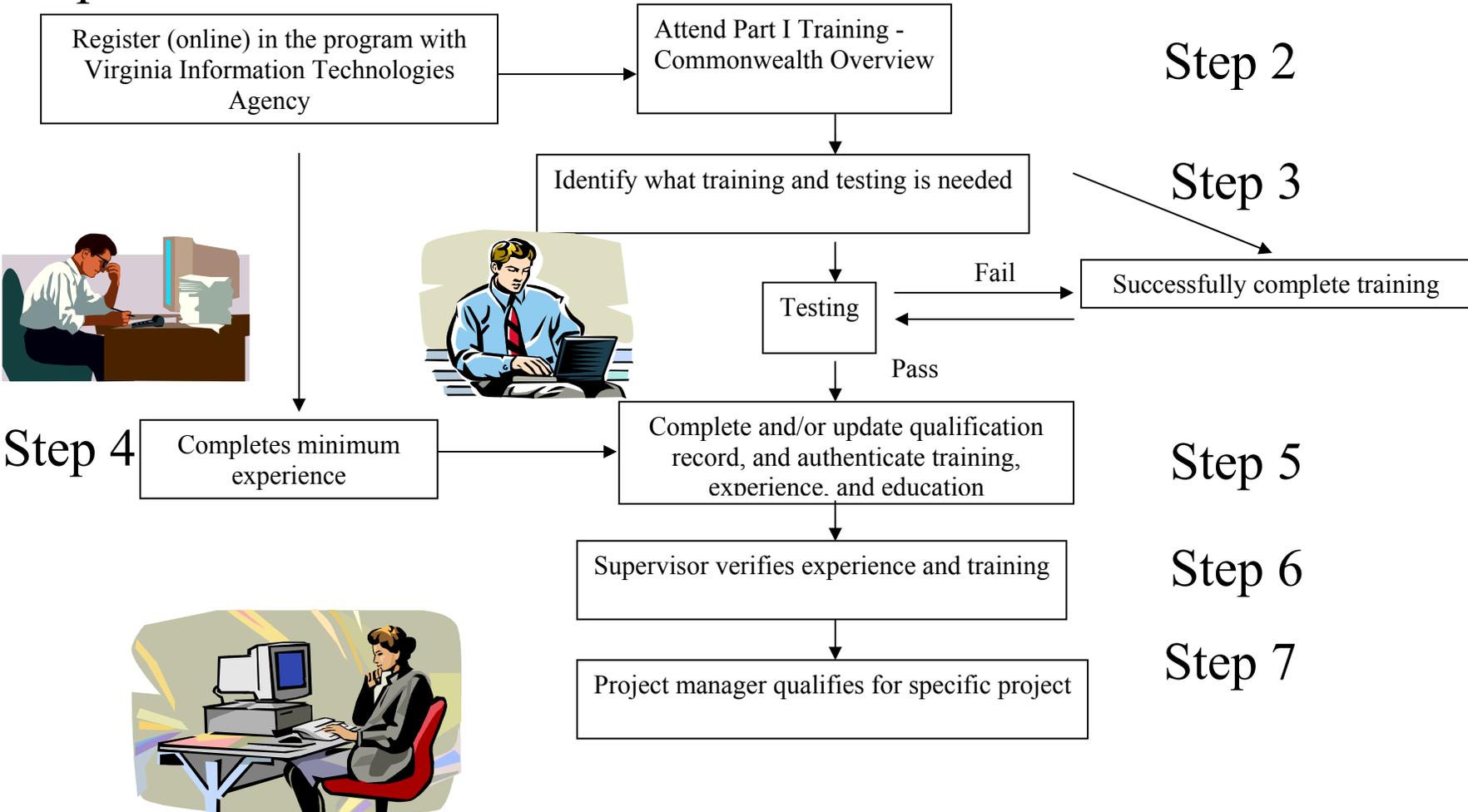
Step 6. The candidate's supervisor verifies the experience and training indicated by the candidate on the completed qualification record. The supervisor will access the online qualification record and mark those entries that can be verified from personal knowledge or documentation provided by the candidate. For state employees, the supervisor may validate past experience, certification, and training from a state application for employment.

Step 7. The project sponsor uses the project manager candidate's qualification record to qualify the individual for specific project assignments.

- For a major project, the project sponsor will qualify the project manager, the Commonwealth of Virginia Chief Information Officer will review and approve the selected project manager.

- For a non-major project, the sponsor will qualify and approve the project manager.

# Step 1



**Project Manager Training and Selection Process  
Figure 1.**

**SECTION 6 - PROJECT MANAGER SELECTION AND TRAINING STANDARD  
IMPLEMENTATION SCHEDULE**

The implementation of this standard will be phased over a 21 month period, beginning September 2003 with full implementation in May 2005. This standard is being implemented in phases to ensure adequate resources and opportunities are available for project managers and ongoing projects are not negatively impacted. The implementation schedule allows projects to receive a waiver of 6 months from the Chief Information Officer or project sponsor. The Chief Information Officer or project sponsor must document the decision to waiver a project in a memorandum to the Project Management Division of VITA.

Publish Standard.....	September 2003
Project Manager Development Web Page Operational.....	September 2003
Qualification Testing Begins .....	October 2003
Commonwealth Overview Training Available.....	October 2003
Standard Effective for New Major IT Projects.....	February 2004
Standard Effective for New Non-major IT Projects.....	May 2004
Standard Effective for Old Major IT Projects.....	August 2004
Project may be waived for 6 months	
Standard Effective for Old Non-major IT Projects.....	November 2004
Project may be waived for 6 months	
Standard Effective for all Projects.....	May 2005

# DRAFT

## COMMONWEALTH OF VIRGINIA



### Information Technology Resource Management Policy

## TECHNOLOGY MANAGEMENT

### Virginia Information Technologies Agency

# DRAFT

## DRAFT

**Preface****Publication Designation**

Commonwealth of Virginia (COV) Information  
Technology Resource Management (ITRM) Policy  
GOV2003-02.4

Code of Virginia § 2.2-2651

*(Powers and duties of the Council on Information  
Technology Services)*

**Subject**

Technology Management

**Scope**

This policy is applicable to all Executive Branch State agencies and institutions of higher education (hereinafter collectively referred to as "agencies") that are responsible for the management, development, purchase and use of information technology investments in the Commonwealth of Virginia. Local government entities are encouraged to consider the implications of this policy for their work.

**Effective Date**

xxxxx, 00, 9999

**Purpose**

To establish a comprehensive and uniform policy for the management of technology investments in the Commonwealth of Virginia (COV).

**Supersedes**

COV ITRM Policy GOV2002-02.1

**Scheduled VITA Review**

One (1) year from the effective date, then every two years thereafter.

**General Responsibilities (*Italics indicate Code of Virginia requirements*)****Authority**

Code of Virginia, §2.2-2007;  
*(Powers and duties of the CIO)*

Code of Virginia, §2.2-2010;  
*(Powers and duties of the Virginia Information  
Technologies Agency; "VITA")*

Code of Virginia, §2.2-2017  
*(Powers and duties of the VITA-Division of Project  
Management)*

Code of Virginia, §2.2-2014  
*(Submission of information technology plans by state  
agencies and public institutions of higher education;  
designation of technology resource.)*

Code of Virginia, §2.2-2015  
*(Authority of CIO to modify or suspend major information  
technology projects; project termination)*

Code of Virginia, §2.2-2018; §2.2-2019; §2.2-2020; §2.2-  
2021  
*(Project planning approval; Project development approval;  
Procurement approval for major information technology  
projects; Project oversight)*

Code of Virginia, §2.2-2457; §2.2-2458;  
*(Powers and duties of the Information Technology  
Investment Board; the "Board")*

**The Information Technology Investment Board (the "Board")**

The Information Technology Investment Board is assigned the following general technology management responsibilities:

- *Appoint the Chief Information Officer as the chief administrative officer of the Board to oversee the operation of VITA pursuant to § 2.2-2005;*
- *Approve or disapprove the development of all major information technology projects as defined in § 2.2-2006. The Board may terminate any major information technology project recommended for termination by the Chief Information Officer pursuant to § 2.2-2015;*
- *Approve strategies, standards, and priorities recommended by the Chief Information Officer for the use of information technology for state agencies in the executive branch of state government;*
- *Approve the four-year plan for information technology projects;*
- *Approve statewide technical and data standards for information technology and related systems;*

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- Approve statewide information technology architecture and related set of system standards;
- Approve criteria for the review and approval of the planning, scheduling and tracking of major information technology projects as defined in § 2.2-2006;
- Adopt resolutions or regulations conferring upon the Chief Information Officer all such powers, authorities and duties as the Board deems necessary or proper to carry out the purposes of Chapter 20 of Title 2.2; and
- Submit by September 1 of each year a list of recommended technology investment projects and priorities for funding such projects to the Governor and the General Assembly.

**Chief Information Officer (CIO)**

The Chief Information Officer is assigned the following general technology management responsibilities:

- Monitor trends and advances in information technology; develop a comprehensive, statewide, four-year strategic plan for information technology to include specific projects that implement the plan; and plan for the acquisition, management, and use of information technology by state agencies. The statewide plan shall be updated annually and submitted to the Board for approval. In developing and updating the plan, the CIO shall consider the advice and recommendations of the Council on Technology Services created pursuant to § 2.2-2651.
- Direct the formulation and promulgation of policies, guidelines, standards, and specifications for the purchase, development, and maintenance of information technology for state agencies, including, but not limited to, those (i) required to support state and local government exchange, acquisition, storage, use, sharing, and distribution of geographic or base map data and related technologies, (ii) concerned with the development of electronic transactions including the use of electronic signatures as provided in § 59.1-496, and (iii) necessary to support a unified approach to information technology across the totality of state government, thereby assuring that the citizens and businesses of the Commonwealth receive the greatest possible security, value, and convenience from investments made in technology.
- Direct the development of policies and procedures, in consultation with the Department of Planning and Budget, that are integrated into the Commonwealth's strategic planning and performance budgeting processes, and that state agencies and public institutions of higher education shall follow in developing information technology plans and technology-related budget requests. Such policies and procedures shall require consideration of the contribution of current and proposed technology expenditures to the support of agency and institution priority functional activities, as well as current and future operating expenses, and shall be utilized by all state agencies and public institutions of higher education in preparing budget requests.
- Review budget requests for information technology from state agencies and public institutions of higher education and recommend budget priorities to the Information Technology Investment Board.
- This review shall include, but not be limited to, all data processing or other related projects for amounts exceeding \$100,000 in which the agency or institution has entered into or plans to enter into a contract, agreement or other financing agreement or such other arrangement that requires that the Commonwealth either pay for the contract by foregoing revenue collections, or allows or assigns to another party the collection on behalf of or for the Commonwealth any fees, charges, or other assessments or revenues to pay for the project. For each project, the agency or institution shall provide the CIO (i) a summary of the terms, (ii) the anticipated duration, and (iii) the cost or charges to any user, whether a state agency or institution or other party not directly a party to the project arrangements. The description shall also include any terms or conditions that bind the Commonwealth or restrict the Commonwealth's operations and the methods of procurement employed to reach such terms.
- Direct the development of policies and procedures for the effective management of information technology investments throughout their entire life-cycles, including, but not limited to, project definition, procurement, development, implementation, operation, performance evaluation, and enhancement or retirement. Such policies and procedures shall include, at a minimum, the periodic review by the CIO of agency and public institution of higher education information technology projects estimated to cost \$1 million or more or deemed to be mission-critical or of statewide application by the CIO.
- Report annually to the Governor and the Joint Commission on Technology and Science created pursuant to § 30-85 on the use and application of information technology by state agencies and public institutions of higher education to increase economic efficiency, citizen convenience, and public access to state government.

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- *Direct the development of policies and procedures that require VITA to review information technology projects proposed by state agencies and institutions exceeding \$100,000, and recommend whether such projects be approved or disapproved. The CIO shall disapprove projects between \$100,000 and \$1 million that do not conform to the statewide information plan or to the individual plans of state agencies or institutions of higher education*

**Virginia Information Technologies Agency (VITA)**

The Virginia Information Technologies Agency is assigned the following general technology management responsibilities:

- *Prescribe regulations necessary or incidental to the performance of duties or execution of powers conferred under this chapter.*
- *Plan and forecast future needs for information technology and conduct studies and surveys of organizational structures and best management practices of information technology systems and procedures.*
- *Assist state agencies and public institutions of higher education in the development of information management plans and the preparation of budget requests for information technology that are consistent with the policies and procedures developed pursuant to § 2.2-2007.*
- *Develop and adopt policies, standards, and guidelines for managing information technology by state agencies and institutions.*
- *Develop and adopt policies, standards, and guidelines for the procurement of information technology and telecommunications goods and services of every description for state agencies.*
- *Direct the establishment of statewide standards for the efficient exchange of electronic information and technology, including infrastructure, between the public and private sectors in the Commonwealth.*
- *Direct the compilation and maintenance of an inventory of information technology, including, but not limited to, personnel, facilities, equipment, goods, and contracts for services.*
- *Develop statewide technical and data standards for information technology and related systems to promote efficiency and uniformity*

- *Evaluate the needs of agencies in the Commonwealth with regard to (i) a consistent, reliable, and secure information technology infrastructure, (ii) existing capabilities with regard to building and supporting that infrastructure, and (iii) recommended approaches to ensure the future development, maintenance, and financing of an information technology infrastructure befitting the needs of state agencies and the service level requirements of its citizens.*

**The Project Management Division (PMD) of VITA**

The Division of Project Management is assigned the following general technology management responsibilities:

- *Implement the approval process for information technology projects developed in accordance with § 2.2-2008;*
- *Assist the CIO in the development and implementation of a project management methodology to be used in the development of and implementation of information technology projects in accordance with this article;*
- *Provide ongoing assistance and support to state agencies and public institutions of higher education in the development of information technology projects;*
- *Establish a program providing cost-effective training to agency project managers;*
- *Review information management and information technology plans submitted by agencies and public institutions of higher education and recommend to the CIO the approval of such plans and any amendments thereto;*
- *Monitor the implementation of information management and information technology plans and periodically report its findings to the CIO;*
- *Assign project management specialists to review and recommend information technology proposals based on criteria developed by the Division based on the (i) degree to which the project is consistent with the Commonwealth's overall strategic plan; (ii) technical feasibility of the project; (iii) benefits to the Commonwealth of the project, including customer service improvements; (iv) risks associated with the project; (v) continued funding requirements; and (vi) past performance by the agency on other projects; and*
- *Provide oversight for state agency information technology projects.*

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**Executive Branch Secretaries**

Executive Branch Secretaries are assigned the following general technology management responsibilities:

- Review information management plans (IT Strategic Plans) submitted by agencies and institutions of higher education within the Secretariat.
- Make appropriate recommendations to the CIO regarding COV enterprise technology programs and projects, throughout the program or project life-cycle, which includes program or project initiation, planning, execution, closeout, and operations and support.
- Review agency major IT projects and make appropriate recommendations to the CIO, throughout the project life-cycle, which includes the project initiation, planning, execution, closeout, and operations and support phases.

**Executive Branch State Agencies**

State Agencies are assigned the following general technology management responsibilities:

- *The head of each state agency shall designate an existing employee to be the agency's information technology resource who shall be responsible for compliance with the procedures, policies, and guidelines established by the CIO.*
- *All state agencies and public institutions of higher education shall prepare and submit information technology plans to the CIO for review and approval. All state agencies and public institutions of higher education shall maintain current information technology plans that have been approved by the CIO.*
- *Prior to proceeding with any major information technology project, an agency shall submit to the Division (PMD) a project proposal, outlining the business need for the project, the proposed technology solution, if known, and an explanation of how the project would support the agency's business objectives and the Commonwealth's information technology plan. The project management specialist may require the submission of additional information if needed to adequately review any such proposal.*
- *Upon approval of the CIO of the project plan, an agency shall submit to the Division (PMD) a project development proposal containing (i) a detailed business case including a cost-benefit analysis; (ii) a business process analysis, if applicable; (iii) system requirements, if known; (iv) a proposed development plan and project management structure; and (v) a*

*proposed resource or funding plan. The project management specialist may require the submission of additional information necessary to meet the criteria developed by the Division (PMD).*

- *Upon approval of the Board of the project development proposal involving a major information technology project that requires the procurement of goods or services, the agency shall submit a copy of any Invitation for Bid (IFB) or Request for Proposal (RFP) to the Division (PMD). The project management specialist shall review the IFB or RFP and recommend its approval or rejection to the CIO. The CIO shall have the final authority to approve the IFB or RFP prior to its release and shall approve the proposed contract for the award of the project.*
- *Whenever an agency has received approval from the Board to proceed with the development and acquisition of a major information technology project, the CIO shall establish an internal agency oversight committee. The internal agency oversight committee shall provide ongoing oversight for the project and have the authority to approve or reject any changes in the project's scope, schedule, or budget. The CIO shall ensure that the project has in place adequate project management and oversight structures for addressing major issues that could affect the project's scope, schedule, or budget and shall address issues that cannot be resolved by the internal agency oversight committee.*
- *Whenever a statewide or multiagency project has received approval from the Board, the primary project oversight shall be conducted by a committee composed of representatives from agencies impacted by the project, which shall be established by the CIO.*
- *As part of the Agency IT Strategic Planning process, each agency will develop, manage, and maintain an Agency Technology Portfolio. Agencies will use the Agency Technology Portfolio to support technology investment decisions, including the identification of all major technology procurements and projects to be incorporated in the Agency IT Strategic Plan. Agencies are required to utilize Information Technology Investment Management (ITIM) based practices in their IT strategic planning efforts. Agency Technology Portfolios will be updated at least annually, and as needed, to ensure the portfolio accurately reflects current and planned agency technology investments.*
- *Comply with the policies, standards, and guidelines for the management of information technology resources in the Commonwealth.*

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- Plan and manage agency IT projects, throughout the project life-cycle, which includes the project initiation, planning, execution, closeout, and operations and support phases.
- Propose the initiation of major IT projects to the CIO. Manage approved major IT projects, throughout the project life-cycle, which includes project initiation, planning, execution, closeout, and operations and support phases.
- *On an annual basis, each agency must report to the CIO and the director of Planning and Budget performance measurement information for technology projects. The information shall include, but not be limited to, the degree to which projects were completed on time and within budget. The performance reporting will be based on guidance issued by the CIO and the Department of Planning and Budget.*

**Council on Technology Services (COTS)**

The Council on Technology Services is assigned the following general technology management responsibility:

- *The purpose of the Council shall be to advise Chief Information Officer on the services provided by the Virginia Information Technologies Agency and the development and use of applications in state agencies and public institutions of higher education.*

***Related COV ITRM Policies, Standards, and Guidelines***

- IT Strategic Planning & Portfolio Management Standard (To be published)
- Model Standard for Maintenance & Enhancement Projects (91-5)
- Model Standard for Large Scope Projects (91-3)
- Model Standard for Small Scope Projects (91-4)
- Project Management Standard (To be published)
- Technology Management Glossary (COV ITRM Standard GOV2003-02.1)
- Portfolio Management Guideline (To be published)
- Project Management Guideline (COV ITRM Standard GOV2003-02.2)

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**Section 1: Introduction*****Background***

The COV ITRM Policy GOV 2003-02.4 establishes a comprehensive and uniform policy for the management of technology investments in the Commonwealth of Virginia. This policy is applicable to all State agencies and institutions of higher education (hereinafter collectively referred to as “agencies”) that are responsible for the management, development, purchase and use of information technology investments in the Commonwealth of Virginia. Derived from relevant research and “best practices” in both the public and private sectors, the policy has been approved by the Commonwealth Chief Information Officer (CIO) and the Commonwealth Information Technology Investment Board (ITIB). Complete implementation of the policy will include development and rollout of supporting standards, guidelines, and tools for managing information technology at state agencies. Local governments, while not bound by the CTM policy, are encouraged to follow the general technology management processes described in the policy and provide feedback related to local government technology management issues.

***Frequently Used Terms and Definitions***

The following frequently used terms and definitions are essential to understanding Commonwealth Technology Management. Other definitions, related to technology management, appear within the body of this policy. A complete glossary of technology management terms used by the Commonwealth of Virginia is available on-line at the Virginia Information Technologies Agency (VITA) Website, <http://www.vita.virginia.gov>.

**Asset** - Component of a business process and can include computer rooms, networks, digital and paper records, hardware, software, people, etc.

The **Common Requirements Vision (CRV)** is the document that presents the business case for the Commonwealth Enterprise Architecture (EA) Initiative and represents the initial step in the evolution of the EA process model. The CRV establishes the agreements reached between business and IT leaders regarding: the most significant, influencing trends on the enterprise; the enterprise business strategies that will drive the EA; the information required by the business decision makers to satisfy the enterprise business strategies; implications for application portfolio development; and the requirements for the technical architecture.

A **Commonwealth Project** is defined as a temporary endeavor, undertaken by a Commonwealth executive branch agency (or agencies), to deliver a unique product or service. Commonwealth projects are expected to follow project management best practices and comply with project management requirements identified in the *Code of Virginia*, Governor’s Executive Orders, and COV ITRM policies, standards, and guidelines,

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**Commonwealth Asset Management (CAM)** is defined as the process of planning, procuring, deploying, operating, maintaining, upgrading, and disposing of assets to achieve maximum return on investment over the life-cycle of the asset, in support of both Commonwealth and agency IT strategic plans.

**Commonwealth Project Management (CPM)** is defined as the application of knowledge, skills, tools, and techniques to meet or exceed stakeholder needs and expectations from a Commonwealth Project.

**Commonwealth Technology Management (CTM)** is the application of information technology investment management (ITIM) principles and practices in support of the business activities of state government.

An **Enterprise** is an organization with common or unifying business interests. An enterprise may be defined at the Commonwealth level, the Secretariat level, or agency level for programs and projects requiring either vertical or horizontal integration within the Commonwealth, Secretariat, or agency, or between multiple Secretariats, agencies, and/or localities.

**Enterprise Architecture (EA)** is a method or framework for developing, implementing, and revising business-focused Information Technology (IT) guidance. The resulting guidance describes how the enterprise can best use technology and proven practices to improve the way it does business. In the Commonwealth, EA is built on the business needs of state and local government agencies. EA is described in a series of documents that showcase the development and revision process, the involved parties, and the resulting guidance. The Commonwealth EA relies on a governance model (roles and responsibilities), business and technical inputs, and knowledge of how agencies presently do business to develop explicit policies, standards, and guidelines for information technology use.

An **Enterprise Technology Program** is a group of related IT projects, aggregated for management purposes that support a defined enterprise.

**Enterprise Program Management (EPM)** is an Information Technology Investment Management-based methodology to manage programs and projects of enterprise significance. EPM focuses on the management of multiple related programs and projects that individually support the same mission or ongoing activity.

**Information Technology Infrastructure Library (ITIL)** is a publication developed by the Central Computer and Telecommunications Agency (CCTA) of the Office of Government Commerce (OGC) of the United Kingdom which document best practices and a comprehensive process model for IT service management.

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**Information Technology Investment Management (ITIM)** is an integrated approach to managing IT investments that provides for the continuous identification, selection, control, life-cycle management, and evaluation of IT investments. ITIM uses structured processes to minimize risks and maximize return on IT investments. ITIM is the basis for the Commonwealth's approach to technology management. The primary sources of ITIM best practices referenced in the Commonwealth Technology Management policy include the U.S. General Accounting Office, META Group, Inc., Gartner, Inc., other states (Washington), and other Federal Agencies (NIH, DoD,)

**Technology Portfolio Management** is a management process used to select, control, and evaluate investments within and across asset and project portfolios. The primary focus of IT portfolio management is to ensure alignment between business goals and IT investments.

An **IT Strategic Plan** is a document that aligns IT strategy and investments with organizational business priorities, goals, and objectives.

**IT Strategic Planning (ITSP)** is an ITIM-based planning methodology that looks at IT resources and projects as capital investments and forms a foundation for the selection, control, and evaluation of IT resources and projects as part of a business-driven technology portfolio.

A **Technology Portfolio** is a repository of essential information about technology investments, structured to facilitate the evaluation of investment alternatives in support of an overall strategic business plan.

## Section 2: CTM Guiding Principles

The guiding principles for Commonwealth Technology Management are to:

*Invest in technology to improve service to customers and, ultimately, to the citizens of Virginia.*

Technology within the Commonwealth is a means not an end. Technology investments must be aligned with critical business needs in order to provide the best possible service to Commonwealth constituents (customers and citizens). Justification for technology investments must clearly demonstrate business value. Anticipated benefits should be clearly identified and continuously assessed throughout the life-cycle of technology projects to ensure the desired business value is achieved.

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***Achieve excellence in the performance of all technology services.***

Recognizing that technology is pervasive throughout all aspects of constituent service delivery and across all levels of government, effective and efficient use of technology resources is of major importance to the Commonwealth. Standard processes for technology management must be clearly defined, repeatable, and adaptable to ensure that technology investments and projects deliver the best product or service, on time and within budget. Of equal importance, the Commonwealth technology workforce must strive for excellence in the delivery of services, courteously, efficiently and promptly, to all constituents.

***Exercise sound financial management of, and accountability for, technology investments.***

Technology represents a significant investment of Commonwealth resources. Competent and capable management of technology investments is, therefore, a required discipline to be exercised by all agencies within the Commonwealth. A common approach to technology management is needed to ensure responsible and accountable stewardship over technology investments.

**Section 3: CTM Governance**

Legislation enacted in 2003 restructured information technology in the Commonwealth, ushering in comprehensive reform of state government information technology. The legislation created a new Commonwealth Technology Management governance structure for planning and development of IT projects and the purchasing of IT equipment and services. CTM is governed by a ten member IT Investment Board comprised of the Secretary of Technology, the Auditor of Public Accounts and appointees by the Governor and the Joint Rules Committee of the legislature. The Board is charged with setting technology strategy and with reviewing and prioritizing enterprise-wide technology investments across state government. The Board also approves priorities, policies, standards, Major IT Project development or termination, and the four-year statewide plan for technology.

The legislation also created a single new state agency, the Virginia Information Technologies Agency (VITA), and a CIO position, appointed by the Board, to oversee the planning and development of all IT projects in the Commonwealth and the purchasing of IT equipment and services. The CIO serves as VITA's chief administrative officer and oversees the operation of VITA. Other responsibilities of the CIO include developing policies, standards and procedures for technology and project management, and approval and oversight of IT projects and procurements. VITA is responsible for managing the Commonwealth technology infrastructure, conducting technology procurements, and consolidating all state agency technology infrastructure staff into VITA, in accordance with targeted dates established in legislation. Appendix A provides a graphical view of the CTM IT Governance Structure. (Reference Appendix A.)

