MINUTES OF THE
JOINT SUBCOMMITTEE ON GENERAL GOVERNMENT
OF THE SENATE COMMITTEE ON FINANCE
AND THE ASSEMBLY COMMITTEE ON WAYS AND MEANS

Seventy-fourth Session
March 27, 2007

The Joint Subcommittee on General Government of the Senate Committee on Finance and the Assembly Committee on Ways and Means was called to order at 8:05 a.m. on Tuesday, March 27, 2007. Chair Kathy McClain presided in Room 2134 of the Legislative Building, Carson City, Nevada. Exhibit A is the Agenda. Exhibit B is the Attendance Roster. All exhibits are available and on file in the Research Library of the Legislative Counsel Bureau.

<u>**ASSEMBLY SUBCOMMITTEE MEMBERS PRESENT**</u>:

Assemblywoman Kathy McClain, Chair
Assemblyman Tom Grady
Assemblyman Joseph P. (Joe) Hardy
Assemblyman Joseph Hogan
Assemblywoman Ellen Koivisto
Assemblyman David R. Parks

<u>**SENATE SUBCOMMITTEE MEMBERS PRESENT**</u>:

Senator Bob Beers, Chair
Senator Bob Coffin

<u>**SUBCOMMITTEE MEMBERS ABSENT**</u>:

Senator Dean A. Rhoads

<u>**GUEST LEGISLATORS PRESENT**</u>:

Assemblyman Mo Denis, Clark Assembly District No.28

<u>**STAFF MEMBERS PRESENT**</u>:

Gary L. Ghiggeri, Senate Fiscal Analyst
Rex Goodman Program Analyst
Larry L. Peri, Principal Deputy Fiscal Analyst
Mark W. Stevens, Assembly Fiscal Analyst
Cynthia Clampitt, Committee Secretary

<u>**OTHERS PRESENT**</u>:

Daniel Stockwell, Director, Chief Information Officer, Department of Information Technology
Curt Flatness, Chief Information Technology Manager, Department of Information Technology
Dan Goggiano, Deputy Chief, Computing Group, Communication and Computing Division, Department of Information Technology
James Elste, Manager, Chief Information Security Officer, Director's Office, Department of Information Technology

Dave McTeer, Manager, Information Technology Improvement, Department of
    Administration
Andrew Clinger, Director, Department of Administration
Kim R. Wallin, State Controller, Office of the State Controller
Alex Echo, Data Processing Manager, Office of the State Controller

CHAIR MCCLAIN:
I hereby open the hearing on budget account (B/A) 721-1365. Please discuss the Information Technology Optimization Study and decentralization of positions.

FINANCE AND ADMINISTRATION

INFORMATION TECHNOLOGY

DOIT - Application Design & Development Unit – Budget Page DOIT-28
    (Volume I)
Budget Account 721-1365

DANIEL STOCKWELL (Director, Chief Information Officer, Department of
    Information Technology):
One question asked earlier by Mr. Rex Goodman, Program Analyst, Fiscal Analysis Division, Legislative Counsel Bureau, concerned the decentralization of two positions into the Department of Taxation.

Three positions are involved. Those positions were actually positions from the Planning and Programming Division of the Department of Information Technology (DoIT) in budget account (B/A) 721-1370; however, they remained in B/A 721-1365 during the last biennium. There was one project manager position and two quality assurance positions. In August 2006, the former director met with the director of the Department of Taxation to discuss the three position transfers. Mr. Dino DiCianno, Executive Director, Department of Administration (DOA), and the former director agreed two positions could be transferred. The project manager position would be utilized for application development and the other positions would be used for quality assurance, special projects and systems design in the other area.

CHAIR MCCLAIN:
This Subcommittee is interested in the programming personnel and billable hours. Are there four programming positions within the Planning and Programming Division of DoIT?

MR. STOCKWELL:
There are ten positions within the Division. There are four positions in the Database Administration (DBA) Services. Six positions are located on Curry Street in Carson City and support approximately 54 agencies, boards and commissions. There are four boards and commissions and the remainder are agencies. Additionally, there are four programmers assigned to the Department of Personnel (DOP). One of the DBA positions is also assigned to the DOP.

CHAIR MCCLAIN:
The Subcommittee is concerned that the DoIT is providing 1,700 billable hours for each position within the DOP.

MR. STOCKWELL:
That is correct.

CHAIR MCCLAIN:
That is for 4 staff for the DOP, but the DoIT has 5.7 programmers to support all remaining agencies?

MR. STOCKWELL:
That is correct.

CHAIR MCCLAIN:
The 5.7 programmers appear to provide only 890 billable hours. We need justification of why 4 positions provide 1,700 billable hours and 5.7 positions are providing 890 billable hours of service.

MR. STOCKWELL:
Are you referring to fiscal year (FY) 2006-2007 or FY 2008-2009?

CHAIR MCCLAIN:
We are referring to FY 2008-2009.

MR. STOCKWELL:
Typically, four or five months prior to budget hearings, we meet with each agency and discuss their information technology (IT) needs over the coming biennium. It may be in terms of new development or support of existing applications and databases. We found, during the beginning of each fiscal year, there are fewer billable hours based on the number of programmers. We have also determined, during the last 3 months of any fiscal year, the billable hours escalate to between greater than 2,000 to 4,000 hours.

These are projects we may assume in requests from agencies for development of new applications or in cases where a vendor has not provided the necessary service the DoIT would provide. It increases billable hours in the last 3 months of a fiscal year from 10 to 25 percent for each programmer. Another reason is smaller agencies; 75 percent of all projections received in programming are for 200 hours or less. Those hours represent maintenance of old legacy systems systems. There are 20 agencies still utilizing legacy applications. They have a tendency to hold those requests until the end of the fiscal year in case of problems and call on the DoIT staff to support them. That is a normal trend.

CHAIR MCCLAIN:
Do most of the State agencies have Master Service Agreements (MSA)?

MR. STOCKWELL:
It depends. Of 54 agencies, 20 hold MSAs according to our performance indicators. Those 20 agencies are larger, where the DoIT performs development work or maintains databases on a recurring basis. The remainder may only experience 20 to 30 billable hours annually. Those are tracked through work

item requests. Requirement of an MSA for those agencies is desired by neither the DoIT nor by the agencies.

CHAIR MCCLAIN:
It is not unreasonable to expect 1 less programmer to produce the same amount of work for the 35 extra agencies. Four staff are dedicated to the DOP at 1,700 billable hours and the others only produce approximately 900 billable hours.

MR. STOCKWELL:
If the Subcommittee reviews FY 2000-2001, there were 85 programmers and DBAs assigned to Application Design and Development. That has been reduced through decentralization to ten programmers; four assigned to the DOP. Only five agencies have received a reduction in services provided by the DoIT. The expertise required to support those agencies did not decrease. The applications did not decrease.

We are at a point, to put it in simple terms, "In the last four years we lost the third string, we lost the second string, and while the first string was on the court, somebody stole the bench." We have only a few staff with the expertise in many agency applications to provide appropriate support.

As an example, in one particular application that has been supported for the last 17 years, if that person was removed through reduction, the agency would have to call on an MSA. If the language is written in something no longer supported, even an MSA may not find a person with expertise to assist.

ASSEMBLYMAN MO DENIS, Clark Assembly District No. 28:
You mentioned 20 agencies are still using legacy systems. Do you know if those agencies have plans to convert to another system?

MR. STOCKWELL:
Twenty agencies have been identified as currently using the legacy system. During our first presentation, our testimony was that restructuring efforts had merged the Planning and Program Divisions. They were not grouped by budget account number, rather by working environment. It allows planners to be partnered with programmers. Some of the legacy system users' applications are over 20 years old. We will be meeting with those agencies. During the last biennium, the DoIT was directed to begin that process. However, under the former director, that project was not considered a priority. I have initiated appropriate procedures beginning in January 2007.

The meetings will allow planners to determine whether a commercial package would meet the needs, whether additional programming could be written or if the current product could be enhanced.

ASSEMBLYMAN DENIS:
How long will the process take?

MR. STOCKWELL:
We hope to have all agency needs identified in the first year of the biennium and to begin a conversion process for some agencies in the second year of the

biennium, especially for those with simpler needs. For some agencies, the cost of rewriting their applications is larger than their entire budget.

ASSEMBLYMAN DENIS:
Will we have to wait until the next biennium to rewrite the old systems?

MR. STOCKWELL:
No, we will start the process as programmers are available. It may be as simple as transferring them to a Structured Query Language database. Some conversions are simple while others are not. We have gathered information from the planning group from CB-TAP two years ago and from our programmers with historical knowledge working with the agencies.

ASSEMBLYMAN DENIS:
Are the programmers you are referencing those six who are under discussion?

MR. STOCKWELL:
Yes, they are the six remaining programmers. It does not include those assigned to the DOP.

CHAIR MCCLAIN:
Why was this project not started sooner?

MR. STOCKWELL:
The former director had different priorities than I have.

CHAIR BEERS:
Do the 890 billable hours for each position you anticipate in the coming 2 years include the task of reviewing agencies using the legacy system?

MR. STOCKWELL:
Historically, the number of billable hours will increase 10 to 20 percent in the 3 months prior to the end of the fiscal year.

CHAIR BEERS:
Why is that not built into the budget? Your budget reflects a request for nearly six positions to work less than half time, and yet be paid for full time, with a complete benefit package. I imagine an exorbitant training program is also needed.

MR. STOCKWELL:
Absolutely, the training program is another result of decentralization and the resulting reduction of training funds. We asked for additional funding to assist staff in remaining current with technology changes.

CHAIR BEERS:
We do not keep staff current. They should keep themselves current.

MR. STOCKWELL:
When someone is billing hours and is not sent to training, a decision must be made as to whether or not they can maintain at their current level of training and hope to receive training funds in the next budget cycle.

CHAIR BEERS:
We expect professional staff to seek and fund their own training and currency levels. Your explanation enhances my opinion that all IT functions should be outsourced.

MR. STOCKWELL:
I would not disagree, other than from the standpoint of historical knowledge. It would likely create a critical situation for some agencies because they would have no one to assist them.

CHAIR BEERS:
Each of these people could start their own company, and with what we would pay them under an MSA contract, they would make a similar salary, have access to their own training and be more efficient than as a part of the behemoth of the DoIT.

MR. STOCKWELL:
Many of these individuals have worked for the State 15 or 20 years, and frankly, if I were one of them and had been loyal to the State that long, I would want to continue my State service.

CHAIR BEERS:
I would love a job where I only have to work less than half time and have an unlimited training opportunity.

MR. STOCKWELL:
During the last two years we have received four major contracts.

CHAIR BEERS:
Why are those not reflected in your budget? The ability to pay for the additional contracts would not be in the other agency expense budgets.

MR. STOCKWELL:
In some instances, we are not aware of new contracts until an agency has a system failure through the vendor not providing needed services.

CHAIR BEERS:
Does the agency come before the Interim Finance Committee (IFC) and request the use of vacancy savings to contract with the DoIT?

MR. STOCKWELL:
That is true in part. Also, once we reach a point where we can justify a contract, the DoIT also appears before the IFC and requests the justification.

CHAIR BEERS:
Staff with obsolete skills is only billing 890 hours annually, and the DoIT is requesting a record training budget. It would be better if some of those positions were eliminated and the affected agencies, at the end of the biennium, would then hire an MSA contractor for the same costs who would have current skills and abilities to provide needed guidance.

MR. STOCKWELL:
I would not state the skills are all obsolete. As they are trained, there may be two or three individuals skilled in JAVA languages, but in the meantime, their other skills would be of assistance in maintaining the smaller agencies still using older systems that may only have 20 or 30 billable hours projected annually. It is a risk. All I can do is present the risk to you.

