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August 1, 2006

MEMORANDUM

To: Henry "Kiki" Saavedra, Chair
Audit, Computers and Capital Projects Subcommittee

From: Aurora B. Sánchez, Senior IT Performance Auditor *A*

Re: **Public Education Department Validation of STARS Progress Reports Sent to OCIO**

BACKGROUND INFORMATION.

Information Technology Projects Validation. Large Information Technology (IT) projects have historically been problematic, costing large sums of money with little results. As such, the LFC staff and the Office of the Chief Information Officer (OCIO) have cooperated on a goal to improve oversight by the legislature and the governor through enhanced reporting.

Agencies are required to report standard project information monthly to the OCIO. The detailed monthly reports can show early warning signs of potential project problems, while there is still time to take corrective action. Warning signs for a troubled project include:

- Schedule delays;
- Budget overruns;
- No independent validation and verification (IV&V) or incorrect reporting level or not working as intended;
- Milestones not achieved; or
- Refusing to comply.

Validation Objectives. The objective of data validation is to determine the accuracy of the reporting to the OCIO. A natural by-product validating the data in the reports sent to the OCIO is the determination of the project's status using the Gantthead vital signs chart if the necessary data is readily available.

Procedures. The procedures to validate the data in the reports included:

- Comparing data reported in the project portfolio to:

- Project status reports to agency management, including the project steering committee;
- Data in the IV&V reports;
- Expenditure data in the agency's accounting system and the project manager's records; and
- Laws appropriating funds for the project.
- Reviewing the laws governing IT projects and the department.

Public Education Department and the STARS Project. The statutory purpose of the Public Education Department (department) is to establish a single, unified department to administer laws and exercise functions formerly administered and exercised by the state board of education and the state department of public education.

Section 22-1-1.2 NMSA 1978 states that the legislature finds that a well-designed, well-implemented and well-maintained assessment and accountability system is the linchpin of public school reform. The department embarked on implementing the student teacher accountability and reporting system (STARS) to centrally gather data that will allow it to have sufficient information to foster public school reform.

On October 22, 2004, the LFC issued the "Performance Accountability Data Systems Project" report in which it recommended the department:

- Document and analyze process and work flows for each data collection point to streamline and reengineer the processes.
- Support and promote the Decision Support Architecture Consortium (DSAC) model to:
 - Interface or web-enable data entry;
 - Accept incremental data versus full files;
 - Install a data warehouse where data is replicated from school districts;
 - Integrate stand-alone systems at the department and districts;
 - Implement a web-accessible, standards-based decision support tool;
 - Implement an audit trail so data can be traced back to its source; and
 - Link student history to a student identification number.
- Coordinate with DSAC members on designing, building and maintaining shared solutions.
- Use statewide enterprise architecture solutions such as shared servers, reporting tools, open source software, and maintenance.
- Make funding for decision support architecture contingent upon the department's commitment to use the DSAC model.
- Select one or two student information systems from which to select replacements.
- Minimize the number of district financial systems, and align them with the national center for education statistics (NCES) chart of accounts.
- Train district staff on how to use existing systems.

- Design and build an instructional portal.
- Implement project management.
- Implement an advisory committee for data standards and data warehouse, including a data dictionary.
- Establish processes and tools for grants management, communication, tracking and reporting.
- Automate the public school district report cards and adequate yearly progress reports.
- Establish a process to add student demographic data validated in a data warehouse to standardized tests.

Attachment 1 summarizes how the recommendations are addressed with the STARS project.

Funding for the STARS project was based in part on the recommendations in the LFC report. The request for funding in the department's FY06 IT Plan included a \$10.0 million request for a no child left behind (NCLB) data warehouse. The purpose as stated in the request was "to take the recommendations of the FY05 ADS Study, LFC Audit of PED NCES chart of accounts project and the council of chief state schools officers audit to implement an accountability data system". It appears the department's intent is to replace the existing accountability data system. The outcome of this new system, according to the request, was to have comprehensive data and associated automated capabilities to assist with student improvement.

Laws 2005, Chapter 33, Section 5, Subsection 128 transferred \$6,650,000 from the appropriation contingency fund to the computer system enhancement fund "for implementation of the systems architecture recommended by DSAC, including NCLB requirements" (Laws 2005, Chapter 33, Section 7, Subsection 35). The appropriation included four term full-time-equivalent positions and required the department to assign staff totally dedicated to the project.

Laws 2006, Chapter 109, Section 5, Subsection 150 transferred \$2.0 million from the appropriation contingency fund to the computer system enhancement fund "to continue implementation of the student and teacher accountability reporting system" (Laws 2006, Chapter 109, Section 7 Subsection 29).

Total two-year funding for STARS is \$8,650 thousand.

