NORTH DAKOTA LEGISLATIVE COUNCIL

Minutes of the

INFORMATION TECHNOLOGY COMMITTEE

Friday, April 14, 2000
Roughrider Room, State Capitol
Bismarck, North Dakota

Senator Larry J. Robinson, Chairman, called the meeting to order at 9:00 a.m.

Members present: Senators Larry J. Robinson, Ken Solberg, Rod St. Aubyn; Representatives Mary Ekstrom, Robin Weisz; Chief Information Officer Curtis L. Wolfe

Members absent: Representative Doug Lemieux, Blair Thoreson

Others present: See attached appendix

It was moved by Senator Solberg, seconded by Senator St. Aubyn, and carried on a voice vote that the minutes of the February 16, 2000, meeting be approved as distributed.

CHIEF INFORMATION OFFICER REPORT

Mr. Curtis L. Wolfe, Chief Information Officer, Information Technology Department, submitted a written summary of initiatives undertaken by the department, a copy of which is on file in the Legislative Council office.

Statewide Network

Mr. Wolfe said a request for proposals was issued on March 27, 2000, for the statewide network. He said a copy of the request for proposals is available at *www.state.nd.us/itd/current/currenthome.html.* He said a bidder conference was held on April 7, 2000, at which 22 firms were represented.

Mr. Wolfe said the 1999 Legislative Assembly provided no funding for the rollout of the new network. However, he said, he hopes the winning bidder or bidders will make an investment in the network that can be recovered from monthly fees and services. He said there will be initial costs related to equipment upgrades and purchases and reoccurring network costs. He said the T-1 rate will be higher than the frame relay rate for state agencies. Thus, he said, agencies may not have funds available in current budgets for the additional costs.

Information Technology Department Organization Structure

Mr. Wolfe said he has established three committees within the Information Technology Department to serve in an advisory capacity--the Senior Level Advisory Group, the Technical Advisory Group, and the E-Government Advisory Group.

Information Technology Department Coordination With Other Entities

Mr. Wolfe said 1999 Senate Bill No. 2043 required the Chief Information Officer to report to this committee regarding the coordination of services with political subdivisions and with the Commissioner of the State Board of Higher Education. He said he has met with city officials and representatives of the North Dakota League of Cities at regional meetings and will provide a report to the committee at its next meeting regarding coordination of information technology between political subdivisions and the Information Technology Department. He said representatives of higher education and the department work together on an ongoing basis. He said representatives of higher education were involved significantly in the requests for proposals process for the statewide network and are involved in workforce development projects. He said he will provide a more formal report regarding coordination between higher education and the department at the next meeting of the committee.

Department of Transportation Vehicle Registration and Titling System Project

Mr. Wolfe said there has been significant progress made in the Department of Transportation vehicle registration and titling system project. He said a firm schedule has been established and a detailed implementation plan has been developed based upon the findings of the recent Information Technology Department audit of the project. He said one detail that remains to be addressed is refinement of the training schedule.

Electronic Signatures

Mr. Wolfe said the Legislative Council's interim Judiciary Committee is considering the Uniform Electronic Transactions Act, which relates to electronic signatures. He said adoption of legislation addressing electronic signatures will allow additional progress in the area of e-government. He said he hopes the Judiciary Committee will revise the bill draft in response to concerns he raised regarding portions of the bill draft.

STATEWIDE NETWORK

Chairman Robinson called on Mr. Jerry Fossum, Information Technology Department, for a review of the request for proposals for a new statewide network. Mr. Fossum submitted a written summary of his comments, a copy of which is on file in the Legislative Council office. He said the three major goals of the request for proposals are to deploy an integrated statewide network to meet current and future requirements for government and education; to provide rate reductions and postalized service offerings for government and education; and to promote economic development by increasing the availability of broadband services for residential and private business needs. He said final vendor questions are due on May 19, 2000, and the responses from the Information Technology Department are due on June 2, 2000. He said the department anticipates having a notice of intent to award ready by June 29, 2000, and a contract signed by July 31, 2000. He said the implementation process for the network should begin by August 7, 2000.