The biggest risk the State would face is if the programmers were reduced to less than six, an average of between six and eight agencies could experience a failure. We would not have the ability to respond if they were one of the smaller agencies.

CHAIR BEERS:
That should be reflected in your projected hours of billing.

MR. STOCKWELL:
The Department appeared before the Legislature two years ago and requested a roll-forward methodology that was denied. Therefore, all we can use are the actual billable hours, and that is what I have presented.

CHAIR MCCLAIN:
It is not fair to say your budget was cut. It is unfortunate you inherited such a department; however, the Subcommittee is looking at hard costs in a tough budget year.

CHAIR BEERS:
We are still left with six individuals working less than half time.

MR. STOCKWELL:
By the end of the year, we will most likely add staff based on projected additional work.

CHAIR BEERS:
Is it your intent to bring a budget amendment?

MR. STOCKWELL:
No, at that time, we will most likely provide justification before the IFC for one or two additional positions in either the programming or the DBA areas.

CHAIR BEERS:
Are the six positions all in programming, not DBA?

MR. STOCKWELL:
There are six programmers and four DBAs.

CHAIR BEERS:
Are the 5.7 positions, reflected at 890 billable hours annually, programmers?

MR. STOCKWELL:
That is correct.

CHAIR BEERS:
This is work that should be contracted to outside services.

MR. STOCKWELL:
I do not disagree other than, because some of those staff are experts in the legacy applications, some agency will experience a failure and will need that expertise. Currently, the expertise is with the individual who has been supporting those applications for the past 17 years.

CHAIR BEERS:
So, "The second string has been taken away, the first string is gone, the bench is gone, but we still have a full coaching staff?"

MR. STOCKWELL:
I would not call it a "full coaching staff."

CHAIR BEERS:
How else do we manage to have rates as high as they are projected?

MR. STOCKWELL:
The reduction in the number of programmers through decentralization to support the remaining 35 agencies has caused the rates to increase.

CHAIR BEERS:
Would the rates decrease if two positions were eliminated? Currently, two-thirds of a year must be built into the rates of the one-third being billed due to no one billing hours for that period.

MR. STOCKWELL:
I do not have the expertise to answer that question.

CHAIR MCCLAIN:
Who, in the DoIT has the expertise? Who built your budget?

CHAIR BEERS:
There are 5.7 programmers, 4 DBAs, 4 programmers exclusively for the DOP, and those 14 individuals have 9 managers?

MR. STOCKWELL:
Those positions are not all managers. There is one manager over the group who is an information systems manager III. The two planning positions moved into that area were an information systems manager II and an information systems manager III and were deleted from this budget. One manager is responsible for the DBAs and the other is responsible for the programmers.

CHAIR BEERS:
The DoIT is authorized 23 positions. The 5.7 programmers have been under discussion, 4 DBAs, and 4 dedicated programmers equals 14 positions. What are the other nine positions?

MR. STOCKWELL:
There are three staff in the Web group, and two in the administrative area.

CURT FLATNESS (Chief Information Technology Manager, Department of
      Information Technology):
I am the manager of the Planning and Programming Division, B/A 721-1365. Of
those positions, 2 positions were moved to the Department of Taxation and
2 positions were eliminated leaving 19 positions. There are ten programmers,
four DBAs, three Web group staff, one additional DBA position dedicated to the
Department of Taxation and one manager for the DBAs.

MR. STOCKWELL:
That is one manager for the DBAs and one manager for the entire group which
is Mr. Flatness's position.

CHAIR BEERS:
What overhead items in B/A 721-1365 could be reduced if the four
programmers are moved to the DOP?

MR. STOCKWELL:
Mr. Chris Apple, Administrative Services Officer, DoIT, could answer that
question; however, he is not present today. I can provide the information to the
Subcommittee.

CHAIR MCCLAIN:
Why are three Webmaster positions needed?

MR. STOCKWELL:
There are 220 Websites covering 17,000 pages for the State of Nevada. Of the
200 sites, approximately 118 are supported by the three Webmaster positions.
The others are supported by 65 Webmasters within specific agencies. The three
DoIT Webmasters support the remaining agencies and are responsible for the
statewide standardization of all Web presence. They are also responsible for the
guest books for the Office of the Governor; they provide all Amber Alert
information; the pages for the Governor and First Lady; and everything in terms
of emergency management and press releases.

CHAIR BEERS:
Do they bill their hours?

MR. STOCKWELL:
No, they do not. They are under an assessment plan.

CHAIR MCCLAIN:
Perhaps you should consider rearrangement of position assignments. If the DOP
has its own four programmer positions, it will save approximately $686,000
over the biennium.

MR. STOCKWELL:
What agency would receive those projected savings?

CHAIR MCCLAIN:
The savings would be in the DOP budget because they pay the largest portion
of assessment costs.

MR. STOCKWELL:
I believe that figure is not accurate.

CHAIR BEERS:
It is not. The $686,000 is the amount of billings the DOP receives. The four positions are costing the DOP $75,000 or more annually.

MR. STOCKWELL:
When the savings were analyzed, certain items were not considered. I will provide the Committee with figures from the four positions that were under the direction of the DoIT in the last biennium. The DOP has experienced 22 abnormal bends (abends) due to hardware or software failure, corrupted data, procedure errors or a myriad of reasons. Of the 22 times the programmers were called to rebuild those systems, 18 were during off-duty hours. These individuals do not receive standby compensation. They spend an average of 6.9 hours for each occurrence, rebuild the systems and have them operational without missing a payroll, printing over 2,912,000 checks at a cost of 152 hours of overtime. Those hours were not built into the projections.

CHAIR BEERS:
All the 152 hours represents is their billings from the DoIT.

MR. STOCKWELL:
That is true.

CHAIR BEERS:
Were those figures not included in your billings?

MR. STOCKWELL:
The DoIT does not include overtime in the billings.

CHAIR BEERS:
Who pays the overtime costs?

MR. STOCKWELL:
The DOP pays for those hours.

CHAIR MCCLAIN:
Why would that change the projections?

CHAIR BEERS:
Is the projection $602,000 biennially plus overtime costs?

MR. STOCKWELL:
The DOP figures did not include their overtime costs. Since I did not prepare the figures for the DOP, I am not sure how they were derived.

CHAIR BEERS:
Their billing should include the overtime costs.

MR. STOCKWELL:
I will withdraw that statement. I am not sure how the DOP figures were derived.

ASSEMBLYMAN DENIS:
For clarification, if the DoIT has to go before the IFC, the agencies do not have funding in their budgets to pay the additional billable hours?

MR. STOCKWELL:
That is correct.

ASSEMBLYMAN DENIS:
The agencies would also have to appear before the IFC requesting additional funding for the additional billable hours.

MR. STOCKWELL:
That is correct. That is the typical methodology when an additional position has become necessary in the interim. It typically occurs when a vendor fails to meet its obligations or, in some cases, the vendor has simply ceased their service.

CHAIR BEERS:
Is the 890 billable hours what was billed by your staff in the current biennium? Is that related to the going-forward plan you mentioned in testimony?

MR. STOCKWELL:
No, we bill to the trend analysis of the prior biennium. We consider the projected hours requested through the Nevada Executive Budget System (NEBS) and the number of programmers utilized and divide those figures. The result shows the actual billable hours versus what was projected. We then consider each month and whether trends increase or decrease. That is done individually and also by the total billable hours. That is how we know the billable hours in the last three months of a biennium increase 10 to 25 percent.

CHAIR MCCLAIN:
That is a major flaw. How can you use history to project billable hours when you are talking about totally different systems and projects? Once a department is billed for 100 hours, for example, it does not mean that history will carryforward. They may not need your services for another four years.

MR. STOCKWELL:
We meet with each agency, representatives from the DOA, a budget analyst and agency IT staff. We fill in the trend analysis for the last nine years and base billable hours on their requests for a program rewrite or simply the number of abends. The meetings last from one to three hours and participants consider the historical data to attempt to justify the projected number of billable hours needed. It is an estimate.

During the Year 2000 (Y2K) crisis, it was discovered many agencies were estimating billable hours. In all due respect, an agency might project 200 billable hours to hopefully cover any abends or unforeseen circumstance that might occur. At the time the practice did not create problems because of the number of programmers authorized in the DoIT budget for Y2K concerns. However, we quickly learned if an agency did not meet their projections, the DoIT was forced to lay off personnel. In the biennium just prior to Y2K, two programmers and a DBA were laid off because we could no longer meet the salary requirements. That is also why two positions within the Applications Development and Design

unit are being deleted. It is a difficult situation for both the DoIT and individual agencies.

CHAIR BEERS:
You still have not justified enough billable hours for the 5.7 programmer positions.

MR. STOCKWELL:
I agree.

CHAIR BEERS:
Why are you not recommending the 5.7 programmers be reduced to a more reasonable number?

MR. STOCKWELL:
There is a criticality of risk to user agencies and the position the State would be in if no one is available to repair a failure.

CHAIR BEERS:
You should be billing those agencies for a fixed maintenance cost.

MR. STOCKWELL:
We are considering that option. It would help.

CHAIR BEERS:
The agency could then use the authorized funding to search the market and fit those needs through an MSA or a contract with the DoIT.

MR. STOCKWELL:
I agree.

CHAIR BEERS:
Why should the DoIT not be converted solely to MSAs?

MR. STOCKWELL:
That should not be done. When an MSA is requested, it takes approximately six weeks to be scheduled. Additionally, background checks must be conducted as part of the process. We interview the vendor candidates with the agency based on the criteria of the specific application. Also, whenever service is needed because an application fails, no one will respond from Michigan or Illinois for application failures.

CHAIR BEERS:
A response could be made locally.

MR. STOCKWELL:
That is correct. The concern is the criticality and risk factors.

CHAIR MCCLAIN:
If programmers are being transferred to the Department of Taxation, why does the DoIT need to retain one DBA position for the Department of Taxation as well?

MR. STOCKWELL:
The Department of Taxation is in the midst of the Unified Tax System project. In meetings with the agency, they currently have an MSA at a salary of $240,000 annually. The skill sets of that individual are also present at the DoIT and we can assist them permanently and perform the same functions for approximately $167,000. Those are estimated figures. In our meetings with the agency, it was agreed that rather than relying on a vendor as a full-time database administrator, and the criticality of the situation, the DoIT could provide the service with the 5.7 programmers and their skill sets.

CHAIR MCCLAIN:
You testified earlier that two programmers are being transferred to the Department of Taxation.

MR. STOCKWELL:
Those were a manager and two quality assurance positions that should never have been placed in B/A 721-1365. Those were planning positions that should not have been in this budget. Errors occurred and I am trying to clean up such areas of the budget.

SENATOR COFFIN:
I am aware of a bill in the Committees on Taxation in both Houses that could dramatically increase the workload of the Department of Taxation depending on which measures are approved. Final decisions should not be made until we see what direction certain legislative measures take.

ASSEMBLYMAN DENIS:
Would the position in the DoIT, dedicated to the Department of Taxation, eventually be eliminated?

MR. STOCKWELL:
That position represents an ongoing need. The DoIT supports over 160 databases currently. Some databases have as many as 400 to 500 tables within one database. That is critical. A failure in any portion of a database can cause a system to crash.

CHAIR MCCLAIN:
Seeing no further questions, I hereby close the hearing on B/A 721-1365 and open the hearing on B/A 721-1385.

DOIT - Computing Division – Budget Page DOIT-36 (Volume I)
Budget Account 721-1385

Please discuss the mainframe enterprise server for southern Nevada.

DAN GOGGIANO (Deputy Chief, Computing Group, Communication and Computing
        Division, Department of Information Technology):
I will address the southern Nevada mainframe request and the capacity increase request together. I have explained the situation to the Committee staff and the Committee in the past.