According to the department CIO, the initial appropriation covered phase 0: planning and phase 1: data warehouse. The FY07 funding is for phase 2: Internet access for interested parties and phase 3: interfaces and support for schools. The STARS project objectives are:

- Meeting informational and reporting requirements;
- Providing data architecture, including data model, data dictionary, business rules, and quality assurance procedures;
- Providing interfaces with school and district software (districts will not have to replace existing systems and incur additional costs);

- Offering compatibility with performance-based data management initiative, school interoperability framework and NCES;
- Coordinating with unique student identification system;
- Complying with state and federal laws, rules and regulations;
- Assuring security;
- Providing decision support tools;
- Meeting the needs of users; and
- Providing training to state, district and school staff.

The data warehouse and decision support tools phase of the project will:

- Integrate school, district and state reporting software (will address integration of stand-alone systems).
- Aggregate the integrated data required by state and federal laws, rules and regulations.
- Disaggregate the integrated data by defined data subgroup.
- Analyze data at various levels.
- Plan for value-added functionality.

The department has contracts for development and implementation services, project management and quality assurance, content advice and IV&V and has dedicated term FTE for the project. The table below shows the contract amounts and actual and estimated FTE costs. In June 2006, the department requested certification of the \$2.0 million appropriation. The table includes \$390 thousand of the appropriation. The department will provide information about the remaining \$1.6 million.

Table 1. STARS Project Contracts and FTE Costs
As of March 30, 2006
 (in thousands)

Project Service Type	Amount
Development & Implementation	\$6,750.0
Project Management & Quality Assurance	199.0
Content Advice	61.4
IV&V	90.9
Actual FTE Costs	44.8
Projected FTE Costs through FY07	263.4
Software and Hardware	250.0
Total	\$7,101.3

Source: LFC analysis of project data

The department required the development/implementation contractor to post a \$3.0 million performance bond and required a 7.5 percent retainage on each payment.

Projects funded in fiscal years 2003 through 2006 that impact the STARS project are shown in the table below.

Table 2. IT Projects Affecting STARS

Laws	Project	Amount
Chapter 76, Laws 2003	Student ID	\$ 300.0
Chapter 114, Laws 2004	NCES Chart of Accounts	1,800.0
Chapter 114, Laws 2004	Student ID	93.0
Chapter 114, Laws 2004	Needs Assessment Accountability System	500.0
Chapter 33, Laws 2005	Student ID Maintenance	40.0
Chapter 33, Laws 2005	NCES Chart of Accounts Implementation	600.0
Chapter 109, Laws 2006	NCES Chart of Accounts	122.5
Total Appropriations for Related Projects		\$3,455.5

Source: LFC analysis

Results of Data Validation. Data reported in the April 2006 OCIO Project Portfolio was validated for reported expenditures and appropriations, existence of IV&V, completed and scheduled deliverables and project management reporting. Data reported as of June 30, 2006, could not be obtained in time to present in this report. Although the department was not required to respond because validations are meant to assist the department in its reporting to the OCIO and in improving project oversight, its responses are included as Attachment 3.

Project Expenditures and Appropriations. Current annual and lifetime project costs reported to the OCIO are under reported by \$233.1 thousand because the department did not include:

- Payments for the project manager and content advisor.
- FTE assigned to the project.
- The 7.5 percent retainage (holdback) on the primary contract which could be as much as \$506.3 thousand over the life of a not to exceed \$6.7 million contract.

**Table 3. Reconciliation of Project Costs
 as of March 31, 2006**

Project Total Reported to OCIO	\$1,666,000.00
Plus Omitted Contractor Payments	62,517.39
Plus Retainage	125,775.00
Plus FTE	44,894.40
Plus Rounding Error	75.14
Actual Project Total	\$1,899,261.93

Source: LFC analysis of department data

Although the OCIO requires the holdback to be reported in the current-year portion of the project portfolio, this amount would be more accurately reported in the lifetime costs since the holdback is representative of the lifetime cost of the project and not simply a current year cost.

Total lifetime appropriations were under reported by \$2.0 million, the amount appropriated during the 2006 legislative session (see Attachment 2 for the definition of total appropriated). The 2006 appropriation provides the department \$150 thousand more than its reported estimate to complete the project.

Under reporting of appropriations and expenditures might allow the project to exceed its available budget without any warning signs.

The project portfolio cell definitions for lifetime and current year costs do not provide sufficient direction to agencies regarding what project costs and appropriations should be included in the calculations or when increases in appropriations should be reported (additional information at Attachment 2).

Recommendation. Require project staff to report all expenditures, development, project management, IV&V, content advisor, FTE, etc. to the OCIO, the Executive Steering Committee and department management.

Include expenditures of prior appropriations used for this project as a footnote so that oversight bodies and department management can easily determine why expenditures are greater than the specific appropriations.

Require the OCIO to revise the cell definitions so that agencies understand what should be included in each cost category and when appropriation amounts should be increased.

Project Status Reporting. Most IT projects have multiple reporting levels. Contractors report to project managers, project managers report to a project steering committee or department management and to external oversight entities, and IV&V reports to department top management and the OCIO.