Mr. Fossum said the request for proposals is divided into four parts--transport, customer premises equipment, Internet access, and video bridging and scheduling. He said each part is a separate and distinct bid and each bidder may bid on one or more parts. He said the request for proposals also encouraged packaging of multiple parts as well as allowing partnerships to package multiple parts. He said a bidder will only be allowed to package the parts the bidder or one of its partners has bid separately.

In response to a question from Senator Solberg, Mr. Fossum said the request for proposals is very broad so the bidders have some flexibility in preparing bids. He said the Information Technology Department will score the bids with its three major goals in mind. In evaluating the technical proposal, he said, the department will have different teams evaluate the bids separately.

Mr. Fossum said the transport portion of the request for proposals addresses all facilities for the statewide backbone network including end-to-end connectivity. He said the transport portion will also require provision of local access circuits of the requested bandwidth where needed. In addition, he said, the vendor will be requested to provide a network operations center, preferably in Bismarck. He said the vendor will serve as the state's single point of contact for all circuit-related issues including installation, billing, and problem resolution.

Mr. Fossum said the customer premises equipment portion of the request for proposals provides that the state will commit to the contract for the equipment it supplies. He said this portion addresses enterprise scale and wide area network equipment such as routers and large switches, local area network and wiring closet equipment, premises video equipment, and IP telephony equipment. He said one

provider may not be able to provide all that is asked in this portion of the bid.

In response to a question from Senator St. Aubyn, Mr. Fossum said the request for proposals provides for a three-year contract with two 1-year extensions. At the request of some vendors, he said, the Information Technology Department will allow the vendors to propose a five-year contract. However, he said, because of significant changes in technology, a five-year contract may be too long.

Mr. Fossum said the Internet access portion of the request for proposals calls for a dual-homed DS3 service with ability to add bandwidth incrementally. He said the vendor will also be requested to provide an in-state connection to a tier 1 provider. With respect to video bridging and scheduling, the request for proposals asks for no usage fees for kindergarten through grade 12 education. He said the vendor will be asked to provide a system for scheduling and set up and take down of video conferences as well as web-based scheduling.

Mr. Fossum said the total solution for the statewide network includes end-to-end managed service addressing all four components, provisioning, installation, problem resolution, and continuous technology updates. He said customer premises equipment will likely cost $10,000 per location for 500 locations, not including elementary schools. He said the contract will call for a minimum of one ATM T-1 per location. He said the ATM T-1 service will cost approximately $500 per month per location. Thus, he said, the total projected cost for equipment for the 500 locations is $5 million with a $250,000 monthly service cost.

Mr. Fossum said the total projected Internet access cost for a biennium will be approximately $1,620,000. He said the Information Technology Department has estimated that the video bridging and scheduling cost will require an initial investment of $1.5 million. He said the cost projections may be on the high side but do not include any administrative or support costs. In addition, he said, equipment will need to be updated or replaced approximately every three to five years. He said there will also be increased demand for Internet and video. He said costs that will need to be addressed in the future include support costs such as staffing for the Information Technology Department, SENDIT, and Interactive Video Network and hardware and software maintenance and upgrade costs. In addition, he said, there will be additional costs for locations that already require more than a T-1 bandwidth.

In response to a question from Senator St. Aubyn, Mr. Fossum said the request for proposals does not include internal infrastructure for schools and local government. He said that infrastructure must be in place so the investment in the network will be utilized. He said another area of concern is training and education in the use of the network. He said e-government applications development and content

and coursework development costs are not included in the overall projected costs of the statewide network.

Mr. Fossum said an important question to be answered is how will state agencies with fixed agency budgets pay the additional costs for the remainder of the biennium. He said there are also concerns that kindergarten through grade 12 education will be unable to pay usage fees for using the video service. He said there are also questions regarding the managing of e-rates. He said several questions remain regarding support for the statewide network and the roles of the various players.

In response to a question from Representative Weisz, Mr. Fossum said the T-1 bandwidth will be adequate for video conferencing. However, he said, a number of school consortiums currently provide video conferencing that may be of better quality.

In response to a question from Senator Solberg, Mr. Fossum said schools with video capability in place will likely get connected to the statewide network. However, he said, most schools do not have video. He said the statewide network can deliver the same services as some of the consortiums but at a cost. He said the network should be very flexible. He said the consortium schools have generally made deals with local telephone companies that connected to the schools with fiber optic line.

