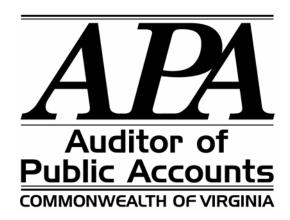
INTERIM REPORT OF VIRGINIA STATE UNIVERSITY'S PROJECT NEW HORIZONS

AUGUST 2005



AUDIT SUMMARY

Project New Horizons can have a successful implementation, on schedule, within budget and with the least disruption to daily operations, but it will require the University to address the staffing shortage with real solutions rather than shifting resources to temporarily patch the problem. Management must also require the Project Manager to manage the project according to an approved project plan. Finally, Management must ensure the Project Manager understands his authority over project team members and that he exercise this authority by holding members accountable for missed deadlines and deliverables. We believe the University can achieve successful completion of this project if they address the concerns described in this report.

We have been monitoring Virginia State University's progress in implementing their new Banner administrative systems. We found that the University has started executing work without an approved project plan and they are not monitoring actual progress against the plan. In addition, the project is not on time as some deliverables are at least two months behind schedule. University staffing shortages and the lack of accountability for completing work are the primary causes for the project delays. Continuing to miss deliverable deadlines and staffing shortages will impact the University's ability to meet their July 1, 2006 implementation schedule, resulting in increased costs.

Over the last year, the University has experienced significant employee turnover in several positions. The University has filled some of positions, but many others have remained vacant. This turnover has led to many new staff in key positions or increased staff workloads due to the positions that remain unfilled. Staffing shortages contributed to the Banner project's suspension in January 2005 and we have concerns that continued shortages will put the reactivated project at risk again.

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HISTORY AND BACKGROUND

Virginia State University is implementing the SCT Banner system to replace their current system, SCT Plus. The University implemented SCT Plus a number of years ago and the vendor, SCT, is planning limited or no support of this system in the near future. Banner will incorporate newer technologies and provide integration with web-based applications for the delivery of information. The University will use staff from business units across the University, as well as from SunGard-Collegis, Inc., its primary implementation service provider. The University has chosen the Banner system because it is a popular higher education system and in current use at nine other public universities in the Commonwealth.

The Virginia Information Technologies Agency (VITA) and the Commonwealth's Chief Information Officer (CIO) approved the University's project charter in January 2004. The project has a three-year implementation schedule consisting of two phases. Phase 1 includes the Finance and Human Resource modules and Phase 2 includes the Student and Financial Aid modules and overall integration of the system. Initial work on the project began around April 2004 and continued for eight months. During this period, VITA employed a vendor, CACI, to perform an initial Independent Verification and Validation (IV&V) review, which found the project off-track and not positioned for success.

An IV&V is a review to determine the overall adequacy of a project's management and ability to meet its budget and goals. This IV&V report led the CIO, Lem Stewart, to suspend the project in January 2005. The suspension lasted three months in which time the University worked to satisfy the required corrective actions to reactivate the project. The CIO reactivated the project in April 2005 and the University is currently working on Phase 1.

The project's reactivation led to a restructuring of project staff, including new project managers from the University as well as Collegis. The University and Collegis Project Managers, along with Collegis management, worked to align Collegis services with revised project deadlines. These deadlines include moving the Finance module "go live" date to July 1, 2006 and scheduling the first-term student registration to the fall of 2007. This led to an agreement to extend the project to January 2008 to allow additional time for the Student module implementation.

PROJECT OVERSIGHT

The project has two new project managers, Joseph Dixon from the University and Peter DeLorme from Collegis. These gentlemen work collaboratively and share responsibility for project planning, execution, and control. The Project Charter also calls for the University Internal Auditor's involvement in conducting mid-quarter quality assessments that are essentially abridged versions of a full IV&V review.

Currently, The University has established both an Executive Steering Committee and a Finance Steering Committee. The Executive Steering Committee has members from University executive management and key representatives from other University areas, the project managers, and a VITA representative. This committee has scheduled bi-weekly meetings according to the Project Communication Plan.

The Finance Steering Committee has key representatives from University functional areas, project managers, and an Auditor of Public Accounts representative. This committee meets twice monthly and the University Controller chairs the meetings.