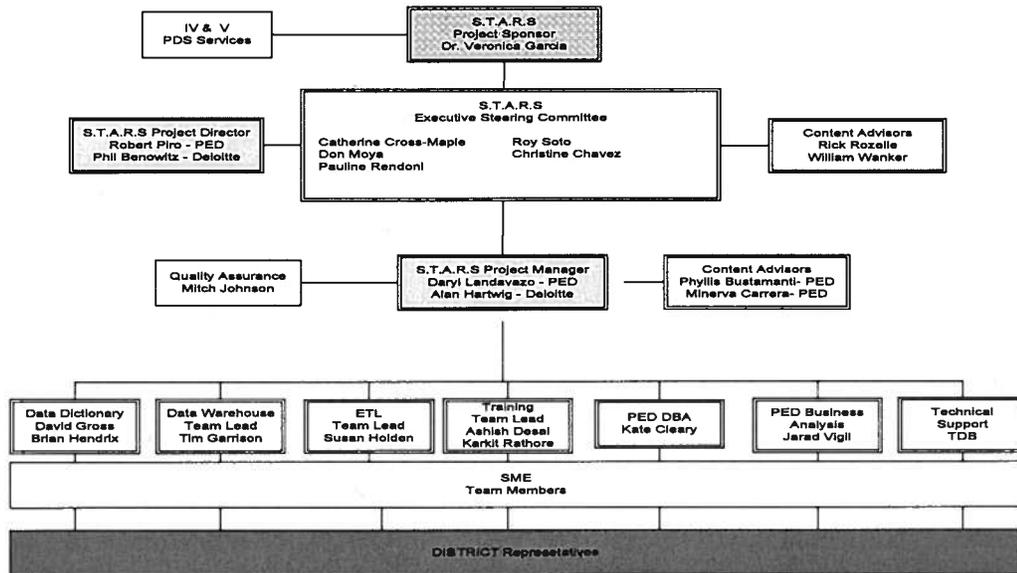
Project manager reports. The joint (contractor and department) project management report to department management is a task list, not a true status of the project. It does not contain sufficient information regarding available budget, risks, product quality, deadlines, resource availability, or risk mitigation so that the Executive Steering Committee can make informed decisions.

The Executive Steering Committee is the key body within the project governance structure responsible for the business issues associated with the project that are essential to the attainment of project outcomes. The STARS Executive Steering Committee is responsible for

- approving the budgetary strategy;
- defining and realizing benefits;
- monitoring risks, quality and timelines;
- making policy and resource allocation decisions; and
- assessing requests for changes to the scope of the project.

The Executive Steering Committee is supposed to “provide overall project direction”.¹ Overall project direction is an internal department function that is outside the authority of the oversight entities on the steering committee. As depicted in the Chart below, three of the five Executive Steering Committee members are members of oversight agencies. Oversight agencies should not take an active role in the implementation of any system or in the day-to-day activities of the department.

Chart 1. STARS Organizational Chart



Source: STARS Implementation Project Plan

Additionally, the project manager’s status reports are insufficient for an outside reviewer to conclude as to the status or actual receipt and acceptance of deliverables since the reports are simply a list of tasks.

Monthly Project Portfolio Reporting. The deliverables reported to the OCIO as complete could not be validated because the department does not maintain documents to fully support the receipt of deliverables. Attempting to compare completed deliverables based on start and finish dates on the OCIO project portfolio to a project plan received from the department is not possible since the task names on the project schedule are not always the same as those reported to the OCIO. The table below shows the project schedules for September 2005 and May 2006, which indicates that the project may be behind on some tasks, but ahead overall.

¹ STARS Project Implementation Plan, May 30, 2006.

**Table 4. Project Schedule Comparison
 September 2005 to May 2006**

Schedule Task	September 23, 2005 Schedule		May 20, 2006 Schedule		Number of Days Ahead (Behind)
	Start Date	Finish Date	Start Date	Finish Date	
Operational Prototype	10/19/2005	3/17/2006	11/1/2005	12/30/2005	76
Implement User Security	10/25/2005	10/27/2005	2/3/2006	2/7/2006	(103)
Develop Training Plan	12/5/2005	12/6/2005	11/15/2005	11/16/2005	20
Pilot	1/2/2006	7/6/2007	1/2/2006	4/28/2006	434
Load NM Data Dictionary	2/16/2006	2/17/2006	2/20/2006	2/21/2006	(4)
Load eScholar Data Dictionary	2/20/2006	2/21/2006	2/22/2006	2/23/2006	(2)
Design Data Validation Reports	2/22/2006	3/6/2006	2/24/2006	3/9/2006	(3)
Develop Data Validation Reports	3/7/2006	3/13/2006	3/10/2006	3/16/2006	(3)
Develop Training Materials	3/1/2006	3/7/2006	1/30/2006	2/6/2006	29
Test Pilot Data Submissions	3/9/2006	3/31/2006	4/3/2006	4/14/2006	(14)
Statewide Rollout	5/2/2006	7/3/2007	4/3/2006	8/15/2006	322
Training to Statewide Users	5/4/2006	6/1/2006	7/10/2006	8/8/2006	(68)
Load Financial Data Submissions	5/29/2006	5/31/2006			
Functional Requirements	1/23/2006	2/13/2006	4/3/2006	4/21/2006	(67)
Develop Report Card	3/15/2006	9/13/2006	5/22/2006	8/1/2006	43
Develop Standard Reports	3/24/2006	8/16/2006	5/29/2006	7/7/2006	40
Acceptance Testing	9/15/2006	9/27/2006	8/4/2006	8/15/2006	43
Deploy Report Card	9/27/2006	9/29/2006	8/14/2006	8/15/2006	46