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**Section 4: CTM Approach and Objectives**

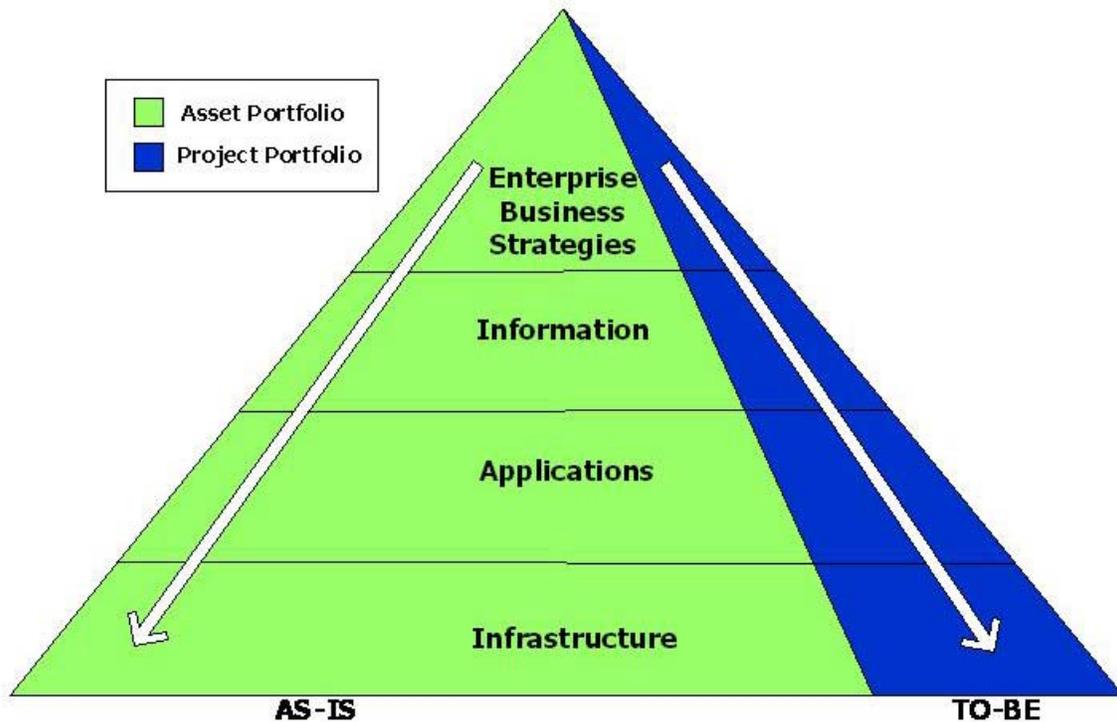
The CIO, under the direction of the ITIB and with the assistance of VITA, must direct the development of policies and procedures for the effective management of information technology investments throughout their life-cycle. The CTM Policy defines the Commonwealth of Virginia approach for managing information technology investments, using IT portfolio management tools, throughout the life-cycle of technology assets and projects.

CTM is based on the concept that technology investments in the Commonwealth support the business of state government. Agency strategic planning articulates the agency mission and business activities, and provides an agency vision for the future. The agency strategic (business) plan is the basis for IT investment decisions. The selection, control, and evaluation of technology investments are based upon the anticipated business value of the investment. Technology investments should be prioritized and executed based on the benefit to be derived towards achieving agency strategic goals and objectives, and addressing agency critical business issues or needs that best support the agency mission and business activities.

Agency business leaders must play an integral part in the initiation of any technology investment, defining the business need and the anticipated outcomes to be achieved. Involvement by the business leadership of the agency should continue throughout the life-cycle of any technology investment, continually validating that the investment is on track to deliver the desired business value. A critical aspect of CTM is the early and continuous involvement of agency leadership in technology investment decision-making and in providing effective oversight as investment decisions are made.

The CTM approach for technology management is based on the principles of ITIM for selecting, controlling, and evaluating IT investments and incorporates ITIM “best practices” from both the private and public sector. The Commonwealth ITIM process utilizes a Commonwealth Technology Portfolio as the repository for technology investments, comprised of a project portfolio and an asset portfolio. The Commonwealth Technology Portfolio is an aggregated view of individual agency projects and assets supporting Commonwealth and agency “Enterprise Business Strategies”. The technology portfolio documents the current “As-Is” technology architecture and facilitates selection of technology investments for the migration to the “To-Be” technology architecture. The selection of technology investments, and migration to the “To-Be”, begins with a comprehensive analysis of the current technology portfolio (“As-Is” technology architecture), and an evaluation of the ability of the current technology portfolio to meet the strategic goals and objectives, and/or address agency critical business issues or needs that best support the agency mission and business activities of the Commonwealth or agency. The evaluation typically takes the form of a gap analysis of the “As-Is” to the “To-Be” and results in the identification of projects and procurements necessary to move the organization to the “To-Be” state. The technology portfolio is represented graphically below.

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IT Strategic Planning is the process of building and maintaining the technology portfolio. Commonwealth business and technology leaders must continuously select, control, and evaluate technology investments, projects, and assets, throughout their life-cycle. As the portfolio changes, it should be evaluated to ensure that the "As Is" and "To Be" states are accurately represented. Moreover, continuous analysis should be performed to assure the "As Is" and identified projects and future procurements are aligned to meet changing strategic goals and objectives, and/or address critical business issues or needs of the Commonwealth and agency. The IT Investment Management (ITIM) process relies on analysis of the technology portfolio for both assets and projects, as well as the interdependence of activities resulting from portfolio analysis and execution of portfolio management activities (Reference Appendix B.)

The objectives of CTM include:

- Establishing a methodology for the selection, control, and evaluation of IT investments to support the business needs of the Commonwealth;
- Providing a framework for the migration from the current enterprise architecture to the desired future enterprise architecture;
- Defining life-cycle processes to ensure that technology projects deliver business value on time and within budget;

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- Defining life-cycle processes to ensure assets are managed to support required service levels with maximum return on investment and benefit to the Commonwealth.

**Section 5: CTM Integrated ITIM Processes**

Commonwealth Technology Management is comprised of five major integrated ITIM processes:

- IT Strategic Planning;
- Enterprise Program Management;
- Commonwealth Project Management;
- Commonwealth Asset Management; and
- Continuous ITIM Evaluation.

CTM components provide a framework for the selection, control, and evaluation of technology investments throughout their life-cycle. (Reference Appendix B.)

Through the IT Strategic Planning process, Commonwealth agencies select IT investments that best support identified agency business needs and Commonwealth enterprise business and technology strategies.

Enterprise Program Management, Commonwealth Project Management, and Commonwealth Asset Management are the control processes for ITIM-based technology management. Enterprise Program Management provides the control for programs, through oversight and coordination, necessary to ensure the ITIM competencies of participating agencies. Commonwealth Project Management provides control for projects to ensure competent and capable project management is applied to all IT projects to achieve business success. Commonwealth Asset Management provides control for assets to ensure assets are managed throughout their useful life to maximize value to the enterprise.

ITIM Evaluation is a continuous process that compares actual results against planned measures of success. The ITIM Evaluation process establishes the business value achieved and the actual return on the investment. Lessons learned from the evaluation process also provide feedback for future selection and control activities.

The CIO, on behalf of the ITIB, develops and maintains tools to support CTM, including: a Technology Portfolio, a Commonwealth Agency Technology Strategic Planning Application (CATSPA), and a Commonwealth Major IT Project Status Report (“Dashboard”) system. CTM tools will be available on-line and incorporate the principles established within the CTM policy.

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Appropriate standards, guidelines, and necessary training will accompany the rollout of CTM tools as required for implementation of CTM within the Commonwealth.

Appendices C-F provide graphical representations (process flow charts) of CTM processes over the life-cycle of technology investment planning and project management. The charts also identify associated decision points and management team responsibilities during each phase of the project life-cycle.

**Section 6: IT Strategic Planning/Technology Portfolio Management**

IT Strategic Planning is a systematic method used by an organization to set broad direction and specific goals for managing information and supporting delivery of IT services to customers. The CTM IT Strategic Planning process is an ITIM-based IT strategic planning methodology that looks at IT projects and assets as long-term investments and forms the foundation for selecting, controlling, and evaluating technology investments as part of a business-driven technology portfolio.

IT strategic planning is performed at various levels of government within the Commonwealth, including development of: a Commonwealth of Virginia Strategic Plan for Technology by the CIO; Enterprise Technology Program Plans as directed by the CIO; and individual Agency IT Strategic Plans.

In the Commonwealth, agency IT strategic planning is completed on a biennial cycle, tied to the budget biennium, with updates occurring at least annually. The Commonwealth of Virginia Strategic Plan for Technology and the COV Enterprise Architecture serve as standing guidance for enterprise technology program plans and for agency IT strategic planning.

***COV IT Strategic Planning***

The CIO, as specified in the *Code of Virginia*, monitors trends and advances in information technology and develops a comprehensive, statewide, four-year strategic plan for information technology. The Commonwealth of Virginia Strategic Plan for Technology includes specific projects that implement the plan, and plan for the acquisition, management, and use of information technology by state agencies.

To develop the COV Strategic Plan for Technology, the Governor and the ITIB provide imperatives to guide the strategic planning effort. The COV Strategic Plan for technology provides a blueprint by which technology assets will be marshaled by the CIO to achieve the imperatives. The CIO, in consultation with the ITIB, identifies guiding principles to provide a sound framework for developing and implementing the strategic plan. Key stakeholders, including executive branch agencies, boards and commissions, and the technology business community contribute to the strategic plan, providing data and input through the development process. Based on the Commonwealth vision for technology, the Commonwealth Strategic Plan

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for Technology is approved by the ITIB, and identifies significant initiatives (projects and procurements) selected as priority technology investments. VITA and other state agencies are directed to implement the strategic plan. VITA is charged with monitoring the implementation of the Commonwealth Strategic Plan for Technology and providing periodic status reports. The statewide plan is updated annually and submitted by the CIO to the ITIB for approval.

***Enterprise Technology Program Plans***

In addition to a Commonwealth of Virginia Strategic Plan for Technology, the CIO may designate and develop Enterprise Technology Program Plans, as needed, to support programs of enterprise significance.

***Agency IT Strategic Planning***

Each executive branch agency within the Commonwealth will develop and maintain an Agency IT Strategic Plan. The agency IT strategic planning process should include both business and technology managers within the agency. Agency IT Strategic Plans will be published biennially, in conjunction with the Commonwealth biennial budget process, and will include planned IT investments for a minimum of two years. VITA will assist state agencies and public institutions of higher education in the development of information management plans that are consistent with the policies and procedures.

The Agency IT Strategic Plan will be used by agencies to align agency technology investments and budget with Commonwealth technology initiatives and with agency organizational priorities, goals, and objectives. Agency IT Strategic Plans typically include a technology vision statement, a description of the agency's business goals and objectives, and IT projects and procurements the agency plans to use to achieve its business goals and objectives or to address agency critical issues. The Agency IT Strategic Plan also includes an update to the technology portfolio to reflect a current description of the agency's technology assets.

The CIO will develop and disseminate planning guidelines to provide specific directions to agencies regarding IT Strategic Planning submission requirements. Appendix C describes the IT Strategic Planning process within the Commonwealth. Appendix D describes the two-year, full planning cycle of the Agency IT Strategic Planning process including the plan development, evaluation, approval, publication, and modification or amendment.

As part of the Agency IT Strategic Planning process, each agency will update their individual agency assets contained in the Commonwealth Technology Portfolio. Agencies will use the Commonwealth Technology Portfolio to support technology investment decisions including, the identification of technology assets, and all major technology projects and procurements to be incorporated in the Agency IT Strategic Plan. Agencies are required to utilize ITIM-based practices in their IT strategic planning efforts, including clearly defined selection criteria, business case development, risk assessment methodologies, and prioritization schema.

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The Agency Strategic Plan, the Commonwealth of Virginia Strategic Plan for Technology, Enterprise Architecture standards, and Enterprise Technology Program Plans, will serve as the basis for the development of Agency IT Strategic Plans and corresponding IT budgets. The Agency IT budget will reflect the technology investments required to support agency business initiatives. Specific IT budget requests will be developed based on guidelines issued by the CIO and the Department of Planning and Budget.

***Plan Evaluation***

Agencies must submit an IT Strategic Plan, through their proponent Secretary, to the CIO. VITA's Project Management Division (PMD), on behalf of the CIO, will review all Agency IT Strategic Plans submitted by agencies and public institutions of higher education. The review will encompass completeness, adherence to planning guidelines, and compatibility with the Commonwealth of Virginia Strategic Plan for Technology and Enterprise Architecture standards. Based upon the plan reviews, PMD will provide an approval recommendation to the CIO. PMD, in conjunction with Cabinet Secretaries, will review Agency IT Strategic Plans to identify and recommend to the CIO projects that could provide business value to the Commonwealth as a COV enterprise technology project or as collaboration opportunities within or across Secretariats.

***Plan Approval***

The Agency Head must certify and approve the Agency IT Strategic Plan before submission to the CIO. The CIO will approve or disapprove all Agency IT Strategic Plans. An approved IT Strategic Plan must be maintained on file with VITA. Approved plans will establish a reference for VITA to validate agency technology investments, including planned projects and procurements. PMD will work with agencies to revise and resubmit plans that are disapproved by the CIO.

***Change Management***

Agencies are required to provide updates to their Agency IT Strategic Plan and Agency Technology Portfolios annually, or as needed, to ensure the portfolio accurately reflects current and planned agency technology investments. VITA will develop and disseminate procedures for IT Strategic Plan Amendments and for technology portfolio maintenance.

***Plan Publication***

VITA will publish copies of the Commonwealth of Virginia Strategic Plan for Technology and Agency IT Strategic Plans on the VITA Website ([www.vita.virginia.gov](http://www.vita.virginia.gov)) with instructions for obtaining printed copies.

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**Section 7: Enterprise Program Management (EPM)**

An enterprise is an organization with common or unifying business interests. For the purposes of CTM, an enterprise may be defined at various levels of state government, where business interests are shared and collaboration is appropriate. An enterprise may be defined at the Commonwealth level, the Secretariat level, or agency level for the management of investments requiring either vertical or horizontal integration within the Commonwealth, Secretariat, or agency, or between multiple Secretariats, agencies, and/or localities.

Within the Commonwealth, Enterprise Program Management (EPM) is an ITIM-based methodology to manage investments of enterprise significance. An enterprise technology program refers to a group of related IT investments, aggregated for management purposes that support a defined enterprise.

PMD, part of VITA Strategic Management Services, serves as the designated Enterprise Program Management Office (EPMO) for the Commonwealth of Virginia and the CIO. In addition to the general functions of EPM, the Commonwealth EPMO also performs specific enterprise program management functions in support of COV enterprise technology programs, the CIO and the ITIB.

***General Functions of EPM***

EPM integrates the portfolio, program, and project, architecture, and resource management processes to achieve the best business value for the enterprise from IT investments.

**IT Portfolio Management*****Project Portfolio Management***

The ITIM project portfolio management process begins with the selection process wherein projects being proposed for funding are screened, analyzed, and ranked based on established criteria such as project costs, benefits, and risks. Management makes investment decisions on which projects to propose for funding, and which mix of projects will best meet strategic business goals. Once projects have been selected, management controls the execution of projects through periodic reviews of project progress against established cost, schedule, performance, and risk baselines. Monitoring of project progress throughout the project life-cycle allows management to effectively manage and mitigate risks, and to take corrective actions to achieve project success. The last phase of ITIM for projects is the evaluation phase, which closes the loop on the ITIM process. By comparing actual results against planned measures of success, the business value achieved and actual return on the investment is determined. Lessons learned during the evaluation phase provide feedback for future selection and control activities.

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*Asset Portfolio Management*

New or modified assets are added to the technology portfolio upon completion of project implementations and procurements. Through asset portfolio management the assets are managed throughout the life-cycle of the asset. As each asset grows and matures, the utilization and value of the asset is measured and managed to support the expected level of service to the associated business activity in a cost effective manner and with minimal risks. Continuous assessment of the value, the condition of the asset, as well as new technologies available, should be considered when determining whether an asset should be maintained, improved, or replaced. At the end of the useful life of the asset, assets are removed from the portfolio as a result of asset retirement, or replacement. Asset transformation projects, to improve assets or to replace assets to maximize the value delivered to the business activity, are proposed as part of the selection process.

Program Management

EPM provides the management and coordination required to ensure successful execution of enterprise programs and supports program efforts by:

- Facilitating the tactical execution of business and IT strategic plans;
- Expediting decision-making in support of the program;
- Providing management support when exceptional risks or value is involved;
- Making recommendations to incorporate enterprise thinking in technology solutions.

Program Managers are responsible for involving appropriate stakeholders in the delivery of program objectives. Program Managers will provide program status information to the IT governance process, including proponent Secretaries, Oversight Committees, and affected agencies.

Program Managers should develop and implement an effective risk management program for the identification, monitoring, and mitigation of risks across IT projects. The risk management plan should be used to manage and balance risks across and among IT projects to ensure the successful delivery of the enterprise technology program.

Change management procedures should also be established for each program to effectively plan, manage, and implement changes across the enterprise. An organizational structure should be established to provide timely communications of changes across the program.

Once a program is operational, the responsible agency or Secretariat should conduct periodic program reviews to ensure program objectives are being met. Based upon the periodic assessments, follow-up actions to improve program delivery should be documented and executed.

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Program Managers should develop, manage, and maintain an enterprise technology portfolio of designated program resources. The enterprise technology portfolio will reflect IT investments made in support of each enterprise technology program. Program Managers should also establish a means for tracking the value achieved from IT investments. The selected valuation method (such as return on investment, balanced scorecard, etc.) should measure the business value earned by the enterprise technology program.

### Project Management

EPM provides the management and integration of multiple IT projects to achieve the desired program result(s). Project management and integration will include: 1.) prioritization of IT projects needed to support the program; 2.) examination and determination of project dependencies and timing; 3.) cost and resource allocation; and 4.) change management.

Program Managers provide oversight and coordination of assigned projects; guide and support the development and enhancement of project management capabilities within enterprise program offices and agencies; ensure appropriate project management processes and procedures are in place; and, enforce adherence to established standards and guidelines in the delivery of IT projects.

Project management and execution of individual IT projects, in support of COV Enterprise Technology Programs, will normally be performed by agency Project Managers within participating agencies. Major projects, with enterprise significance, may be managed directly by the EPMO.

### Architecture Management

Program Managers should review technology investments for compliance with established COV Enterprise Architecture standards and maximize opportunities for migration from the current architecture to the desired future architecture. Program Managers should facilitate architecture reviews of designated investments using experienced personnel to identify problems or inconsistencies and feasible alternative solutions. Lessons learned during project execution and architecture reviews should be provided as feedback to the CIO.

### Resource Management

A major function of Program Managers is managing resources across programs and IT projects. The three key tasks of resource management are: 1) prioritizing and allocating resources; 2) coordinating resource utilization across investments; and 3) measuring and tracking the expenditure of resources. Clearly defined methods for resource management and reporting of expenditures should be documented and communicated to program constituents.

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***Specific Functions of the Commonwealth EPMO (VITA PMD)***CIO/ITIB Staff Support

As specified in the *Code of Virginia*, PMD provides staff support to the ITIB and the CIO in the approval process for IT projects, the approval of agency IT Strategic Plans, and the prioritizing of agency budget requests for information technology. As staff to the ITIB and the CIO, PMD also serves as the proponent for the implementation of ITIM practices and principles within Commonwealth agencies through the development and promulgation of ITIM-based policies, standards and guidelines.

IT Portfolio Management

PMD is responsible for managing the Commonwealth Technology Portfolio that serves as a repository for Commonwealth projects and assets to support IT strategic planning and CIO and ITIB reporting requirements. PMD supports portfolio management processes for the selection, control, and evaluation of projects in the Commonwealth Technology Portfolio as approved by the CIO and the ITIB. PMD assists the CIO in the development of standards and guidelines to be used by agencies for the maintenance and management of the technology portfolio. PMD, at the direction of the CIO and the ITIB will establish guidelines for the regular update of the Commonwealth Technology Portfolios to ensure the portfolio accurately reflects current assets and current and proposed projects. Using ITIL-based processes, VITA operational divisions will provide operational/usage measures as well as business/cost information to support IT portfolio management activities.

Commonwealth Program and Project Management

PMD supports the Commonwealth governance process for the initiation and management of Commonwealth technology programs and projects. Commonwealth technology programs and projects are initiated through the PMD, subject to the recommendation of a Secretariat Oversight Committee, and the CIO, and approved by the ITIB. During program and project execution, program and project progress will be approved by the participating Agency Heads, evaluated by the Proponent Secretariat, reviewed by the Oversight Committee, and approved for continuance by the CIO. Closeout of programs will follow the same process of reviews and approvals as program and project initiation.

Project Manager Development Program

The *Code of Virginia* requires the CIO to establish standards for the qualification and training of IT project managers. PMD manages the qualification program, including PM testing and training, required for Commonwealth IT project managers. PMD monitors the implementation of information management and information technology plans and periodically reports its findings to the CIO.

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Oversight of Agency Major IT Projects

PMD, in conjunction with the proponent Secretaries and Agency Oversight Committees, will perform oversight of Major IT Projects on behalf of the CIO and the ITIB. PMD will conduct IT project audits and reviews for specific Major IT Projects as directed by the CIO.

Consult on Designated Programs and Projects

At the request of proponent Secretaries or agencies, and with the approval of the CIO, PMD will consult or assist on designated technology programs and Major IT Projects. Consultation or assistance may be provided to Secretariats or agencies at any point in the program or project life-cycle.

Best Practices Promulgation

PMD serves as a “best practices” center. PMD will conduct research to determine “best practices” in technology management in both the public and private sector. “Best practices” will be promulgated through the issuance of policies, standards, and guidelines as appropriate to technology management within the Commonwealth. A reference library of “best practices” material will be provided on the VITA website ([www.vita.virginia.gov](http://www.vita.virginia.gov)).

Proponent for CTM Tools

PMD serves as the proponent for development and maintenance of supporting tools for the implementation of CTM. Supporting tools will be accompanied by necessary documentation and training. At a minimum, PMD will serve as functional proponent, the business owner, for the Commonwealth Technology Portfolio, the Commonwealth Agency Strategic Planning Application (CATSPA); and, the Commonwealth Major IT Project Status Report “Dashboard” System.

***Secretariat and Agency Enterprise Program Management***

The Cabinet Secretaries or Agency Heads may designate secretariat and agency enterprise technology programs in support of Secretariat or agency initiatives, with the approval of the Commonwealth CIO and the ITIB. Secretariat or agency enterprise technology programs will be defined, funded, developed, approved, and managed at the Secretariat and agency level utilizing guidance established within the CTM policy.

**Section 8: Commonwealth Project Management (CPM)**

The *Code of Virginia* requires the CIO to develop an approval process for proposed major information technology projects by state agencies to ensure that all such projects conform to the statewide information management plan and the information management plans of agencies and

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public institutions of higher education. The CIO must also establish a methodology for conceiving, planning, scheduling, and providing appropriate oversight for information technology projects including a process for approving the planning, development and procurement of information technology projects. Commonwealth Project Management documents the CIO established project management methodology to be used by agencies and institutions of higher education.

Commonwealth Project Management is the application of knowledge, skills, tools, and techniques, to meet or exceed stakeholder needs and expectations from a Commonwealth Project. The major concerns of project management are to manage project performance, cost, schedule, and risk over the life of a project in order to achieve anticipated business value. The objective of CPM is to define a structured, disciplined approach for project management in order to deliver anticipated benefits from business-driven IT investments. CPM incorporates industry standards and “best practices” for project management, tailored to meet Commonwealth specific requirements. While CPM supports multiple development methodologies, it provides a common frame of reference for all Commonwealth Project Managers.

The CIO will issue CPM standards and guidelines for technology project management. CPM standards and guidelines will establish comprehensive guidance for Commonwealth project managers on project initiation, planning, execution, control, and closeout. CPM will also provide standard project management processes, documents, and templates to assist Project Managers in implementing CPM guidance.

Technology projects are expected to be temporary endeavors undertaken to deliver a unique product or service. Technology projects of long duration, more than twelve months, will be executed in phases with incremental objectives and measures of success, such that continued funding can be allocated based on achievement of prior phase objectives.

There are two categories of technology projects in the Commonwealth:

1. Major IT Project - In the Commonwealth of Virginia, Major IT Projects are information technology projects that: are mission critical; have statewide application; or, have a total estimated cost of more than \$1 million. The CTM life-cycle for Major IT Projects is described in Appendix E.
2. Non-major IT Project - In the Commonwealth of Virginia, Non-major IT Projects are those technology projects with a total estimated cost less than or equal to \$1 million; that are not mission critical or do not have statewide application. The CTM life-cycle for Non-major IT Projects with a total cost of over \$100,000 is described in Appendix F.

A technology project may represent a sub-project of some other type of project, for example a building construction, business process re-engineering or transportation system project. If the larger project includes a technology component or information system as a required deliverable within the project, the technology portion of the project should be managed as a technology

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project and is subject to all policies, standards, and guidelines governing the management of Commonwealth technology projects.

Specific requirements for both planning and development approval of Major IT Projects are mandated in the *Code of Virginia*. All Commonwealth Major IT Projects must receive “approval for planning” from the CIO and “approval for development” from the ITIB based upon recommendation of the CIO.

Agencies have authority for planning and development of Non-major IT projects with a total cost of less than \$100,000. Non-major projects with a total cost of over \$100,000 must have the approval of the CIO for planning and development, unless specific delegated authority is granted by the CIO to an agency or institution of higher education for such projects. Institutions of higher education which are members of the Virginia Association of State Colleges and University Purchasing Professionals (VASCUPP) as of July 1, 2003, are delegated authority by the CIO for planning and development of Non-major IT Projects from \$100,000 to \$1 million.

An agency is responsible for the management of any IT project initiated for their agency. All Commonwealth Major IT Projects must have a designated Project Sponsor. The Project Sponsor should be an individual, usually part of the organization management team, who makes the business case for the project. This individual should also have the authority to define project goals, secure resources, approve project budgets and expenditures, and resolve organizational and priority conflicts.

Every Commonwealth IT project must have a designated Project Manager. The Project Manager will be nominated by the Project Sponsor or Agency Head and approved by the CIO (Non-major IT Projects) or the ITIB (Major IT Projects). The Project Manager will be responsible for the management of the project from project initiation to closeout. The Project Manager for a Major IT Project must be an employee of the Commonwealth or a consultant directly contracted for that purpose and supervised by the agency. Project Managers for Major IT Projects are responsible for project reporting to the CIO via the oversight process set out below.

The *Code of Virginia* requires the CIO to establish standards for the qualification and training of IT project managers. The Project Manager Development Program endeavors to satisfy the requirements of the *Code of Virginia* through its five components: PM Testing and Training; PM Qualifications; PM Mentoring; a Qualification and Selection Process; and, the PM Qualification and Selection Process Implementation Schedule, through which Commonwealth of Virginia IT project managers are qualified for specific projects within established project categories. To be qualified to manage a specific project, the project manager candidate must meet the qualification requirements for the project category and have the appropriate training or experience necessary for the specific project as specified in the Project Manager (PM) Selection and Training Standard.

Agencies are required to follow CPM standards and are encouraged to utilize CPM guidelines for the management of all IT projects within the Commonwealth. For Non-major IT projects, the

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application of project management standards and guidelines and the level of project management should be tailored to the size and importance of the project.

***Major IT Project Oversight***

Major IT Projects will be subject to periodic review by the CIO. For Major IT Projects, the CIO is required by the *Code of Virginia* to establish internal agency oversight committees, multi-agency oversight committees for statewide applications projects, and oversight structures for addressing issues that cannot be resolved by internal agency oversight committees. Major IT Project oversight committee structure and designated committee members will be identified in the project charter. Standing Proponent Secretariat Oversight Committees will normally address issues that cannot be resolved by internal agency oversight committees.

