Information Technology Council Minutes

October 20, 1999, Moyer Student Union, UNLV

Present: Chair Davan Weddle, SCS; Stan Aiazzi, GBC; Bob Barry, WNCC; John Case, DRI; Juanita Fain, UNLV; David Keebler, TMCC; Katrina Meyer, System Administration; Robert Moore, ATSC; Jim Randolph, System Administration; Al Ruter, CCSN; George Scaduto, UNLV; Becky Seibert, SCS; Lori Temple, UNLV; David Westfall, UNR; and Steven Zink, UNR. Guests: Debbie Jones, UNLV; Ed Anderson, SCS; Jim Hanna, SCS.

1. NevadaNet Enhancement Status

Executive Director Davan Weddle introduced the new SCS NevadaNet Director, Ed Anderson and asked him to report on current network initiatives.

The State of Nevada and Williams Communications have entered into an agreement in which Williams will provide the state with telecommunications services in exchange for a right of way along highway 80 from Verdi to Wendover. Williams has agreed to make the service available by March 31, 2000. UCCSN will receive high bandwidth service between Reno and Las Vegas and out to the Williams switches in Sacramento and Anaheim.

It will be the responsibility of SCS Telecommunications to provide the "last mile" connectivity from the Williams switches to SCS hubs and UCCSN research sites. SCS is working on identifying and engineering cost-effective ways to bring the service to the required sites. Although Williams is providing Nevada service to their California switches, it will be our responsibility to make the connections to the national research and commodity networks. UCCSN will join the Corporation for Educational Network Initiatives in California. CENIC operates the California research network, CALren-2.

Although UCCSN will receive free high-speed connections to California, we will be charged for commodity traffic that travels through the switches to the Internet. The monthly cost will be \$600/MB. We are currently using 9-10 MB at approximately \$1200/MB. At the new lower cost our current funding would support 20MB. Ed will be meeting with campus representatives to get an estimate of how much additional commodity traffic we need to accommodate. Research traffic will be provided with our membership in CENIC, a fee we will initially cover with grant funds.

In addition to the service between Las Vegas and Reno and to the Internet, Williams is providing the state with "dark fiber" along the I80 corridor. To use the fiber to increase bandwidth to Eastern Nevada, SCS must install equipment and provide last mile service to each eastern UCCSN site. SCS plans to use the I80 fiber and additional DS3 service from Elko to Las Vegas to provide network redundancy between Las Vegas and Reno. Lighting the fiber and adding the DS3 to Las Vegas will require enhancement funds in the 2001-03 biennium.

2. Administrative Information Systems Report

Applications and Technical Services Director, Jim Hanna, gave the Council an update on the installation of the Las Vegas administrative machine, year 2000 plans, new student information system status and the status of the financial and human resources applications.

Part of the 1999-2001 funds allocated for updating the student information system was used to place an administrative machine in Las Vegas. The primary purpose was to alleviate capacity problems caused by the new SIS architecture and the introduction of web-based registration. A secondary but very important benefit is to provide the means for disaster recovery. The new

machine was installed in August. SCS is currently installing and testing software and working out the communication procedures between the Reno and Las Vegas administrative machines. The human resources and financial systems will reside on the Las Vegas machine, which will go into production sometime after spring semester registration. Some of the funds were also spent on increasing capacity on the Reno machine. During registration last January over 800,000 daily transactions brought all systems to a near standstill. After the capacity upgrade, fall registration loads of over 900,000 daily transactions caused no problems.

All UCCSN administrative applications have been certified millenium compliant. To ensure there are no unpleasant surprises, SCS created a test environment in which the date was set forward. As January 1, 2000, passed, all applications functioned smoothly. The date is continuing forward to test the applications for leap year capability. As the real January 1 approaches, full volume dumps will be done on December 29, and the tapes will be sent to Las Vegas. On Thursday, December 30, all SCS systems will be put in a quiescent state in which no access and no processing takes place. If the power supply is normal on Saturday, January 1, the systems will be brought back into production status. If there are power problems over the weekend, the staff will try again on Monday. We do not anticipate any Reno power problems, but will have the capability to bring up the Las Vegas machines and load the data off the Reno tapes within two to four days if needed. SCS plans will be posted on the Y2K web page.

Informs has stayed pretty well within schedule on developing the new Java version of SIS (J2K). However SCS has not been able to do the planned performance testing because IBM has not released Component Broker for installation on our S390 as originally scheduled (IBM delayed the release from Fall 1999 to March 2000). The first Informs J2K module released (Commons) can be viewed via the web, but performance is too slow to be of use for UCCSN testing. Although SCS implementation of SIS J2K will probably be delayed past July 31, 2002, Informs will not drop support for the current application until after the J2K version is available.

UCCSN uses three primary administrative applications - student information, financial and human resources. We are already in the process of moving to a new student information version that will be web-based, use the relational database, DB2, and be written in Java. At recent user meetings our financial system vendor, AMS, and our human resources system vendor, Integral, announced plans for similar migrations. Both Advantage and HRS will be web-based and use DB2. The new version of Advantage will be written in Java while HRS will stick with COBOL. However, the new version of HRS will use a developmental tool called VisualAge Generator. Tentative implementation dates are 2003 for Advantage and 2002 for HRS. During the next biennium, SCS staff plans to move the financial system to DB2 to position it for the eventual conversion to the new system while the HRS timetable requires a complete implementation. As with all upgrades there will be both financial and human costs for implementation and training. SCS will keep the ITC informed, as details become available.