Source: LFC Analysis of Project Schedules

Invoices from the primary contractor do not contain sufficient detail to conclude as to how the deliverable on the invoice relates to deliverables on the project schedule or the information reported to the OCIO, except for the prototype. Additional information from the primary contractor helped link items on an invoice to the deliverables on the contract exhibits.

The deliverables dealing with implementation and timelines, human resource capabilities, training framework and monthly reporting are activities that should be addressed by the project manager. From the description of these activities in the scope of work for each contractor, it appears that there is a duplication of services between the project manager, the content advisor, and, in some cases, the IV&V contractor.

Reporting contract amendments in the project portfolio should indicate which contracts are being amended and why amendments are required, especially if amendments are executed soon after signing the original contract. For example, the \$31.7 thousand content advisor contract was amended approximately six months after it was originally signed, increasing the compensation to the contractor to \$61.4 thousand. The IV&V contractor was initially hired in May 2005 using price agreement #30-00152. The total of the original contract and subsequent amendment was \$90.9 thousand. The price agreement requires that the department “not exceed a maximum of \$200,000 or a term not to exceed 365 days from the date signed by the Agreement Administrator”.² According to the Department of Finance and

² SPD#30-000-00-00152, effective May 1, 2003 – November 30, 2006.

Administration contracts review bureau, the contract's expiration date was April 27, 2006. The department plans to increase IV&V services by \$140 thousand. However, it cannot amend an expired contract. Since it is unlikely the scope of work will change for continued IV&V, the price agreement cannot be used for this purpose. These are examples of items that should be reported to the Executive Steering Committee, department management and the OCIO.

Independent validation and verification. IV&V is the process to determine whether or not the products of a given software development phase fulfill the requirements established during the previous phase (verifying) and to evaluate software at the end of the development process to ensure it is free from failures and complies with its requirements (validation).

The IV&V contractor, the project manager and content advisor are all providing quality assurance services. Quality assurance refers to the process used to create the deliverables that can be performed by the internal or external project manager or even a third-party reviewer. Quality control is used to verify that deliverables are of acceptable quality and that they are complete and correct. From the available reports, it is difficult to determine if the quality assurance and the quality control processes are working.

The activities reported in the project portfolio are tasks and areas of potential risk, but are not necessarily actual risks. It is possible that the cell definition in the OCIO project portfolio is being misinterpreted. In a project that is just starting, listing potential risks would be correct. However this project is scheduled for statewide rollout in August so actual risks should be known and risk mitigation strategies should be developed.

Successful projects are evaluated for risks at each step of the project and employ mitigation strategies that address the identified risks. The IV&V contractor should identify risks, evaluate risk mitigation, and not simply ensure that particular documents are published. IV&V status reporting should focus on findings and recommendations for corrective action, not on contractor activities or the contracting process. The current IV&V reports add little value to this project.

Recommendation. Include the following in the project manager's reports to the Executive Steering Committee:

- Issue or item, including product quality, deadlines, and resource availability;
- Reason why the issue has occurred or why the item is important;
- Due date to resolve or address the issue or complete the item;
- Status of the issue or item;
- Impact to the project or the department;
- Options to resolve or mitigate the issue
- Recommendation, including the date the recommendation should be implemented; and
- Expenditures and available budget.

Have members of oversight bodies on the Executive Steering Committee be advisory members and not provide overall project direction.

Require the independent project manager to maintain and retain a schedule of deliverables including estimated and actual completion dates. Require the state project manager to retain records of deliverable received, accepted and paid and how each relates to the schedule of deliverables. Report to the OCIO the same month-end information reported to Executive Steering Committee and department management that is based on information maintained and retained by the project managers.

Consult with General Services Department State Purchasing Division to make sure the department will not violate the procurement code by entering into a new contract with the same contractor on the price agreement.

Reports to the department's management should include project risks and mitigation strategies so that those involved in the project understand the ramifications of not completing certain tasks. The reports should also contain comments about the quality of the product delivered by the development contractor.

Require IV&V to report on the quality of the product delivered, timeliness of the development contractor, disposition of the team, availability of project resources, revenue and expenditures, unresolved issues, delays, sponsor commitment and what risks if any are associated with each item.

The cell definition for Risks/IV&V should instruct agencies not to list tasks but potential risks for new projects and actual risks for ongoing projects.