Internal agency oversight committees provide ongoing oversight for an agency project and have the authority to approve or reject changes to the project scope, cost, schedule, and performance measures, which are collectively referred to as the project baseline. A representative from the PMD will participate in the Major IT Project internal agency oversight in to provide ongoing assistance and support to state agencies and public institutions of higher education in the development of information technology projects, as specified in the *Code of Virginia*.

For statewide or multi-agency projects, the CIO will appoint the members of oversight committees in consultation with the lead agency and proponent Secretary. The appointed members of statewide or multi-agency project oversight committees are typically employees of the agencies affected by the project and include a representative from PMD. Multi-agency committees provide ongoing oversight for a statewide or multi-agency project and have the authority to approve or reject changes to the project baseline.

Once initiated, a Major IT Project must be entered into the Commonwealth Major IT Project Status Report “Dashboard” System. The “Dashboard” provides a common framework for agency, Secretariat, and Oversight Committee review and assessment of all Commonwealth Major IT Projects. The CIO will resolve, in consultation with the proponent secretaries, any issues that cannot be resolved by the Agency Internal Oversight committees. The Commonwealth Major IT Project Status Report Dashboard is the tool used to notify the proponent secretaries and CIO of issues that require resolution at their level. Project baseline changes, approved by agency internal oversight committees, for Major IT Projects will be reported to the Proponent Secretariat Oversight Committee and CIO through the Dashboard system.

Based on project oversight reviews, the Proponent Secretariat Oversight Committee will provide the CIO with recommendations regarding project continuance or termination, baselines, management plan, (next) periodic review, and any follow-up actions required. The CIO will issue a formal, written approval or rejection of committee recommendations. Approvals may be issued contingent upon the proponent agency addressing specific recommendations from the Oversight Committee. Approvals will also include the date for the next periodic review of the

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project by the Oversight Committee. Based on recommendations from the Oversight Committee, the CIO will issue a written decision to direct necessary modifications to insure the success of a project, or will recommend to the ITIB to terminate the project.

As a supplement to regular project review and oversight, project managers for all Major IT Projects must implement an independent verification and validation (IV&V) strategy. IV&V should be performed by an organization that is technically, managerially, and financially independent of the development organization. The IV & V strategy for Major IT Projects will be reviewed and approved as part of the Major IT Project oversight process. IV & V of Non-Major IT Projects is encouraged.

As specified in the *Code of Virginia*, research projects, research initiatives, or instructional programs at public institutions of higher education estimated to cost more than \$1 million of general fund appropriations may be subject to periodic review by the CIO if the projects are deemed mission-critical by the institution or of statewide application by the CIO. Criteria for determining whether such projects are mission-critical shall be developed by the CIO and Secretary of Education in consultation with public institutions of higher education. Consistent with the *Code of Virginia*, the oversight process will not supersede the responsibility of a board of visitors for the management and operations of an institution of higher education.

***Procurements in Support of Major IT Projects***

When a Request for Proposal (RFP) or Invitation for Bid (IFB) is used to procure goods or services for an approved Major IT Project, the agency is required to submit a copy of the RFP or IFB to the PMD. A PMD project management specialist will review the RFP or IFB and recommend its approval or rejection to the CIO. The project management specialist may require additional documentation from the agency. The CIO is the final authority for approval of an RFP or IFB for release and has final approval authority for the proposed contract before the contract is awarded.

As required by the *Code of Virginia*, as part of the project initiation process, agencies must identify to PMD all projects involving a contract, agreement or financing arrangement that requires that the Commonwealth either pay for the contract by foregoing revenue collections, or allows or assigns to another party the collection on behalf of or for the Commonwealth any fees, charges, or other assessment or revenues to pay for the project. Identified projects will be required to comply with additional reporting requirements to the Department of Planning and Budget.

***Project Life-cycle Processes*****Project Selection**

Agencies are asked to identify planned projects, including telecommunications projects, as part of the Agency IT Strategic Plan. All proposed or continuing projects with expenditures planned,

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regardless of funding source, should be identified in the Agency IT Strategic Plan. Criteria for the evaluation and approval or “selection” of projects, with a focus on Major IT Projects are specified in the *Code of Virginia* to include:

- Degree to which the project is consistent with the Commonwealth's overall strategic plan
- Technical feasibility of the project;
- Benefits to the Commonwealth of the project, including customer service improvements;
- Risks associated with the project;
- Continued funding requirements;
- Past performance by the agency on other projects.

Approval by the CIO of the Agency IT Strategic Plan constitutes selection approval allowing agencies to proceed with project initiation. Approval of the project, as reflected in the Agency IT Strategic Plan, also satisfies the legislative requirement for “project planning approval” by the CIO. Approved agency IT strategic plans define an agency’s technology project portfolio.

### Project Initiation

IT projects selected for inclusion as part of the approved agency IT Strategic Plan must go through a formal initiation process prior to proceeding with detailed project planning and subsequent execution. Agencies seeking to initiate detailed project planning and subsequent execution are required to submit a project proposal outlining the business need for the project, the proposed technology solution, if known, and an explanation of how the project would support the agency's business objectives and the Commonwealth's information technology plan. The project proposal is meant to ensure that the implementing organization has a clear understanding of the objectives and scope of the project and that the project is a sound solution to a business need or issue.

The project proposal will provide the basis for a project charter authorizing the allocation of resources for initiation of the project. Agencies seeking to initiate detailed project planning and subsequent execution of an IT project are required to submit a project charter along with their project proposal. Approval of the project charter represents the official initiation of the project and beginning of the project-planning phase. The approval of the project proposal and charter also satisfies the legislative requirement within the *Code of Virginia* for “project development approval” by the ITIB. Project development approval includes approval for an agency to proceed with the planning and execution phases of the CTM life-cycle. Once a Major IT Project is approved, the project will be established as an active project on the Commonwealth Major IT Project Status Report Dashboard. Project proposals, charters, and Dashboard status reports should be submitted in the format prescribed in the Commonwealth Project Management standards and guidelines available on the Commonwealth Project Management Website (<http://www.vita.virginia.gov/projects/cpm/index.cfm>).

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Project Planning

A project plan must be developed for all Major IT Projects. The CIO, upon recommendation of the Internal Agency Oversight Committee, must approve project plans including project cost, schedule, and performance baselines for Major IT Projects. The Agency Head or Project Sponsor should approve project plans for Non-major IT Projects. The project plan will be revised as needed to reflect changes approved by the agency project management organization and internal oversight committee in accordance with the Commonwealth Project Management Standard.

Project Execution and Control

Project execution should be in accordance with the approved project plan. Specific metrics will be established to measure progress against project baselines. Measures of success will be business-driven and measured incrementally through the life of the project.

Project Managers and Project Sponsors of Major IT Projects are responsible for tracking and measuring project progress against the approved project plan. As required by the *Code of Virginia*, an agency internal oversight committee must be established to conduct regular reviews of Major IT project execution to ensure the project is on track to achieve targeted measures of success. Project Managers must report the status of Major IT Projects for review by the Agency Head, the proponent Secretary, and the CIO via the Commonwealth IT Project Status Report “Dashboard”, according to the reporting schedule established by the CIO. Major IT Project Oversight and project reporting should be performed as prescribed in the Commonwealth Project Management standards and guidelines available on the Commonwealth Project Management Website (<http://www.vita.virginia.gov/projects/cpm/index.cfm>).

The Project Sponsor and Project Manager of Non-major IT Projects are responsible for tracking and measuring project progress against the approved project plan. For Non-major IT Projects, the Agency Head or established agency oversight organization should conduct regular reviews of the project execution to ensure the project is on track to achieve targeted measures of success.

Project Closeout

All Major IT Projects must complete a formal project closeout. All Non-major IT Projects should complete a formal project closeout. The purpose of the project closeout is to:

- Perform a final administrative review to account for resources and expenditures
- Perform a final project review to assess the actual versus planned results
- Document formal acceptance of project deliverables
- Identify lessons learned for feedback into the Commonwealth project management process

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For all Major IT Projects, a final project status report will be entered into the “Dashboard” by the Project Manager and approved by the CIO, upon recommendation of the agency internal oversight committee. Project closeout documents for Non-major IT Projects should be approved by the Project Sponsor and maintained by the agency.

On an annual basis, agencies must report to the CIO and the Director of Planning and Budget on performance measurement information for technology projects. The information shall include, but not be limited to, the degree to which projects were completed on time and within budget. The performance reporting will be based on guidance issued by the CIO and the Department of Planning and Budget.

#### Project Operations and Support

Once a project is completed, the product or service is transferred to the operational unit of the organization where it is then supported, managed and maintained. After the product or service has become operational for a sufficient period of time (typically six to 12 months), a Post Implementation Review (PIR) should be performed to evaluate whether the product or service is delivering the expected results. The actual project costs and benefits should be measured against the project plan. A determination should be made regarding continued operation of the system and whether modifications or enhancements are needed to improve the operation of the system. If system changes are necessary, management must decide which actions must be taken to achieve the desired return on the IT investment. The PIR should also document the successes and failures of both the investment decision and project management processes.

A PIR must be performed for all Major IT Projects, normally twelve months after project closeout. The agency will conduct a formal post implementation review. A Post Implementation Report will be submitted by the agency to PMD, documenting the successes and failures of the project and any approved follow-up actions. Lessons learned from the PIR process will be reviewed by the PMD of VITA and disseminated as appropriate. For Non-Major IT Projects, agencies and Secretariats are encouraged to utilize the PIR process.

### **Section 9: Commonwealth Asset Management (CAM)**

Commonwealth Asset Management is a disciplined process based on industry standards and best practices, like ITIM and IT Infrastructure Library (ITIL), for the management of information technology assets. CAM is defined as the process of planning, procuring, deploying, operating, maintaining, upgrading and disposing of information technology assets to achieve maximum return on investment over the life-cycle of the asset, in support of both the Commonwealth and agency IT strategic plans. An asset is a component of a business process and can include computer rooms, networks, digital and paper records, hardware, software, people, etc.

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The major objectives of CAM include:

- Optimizing utilization of all technology assets;
- Lowering operating costs;
- Maximizing asset availability for service delivery;
- Improving IT risk management;
- Improving productivity for service support;
- Improving organizational agility;
- Maximizing asset useful life;
- Improving the ability to monitor and manage change;
- Improving the ability to plan and budget for asset replacement;
- Ensuring financial records reflect the true picture of assets in the Commonwealth.

CAM includes both the collection of inventory information about IT assets and the analysis of this information to facilitate strategic planning, financial planning and accounting, procurement, help desk service delivery and customer support, and risk management planning and training. VITA, under the direction of the CIO and as owner of infrastructure assets, will build and maintain a detailed inventory of Commonwealth technology infrastructure assets. Agencies, under the direction of the CIO and as owners of application assets, will build and maintain a detailed inventory of agency technology application assets. In collaboration with VITA, agencies will manage their asset portfolio throughout the lifecycle of the assets. Agency human resource asset management will follow the established *Code of Virginia* and DHRM policies and procedures.

#### Commonwealth Technology Portfolio

A Commonwealth Asset Portfolio will be established and maintained as part of the Agency IT Strategic Planning Process. The Asset Portfolio will identify all technology assets in the Commonwealth and will serve as the centralized repository for asset information. Agencies will maintain their individual asset information in the Commonwealth Technology Portfolio as part of the routine process of updating their Agency IT Strategic Plan (ITSP).

#### Commonwealth Asset Manager

The business owner and manager of the Commonwealth Asset Portfolio is the CIO. The CIO will issue standards and guidelines, which will establish a comprehensive framework for agency participation in CAM. VITA will serve as the CAM executive agent for the CIO to insure consistent implementation of asset management processes and procedures. The Commonwealth Strategic Plan for Technology, the Commonwealth enterprise architecture (standards), and centralized technology procurement through VITA will support the achievement of CAM objectives.

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***Commonwealth Asset Life-cycle***Asset Planning

Asset planning is a structured approach to determine the right mix of assets required within the asset portfolio to meet established service level agreements in a cost-effective manner while minimizing risk to service delivery. In the Commonwealth of Virginia, asset planning is conducted via the Agency IT Strategic Planning process, which builds the Commonwealth Technology Portfolio.

The Commonwealth Technology Portfolio is a repository for agency IT investments, both projects and assets. The portfolio captures the “As Is” view of an agency’s IT architecture and facilitates the identification of and migration to the “To Be” IT architecture. The identification of and migration to the “To Be” architecture begins with a comprehensive analysis of the current Commonwealth Technology Portfolio (“As Is” IT architecture), and an evaluation of the ability of the current technology portfolio to meet the business needs of the agency. The evaluation typically takes the form of a gap analysis of the “As Is” to the “To Be” state and results in the identification of projects and procurements necessary to move the organization to the “To Be” state. The gap analysis compares the proposed technology environment with the actual technology environment to ensure that assets are selected and deployed to meet the business needs of the agency.

Upon completion of a gap analysis, appropriate standardization and optimization actions and recommendations for assets are submitted as part of the Agency IT Strategic Plan. Asset transformation projects and procurements are identified in the Agency ITSP for the approval of the CIO.

While the asset planning process begins with preparation of the Agency ITSP, agencies must continuously manage and evaluate their technology portfolio through industry standards and best practices like ITIL. This assures that the "As Is" inventory of assets and planned asset deployments stay continuously aligned with the business needs of the agency and the Commonwealth.

Asset Procurement

Assets may be individually procured or developed as a product of a project implementation. As specified in the *Code of Virginia*, VITA will be responsible for all technology procurements unless otherwise delegated by the CIO. Assets must be procured in accordance with the established Commonwealth and VITA procurement standards.

Requirements for asset procurements should be carefully crafted to ensure the resulting purchase meets the required business need, while supporting the Commonwealth Strategic Plan for Technology and enterprise architecture. Likewise, assets deployed as the result of a project

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implementation must also adhere to the Commonwealth Strategic Plan for Technology and support both architecture standards and business strategy.

Asset Deployment

The asset deployment phase of the CAM life-cycle includes activities to receive, reconcile, and deploy assets within the Commonwealth, following industry standards and best practices to protect the investment. As new assets are deployed, information should be shared across the agency in a timely manner to insure the asset, service and financial systems are properly updated in order to manage the asset investment. Agencies must ensure that technology asset deployment strategies are implemented as planned in support of overall business strategy.

Asset information should be collected and recorded in the Agency Asset Portfolio in a timely manner. Standard processes based upon industry best practices like ITIL will be used to track the deployment of new assets.

Asset Operations and Maintenance

The agency will establish industry standards and best practices (i.e. ITIL) for service delivery, and service support processes and procedures to properly operate, maintain, and manage assets. Operations and maintenance includes change management procedures to track asset lifecycle activity through the service support process, to provide service status and reporting, and maintain a complete history of asset changes.

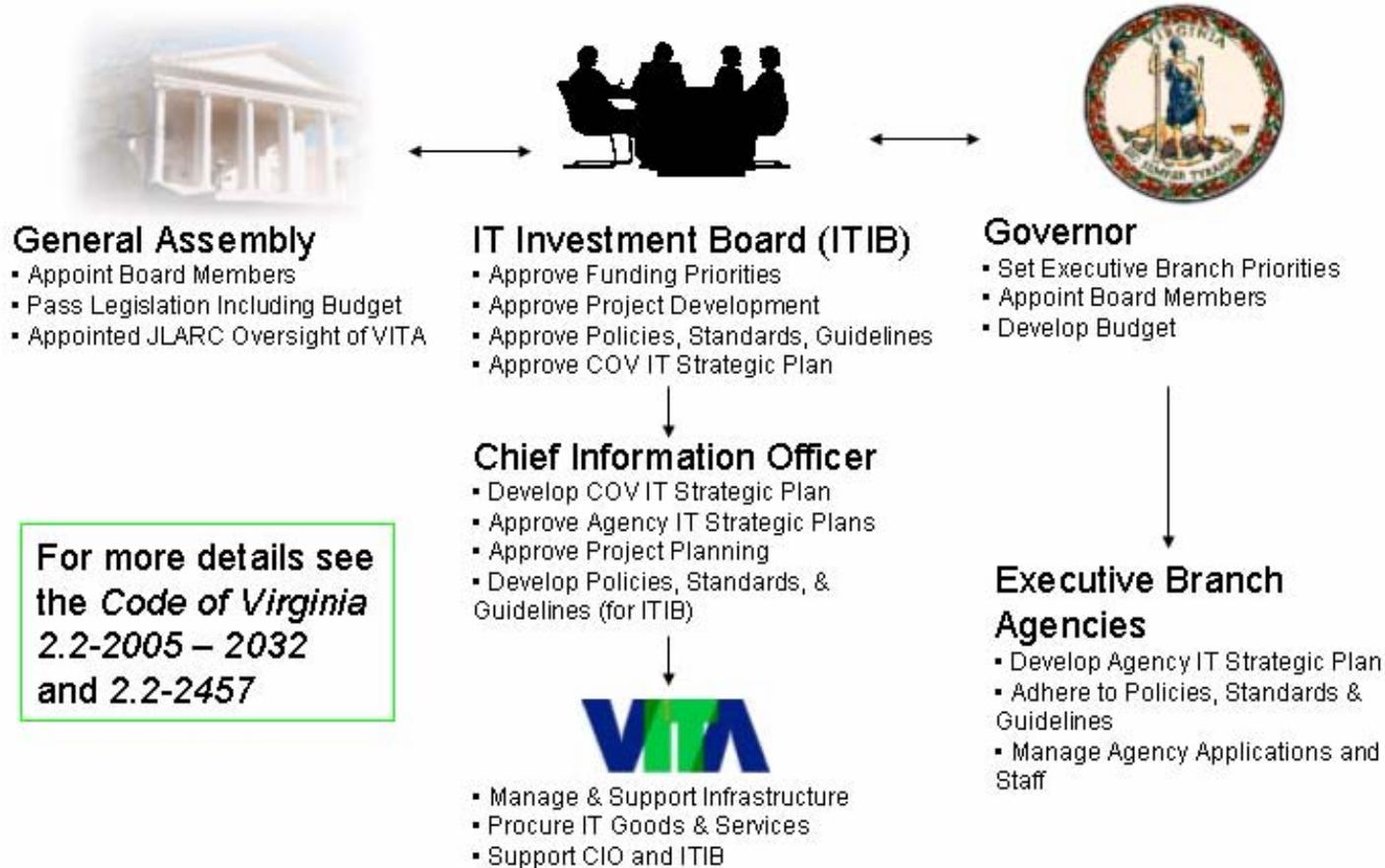
Asset Retirement

VITA will develop standards and procedures for rehabilitation and disposition of technology assets in accordance with the COV Agency Procurement and Surplus Property Manual. Asset retirement standards will take into consideration advancement of the Commonwealth enterprise architecture, contract renewals, life-cycle stage, emerging and new technologies, and cost and value considerations. Procedures for asset retirement will be established to insure proper security is implemented, including data removal and cleansing as defined by the Commonwealth of Virginia.

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**Appendix A: CTM Governance Structure**

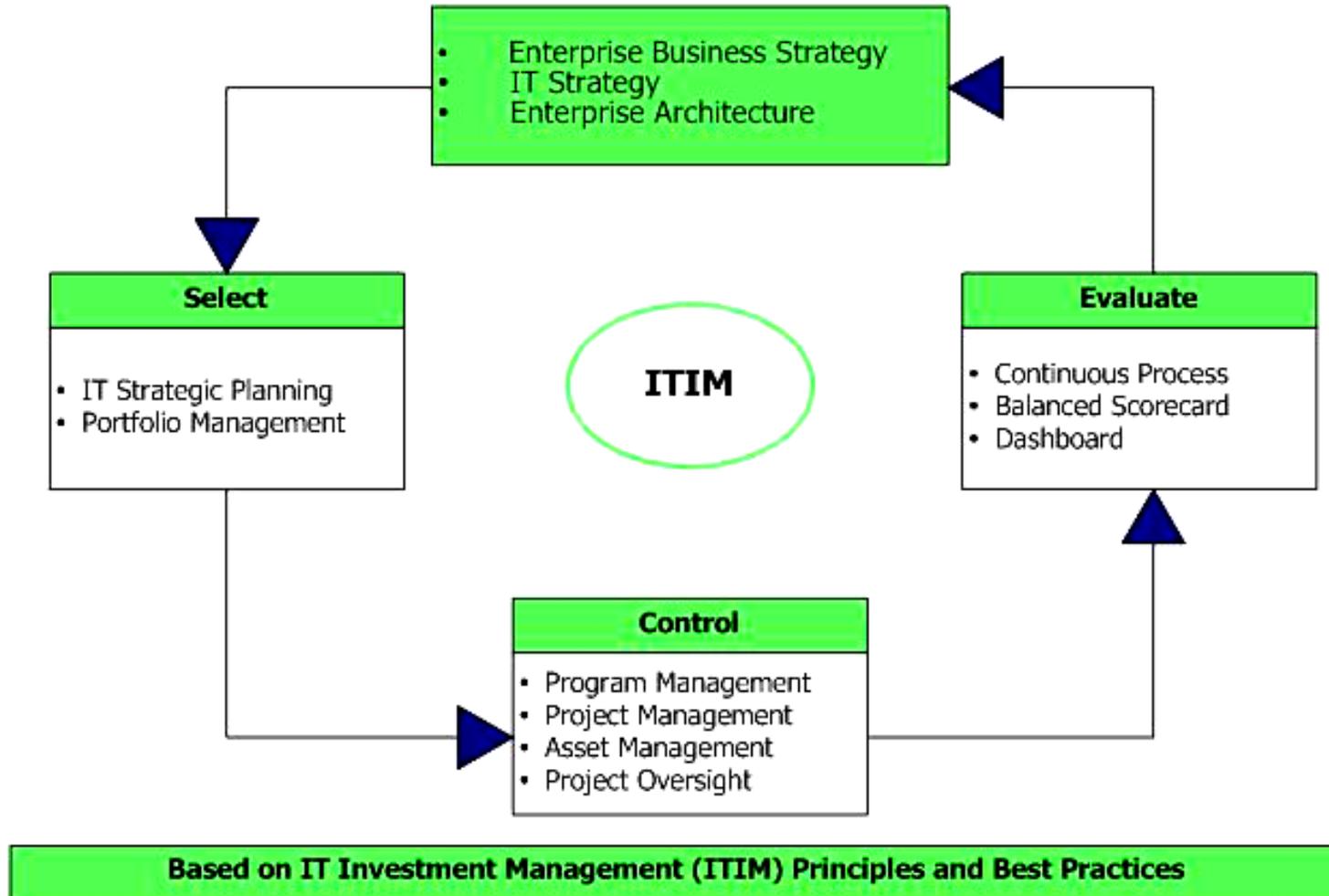
The following chart documents the graphical view of the CTM Governance as established in the *Code of Virginia*.



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**Appendix B: CTM Integrated ITIM**

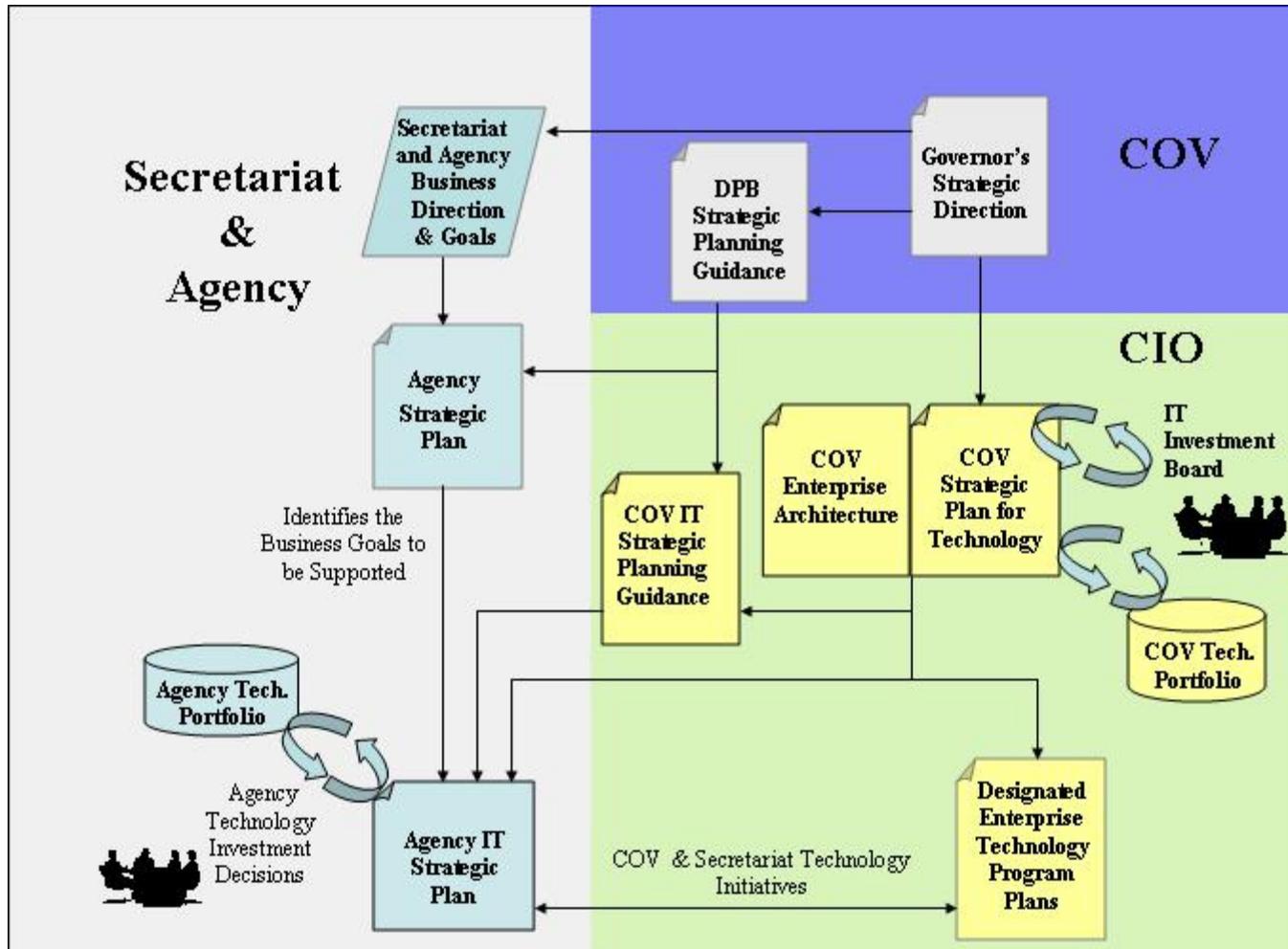
The following chart documents the ITIM framework and supporting processes for the selection, control, and evaluation of Commonwealth IT investments.