Senator Robinson said there is some question as to how long the deals with the local telephone companies are in place and if the local companies will continue to provide the lucrative rates to the consortiums.

In response to a question from Senator St. Aubyn, Mr. Fossum said he is confident the Information Technology Department will receive good proposals and will get good pricing from the selected vendors.

In response to a question from Senator Solberg, Mr. Wolfe said he will be meeting with representatives of the Governor's office to discuss the cost projections for the statewide network. He said a comprehensive estimate of the total cost of the rollout, training, and support is needed. He said South Dakota allocated several million dollars to provide teacher training. He said it is his intent to develop an overall information technology budget including refocusing existing budgets so that members of the Legislative Assembly can see the entire budget package including reallocations.

In response to a question from Senator Solberg, Mr. Jim W. Smith, Legislative Budget Analyst and Auditor, said the Legislative Council fiscal staff will review agency budget requests and will analyze the Governor's budget request with respect to all aspects including information technology expenditures.

Mr. Wolfe said the Governor is supportive of a request that will be going before the Emergency Commission for funding for the statewide network rollout during this biennium.

SEED DEPARTMENT SOFTWARE DEVELOPMENT PROJECT

Chairman Robinson called on Mr. Ken Bertsch, Commissioner, Seed Department, for comments regarding the Seed Department software development project. Mr. Bertsch submitted a written summary of the project, a copy of which is on file in the Legislative Council office. He said the Seed Department is entirely self-funded. He said the computer system in use by the department is DOS-based and is approximately 10 years old. He said the proposed project is a major rewrite of the existing business application software to a web-enabled Windows application. He said specific goals with respect to the project include economical and accurate conversion of existing historical data stored on the DOS program; application development with flexibility to allow expansion and stacking of additional functions throughout the useful life of the program; a phased approach to development, with the first phase focused on design and construction of a baseline system capable of a minimum of replacement of conversion of the DOS program; a project management process which includes departmentwide input, consensus on project scope and limitations, sufficient cost controls linked to the department budget, and input from and coordinated with the Information Technology Department; and an awareness of and authority over the project scope and cost by the State Seed Commission.

Mr. Bertsch said the development of the new system should increase the creditability of the department and should provide the department the ability to provide a broader range of programming that is more technical. In addition, he said the department will be able to better serve its customers with a reduction in staff time and effort.

Mr. Bertsch said the department began its project in January 1999 but determined by August that the progress and the cost of the project was not going as had been planned. He said the State Seed Commission terminated the project in September and revised the scope of the project and redefined the goals in January 2000. He said the State Seed Commission approved a preliminary four-phase plan for the project in February. He said the first phase, which is construction of a base-operating program and conversion of historical data, has a target completion date of December 2000. The second phase, he said, includes an addition of operating features and auxiliary items to complement the base package and has a scheduled completion date of July 2001. He said the third phase of the project, which includes completion of operating features including web access, has a target completion date of December 2001. The fourth phase, he said, includes addition of operating features including lab scales and bar coding. He said the fourth phase has a target completion date of July 2002.

In response to a question from Senator St. Aubyn, Mr. Bertsch said the estimated expenditures for this biennium and the next biennium will be approximately $485,000. Of that amount, he said, approximately $207,000 was expended before the original project was terminated. He said the estimated total biennial cost-savings as a result of the project are approximately $156,000.

INTELIANT CORPORATION STUDY

Chairman Robinson called on Mr. Bob Pope, Inteliant Corporation, for comments regarding the telecommunications study undertaken on behalf of the Legislative Council. Mr. Pope submitted a written summary of his presentation, a copy of which is on file in the Legislative Council office. He said the study focused on four areas--kindergarten through grade 12 education, funding, economic development, and fiscal measures. He said in conducting the research, representatives of Inteliant Corporation met with information technology professionals in Wyoming and South Dakota and representatives of various education groups, the Information Technology Department, the University System, and economic development groups. In addition, he said, industry research was conducted.

Mr. Pope said network implementation and network utilization were the two basic issues studied. With respect to network implementation, he said, the study focused on kindergarten through grade 12 participation and level of funding. With respect to network utilization, he said, the study focused on education and economic development.