Consider having the IV&V contractor or the project manager use the Gantthead vital signs, shown in the table below, as a quick assessment of the overall health of the project and a way to report to department management and the Executive Steering Committee.

Table 5. Project Vital Signs

Gantthead Vital Sign	Project Status
Schedule delays	
Milestone delays	
Deliverable delays	
Unresolved issues	
Cost over budget	
Resource shortage	
High probability, high-impact risk events	
Disposition of the team	
Sponsor's commitment and time	

Source: www.gantthead.com

Other Areas of Concern. The review of supporting documentation to complete the

validation of data reported to the OCIO raised concerns about information that would not be readily apparent in the OCIO project portfolio.

Vendor Hourly Rates. The department is paying the project manager \$180 per hour. When compared to the SaveSmart vendors and the price agreement vendors providing project management services, the department is paying approximately \$100 per hour more than the highest SaveSmart vendor and \$30 per hour more than the highest price agreement vendor.

Maintenance Payments. The primary vendor is invoicing the department for maintenance on a system that is not in full production. A system becomes operational when it is released for day-to-day use within the organization. The system will be rolled out statewide in August 2006 at which time it will be released for day-to-day use by each district, school and the department. Maintenance costs through May 2006 are \$216.5 thousand.

Statutory Reporting Requirements. Numerous statutes require schools to report to the department. STARS is supposed to help facilitate the reporting by schools to the department and by the department to oversight entities. For example:

- The state equalization guarantee distribution, Section 22-8-25, NMSA 1978, requires schools to report program units on “eightieth and one hundred twentieth days of the prior year or the fortieth day of the current year, whichever is greater.”
- Section 22-8-29, NMSA 1978 requires reporting of district operations on the fortieth day.
- Section 22-10A-20, NMSA 1978 requires reporting of staffing, class and teaching load on the fortieth day of the school.
- Section 22-24-4, NMSA 1978 requires reporting of the average full-time-equivalent enrollment using leased classroom facilities on the fortieth, eightieth and one hundred twentieth days.

Depending on which day the school year starts, each school will have a different reporting day which could pose a problem when defining the requirements in the system. The department may want to seek a statutory change to allow for fixed date reporting.

**STARS Project Addressing Performance Accountability Data Systems Project 2004
Recommendations**

LFC Performance Accountability Data Systems Project October 22, 2004 Report Recommendations	Will Recommendation be Addressed with a STARS Deliverable or Process
Document and analyze process and work flows for each data collection point to streamline and reengineer the processes.	Ongoing process throughout the project
Support and promote the Decision Support Architecture Consortium (DSAC) model to: <ul style="list-style-type: none"> o Interface or web-enable data entry; o Accept incremental data versus full files; o Install a data warehouse where data is replicated from school districts; o Integrate stand-alone systems at the department and districts; o Implement a web-accessible, standards-based decision support tool; o Implement an audit trail so data can be traced back to its source; and o Link student history to a student identification number. 	STARS follows DSAC model and addresses these issues.
Coordinate with DSAC members on designing, building and maintaining shared solutions.	Department and Project staff are coordinating with DSAC.
Use statewide enterprise architecture solutions such as shared servers, reporting tools, open source software, and maintenance.	Working toward using statewide enterprise architecture.
Make funding for decision support architecture contingent upon the department's commitment to use the DSAC model.	Funding for STARS was based on commitment to use DSAC model.
Select one or two student information systems from which to select replacements.	STARS data warehouse will not require replacement of existing systems and no additional costs will be incurred.
Minimize the number of district financial systems, and align them with the national center for education statistics (NCES) chart of accounts.	District financial systems have been aligned with NCES chart of accounts. Data will be available in the data warehouse.
Train district staff on how to use existing systems.	Training for district is ongoing.
Design and build an instructional portal.	Part of the project, but in later phases.
Implement project management.	Project has project management.
Implement an advisory committee for data standards and data warehouse, including a data dictionary.	The pilot districts act as an advisory committee to data collection efforts at PED. Every data element was reviewed definitions were standardized and a data dictionary was created.
Establish processes and tools for grants management, communication, tracking and reporting.	This initiative has started and will align with the NCES Char of Accounts and will be integrated in the new operation school budget application.
Automate the public school district report cards and adequate yearly progress reports.	Report cards can be generated using data in the data warehouse by school, district and for the state.
Establish a process to add student demographic data validated in a data warehouse to standardized tests.	This is inherent in the design of STARS. Phase 1 of STARS PED loaded NMSBA data into STARS. With assessment data in the warehouse the data can now be analyzed across all content areas of STARS