REVIEW METHODOLOGIES

The Auditor of Public Accounts' (APA) systems development specialists monitor the status of major systems development projects within the Commonwealth. These specialists have monitored the University's Banner implementation since its inception and have reviewed its overall project management, as well as its progress. They have reviewed various project documents such as the project plan, organization charts, and project charter and offered suggestions and recommendations based on project management best practices. These specialists also regularly attend Finance Steering Committee meetings to note any issues affecting the project.

These specialists regularly meet with the project managers and the University's Internal Audit staff to offer suggestions and recommendations based on their experience monitoring Banner implementations at other Commonwealth universities. The ultimate goal of the APA's involvement is to determine if and when the project may not be progressing as planned and alert any critical decision-makers to this information, thereby mitigating the potential for failure at the earliest point possible.

FINDINGS AND RECOMMENDATIONS

Our most recent University financial audit report dated April 15, 2005, noted that over the last year, the University has experienced significant employee turnover in several key positions including, but not limited to the Vice President for Administration and Finance, Controller, Budget Director, Manager of General Accounting, Cash and Investments Manager, Director of Purchasing, and Payroll Manager. The University has filled some of these positions, but many positions have remained vacant and at times, the University had to rely on temporary employees and support from Commonwealth's Central Service agencies to perform functions necessary for day-to-day operations. As a result of this turnover, the University has had many new staff in these positions or has had to increase staff workloads due to the positions that remain unfilled.

Develop Solutions to Staffing Shortage

Staffing shortages contributed to the Banner project's suspension in January 2005 and we have concerns that continued shortages will put the project at risk again. Systems development projects, such as Banner, generally increase workloads. We are concerned that the University's staffing is already inadequate to sustain normal daily operations without adding the burden of such a project.

The Project Managers identified staffing shortages as a high risk area and brought their concerns to the Executive Steering Committee on July 14. At that time, the Project Managers estimated the project was three to five weeks behind schedule. The Executive Committee responded by shifting operational staff to fill vacant project team positions. Management approved the hiring of temporary staff to fill the void in operational areas that resulted from this shift. The Executive Committee also mandated that all project staff commit a minimum of 20 percent of their work week to the project.

Team members are currently completing business process analyses to document how their sections perform work now and how they will re-engineer it using Banner. According to the project plan, these analyses are already more than two months behind schedule. We believe the reorganized staff may initially require more time than planned to complete this work because the project plan and completion dates were originally determined based on staff with knowledge and experience.

While the Executive Committee's actions demonstrate an active response to the problem, the project was already three to five weeks behind schedule when they met and we believe a 20 percent commitment may

not bring the project back on schedule, let alone keep pace with the current assignments. Although the Project Manager and Executive Committee provided us with a brief analysis that shows the 20 percent commitment is adequate, we believe an effective analysis would require a baseline project plan with resources assigned and leveled, scheduled start and finish dates for tasks with the critical path identified, and tracking of actual work completed.

However, the project plan completion is behind schedule, does not have resources identified, and will not receive the Executive Committee approval until August 11. We discuss project plan concerns in more detail later in this report.

We attended the Finance Steering Committee meeting on July 26 during which the Project Managers indicated they now believe the project is five to seven weeks late and expect to monitor the benefit of the 20 percent time commitment at the end of August. If the Project Managers do not see improvements at that time, the Executive Committee has approved a plan to increase the percentage. We are concerned that waiting until the end of August may be too late and that the Project Managers should perform a detailed analysis regularly. Waiting may put the project too far behind schedule for the University to implement effective measures to meet the July 1, 2006 implementation date.

We commend the Project Managers and Executive Committee for addressing the staffing vacancies, but are concerned that the problem is larger than these groups alone can fix. In fact, we believe their actions may actually compound the operational staffing shortage problem as noted in our last financial audit report.

We recommend the University develop a realistic project plan with realistic deadlines that acknowledge the existing staffing problems. Further, the project plan should recognize that operational functions need to continue and that overtime and other internal resource allocations will affect the deadline and ultimately the project. Management should give consideration to revising their implementation schedule to a later date. This would allow the University to continue their momentum towards implementing the system without setting unachievable expectations that could result in frustration, disappointment, and possibly additional staff turnover. However, if the University insists on a July 1, 2006 implementation date, they should consider purchasing project management and business process reengineering services directly from SCT or other vendors with Banner experience, in addition to those already hired through Collegis.