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**Appendix C: CTM IT Strategic Planning Process**

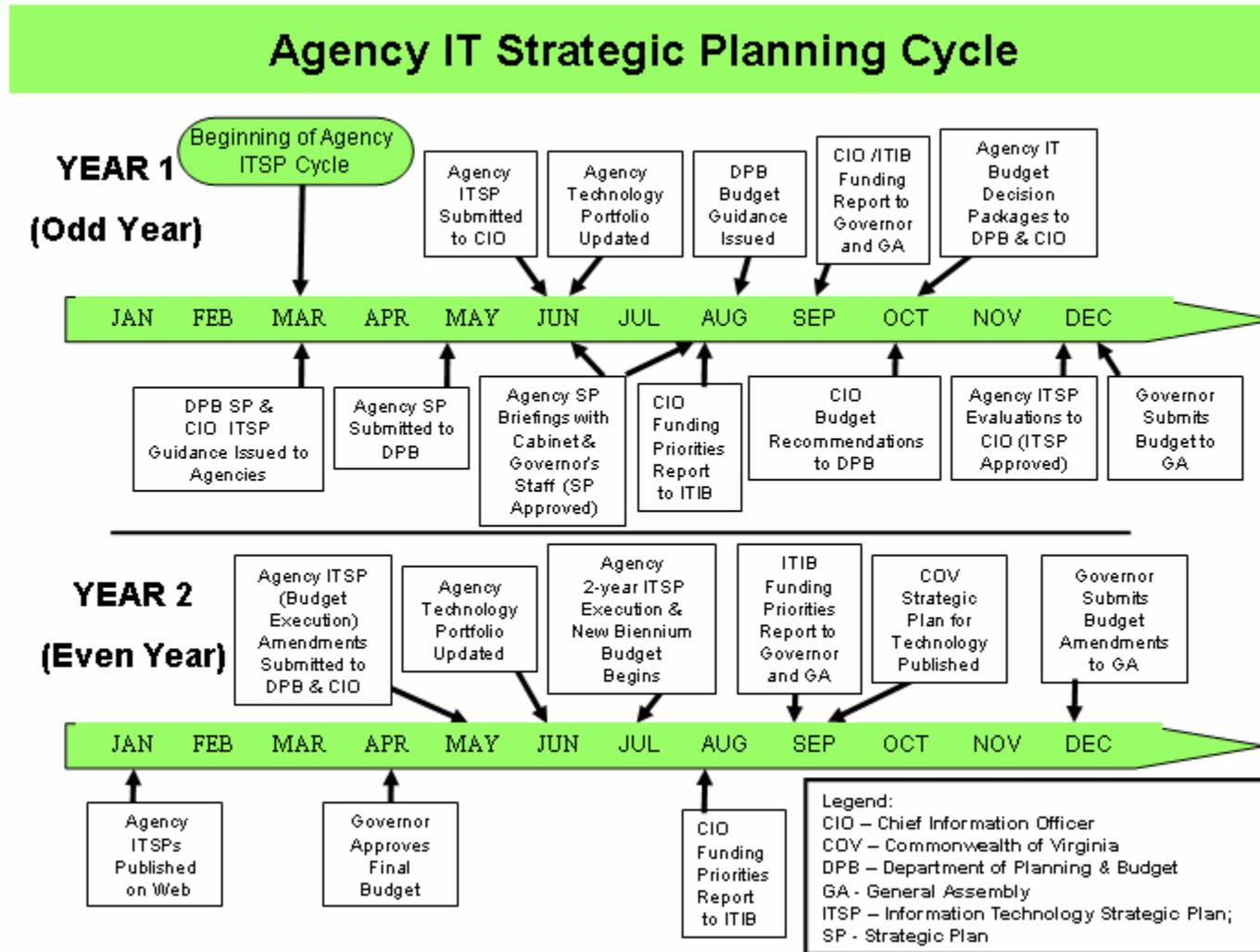
The following chart documents the CTM IT Strategic Planning process.



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Appendix D: CTM Agency IT Strategic Planning Cycle

The following chart documents the general schedule of activities for the IT strategic planning cycle. Specific dates for each activity will be determined by the Governor’s and the General Assembly’s schedules for biennium strategic planning and budget submissions.



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Appendix E: CTM Life-cycle – Major IT Project

The following chart documents the life-cycle phases for Major IT Projects, associated decision points, and management team responsibilities during each phase.

Life-cycle Phase	Selection	Initiation	Planning	Execution & Control	Closeout	Operations & Support
<b>Decision Points</b>	Selection Approved	Initiation Approved	Baseline Approved	Implementation Approved	Closeout Approved	End of Project
<b>Process Roles and Responsibilities</b>						
<b>IT Investment Board (ITIB)</b>		Approve Project Initiation <i>(Code of Virginia – Development Approval)</i>	May Terminate Project	May Terminate Project		
<b>Chief Information Officer (CIO)</b>	Approve Agency IT Strategic Plan <i>(Code of Virginia - Planning Approval)</i>	Recommend Project Initiation to ITIB	- Resolve Issues as Required - Modify, Suspend or Recommend Termination	- Monitor Project Progress - Approve Project Status Reports - Modify, Suspend, or Recommend Termination	Approve Project Closeout	
<b>Project Management Division</b>	Recommend Approval of IT Strategic Plan to CIO	Recommend Project Initiation to CIO	Assist & Support Project Detailed Planning	- Review Project Progress - Assist & Support Project Development	- Complete Final Project Evaluation	- Review Post Implementation Report
<b>Proponent Secretariat</b>	Review Agency IT Strategic Plan	Recommend Project Initiation	Resolve Issues as Requested by Agency and CIO	- Evaluate Project Status Reports - Resolve Issues as Requested by Agency and CIO	Review Project Closeout Report	
<b>Agency</b>	Select Project in Agency IT Strategic Plan 	Submit Project Proposal & Charter	Submit Detailed Project Plan	- Submit Project Status Reports - Evaluate Overall Project Progress	- Submit Project Closeout Documentation	- Conduct Post Implementation Review - Submit Post Implementation Report

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**Appendix F: CTM Life-cycle – Non-major IT Projects with a Total Estimated Cost Greater from \$100,000 to \$1 million**

The following chart documents the life-cycle phases for Non-major IT Projects, associated decision points and management team responsibilities during each phase.

Life-cycle Phase	Selection	Initiation	Planning	Execution & Control	Closeout	Operations & Support
<b>Decision Points</b>	Selection Approved	Initiation Approved	Baseline Approved	Implementation Approved	Closeout Approved	End of Project
<b>Process Roles and Responsibilities</b>						
<b>Chief Information Officer (CIO)</b>	Approve IT Strategic Plan	Approve Project				
<b>Project Management Division</b>	Recommend Approval of IT Strategic Plan	Recommend Project Approval			- Review report on project success or failure	
<b>Proponent Secretariat</b>	Review IT Strategic Plan					
<b>Agency</b>	<ul style="list-style-type: none"> <li>- Select Project to Include in the IT Strategic Plan</li> <li>- Identify Business Needs and Recommend Projects</li> </ul> 	<ul style="list-style-type: none"> <li>- Approve Project Proposal &amp; Charter</li> <li>- Establish Oversight Structure</li> <li>- Develop Project Proposal &amp; Charter</li> <li>- Establish Non-major IT Project Approval Process</li> </ul>	<ul style="list-style-type: none"> <li>- Approve Project Plan</li> <li>- Resolve Issues as Required</li> <li>- Develop Project Plan (including Baselines)</li> </ul>	<ul style="list-style-type: none"> <li>- Approve Project Status Reports and Project Progress</li> <li>- Resolve Issues as Required</li> <li>- Evaluate Overall Project Progress</li> <li>- Manage Project</li> <li>- Report Project Progress</li> </ul>	<ul style="list-style-type: none"> <li>- Approve Project Closeout</li> <li>- Recommend Project Closeout</li> <li>- Prepare Closeout Documentation</li> <li>- Report project success or failure</li> </ul>	<ul style="list-style-type: none"> <li>- Recommend Post Implementation Actions</li> <li>- Conduct Post Implementation Review</li> </ul>

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## COMMONWEALTH OF VIRGINIA

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### Information Technology Resource Management Policy

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## TECHNOLOGY MANAGEMENT

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### Virginia Information Technologies Agency

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1 **Preface**  
2  
3 **Publication Designation**  
4 Commonwealth of Virginia (COV) Information  
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17 Code of Virginia, §2.2-2007;  
18 *(Powers and duties of the CIO)*  
19  
20 Code of Virginia, §2.2-2010;  
21 *(Powers and duties of the Virginia Information*  
22 *Technologies Agency; "VITA")*  
23  
24 Code of Virginia, §2.2-2017  
25 *(Powers and duties of the VITA-Division of Project*  
26 *Management)*  
27  
28 Code of Virginia, §2.2-2014  
29 *(Submission of information technology plans by state*  
30 *agencies and public institutions of higher education;*  
31 *designation of technology resource.)*  
32  
33 Code of Virginia, §2.2-2015  
34 *(Authority of CIO to modify or suspend major*  
35 *information technology projects; project termination)*  
36  
37 Code of Virginia, §2.2-2018; §2.2-2019; §2.2-2020;  
38 §2.2-2021  
39 *(Project planning approval; Project development*  
40 *approval; Procurement approval for major information*  
41 *technology projects; Project oversight)*  
42  
43 Code of Virginia, §2.2-2457; §2.2-2458;  
44 *(Powers and duties of the Information Technology*  
45 *Investment Board; the "Board")*  
46  
47  
48

49 Code of Virginia § 2.2-2651  
50 *(Powers and duties of the Council on Information*  
51 *Technology Services)*  
52 **Scope**  
53 This policy is applicable to all Executive Branch State  
54 agencies and institutions of higher education (hereinafter  
55 collectively referred to as "agencies") that are  
56 responsible for the management, development, purchase  
57 and use of information technology investments in the  
58 Commonwealth of Virginia. Local government entities  
59 are encouraged to consider the implications of this policy  
60 for their work.  
61 **Purpose**  
62 To establish a comprehensive and uniform policy for the  
63 management of technology investments in the  
64 Commonwealth of Virginia (COV).  
65 **General Responsibilities (Italics indicate**  
66 **Code of Virginia requirements)**  
67 **The Information Technology Investment Board (the**  
68 **"Board")**  
69 The Information Technology Investment Board is  
70 assigned the following general technology management  
71 responsibilities:  
72  
73 • *Appoint the Chief Information Officer as the chief*  
74 *administrative officer of the Board to oversee the*  
75 *operation of VITA pursuant to § 2.2-2005;*  
76  
77 • *Approve or disapprove the development of all major*  
78 *information technology projects as defined in § 2.2-*  
79 *2006. The Board may terminate any major*  
80 *information technology project recommended for*  
81 *termination by the Chief Information Officer*  
82 *pursuant to § 2.2-2015;*  
83  
84 • *Approve strategies, standards, and priorities*  
85 *recommended by the Chief Information Officer for*  
86 *the use of information technology for state agencies*  
87 *in the executive branch of state government;*  
88 • *Approve the four-year plan for information*  
89 *technology projects;*  
90  
91 • *Approve statewide technical and data standards for*  
92 *information technology and related systems;*  
93  
94 • *Approve statewide information technology*  
95 *architecture and related set of system standards;*  
96  
97 • *Approve criteria for the review and approval of the*  
98 *planning, scheduling and tracking of major*  
99 *information technology projects as defined in § 2.2-*  
100 *2006;*  
101

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- 1 • Adopt resolutions or regulations conferring upon  
2 the Chief Information Officer all such powers,  
3 authorities and duties as the Board deems  
4 necessary or proper to carry out the purposes of  
5 Chapter 20 of Title 2.2; and  
6
- 7 • Submit by September 1 of each year a list of  
8 recommended technology investment projects and  
9 priorities for funding such projects to the Governor  
10 and the General Assembly.

Chief Information Officer (CIO)

The Chief Information Officer is assigned the following general technology management responsibilities:

- 17 • Monitor trends and advances in information  
18 technology; develop a comprehensive, statewide,  
19 four-year strategic plan for information technology  
20 to include specific projects that implement the plan;  
21 and plan for the acquisition, management, and use  
22 of information technology by state agencies. The  
23 statewide plan shall be updated annually and  
24 submitted to the Board for approval. In developing  
25 and updating the plan, the CIO shall consider the  
26 advice and recommendations of the Council on  
27 Technology Services created pursuant to § 2.2-  
28 2651.  
29
- 30 • Direct the formulation and promulgation of  
31 policies, guidelines, standards, and specifications  
32 for the purchase, development, and maintenance of  
33 information technology for state agencies,  
34 including, but not limited to, those (i) required to  
35 support state and local government exchange,  
36 acquisition, storage, use, sharing, and distribution  
37 of geographic or base map data and related  
38 technologies, (ii) concerned with the development of  
39 electronic transactions including the use of  
40 electronic signatures as provided in § 59.1-496, and  
41 (iii) necessary to support a unified approach to  
42 information technology across the totality of state  
43 government, thereby assuring that the citizens and  
44 businesses of the Commonwealth receive the  
45 greatest possible security, value, and convenience  
46 from investments made in technology.  
47
- 48 • Direct the development of policies and procedures,  
49 in consultation with the Department of Planning  
50 and Budget, that are integrated into the  
51 Commonwealth's strategic planning and  
52 performance budgeting processes, and that state  
53 agencies and public institutions of higher education  
54 shall follow in developing information technology  
55 plans and technology-related budget requests. Such  
56 policies and procedures shall require consideration  
57 of the contribution of current and proposed  
58 technology expenditures to the support of agency  
59 and institution priority functional activities, as well  
60 as current and future operating expenses, and shall  
61 be utilized by all state agencies and public

- 62 institutions of higher education in preparing budget  
63 requests.
- 64
- 65 • Review budget requests for information technology  
66 from state agencies and public institutions of higher  
67 education and recommend budget priorities to the  
68 Information Technology Investment Board.
- 69
- 70 • This review shall include, but not be limited to, all  
71 data processing or other related projects for  
72 amounts exceeding \$100,000 in which the agency or  
73 institution has entered into or plans to enter into a  
74 contract, agreement or other financing agreement  
75 or such other arrangement that requires that the  
76 Commonwealth either pay for the contract by  
77 foregoing revenue collections, or allows or assigns  
78 to another party the collection on behalf of or for  
79 the Commonwealth any fees, charges, or other  
80 assessments or revenues to pay for the project. For  
81 each project, the agency or institution shall provide  
82 the CIO (i) a summary of the terms, (ii) the  
83 anticipated duration, and (iii) the cost or charges to  
84 any user, whether a state agency or institution or  
85 other party not directly a party to the project  
86 arrangements. The description shall also include  
87 any terms or conditions that bind the  
88 Commonwealth or restrict the Commonwealth's  
89 operations and the methods of procurement  
90 employed to reach such terms.
- 91
- 92 • Direct the development of policies and procedures  
93 for the effective management of information  
94 technology investments throughout their entire life-  
95 cycles, including, but not limited to, project  
96 definition, procurement, development,  
97 implementation, operation, performance evaluation,  
98 and enhancement or retirement. Such policies and  
99 procedures shall include, at a minimum, the  
100 periodic review by the CIO of agency and public  
101 institution of higher education information  
102 technology projects estimated to cost \$1 million or  
103 more or deemed to be mission-critical or of  
104 statewide application by the CIO.  
105
- 106 • Report annually to the Governor and the Joint  
107 Commission on Technology and Science created  
108 pursuant to § 30-85 on the use and application of  
109 information technology by state agencies and public  
110 institutions of higher education to increase  
111 economic efficiency, citizen convenience, and public  
112 access to state government.
- 113
- 114 • Direct the development of policies and procedures  
115 that require VITA to review information technology  
116 projects proposed by state agencies and institutions  
117 exceeding \$100,000, and recommend whether such  
118 projects be approved or disapproved. The CIO  
119 shall disapprove projects between \$100,000 and \$1  
120 million that do not conform to the statewide  
121 information plan or to the individual plans of state  
122 agencies or institutions of higher education

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1 Virginia Information Technologies Agency (VITA)

59 The Project Management Division (PMD) of VITA

2 The Virginia Information Technologies Agency is  
3 assigned the following general technology management  
4 responsibilities:

60 The Division of Project Management is assigned the  
61 following general technology management  
62 responsibilities:

- 5 • *Prescribe regulations necessary or incidental to the*  
6 *performance of duties or execution of powers*  
7 *conferred under this chapter.*
- 8
- 9 • *Plan and forecast future needs for information*  
10 *technology and conduct studies and surveys of*  
11 *organizational structures and best management*  
12 *practices of information technology systems and*  
13 *procedures.*
- 14
- 15 • *Assist state agencies and public institutions of*  
16 *higher education in the development of information*  
17 *management plans and the preparation of budget*  
18 *requests for information technology that are*  
19 *consistent with the policies and procedures*  
20 *developed pursuant to § 2.2-2007.*
- 21
- 22 • *Develop and adopt policies, standards, and*  
23 *guidelines for managing information technology by*  
24 *state agencies and institutions.*
- 25
- 26 • *Develop and adopt policies, standards, and*  
27 *guidelines for the procurement of information*  
28 *technology and telecommunications goods and*  
29 *services of every description for state agencies.*
- 30
- 31 • *Direct the establishment of statewide standards for*  
32 *the efficient exchange of electronic information and*  
33 *technology, including infrastructure, between the*  
34 *public and private sectors in the Commonwealth.*
- 35
- 36 • *Direct the compilation and maintenance of an*  
37 *inventory of information technology, including, but*  
38 *not limited to, personnel, facilities, equipment,*  
39 *goods, and contracts for services.*
- 40
- 41 • *Develop statewide technical and data standards for*  
42 *information technology and related systems to*  
43 *promote efficiency and uniformity*
- 44
- 45 • *Evaluate the needs of agencies in the*  
46 *Commonwealth with regard to (i) a consistent,*  
47 *reliable, and secure information technology*  
48 *infrastructure, (ii) existing capabilities with regard*  
49 *to building and supporting that infrastructure, and*  
50 *(iii) recommended approaches to ensure the future*  
51 *development, maintenance, and financing of an*  
52 *information technology infrastructure befitting the*  
53 *needs of state agencies and the service level*  
54 *requirements of its citizens.*
- 55
- 56
- 57
- 58

- 63 • *Implement the approval process for information*  
64 *technology projects developed in accordance with §*  
65 *2.2-2008;*
- 66
- 67 • *Assist the CIO in the development and*  
68 *implementation of a project management*  
69 *methodology to be used in the development of and*  
70 *implementation of information technology projects*  
71 *in accordance with this article;*
- 72
- 73 • *Provide ongoing assistance and support to state*  
74 *agencies and public institutions of higher education*  
75 *in the development of information technology*  
76 *projects;*
- 77
- 78 • *Establish a program providing cost-effective*  
79 *training to agency project managers;*
- 80
- 81 • *Review information management and information*  
82 *technology plans submitted by agencies and public*  
83 *institutions of higher education and recommend to*  
84 *the CIO the approval of such plans and any*  
85 *amendments thereto;*
- 86
- 87 • *Monitor the implementation of information*  
88 *management and information technology plans and*  
89 *periodically report its findings to the CIO;*
- 90
- 91 • *Assign project management specialists to review*  
92 *and recommend information technology proposals*  
93 *based on criteria developed by the Division based*  
94 *on the (i) degree to which the project is consistent*  
95 *with the Commonwealth's overall strategic plan; (ii)*  
96 *technical feasibility of the project; (iii) benefits to*  
97 *the Commonwealth of the project, including*  
98 *customer service improvements; (iv) risks*  
99 *associated with the project; (v) continued funding*  
100 *requirements; and (vi) past performance by the*  
101 *agency on other projects; and*
- 102
- 103 • *Provide oversight for state agency information*  
104 *technology projects.*
- 105

106 Executive Branch Secretaries

107 Executive Branch Secretaries are assigned the following  
108 general technology management responsibilities:

- 109
- 110 • *Review information management plans (IT*  
111 *Strategic Plans) submitted by agencies and*  
112 *institutions of higher education within the*  
113 *Secretariat.*
- 114

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- 1 • Make appropriate recommendations to the CIO  
2 regarding COV enterprise technology programs and  
3 projects, throughout the program or project life-  
4 cycle, which includes program or project initiation,  
5 planning, execution, closeout, and operations and  
6 support.
- 7
- 8 • Review agency major IT projects and make  
9 appropriate recommendations to the CIO,  
10 throughout the project life-cycle, which includes the  
11 project initiation, planning, execution, closeout, and  
12 operations and support phases.

13 Executive Branch State Agencies

- 14 • State Agencies are assigned the following general  
15 technology management responsibilities:
- 16
- 17 • *The head of each state agency shall designate an  
18 existing employee to be the agency's information  
19 technology resource who shall be responsible for  
20 compliance with the procedures, policies, and  
21 guidelines established by the CIO.*
- 22
- 23 • *All state agencies and public institutions of higher  
24 education shall prepare and submit information  
25 technology plans to the CIO for review and  
26 approval. All state agencies and public institutions  
27 of higher education shall maintain current  
28 information technology plans that have been  
29 approved by the CIO.*
- 30
- 31 • *Prior to proceeding with any major information  
32 technology project, an agency shall submit to the  
33 Division (PMD) a project proposal, outlining the  
34 business need for the project, the proposed  
35 technology solution, if known, and an explanation  
36 of how the project would support the agency's  
37 business objectives and the Commonwealth's  
38 information technology plan. The project  
39 management specialist may require the submission  
40 of additional information if needed to adequately  
41 review any such proposal.*
- 42
- 43 • *Upon approval of the CIO of the project plan, an  
44 agency shall submit to the Division (PMD) a project  
45 development proposal containing (i) a detailed  
46 business case including a cost-benefit analysis; (ii)  
47 a business process analysis, if applicable; (iii)  
48 system requirements, if known; (iv) a proposed  
49 development plan and project management  
50 structure; and (v) a proposed resource or funding  
51 plan. The project management specialist may  
52 require the submission of additional information  
53 necessary to meet the criteria developed by the  
54 Division (PMD).*
- 55
- 56 • *Upon approval of the Board of the project  
57 development proposal involving a major  
58 information technology project that requires the  
59 procurement of goods or services, the agency shall*

- 60 *submit a copy of any Invitation for Bid (IFB) or*  
61 *Request for Proposal (RFP) to the Division (PMD).*  
62 *The project management specialist shall review the*  
63 *IFB or RFP and recommend its approval or*  
64 *rejection to the CIO. The CIO shall have the final*  
65 *authority to approve the IFB or RFP prior to its*  
66 *release and shall approve the proposed contract for*  
67 *the award of the project.*
- 68
- 69 • *Whenever an agency has received approval from*  
70 *the Board to proceed with the development and*  
71 *acquisition of a major information technology*  
72 *project, the CIO shall establish an internal agency*  
73 *oversight committee. The internal agency oversight*  
74 *committee shall provide ongoing oversight for the*  
75 *project and have the authority to approve or reject*  
76 *any changes in the project's scope, schedule, or*  
77 *budget. The CIO shall ensure that the project has*  
78 *in place adequate project management and*  
79 *oversight structures for addressing major issues*  
80 *that could affect the project's scope, schedule, or*  
81 *budget and shall address issues that cannot be*  
82 *resolved by the internal agency oversight*  
83 *committee.*
- 84
- 85 • *Whenever a statewide or multiagency project has*  
86 *received approval from the Board, the primary*  
87 *project oversight shall be conducted by a committee*  
88 *composed of representatives from agencies*  
89 *impacted by the project, which shall be established*  
90 *by the CIO.*
- 91
- 92 • *As part of the Agency IT Strategic Planning*  
93 *process, each agency will develop, manage, and*  
94 *maintain an Agency Technology Portfolio.*  
95 *Agencies will use the Agency Technology Portfolio*  
96 *to support technology investment decisions,*  
97 *including the identification of all major technology*  
98 *procurements and projects to be incorporated in the*  
99 *Agency IT Strategic Plan. Agencies are required to*  
100 *utilize Information Technology Investment*  
101 *Management (ITIM) based practices in their IT*  
102 *strategic planning efforts. Agency Technology*  
103 *Portfolios will be updated at least annually, and as*  
104 *needed, to ensure the portfolio accurately reflects*  
105 *current and planned agency technology investments.*
- 106
- 107 • *Comply with the policies, standards, and guidelines*  
108 *for the management of information technology*  
109 *resources in the Commonwealth.*
- 110
- 111 • *Plan and manage agency IT projects, throughout the*  
112 *project life-cycle, which includes the project*  
113 *initiation, planning, execution, closeout, and*  
114 *operations and support phases.*
- 115
- 116 • *Propose the initiation of major IT projects to the*  
117 *CIO. Manage approved major IT projects,*  
118 *throughout the project life-cycle, which includes*  
119 *project initiation, planning, execution, closeout, and*  
120 *operations and support phases.*
- 121

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- 1 • *On an annual basis, each agency must report to the*  
2 *CIO and the director of Planning and Budget*  
3 *performance measurement information for*  
4 *technology projects. The information shall include,*  
5 *but not be limited to, the degree to which projects*  
6 *were completed on time and within budget. The*  
7 *performance reporting will be based on guidance*  
8 *issued by the CIO and the Department of Planning*  
9 *and Budget.*

10

11

12 **Council on Technology Services (COTS)**

13 The Council on Technology Services is assigned the  
14 following general technology management  
15 responsibility:

- 16  
17 • *The purpose of the Council shall be to advise Chief*  
18 *Information Officer on the services provided by the*  
19 *Virginia Information Technologies Agency and the*  
20 *development and use of applications in state*  
21 *agencies and public institutions of higher*  
22 *education.*

23

24 • ***Related COV ITRM Policies,***  
25 ***Standards, and Guidelines***

- 26 • IT Strategic Planning & Portfolio Management  
27 Standard (To be published)
- 28 • Model Standard for Maintenance & Enhancement  
29 Projects (91-5)
- 30 • Model Standard for Large Scope Projects (91-3)
- 31 • Model Standard for Small Scope Projects (91-4)
- 32 • Project Management Standard (To be published)
- 33 • Technology Management Glossary (COV ITRM  
34 Standard GOV2003-02.1)
- 35 • Portfolio Management Guideline (To be published)
- 36 • Project Management Guideline (COV ITRM  
37 Standard GOV2003-02.2)

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1

**Section 1: Introduction**

2

3

4

***Background***

5

6 The COV ITRM Policy GOV 2003-02.4 establishes a comprehensive and uniform policy for the  
7 management of technology investments in the Commonwealth of Virginia. This policy is  
8 applicable to all State agencies and institutions of higher education (hereinafter collectively  
9 referred to as “agencies”) that are responsible for the management, development, purchase and  
10 use of information technology investments in the Commonwealth of Virginia. Derived from  
11 relevant research and “best practices” in both the public and private sectors, the policy has been  
12 approved by the Commonwealth Chief Information Officer (CIO) and the Commonwealth  
13 Information Technology Investment Board (ITIB). Complete implementation of the policy will  
14 include development and rollout of supporting standards, guidelines, and tools for managing  
15 information technology at state agencies. Local governments, while not bound by the CTM  
16 policy, are encouraged to follow the general technology management processes described in the  
17 policy and provide feedback related to local government technology management issues.

***Frequently Used Terms and Definitions***

18  
19 The following frequently used terms and definitions are essential to understanding  
20 Commonwealth Technology Management. Other definitions, related to technology management,  
21 appear within the body of this policy. A complete glossary of technology management terms  
22 used by the Commonwealth of Virginia is available on-line at the Virginia Information  
23 Technologies Agency (VITA) Website, <http://www.vita.virginia.gov>.

24 **Asset** - Component of a business process and can include computer rooms, networks,  
25 digital and paper records, hardware, software, people, etc.

26 The **Common Requirements Vision (CRV)** is the document that presents the business  
27 case for the Commonwealth Enterprise Architecture (EA) Initiative and represents the  
28 initial step in the evolution of the EA process model. The CRV establishes the  
29 agreements reached between business and IT leaders regarding: the most significant,  
30 influencing trends on the enterprise; the enterprise business strategies that will drive the  
31 EA; the information required by the business decision makers to satisfy the enterprise  
32 business strategies; implications for application portfolio development; and the  
33 requirements for the technical architecture.