Source: LFC Analysis of Project Data

OCIO Monthly Project Portfolio Reporting Requirements	
Portfolio Reporting Item	Explanation
Risks / IV&V	Itemize the project's high impact, high probability risks. Risks include the risks identified by IV&V. Describe the IV&V process.
IV&V Status	All project issues in regard to scope, budget schedule or IV&V are manageable by the project team and issues are resolved within a 30-day period
IV&V Detail	Brief explanation of the reasons for the project's IV&V status
Total Appropriated	Total budgeted/ appropriated from all sources . Funds from board of finance loans, legislation, gifts, grants, donations, bequests, insurance settlements, refunds o payments into revolving funds are considered appropriated. Includes appropriations since project inception for multi-year projects.
Holdback \$ - Overall	What is the total holdback for the entire project. Hold back can be used to retain a certain amount of dollars or a percentage of the contract until the vendor has met all project requirements/deliverables.
Project Lifetime and Current Year Costs	
Project to Date \$	Total costs from project's inception of total expenditures of the appropriated funds. This includes an accumulation of prior years spending for multi-year projects.
Actual \$ Spent to date	Expenditures as of the date of this report for this year.
Encumbered \$ (overall)	This is the total encumbered dollars for the project. The default is \$0.0. The total set aside for specific purposes.
Estimated \$ to complete	Estimated dollars required to complete the project for this year. This amount includes the amounts unencumbered and encumbered for this year only. Do not include encumbered set aside for future years.
Total Costs - \$	The sum of actual and estimated dollars (formula)

Source: OCIO Project Portfolio



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SECRETARY OF EDUCATION

BILL RICHARDSON
Governor

July 27, 2006

MEMORANDUM

TO: Aurora B. Sánchez, Senior IT Performance Auditor, Legislative Finance Committee

FROM: Robert Piro, Chief Information Officer, Public Education Department

RE: **RESPONSE TO PED VALIDATION OF STARS PROGRESS REPORTS SENT TO OCIO**

Thank you for providing the Public Education Department (PED) with an advance copy of the validation of project data report on STARS. Attached is the PED's response. Please note that I will be attending the LFC subcommittee review of the report on August 1 in Las Vegas.

Thank you.

RP/rmw

Enclosure

cc: Secretary Veronica C. García, Ed.D., Public Education Department
Brian Condit, Office of the Governor
David Abbey, Legislative Finance Committee
Ruth Williams, Public Education Department

Public Education Department Response to
LFC Validation of Project Data

Status of Student Teacher Accountability and Reporting System (STARS)

LFC Text	PED Response
<p>Current annual and lifetime project costs reported to the OCIO are under reported by \$233.1 thousand because the department did not include:</p> <ul style="list-style-type: none"> • Payments for the project manager and content advisor. • FTE assigned to the project. • The 7.5 percent retainage (holdback) on the primary contract which could be as much as \$506.3 thousand over the life of a not to exceed \$6.7 million contract. 	<p>The PED agrees. It will report as directed by the Office of the Chief Information Officer (OCIO), the report owner.</p>
<p>Total lifetime appropriations were under reported by \$2.0 million, the amount appropriated during the 2006 legislative session. The 2006 appropriation provides the department \$150 thousand more than its reported estimate to complete the project.</p>	<p>The PED disagrees. Until the Information Technology Commission (ITC) approved the additional \$2 million appropriated by the 2006 Legislature the PED did not report on it. Further, the OCIO status report as of this review did not include this appropriation. The new appropriation was approved and released to the PED on July 22, 2006. The last OCIO status report submitted on July 10 accounts for this appropriation. The PED will report in subsequent reports.</p>
<p>The project portfolio cell definitions for lifetime and current year costs do not provide sufficient direction to agencies regarding what project costs and appropriations should be included in the calculations or when increases in appropriations should be reported.</p>	<p>This is an issue for the OCIO.</p>
<p>Require project staff to report all expenditures, development, project management, IV&V, content advisor, FTE, etc. to the OCIO, the Executive Steering Committee and department management.</p> <p>Include expenditures of prior appropriations used for this project as a footnote so that oversight bodies and department management can easily determine why expenditures are greater than the specific appropriations.</p> <p>Require the OCIO to revise the cell definitions so that agencies understand what should be included in each cost category and when appropriation amounts should be increased.</p>	<p>The PED agrees. PED Project Management has reported project expenditures per the directions of the OCIO. This was to be only for the amounts contracted for with the primary vendor. Project Management keeps a detailed project budget in order to control all elements of the project and can include this information in all future reports.</p>
<p>The joint (contractor and department) project management report to department management is a task list, not a true status of the project. It does not contain sufficient information regarding available budget, risks, product quality, deadlines, resource availability, or risk mitigation so that the Executive Steering Committee can make</p>	<p>The PED agrees with the purpose of the Project Steering Committee as stated. The PED disagrees that direction is an internal department function. The PED believes that project direction should come from the project's customers and views each committee member as a future STARS customer. As such, each member has a vested interest in appropriate</p>