The mainframe for southern Nevada architecture has changed dramatically since the last meeting due to information brought to staff and this Subcommittee

regarding International Business Machines (IBM) support of upgrades and downgrades for the existing platform. We did the analysis necessary to accomplish the same business goals within the justifications provided.

We are able to bring several alternatives that meet those business goals in various degrees. We are currently recommending the purchase of two replacement mainframes. One would run as the active production environment and the other would operate as a hot standby. The original plan was to have both servers actively operating the production workload. The analysis revealed the cost of running two systems would be prohibitive. The licensing costs for two platforms would not make sense in a long-term strategy for our Department or for the State mainframe system. The current proposal can be completed within the original cost estimates. There would actually be a reduction in the overall request between the two decision units.

CHAIR BEERS:
This Subcommittee had hoped this proposal would not become necessary when changes were made approximately four years ago.

MR. GOGGIANO:
Approximately four years ago, the Z900 server was installed. We now need a Z9 model.

CHAIR BEERS:
Has IBM notified the State they will no longer support the Z900 model?

MR. GOGGIANO:
We have been notified by IBM they will no longer allow upgrades or downgrades to the Z900 model. That is different than support issues. No established end-of-support date has been published. We cannot meet capacity needs into the next biennium. For instance, if we choose to fund only capacity and not the southern Nevada mainframe, I would not have the ability to add capacity to meet the growing needs of Departments such as Taxation or Health and Human Services.

CHAIR BEERS:
Is it simply a matter of a software key?

MR. GOGGIANO:
There are no hardware changes involved. This action is in line with typical business practices considering the four-year life expectancy when the Z900 was acquired. A spreadsheet was provided to this Subcommittee at that time reflecting this expectancy. We, as a Department, had hoped we could extend the life of the Z900 server.

CHAIR BEERS:
How were the cost allocations established?

MR. GOGGIANO:
The current mainframe was financed. The financing is set to terminate during the next biennium. It will terminate at roughly the same time as the target date for procurement of a new mainframe.

CHAIR BEERS:
Is the annual cost of financing being dumped into the cost allocation request? Is there a disparity in the time this is cost allocated and its useful life?

MR. GOGGIANO:
The financing cost has been rolled into the allocation request. The rate model allows two components; the first is depreciation. The Z900 was depreciated over a four-year life expectancy. The second is interest cost.

CHAIR BEERS:
Was the Z900 financed over four years? What is the financing proposal for the Z9 model server?

MR. GOGGIANO:
The Z900 was financed for four years. The Z9 server request is for an outright purchase.

CHAIR BEERS:
How will that be depreciated?

MR. GOGGIANO:
It will be depreciated over a four-year life as well.

CHAIR BEERS:
Where will it be located?

MR. GOGGIANO:
That is yet to be determined. One server would be placed in Las Vegas and one in Carson City. The primary production unit would most likely reside in Carson City. We are considering whether or not there would be a savings in terms of bandwidth by locating the primary unit at the user center in Las Vegas.

ASSEMBLYMAN DENIS:
How many users are there in the Las Vegas area compared to those in northern Nevada?

MR. GOGGIANO:
I will provide the information to the Subcommittee when our analysis is complete.

ASSEMBLYMAN DENIS:
Is there currently a mainframe in Las Vegas?

MR. GOGGIANO:
The DoIT does not have a mainframe in Las Vegas. However, the southern Nevada mainframe Technology Investment Request (TIR) intent was to provide that service. The project is consistent with the strategy over the past two Legislative Sessions of a three-phase disaster-recovery business-continuity model. This is the third and final phase of that approach.

SENATOR COFFIN:
Are major issues one and three to be considered together? What is the purpose behind the IBM decision? Is it simply a method to increase sales of newer

models? Is there an agreement, verbal or through contract, indicating a longer life cycle than four years?

MR. GOGGIANO:
The service issue is not specified. The question relates to marketing. The actual term is "withdrawal from marketing" which affects the ability to upgrade or downgrade our equipment. That was not specifically stated or implied in any documents I have reviewed. I will make such a request if this acquisition is approved. I hope to protect the State from continually facing this issue.

SENATOR COFFIN:
That is good. Is it possible parts for the current system could be found from other sources?

MR. GOGGIANO:
The increase in capacity is not a matter of procurement of hardware to be added to a server. Turning on accessibility is the question and that is a service that can only be provided by IBM.

SENATOR COFFIN:
What are other states doing with regard to similar issues?

MR. GOGGIANO:
The acquisition process has been relatively consistent with IBM. The motivation is absolutely to continue the hardware investment and acquisition of their goods. It has a direct impact on their bottom line. From the DoIT perspective, we can take steps such as specifications within the contracts to allow us a slightly longer life span to protect the State.

As we have migrated from one platform to the next, there is additional value that cannot be correlated with hard-dollar figures. The last acquisition was motivated because of applications such as the DataBase 2 (DB2), our database system on the mainframe. It only became available on the platform in use at this time. In one sense, IBM is holding us hostage; however, they are providing additional value. Additional capacity is a value statement as well.

CHAIR McCLAIN:
Was that not foreseen when the contract was written four years ago?

MR. GOGGIANO:
No, it was not foreseen. I was not in my current position at that time. It will be a part of the process this time.

CHAIR McCLAIN:
Let me phrase it a different way. The person in your position four years ago should have foreseen the issue.

MR. GOGGIANO:
I am not aware of whether or not that need was analyzed. A four-year support span was predicted. I will take responsibility for that, but I did not foresee the withdrawal from marketing at this point in time.

CHAIR MCCLAIN:
Why is the request for an outright purchase in this acquisition rather than a finance plan?

MR. GOGGIANO:
We are open to either method. We are considering the total effect on our mainframe rates and, for the most part, those rates are decreasing. Based on what we predicted in cash flow, we were not concerned over an outright purchase agreement.

A more detailed explanation from Mr. Apple might be helpful. It was a collaborative financial decision between the DoIT and the Budget Division.

ASSEMBLYMAN DENIS:
If the allocation of the Z9 server is approved, what becomes of the Z900?

MR. GOGGIANO:
Proposals provided to the Subcommittee staff include the trade-in value of the Z900. I do not have the value with me today.

ASSEMBLYMAN DENIS:
Is the trade-in value built into the budget request?

MR. GOGGIANO:
Yes, sir.

ASSEMBLYMAN DENIS:
I cannot imagine the trade-in value would be great.

MR. GOGGIANO:
I would estimate the trade-in value to be approximately $100,000. Currently, IBM has a trade-in program because they want to get the older models off the market.

CHAIR BEERS:
To recap, your request is to purchase two servers and user licenses for only one server?

MR. GOGGIANO:
Yes, sir.

CHAIR BEERS:
The second server will serve what purpose?

MR. GOGGIANO:
The second server will be available in the event of an actual disaster or the need to perform disaster-recovery testing. The contract for the second server is called a capacity-based upgrade contract and a portion of the acquisition costs are for that contract. The contract allows five years to utilize the southern server in the event of a failure of the northern server. With that contract in place, all user licenses move to the second server without simultaneous licensing. The smaller server in southern Nevada would be automatically upgraded to the same capacity of the northern server to satisfy production requirements.

CHAIR BEERS:
Has that been approved by the vendors?

MR. GOGGIANO:
That is correct. Most of those terms and conditions are built into our contracts and licensing agreements. The provision is already being exercised with the Boulder, Colorado, testing process.

CHAIR BEERS:
There are a number of IBM resellers. Will the contract be bid among those?

MR. GOGGIANO:
Absolutely, because of the size of the purchase, we will follow the formal purchasing process.

CHAIR BEERS:
We had hoped the server could be placed in the Freeway and Arterial System of Transportation (FAST) facility.

MR. GOGGIANO:
My intent was not to place the server in the FAST facility. As a follow-up to the second phase of the disaster recovery plan, this included disk replication between the north and the south. It was funded, and is being finalized at this time. My intent was to place it in Switch Communications which has been awarded a contract by a letter of bid request for services to provide storage for the disk array in southern Nevada. That was decided after an exhaustive search for space throughout the Las Vegas metropolitan area. It included many agencies, and certain non-State agencies. We were unable to find a space suitable for the short- and mid-term needs. We were funded within the project to do so.

If we decide to relocate, a large component of the disk array would have to be relocated into the other offering. The particular concerns with the FAST facility are network connectivity and mid- and long-term capacity.

There are a number of State agencies that have already developed the architecture to split their technology between the north and the south, including the Division of Welfare and Supportive Services. The available space in the FAST facility is spoken for in some cases, and in other cases the facility is size-limiting altogether.

CHAIR BEERS:
Is a contract in place for a specified footage in the Switch Communications facility?

MR. GOGGIANO:
That is correct.

CHAIR BEERS:
How long do you anticipate the Switch Communications space will meet capacity needs?

MR. GOGGIANO:
The fixed footage is currently150 square feet. That will provide what is needed in FY 2006-2007. Going forward, we have requested to extend the capacity to a total of 1,500 square feet. The contract is written to allow scaling up the space requirement as needed. The 1,500 square feet will bring us through the entire biennium.

CHAIR BEERS:
How much did we spend on the new computer center?

MR. GOGGIANO:
The total project construction cost was approximately $5.5 million.

CHAIR BEERS:
Does the construction cost include a building?

MR. GOGGIANO:
Yes, it allowed a renovation and addition project including approximately 10,000 square feet of space. A large component of the cost was for mechanical systems and renovations of the existing computer center.

CHAIR BEERS:
Does it make sense for the State to centrally outsource the creation of a data center compared to building our own?

MR. GOGGIANO:
That is a policy decision, not purely a financial argument. We have an offering in southern Nevada that can provide the services at a cost comparable with the long-term costs of operating our own data center. It is currently available.

CHAIR BEERS:
How is the cost allocation billed to users?

MR. GOGGIANO:
All costs are built into our rates provided as a per-unit charge to customer agencies consuming those services.

CHAIR BEERS:
What is contained within the per-unit charge?

MR. GOGGIANO:
It varies according to the services provided. For example, in the mainframe environment, it would be billed as a central-processing-unit minute. The time of service in that situation is billed at $12 for each minute.

CHAIR BEERS:
Are facility costs built into those rates?

MR. GOGGIANO:
Facility costs and components thereof are built directly into the rates. Some are indirect in the form of general administrative overhead costs.

CHAIR BEERS:
How are those charges costed out?

MR. GOGGIANO:
It is costed on dollars of direct cost for each service.

CHAIR MCCLAIN:
Please review the three options with regard to the purchase of new servers.

MR. GOGGIANO:
We have discussed the recommended alternative to some extent. That is to purchase two servers, one in southern Nevada and one in northern Nevada. One would house the active environment and the alternate would be a standby environment. The reason that alternative is recommended was a cost for value received proposition. It is not the least-expensive alternative, but it provides the needs of our business plan.

The major advantages are disaster-recovery capabilities, support of the platform and the total cost of ownership.

The original proposal was to place two active servers, one in the north and one in the south. We had planned to keep the existing server and procure one additional server. Due to the IBM changes, that is no longer possible. The challenge of having both new servers active requires licensing software for the capacity of both environments. Software licensing costs are a major portion of the budget for mainframe operations and computing functions. The hardware acquisition cost is only one component of the overall, ongoing operational costs. It would commit us to funding, not just for the biennium but ongoing into perpetuity until the model is changed. I did not feel that was a fiscally responsible method of business operation. The challenges are the cost and complexity of operating two environments, the need to migrate certain workflow and ensuring all systems interconnect and work together.

The first alternative is much simpler and allows us to stay with the current mainframe environment. In the event of a disaster, we can migrate the system to the alternative server.

The final alternative was to request a single Z9 mainframe server to replace the existing environment. The specifications reflected greater cost savings, but it was not chosen because the overall cost of the software licenses is the same between the recommended alternative and the single-unit alternative. It would not meet our disaster-recovery requirements. Even worse, the investment in disk storage that has been purchased in this biennium would be rendered of substantially less value without the two mainframes.