34 A **Commonwealth Project** is defined as a temporary endeavor, undertaken by a  
35 Commonwealth executive branch agency (or agencies), to deliver a unique product or  
36 service. Commonwealth projects are expected to follow project management best  
37 practices and comply with project management requirements identified in the *Code of*  
38 *Virginia*, Governor’s Executive Orders, and COV ITRM policies, standards, and  
39 guidelines,

40 **Commonwealth Asset Management (CAM)** is defined as the process of planning,  
41 procuring, deploying, operating, maintaining, upgrading, and disposing of assets to

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1 achieve maximum return on investment over the life-cycle of the asset, in support of both  
2 Commonwealth and agency IT strategic plans.

3  
4 **Commonwealth Project Management (CPM)** is defined as the application of  
5 knowledge, skills, tools, and techniques to meet or exceed stakeholder needs and  
6 expectations from a Commonwealth Project.

7 **Commonwealth Technology Management (CTM)** is the application of information  
8 technology investment management (ITIM) principles and practices in support of the  
9 business activities of state government.

10 An **Enterprise** is an organization with common or unifying business interests. An  
11 enterprise may be defined at the Commonwealth level, the Secretariat level, or agency  
12 level for programs and projects requiring either vertical or horizontal integration within  
13 the Commonwealth, Secretariat, or agency, or between multiple Secretariats, agencies,  
14 and/or localities.

15 **Enterprise Architecture (EA)** is a method or framework for developing, implementing,  
16 and revising business-focused Information Technology (IT) guidance. The resulting  
17 guidance describes how the enterprise can best use technology and proven practices to  
18 improve the way it does business. In the Commonwealth, EA is built on the business  
19 needs of state and local government agencies. EA is described in a series of documents  
20 that showcase the development and revision process, the involved parties, and the  
21 resulting guidance. The Commonwealth EA relies on a governance model (roles and  
22 responsibilities), business and technical inputs, and knowledge of how agencies presently  
23 do business to develop explicit policies, standards, and guidelines for information  
24 technology use.

25 An **Enterprise Technology Program** is a group of related IT projects, aggregated for  
26 management purposes that support a defined enterprise.

27 **Enterprise Program Management (EPM)** is an Information Technology Investment  
28 Management-based methodology to manage programs and projects of enterprise  
29 significance. EPM focuses on the management of multiple related programs and projects  
30 that individually support the same mission or ongoing activity.

31 **Information Technology Infrastructure Library (ITIL)** is a publication developed by  
32 the Central Computer and Telecommunications Agency (CCTA) of the Office of  
33 Government Commerce (OGC) of the United Kingdom which document best practices  
34 and a comprehensive process model for IT service management.

35 **Information Technology Investment Management (ITIM)** is an integrated approach to  
36 managing IT investments that provides for the continuous identification, selection,  
37 control, life-cycle management, and evaluation of IT investments. ITIM uses structured  
38 processes to minimize risks and maximize return on IT investments. ITIM is the basis for  
39 the Commonwealth's approach to technology management. The primary sources of

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1 ITIM best practices referenced in the Commonwealth Technology Management policy  
2 include the U.S. General Accounting Office, META Group, Inc., Gartner, Inc., other  
3 states (Washington), and other Federal Agencies (NIH, DoD.)

4 **Technology Portfolio Management** is a management process used to select, control, and  
5 evaluate investments within and across asset and project portfolios. The primary focus of  
6 IT portfolio management is to ensure alignment between business goals and IT  
7 investments.

8 An **IT Strategic Plan** is a document that aligns IT strategy and investments with  
9 organizational business priorities, goals, and objectives.

10 **IT Strategic Planning (ITSP)** is an ITIM-based planning methodology that looks at IT  
11 resources and projects as capital investments and forms a foundation for the selection,  
12 control, and evaluation of IT resources and projects as part of a business-driven  
13 technology portfolio.

14 A **Technology Portfolio** is a repository of essential information about technology  
15 investments, structured to facilitate the evaluation of investment alternatives in support of  
16 an overall strategic business plan.

17

## 18 **Section 2: CTM Guiding Principles**

19 The guiding principles for Commonwealth Technology Management are to:

20 *Invest in technology to improve service to customers and, ultimately, to the citizens of*  
21 *Virginia.*

22 Technology within the Commonwealth is a means not an end. Technology investments must be  
23 aligned with critical business needs in order to provide the best possible service to  
24 Commonwealth constituents (customers and citizens). Justification for technology investments  
25 must clearly demonstrate business value. Anticipated benefits should be clearly identified and  
26 continuously assessed throughout the life-cycle of technology projects to ensure the desired  
27 business value is achieved.

28

29

30 *Achieve excellence in the performance of all technology services.*

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1 Recognizing that technology is pervasive throughout all aspects of constituent service delivery  
2 and across all levels of government, effective and efficient use of technology resources is of  
3 major importance to the Commonwealth. Standard processes for technology management must  
4 be clearly defined, repeatable, and adaptable to ensure that technology investments and projects  
5 deliver the best product or service, on time and within budget. Of equal importance, the  
6 Commonwealth technology workforce must strive for excellence in the delivery of services,  
7 courteously, efficiently and promptly, to all constituents.

8 *Exercise sound financial management of, and accountability for, technology investments.*

9 Technology represents a significant investment of Commonwealth resources. Competent and  
10 capable management of technology investments is, therefore, a required discipline to be  
11 exercised by all agencies within the Commonwealth. A common approach to technology  
12 management is needed to ensure responsible and accountable stewardship over technology  
13 investments.

14

15 **Section 3: CTM Governance**

16

17 Legislation enacted in 2003 restructured information technology in the Commonwealth, ushering  
18 in comprehensive reform of state government information technology. The legislation created a  
19 new Commonwealth Technology Management governance structure for planning and  
20 development of IT projects and the purchasing of IT equipment and services. CTM is governed  
21 by a ten member IT Investment Board comprised of the Secretary of Technology, the Auditor of  
22 Public Accounts and appointees by the Governor and the Joint Rules Committee of the  
23 legislature. The Board is charged with setting technology strategy and with reviewing and  
24 prioritizing enterprise-wide technology investments across state government. The Board also  
25 approves priorities, policies, standards, Major IT Project development or termination, and the  
26 four-year statewide plan for technology.

27

28 The legislation also created a single new state agency, the Virginia Information Technologies  
29 Agency (VITA), and a CIO position, appointed by the Board, to oversee the planning and  
30 development of all IT projects in the Commonwealth and the purchasing of IT equipment and  
31 services. The CIO serves as VITA's chief administrative officer and oversees the operation of  
32 VITA. Other responsibilities of the CIO include developing policies, standards and procedures  
33 for technology and project management, and approval and oversight of IT projects and  
34 procurements. VITA is responsible for managing the Commonwealth technology infrastructure,  
35 conducting technology procurements, and consolidating all state agency technology  
36 infrastructure staff into VITA, in accordance with targeted dates established in legislation.  
37 Appendix A provides a graphical view of the CTM IT Governance Structure. (Reference  
38 Appendix A.)

39

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**2 Section 4: CTM Approach and Objectives**

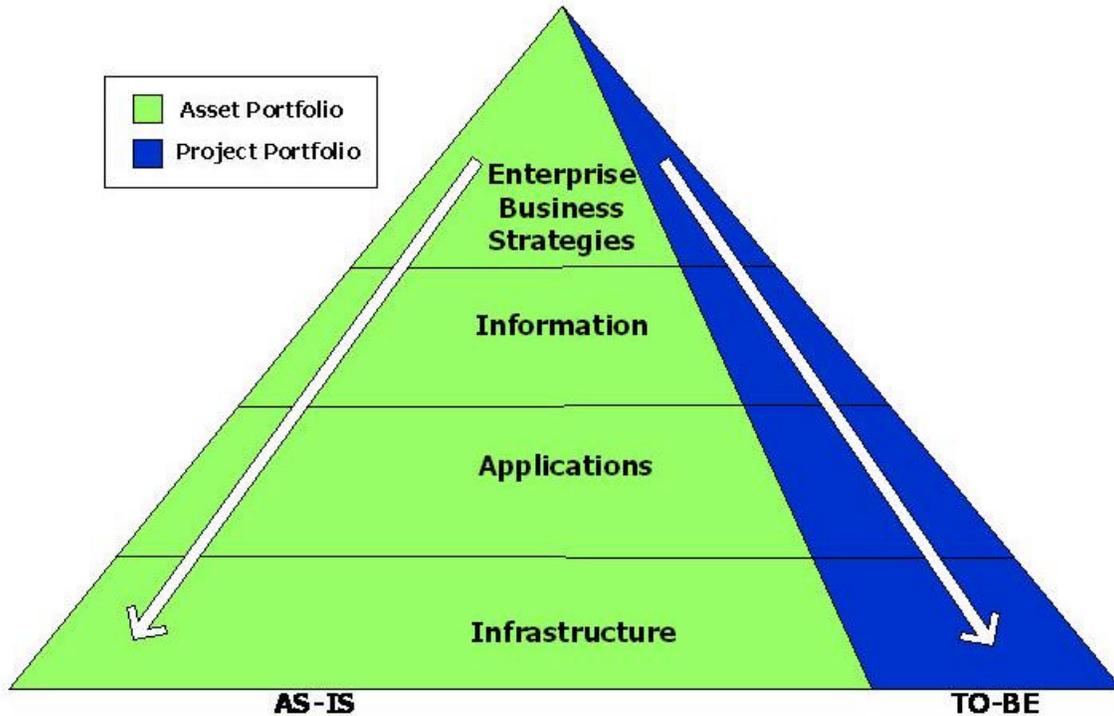
3 The CIO, under the direction of the ITIB and with the assistance of VITA, must direct the  
4 development of policies and procedures for the effective management of information technology  
5 investments throughout their life-cycle. The CTM Policy defines the Commonwealth of Virginia  
6 approach for managing information technology investments, using IT portfolio management  
7 tools, throughout the life-cycle of technology assets and projects.

8 CTM is based on the concept that technology investments in the Commonwealth support the  
9 business of state government. Agency strategic planning articulates the agency mission and  
10 business activities, and provides an agency vision for the future. The agency strategic (business)  
11 plan is the basis for IT investment decisions. The selection, control, and evaluation of  
12 technology investments are based upon the anticipated business value of the investment.  
13 Technology investments should be prioritized and executed based on the benefit to be derived  
14 towards achieving agency strategic goals and objectives, and addressing agency critical business  
15 issues or needs that best support the agency mission and business activities.

16 Agency business leaders must play an integral part in the initiation of any technology  
17 investment, defining the business need and the anticipated outcomes to be achieved.  
18 Involvement by the business leadership of the agency should continue throughout the life-cycle  
19 of any technology investment, continually validating that the investment is on track to deliver the  
20 desired business value. A critical aspect of CTM is the early and continuous involvement of  
21 agency leadership in technology investment decision-making and in providing effective  
22 oversight as investment decisions are made.

23 The CTM approach for technology management is based on the principles of ITIM for selecting,  
24 controlling, and evaluating IT investments and incorporates ITIM “best practices” from both the  
25 private and public sector. The Commonwealth ITIM process utilizes a Commonwealth  
26 Technology Portfolio as the repository for technology investments, comprised of a project  
27 portfolio and an asset portfolio. The Commonwealth Technology Portfolio is an aggregated  
28 view of individual agency projects and assets supporting Commonwealth and agency “Enterprise  
29 Business Strategies”. The technology portfolio documents the current “As-Is” technology  
30 architecture and facilitates selection of technology investments for the migration to the “To-Be”  
31 technology architecture. The selection of technology investments, and migration to the “To-Be”,  
32 begins with a comprehensive analysis of the current technology portfolio (“As-Is” technology  
33 architecture), and an evaluation of the ability of the current technology portfolio to meet the  
34 strategic goals and objectives, and/or address agency critical business issues or needs that best  
35 support the agency mission and business activities of the Commonwealth or agency. The  
36 evaluation typically takes the form of a gap analysis of the “As-Is” to the “To-Be” and results in  
37 the identification of projects and procurements necessary to move the organization to the “To-  
38 Be” state. The technology portfolio is represented graphically below.

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2 IT Strategic Planning is the process of building and maintaining the technology portfolio.  
 3 Commonwealth business and technology leaders must continuously select, control, and evaluate  
 4 technology investments, projects, and assets, throughout their life-cycle. As the portfolio  
 5 changes, it should be evaluated to ensure that the "As Is" and "To Be" states are accurately  
 6 represented. Moreover, continuous analysis should be performed to assure the "As Is" and  
 7 identified projects and future procurements are aligned to meet changing strategic goals and  
 8 objectives, and/or address critical business issues or needs of the Commonwealth and agency.  
 9 The IT Investment Management (ITIM) process relies on analysis of the technology portfolio for  
 10 both assets and projects, as well as the interdependence of activities resulting from portfolio  
 11 analysis and execution of portfolio management activities (Reference Appendix B.)

12 The objectives of CTM include:

- 13 • Establishing a methodology for the selection, control, and evaluation of IT investments to
- 14 support the business needs of the Commonwealth;
- 15
- 16 • Providing a framework for the migration from the current enterprise architecture to the
- 17 desired future enterprise architecture;
- 18
- 19 • Defining life-cycle processes to ensure that technology projects deliver business value on
- 20 time and within budget;
- 21

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- 1 • Defining life-cycle processes to ensure assets are managed to support required service levels  
2 with maximum return on investment and benefit to the Commonwealth.  
3  
4

**Section 5: CTM Integrated ITIM Processes**

6 Commonwealth Technology Management is comprised of five major integrated ITIM processes:

- 7 • IT Strategic Planning;
- 8 • Enterprise Program Management;
- 9 • Commonwealth Project Management;
- 10 • Commonwealth Asset Management; and
- 11 • Continuous ITIM Evaluation.

12 CTM components provide a framework for the selection, control, and evaluation of technology  
13 investments throughout their life-cycle. (Reference Appendix B.)  
14

15 Through the IT Strategic Planning process, Commonwealth agencies select IT investments that  
16 best support identified agency business needs and Commonwealth enterprise business and  
17 technology strategies.  
18

19 Enterprise Program Management, Commonwealth Project Management, and Commonwealth  
20 Asset Management are the control processes for ITIM-based technology management.  
21 Enterprise Program Management provides the control for programs, through oversight and  
22 coordination, necessary to ensure the ITIM competencies of participating agencies.  
23 Commonwealth Project Management provides control for projects to ensure competent and  
24 capable project management is applied to all IT projects to achieve business success.  
25 Commonwealth Asset Management provides control for assets to ensure assets are managed  
26 throughout their useful life to maximize value to the enterprise.  
27

28 ITIM Evaluation is a continuous process that compares actual results against planned measures  
29 of success. The ITIM Evaluation process establishes the business value achieved and the actual  
30 return on the investment. Lessons learned from the evaluation process also provide feedback for  
31 future selection and control activities.

32 The CIO, on behalf of the ITIB, develops and maintains tools to support CTM, including: a  
33 Technology Portfolio, a Commonwealth Agency Technology Strategic Planning Application  
34 (CATSPA), and a Commonwealth Major IT Project Status Report (“Dashboard”) system. CTM  
35 tools will be available on-line and incorporate the principles established within the CTM policy.  
36 Appropriate standards, guidelines, and necessary training will accompany the rollout of CTM  
37 tools as required for implementation of CTM within the Commonwealth.

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1 Appendices C-F provide graphical representations (process flow charts) of CTM processes over  
2 the life-cycle of technology investment planning and project management. The charts also  
3 identify associated decision points and management team responsibilities during each phase of  
4 the project life-cycle.  
5  
6

**7 Section 6: IT Strategic Planning/Technology Portfolio Management**

8 IT Strategic Planning is a systematic method used by an organization to set broad direction and  
9 specific goals for managing information and supporting delivery of IT services to customers.  
10 The CTM IT Strategic Planning process is an ITIM-based IT strategic planning methodology  
11 that looks at IT projects and assets as long-term investments and forms the foundation for  
12 selecting, controlling, and evaluating technology investments as part of a business-driven  
13 technology portfolio.

14 IT strategic planning is performed at various levels of government within the Commonwealth,  
15 including development of: a Commonwealth of Virginia Strategic Plan for Technology by the  
16 CIO; Enterprise Technology Program Plans as directed by the CIO; and individual Agency IT  
17 Strategic Plans.

18 In the Commonwealth, agency IT strategic planning is completed on a biennial cycle, tied to the  
19 budget biennium, with updates occurring at least annually. The Commonwealth of Virginia  
20 Strategic Plan for Technology and the COV Enterprise Architecture serve as standing guidance  
21 for enterprise technology program plans and for agency IT strategic planning.

**22 COV IT Strategic Planning**

23 The CIO, as specified in the *Code of Virginia*, monitors trends and advances in information  
24 technology and develops a comprehensive, statewide, four-year strategic plan for information  
25 technology. The Commonwealth of Virginia Strategic Plan for Technology includes specific  
26 projects that implement the plan, and plan for the acquisition, management, and use of  
27 information technology by state agencies.

28 To develop the COV Strategic Plan for Technology, the Governor and the ITIB provide  
29 imperatives to guide the strategic planning effort. The COV Strategic Plan for technology  
30 provides a blueprint by which technology assets will be marshaled by the CIO to achieve the  
31 imperatives. The CIO, in consultation with the ITIB, identifies guiding principles to provide a  
32 sound framework for developing and implementing the strategic plan. Key stakeholders,  
33 including executive branch agencies, boards and commissions, and the technology business  
34 community contribute to the strategic plan, providing data and input through the development  
35 process. Based on the Commonwealth vision for technology, the Commonwealth Strategic Plan  
36 for Technology is approved by the ITIB, and identifies significant initiatives (projects and  
37 procurements) selected as priority technology investments. VITA and other state agencies are  
38 directed to implement the strategic plan. VITA is charged with monitoring the implementation  
39 of the Commonwealth Strategic Plan for Technology and providing periodic status reports. The  
40 statewide plan is updated annually and submitted by the CIO to the ITIB for approval.

**DRAFT****1 *Enterprise Technology Program Plans***

2 In addition to a Commonwealth of Virginia Strategic Plan for Technology, the CIO may  
3 designate and develop Enterprise Technology Program Plans, as needed, to support programs of  
4 enterprise significance.

**5 *Agency IT Strategic Planning***

6 Each executive branch agency within the Commonwealth will develop and maintain an Agency  
7 IT Strategic Plan. The agency IT strategic planning process should include both business and  
8 technology managers within the agency. Agency IT Strategic Plans will be published biennially,  
9 in conjunction with the Commonwealth biennial budget process, and will include planned IT  
10 investments for a minimum of two years. VITA will assist state agencies and public institutions  
11 of higher education in the development of information management plans that are consistent with  
12 the policies and procedures.

13 The Agency IT Strategic Plan will be used by agencies to align agency technology investments  
14 and budget with Commonwealth technology initiatives and with agency organizational priorities,  
15 goals, and objectives. Agency IT Strategic Plans typically include a technology vision statement,  
16 a description of the agency's business goals and objectives, and IT projects and procurements the  
17 agency plans to use to achieve its business goals and objectives or to address agency critical  
18 issues. The Agency IT Strategic Plan also includes an update to the technology portfolio to  
19 reflect a current description of the agency's technology assets.

20 The CIO will develop and disseminate planning guidelines to provide specific directions to  
21 agencies regarding IT Strategic Planning submission requirements. Appendix C describes the IT  
22 Strategic Planning process within the Commonwealth. Appendix D describes the two-year, full  
23 planning cycle of the Agency IT Strategic Planning process including the plan development,  
24 evaluation, approval, publication, and modification or amendment.

25 As part of the Agency IT Strategic Planning process, each agency will update their individual  
26 agency assets contained in the Commonwealth Technology Portfolio. Agencies will use the  
27 Commonwealth Technology Portfolio to support technology investment decisions including, the  
28 identification of technology assets, and all major technology projects and procurements to be  
29 incorporated in the Agency IT Strategic Plan. Agencies are required to utilize ITIM-based  
30 practices in their IT strategic planning efforts, including clearly defined selection criteria,  
31 business case development, risk assessment methodologies, and prioritization schema.

32 The Agency Strategic Plan, the Commonwealth of Virginia Strategic Plan for Technology,  
33 Enterprise Architecture standards, and Enterprise Technology Program Plans, will serve as the  
34 basis for the development of Agency IT Strategic Plans and corresponding IT budgets. The  
35 Agency IT budget will reflect the technology investments required to support agency business  
36 initiatives. Specific IT budget requests will be developed based on guidelines issued by the CIO  
37 and the Department of Planning and Budget.

**38 *Plan Evaluation***

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1 Agencies must submit an IT Strategic Plan, through their proponent Secretary, to the CIO.  
2 VITA's Project Management Division (PMD), on behalf of the CIO, will review all Agency IT  
3 Strategic Plans submitted by agencies and public institutions of higher education. The review  
4 will encompass completeness, adherence to planning guidelines, and compatibility with the  
5 Commonwealth of Virginia Strategic Plan for Technology and Enterprise Architecture standards.  
6 Based upon the plan reviews, PMD will provide an approval recommendation to the CIO. PMD,  
7 in conjunction with Cabinet Secretaries, will review Agency IT Strategic Plans to identify and  
8 recommend to the CIO projects that could provide business value to the Commonwealth as a  
9 COV enterprise technology project or as collaboration opportunities within or across  
10 Secretariats.

**11 *Plan Approval***

12 The Agency Head must certify and approve the Agency IT Strategic Plan before submission to  
13 the CIO. The CIO will approve or disapprove all Agency IT Strategic Plans. An approved IT  
14 Strategic Plan must be maintained on file with VITA. Approved plans will establish a reference  
15 for VITA to validate agency technology investments, including planned projects and  
16 procurements. PMD will work with agencies to revise and resubmit plans that are disapproved  
17 by the CIO.

**18 *Change Management***

19 Agencies are required to provide updates to their Agency IT Strategic Plan and Agency  
20 Technology Portfolios annually, or as needed, to ensure the portfolio accurately reflects current  
21 and planned agency technology investments. VITA will develop and disseminate procedures for  
22 IT Strategic Plan Amendments and for technology portfolio maintenance.

**23 *Plan Publication***

24 VITA will publish copies of the Commonwealth of Virginia Strategic Plan for Technology and  
25 Agency IT Strategic Plans on the VITA Website ([www.vita.virginia.gov](http://www.vita.virginia.gov)) with instructions for  
26 obtaining printed copies.

27

**28 *Section 7: Enterprise Program Management (EPM)***

29 An enterprise is an organization with common or unifying business interests. For the purposes of  
30 CTM, an enterprise may be defined at various levels of state government, where business  
31 interests are shared and collaboration is appropriate. An enterprise may be defined at the  
32 Commonwealth level, the Secretariat level, or agency level for the management of investments  
33 requiring either vertical or horizontal integration within the Commonwealth, Secretariat, or  
34 agency, or between multiple Secretariats, agencies, and/or localities.

35 Within the Commonwealth, Enterprise Program Management (EPM) is an ITIM-based  
36 methodology to manage investments of enterprise significance. An enterprise technology

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1 program refers to a group of related IT investments, aggregated for management purposes that  
2 support a defined enterprise.

3 PMD, part of VITA Strategic Management Services, serves as the designated Enterprise Program  
4 Management Office (EPMO) for the Commonwealth of Virginia and the CIO. In addition to the  
5 general functions of EPM, the Commonwealth EPMO also performs specific enterprise program  
6 management functions in support of COV enterprise technology programs, the CIO and the  
7 ITIB.

**8 *General Functions of EPM***

9  
10 EPM integrates the portfolio, program, and project, architecture, and resource management  
11 processes to achieve the best business value for the enterprise from IT investments.

**12 IT Portfolio Management****13 *Project Portfolio Management***

14 The ITIM project portfolio management process begins with the selection process wherein  
15 projects being proposed for funding are screened, analyzed, and ranked based on established  
16 criteria such as project costs, benefits, and risks. Management makes investment decisions on  
17 which projects to propose for funding, and which mix of projects will best meet strategic  
18 business goals. Once projects have been selected, management controls the execution of projects  
19 through periodic reviews of project progress against established cost, schedule, performance, and  
20 risk baselines. Monitoring of project progress throughout the project life-cycle allows  
21 management to effectively manage and mitigate risks, and to take corrective actions to achieve  
22 project success. The last phase of ITIM for projects is the evaluation phase, which closes the  
23 loop on the ITIM process. By comparing actual results against planned measures of success, the  
24 business value achieved and actual return on the investment is determined. Lessons learned  
25 during the evaluation phase provide feedback for future selection and control activities.

26

**27 *Asset Portfolio Management***

28 New or modified assets are added to the technology portfolio upon completion of project  
29 implementations and procurements. Through asset portfolio management the assets are managed  
30 throughout the life-cycle of the asset. As each asset grows and matures, the utilization and value  
31 of the asset is measured and managed to support the expected level of service to the associated  
32 business activity in a cost effective manner and with minimal risks. Continuous assessment of  
33 the value, the condition of the asset, as well as new technologies available, should be considered  
34 when determining whether an asset should be maintained, improved, or replaced. At the end of  
35 the useful life of the asset, assets are removed from the portfolio as a result of asset retirement, or  
36 replacement. Asset transformation projects, to improve assets or to replace assets to maximize  
37 the value delivered to the business activity, are proposed as part of the selection process.

**DRAFT**Program Management

EPM provides the management and coordination required to ensure successful execution of enterprise programs and supports program efforts by:

- Facilitating the tactical execution of business and IT strategic plans;
- Expediting decision-making in support of the program;
- Providing management support when exceptional risks or value is involved;
- Making recommendations to incorporate enterprise thinking in technology solutions.

Program Managers are responsible for involving appropriate stakeholders in the delivery of program objectives. Program Managers will provide program status information to the IT governance process, including proponent Secretaries, Oversight Committees, and affected agencies.

Program Managers should develop and implement an effective risk management program for the identification, monitoring, and mitigation of risks across IT projects. The risk management plan should be used to manage and balance risks across and among IT projects to ensure the successful delivery of the enterprise technology program.

Change management procedures should also be established for each program to effectively plan, manage, and implement changes across the enterprise. An organizational structure should be established to provide timely communications of changes across the program.

Once a program is operational, the responsible agency or Secretariat should conduct periodic program reviews to ensure program objectives are being met. Based upon the periodic assessments, follow-up actions to improve program delivery should be documented and executed.

Program Managers should develop, manage, and maintain an enterprise technology portfolio of designated program resources. The enterprise technology portfolio will reflect IT investments made in support of each enterprise technology program. Program Managers should also establish a means for tracking the value achieved from IT investments. The selected valuation method (such as return on investment, balanced scorecard, etc.) should measure the business value earned by the enterprise technology program.

Project Management

EPM provides the management and integration of multiple IT projects to achieve the desired program result(s). Project management and integration will include: 1.) prioritization of IT projects needed to support the program; 2.) examination and determination of project dependencies and timing; 3.) cost and resource allocation; and 4.) change management.

Program Managers provide oversight and coordination of assigned projects; guide and support the development and enhancement of project management capabilities within enterprise program

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1 offices and agencies; ensure appropriate project management processes and procedures are in  
2 place; and, enforce adherence to established standards and guidelines in the delivery of IT  
3 projects.