LFC Text	PED Response
<p>informed decisions...</p> <p>The Executive Steering Committee is supposed to "provide overall project direction". Overall project direction is an internal department function that is outside the authority of the oversight entities on the steering committee. As depicted in the Chart below, three of the five Executive Steering Committee members are members of oversight agencies. Oversight agencies should not take an active role in the implementation of any system or in the day-to-day activities of the department.</p>	<p>project direction. Each member, identified at the onset of the project, will and must perform a dual role in the project of both customer direction and state oversight. The PED is confident that each member can and has been performing these roles.</p>
<p>The project manager's status reports are insufficient for an outside reviewer to conclude as to the status or actual receipt and acceptance of deliverables since the reports are simply a list of tasks.</p>	<p>The PED disagrees. PED Project Management and agency leadership are fully aware of the STARS' project status. Based on PMI, STARS utilizes many controlling documents to monitor and control the project, including internal project reports used to document critical elements of the project. Project Management will include a summary of each of these items in its future reports to the Steering Committee.</p>
<p>The deliverables reported to the OCIO as complete could not be validated because the department does not maintain documents to fully support the receipt of deliverables. Attempting to compare completed deliverables based on start and finish dates on the OCIO project portfolio to a project plan received from the department is not possible since the task names on the project schedule are not always the same as those reported to the OCIO. The table below shows the project schedules for September 2005 and May 2006, which indicates that the project may be behind on some tasks, but ahead overall.</p>	<p>The PED disagrees. PED Project Management maintains a complete log of all project deliverables. It conducts detailed deliverable and acceptance reviews on each of the major project deliverables. In the future, PED will work to improve its consistency with project documentation and the required oversight reports.</p>
<p>Invoices from the primary contractor do not contain sufficient detail to conclude as to how the deliverable on the invoice relates to deliverables on the project schedule or the information reported to the OCIO, except for the prototype.</p>	<p>The PED agrees. As documented by LFC staff, the PED has provided the additional information to the LFC. The PED's detailed records do have this information.</p>
<p>The deliverables dealing with implementation and timelines, human resource capabilities, training framework and monthly reporting are activities that should be addressed by the project manager. From the description of these activities in the scope of work for each contractor, it appears that there is a duplication of services between the project manager, the content advisor, and, in some cases, the IV&V contractor.</p>	<p>The PED agrees. PED project managers do address the deliverables weekly with the project director. It is critical to the success of this project that there be multiple points of reference. The content advisor is focused on federal and other issues as they relate to a Decision Support System (including the Data Warehouse), including the PED's adherence to DSAC as required by legislation. The project manager is required to handle the day-to-day project and has overall responsibility for project success. The IV&V contractor is required by</p>

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	state rules and provides separate and independent reviews. All contribute to the project overall.
Reporting contract amendments in the project portfolio should indicate which contracts are being amended and why amendments are required, especially if amendments are executed soon after signing the original contract.	The PED agrees. It should have included the IV&V amendment and will include others when it has contract amendments.
According to the Department of Finance and Administration contracts review bureau, the contract's expiration date was April 27, 2006. The department plans to increase IV&V services by \$140 thousand. However, it cannot amend an expired contract.	The PED agrees. It has requested an exception (as LFC staff recommended) and could initiate a second contract for Phase 2.
Since it is unlikely the scope of work will change for continued IV&V, the price agreement cannot be used for this purpose. These are examples of items that should be reported to the Executive Steering Committee, department management and the OCIO.	The PED disagrees. Project-related items should be reported to the Executive Steering Committee when there is an organizational obstacle to be removed or when items have been judged to be true project-related issues. There are internal project documents that track the identification of each issue and potential issues and consequences that could result from them. When these issues arise they are documented and reported to the Steering Committee. Regarding the IV&V price agreement, Project Management is aware of this item and is working with the appropriate staff to determine if it is indeed an issue to be reported to management.
The IV&V contractor, the project manager and content advisor are all providing quality assurance services. Quality assurance refers to the process used to create the deliverables that can be performed by the internal or external project manager or even a third-party reviewer. Quality control is used to verify that deliverables are of acceptable quality and that they are complete and correct. From the available reports, it is difficult to determine if the quality assurance and the quality control processes are working.	The PED disagrees. There are several project oversight roles that the PED has elected to assign to the STARS project. The three contractors, IV&V contractor, project manager and content advisor each brings individual skills and value to the STARS project. Individually, each provides advice and direction based on assigned roles. Collectively, they provide a service to help PED management monitor and control STARS.
The activities reported in the project portfolio are tasks and areas of potential risk, but are not necessarily actual risks. It is possible that the cell definition in the OCIO project portfolio is being misinterpreted. In a project that is just starting, listing potential risks would be correct. However this project is scheduled for statewide rollout in August so actual risks should be known and risk mitigation strategies should be developed.	The PED disagrees. The PED believes that all risks are potential. Mitigation strategies are developed to keep a risk from becoming a reality. If a risk was "actual" it would be considered a project issue and be assigned. Rather than mitigation strategies, resolution alternatives would be developed. For the rollout, all risks and issues have been identified and are being addressed based on the appropriate project management control mechanism.
Successful projects are evaluated for risks at each step of the project and employ mitigation	The PED agrees. The PED has multiple inputs into the project status as described. IV&V is