SENATOR COFFIN:
For 10 or 12 years I have been trying to convince the State to consider the possibility of an independent system. Are we reaching a point where the use of an IBM mainframe is not absolutely necessary?

CHAIR BEERS:
The cost is decreasing. The reliability of other systems is increasing. The feeling of extortion is becoming more acute. It would be difficult to transfer all the

necessary files and data to a completely different environment without the considerable risk of a failure.

SENATOR COFFIN:
That is a recipe for inertia. I would like to hear of creative alternatives.

MR. GOGGIANO:
I could write a short paper on the alternatives to the use of solely IBM equipment for the benefit of the Subcommittee. I can provide examples of why the proposal would, or would not, be practical in the current environment.

CHAIR MCCLAIN:
Your response does not need to be formal. Please e-mail the information to members and staff of this Subcommittee.

I hereby close B/A 721-1385 and open the hearing on B/A 721-1389.

DOIT - Security Division – Budget Page DOIT-81 (Volume I)
Budget Account 721-1389

We have concerns with the areas of staffing enhancements, the equipment for the new security initiatives, reclassification of the chief IT manager, the State building security system and assessment increases. Please begin with justification for the staffing enhancements. What will be supported by the four additional staff requested in enhancement unit E-901?

E-901 Transfer from BA 1373 to BA 1389 – Page DOIT-82

JAMES ELSTE (Manager, Chief Information Security Officer, Director's Office, Department of Information Technology):
We are requesting four additional positions; two in FY 2007-2008 and two in FY 2008-2009. Those positions will assist us in providing services to State agencies. Specifically, the positions will lead the disaster recovery and continuity of operations efforts for all departments. We are also requesting an information services officer in FY 2007-2008 to assist in the Incident Command System (ICS) function within our office.

CHAIR MCCLAIN:
What are the functions of the current positions approved by the 2005 Legislature?

MR. ELSTE:
Five positions were approved by the 2005 Legislature. They are primarily functioning in an assessment role by providing security and risk assessments to the agencies. One position is serving in a disaster-recovery role and one position provides security awareness and training.

CHAIR MCCLAIN:
If this budget is approved, how many staff will your section employ?

MR. ELSTE:
There will be 10 staff in FY 2007-2008 and 12 in FY 2008-2009. There are deficiencies in the technical-security architecture and disaster-recovery

functions. Therefore, we are utilizing staff across functions to provide less of an assessment service allowing them to cover responsibilities for incident management and disaster recovery. The additional positions will allow the section to balance the workload and dedicate our resources toward assessments, disaster-recovery planning and assistance in incident management. It will provide technical security assistance to the agencies.

CHAIR MCCLAIN:
Explain what is left to be done in the disaster-recovery planning operation.

MR. ELSTE:
Considerable work remains in that project. The disaster recovery spreads over a spectrum of functions. It is not simply initiatives, as explained by Mr. Goggiano, with the mainframe in southern Nevada. It also concerns the continuity of operations, identification of critical applications within agencies, and preparation for response to a crisis event. We must manage not only the technical infrastructure in such an event, but also the personnel and operational procedures.

From a planning perspective, critical applications must be identified. How functions will be performed within a continuity of operations plan such as the delegation of authority, succession planning, identification of critical information resources and the procedures for the technical-recovery component are also necessary. It is a continuing effort as systems change and evolve.

The assistance is provided to all State agencies including elected officers. It is a significant workload.

CHAIR MCCLAIN:
Why are these functions not being performed within the development unit? It seems that future development, regardless of whether it is for disaster recovery, would be a responsibility of the development unit.

MR. ELSTE:
Disaster recovery planning and security law are specialized functions. The development resources are focused primarily on establishing and loading applications. Security and disaster-recovery expertise are required to guide the agencies through development of their plans.

CHAIR MCCLAIN:
In other words, you are decentralizing within your own agency?

MR. ESTES:
I would term it specialization.

CHAIR MCCLAIN:
Explain the equipment necessary for the new security initiative in enhancement units E-903 and E-909. These enhancements target cyber crime with sniffer software. How does this correlate with the Office of the Attorney General (AG)? They already have a cyber-crime unit.

E-903 Transfer from BA 1373 to BA 1389 – Page DOIT-83

E-909 Transfer from BA 1373 to BA 1389 – Page DOIT-85

MR. ELSTE:
A poor choice of words has caused confusion. Our intent is to provide the tools and resources for incident management to the agencies. At the point of a security event, all responses would be coordinated and structured.

To distinguish this request from the forensics unit of the AG's office, their requests are for forensic resources providing support to law enforcement agencies throughout the State in pursuit of criminal computer forensics. Ours will offer analysis of computer systems and recovery of data to provide evidentiary quality material in pursuit of a criminal action.

We have met with the AG's office, the Department of Public Safety (DPS), and the DOA budget analysts to discuss and distinguish between of two functions.

Our intent is to perform the early response for State agencies up to a point where a criminal act is detected. At that point, we pass the situation to law enforcement and the AG's office. One comment from the meeting I found salient was by the detective in charge of forensics at the DPS, who stated that he wished all the agencies and organizations he worked with had similar capabilities. Often, they receive incidents that have not been managed in a structured manner and as a result, they have lost the capability to pursue criminal action.

Our intent is to respond quickly to a State agency incident in a structured manner.

CHAIR MCCLAIN:
Please give this Subcommittee an example of an event that might occur within a State agency that would reach the level of the AG's office.

MR. ELSTE:
Without divulging privileged information, I will relate an actual incident currently being pursued. It involves the inappropriate use of privileged access to an information system. The individual went beyond their appropriate use of the system. The incident was detected and we were requested, by the agency, to determine the scope of inappropriate use, and if we identify a criminal intent, the situation would be passed to the AG's office. We have a significant responsibility to manage the information systems environment and respond appropriately.

CHAIR MCCLAIN:
How frequently do incidents, including those not of a criminal level, occur?

MR. ELSTE:
Incidents are reported periodically. There were 12 incidents in FY 2005-2006 of various severities including inappropriate use of the State e-mail systems and requests from agencies to assist them with administrative investigations. We have several incident reports monthly that are deemed insignificant. Those include money policy investigations, but we must respond to the incidents in each case because it is sometimes difficult to distinguish between an innocuous incident and one of a severe nature.

CHAIR MCCLAIN:
Would that be the responsibility of the four new positions requested?

MR. ELSTE:
One of those individuals would have those responsibilities. All the resources in my office would respond to incidents in case a fire alarm is triggered.

CHAIR MCCLAIN:
If the four new positions are not approved, will it place the State at an even greater risk?

MR. ESTES:
The risk is inherent in information systems. The real question is whether or not we will have the ability to identify those risks and provide information on how to mitigate them. From my perspective, it is more important that we vigilantly pursue identifying the risk to our environment and provide structured responses through mitigation alternatives to the risks. Without performing the assessments, we have no basis for making determinations of the appropriate levels of security.

CHAIR MCCLAIN:
Are we basically talking about more planners? The request projects a starting date of July 1, 2007, which is not realistic. Budgets will not be in effect until that date unless you already have specific individuals in mind for the positions.

MR. ELSTE:
When our budgets are approved, we will proceed vigilantly to get the resources onboard.

CHAIR MCCLAIN:
Typically, personnel are planned to begin work in approximately October to allow time for recruitment.

MR. ELSTE:
That is correct.

ASSEMBLYMAN DENIS:
How did you determine four additional staff are needed? It sounds as if you have a crew working in security and the intent of these four positions appears to be visitation of the agencies and searching for culpabilities to help them overcome issues.

MR. ELSTE:
We had assistance in determining the need for four staff. Our request came through the Governor's recommendations and that was the determination of need. I feel it is the correct number.

CHAIR MCCLAIN:
What was requested in your initial budget process?

MR. ELSTE:
Our original request was for seven new positions.

ASSEMBLYMAN DENIS:
Regardless of the number, how did you arrive at the number of staff needed to address the situation? It was not based on a backlog of security incidents.

MR. ELSTE:
Two factors drive the office of Information Security. One is scheduled assessments, including functions we anticipate performing for the agencies. The other is support services based on demand. In turn, we reviewed the current composition of the unit and where additional skill sets were needed such as disaster recovery and incident management. We determined what the appropriate mix was, based on the historical workload. We forwarded a request that allowed us to balance the functionality and skill sets within our organization.

Over the course of the previous two biennia, the requests have always reflected a general expectation of a number of approximately 15 staff. Those numbers are adjusted throughout the budget process. One challenge of the office of Information Security is the security function within the State. We are the only full-time resource for information security with one or two exceptions. It is a serious burden to provide the services and be prepared to respond with capability for the entire State. There are current limitations in the mix of resources. These requests will allow the office to balance its functions.

ASSEMBLYMAN DENIS:
Have you had to decline any requests for assistance with security issues?

MR. ELSTE:
We have not declined any requests; however, we have had to prioritize incidents and, in some cases, postpone response to a request.

ASSEMBLYMAN DENIS:
How long have you had to postpone incident investigations?

MR. ELSTE:
In certain cases where we are performing a rather large assessment, we must postpone a smaller assessment. We have postponed the wireless assessments for the last 90 days. Our staff is working overtime and working hard in response to security requests we receive.

ASSEMBLYMAN DENIS:
Do you currently have the security software contained in your request and wish to upgrade, or is the request for new software?

MR. ELSTE:
These are additional hardware and software requests that would allow us to perform the assessment and ICS functions in a more structured manner. The current tools are open-source tools such as freeware. They are widely recognized tools, but the new resources requested would allow us more efficient and reputable results.

ASSEMBLYMAN DENIS:
Are there ongoing costs with the new functionality?

MR. ELSTE:
There are additional maintenance fees in the following year in some instances. Those are outlined in the budgets. They are insignificant.

ASSEMBLYMAN DENIS:
Is it likely you will appear before the Subcommittee in two years requesting more new software or will you have the ability to upgrade the software if these requests are approved?

MR. ELSTE:
There is the potential of requesting new assessment tools. Security is an industry that evolves quickly as new threats are identified. It is my intent to produce a clear assessment of agencies and bring the Subcommittee not only requests for tools, but to provide an understanding of the kinds of tools necessary to mitigate specific security risks.

CHAIR BEERS:
Have we done any Requests for Proposals (RFP) to identify a list of contractors who provide security services on a project-by-project basis?

MR. ELSTE:
Are you speaking in terms of security projects?

CHAIR BEERS:
I am speaking in terms of security detection or wireless products.

MR. ELSTE:
We work with certain vendors. I am unaware of whether or not an RFP has been done to identify security consultants or MSAs. I would support the suggestion. There is a balance between what is done internally and outside support. Outsourcing certain security functions is not practical. We are ultimately responsible for the security within State agency systems.

CHAIR BEERS:
How much of the funding in B/A 721-1389 is currently specified for consultants?

MR. ELSTE:
Currently, $1 million is allocated for consultant services. By performing assessments and identifying where security issues exist, we can identify and make requests for discreet projects to improve security for a particular function or agency.

CHAIR MCCLAIN:
The justification given for the request for reclassification of the chief IT manager states the position should serve at the pleasure of the appointing authority because of high-visibility duties in enhancement unit E-906. I totally disagree.

E-906 Transfer from BA 1373 to BA 1389 – Page DOIT-84

MR. ELSTE:
This budget request was incorporated into the *Executive Budget* prior to my appointment. It was a result of a situation during the previous year with

my predecessor. I have two observations. The chief information security officer is a high-profile position. The person in the position is requested whenever an agency suspects a security issue. It is occasionally necessary to bring bad news to an agency, my director or to the attention of the Legislature.