Mr. Pope said visits to Wyoming and South Dakota indicated that the North Dakota strategy is being successfully implemented. He said the visits also demonstrated that training is vital for effective utilization of the network. He said the investment that will be required is significant and revenue sources have or can be found. He said recommendations of the study are that existing investments be consolidated, there must be an investment in the network to jump start it, the Legislative Assembly must be educated regarding the network, and the general public must be educated.

Mr. Pope said with respect to kindergarten through grade 12 issues, the study recommends education be included in the network implementation and that there be continued dialogue with school officials. He said it is vital that funding be provided for essential network services. With respect to distance education, he said, the challenge is leveraging technology and telecommunications capability to maximize educational results. He said the study recommends that an entity be established to provide leadership for educational development in the utilization of technology. In addition, he said, there must be an analysis of current technology training and funding and a new educational model should be established.

Mr. Pope said collaboration is vital to obtaining grants to help fund the implementation and utilization of the statewide network. In the grant process, he said, there had been an early emphasis toward information technology infrastructure. However, he said, the training and programmatic areas are now being emphasized. He said the study recommends the state aggressively pursue outside funding sources in a cohesive, multiagency approach.

In response to a question from Senator St. Aubyn, Mr. Pope said if the Legislative Assembly can provide funding, most concerns with regard to the successful utilization of the network can be alleviated. Although coordination of the search for funding sources is vital, he said, he is not sure who or what entity should be ultimately responsible. He said in South Dakota, the governor, secretary of education, and chief information officer worked closely on the network implementation and training. He said there were education-related grants made available in South Dakota for training.

In response to a question from Senator Robinson, Mr. Wolfe said he will be making specific recommendations to the Higher Education Roundtable regarding technology. He said a coordinated approach to budget issues and all other components of the implementation and utilization of the network is important. He said those issues must be addressed before adjournment of the 2001 Legislative Assembly.

In response to a question from Senator Robinson, Mr. Wolfe said because there is not one person responsible for everything related to the implementation and utilization of the statewide network, it may be best to establish a small group or task force to develop a comprehensive strategy.

In response to a question from Senator Robinson, Mr. Pope said although the state received a $7 million grant from the federal government for teacher technology training, the total funding amounts to approximately $144 per year per teacher for training for the five-year term of the grant.

Chairman Robinson called on Mr. Scott Kost, Eide Bailly LLP, to review the findings of Inteliant Corporation's study with respect to broadband availability in the state and fiscal measures. Mr. Kost said reviews of telecommunications regulation almost universally encourage competition, affordable pricing, and universal access. He said an analysis of broadband access in the state indicates that of the 25 communities surveyed all communities have dial-up access. However, only a handful of communities have digital subscriber line access, cable access, and wireless access. He said the study concludes there have been positive developments in rural and urban communities in the state. He said a statewide network will provide a catalyst to further development. However, he said, there must be further review of telecommunications regulations.

Mr. Kost said broadband access reduces urban and rural distance, which offers new employment opportunities. He said national and international marketplaces are opened and new capabilities for efficiencies and productivity are provided as a result of broadband access. He said threats to economic development include the increased need for a technology-literate work force, the enabling of global competition for local businesses, and the requirement of an advanced infrastructure to attract employers and employees. He said a sound economic development policy should ensure a technology-literate work force, provide development of an advanced and affordable telecommunications infrastructure, leverage capabilities of higher education and research institutions, provide access to venture capital, and provide technology education and resources for economic developers.

Mr. Kost said with respect to the fiscal note measures portion of the study, the representatives of Inteliant Corporation reviewed industry data, reviewed input from other states, reviewed activity from within North Dakota, and met with Mr. Wolfe and the North Dakota University System chief information officer. He said the study concluded that telecommunications spending will increase, but efficiencies will be gained by proceeding with the statewide network plan. He said the fiscal impact will be determined based upon the responses to the request for proposals for the statewide network. He said there will be a significant need for legislative support and funding for the implementation of the network. In addition, he said, the Legislative Assembly can aid in developing world-class utilization of the network and in enhancing economic development through the use of the network.

