February 17, 1999

The Honorable James S. Gilmore, III Governor of Virginia

The Honorable John H. Chichester Co-Chairman, Senate Finance Committee

The Honorable Stanley C. Walker Co-Chairman, Senate Finance Committee The Honorable V. Earl Dickinson Co-Chairman, House Appropriations Committee

The Honorable Vincent F. Callahan, Jr. Co-Chairman, House Appropriations Committee

#### Gentlemen:

We have reviewed the status and progress of the **Integrated Human Resources Information System** as required by the *1997 Appropriations Act*. Our involvement in the project continues and we issued our last report in June 1998.

The Steering Committee significantly changed the direction of this project in February 1999. Over the past two years, the project had planned to replace the existing statewide personnel and payroll systems with a new integrated human resource and payroll system licensed from PeopleSoft. As of December 1998, the work teams had installed the customized PeopleSoft Human Resources and Payroll modules and had versions available for testing. The new project direction will now seek a solution to eliminate duplicate data entry for the existing human resource systems and to provide on-line query capability. This plan does not address the existing payroll system or any changes to the payroll process.

As of December 1998, the IHRIS project has spent over \$9 million, and we estimate \$6.5 million relates directly to payments to PeopleSoft or specific costs to adapt this system to Virginia. In addition, there is potentially an additional \$2 million related to work on the functionality design which is not a direct component of the new plan.

Under existing policy, the project charges user agencies for use of the system and allows the project to recover at least 60 percent of the cost from Federal and Special Revenue Fund users. At this time, the project has received repayments of \$2.6 million from Federal and Special Revenue Fund agency users and the project has an outstanding loan balance of \$5.5 million at January 31, 1999. Without deployment of the PeopleSoft system and the new plan's incorporation of functionality design consideration, a policy question exists concerning the method by which continued funding for this project should occur.

The Steering Committee must address the following policy questions:

- 1. Should project continue to receive its current method of funding?
- 2. Should the Commonwealth continue to recover the loan balance from Federal and Special Revenue Fund agencies?
- 3. Should the Commonwealth repay Federal and Special Revenue Fund agencies for any loan payments?

The Steering Committee should report their findings and a repayment policy to the Secretaries of Finance and Technology, who can incorporate this recommendation into their report to Co-Chairmen's of the House Appropriations and Senate Finance Committees.

The reason to seek an alternative to the implementation of the new system from PeopleSoft results from resolving several technical infrastructure issues. As a result of unresolved issues, significant project slippage began during July 1998 and continued through December 1998. We believe the following factors contributed to having to change the plan:

- The IHRIS Steering Committee was slow in requiring consultants to provide alternatives to resolve the technical infrastructure issues.
- The IHRIS project experienced difficulty obtaining and retaining committed technical resources because of both employee turnover and agencies' abilities to allow staff to work on the project.

#### **CONCLUSION**

The Steering Committee must address the funding policy issues raised above. The new project direction does not replace the current payroll and personnel systems with a single application, integrated human resource system, as anticipated by the Appropriations Act.

Further, issues that impacted IHRIS under the PeopleSoft plan require resolution. No future development can occur with any statewide system unless the Commonwealth addresses the communication problem inherent with multiple networks and the need for a technical infrastructure to bridge this communication issue. If these issues continue, they may adversely influence the success of the new project direction.

### **EXIT CONFERENCE**

We discussed this report with officials at the Council on Information Management, and the Departments of Personnel and Training, Information Technology, and Accounts on February 26, 1999.

AUDITOR OF PUBLIC ACCOUNTS

KKH:pym pym:43

### **Review Activities**

To review the progress of this project, we held and attended meetings with project management, consultants, and agency personnel. We have also compared project expenses to the budget and status of the project for reasonableness.

#### **Spending**

The table below shows the IHRIS project budget compared to project costs through December 1998.