My understanding of the budget request is it was made so the position could serve at the pleasure of the director. I was told I would be grandfathered in and that I would have a choice of whether to serve under the classified or unclassified service. My successors would be placed in the unclassified service. If the request is approved, it would be the decision of the director whether or not I become an unclassified-service employee. I have trouble supporting the request.

MR. STOCKWELL:
The prior leadership of DoIT had created an executive staff outside the normal chain of leadership. The executive staff consisted of five positions to direct the agency.

CHAIR MCCLAIN:
Are the other positions in the executive staff unclassified?

MR. STOCKWELL:
They are not. I eliminated one request for reclassification of the information services manager III.

CHAIR MCCLAIN:
Why would one want the five top positions in any agency to serve at someone's will?

MR. STOCKWELL:
I do not have the answer to that question.

CHAIR MCCLAIN:
Discuss justification for the State buildings' security system in enhancement unit E-907. Is this request for key-card equipment?

E-907 Transfer from BA 1373 to BA 1389 – Page DOIT-84

MR. ELSTE:
The budget request in enhancement unit E-907 is the software maintenance and additional supplies to support the physical-access security system being installed. It has been installed in the DoIT and all mountaintop sites managed by the DoIT. In the current biennium, the program plans installation of physical-access security in the Capitol Complex, the Nevada Supreme Court, the Office of the Attorney General, the Office of the Secretary of State, and the State Division of Library and Archives. It is a badge and identification-card system.

CHAIR MCCLAIN:
Will some of the costs be allocated to the State agencies in which the systems are being installed?

MR. ELSTE:
At this point, with the security of the system as a part of the DoIT, those costs are distributed throughout all the State agencies as part of our assessments. We are under discussion of an optimum model for the operations communications of the system.

CHAIR MCCLAIN:
Have you decided how the costs will be allocated in the future?

MR. ELSTE:
We have not.

ASSEMBLYMAN DENIS:
Are you replacing or adding a server?

MR. ELSTE:
We are upgrading the server. The additional secure server specification did not allow enough tolerance. As more entities are included into the system, we want to build full tolerance into the core of the system.

ASSEMBLYMAN DENIS:
You are deleting an older server and replacing it with a larger server?

MR. ELSTE:
That is correct.

CHAIR BEERS:
How old is the server being replaced?

MR. ELSTE:
The current server is one year old. It was under-specified for the scope of needs. There have been discussions for adding several entities into the system. Tolerance and capacity become key concerns.

CHAIR BEERS:
What will be done with the current server?

MR. ELSTE:
I am unsure what the plans are for the current server.

CHAIR BEERS:
At only one year old, it should still have the ability to provide some type of service.

MR. ELSTE:
I agree.

MR. GOGGIANO:
The current server was purchased as part of the Capital Improvement Program for the computer facility. It was originally scoped with only sufficient capacity for the DoIT security operations. Redeployment is an option we will explore for the current server.

CHAIR BEERS:
The agency is requesting an increase in the security assessment fee from $61.05 per full-time equivalent (FTE) to $82.02 per FTE.

MR. ELSTE:
That is correct.

CHAIR MCCLAIN:
Is the amount of increase negotiable?

MR. ELSTE:
The security assessment is a good value for dollars spent. Attempts to support security within individual agencies would ultimately have a higher cost than the current method. Our objective is to attain the ability to reach more agencies with our security services. The State agencies process a variety of personal and sensitive information. The last thing we want is a security breach.

As a rough cost analysis, three security breaches of personal and identifiable information under the proposed bill draft request provide a penalty for the crime that would pay the entire security budget.

CHAIR BEERS:
I have not heard of this bill draft request. Has it been assigned to a committee?

MR. ELSTE:
I do not believe it is an agency bill. It is an enhancement to the breach notification law providing a fine of $100 for each individual penalty of personal, identifiable information up to $500,000 for each incident.

CHAIR BEERS:
Would the State receive funds from the fines?

MR. ELSTE:
That is unknown at this point.

CHAIR BEERS:
Have you brought an amendment to suggest the fines imposed be allocated to the budget of your office?

MR. ELSTE:
No, sir.

SENATOR COFFIN:
We do not have the bill, but are we talking about fines against perpetrators of crimes?

MR. ELSTE:
The fines are directed at individuals who possess the personal information. There is an obligation under existing breach law in *Nevada Revised Statutes* (NRS) 603A that requires prudent security measures and notification if there is a breach or suspected breach of personal-identifiable information. The bill draft request adds a fine to those entities should they have a breach. The fines would revert to the General Fund.

SENATOR COFFIN:
Are we talking judgment-proof entities or those that have assets?

CHAIR BEERS:
It would be directed at any entity responsible for personal data such as the Department of Motor Vehicles. Are you suggesting the increases in your budget should be contingent on passage of that legislation?

MR. ELSTE:
No, sir.

CHAIR MCCLAIN:
The assessment is contingent upon approval of requested staff increases.

MR. ELSTE:
Certainly, we have an obligation to protect personal information possessed by the State entities. That is our mission.

CHAIR MCCLAIN:
Decision unit E-908 requests enhanced background checks on existing security unit staff. Who will conduct the background checks?

E-908 Transfer from BA 1373 to BA 1389 – Page DOIT-84

MR. ELSTE:
This is another legacy from the incident in 2006 in which additional funds were requested to perform enhanced background checks for my office. In discussions with the former director, that provision would be grandfathered for existing staff and the funds used for enhanced background checks of new staff. Additional background checks are not necessary. The Information Security staff is not a privileged user of the system. We perform a service to various operators of the systems. Background checks should be applied to individuals with privileged access or it could cause potential harm to the systems.

CHAIR BEERS:
Decision unit E-908 requests funds for enhanced background checks. Has a background check been performed on the former director?

MR. ELSTE:
Not to my knowledge. A policy was implemented in 2006 for background checks of individuals involved in the management of information systems. Those background checks include a civil name check performed against the DPS civil name-check service and a fingerprint-based background check that is sent to both the DPS and to the Federal Bureau of Investigation.

CHAIR BEERS:
Are background checks performed on management-level staff but not on the director?

MR. ELSTE:
That is correct. A number of positions were identified that would require a background check for both full-time employees and MSA contractors. The

Information Security office currently provides that service for the DoIT and the MSA contractors.

CHAIR BEERS:
Which functions have a cost associated?

MR. ELSTE:
At this point, background checks cost our agency approximately $75 each. The costs are borne by the employee or the MSA contractor. The particular request in decision unit E-908 is for enhanced background checks. I do not have details with me this morning. I have suggested the addition of one check that has not previously been performed. It is a financial background or credit check. People who are inclined to engage in malfeasance or misconduct typically do so for financial motives. I believe it involves a psychological profile akin to the Level 2 Background Check done for the DPS.

CHAIR BEERS:
Decision unit E-910 requests additional travel for the staff of this Division. Is the increase to accommodate the staff increases? Will the travel budget need to be increased if the additional staff is approved?

E-910 Transfer from BA 1373 to BA 1389 – Page DOIT-85

MR. ELSTE:
The travel budget increase does not include the additional personnel requested. Decision unit E-910 is a part of the separation of the office of Information Security from the director's budget account. Our Base Budget allocated existing travel as opposed to what had been allocated to my Division when we were working under restricted travel requirements. This request would allow us to perform the services necessary.

CHAIR MCCLAIN:
I hereby close the hearing on B/A 721-1389 and open the hearing to a discussion on the integration of the Integrated Financial System (IFS) in budget accounts 721-1385, 101-1320 and 101-1130. This is information combined from the DoIT, the DOA and the Office of the State Controller.

Information Technology Division – Budget Page ADMIN-29 (Volume I)
Budget Account 101-1320

Controller's Office – Budget Page ELECTED-102 (Volume I)
Budget Account 101-1130

DAVE MCTEER (Manager, Information Technology Improvement, Department of Administration):
I have provided the Committee with a packet of information (Exhibit C, original is on file in the Research Library) providing a brief history of the IFS project and review of cost differences between our proposal and that of the Office of the State Controller.

The IFS project began in 1997 when funding was appropriated by the 1997 Legislature. The project involved core agencies including: The DOA, Executive sponsor; the Budget Division, project management; the Purchasing

Division, procurement module; the Office of the State Controller; the Office of the State Treasurer; the Nevada Department of Transportation (NDOT); and the DOP.

The Legislature required all agencies to cooperate to achieve a successful project.

Page 4 of Exhibit C provides the costs of the IFS project through 2003 which was the official end of the project. The cost at that point was approximately $56.6 million.

Page 5 of Exhibit C provides information concerning the various components of the system. It lists the applications for each core agency. The three Advantage applications of the Office of the State Controller, the NDOT and the DOP have not been upgraded to a recent version of the operating system and database software. Those will take additional time to migrate to the IFS system.

Page 6 of Exhibit C explains the reasons the server consolidation was considered. The DOP data warehouse and Nevada Employee Action Timekeeping System (NEATS) server is nearly at capacity. The State needs to improve disaster recovery in the IFS. The current servers are aging and not supported by the vendor. Many of the existing IFS servers will be reaching the end of their useful life in the near future and will need to be replaced before the hardware is no longer supported. The technology is now available to significantly reduce the number of servers needed to support all the IFS applications. There are opportunities to reduce costs over the long term. State infrastructure will be in place that can support backup and recovery efforts.

CHAIR MCCLAIN:
Is that only for this system?

MR. MCTEER:
It would support the entire IFS project.

Page 7 of Exhibit C is a visual depiction of the hosting facilities currently in place. The proposed solution is to combine the current server network into two hosting facilities, one in the DoIT in Carson City and one at the hosting facility of DoIT discussed earlier in Las Vegas. They will be connected by high-speed fiber providing data replication between the two servers.

Page 8 of Exhibit C depicts there to be minimal impact to roles of the agencies in relation to the applications. The application owners are listed across the top of the graph and we have considered specific functions down the left side of the graph. Only the highlighted areas will be impacted by the consolidation. The remainder will remain with their particular agencies. The last row of the graph depicts each agency is, and always has been, responsible for their own disaster recovery piece.

Page 9 of Exhibit C depicts the primary cost components of the IFS program. With consolidation, the UNIX and storage cost pools would remain with the DoIT. At the bottom of the page, are the cost pools paid to IBM and Oracle. Those offer an opportunity for future savings. The right side of the page shows

a module for the interim statewide advantage and disaster-recovery funding put in place for the State Controller to solve a problem.

Page 10 of Exhibit C shows the true cost of the server consolidation as proposed by the DOA is $271,620 over the biennium. The E-225 decision units found in all agencies' budgets for UNIX costs total $719,273. Of that, $447,653 represents sunk costs. Those costs will occur whether the consolidation plan goes forward or not. That has presented several additional factors.

E-225 Eliminate Duplicate Effort – Page ADMIN-3; PERSONNEL-3; NDOT-5; and
    ELECTED-104

The Base Budget has been understated because the Department of Health and Human Services, Division of Welfare and Supportive Services (WSS), was supposed to be consolidated into the UNIX cost pool in FY 2006-2007. The rates were based upon that assumption. That did not occur, thus it created an under-collection of revenue in the amount of $301,218.

A salary increase and non-server, general and administrative cost components complete the $447,663 cost figure.

CHAIR BEERS:
Was there also an underutilization of assets? When the largest user in the UNIX cost pool failed to use the services of the UNIX cost pool, was there an underutilization of assets?

MR. GOGGIANO:
We did not have shared assets associated with the UNIX cost pool. The additional services built into the rate model, predominately the WSS in this case, were for our individual personnel. The assets were continually used on the IFS project. Staff was deployed to other projects. The issue was an under-collection of fees. The amount not collected is approximately $200,000 annually.

CHAIR BEERS:
If the staff was deployed to other projects, why were those projects not billed for staff services?