INFORMATION TECHNOLOGY
DEPARTMENT PERSONNEL INITIATIVES

Chairman Robinson called on Ms. Ardy Pfaff, Information Technology Department, for comments regarding the department personnel initiatives. Ms. Pfaff submitted a written summary of her presentation, a copy of which is on file in the Legislative Council office. She said the functional areas of responsibility under human resources include compensation and benefits; training and development; organizational design and development; work force planning and staffing; strategic planning; quality and performance management; employee/management relations; health, safety, and security; policy and procedures; information management; and legal compliance with employment laws. She said the traditional human resources role in organizations has changed from the traditional role of serving a functional and administrative need to a more proactive role of serving as a key figure in the management hierarchy. She said today's role of human resources is integral to any organizational

change process and is more of an adviser or management partner with management.

Ms. Pfaff said the Information Technology Department contracted with Sterling Institute, Inc., to survey employees and contractors of the Information Technology Department to find out how to best prepare for the future, identify training and developmental needs, gather information on organizational effectiveness and key management subject areas, strengthen the department's strategic business and planning processes, and identify actions that will allow the department to be more successful. She said the survey was confidential and served as a management road map to be used for growth and development. She said results of the survey indicated that the strengths of the department are a strong personal satisfaction and pride among its employees; clear and reasonable expectations linked to the department's mission and goals; a strong customer focus; and responsive employees with initiative. She said the survey indicated areas upon which the department can improve are related to performance and work unit measures, organizational and interpersonal communications, empowerment of employees, recognition and compensation, and work and job design.

Ms. Pfaff said the Information Technology Department has responded to the survey results by providing a written communication to all employees of the results of the survey and holding employee focus group meetings to clarify issues and identify solutions. In addition, she said, the department has conducted management and supervisory retreats to discuss issues and begin action planning. She said each supervisor holds small group meetings with work units to identify solutions. She said the department has identified issues that can be easily resolved and those that will require additional research. She said the department is examining offering flexible work arrangements. In addition, she said, the department is providing new communications tools such as a chief information officer newsletter and brown bag "lunch and learns." She said the department is soliciting employee input on day-to-day decisions and developing a workshop on developing meaningful performance measures, identifying process efficiencies, and the art of problem-solving.

Ms. Pfaff said the Information Technology Department will conduct workshops in late April and early May to identify performance measures. She said the department will then determine whether it is structured in such a way to maximize productivity. She said the department will also conduct leadership training and development. She said organizational change processes require constant attention and completion commitment from the top of the organization.

GEOGRAPHIC INFORMATION SYSTEMS INITIATIVE

Chairman Robinson called on Mr. Bart Elliott, Convergent Group, Denver, Colorado, for comments regarding the Information Technology Department geographic information systems initiative. Mr. Elliott submitted a written summary of his presentation, a copy of which is on file in the Legislative Council office. Updates regarding the geographic information systems initiative are available at *www.state.nd.us/itd/current/currenthome.html*.

Mr. Elliott said the Convergent Group was retained by the Information Technology Department to assess geographic information systems in the state, to develop a sensible statewide geographic information systems strategy, to look at a business case, and to provide a planned summary and budget estimates. He said geographic information systems is automation of maps and geographic records. He said the Convergent Group interviewed current and potential geographic information systems users including the Game and Fish Department, the Parks and Recreation Department, the State Water Commission, the Geological Survey, the Labor Department, the State Department of Health, the Department of Economic Development and Finance, the Aeronautics Commission, and the Department of Agriculture. He said the study found geographic information systems are being used in all departments except the Aeronautics Commission, the Labor Department, and the Department of Agriculture. He said most of the users are using geographic information systems on a day-to-day basis and are supporting internal projects. He said access is generally limited to a portion of the department and through expert user systems. Although redundancy is minimal, he said, there are a variety of data bases. He said the study indicates every department surveyed would like to use more geographic information systems. Although creativity has been high, he said, there is an absence of a statewide strategy.

Mr. Elliott said the study indicated there is a need for a mechanism to share data and develop one-web strategy. He said the growth strategy must reduce redundancy and provide a capability to share costs. He said there is also a need for user access and public access. He said investments in geographic information systems should be leveraged, and there must be some leadership toward development of a geographic information systems budget. He said the study indicated geographic information systems training is necessary, and centralized information technology support is needed. He said there is also a need for the development of web information for economic development. He said there is a window of opportunity to develop a state geographic information systems program now so that costs can be reduced.