Category	Budget	Expenses as of December 1998	Budget Balance
Software (PeopleSoft)	\$ 2,540,840	\$ 2,540,840	\$ -
Platform	2,958,760	689,340	2,269,420
Consulting	4,074,000	4,095,491	(21,491)
Training	540,000	207,896	332,104
Maintenance	2,772,437	1,085,840	1,686,597
Other	316,866	632,758	(315,892)
Total	<u>\$ 13,202,903</u>	\$ 9,252,165	\$ 3,950,738

# **Background**

The 1995 Appropriations Act provided funding to replace the current payroll and personnel system with an integrated human resource system, IHRIS. Since that time, the project has spent over \$9 million to purchase hardware, pay consultants, purchase the PeopleSoft Human Resources and Payroll software, and train staff on the system. As of December 1998, the project team had installed the customized PeopleSoft Human Resources and Payroll modules and had versions available for testing.

Project management comes from a Steering Committee, who has the responsibility to monitor the project's status, address major issues and policies, provide strategic direction, and resolve conflicts for resources and priorities. Committee members include agency heads from the Department of Personnel and Training (Chair), Department of Accounts, Department of Information Technology, and the Council on Information Management.

As of November 1998, the project deployment schedule had slipped. In June 1998, the project team planned to begin parallel testing the Human Resources module during the first quarter of 1999 in the DOA Payroll Service Bureau. By November 1998, this date had slipped to the third quarter of 1999.

Fundamental to this project from the beginning was how the system would communicate with over 200 agencies, each having different network environments and using a variety of communication methods. Since first purchasing the PeopleSoft software, the project teams have raised questions about the technical infrastructure. The IHRIS project hired a consultant who made a technical infrastructure recommendation in November 1998, however some members of the project team rejected their recommendation as unfeasible.

Since early January 1999, several changes have affected the IHRIS project. The Steering Committee hired a new Project Manager, who has direct responsibility for IHRIS and is accountable to the Steering Committee. The project team ended The Hunter Group's involvement in the management of IHRIS. A consultant assumed The Hunter Group's administrative duties at a significantly reduced cost.

In February 1999, the Project Manager met with PeopleSoft to discuss the State's infrastructure and to determine how PeopleSoft could successfully implement its software within the existing structure. This meeting did not result in a solution, however PeopleSoft agreed to study the matter further, at no cost to the State, and determine if a solution exists.

### **The Current IHRIS Plan**

The Project Manager, along with the Steering Committee, determined that issues regarding the technical infrastructure were difficult to resolve, costly, and time consuming. They agreed that a feasible solution was required to successfully use PeopleSoft as planned. At the February 1999 meeting, the Steering Committee decided that they could not resolve the communication issues and approved that the Project Manager undertake a new project direction. The new direction involved not replacing existing State systems with a single application, integrated human resource, personnel and payroll system.

With approval of the Steering Committee, all efforts to use PeopleSoft have ceased. Rather than replace current payroll system (CIPPS) and personnel system (PMIS), the plan is to continue using these systems. The plan is to integrate PMIS and current benefits system (BES) and other independent human resource systems using Message Oriented Middle (MOM) software. This software will make use of Web technology, eliminate duplicate data entry, and facilitate on-line query capabilities. For agencies with independent human resource systems, such as James Madison University, the plan is to have MOM facilitate the transfer of data from their databases into each of the State's human resource systems.

The Project Manager believes the new direction can use the functionality learned from the PeopleSoft systems development sessions. However, these modifications will not occur within the existing PMIS and BES systems. Instead, the plan calls for programming the functionality in Oracle and Java, and storing the data on a UNIX server originally purchased for PeopleSoft. There have been no decisions yet on the level and extent of the added functionality.

The State will continue to use its existing payroll system to process transactions and there are no plans to change the payroll process in the near future. Additionally, the Department of Accounts will evaluate the results of the MOM structure changes before they consider integrating the payroll process.

#### **Project Funding and Resource Commitment**

The original funding for this project was a General Fund loan. Project management can use the loan like a line of credit to pay for the project and charge user agencies a use-charge to recover the loan. Original funding estimates expected those agencies with either Federal or Special Revenue funds would repay at least 60 percent of the loan. To date, these agencies have paid \$2.6 million of the costs of IHRIS.