MR. GOGGIANO:
They were billed. Staff was not added to accommodate the additional utilization. There are four staff in the IFS group, and they have been in the project over the past two biennia.

Those four individuals were fully tasked with IFS projects throughout the biennium. Two staff are dedicated to the application functions and two are dedicated to operating systems and hardware maintenance. We anticipated performing the additional workload based on the requirements of the WSS Division which did not occur.

CHAIR BEERS:
Are the four staff all billed to the IFS project going forward?

MR. GOGGIANO:
That is correct. There are no additional rates or users incorporated into the rate pool going forward in the 2007-2009 biennium.

CHAIR BEERS:
Are the non-project costs in decision units E-225 recovery of unbilled current biennium funds, or are they future biennium costs?

MR. GOGGIANO:
The requests in the E-225 modules are future biennial costs only.

CHAIR BEERS:
Is this not an attempt to recoup losses, but a failure to break out two separate enhancement decision units? These costs should be a maintenance decision unit.

MR. MCTEER:
You are correct. Mr. Andrew Clinger, Director, DOA and I agree. These costs should not have been in decision unit E-225. It skews the big picture.

CHAIR BEERS:
In the big picture these decision units will offset some of the several costs that have been identified in the Base Budget that should have been enhancement units.

MR. MCTEER:
Page 11 of Exhibit C is a different view of the situation. This is a complex issue. We have presented several different views to help the Subcommittee grasp the situation.

This page is the same UNIX cost pool for IFS. We are reflecting the direct labor, operating costs, indirect costs, depreciation on existing equipment and depreciation on new equipment for a total UNIX cost pool of $1,762,991. Those costs must all be recovered.

The sum of agency Base Budget items for the UNIX cost pool at $1,043,718, leaving the sum of the decision unit E-225 at $719,273. Those costs should not be reflected in enhancement decision units because the non-server cost of $447,653 is not related to the IFS consolidation. The total IFS cost for the biennium is $271,620.

Page 12 of Exhibit C reflects the other major component of the costs; the storage cost pool. This is a DoIT cost pool reflecting revenue paid to DoIT to cover their cost of data and application storage. None of these costs are related to the IFS server consolidation. All these costs are sunk costs and would have to be paid to DoIT to recover their costs for storage whether or not consolidation goes forward. The costs are spread across a variety of budget accounts.

In FY 2002-2003, the IFS project purchased storage equipment to attach to the DoIT storage area network (SAN). The IFS project is not required to pay storage rates because we essentially bought the hardware. The DOP and the DOA have been using the SAN resources but have not paid for depreciation. That SAN

became obsolete and is to be replaced in FY 2006-2007. The IFS budget has no funding to buy into the SAN hardware purchase and it would not be correct policy to do so. Therefore, all the IFS agencies utilizing the new SAN will have to pay rates according to federal cost guidelines. Those sunk costs must be recovered by DoIT from all agency users whether or not an IFS project is in place.

Page 13 of Exhibit C lists the components of the storage cost pool from the DoIT perspective. The total cost to be recovered is $1,417,696 less costs allocated to other cost pools such as e-mail and Web services. The costs are recovered through e-mail and Web rates to users. The total storage allocated to the cost pool after e-mail and Web rates are removed is $1,128,121. Next, the non-IFS agency costs are $357,390 leaving $770,731 in the E-225 decision units. None of those charges are related to the IFS consolidation so the server consolidation increase is zero.

Page 14 of Exhibit C is another perspective moving up to a slightly bigger picture. It combines the UNIX and storage costs. The two highlighted columns are items related to the server increase. The bottom figure in the first highlighted, area is $271,820 as noted previously. In the "other" column, also highlighted, are the costs that were contained in the Office of the State Controller budget for the interim disaster-recovery solution at a cost of $318,551. That is not a part of actual consolidation costs. It was costs related to the solution of an immediate problem with the interim disaster recovery issue.

Page 15 of Exhibit C is another view of the situation. One problem that has been identified is that all Base Budget and decision unit E-225 costs total $2,522,722. However, only $271,620 is directly contributable to the server consolidation.

Page 16 of Exhibit C provides a stacked bar chart view of the situation. It reflects costs across the coming two biennia. The darker bar is the ongoing sunk costs and the lighter bar is the increase for ongoing sunk costs.

Page 17 of Exhibit C is our comparison of the DOA plan and the plan being brought forward by the State Controller. Row A is the plan presented by the DOA. We have projected out a total of six years ending in FY 2012-2013. The costs reflect the UNIX and storage costs and the reduction, over time, in the Oracle licenses and the IBM hardware and software costs I spoke about earlier.

Row B, on page 17 of Exhibit C, is the projections without the Office of Controller involvement. Row C is our projection for costs to the Office of the Controller for their independence. The total of Rows B and C are shown in Row D. If Row A is subtracted from Row D, that is the true difference in the two plans from our perspective. The actual cost is $86,441 in FY 2007-2008, and $3,597 in FY 2008-2009. Then, it begins to rise going forward because there will be fewer license reductions for the Oracle licensing. In FY 2012-2013, the cost difference is projected to be $150,985. Over six years, in Row G, is the difference of approximately $500,000.

CHAIR MCCLAIN:
On page 17 of Exhibit C, Row B shows consolidation with the Office of the Controller separate, Row C shows the Office of the Controller independent. What is the difference?

MR. MCTEER:
Row B is a variation of Row A removing the Office of the State Controller from our plan. Row C is our estimate of the costs for their independent plan which you will hear more about shortly from the Office of the Controller.

CHAIR MCCLAIN:
Row C is the costs the Office of the State Controller projects for implementation of their plan, and Row B is the DOA plan with the component of the Office of the State Controller removed.

MR. MCTEER:
That is correct. Row H, on page 17 of Exhibit C, projects the six-year average costs at approximately an annual difference of $88,520. This includes all the cost categories of the UNIX cost pool, storage cost pool, the hardware and AIX software maintenance, support hardware and software, and Oracle software maintenance.

Certain assumptions have been made that Oracle licenses will be transferred from the existing system to the new Controller server with their plan resulting in a reduction of $120,000 annually.

Page 18 of Exhibit C is a stacked bar chart with the darker bars representing the sunk costs and the lighter color reflecting the difference.

Page 19 of Exhibit C reflects the DOA proposal for the interim disaster recovery system for the statewide Advantage financial software to provide the Office of the State Controller with an interim disaster-recovery site as part of our proposal.

The attachment pages of Exhibit C are background detail of our plan.

CHAIR MCCLAIN:
Is the interim disaster-recovery plan a new proposal?

MR. MCTEER:
It is not a new proposal. It was proposed late in the budget cycle because of the concerns expressed by the Office of the State Controller. They felt the original plan we had proposed would take too long to provide them a disaster-recovery plan.

CHAIR MCCLAIN:
To which budget are the interim costs allocated?

MR. MCTEER:
It is allocated to the budget of the Office of the State Controller.

CHAIR BEERS:
Is your testimony your interim plan proposal is currently in the *Executive Budget*?

ANDREW CLINGER (Director, Department of Administration):
The interim plan is in the Governor's recommended *Executive Budget*. We met with the State Controller and her staff in mid-November and presented our plan to her at that time. Her primary concern was that our plan did not accommodate a disaster-recovery portion early enough in the process. To address her concern, we added the interim plan to our proposal at a cost of $318,551. It would be one of the first components to be accomplished on our timeline. It would place the interim recovery disaster server in Las Vegas.

CHAIR BEERS:
When you refer to the interim recovery disaster server, are you referring to the proposed backup server, or is this a second backup server?

MR. CLINGER:
This proposal is for a backup to the current Advantage financial system without the need to port the Advantage system over to the new hardware and software. It would provide the Office of the State Controller space on the existing platform in Las Vegas creating a disaster-recovery process.

CHAIR BEERS:
What was the alternative in your original plan?

MR. CLINGER:
The alternative is to follow Mr. McTeer's presentation, prior to Exhibit C page 19, by the establishment of two super servers. That process involves the migration of the Advantage software application which will take time to accomplish.

As an end result, once the Advantage application is migrated, the option on page 19 of Exhibit C would be deleted.

CHAIR BEERS:
How long is the migration expected to take?

MR. MCTEER:
We are confident we can port the NDOT financial system and the DOP system by the end of the 2007-2009 biennium. It is likely conversion of all three systems would take two biennia. The cost reduction in Oracle licensing is based on that premise. We want to ensure the agencies involved have sufficient time to migrate existing systems without having to spend a significant amount of funding to hire additional staff.

MR. CLINGER:
The process of migrating the Advantage applications has already begun within the DOP. The human resources Advantage application is being reviewed and tested.

CHAIR BEERS:
Is the DOP portion of the Advantage migration on the same level as the main IFS Advantage system?

MR. MCTEER:
That is correct. The three Advantage systems are the ones on an older version of AIX and Oracle platforms. All three are at the same level and would need to be moved to the current level to be housed on the super servers. It will be necessary regardless because IBM has indicated that sometime in the next seven or eight years, the hardware on the existing servers will become unsupported.

I am not as concerned about the current time period with the Office of the State Controller being unsupported operating on Oracle systems. Those systems are stable and significant development processes are not being pursued. However, when the hardware is no longer supported, it will create a major problem.

CHAIR BEERS:
Both IBM and Oracle must have a published opinion on the degree of backwards accountability with their current products.

MR. MCTEER:
The IBM and Oracle problem is not so much an Advantage application software issue. The software was designed, in its most current version, on the Oracle and AIX version and must be ported upwards to operate on the new server technology. If there was not a concern of outdated hardware and a desire to reduce total licenses, those three systems could continue as they are currently.

CHAIR BEERS:
Describe what has been performed to date for the DOP system migration.

MR. MCTEER:
In the case of the DOP, a separate logical partitioning was established, called an LPAR, on the newest system available that also currently hosts the NEBS. The LPAR has been available since last fall, and the technical team is working to begin actual migration of the database and applications and implementing testing.

CHAIR BEERS:
Who are the technical team members?

MR. MCTEER:
The team consists of the DoIT technical staff, programming staff for the DOP and the facility staff. Also included is the DOP functional staff.

CHAIR BEERS:
When does the technical team anticipate performing sample transactions?

MR. MCTEER:
I do not have a specific date; however, I am confident that can happen within the next couple of months.

CHAIR BEERS:
What percentage of the project is complete?

MR. MCTEER:
Are you referring only to the DOP system or the three systems?

CHAIR BEERS:
I am referring to the code review and conversion.

MR. MCTEER:
Approximately 20 percent of that area is completed.

CHAIR BEERS:
When was the project started?

MR. MCTEER:
The project began in the Fall of 2006; it is an activity designed to work in the background not as a primary task. The intent was to lower costs and not require staff increases to any of the agencies involved.

CHAIR BEERS:
Is a backup process of both systems being performed currently?

MR. MCTEER:
That is correct. Both systems are backed up nightly.

CHAIR BEERS:
What does the interim disaster recovery for the Advantage system, on page 19 of Exhibit C, accomplish?

MR. MCTEER:
That proposal provides a separate server in case of a true disaster. It would provide a separate operating environment and separate physical location.

One issue we have encountered for five years was the existence of two extremely old servers at the Emergency Operations Center (EOC) in Carson City. Funds to replace those servers were reverted from the IFS project during the 2001 Legislative Session due to budget shortfalls. Those servers are more than nine years old and are no longer supported. It has become problematic to continue their operation.

CHAIR BEERS:
Were those servers designed to accommodate only a backup process or were they designed to assume operations in the case of a disaster?

MR. MCTEER:
They are designed to operate an application that cannot be run on its own server. The disaster-recovery plan in the IFS project has multiple levels. One level discussed is a situation in which all servers are not operational. There are lesser degrees of disaster possible as well. For instance, a particular building might not be able to continue operation. The plan was designed with the expectation the two servers at the EOC could run production if a normal host

facility was not operable. It was a good plan at the time. Things have changed. Systems are older and technology has advanced dramatically.