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<p>strategies that address the identified risks. The IV&V contractor should identify risks, evaluate risk mitigation, and not simply ensure that particular documents are published. IV&V status reporting should focus on findings and recommendations for corrective action, not on contractor activities or the contracting process. The current IV&V reports add little value to this project.</p>	<p>but one of three and is typically historical. Hence, the IV&V reviews typically have not had many items and the majority of "risks" on the STARS project have been dealt with. The PED expects the IV&V contractor to report on whether the project is: 1) on time, 2) within budget and 3) has any unresolved issues or risks.</p>
<p>Include the following in the project manager's reports to the Executive Steering Committee:</p> <ul style="list-style-type: none"> • Issue or item, including product quality, deadlines, and resource availability; • Reason why the issue has occurred or why the item is important; • Due date to resolve or address the issue or complete the item; • Status of the issue or item; • Impact to the project or the department; • Options to resolve or mitigate the issue • Recommendation, including the date the recommendation should be implemented; and • Expenditures and available budget. 	<p>The PED disagrees. PED Project Management and agency leadership are kept abreast of each of the items listed. There are controlling documents for each that Project Management utilizes to monitor and control the project. There are internal project reports used to document each. PED will provide the additional documents to LFC staff. Project Management will include a summary of each of these items in its reports to the Steering Committee.</p>
<p>Have members of oversight bodies on the Executive Steering Committee be advisory members and not provide overall project direction.</p>	<p>The PED is neutral. The PED finds value in the project's customers having input into project direction. Steering Committee members review their assigned roles and responsibilities. If they are uncomfortable or unable to support their dual roles, they are asked to contact Program Management for reassignment.</p>
<p>Require the independent project manager to maintain and retain a schedule of deliverables including estimated and actual completion dates. Require the state project manager to retain records of deliverable received, accepted and paid and how each relates to the schedule of deliverables. Report to the OCIO the same month-end information reported to Executive Steering Committee and department management that is based on information maintained and retained by the project managers.</p>	<p>This item is completed. Project Management keeps records of the deliverable process as described in the Project Implementation Plan. PED will provide the additional documents to LFC staff.</p>
<p>Consult with General Services Department State Purchasing Division to make sure the department will not violate the procurement code by entering into a new contract with the same contractor on the price agreement.</p>	<p>The PED agrees. The PED is working and will continue to work directly with the General Services Department State Purchasing Division to assure that it is in full compliance with all procurement codes.</p>
<p>Reports to the department's management should include project risks and mitigation strategies so that those involved in the project</p>	<p>The PED agrees. Project Management develops weekly project status reports on all aspects of effective project management and</p>

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understand the ramifications of not completing certain tasks. The reports should also contain comments about the quality of the product delivered by the development contractor.	control.
Require IV&V to report on the quality of the product delivered, timeliness of the development contractor, disposition of the team, availability of project resources, revenue and expenditures, unresolved issues, delays, sponsor commitment and what risks if any are associated with each item.	The PED disagrees. PED Project Management and agency leadership have an understanding of the status of each issue described. The PED will work with the IV&V contractors to improve the scope and detail of their reports in order to provide better documentation.
The cell definition for Risks/IV&V should instruct agencies not to list tasks but potential risks for new projects and actual risks for ongoing projects.	This is an issue for the OCIO.
Consider having the IV&V contractor or the project manager use the Gantthead vital signs, shown in the table below, as a quick assessment of the overall health of the project and a way to report to department management and the Executive Steering Committee.	The PED has no issue with this recommendation.
The department is paying the project manager \$180 per hour. When compared to the SaveSmart vendors and the price agreement vendors providing project management services, the department is paying approximately \$100 per hour more than the highest SaveSmart vendor and \$30 per hour more than the highest price agreement vendor.	The PED agrees. An hourly rate is not the only consideration particularly with a complex project. STARS is a complex project and the Chief Information Officer needs to have experienced project management along with knowledge of New Mexico's internal decision-making process, which is what this vendor provides.
The primary vendor is invoicing the department for maintenance on a system that is not in full production. A system becomes operational when it is released for day-to-day use within the organization. The system will be rolled out statewide in August 2006 at which time it will be released for day-to-day use by each district, school and the department. Maintenance costs through May 2006 are \$216.5 thousand.	The PED disagrees. The hosting vendor is providing host services throughout the implementation. As validated by the PED Project Manager, there is a complete hosting environment in operation at the vendor's facility. This is not an environment under development. The PED is utilizing many of the production capabilities that the hosting solution will provide during implementation. The PED feels that the charges are correct and justifiable.
Depending on which day the school year starts, each school will have a different reporting day which could pose a problem when defining the requirements in the system. The department may want to seek a statutory change to allow for fixed date reporting.	The PED agrees. The PED will take this under consideration and will work with LFC staff to determine the feasibility of proposing new legislation that might create a better set of data.