The Project Manager believes that current funding levels are sufficient to install the MOM software, and have full functionality of the human resource components of the project. Additionally, the Project Manager has received approval from the Steering Committee that resources working on IHRIS must commit a minimum of 50 percent of their time on the project.

As of December 1998, the IHRIS project has spent over \$9 million, and we estimate \$6.5 million relates directly to PeopleSoft payments or specific costs to adapt this system to Virginia. In addition, there is potentially \$2 million related to work on the functionality design, which is not a direct component of the new plan.

Under existing policy, the project charges user agencies for use of the system and allows the project to recover at least 60 percent of the cost from Federal and Special Revenue Fund users. At this time, the project has received repayments of \$2.6 million from Federal and Special Revenue Fund agency users and the project has an outstanding loan balance of \$5.5 million at January 31, 1999. Without deployment of the PeopleSoft system and the new plan's incorporation of functionality design consideration, a policy question exists concerning the method by which continued funding for this project should occur.

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## **Deployment Schedule**

With the recent approval of the new IHRIS project plan, the Project Manager has not had time to develop firm deployment dates. Below is the deployment schedule as of February 11, 1999.

Subject Area	Begin Implementation	End Implementation	Roll Out
HR Admin	February 11, 1999	January 31, 2000	February 2000
Benefits Admin	October 1, 1999	September 30, 2000	October 2000
Payroll	June 1, 2000	November 30, 2000	December 2000

The above reference to payroll is only an estimate should DOA decide to participate in the new project plan. As noted in the section entitled, "The Current IHRIS Plan," the State will continue to use its existing payroll system to process transactions and there are no plans to change the payroll process. Additionally, the Department of Accounts will evaluate the results of the MOM structure changes before they consider integrating the payroll process.

### **Issues Contributing to Changing the Plan**

The following issues contributed to project delays and deployment slippage under the PeopleSoft project plan scenario. While we do not predict whether similar problems will arise under the new MOM model, failure to correct these issues may affect the success of the new project plan.

## The Steering Committee Delayed Making Technical Infrastructure Decisions

The Steering Committee delayed making critical decisions regarding the technical infrastructure. From the beginning, this project needed to have a way to communicate with over 200 agencies, each having different network environments and using a variety of communication methods. The need to develop a

technical infrastructure solution has existed for more than two years ago. The failure to address this issue early in the project has led to the new plan.

- The Steering Committee did not decide which agency should have responsibility for the IHRIS production environment. A July 1998 study recommended one agency handle IHRIS production and have responsibility for the technical infrastructure. The Steering Committee never resolved this issue even though the Steering Committee's "Issues Log" indicated an August 1998 deadline.
- The project team hired consultants to study and recommend a technical infrastructure solution. They delivered their recommendation on October 26, 1998, and the Steering Committee set a December 3, 1998, deadline to select a solution. The Steering Committee did not accept the consultant's recommendation and therefore did not resolve the technical infrastructure issue.

#### Failure to Commit Resources

The project experienced difficulty obtaining and retaining committed technical resources. As a result, the Project Manager could not assign several tasks by their due date. Year 2000 and the new sickness and disability plan diverted resources and assigned resources could not focus a significant portion of their time on this project. Additionally, employee turnover and difficulty hiring technical staff has continued. Without committed resources, it is difficult to make new assignments and also complete tasks by their due date.

### Failure to Resolve Connectivity Issues Timely

Under the PeopleSoft plan, lead sites continued to experience connectivity issues throughout Summer 1998. As discussed in our earlier reports, three networks exist that connect agencies throughout the Commonwealth: the Capitol Campus Network maintained by the Department of General Services, Network Virginia established by Virginia Tech, and the CTN managed by the Department of Information Technology (DIT).

DIT was the service bureau housing the IHRIS servers under the PeopleSoft plan. Agencies could use any or all of the three networks to communicate with this server. The Departments of Personnel and Training and Accounts, as well as the initial sites, had experienced earlier problems resolving connectivity issues when the problem appeared to involve more than one of the agencies managing a network.