4  
5 Project management and execution of individual IT projects, in support of COV Enterprise  
6 Technology Programs, will normally be performed by agency Project Managers within  
7 participating agencies. Major projects, with enterprise significance, may be managed directly by  
8 the EPMO.

9 Architecture Management

10 Program Managers should review technology investments for compliance with established COV  
11 Enterprise Architecture standards and maximize opportunities for migration from the current  
12 architecture to the desired future architecture. Program Managers should facilitate architecture  
13 reviews of designated investments using experienced personnel to identify problems or  
14 inconsistencies and feasible alternative solutions. Lessons learned during project execution and  
15 architecture reviews should be provided as feedback to the CIO.

16 Resource Management

17 A major function of Program Managers is managing resources across programs and IT projects.  
18 The three key tasks of resource management are: 1) prioritizing and allocating resources; 2)  
19 coordinating resource utilization across investments; and 3) measuring and tracking the  
20 expenditure of resources. Clearly defined methods for resource management and reporting of  
21 expenditures should be documented and communicated to program constituents.

22

23 ***Specific Functions of the Commonwealth EPMO (VITA PMD)***

24 CIO/ITIB Staff Support

25 As specified in the *Code of Virginia*, PMD provides staff support to the ITIB and the CIO in the  
26 approval process for IT projects, the approval of agency IT Strategic Plans, and the prioritizing  
27 of agency budget requests for information technology. As staff to the ITIB and the CIO, PMD  
28 also serves as the proponent for the implementation of ITIM practices and principles within  
29 Commonwealth agencies through the development and promulgation of ITIM-based policies,  
30 standards and guidelines.

31 IT Portfolio Management

32 PMD is responsible for managing the Commonwealth Technology Portfolio that serves as a  
33 repository for Commonwealth projects and assets to support IT strategic planning and CIO and  
34 ITIB reporting requirements. PMD supports portfolio management processes for the selection,  
35 control, and evaluation of projects in the Commonwealth Technology Portfolio as approved by  
36 the CIO and the ITIB. PMD assists the CIO in the development of standards and guidelines to

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1 be used by agencies for the maintenance and management of the technology portfolio. PMD, at  
2 the direction of the CIO and the ITIB will establish guidelines for the regular update of the  
3 Commonwealth Technology Portfolios to ensure the portfolio accurately reflects current assets  
4 and current and proposed projects. Using ITIL-based processes, VITA operational divisions will  
5 provide operational/usage measures as well as business/cost information to support IT portfolio  
6 management activities.

7 Commonwealth Program and Project Management

8 PMD supports the Commonwealth governance process for the initiation and management of  
9 Commonwealth technology programs and projects. Commonwealth technology programs and  
10 projects are initiated through the PMD, subject to the recommendation of a Secretariat Oversight  
11 Committee, and the CIO, and approved by the ITIB. During program and project execution,  
12 program and project progress will be approved by the participating Agency Heads, evaluated by  
13 the Proponent Secretariat, reviewed by the Oversight Committee, and approved for continuance  
14 by the CIO. Closeout of programs will follow the same process of reviews and approvals as  
15 program and project initiation.

16 Project Manager Development Program

17 The *Code of Virginia* requires the CIO to establish standards for the qualification and training of  
18 IT project managers. PMD manages the qualification program, including PM testing and  
19 training, required for Commonwealth IT project managers. PMD monitors the implementation  
20 of information management and information technology plans and periodically reports its  
21 findings to the CIO.

22 Oversight of Agency Major IT Projects

23 PMD, in conjunction with the proponent Secretaries and Agency Oversight Committees, will  
24 perform oversight of Major IT Projects on behalf of the CIO and the ITIB. PMD will conduct IT  
25 project audits and reviews for specific Major IT Projects as directed by the CIO.

26 Consult on Designated Programs and Projects

27 At the request of proponent Secretaries or agencies, and with the approval of the CIO, PMD will  
28 consult or assist on designated technology programs and Major IT Projects. Consultation or  
29 assistance may be provided to Secretariats or agencies at any point in the program or project life-  
30 cycle.

31 Best Practices Promulgation

32 PMD serves as a “best practices” center. PMD will conduct research to determine “best  
33 practices” in technology management in both the public and private sector. “Best practices” will  
34 be promulgated through the issuance of policies, standards, and guidelines as appropriate to  
35 technology management within the Commonwealth. A reference library of “best practices”  
36 material will be provided on the VITA website ([www.vita.virginia.gov](http://www.vita.virginia.gov)).

**DRAFT**1 Proponent for CTM Tools

2 PMD serves as the proponent for development and maintenance of supporting tools for the  
3 implementation of CTM. Supporting tools will be accompanied by necessary documentation and  
4 training. At a minimum, PMD will serve as functional proponent, the business owner, for the  
5 Commonwealth Technology Portfolio, the Commonwealth Agency Strategic Planning  
6 Application (CATSPA); and, the Commonwealth Major IT Project Status Report “Dashboard”  
7 System.

8 ***Secretariat and Agency Enterprise Program Management***

9 The Cabinet Secretaries or Agency Heads may designate secretariat and agency enterprise  
10 technology programs in support of Secretariat or agency initiatives, with the approval of the  
11 Commonwealth CIO and the ITIB. Secretariat or agency enterprise technology programs will be  
12 defined, funded, developed, approved, and managed at the Secretariat and agency level utilizing  
13 guidance established within the CTM policy.  
14  
15

16 **Section 8: Commonwealth Project Management (CPM)**

17 The *Code of Virginia* requires the CIO to develop an approval process for proposed major  
18 information technology projects by state agencies to ensure that all such projects conform to the  
19 statewide information management plan and the information management plans of agencies and  
20 public institutions of higher education. The CIO must also establish a methodology for  
21 conceiving, planning, scheduling, and providing appropriate oversight for information  
22 technology projects including a process for approving the planning, development and  
23 procurement of information technology projects. Commonwealth Project Management  
24 documents the CIO established project management methodology to be used by agencies and  
25 institutions of higher education.

26 Commonwealth Project Management is the application of knowledge, skills, tools, and  
27 techniques, to meet or exceed stakeholder needs and expectations from a Commonwealth  
28 Project. The major concerns of project management are to manage project performance, cost,  
29 schedule, and risk over the life of a project in order to achieve anticipated business value. The  
30 objective of CPM is to define a structured, disciplined approach for project management in order  
31 to deliver anticipated benefits from business-driven IT investments. CPM incorporates industry  
32 standards and “best practices” for project management, tailored to meet Commonwealth specific  
33 requirements. While CPM supports multiple development methodologies, it provides a common  
34 frame of reference for all Commonwealth Project Managers.

35 The CIO will issue CPM standards and guidelines for technology project management. CPM  
36 standards and guidelines will establish comprehensive guidance for Commonwealth project  
37 managers on project initiation, planning, execution, control, and closeout. CPM will also  
38 provide standard project management processes, documents, and templates to assist Project  
39 Managers in implementing CPM guidance.

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1 Technology projects are expected to be temporary endeavors undertaken to deliver a unique  
2 product or service. Technology projects of long duration, more than twelve months, will be  
3 executed in phases with incremental objectives and measures of success, such that continued  
4 funding can be allocated based on achievement of prior phase objectives.

5 There are two categories of technology projects in the Commonwealth:

6 1. Major IT Project - In the Commonwealth of Virginia, Major IT Projects are information  
7 technology projects that: are mission critical; have statewide application; or, have a total  
8 estimated cost of more than \$1 million. The CTM life-cycle for Major IT Projects is  
9 described in Appendix E.

10  
11 2. Non-major IT Project - In the Commonwealth of Virginia, Non-major IT Projects are  
12 those technology projects with a total estimated cost less than or equal to \$1 million; that  
13 are not mission critical or do not have statewide application. The CTM life-cycle for  
14 Non-major IT Projects with a total cost of over \$100,000 is described in Appendix F.

15  
16 A technology project may represent a sub-project of some other type of project, for example a  
17 building construction, business process re-engineering or transportation system project. If the  
18 larger project includes a technology component or information system as a required deliverable  
19 within the project, the technology portion of the project should be managed as a technology  
20 project and is subject to all policies, standards, and guidelines governing the management of  
21 Commonwealth technology projects.

22  
23 Specific requirements for both planning and development approval of Major IT Projects are  
24 mandated in the *Code of Virginia*. All Commonwealth Major IT Projects must receive “approval  
25 for planning” from the CIO and “approval for development” from the ITIB based upon  
26 recommendation of the CIO.

27  
28 Agencies have authority for planning and development of Non-major IT projects with a total cost  
29 of less than \$100,000. Non-major projects with a total cost of over \$100,000 must have the  
30 approval of the CIO for planning and development, unless specific delegated authority is granted  
31 by the CIO to an agency or institution of higher education for such projects. Institutions of  
32 higher education which are members of the Virginia Association of State Colleges and  
33 University Purchasing Professionals (VASCUPP) as of July 1, 2003, are delegated authority by  
34 the CIO for planning and development of Non-major IT Projects from \$100,000 to \$1 million.

35  
36 An agency is responsible for the management of any IT project initiated for their agency. All  
37 Commonwealth Major IT Projects must have a designated Project Sponsor. The Project Sponsor  
38 should be an individual, usually part of the organization management team, who makes the  
39 business case for the project. This individual should also have the authority to define project  
40 goals, secure resources, approve project budgets and expenditures, and resolve organizational  
41 and priority conflicts.

42 Every Commonwealth IT project must have a designated Project Manager. The Project Manager  
43 will be nominated by the Project Sponsor or Agency Head and approved by the CIO (Non-major

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1 IT Projects) or the ITIB (Major IT Projects). The Project Manager will be responsible for the  
2 management of the project from project initiation to closeout. The Project Manager for a Major  
3 IT Project must be an employee of the Commonwealth or a consultant directly contracted for that  
4 purpose and supervised by the agency. Project Managers for Major IT Projects are responsible  
5 for project reporting to the CIO via the oversight process set out below.

6 The *Code of Virginia* requires the CIO to establish standards for the qualification and training of  
7 IT project managers. The Project Manager Development Program endeavors to satisfy the  
8 requirements of the *Code of Virginia* through its five components: PM Testing and Training; PM  
9 Qualifications; PM Mentoring; a Qualification and Selection Process; and, the PM Qualification  
10 and Selection Process Implementation Schedule, through which Commonwealth of Virginia IT  
11 project managers are qualified for specific projects within established project categories. To be  
12 qualified to manage a specific project, the project manager candidate must meet the qualification  
13 requirements for the project category and have the appropriate training or experience necessary  
14 for the specific project as specified in the Project Manager (PM) Selection and Training  
15 Standard.

16  
17 Agencies are required to follow CPM standards and are encouraged to utilize CPM guidelines for  
18 the management of all IT projects within the Commonwealth. For Non-major IT projects, the  
19 application of project management standards and guidelines and the level of project management  
20 should be tailored to the size and importance of the project.

**21 Major IT Project Oversight**

22 Major IT Projects will be subject to periodic review by the CIO. For Major IT Projects, the CIO  
23 is required by the *Code of Virginia* to establish internal agency oversight committees, multi-  
24 agency oversight committees for statewide applications projects, and oversight structures for  
25 addressing issues that cannot be resolved by internal agency oversight committees. Major IT  
26 Project oversight committee structure and designated committee members will be identified in  
27 the project charter. Standing Proponent Secretariat Oversight Committees will normally address  
28 issues that cannot be resolved by internal agency oversight committees.

29 Internal agency oversight committees provide ongoing oversight for an agency project and have  
30 the authority to approve or reject changes to the project scope, cost, schedule, and performance  
31 measures, which are collectively referred to as the project baseline. A representative from the  
32 PMD will participate in the Major IT Project internal agency oversight in to provide ongoing  
33 assistance and support to state agencies and public institutions of higher education in the  
34 development of information technology projects, as specified in the *Code of Virginia*.

35 For statewide or multi-agency projects, the CIO will appoint the members of oversight  
36 committees in consultation with the lead agency and proponent Secretary. The appointed  
37 members of statewide or multi-agency project oversight committees are typically employees of  
38 the agencies affected by the project and include a representative from PMD. Multi-agency  
39 committees provide ongoing oversight for a statewide or multi-agency project and have the  
40 authority to approve or reject changes to the project baseline.

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1 Once initiated, a Major IT Project must be entered into the Commonwealth Major IT Project  
2 Status Report “Dashboard” System. The “Dashboard” provides a common framework for  
3 agency, Secretariat, and Oversight Committee review and assessment of all Commonwealth  
4 Major IT Projects. The CIO will resolve, in consultation with the proponent secretaries, any  
5 issues that cannot be resolved by the Agency Internal Oversight committees. The  
6 Commonwealth Major IT Project Status Report Dashboard is the tool used to notify the  
7 proponent secretaries and CIO of issues that require resolution at their level. Project baseline  
8 changes, approved by agency internal oversight committees, for Major IT Projects will be  
9 reported to the Proponent Secretariat Oversight Committee and CIO through the Dashboard  
10 system.

11 Based on project oversight reviews, the Proponent Secretariat Oversight Committee will provide  
12 the CIO with recommendations regarding project continuance or termination, baselines,  
13 management plan, (next) periodic review, and any follow-up actions required. The CIO will  
14 issue a formal, written approval or rejection of committee recommendations. Approvals may be  
15 issued contingent upon the proponent agency addressing specific recommendations from the  
16 Oversight Committee. Approvals will also include the date for the next periodic review of the  
17 project by the Oversight Committee. Based on recommendations from the Oversight Committee,  
18 the CIO will issue a written decision to direct necessary modifications to insure the success of a  
19 project, or will recommend to the ITIB to terminate the project.

20 As a supplement to regular project review and oversight, project managers for all Major IT  
21 Projects must implement an independent verification and validation (IV&V) strategy. IV&V  
22 should be performed by an organization that is technically, managerially, and financially  
23 independent of the development organization. The IV & V strategy for Major IT Projects will be  
24 reviewed and approved as part of the Major IT Project oversight process. IV & V of Non-Major  
25 IT Projects is encouraged.

26 As specified in the *Code of Virginia*, research projects, research initiatives, or instructional  
27 programs at public institutions of higher education estimated to cost more than \$1 million of  
28 general fund appropriations may be subject to periodic review by the CIO if the projects are  
29 deemed mission-critical by the institution or of statewide application by the CIO. Criteria for  
30 determining whether such projects are mission-critical shall be developed by the CIO and  
31 Secretary of Education in consultation with public institutions of higher education. Consistent  
32 with the *Code of Virginia*, the oversight process will not supersede the responsibility of a board  
33 of visitors for the management and operations of an institution of higher education.

**34 *Procurements in Support of Major IT Projects***

35 When a Request for Proposal (RFP) or Invitation for Bid (IFB) is used to procure goods or  
36 services for an approved Major IT Project, the agency is required to submit a copy of the RFP or  
37 IFB to the PMD. A PMD project management specialist will review the RFP or IFB and  
38 recommend its approval or rejection to the CIO. The project management specialist may require  
39 additional documentation from the agency. The CIO is the final authority for approval of an  
40 RFP or IFB for release and has final approval authority for the proposed contract before the  
41 contract is awarded.

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1 As required by the *Code of Virginia*, as part of the project initiation process, agencies must  
2 identify to PMD all projects involving a contract, agreement or financing arrangement that  
3 requires that the Commonwealth either pay for the contract by foregoing revenue collections, or  
4 allows or assigns to another party the collection on behalf of or for the Commonwealth any fees,  
5 charges, or other assessment or revenues to pay for the project. Identified projects will be  
6 required to comply with additional reporting requirements to the Department of Planning and  
7 Budget.

**8 *Project Life-cycle Processes*****9 Project Selection**

10 Agencies are asked to identify planned projects, including telecommunications projects, as part  
11 of the Agency IT Strategic Plan. All proposed or continuing projects with expenditures planned,  
12 regardless of funding source, should be identified in the Agency IT Strategic Plan. Criteria for  
13 the evaluation and approval or “selection” of projects, with a focus on Major IT Projects are  
14 specified in the *Code of Virginia* to include:

- 15 • Degree to which the project is consistent with the Commonwealth's overall strategic plan
- 16 • Technical feasibility of the project;
- 17 • Benefits to the Commonwealth of the project, including customer service improvements;
- 18 • Risks associated with the project;
- 19 • Continued funding requirements;
- 20 • Past performance by the agency on other projects.

21 Approval by the CIO of the Agency IT Strategic Plan constitutes selection approval allowing  
22 agencies to proceed with project initiation. Approval of the project, as reflected in the Agency  
23 IT Strategic Plan, also satisfies the legislative requirement for “project planning approval” by the  
24 CIO. Approved agency IT strategic plans define an agency’s technology project portfolio.

**25 Project Initiation**

26 IT projects selected for inclusion as part of the approved agency IT Strategic Plan must go  
27 through a formal initiation process prior to proceeding with detailed project planning and  
28 subsequent execution. Agencies seeking to initiate detailed project planning and subsequent  
29 execution are required to submit a project proposal outlining the business need for the project,  
30 the proposed technology solution, if known, and an explanation of how the project would support  
31 the agency's business objectives and the Commonwealth's information technology plan. The  
32 project proposal is meant to ensure that the implementing organization has a clear understanding  
33 of the objectives and scope of the project and that the project is a sound solution to a business  
34 need or issue.

35 The project proposal will provide the basis for a project charter authorizing the allocation of  
36 resources for initiation of the project. Agencies seeking to initiate detailed project planning and  
37 subsequent execution of an IT project are required to submit a project charter along with their  
38 project proposal. Approval of the project charter represents the official initiation of the project

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1 and beginning of the project-planning phase. The approval of the project proposal and charter  
2 also satisfies the legislative requirement within the *Code of Virginia* for “project development  
3 approval” by the ITIB. Project development approval includes approval for an agency to  
4 proceed with the planning and execution phases of the CTM life-cycle. Once a Major IT Project  
5 is approved, the project will be established as an active project on the Commonwealth Major IT  
6 Project Status Report Dashboard. Project proposals, charters, and Dashboard status reports  
7 should be submitted in the format prescribed in the Commonwealth Project Management  
8 standards and guidelines available on the Commonwealth Project Management Website  
9 (<http://www.vita.virginia.gov/projects/cpm/index.cfm>).

Project Planning

12 A project plan must be developed for all Major IT Projects. The CIO, upon recommendation of  
13 the Internal Agency Oversight Committee, must approve project plans including project cost,  
14 schedule, and performance baselines for Major IT Projects. The Agency Head or Project  
15 Sponsor should approve project plans for Non-major IT Projects. The project plan will be  
16 revised as needed to reflect changes approved by the agency project management organization  
17 and internal oversight committee in accordance with the Commonwealth Project Management  
18 Standard.

Project Execution and Control

20 Project execution should be in accordance with the approved project plan. Specific metrics will  
21 be established to measure progress against project baselines. Measures of success will be  
22 business-driven and measured incrementally through the life of the project.

23 Project Managers and Project Sponsors of Major IT Projects are responsible for tracking and  
24 measuring project progress against the approved project plan. As required by the *Code of*  
25 *Virginia*, an agency internal oversight committee must be established to conduct regular reviews  
26 of Major IT project execution to ensure the project is on track to achieve targeted measures of  
27 success. Project Managers must report the status of Major IT Projects for review by the Agency  
28 Head, the proponent Secretary, and the CIO via the Commonwealth IT Project Status Report  
29 “Dashboard”, according to the reporting schedule established by the CIO. Major IT Project  
30 Oversight and project reporting should be performed as prescribed in the Commonwealth Project  
31 Management standards and guidelines available on the Commonwealth Project Management  
32 Website (<http://www.vita.virginia.gov/projects/cpm/index.cfm>).

33 The Project Sponsor and Project Manager of Non-major IT Projects are responsible for tracking  
34 and measuring project progress against the approved project plan. For Non-major IT Projects,  
35 the Agency Head or established agency oversight organization should conduct regular reviews of  
36 the project execution to ensure the project is on track to achieve targeted measures of success.

Project Closeout

38 All Major IT Projects must complete a formal project closeout. All Non-major IT Projects  
39 should complete a formal project closeout. The purpose of the project closeout is to:

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- 1 • Perform a final administrative review to account for resources and expenditures
- 2 • Perform a final project review to assess the actual versus planned results
- 3 • Document formal acceptance of project deliverables
- 4 • Identify lessons learned for feedback into the Commonwealth project management
- 5 process

6 For all Major IT Projects, a final project status report will be entered into the “Dashboard” by the  
7 Project Manager and approved by the CIO, upon recommendation of the agency internal  
8 oversight committee. Project closeout documents for Non-major IT Projects should be approved  
9 by the Project Sponsor and maintained by the agency.

10 On an annual basis, agencies must report to the CIO and the Director of Planning and Budget on  
11 performance measurement information for technology projects. The information shall include,  
12 but not be limited to, the degree to which projects were completed on time and within budget.  
13 The performance reporting will be based on guidance issued by the CIO and the Department of  
14 Planning and Budget.

### 15 Project Operations and Support

16 Once a project is completed, the product or service is transferred to the operational unit of the  
17 organization where it is then supported, managed and maintained. After the product or service  
18 has become operational for a sufficient period of time (typically six to 12 months), a Post  
19 Implementation Review (PIR) should be performed to evaluate whether the product or service is  
20 delivering the expected results. The actual project costs and benefits should be measured against  
21 the project plan. A determination should be made regarding continued operation of the system  
22 and whether modifications or enhancements are needed to improve the operation of the system.  
23 If system changes are necessary, management must decide which actions must be taken to  
24 achieve the desired return on the IT investment. The PIR should also document the successes  
25 and failures of both the investment decision and project management processes.

26 A PIR must be performed for all Major IT Projects, normally twelve months after project  
27 closeout. The agency will conduct a formal post implementation review. A Post Implementation  
28 Report will be submitted by the agency to PMD, documenting the successes and failures of the  
29 project and any approved follow-up actions. Lessons learned from the PIR process will be  
30 reviewed by the PMD of VITA and disseminated as appropriate. For Non-Major IT Projects,  
31 agencies and Secretariats are encouraged to utilize the PIR process.

32

### 33 **Section 9: Commonwealth Asset Management (CAM)**

34

35 Commonwealth Asset Management is a disciplined process based on industry standards and best  
36 practices, like ITIM and IT Infrastructure Library (ITIL), for the management of information  
37 technology assets. CAM is defined as the process of planning, procuring, deploying, operating,  
38 maintaining, upgrading and disposing of information technology assets to achieve maximum  
39 return on investment over the life-cycle of the asset, in support of both the Commonwealth and

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1 agency IT strategic plans. An asset is a component of a business process and can include  
2 computer rooms, networks, digital and paper records, hardware, software, people, etc.

3  
4 The major objectives of CAM include:

- 5
- 6 • Optimizing utilization of all technology assets;
- 7 • Lowering operating costs;
- 8 • Maximizing asset availability for service delivery;
- 9 • Improving IT risk management;
- 10 • Improving productivity for service support;
- 11 • Improving organizational agility;
- 12 • Maximizing asset useful life;
- 13 • Improving the ability to monitor and manage change;
- 14 • Improving the ability to plan and budget for asset replacement;
- 15 • Ensuring financial records reflect the true picture of assets in the Commonwealth.
- 16

17 CAM includes both the collection of inventory information about IT assets and the analysis of  
18 this information to facilitate strategic planning, financial planning and accounting, procurement,  
19 help desk service delivery and customer support, and risk management planning and training.  
20 VITA, under the direction of the CIO and as owner of infrastructure assets, will build and  
21 maintain a detailed inventory of Commonwealth technology infrastructure assets. Agencies,  
22 under the direction of the CIO and as owners of application assets, will build and maintain a  
23 detailed inventory of agency technology application assets. In collaboration with VITA,  
24 agencies will manage their asset portfolio throughout the lifecycle of the assets. Agency human  
25 resource asset management will follow the established *Code of Virginia* and DHRM policies and  
26 procedures.

#### 27 28 Commonwealth Technology Portfolio

29  
30 A Commonwealth Asset Portfolio will be established and maintained as part of the Agency IT  
31 Strategic Planning Process. The Asset Portfolio will identify all technology assets in the  
32 Commonwealth and will serve as the centralized repository for asset information. Agencies will  
33 maintain their individual asset information in the Commonwealth Technology Portfolio as part of  
34 the routine process of updating their Agency IT Strategic Plan (ITSP).

#### 35 36 Commonwealth Asset Manager

37  
38 The business owner and manager of the Commonwealth Asset Portfolio is the CIO. The CIO  
39 will issue standards and guidelines, which will establish a comprehensive framework for agency  
40 participation in CAM. VITA will serve as the CAM executive agent for the CIO to insure  
41 consistent implementation of asset management processes and procedures. The Commonwealth  
42 Strategic Plan for Technology, the Commonwealth enterprise architecture (standards), and  
43 centralized technology procurement through VITA will support the achievement of CAM  
44 objectives.

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1

2 ***Commonwealth Asset Life-cycle***

3

4 Asset Planning

5

6 Asset planning is a structured approach to determine the right mix of assets required within the  
7 asset portfolio to meet established service level agreements in a cost-effective manner while  
8 minimizing risk to service delivery. In the Commonwealth of Virginia, asset planning is  
9 conducted via the Agency IT Strategic Planning process, which builds the Commonwealth  
10 Technology Portfolio.

11

12 The Commonwealth Technology Portfolio is a repository for agency IT investments, both  
13 projects and assets. The portfolio captures the “As Is” view of an agency’s IT architecture and  
14 facilitates the identification of and migration to the “To Be” IT architecture. The identification  
15 of and migration to the “To Be” architecture begins with a comprehensive analysis of the current  
16 Commonwealth Technology Portfolio (“As Is” IT architecture), and an evaluation of the ability  
17 of the current technology portfolio to meet the business needs of the agency. The evaluation  
18 typically takes the form of a gap analysis of the “As Is” to the “To Be” state and results in the  
19 identification of projects and procurements necessary to move the organization to the “To Be”  
20 state. The gap analysis compares the proposed technology environment with the actual  
21 technology environment to ensure that assets are selected and deployed to meet the business  
22 needs of the agency.

23 Upon completion of a gap analysis, appropriate standardization and optimization actions and  
24 recommendations for assets are submitted as part of the Agency IT Strategic Plan. Asset  
25 transformation projects and procurements are identified in the Agency ITSP for the approval of  
26 the CIO.

27 While the asset planning process begins with preparation of the Agency ITSP, agencies must  
28 continuously manage and evaluate their technology portfolio through industry standards and best  
29 practices like ITIL. This assures that the "As Is" inventory of assets and planned asset  
30 deployments stay continuously aligned with the business needs of the agency and the  
31 Commonwealth.

32 Asset Procurement

33 Assets may be individually procured or developed as a product of a project implementation. As  
34 specified in the *Code of Virginia*, VITA will be responsible for all technology procurements  
35 unless otherwise delegated by the CIO. Assets must be procured in accordance with the  
36 established Commonwealth and VITA procurement standards.

37 Requirements for asset procurements should be carefully crafted to ensure the resulting purchase  
38 meets the required business need, while supporting the Commonwealth Strategic Plan for  
39 Technology and enterprise architecture. Likewise, assets deployed as the result of a project  
40 implementation must also adhere to the Commonwealth Strategic Plan for Technology and  
41 support both architecture standards and business strategy.