A question was raised as to whether this would be an appropriate time to investigate alternative application solutions. Van stated that moving to a new vendor and application is always a great deal more expensive in both money and time than upgrading an existing application. SCS offered to provide an initial analysis of the issues involved in upgrading versus purchasing new applications.

A question was raised about the technical capability of the new SIS version to provide common course numbering as mandated by the Board of Regents. Jim said he would investigate what the technical implications will be and report back to the Council.

3. 2001-03 Budget Preparations

Jim Randolph, Interim Vice Chancellor for Finance and Planning, briefed the Council on issues that will impact the 2001-003 budget process.

The Legislature has formed a committee to study funding in higher education. The committee consists of three senators, three assemblymen, three UCCSN regents, chairs of the UNR and UNLV foundations, an NFA representative, three UCCSN presidents and a representative of the Governor's Budget Office. (Details on the exact membership can be found in the October 21-22 Board of Regents meeting materials.) The committee's agenda includes review of current funding formulas, review of the MGT Equity Study, and review of higher education funding in general. The UCCSN Business Officers are currently reviewing all funding formulas and will be providing input for the committee's consideration. The Business Officers have requested that the ITC provide input about how funding for computer technology should be incorporated. Jim reported that the Legislative Council Bureau is pleased that UCCSN is reviewing the formulas.

In preparation for the 2001-03 budget process, Governor Guinn has requested that each agency and UCCSN provide an analysis and review of all budget line items (about 20 for UCCSN). The analysis will include explanations for why each line exists and what performance outcomes are expected. The Governor's audit staff, consisting of eight new audit positions, will conduct an internal operational audit. In May, six agencies will be selected for an in-depth review. UCCSN does not expect an in-depth review this time. The Governor will be looking for opportunities for more efficient operation through consolidation, privatization, and other methods. His goal is recommend a flat budget to avoid any tax increases even though some areas in education and prisons will require increased funding and he does plan to recommend a 2% COLA. The UCCSN Budget Officers must make formula recommendations in about one month. The new formula recommendations may take the place of an enhancement request. Jim expects that the Governor may require any new spending to fall within the current base budget amount.

Jim briefed the Council on the Estate Tax status. It is not growing as fast as in the past, and is not expected to continue to grow as much in the future. The tax-exempt threshold will be raised over the next several years, cutting the fund's growth. To spend the \$55 million allocated for expenditure for this biennium will require spending some of the principal. Although the Estate Tax was intended for one-time expenditures, some personnel are Estate Tax funded. UCCSN may want to try to move all Estate Tax positions into the base budget.

4. Developing a Plan for Funding Computer Technology

The Council discussed various approaches to incorporating computer technology funding into future budgets. Van reported that he could find no national examples of formulas to cover all computer technology funding. He did provide a 1995 CAUSE survey showing technology spending as a percentage of total spending. A number of questions were raised. What components should be included in any computer technology funding strategy? How large is each campus's investment in microcomputers alone? Is it possible or wise to break out all computer and network technology funding as a separate area since such expenditures affect almost every budget area and have come from a wide variety of sources?

Council members commented on problems they have encountered. No funding area seems to appropriately cover network infrastructure, especially in retrofitting existing buildings and in cabling between buildings. Even when we did receive equipment replacement funds, which we did not for this biennium, the funding did not begin to cover the true cost of keeping microcomputers current enough to run the required software. There is currently no appropriate way to fund technology support personnel. Equipment funding is sporadic and there is no ongoing support for purchased equipment.

Several approaches were discussed. Inventory existing technology funding and calculate what percent of the overall budget that represents. The 1995 CAUSE study showed that the national average for technology funding as a percent of overall funding was 5%. Establish a technology formula that brings our technology funding at least to that percentage. Alternatively, attempt to incorporate computer technology into existing formulas. For example, include support personnel in the support and instructional support formulas. Dave Keebler shared a budgeting approach adopted by TMCC that included conservative proposed formulas for a wide variety of computer/network technology service areas. TMCC then calculated how many dollars it would take per student FTE and per faculty/staff FTE to bring funding up to the required levels. They included both recurring and non-recurring (or start-up) costs. TMCC estimated that \$552 per student and \$2759 per faculty/staff expending on technology in 2000 would provide adequate support. A system-wide FTE-based funding formula was discussed. DRI, the universities, and the community colleges would probably need different formulas. There might also need to be a basic-needs adjustment for the smallest community colleges.

After considerable discussion the Council decided to try the following approach. Each institution will identify current computer/network technology spending in each of the seven existing functional formulas, both as a total annual number and as a percentage of the functional area. We will find national formulas for as many of the functional areas as possible. Based on the fact that the formulas were created before technology spending was an issue, our recommendation to the Budget Officers will be to increase each existing formula enough to cover the technology spending we already have and, further, to increase it to or above the national average. It was also discussed that equipment replacement spending be identified and proposed as another formula.

Council members were asked to evaluate whether they could provide this information within one or two weeks because the Budget Officers must have their formula recommendations completed before Thanksgiving. They were also asked to review the technology definition used by TMCC to see if it would serve them. It can be found at www.tmcc.edu/ITV/Introduction.htm. A video or telephone ITC conference will be scheduled very soon to evaluate whether this approach will work.