Improve Oversight and Overall Project Authority

Executive management publicly supports the Banner implementation, but their implementation schedule during the University's staffing shortage places the project and daily operations at risk. They have shifted resources from operations to the project at a time when our audit identified internal control concerns in operations directly resulting from staffing shortages. Proceeding with the systems project under a tight implementation schedule before stabilizing the staffing situation creates a perception that management does not understand the resource commitment required to implement a new system and is not supporting staff.

In a project, such as Banner, there are many project stakeholders. Project team members have an interest in making the project successful and meeting the deadlines assigned to them. Management is interested in the project's success, but they are also motivated to have the daily operations they are accountable for succeed. The University's Project Charter identified stakeholders and their responsibilities, but the project manager's ability to manage these stakeholders is limited if he is only granted responsibility, but not authority, over the project.

We reviewed the Banner Project Charter and found that it only gives responsibility to the Project Manager and it does not grant project authority to him. Instead, the Project Charter grants authority to the Vice President for Accounting and Finance, the Provost and Vice President for Academic Affairs, and the

Assistant to the President. During a follow-up with management, we learned that they believe by giving the Project Manager responsibility for the project they have also delegated authority to him. However, management must explicitly communicate this authority in writing so that both the Project Manager and stakeholders understand his authority. Otherwise, we are concerned that the Project Manager may not realize his authority and consequently may not exercise it in securing resources and holding team members accountable.

Project management best practices suggest that the Project Charter grant overall project authority to the project manager. The project charter should specify the nature of the authority along with any nuances in exercising that authority. Granting authority in writing ensures the project manager and others understand the authority and provides credibility when the project manager exercises that authority.

Manage Against an Approved Project Plan

The project team is executing work without an approved project plan. The plan was scheduled to be approved by June 30 and is now tentatively slated for approval at the Executive Steering Committee meeting on August 11. The Project Manager has prepared a draft project plan that he expects will closely resemble the approved version.

The Project Manager does not use the draft project plan as a management tool. Instead, he uses a quarterly deliverables agreement between the University and Collegis. There are differences between the project plan and deliverables agreement, such as different task deadlines, but we do not know how these differences impact the final implementation date. Without managing to a well-developed project plan, the Project Manager cannot effectively monitor resources, plan when those resources are needed, or evaluate the impact of delays on the project end date. Without this project plan, he also cannot provide Executive Management with a clear portrait of the project's condition or predict the impact of decisions they make.

A project plan is the single most important tool a project manager can use to control the project. It describes all tasks in detail, identifies the resources required to complete the tasks, calculates how long each task should take, provides each task's start and end date, and identifies dependencies and milestones. In the plan, the project manager also identifies those tasks that affect the final project end date, known as the critical path, so the manager can closely monitor and manage those tasks. The project manager uses the plan daily to track completed tasks and the actual time spent, so he can identify delays promptly.

First, we recommend that the Project Manager obtain approval of the project plan as scheduled. Second, the Project Manager must review the plan to ensure it contains all of the essential elements of a good plan, including the identification of resources assigned to tasks and which tasks are part of the critical path. Finally, we recommend that the Project Manager use the plan to manage the project. For example, the Project Manager must obtain at least weekly progress reports from all team members, including actual time spent on specific tasks and an estimate of remaining time needed to complete outstanding tasks, and record that information in the project plan.

Enforce Accountability for Work

Although the project is still in the early stages, we noticed the Project Manager not holding some project team members accountable for not completing their assigned tasks. As of July 26, our review of the draft project plan noted that some teams are two months behind schedule completing some tasks. The lag in completing these tasks may impact other dependent tasks on the project plan.

To achieve success, the project first requires competent team members that possess the experience and skills necessary to perform the tasks. Second, the Project Manager must develop an effective

communication plan to ensure the team members understand their tasks, deadlines, and expectations. Third, the Project Manager must baseline all tasks in a project plan, measure their completion, analyze the gap, and develop a corrective action plan to deal with task delays. Finally, the Project Manager must have and exercise authority by disciplining or removing ineffective team members.