MR. CLINGER:
One difference with the proposed interim disaster recovery, on page 19 of Exhibit C, is simply the geographic location of the backup server. It separates the disaster site from the production site. The proximity of the current backup site at the EOC is a concern.

CHAIR MCCLAIN:
At this point, I intend to provide the State Controller, Ms. Kim R. Wallin, an opportunity to present her plan to the Committee.

KIM R. WALLIN (State Controller, Office of the State Controller):
I have provided the Committee with our presentation document (Exhibit D, original is on file in the Research Library).

The Office of the State Controller is the financial hub for the State. On an average day, over $1 billion in transactions are processed through the statewide accounting system. Therefore, it is important for the safety and integrity of the IFS system to be maintained.

Originally, the Office had requested a robust disaster-recovery site, geographically dispersed. It is necessary for the recovery site to be operational within a matter of hours instead of a matter of days. The proposed system by the DOA requires us to upgrade to a new platform. Our alternative proposal will save the State between $4.4 million in this biennium and nearly $6 million over a six-year period. It proposes to perform what is needed at this time and not an enhanced plan.

The DOA testified concerning my Office porting over to a new platform. It is a platform, according to our vendor for the Advantage system that is not as supported on Oracle Database 10g. We have enclosed e-mails under the tab titled "E-mails about Oracle Licensing and Upgrade" in Exhibit D. One is an e-mail from Mr. Jeff McDonald, Director, Consulting Services, Aeris Enterprises, Incorporated, in which he discusses the Advantage system as not supported on the Oracle Database 10g. On the last page of the e-mail tab, Mr. McDonald states, "try it, see what happens, figure out a fix, and try it again."

CHAIR BEERS:
Is Aeris Enterprises Incorporated the vendor for the IFS project?

MS. WALLIN:
They are the vendor for the Advantage system.

CHAIR BEERS:
Have we not weaned ourselves from the vendor because they have a robust set of support people at the NDOT, the DOP, the DoIT and in the Office of the State Controller?

MS. WALLIN:
That is correct.

CHAIR BEERS:
Mr. McDonald's response agrees with what I would have said when asked by a non-service contract customer, except I would have made it sound much more difficult.

MS. WALLIN:
That is true. More to the point, it has also been estimated we have less than a 30-percent chance of successfully porting to the new platform.

CHAIR BEERS:
Where is that documented?

MS. WALLIN:
Those discussions were results of various undocumented conversations with a variety of vendors.

CHAIR BEERS:
I do not understand why the chance of success would be that low.

ALEX ECHO (Data Processing Manager, Information Technology, Office of the State Controller):
There are many untested, unproven components to have the current software run on the latest hardware and software. Until it is implemented, no one knows what will happen. There are thousands of programs to be recompiled and tested. A major amount of business analysis and functional processes must be performed to determine that batches and cycles run the same with the same outcomes in both environments.

CHAIR BEERS:
The IFS project does not change the operating system and the database; in essence, it is an upgrade. You should expect backwards compatibility from the start and be seeking exceptions to that expectation.

MR. ECHO:
In certain instances, such as with the data warehouses, that is a reasonable expectation as it was written by Oracle. The Advantage system was written by the AMS. They utilized software technology, in some cases, from the 1960s. They wrote many custom "black-box" type software applications specifically written in the "C" programming language and hard coded for the current environment. Those are the areas of concern.

CHAIR BEERS:
Do you not have that source code?

MR. ECHO:
We have the source code. We are concerned whether the technologies will port over to the newer technology.

CHAIR BEERS:
Is testing underway?

MR. ECHO:
The Office of the State Controller is not involved in the testing and I cannot respond to what has currently been accomplished. No transactions have been run against a migrated application.

CHAIR BEERS:
Is the 30-percent probability an internal estimate?

MS. WALLIN:
That is correct. It was developed from discussions with other users of the IFS system. Serious doubt exists whether the other entities can port over as well.

The Advantage Life Cycle tab, in Exhibit D, shows the lifecycle of our system. In the beginning, the system was unstable. We are, and will be, for the next seven or eight years, in the stable green area. At that point, the system will become a less stable environment if we are unable to port over to new platforms.

If the hardware can be maintained, there is no reason to believe our system will not last another seven or eight years. Our goal is to minimize our investment in the system and maximize the return on our investment until a replacement is found.

If our system is required to migrate to the proposed system, we will return to an unstable environment. It does not seem sensible to expend the funds and risk instability if the plan includes replacement of the system in the near future.

I do not have the staff available to devote to the project and complete the project in a reasonable amount of time. I will need to request an additional four full-time equivalent (FTE) staff to complete the project.

This project is fraught with pitfalls for the following reasons. According to the *National Government Association Issue Brief* on managing IT investment experiences from state chief information officers they say the following.

> Too aggressive a plan to centralize a plan is fraught with pitfalls. Trying to centralize all IT functions in one fell swoop is unlikely to work. If you want to move services along and provide them centrally, you have to have had some success in doing so to prove it will work, or you are going to fail.

They also state, a key factor in preparing a successful plan is trust. There must be trust in the people providing the services. Those people, in turn, must have credibility and the ability to deliver the services.

There has been testimony concerning sunk costs with the SAN disk. It was a plan recently authorized by the Legislature. I was not the State Controller at the time, and I do not believe those in management would have wanted to surrender our accounting system. Under NRS 242, we are not required to be a part of the DoIT.

In tab, Controller's Alternative, in Exhibit D, the Committee will see our proposal will cost $492,498 in FY 2007-2008 and $100,868 in FY 2008-2009. The remainder of this tab contains pictures of the state-of-the-art FAST building. There has been testimony about the FAST building having insufficient space. We have been assured we will have access to five racks and perhaps more. That is more than adequate for the needs of the DOP, the NDOT and our needs if our proposal is adopted instead of the super server plan.

The tab, Comparison of DOIT/DOA TIR with the IFS Users' Costs, in Exhibit D, provides three scenarios. The first examines the costs as they have been budgeted and compares them to users' actual required costs. According to our calculations, we will save the State $4.4 million in the next six years. The NDOT was not included because they do not require an upgrade at this time. The NEBS system was not included because it is not a part of the Advantage system. It would be a stand-alone system outside the IFS project.

The second scenario reflects the costs as currently budgeted and includes the additional software licensing for the agencies that have not been included in the DOA proposal. With this proposal, we would save the State $5.7 million in the next six years. Mr. Echo can explain the licensing costs further.

MR. ECHO:
A considerable amount of application licensing must be placed on the new servers to successfully migrate data to them. Much of the licensing is based not on the number of machines containing the application, but on the number of processors utilizing the application. Applications such as Microfocus COBOL are necessary to complete the transfer of applications. Approximately $400,000 of extra licensing would be needed in the first year of the IFS project. The ongoing maintenance of the software would be approximately $143,000 annually. Those costs have not been factored into the DOA proposal.

MS. WALLIN:
The third scenario is the worst-case scenario. It takes the costs that have been budgeted and includes the additional licensing for the agencies and the additional licensing that would be required by Oracle if all does not go as planned.

By our calculations, our proposal would save the State approximately $9.2 million over the next six years.

MR. ECHO:
If every processor is on the new servers and they retain all existing licenses, the associated costs are shown on the last page of tab 3 in Exhibit D. In reality, the results will be somewhere in between.

We have heard there is no Oracle licensing needed because several extra licenses are available. There are other factors involved. The Oracle system has a 30-day grace period when an application is transferred from one system to another.

According to the schedule within the DOA plan, it will take approximately four to five months to transfer those applications that can be transferred. Another consideration is in the testimony concerning dynamic allocation of the

LPAR resources. Oracle's rule is an entity cannot license two processors for one application and one processor for a different application. An entity is required to license every Oracle product on every processor on the server. Interim licensing may be needed as well.

Ms. Wallin:
In Exhibit C, page 14, it claims under decision unit E-225 they have budgeted $719,273 in the Office of the Controller budget for the UNIX cost pool. The decision unit E-225 in our budget account allocates $601,940 plus another $374,709. If the $318,000 for the interim disaster recovery backup is subtracted from those amounts, we are still requesting allocations of $600,000 of the $719,273 cost.

Other decision unit E-225 costs for the NDOT are only $153,000. In their example for the DOP, the Base Budgets were subtracted out, but the Base Budget figures need to be included when the figures are added back in. I am confused about those cost representations in the DOA presentation in Exhibit C, page 14.

The remainder of the tabs in Exhibit D includes information on Oracle licenses, e-mails showing the disaster-recovery history with the DOA and the DoIT. It also shows in 2003 they were planning to send a server to Las Vegas and yet, in 2007 a disaster-recovery system has not been geographically dispersed. A letter from Mr. Steve Martin, my predecessor, is included supporting the Controller's alternative plan.

In closing, I attended a conference recently on the benchmark forum. Several states have done benchmark studies on IT, finance, human resources and procurement. One constant in the results is the amount spent on transaction processing compared to corporate America. States have 46 percent more staff performing processing functions than in corporate America. They also spend over 11 percent on performance management compared to 22 percent in corporate America. If Nevada is going to become more efficient and cost-effective, we need to change our processes to best practices.

The IFS consolidation plan will not save the State money because it is being approached backwards. The approach should be to conduct a benchmark study for our baseline and compare our practices to best practices, implement best practices and find a technology solution to help us meet our goals. The Issue Brief mentioned earlier provides the view that problems can arise when state governments try to fit a solution to technology rather than first finding a solution and determining if technology can enable the solution.

It seems to me the IFS consolidation falls into the category of trying to fit a solution to a technology.

Chair McClain:
My first concern is previous testimony stating only 20 percent of the necessary code for the consolidation has been written in a six-month period. Migration will not be funded up front. Funding will be placed in a Contingency Fund to be requested when needed.

The decision left is whether or not the Office of the State Controller will have the ability to run its own system rather than being a part of the IFS consolidation. Is the disaster-recovery module in the Office of the State Controller budget for immediate installation? If so, there is no need for the provision to be in the DoIT budget.

MS. WALLIN:
It is in the budget of the Office of the State Controller. The choice is whether to keep the Advantage system on the current platform or to port over to the new system.

CHAIR BEERS:
Who prepared the graph immediately after the first tab in Exhibit D? I have never seen this concept of a system life cycle.

MS. WALLIN:
It was designed by the chief deputy controller.

CHAIR BEERS:
Please explain the concept that older systems deteriorate and become less stable with changes over time.

MR. ECHO:
The reason is because updates and changes are made as time passes. Those systems are large and fragile. As the changes and updates are made, systems become more fragile. That is why the Microsoft Corporation operating systems are moved to a new system once a certain number of changes have been made.

CHAIR BEERS:
My Windows XP Service Pak 2 is exceptionally stable.

MR. ECHO:
Your Windows XP system is stable because it is no longer being patched. The Advantage system is a living system.

CHAIR BEERS:
Once problems are addressed, a system does not need ongoing patches over time. A new product might be introduced to enhance the suppliers' profit margins. This standpoint is counter to what I know of computer systems.

MR. ECHO:
The chart, on page 3 of Exhibit D, is a standard diagram found in any computer science textbook. The textbooks state the depiction in the diagram is typical of aging applications when changes must be made. The individuals knowledgeable concerning certain applications retire or leave and new staff are unaware of the underlying processes that have been changed.

CHAIR BEERS:
The changes and upgrades should make an application more stable not less stable. I would like to see the authority for the diagram.

On page 17 of Exhibit C, there is a comparison of consolidation with and without the Office of the State Controller as part of the original State plan. I do

not understand why the comparison is in error as stated in testimony earlier. The State Controller contends the cost figures listed are extremely low and that they cannot do what the DOA intends because of the license issues. Is that correct?