**DRAFT**1 Asset Deployment

2 The asset deployment phase of the CAM life-cycle includes activities to receive, reconcile, and  
3 deploy assets within the Commonwealth, following industry standards and best practices to  
4 protect the investment. As new assets are deployed, information should be shared across the  
5 agency in a timely manner to insure the asset, service and financial systems are properly updated  
6 in order to manage the asset investment. Agencies must ensure that technology asset deployment  
7 strategies are implemented as planned in support of overall business strategy.

8  
9 Asset information should be collected and recorded in the Agency Asset Portfolio in a timely  
10 manner. Standard processes based upon industry best practices like ITIL will be used to track  
11 the deployment of new assets.

12 Asset Operations and Maintenance

13 The agency will establish industry standards and best practices (i.e. ITIL) for service delivery,  
14 and service support processes and procedures to properly operate, maintain, and manage assets.  
15 Operations and maintenance includes change management procedures to track asset lifecycle  
16 activity through the service support process, to provide service status and reporting, and maintain  
17 a complete history of asset changes.

18 Asset Retirement

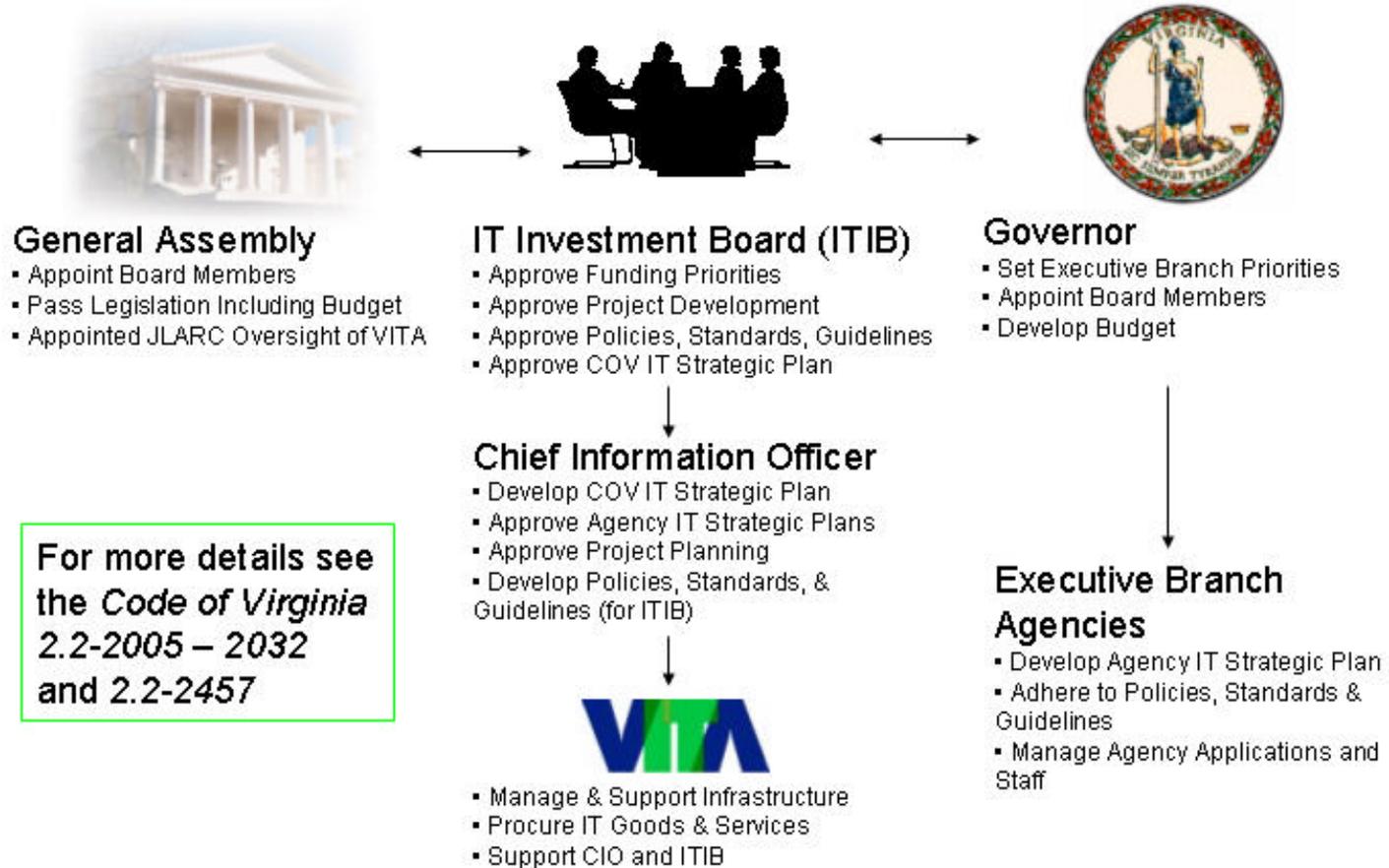
19 VITA will develop standards and procedures for rehabilitation and disposition of technology  
20 assets in accordance with the COV Agency Procurement and Surplus Property Manual. Asset  
21 retirement standards will take into consideration advancement of the Commonwealth enterprise  
22 architecture, contract renewals, life-cycle stage, emerging and new technologies, and cost and  
23 value considerations. Procedures for asset retirement will be established to insure proper  
24 security is implemented, including data removal and cleansing as defined by the Commonwealth  
25 of Virginia.

26

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1 Appendix A: CTM Governance Structure

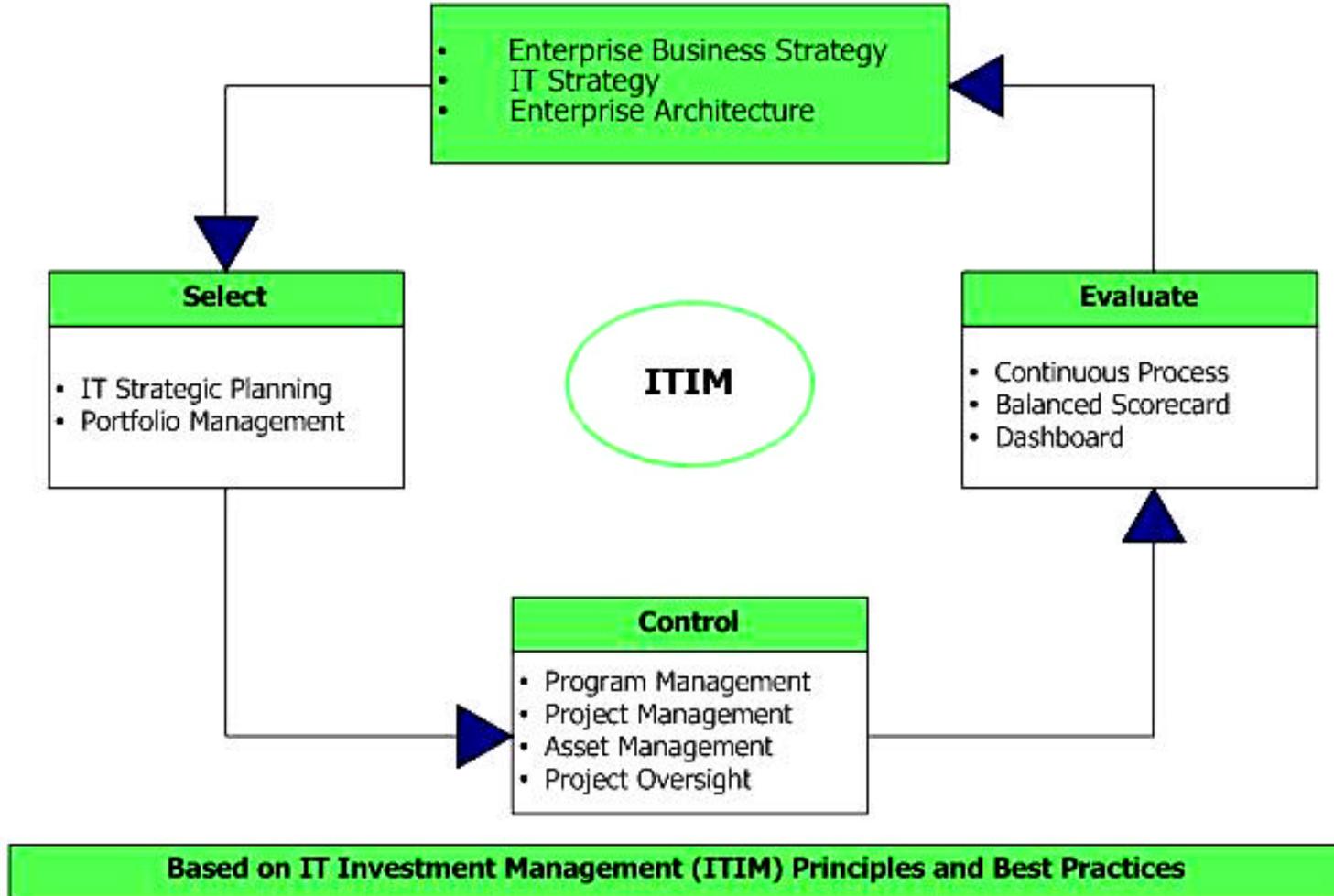
2  
3 The following chart documents the graphical view of the CTM Governance as established in the *Code of Virginia*.  
4  
5



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**Appendix B: CTM Integrated ITIM**

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3 The following chart documents the ITIM framework and supporting processes for the selection, control, and evaluation of  
4 Commonwealth IT investments.  
5



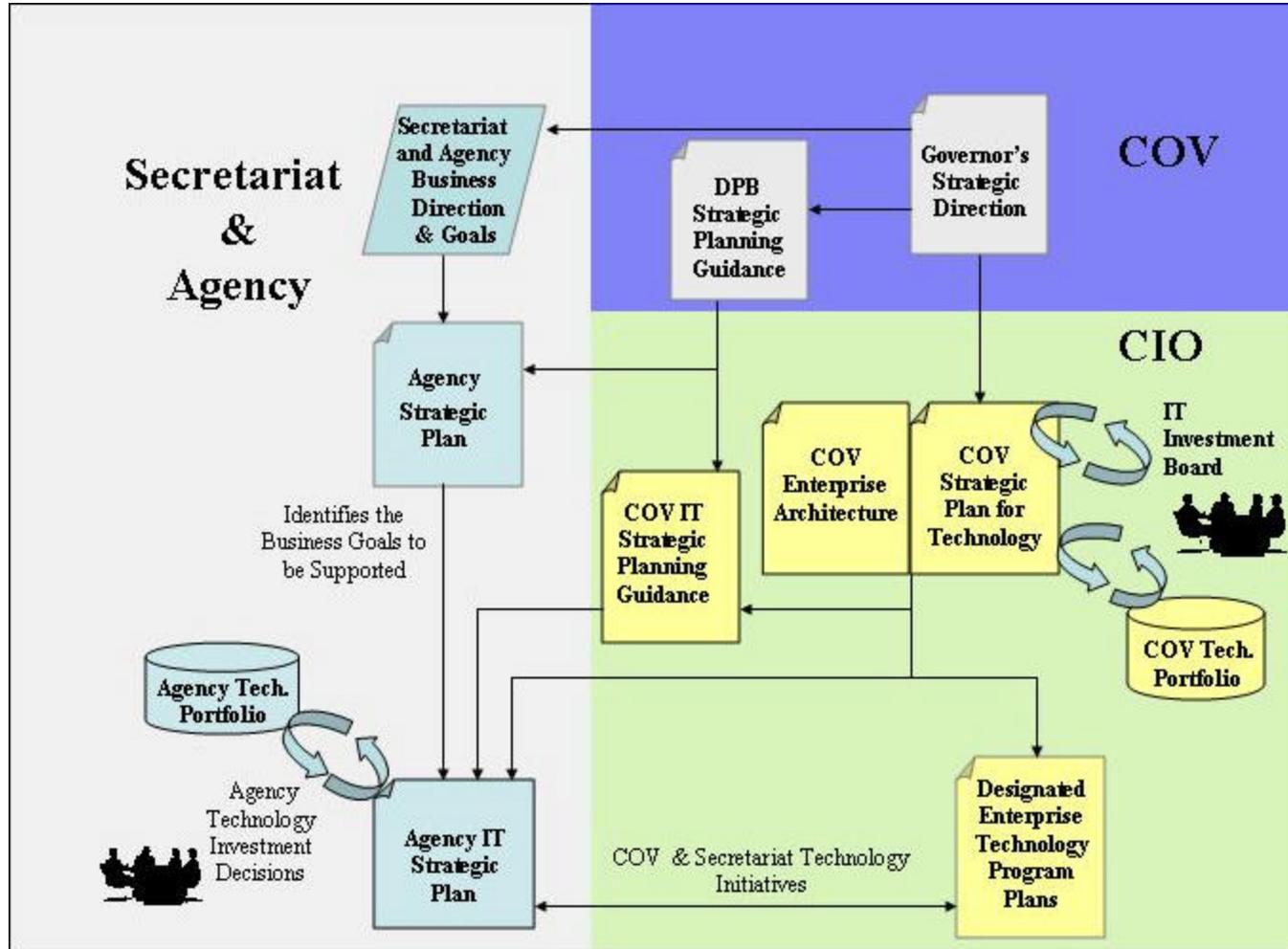
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Appendix C: CTM IT Strategic Planning Process

The following chart documents the CTM IT Strategic Planning process.

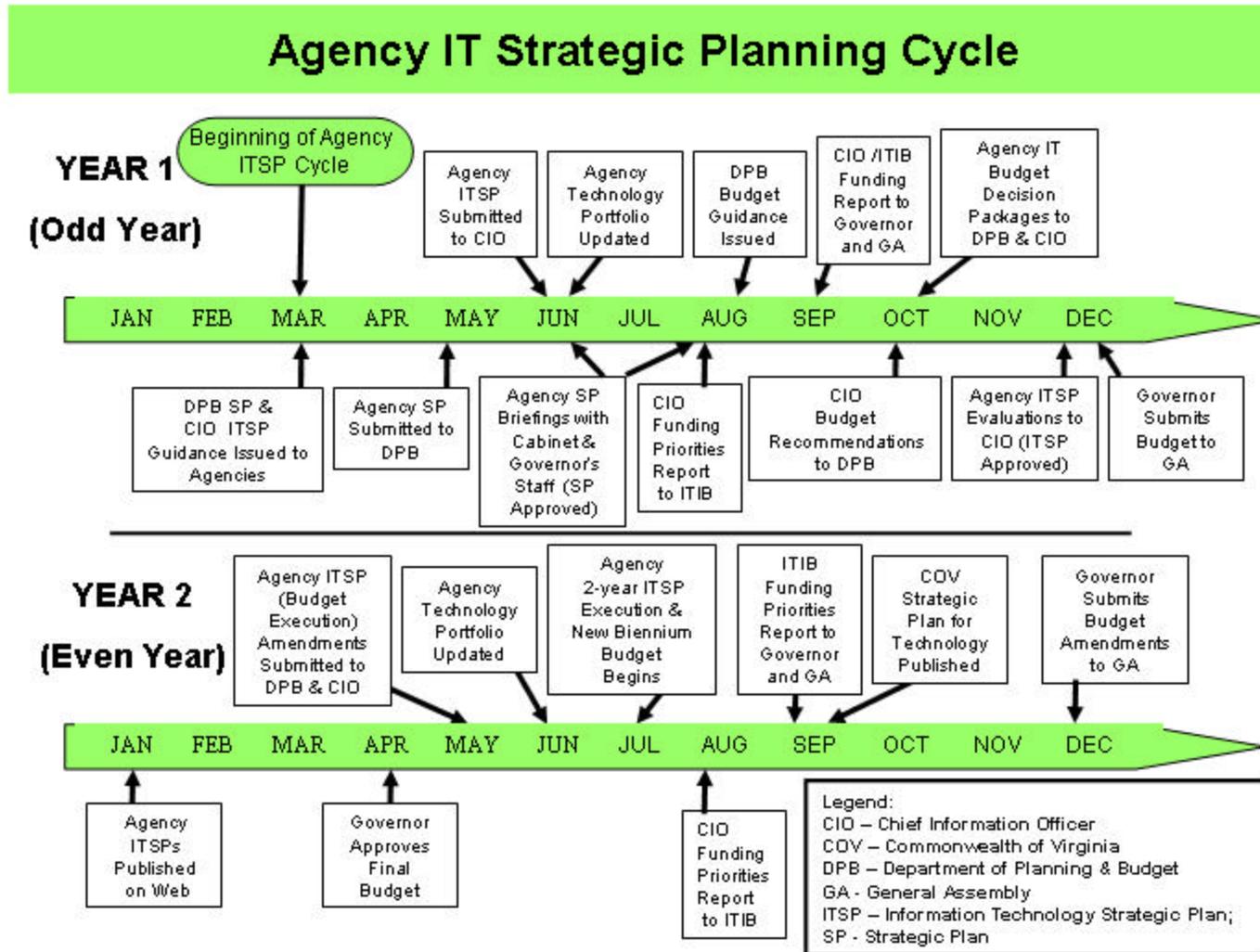


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**Appendix D: CTM Agency IT Strategic Planning Cycle**

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3 The following chart documents the general schedule of activities for the IT strategic planning cycle. Specific dates for each activity  
4 will be determined by the Governor's and the General Assembly's schedules for biennium strategic planning and budget  
5 submissions.



6

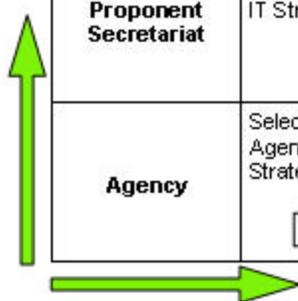
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Appendix E: CTM Life-cycle – Major IT Project

The following chart documents the life-cycle phases for Major IT Projects, associated decision points, and management team responsibilities during each phase.

Life-cycle Phase	Selection	Initiation	Planning	Execution & Control	Closeout	Operations & Support
<b>Decision Points</b>	Selection Approved	Initiation Approved	Baseline Approved	Implementation Approved	Closeout Approved	End of Project
<b>Process Roles and Responsibilities</b>						
<b>IT Investment Board (ITIB)</b>		Approve Project Initiation <i>(Code of Virginia – Development Approval)</i>	May Terminate Project	May Terminate Project		
<b>Chief Information Officer (CIO)</b>	Approve Agency IT Strategic Plan <i>(Code of Virginia - Planning Approval)</i>	Recommend Project Initiation to ITIB	- Resolve Issues as Required - Modify, Suspend or Recommend Termination	- Monitor Project Progress - Approve Project Status Reports - Modify, Suspend, or Recommend Termination	Approve Project Closeout	
<b>Project Management Division</b>	Recommend Approval of IT Strategic Plan to CIO	Recommend Project Initiation to CIO	Assist & Support Project Detailed Planning	- Review Project Progress - Assist & Support Project Development	- Complete Final Project Evaluation	- Review Post Implementation Report
<b>Proponent Secretariat</b>	Review Agency IT Strategic Plan	Recommend Project Initiation	Resolve Issues as Requested by Agency and CIO	- Evaluate Project Status Reports - Resolve Issues as Requested by Agency and CIO	Review Project Closeout Report	
<b>Agency</b>	Select Project in Agency IT Strategic Plan 	Submit Project Proposal & Charter	Submit Detailed Project Plan	- Submit Project Status Reports - Evaluate Overall Project Progress	- Submit Project Closeout Documentation	- Conduct Post Implementation Review - Submit Post Implementation Report



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**Appendix F: CTM Life-cycle – Non-major IT Projects with a Total Estimated Cost Greater from \$100,000 to \$1 million**

The following chart documents the life-cycle phases for Non-major IT Projects, associated decision points and management team responsibilities during each phase.

Life-cycle Phase	Selection	Initiation	Planning	Execution & Control	Closeout	Operations & Support
<b>Decision Points</b>	Selection Approved	Initiation Approved	Baseline Approved	Implementation Approved	Closeout Approved	End of Project
<b>Process Roles and Responsibilities</b>						
<b>Chief Information Officer (CIO)</b>	Approve IT Strategic Plan	Approve Project				
<b>Project Management Division</b>	Recommend Approval of IT Strategic Plan	Recommend Project Approval			- Review report on project success or failure	
<b>Proponent Secretariat</b>	Review IT Strategic Plan					
<b>Agency</b>	<ul style="list-style-type: none"> <li>- Select Project to Include in the IT Strategic Plan</li> <li>- Identify Business Needs and Recommend Projects</li> </ul> 	<ul style="list-style-type: none"> <li>- Approve Project Proposal &amp; Charter</li> <li>- Establish Oversight Structure</li> <li>- Develop Project Proposal &amp; Charter</li> <li>- Establish Non-major IT Project Approval Process</li> </ul>	<ul style="list-style-type: none"> <li>- Approve Project Plan</li> <li>- Resolve Issues as Required</li> <li>- Develop Project Plan (including Baselines)</li> </ul>	<ul style="list-style-type: none"> <li>- Approve Project Status Reports and Project Progress</li> <li>- Resolve Issues as Required</li> <li>- Evaluate Overall Project Progress</li> <li>- Manage Project</li> <li>- Report Project Progress</li> </ul>	<ul style="list-style-type: none"> <li>- Approve Project Closeout</li> <li>- Recommend Project Closeout</li> <li>- Prepare Closeout Documentation</li> <li>- Report project success or failure</li> </ul>	<ul style="list-style-type: none"> <li>- Recommend Post Implementation Actions</li> <li>- Conduct Post Implementation Review</li> </ul>

7

## Commonwealth Technology Investment Project Portfolio

December 15, 2003

Identified for Preliminary Planning					
Project ID	Secretariat	Agency	Project Title	Project Cost (Estimate At Completion)	Planned Start Date
P000473	Administration	State Board of Elections	Campaign Finance Management System	\$500,000	1/1/2005
P000480	Commerce and Trade	Virginia Employment Commission	Web-based Financial Management Accounting System	\$2,436,000	7/1/2004
P000154	Education	Longwood College	Science Building	\$657,539	1/15/2005
P000088	Education	Norfolk State University	Blackboard / Datatel Authentication	\$45,000	3/1/2004
P000451	Education	Norfolk State University	Videostreaming	\$45,000	2/2/2004
P000012	Education	Virginia Community College System	J. Sargeant Reynolds Community College Phase IV Building	\$2,000,000	7/1/2004
P000043	Education	Virginia State University	Resource Security	\$818,400	1/1/2004
P000020	Finance	Department of Accounts	Commonwealth Integrated Payroll/Personnel System (CIPPS) FINDS Web	\$85,000	9/15/2003
P000059	Finance	Department of Accounts	Lease Accounting System (LAS) Replacement	\$85,000	10/1/2003
P000117	Health & Human Resources	Department of Health	Women, Infant, and Children's Nutrition Program II (WIC-II)	\$7,500,000	9/1/2004
P000110	Health & Human Resources	Department of Social Services	Integrated Social Services Delivery System	\$7,000,000	1/1/2004
P000104	Public Safety	Department of Criminal Justice Services	Grants Tracking	\$960,000	7/15/2005
P000423	Public Safety	Department of Criminal Justice Services	Replace Phone Systems at Division of Forensic Science	\$1,000,000	7/15/2005
P000435	Public Safety	Department of Criminal Justice Services	Replacement of Building Access System for Division of Forensic Science	\$1,000,000	7/15/2005
P000211	Technology	Virginia Information Technologies Agency	Email Consolidation	\$24,306,000	4/1/2003
P000328	Technology	Virginia Information Technologies Agency	Lightweight Directory Access Protocol (LDAP)	\$1,400,000	10/31/2003
P000212	Technology	Virginia Information Technologies Agency	Oracle Financials	\$1,500,000	10/31/2003
P000474	Technology	Virginia Information Technologies Agency	VIPNet Enterprise Solutions	\$1,940,000	7/1/2004
P000207	Technology	Virginia Information Technologies Agency	Web Accessibility Standards & Content Management	\$2,422,250	7/31/2003
P000486	Technology	Virginia Information Technologies Agency	Critical Infrastructure and E-911 Data Capture (Virginia Base Mapping Program)	\$110,000	3/1/2004
P000477	Technology	Virginia Information Technologies Agency	Develop a Statewide Contingency and Disaster Recovery Plan.	\$1,000,000	12/1/2003
P000476	Technology	Virginia Information Technologies Agency	Enterprise Desktop Management	\$115,000,000	7/1/2005
P000501	Technology	Virginia Information Technologies Agency	Establish COV Security Program	\$1,000,000	1/2/2004
P000506	Technology	Virginia Information Technologies Agency	G2G Data Sharing	\$500,000	12/1/2003
P000487	Technology	Virginia Information Technologies Agency	Project Management & Portfolio Software	\$250,000	1/5/2004
P000485	Technology	Virginia Information Technologies Agency	Road Centerline / Addressing (Virginia Base Mapping Program)	\$50,000	3/1/2003
Identified for Preliminary Planning (continued)					

## Commonwealth Technology Investment Project Portfolio

December 15, 2003

Project ID	Secretariat	Agency	Project Title	Project Cost (Estimate At Completion)	Planned Start Date
P000479	Technology	Virginia Information Technologies Agency	The VITA Academy	\$1,015,000	7/1/2004
P000484	Technology	Virginia Information Technologies Agency	Virginia Readiness, Response, and Recovery GIS	\$110,000	11/15/2003
P000009	Transportation	Department of Motor Vehicles	Integrated Systems Redesign	\$50,000,000	7/1/2005
P000068	Transportation	Department of Motor Vehicles	REDESIGNED SELF SERVICE KIOSKS	\$675,234	7/1/2005
P000114	Transportation	Department of Transportation	Integrated Six Year Programming System	\$1,290,038	12/1/2003
P000116	Transportation	Department of Transportation	Program/Project Management System Upgrade	\$3,900,000	3/1/2004
P000093	Transportation	Department of Transportation	Statewide Business Security System	\$1,400,000	11/21/2003
P000090	Transportation	Department of Transportation	Statewide Traveler Information System	\$8,640,000	4/1/2003
P000094	Transportation	Department of Transportation	Violation Enforcement System	\$5,000,000	1/1/2004
<b>Identified for Preliminary Planning - Total Number of Projects = 35</b>			<b>Total Dollar Value =</b>	<b>\$245,640,461</b>	