We understand that the Project Manager is actively meeting with the team leads to review their assigned tasks to make sure they understand what they need to do. However, we believe the University must also address the areas identified above in the sections titled "Develop Solutions to Staffing Shortage," "Improve Oversight and Overall Project Authority," and "Manage Against an Approved Project Plan" in order to improve team member accountability.

Maintain Internal Audit Oversight

Recent staff turnover has left the University's Internal Audit department with only one staff member. The Internal Audit Director recently resigned and the staff auditor responsible for monitoring the project transferred to another University department. The remaining internal auditor has had no involvement with any aspects of the Banner project.

The Project Charter provides for both external and internal project oversight. For external oversight, the University will hire a firm each quarter to conduct an Independent Verification and Validation (IV&V), much like the one performed in January 2005 by CACI. For internal oversight, the University assigned the Internal Auditor with responsibility for conducting mid-quarter quality assessments that are essentially abridged versions of a full IV&V review and should occur six weeks after the external quarterly IV&V.

The loss of internal audit staff has severely impaired the University's internal oversight plan. While the completion of the project does not hinge on these mid-quarterly reviews, management obviously understood the value they would add to the process and included them in the Project Charter. We recommend that University management work swiftly to fill the vacant Internal Audit positions to minimize the impact on completing the mid-quarterly reviews.



Commonwealth of Hirginia

Walter J. Kucharski, Auditor

Auditor of Public Accounts P.O. Box 1295 Richmond, Virginia 23218

August 2, 2005

The Honorable Mark R. Warner Governor of Virginia State Capital Richmond, Virginia The Honorable Lacey E. Putney Chairman, Joint Legislative Audit and Review Commission General Assembly Building Richmond, Virginia

Our office monitors the status of major systems development projects within the Commonwealth to help eliminate costly systems development and implementation failures.

We have completed an interim review of Virginia State University's Banner information systems development project, Project New Horizons. We conducted our overall review in accordance with the standards for performance audits set forth in <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States.

Objectives

Our objectives for the review of Project New Horizons were to determine that the University has complied with the Commonwealth's Project Management Standards (COV ITRM Standard GOV2004-02.3.2) governing major information technology projects in the Commonwealth and the project is progressing on time, within budget, and satisfying all defined project deliverables.

Scope and Methodology

Our review examined the University's project management activities between January 2004 and August 2005, with a heavy emphasis on activities since the project was reactivated in April 2005 after a brief suspension. Our work consisted of management inquiries, examination of project documentation, and attendance at oversight committee meetings.

Results

We found that the University has prepared and submitted many of the project management documents required by the Commonwealth's Project Management Standard (COV ITRM Standard GOV2004-02.3.2). However, they have started executing work without an approved project plan and are not monitoring actual progress against the plan. In addition, the project is not on time as some key deliverables are at least two months behind schedule. University staffing shortages and the lack of accountability for completing work are the primary causes for the project delays. Continuing to miss deliverable deadlines and staffing shortages will impact the University's ability to meet their July 1, 2006 implementation schedule, resulting in increased costs.

Additional information concerning the status and history of Project New Horizons can be found in the body of this report.

We discussed this report with University management at an exit conference on August 8, 2005.

AUDITOR OF PUBLIC ACCOUNTS

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VIRGINIA STATE UNIVERSITY



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August 9, 2005

Mr. Walter Kucharski Auditor of Public Accounts P.O. Box 1295 Richmond, Virginia 23218-1295

RE: Response to Report on Project New Horizons

Dear Mr. Kucharski:

Thank you for the opportunity to respond to the Findings and Recommendations presented in the report on Virginia State University's Project New Horizons (Banner System Implementation).