MR. ECHO:
One issue is whether the Advantage system is capable of being ported to the new hardware.

CHAIR BEERS:
I believe the Subcommittee members of both Houses would agree regular progress reports will be needed through the interim.

MR. ECHO:
That is correct. If the Subcommittee assumes the risk occurs and the Advantage system does not port, we will need to support at least six of the old systems between the three agencies for the operating and disaster recovery systems. The scenario would be to support two super servers and six Advantage servers running simultaneously. There would be no software license and IBM maintenance reductions.

MR. MCTEER:
That eventuality has been considered. If the Advantage systems cannot be ported, there will still be sufficient savings in Oracle licenses with the move to the two super servers and have an excess of licenses. The chart, on page 17 of Exhibit C, shows that if the Office of the State Controller elects not to join the IFS consolidation, the departments remaining with both their Advantage systems and non-Advantage systems will have approximately 20 excess licenses for the Oracle database. It is more than enough to provide licensing to the two Advantage servers if the Advantage system does not port over. The State would not have as much savings from Oracle licenses over the long term.

The server consolidation has never been solely dependent on whether or not the Advantage systems can be migrated. The consolidation can still be accomplished and show a savings over all.

SENATOR COFFIN:
I have worked with at least four State Controllers. The most progressive ideas for our financial systems have always been suggested from the Office of the State Controller. I am in favor of the State Controller's plan. It is not a slam at the other agencies involved. The amount of savings is not as significant as the security concerns.

CHAIR MCCLAIN:
Given the time frame considerations, it makes sense to allow the State Controller to operate on a separate system while the other agencies are migrated to the IFS system. Then, if the older systems become more unstable, most of the initialization and problem solving will be complete in the IFS consolidation. This will allow a simpler process to convert the Office of the State Controller perhaps in the next biennium.

MS. WALLIN:
I concur.

CHAIR MCCLAIN:
If the disaster-recovery system can be brought online in a short period of time, it would facilitate the situation.

MS. WALLIN:
We are confident in the timeline of the disaster-recovery system.

CHAIR BEERS:
If the IFS system is implemented and the code can be converted to the newer technology, is there a salvage value to the immediate disaster-recovery piece in the Office of the State Controller?

MR. ECHO:
That is correct. The request of the Office of State Controller dovetails nicely with the plan of the DOA. The DOA plan is good in many respects. Our systems would be a smaller version and we would standardize on the same equipment and methods. The major difference would be the individual server for the Office of the State Controller. There are many commonalities and benefits to be had by working together. The plans do not have to be independent.

CHAIR BEERS:
Is there an equipment list or TIR for the Office of the State Controller plan?

MS. WALLIN:
The TIR was delivered to the Senate Committee on Finance members on March 5, 2007.

CHAIR BEERS:
The document provided on March 5, 2007, (Exhibit E) appears to require an RF6000 server. Does the State still have any RF6000 servers in use?

MR. MCTEER:
An RF600 is currently being used as a development server. Under the DOA plan, it would be provided to the Office of the State Controller as an interim disaster-recovery server.

CHAIR BEERS:
Currently, the *Executive Budget* includes $500,000 for the Office of the State Controller's immediate disaster-recovery needs and the long-term goal of the IFS project is to reduce the number of servers and licenses and standardize the code on the operating systems.

MR. MCTEER:
That is correct.

CHAIR BEERS:
Is Exhibit F the Controller's piece of the *Executive Budget*?

MS. WALLIN:
That is correct. Our plan was to have a separate server located in Las Vegas. The DOA plan was to have a server for the Office of the State Controller. They have allocated $127,500 in our budget for IBM and a SAN volume controller making the Office of the State Controller a part of the large SAN disk.

CHAIR BEERS:
That plan has been long contemplated and approved by previous State Controllers.

In the plan from the Office of the State Controller, will there be salvage value from an RF6000 server in four years?

MR. MCTEER:
In my discussions with IBM, there will be virtually no salvage value for older version servers.

CHAIR BEERS:
In other words, there would be no salvage value to the $600,000 expenditure in the current biennium?

REX GOODMAN (Policy Analyst, Fiscal Analysis Division, Legislative Counsel Bureau):
If the equipment requested by the State Controller in this budget cycle were purchased, it would have salvage value. The existing 15 servers currently running the IFS programs have only a slight value according to Mr. McTeer.

CHAIR BEERS:
Is the request from the State Controller for a new RF6000 server?

MR. GOODMAN:
That is correct.

CHAIR BEERS:
In two years, it would have approximately one-fifth in salvage value and in four years it would have no salvage value?

MR. GOODMAN:
In four years it would not have much salvage value but, within the State, it would still have some value. There are nine-year-old servers currently operating.

CHAIR BEERS:
Can this proposal be considered an insurance policy if the Advantage code cannot be ported to the new operating system?

MS. WALLIN:
That is correct.

CHAIR BEERS:
What happens if the Advantage code can port over to the new system?

MS. WALLIN:
We hope to retain some salvage value with the RF6000.

MR. MCTEER:
Page 5 of Exhibit C provides a list of all current systems. There are a total of 12 systems of which, only 3 are Advantage systems. We do not believe the other nine systems will have difficulties porting over to the new operating system.

CHAIR BEERS:
Is it true there are separate decision units in a variety of budgets proposing additional enhancements for new functionality in the systems other than the Advantage system?

MR. MCTEER:
That is correct. There are ongoing requests for enhancements.

CHAIR BEERS:
There are portions in the budgets of the Distributive School Account, the State Motor Pool and others.

MR. MCTEER:
There are also some in the DOP and the DOA work program.

CHAIR MCCLAIN:
The Subcommittee is not trying to delete the IFS system; we are simply trying to determine if it is wiser to authorize the State Controller to have a separate piece at this time because the timeline does not currently include their migration.

MR. MCTEER:
That is correct. We had originally placed the Office of the State Controller near the beginning of the timeline. When it became apparent the State Controller did not want to migrate in the near future, they have been placed at the end of the present timeline.

CHAIR MCCLAIN:
I concur with Senator Coffin's comments that the Office of the State Controller is essential to the financial status of the State.

CHAIR BEERS:
Staff has clarified that the equipment list, on page 1 of the attachments in Exhibit C, is not in the budget. There is a different immediate request for disaster recovery within the Office of the State Controller.

MS. WALLIN:
That is correct. We have concerns about the SAN disk. The *Executive Budget* contains $147,914 in hardware requests. In Exhibit D, under the NEBS Worksheet tab. The first section reflects the budgeted amount. The second section identifies the Office of the State Controller disaster-recovery needs. It includes software, travel expenses, cost to move the disaster recovery to Las Vegas and other costs. Actual disaster-recovery costs are $$318,000.

CHAIR BEERS:
The Committee needs to know the actual budget increase projected. I am not clear on the budget difference between the various plans.

MS. WALLIN:
I will provide that information to the Committee before the end of the week.

CHAIR MCCLAIN:
Is the information in one of your previous presentations?

MS. WALLIN:
I will provide the exact information requested on one sheet.

CHAIR MCCLAIN:
Can the information be provided today?

CHAIR BEERS:
Is the information new to you today? I believe some of the money you were counting on to fund the separate plan has been long spent.

MS. WALLIN:
We need to analyze for ourselves and for the Subcommittee the amount currently reflected in the *Executive Budget*, sunk costs depreciation and what remains to fund the new equipment.

CHAIR BEERS:
The Committee needs the incremental cost. The module E-225 budget is no longer available in its entirety.

MS. WALLIN:
I understand.

MR. CLINGER:
Let me clarify: what cannot be done is to remove the UNIX or storage costs from the budget of the Office of the Controller. Those costs will be reallocated to the other agencies. There will be a small reduction due to sizing smaller servers for the overall IFS project resulting in less depreciation. The costs must be reallocated to the other agencies.

CHAIR BEERS:
One piece of the information we need is on page 17 of Exhibit C that lists the cost of consolidation with the Office of the State Controller separate. The State Controller's independent figures are different than what is presented in the TIR. It is roughly $600,000 in Exhibit D from the Office of the State Controller and the figure in Exhibit C is $450,000. In addition to the $90,000, listed on page 17 of Exhibit C, will another $150,000 be necessary?

MR. CLINGER:
That is correct.

CHAIR BEERS:
The grand total would require approximately $225,000 more overall to authorize the TIR as presented by the Office of the State Controller plus the existing long-term plan.

MR. CLINGER:
Concerning comments that the Office of the State Controller has control over the financial systems of the State, we do not anticipate taking anything away from the State Controller. The IFS project simply provides the hardware on which the State Controller's applications will run. The Office of the State Controller would still manage and control the State financial system and the backup system.

CHAIR MCCLAIN:
No one was disputing that fact. Our intent is for the Office of the State Controller to have the ability to manage its own computer system through the migration.

CHAIR BEERS:
I disagree. We want to provide the management of the State Controller's fear that the code cannot be upgraded. The State Controller does not have the resources to upgrade the code.

MR. CLINGER:
A comment was made earlier about migration costs being placed in a Contingency Fund. There are no migration costs. The costs are primarily hardware costs built into the cost pools. The idea of placing funding in the Contingency Fund, based on the progress of the plan, is not necessary because there is no funding to take from the plan for that purchase. The DoIT would purchase the servers and recoup its costs through their rates.

CHAIR BEERS:
There is no indication that the Advantage code cannot be ported and there is every indication that it can. Twenty percent has been ported successfully.

MR. CLINGER:
We are not talking about a change to the application, simply converting it to a new operating system. We are not considering any changes to the processes of the Advantage system. Unless the system is planned for replacement at a cost of $56 million in the next few years, and I would not recommend that consideration, it needs to be placed on hardware with support into the future.

MS. WALLIN:
One item not placed into any of the budgets is funding for the resources and staff time necessary for the IFS project. If it has taken 6 months to port 20 percent of the project, it will take more than 4 years to complete the project.

CHAIR BEERS:
It might take as long as eight years to complete the project.

MS. WALLIN:
I concur. By then, we will be considering replacement of the system.

CHAIR BEERS:
Are there any plans to increase the pace of conversion?

MR. CLINGER:
We are in the initial phases of the project. At this time, the project has not been a primary priority for any of the agencies. We are seeking funding to implement the project. If the funding is authorized, we will make the project one of our top priorities. Twenty percent of the project has been completed on a spare-time basis. If funding is authorized, in two years we will be discussing the Advantage system running on a new operating system.

CHAIR BEERS:
The Subcommittees will expect regular updates on the project at IFC meetings in the interim.

MR. CLINGER:
We will certainly provide reports to every IFC hearing in the next two years.

ASSEMBLYMAN DENIS:
If the project becomes a priority, what procedures will be moved to a lower priority to accomplish the project?

MR. CLINGER:
It will be a matter of prioritization of staff time as it always is. The DOP has other NEATS applications that will be ported in the future. I believe it can be done within current staff resources.

ASSEMBLYMAN DENIS:
That is my point. If it has taken six months to port 20 percent of the project, it means something else that was a priority will move to a lower level of prioritization.

MR. CLINGER:
From a technical standpoint, there is some up-front time needs to be taken into consideration. The timeline should speed up as the project moves forward. The efficiencies of migration will become greater.

CHAIR McCLAIN:
Is there further information needed by our staff?

MR. GOODMAN:
We would request to meet directly with the agencies and review the amounts requested in their most recent adjustments.

CHAIR MCCLAIN:
The Chairs will have further discussions as well. The meeting is adjourned at 11:31 a.m.

RESPECTFULLY SUBMITTED:

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Cynthia Clampitt,
Committee Secretary

APPROVED BY:

_____
Assemblywoman Kathy McClain, Chair

DATE:_____

_____
Senator Bob Beers, Chair

DATE:_____