## Commonwealth Technology Investment Project Portfolio

December 15, 2003

<b>Recommended for Planning</b>					
<b>Project ID</b>	<b>Secretariat</b>	<b>Agency</b>	<b>Project Title</b>	<b>Project Cost (Estimate At Completion)</b>	<b>Planned Start Date</b>
P000413	Administration	Department of Employment Dispute Resolution	Videoconferencing	\$15,000	7/1/2005
P000051	Administration	Department of General Services	Laboratory Information Management System (DCLS)	\$1,587,000	8/1/2003
P000034	Administration	Department of General Services	Seat of Government Voice Over Internet Protocol (VoIP)	\$3,639,800	3/1/2004
P000143	Administration	State Board of Elections	Virginia Election and Registration Information System (VERIS)	\$12,000,000	9/15/2003
P000125	Commerce and Trade	Department of Agriculture & Consumer Services	Reengineering/Conversion of Legacy Applications	\$800,000	8/30/2003
P000003	Commerce and Trade	Department of Forestry	Integrated Forest Resource Information System (IFRIS)	\$627,191	5/1/2000
P000035	Commerce and Trade	Department of Forestry	Private Land Mobile Radio Replacement	\$1,992,704	9/15/2003
P000017	Education	Christopher Newport University	Centralized IT Services for use by faculty and students	\$2,064,656	3/1/2003
P000010	Education	Christopher Newport University	Classroom Technology and Faculty Understanding of its Use	\$1,863,700	9/1/2003
P000050	Education	Christopher Newport University	Mitigation of Risk-related Down-Time of Campus Computing	\$1,500,000	3/1/2003
P000025	Education	Christopher Newport University	Workstation and Information-Interface Upgrades	\$1,420,000	9/1/2001
P000150	Education	Department of Education	Education Information Management System (EIMS)	\$14,900,000	7/31/2003
P000111	Education	George Mason University	Mason Enterprise Security Architecture (MESA)	\$1,599,000	7/1/2003
P000458	Education	George Mason University	Telecommunications/Infrastructure Project	\$4,625,000	9/1/2003
P000073	Education	James Madison University	Technology Classrooms	\$4,762,000	5/19/2003
P000027	Education	James Madison University	Technology Infrastructure	\$10,775,000	5/19/2003
P000139	Education	Jamestown-Yorktown Foundation	JYF Ticketing Improvements	\$267,345	4/1/2004
P000121	Education	Library of Virginia	Circuit Court Records Preservation Grants	\$1,900,000	9/1/2001
P000120	Education	Library of Virginia	Find It Virginia	\$5,000,000	10/1/2000
P000022	Education	Longwood College	Centralized Storage Server	\$435,000	3/1/2004
P000060	Education	Longwood College	Purchase and Install Enterprise Resource Program (ERP)	\$4,810,566	7/1/2004
P000438	Education	Longwood College	Replace end-of-life network equipment	\$860,000	3/1/2004
P000231	Education	Longwood College	Replace Private Branch eXchange (PBX)	\$710,000	3/1/2004
P000153	Education	Longwood College	Ruffners Technology	\$970,000	7/2/2003
P000464	Education	Norfolk State University	Community Hospital Building Renovation	\$1,000,000	10/1/2003

**Recommended for Planning (continued)**

## Commonwealth Technology Investment Project Portfolio

December 15, 2003

Project ID	Secretariat	Agency	Project Title	Project Cost (Estimate At Completion)	Planned Start Date
P000224	Education	Norfolk State University	Data Center Relocation	\$1,000,000	8/3/2003
P000138	Education	Norfolk State University	Establish Open Access / Instructional Computer Labs	\$1,125,000	9/1/2003
P000257	Education	Norfolk State University	Firewall Implementation	\$83,000	5/1/2003
P000421	Education	Norfolk State University	Mediated Classrooms	\$2,150,000	6/30/2002
P000466	Education	Norfolk State University	Residence Hall Connectivity	\$3,620,000	12/1/2003
P000465	Education	Norfolk State University	RISE Network Connectivity	\$1,800,000	10/1/2003
P000086	Education	Norfolk State University	Voice over Internet Protocol (VoIP) Telephony	\$1,250,000	6/1/2004
P000151	Education	Old Dominion University	Digital Library	\$3,641,000	7/1/2003
P000162	Education	Old Dominion University	Enrollment Growth	\$2,600,000	7/1/2004
P000162	Education	Old Dominion University	Research Computational Infrastructure	\$8,735,000	7/1/2003
P000036	Education	Radford University	Storage Area Networks (SANs) Project	\$262,300	6/1/2003
P000018	Education	Radford University	Voice Over Internet Protocol (VoIP) Telephone System Project	\$1,414,094	3/1/2003
P000057	Education	University of Virginia Medical Center	Clinical System Implementation	\$19,900,000	12/30/1998
P000128	Education	Virginia Commission for the Arts	Replace the current computer network system.	\$50,000	7/1/2004
P000156	Education	Virginia Commonwealth University	Administrative Systems Replacement	\$11,400,000	4/1/2004
P000147	Education	Virginia Commonwealth University	Modernization of Communications Infrastructure	\$11,450,200	1/1/2004
P000149	Education	Virginia Commonwealth University	VCUnet Infrastructure Maintenance and Experimental Networking	\$1,677,000	10/1/2003
P000134	Education	Virginia Institute of Marine Science	Critical IT Infrastructure Project	\$1,150,000	7/1/2004
P000008	Education	Virginia State University	Classroom Instruction Enhancement	\$1,540,000	5/1/2004
P000005	Education	Virginia State University	Distance Education Initiative	\$1,515,000	1/1/2004
P000013	Education	Virginia State University	Network Infrastructure Upgrade	\$3,154,844	7/31/2003
P000061	Education	Virginia State University	Student IT Services	\$1,347,500	3/1/2004
P000007	Education	Virginia State University	Re-engineer Core Business Processes	\$5,422,857	10/1/2003
P000158	Finance	Department of Accounts	Geac Software Upgrade	\$391,370	1/10/2002
P000131	Finance	Department of Accounts	Hardware Upgrade and Software	\$300,000	8/1/2003
P000032	Finance	Department of the Treasury	Infrastructure update & Disaster Recovery	\$515,000	11/1/2003
P000118	Health & Human Resources	Department of Health	Financial & Administrative System Rewrite	\$2,440,837	10/1/2003
P000183	Health & Human Resources	Department of Health	WebVISION - Private Provider Immunization	\$3,060,000	9/1/2003
P000144	Health & Human Resources	Department of Health	WebVISION Lab Module	\$5,445,952	12/31/2004
P000106	Health & Human Resources	Department of Social Services	Child Care System	\$9,500,000	9/1/2003
P000145	Health & Human Resources	Dept. of Mental Health, Mental Ret. & Sub. Abuse Svcs.	Clinical Apps/EMR	\$11,843,000	7/14/2004

## Commonwealth Technology Investment Project Portfolio

December 15, 2003

Recommended for Planning (continued)					
Project ID	Secretariat	Agency	Project Title	Project Cost (Estimate At Completion)	Planned Start Date
P000146	Health & Human Resources	Dept. of Mental Health, Mental Ret. & Sub. Abuse Svcs.	Health Insurance Portability and Accountability Act (HIPAA) Security Rule	\$1,200,000	8/6/2003
P000119	Health & Human Resources	Dept. of Mental Health, Mental Ret. & Sub. Abuse Svcs.	Hewlett-Packard e3000 Computer Replacement	\$64,000	7/14/2004
P000124	Health & Human Resources	Dept. of Mental Health, Mental Ret. & Sub. Abuse Svcs.	IT Infrastructure Upgrade	\$7,130,000	7/14/2004
P000015	Natural Resources	Department of Game and Inland Fisheries	Point of Sale License System	\$1,500,000	8/1/2004
P000091	Natural Resources	Virginia Museum of Natural History	Adventure Classroom	\$2,200,000	1/2/2004
P000052	Public Safety	Department of Corrections	Offender Management System	\$16,200,000	7/1/2003
P000002	Public Safety	Department of Criminal Justice Services	Virginia Integrated Justice Program (Phase II)	\$3,000,000	5/31/2004
P000459	Public Safety	Department of Emergency Management	IT Infrastructure for the Joint Virginia Emergency Operations Center	\$3,529,109	8/15/2003
P000037	Public Safety	Department of State Police	Consolidated Billing System	\$855,000	10/2/2002
P000046	Public Safety	Department of State Police	Conversion of Database Systems on New Platform	\$4,000,000	1/1/2004
P000033	Public Safety	Department of State Police	Conversion of Master Fingerprint File to Electronic Archive	\$1,600,000	4/1/2004
P000463	Public Safety	Department of State Police	Criminal Justice Information System (CJIS) Master Name Index	\$2,000,000	1/1/2005
P000045	Public Safety	Department of State Police	Disaster Planning	\$2,200,000	9/1/2004
P000101	Public Safety	Department of State Police	Dissemination of Department of Motor Vehicles photos	\$980,000	11/1/2003
P000056	Public Safety	Department of State Police	Enhancement of the Automated Fingerprint Identification System <sup>21</sup> (AFIS <sup>21</sup> )	\$700,000	7/1/2004
P000461	Public Safety	Department of State Police	Enhancement of the Automated Fingerprint Identification System <sup>21</sup> (AFIS <sup>21</sup> ) - Palm Print Search	\$2,000,000	9/1/2005
P000462	Public Safety	Department of State Police	Enhancement of the Automated Fingerprint Identification System <sup>21</sup> (AFIS <sup>21</sup> ) - Wireless Access	\$2,000,000	8/1/2004
P000055	Public Safety	Department of State Police	Enhancement of the Live Scan System	\$400,000	7/1/2004
P000044	Public Safety	Department of State Police	Re-Write the Automated Workflow for Fingerprint Submissions	\$420,000	11/1/2004
P000142	Public Safety	Department of State Police	Sex Offender Registry/Livescan Interface for Mugshots	\$109,600	7/1/2004
P000042	Public Safety	Department of State Police	Statewide Mug-shot and Other Images Repository	\$725,000	11/1/2003

## Commonwealth Technology Investment Project Portfolio

December 15, 2003

Recommended for Planning (continued)					
Project ID	Secretariat	Agency	Project Title	Project Cost (Estimate At Completion)	Planned Start Date
P000058	Public Safety	Department of State Police	Sun Microsystems SUN Fire 6800 Midrange Server upgrade project	\$2,250,000	11/1/2004
P000141	Public Safety	Department of State Police	Upgrade of Virginia Criminal Information Network software	\$100,000	11/1/2003
P000201	Technology	Virginia Information Technologies Agency	VITA Information Center (VIC)	\$2,688,000	8/30/2003
P000475	Technology	Virginia Information Technologies Agency	Data Center and Server Consolidation	\$10,325,000	11/15/2003
P000478	Technology	Virginia Information Technologies Agency	Electronic Bill Presentation and Payment	\$1,530,000	6/30/2004
P000504	Technology	Virginia Information Technologies Agency	MACS Replacement	\$1,423,600	6/30/2004
P000200	Technology	Virginia Information Technologies Agency	VITA Customer Care Center	\$3,000,000	4/1/2003
P000204	Technology	Virginia Information Technologies Agency	VITA Network Security	\$1,533,000	5/7/2003
P000102	Transportation	Department of Transportation	American Association of State Highway & Transportation Officials (AASHTO) Bridgeware Implementation	\$1,023,500	12/1/2003
P000095	Transportation	Department of Transportation	Highway Traffic Records Information System (HTRIS) Technology Upgrade	\$3,000,000	12/1/2003
P000089	Transportation	Department of Transportation	Statewide Video Distribution Service	\$1,170,000	12/1/2003
P000029	Transportation	Motor Vehicle Dealer Board	Seat Management Contract Renewal	\$180,000	7/1/2003
<b>Recommended for Planning - Total Number of Projects = 89</b>				<b>Total Dollar Value =</b>	<b>\$280,943,725</b>

## Commonwealth Technology Investment Project Portfolio

December 15, 2003

Approved for Planning by CIO					
Project ID	Secretariat	Agency	Project Title	Project Cost (Estimate At Completion)	Planned Start Date
P000052	Public Safety	Department of Corrections	Offender Management System Phase 1 - Offender Sentence Calculation Project	\$800,000	4/1/2004
<b>Approved for Planning by CIO - Total Number of Projects = 1</b>			<b>Total Dollar Value =</b>		<b>\$800,000</b>
Recommended for Development Approval by CIO and Secretariat Oversight Committee					
Project ID	Secretariat	Agency	Project Title	Project Cost (Estimate At Completion)	Planned Start Date
<b>Recommended for Development Approval - Total Number of Projects = 0</b>			<b>Total Dollar Value =</b>		<b>\$0</b>
Approved for Development by Commonwealth IT Investment Board					
Project ID	Secretariat	Agency	Project Title	Project Cost (Estimate At Completion)	Planned Start Date
P000085	Transportation	Department of Transportation	Financial Management System (FMS II) Upgrade	\$18,613,003	8/4/2003
P000123	Transportation	Department of Transportation	Asset Management System	\$2,046,794	3/1/2003
P000084	Transportation	Department of Transportation	EZ Pass Reciprocity	\$2,029,240	12/31/2003
<b>Approved for Development - Total Number of Projects = 3</b>			<b>Total Dollar Value =</b>		<b>\$22,689,037</b>

# Commonwealth Technology Investment Project Portfolio

December 15, 2003

Planned Completion Date
6/30/2006
6/30/2006
12/15/2005
5/1/2004
4/1/2004
6/30/2005
8/1/2005
11/15/2004
8/15/2004
7/1/2008
12/1/2011
6/30/2006
6/30/2006
6/30/2006
1/15/2004
10/31/2004
10/31/2004
6/30/2006
6/30/2006
6/30/2006
6/30/2004
6/30/2006
12/30/2004
4/1/2004
12/30/2004
6/30/2004

# Commonwealth Technology Investment Project Portfolio

December 15, 2003

<b>Planned Completion Date</b>
7/1/2005
6/30/2005
7/1/2006
7/1/2006
12/1/2005
10/1/2006
6/30/2006
10/1/2005
6/1/2005

# Commonwealth Technology Investment Project Portfolio

December 15, 2003

Planned Completion Date
12/1/2005
1/1/2005
9/30/2006
12/15/2005
6/30/2006
2/1/2005
6/30/2008
12/1/2005
2/1/2006
12/1/2007
6/1/2006
6/30/2006
12/1/2005
6/30/2006
6/1/2008
6/30/2008
6/30/2005
3/1/2013
12/1/2006
12/1/2005
8/1/2005
7/1/2006
12/1/2005
4/1/2004
1/1/2005

# Commonwealth Technology Investment Project Portfolio

December 15, 2003

Planned Completion Date
8/1/2004
8/1/2004
1/1/2004
6/30/2010
1/1/2005
1/1/2005
8/1/2005
4/1/2007
6/30/2008
10/1/2007
3/1/2005
4/1/2005
9/1/2005
6/30/2005
10/1/2008
12/30/2006
8/1/2006
6/30/2006
6/1/2007
12/1/2005
6/30/2007
1/1/2007
5/1/2007
2/1/2005
12/31/2005
3/1/2005
12/31/2006
4/1/2007
12/31/2008
12/1/2005
6/30/2008

# Commonwealth Technology Investment Project Portfolio

December 15, 2003

Planned Completion Date
5/1/2005
11/29/2004
7/1/2006
1/31/2006
12/31/2005
6/1/2006
8/30/2006
12/30/2005
3/10/2005
7/1/2006
9/30/2006
6/1/2007
6/1/2006
6/1/2005
6/30/2005
2/1/2007
6/30/2006
6/1/2005
6/1/2006
7/1/2005
6/1/2005

# Commonwealth Technology Investment Project Portfolio

December 15, 2003

Planned Completion Date
6/1/2006
6/1/2005
2/15/2005
1/31/2006
6/30/2005
6/30/2005
2/1/2005
1/30/2004
8/1/2005
6/1/2005
4/1/2005
7/12/2004

# Commonwealth Technology Investment Project Portfolio

December 15, 2003

<b>Planned Completion Date</b>
2/15/2005
<b>Planned Completion Date</b>
<b>Planned Completion Date</b>
12/1/2005
11/30/2004
12/31/2004



## Budget Request Briefs for 2004-2006 Biennium

### Summary Table of Budget Request Briefs for the 2004-2006 Biennium

(As approved by the Information Technology Investment Board, Nov. 5, 2003)

#### Virginia Information Technologies Agency

		FY 2005			FY 2006		
Priority	Short Title	GF \$	NGF	Positions	GF \$	NGF \$	Positions
	Base Funding	2,367,186	33,031,255	367	2,367,186	33,031,255	367
1	CIO Compensation	Sum sufficient not to exceed \$250,000			Sum sufficient not to exceed \$250,000		
2	Agency Transition Fund	8,300,000	-	-	-	-	-
3	Startup Costs for VITA Consolidation	4,847,000	-	-	-	-	-
4	Statewide Acquisition Services	509,279	-	-	509,279	-	-
5	VITA Startup Equipment Outyear Costs	1,114,000	-	-	1,114,000	-	-
6	Project Management Code Requirements	2,850,374	-	6	785,986	-	6
7	Administrative Support for General and Special Fund Programs	442,900	285,700	-	442,900	285,700	-
8	Server Consolidation Investment to Achieve Savings	420,000	-	-	610,000	-	-
9	E-911 Technology Improvements	-	1,000,000	-	-	1,000,000	-
	<b>Total</b>	\$21,100,739	\$34,316,955	373	\$6,079,351	\$34,316,955	373



# VITA Projected Financial Statements

## Statement for Internal Service Funds FY04 – 06

	FY04	FY05	FY06
<b>Revenue</b>			
<i><b>Current Services</b></i>			
Computer Services	\$45,474,448	\$48,029,197	\$50,237,174
Telecommunications	\$69,300,000	\$69,246,279	\$70,246,279
Enterprise Systems	\$2,723,838	\$2,723,838	\$2,723,838
<b>Subtotal</b>	<b>\$117,498,286</b>	<b>\$119,999,314</b>	<b>\$123,207,291</b>
<i><b>New Services</b></i>			
Computer Services	\$19,190,936	\$109,829,281	\$131,673,997
Telecommunications Services	\$3,205,918	\$19,442,302	\$23,466,604
Subtotal	\$22,396,854	\$129,271,584	\$155,140,602
<b>Total Revenue</b>	<b>\$139,895,141</b>	<b>\$249,270,898</b>	<b>\$278,347,893</b>
<b>Expenses</b>			
<i><b>Current Services Direct Expenses</b></i>			
Computer Services	\$39,185,193	\$40,231,398	\$40,648,666
Telecommunications	\$64,360,574	\$64,310,574	\$65,510,574
Enterprise Systems	\$1,709,602	\$1,709,602	\$1,709,602
<b>Subtotal</b>	<b>\$105,255,368</b>	<b>\$106,251,573</b>	<b>\$107,868,841</b>

	FY04	FY05	FY06
<b><i>New Services Direct Expenses</i></b>			
Computer Services	\$16,421,350	\$93,979,003	\$112,671,146
Telecommunications Services	\$2,916,103	\$17,684,716	\$21,345,221
<b>Subtotal</b>	\$19,337,453	\$111,663,719	\$134,016,367
<b><i>Indirect Expenses</i></b>			
Current	\$21,596,048	\$21,724,513	\$21,724,513
New	\$2,035,059	\$7,783,148	\$11,321,972
<b>Subtotal</b>	\$23,631,107	\$29,507,661	\$33,046,486
<b>Total Expenses</b>	<b>\$148,223,927</b>	<b>\$247,422,954</b>	<b>\$274,931,694</b>
<b>PROFIT/(LOSS)</b>	<b>(\$8,328,787)</b>	\$1,847,944	\$3,416,199
<b>Start-Up Costs /1</b>	<b>(\$3,950,000)</b>	\$0	\$0
<b>RETAINED EARNINGS JULY 1</b>	\$26,362,876	\$14,084,089	\$15,932,033
<b>RETAINED EARNINGS JUNE 30</b>	<u>\$14,084,089</u>	<u>\$15,932,033</u>	<u>\$19,348,232</u>

/1 VITA and the Secretary of Finance have agreed to charge \$4 million in start-up costs to the Internal Service Funds in lieu of Finance transferring VITA's share of IT reductions out of this account in the same amount. These costs will be distributed to the Expenses section of this worksheet in the next update.

## Statement for Non-Internal Service Funds By Fund and Program (FY04)

FUND PROGRAM	0100			0200	0910	0928		0241
	71105	71199	71106	71199	71104	71105	71200	71199
Fund Balance - 7/1/03	0	0	0	95,091	667,017	2,323,211	26,170,206	84,738
Projected Revenues	0	0	0		34,026,813	0	30,504,977	0
Chapter 1042 Appropriation	336,040	2,015,932	5,167,823	21,609	4,237,918	125,000	0	0
Expenses	(336,040)	(2,015,932)	(5,167,823)	(21,609)	(38,431,748)	(2,448,211)	(26,753,942)	(84,738)
Budget Reductions & Adjustments	0	0	0	0	0	0	(25,087,953)	0
Projected Fund Balance - 6/30/04	0	0	0	95,091	500,000	0	4,833,288	0

### Fund Descriptions

- 0100 - General Funds
- 0200 - Special Funds
- 0910 - Dedicated Special Funds
- 0928 - Dedicated Special Funds
- 0241 - E-Government Services Fund

### Program Descriptions

- 71103 - Special Project Management
- 71104 - Public Information Access Services
- 71105 - Geographic Information Access Services
- 71106 - Technology Management and Oversight (Start-Up Costs)
- 71199 - IT Strategic Management Services
- 71200 - Emergency Communication Systems Management and Direction - Includes the following Subprograms:
- 71201 - Emergency Communication Systems Development Services
- 71202 - Financial Assistance to Localities for Enhanced Emergency Communications
- 71203 - Financial Assistance to Service Providers for Enhanced Emergency Communications Services

## VITA Approved Interim Rates

### Approved Interim Rates Calculations

<u>Servers</u>	NT Tier 1	NT Tier 2	NT Tier 3	UNIX Tier 1	Unix Tier 2	Unix Tier 3
<b>Annual cost range</b>	\$547-\$5,999	\$6,000-\$14,999	\$15,000-\$27,999	\$547-\$7,499	\$7,500-\$17,499	\$17,500-\$29,999
<b>Server counts</b>	1,564	211	43	982	138	30
<b>Mean cost</b>	\$2,281	\$9,016	\$18,728	\$2,907	\$10,931	\$23,796
<b>Median cost (FYI only)</b>	\$1,875	\$8,000	\$16,980	\$2,400	\$10,113	\$24,170
<b>Base (HW and SW)</b>	\$3,567,484	\$1,902,376	\$805,304	\$2,854,674	\$1,508,478	\$713,880
<b>Support and shared</b>	\$2,776,089	\$1,480,361	\$626,659	\$2,221,406	\$1,173,844	\$555,516
<b>Total to recover</b>	\$6,343,573	\$3,382,737	\$1,431,963	\$5,076,080	\$2,682,322	\$1,269,396
<b>Annual amount per server</b>	\$4,055.99	\$16,031.93	\$33,301.46	\$5,169.12	\$19,437.11	\$42,313.20
<b>Monthly Rates</b>	<b>\$338.00</b>	<b>\$1,335.99</b>	<b>\$2,775.12</b>	<b>\$430.76</b>	<b>\$1,619.76</b>	<b>\$3,526.10</b>

<u>Software</u>	SW Tier 1	SW Tier 2	SW Tier 3	SW Tier 4	SW Tier 5
<b>Annual cost range</b>	\$320-\$9,999	\$10,000-\$49,999	\$50,000-\$99,999	\$100K-\$249K	\$250K-\$474,005
<b>Software counts</b>	407	77	41	12	14
<b>Mean Annual Cost</b>	\$2,110	\$20,327	\$67,855	\$159,543	\$347,933
<b>Base SW cost</b>	\$858,770	\$1,565,179	\$2,782,055	\$1,914,516	\$4,871,062
<b>Support and Shared</b>	\$668,264	\$1,217,967	\$2,164,896	\$1,489,808	\$3,790,487
<b>Total to recover</b>	\$1,527,034	\$2,783,146	\$4,946,951	\$3,404,324	\$8,661,549
<b>Annual amount per unit</b>	\$3,751.93	\$36,144.75	\$120,657.34	\$283,693.68	\$618,682.07
<b>Monthly Rates</b>	<b>\$312.66</b>	<b>\$3,012.06</b>	<b>\$10,054.78</b>	<b>\$23,641.14</b>	<b>\$51,556.84</b>

<u>Desktops</u>	PC Standard	PC High	Lap Standard	Lap High
<b>Desktop counts</b>	49,588		8,133	
<b>Total to Recover</b>	\$56,351,414		\$19,912,032	
<b>Annual Amount</b>	\$1,136.39		\$2,448.30	
<b>Monthly Rates</b>	<b>\$94.70</b>	<b>\$107.70</b>	<b>\$204.03</b>	<b>\$218.03</b>

**Network Equipment - Data**

**Purchase Total** \$22,683,419.23  
**3 year recovery Total** \$62,868,529.70  
**Monthly recovery amount** \$1,746,348.05

**Monthly rate (% of purchase)** **7.70%**

**Network Equipment - Voice**

**Purchase Total** \$6,055,893.61  
**5 year recovery Total** \$16,506,094.03  
**Monthly recovery amount** \$275,101.57

**Monthly rate (% of purchase)** **4.54%**

**Other Hardware**

**Purchase Total** \$19,137,353  
**5 year recovery Total** \$68,371,131.73  
**Monthly recovery amount** \$1,139,518.86

**Monthly rate (% of purchase)** **5.95%**

**Additional PC hardware devices (printer, scanner, plotter, etc) charged as purchase price + administrative support (8.9 percent)**  
**Additional PC software (Attachmate, Visio, MS Project, etc) charged as purchase price + administrative support (8.9 percent)**  
**Wireless handheld devices charged as cost (purchase, maintenance, license, usage) + administrative support (8.9 percent)**

## **Rate Category Definitions for New VITA Services**

### **Servers**

Server rates include hardware replacement, operating system software, hardware maintenance, direct staff support of hardware and operating system, security (hardware, software and staff), Customer Care Center support and other indirect expenses.

The appropriate rate can be determined as follows: identify the server as a Windows/NT or Unix server. Then, divide the purchase price of the server by 3 and add the annual maintenance cost (if any). The resulting number should fall within one of the 3 ranges for each type of server and will be charged at the corresponding rate for that range. See the other hardware category for servers falling above either of the Tier 3 ranges.

### **Server Software**

Server software rates include annual renewable expenses for licensing and/or upgrades of the software, direct staff support of the software, security (hardware, software and staff), Customer Care Center support and other indirect expenses.

The appropriate rate can be determined by adding the annual recurring direct expenses associated with the software (licensing, maintenance, upgrade). The resulting number should fall within one of the 5 ranges and will be charged at the corresponding rate for that range.

### **Desktop**

Desktop rates include hardware replacement, operating system software, hardware maintenance, a standard suite of client software (MS Office, terminal emulation, anti-virus, email, browser), direct staff support of hardware and operating system, LAN server software and direct staff support, security (hardware, software and staff), Customer Care Center support and other indirect expenses.

At the time of transition, all desktops and laptops will be treated as standard. As new PC's are purchased, the distinction between standard and high-end will be based solely on the cost of the hardware.

### **Network equipment – data**

The network equipment data rate includes hardware replacement, disposal, maintenance, direct staff support, security (hardware, software and staff), Customer Care Center support and other indirect expenses.

The monthly charge can be determined by multiplying the purchase cost by 7.7 percent.

### **Network equipment – voice**

The network equipment voice rate includes hardware replacement, maintenance, direct staff support, security (hardware, software and staff), Customer Care Center support and other indirect expenses. Phone sets that are bundled in the hardware/software vendor cost are included in the rate.

The monthly charge can be determined by multiplying the purchase cost by 4.54 percent.

## Other hardware

Other hardware is generally high-end enterprise servers (mainframes) and data center equipment such as disk arrays, tape drives and enterprise printers. The rate includes hardware replacement, maintenance, direct staff support, security (hardware, software and staff), Customer Care Center support and other indirect expenses.

The monthly charge can be determined by multiplying the purchase cost by 5.95 percent.