We appreciate the APA's input and involvement with this project and value the advice and support your staff has provided to the University over the years. We look forward to the Auditor of Public Accounts' (APA) continued guidance and advice to our staff. Our specific responses to the findings and recommendations in the report are provided below:

Staff Shortage Puts Project Completion at Risk

- 1. The University agrees that we are experiencing a large amount of turnover in areas that impact the project. We are keenly aware of the staffing situation and are taking an aggressive approach to filling vacancies in the Administration and Finance Division. More specifically,
 - A. We issued an RFP to seek temporary personnel to assist with project responsibilities and backfill for staff assigned to the project. This has provided some limited additional personnel. We currently have six temporary staff persons employed within the Administration and Finance area of the University. We have added six additional permanent full-time positions and been successful in filling three of them at this time.
 - B. We have reorganized the project teams, giving consideration to the expertise of current and new staff members to ensure that task completion is not dependent upon vacant positions. This realignment was done with operational needs considered. The team memberships are clearly realigned and re-organized to have the best and most skilled personnel leading the functional areas. We are comfortable with our team realignments but acknowledge that as we move this project forward additional changes may occur.

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The recruitment efforts are continuing. The University will continue to analyze staffing levels, and its impact on operations and the success of the project on an on-going basis.

- 2. The project team believes it has a realistic project plan and an escalation process that will lead to a successful project completion. To further document this, the Collegis Project Manager will complete the following activities no later than **August 12**, 2005:
 - A. Baseline the project schedule and work break down structure (WBS) that was approved by VITA in April 2005.
 - B. Update the schedule to reflect the project's critical path.
 - C. Reconcile the plan with the quarterly deliverables to reflect the appropriate task completion dates.
 - D. Update the actual work performed on the project by the project team members through July 31, 2005.
- 3. The VSU and Collegis project teams will, following the previously laid out escalation plan, evaluate progress on August 31, and determine if additional escalation is required.
- 4. The VSU and Collegis Project Managers will follow the escalation plan and evaluate the progress again on September 30, 2005. If necessary, the Project Managers will adjust the project resources to create a dedicated, full-time, project team.
- 5. The University will approve its detailed Finance project plan by the first scheduled Executive Committee on August 18, 2005.
- 6. The University will evaluate the need for adding support from an experienced vendor such as SCT or extending the project completion schedule.

Improve Oversight and Overall Project Authority

The statement of explicit authority related to the Project Manager below, recently approved by the Project Sponsor, will be clearly communicated in writing to all stakeholders and the Project Manager. It will also be included in the Project Charter.

- 1. The Project Manager holds explicit authority over University staff within the scope of Project assignments, and all Project staff members are accountable to the Project Manager for successful and timely completion of those assignments.
- 2. The Project Manager also holds explicit authority over assigned staff during scheduled Project work periods.

This activity will be completed in the next thirty (30) days.

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Manage Against a Project Plan

- 1. The Project Managers will obtain approval of the project plan from the Banner Executive Committee on August 18, 2005.
- 2. The Collegis Project Manager will provide the Executive Committee with a realistic and well developed plan that will include the identification of resources assigned to tasks, tasks that are part of the critical path, and quarterly deliverables.
- 3. The Collegis Project Manager will use the plan to manage the project.
- 4. The Collegis Project Manager will continue to collect status reports from each functional lead; this activity will be shifted to a twice a month schedule. From these status reports collected, the project team efforts will be entered into the project plan so that it accurately reflects project progress.

Enforce Accountability for Work

The Project Manager has begun meetings with the team leads to make certain that they understand what is expected of them. Additional project consultants have recently been added to provide assistance to the team members. The team memberships have been clearly realigned and re-organized to have the best and most skilled personnel to lead the functional areas. The Project Manager authority is being reinforced and he has been tasked to oversee the execution of the implementation activities, monitor the team members' work progress, and ensure that team members fulfill work assignments as scheduled. If necessary, the Project Managers will take any disciplinary actions to remove ineffective team members.

Lack of Internal Audit Oversight

The staff auditor has requested and been approved to return to the Internal Audit department on or before August 11, 2005. The President and Board of Visitors will take appropriate action to secure an Internal Audit director.

I again appreciate the opportunity to respond to the report and look forward to the continued excellent working relationship with APA. Feel free to contact me at 804 524-5995 to discuss the response.

Sincerely,

Clementine S. Cone

Vice President for Administration and Finance

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C: Eddie N. Moore, Jr., President

VIRGINIA STATE UNIVERSITY

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