Mr. Elliott said the first phase of a recommended solution is to implement a data hub to provide a foundation for statewide geographic information systems and allow shared maintenance and costs. He said this approach would eliminate the path to redundancy and provide efficiencies such as license sharing. In addition, he said, a statewide data hub would provide systems scaleability, provide one portal for Internet and intranet, allow integration with other systems, provide for casual users, and allow information to be shared with the public and other agencies. He said the estimated cost of developing a centralized hub would be approximately $1,233,000.

Mr. Elliott said phase two would consist of an economic development application for the Department of Economic Development and Finance, a state call center, asset inventory management, data base administration, services, applications, and external assistance. He said the total estimated cost of phase two would be approximately $1,548,000. Although current cost savings would be minimal, he said, there would be significant savings related to avoidance such as reduced staff and contractor costs, coordinated software purchases, and coordinated maintenance and labor. In addition, he said, there would be elimination of redundancy in data maintenance and applications development and skills could be leveraged across the organization. He said other benefits would be better service to the public and increased economic development opportunities. He said the state could also have opportunities for revenue related to state Internet portal advertising and through serving as an Internet service provider.

In response to a question from Senator St. Aubyn, Mr. Elliott said continuing to allow agencies to purchase and utilize geographic information systems without a statewide strategy will put the state further behind and increase redundancies. He said standards will reduce staff costs and purchasing costs.

Mr. Wolfe said agencies appear interested in having the Information Technology Department serve as the hub host.

E-GOVERNMENT

Chairman Robinson called on Mr. Vern Welder, Information Technology Department, for comments regarding e-government. Mr. Welder submitted a written summary of his presentation, a copy of which is on file in the Legislative Council office. He said e-commerce is the use of internetworked computers to create and transform business relationships. He said applications provide business solutions that improve the quality of goods and services, increase the speed of service delivery, and reduce the cost of business operations.

Mr. Welder said by providing a statewide portal there would be user-friendly access to state government, one-stop shopping for government information and services, and an enterprise approach that would maximize efficiencies. He said the Information Technology Department has established an e-government

advisory group that includes representatives from 16 state agencies. He said the group meets quarterly and reviews e-government issues such as the appearance of e-government web sites, pricing models for e-government services, advertising, and electronic signatures.

Mr. Welder said the Information Technology Department has purchased hardware and software, trained staff, provided marketing assistance, and created an e-team in furtherance of promoting e-government. He said the e-team has completed five projects and has seven projects in progress. He said another 10 projects have been approved and cost estimates have been submitted to agencies for another 10 projects.

Mr. Welder said challenges to be faced in implementing e-government include obtaining public trust, maintaining a good impression of state government, and adopting the legislation necessary to authorize digital signatures. In addition, he said, it is important employees acquire the proper skills and agencies retain trained staff so the state can deliver quality applications to customers in a timely manner. He said marketing of e-government and keeping up with technology advancements will also be important issues to be addressed.

Chairman Robinson called on Mr. Paul Schadewald, Game and Fish Department, for a demonstration of the Game and Fish on-line licensing system. Mr. Schadewald said the Game and Fish Department is the first state agency to get its on-line system implemented. He said the department worked with the Information Technology Department on system design and obtained a contractor to design the web page. He said the Bank of North Dakota provides on-line verification for credit card transactions for the department and receives a two and one-half percent fee for providing that service. In addition, he said, CyberCash serves as the transaction agent. He said the on-line system was announced to the public on April 12, 2000.

In response to a question from Senator Robinson, Mr. Schadewald said the department will attempt to make more licenses available on-line. He said on-line licensing reduces data entry costs for the department and is more convenient for the customer and the department. He said money is collected faster through on-line licensing.

LARGE PROJECT REPORT

Chairman Robinson called on Ms. Nancy Walz, Information Technology Department, for an update on the large project report. Ms. Walz submitted a written summary of the large projects being undertaken by state agencies, a copy of which is on file in the Legislative Council office. She said each of the large projects on the report is on track and the Information Technology Department has no concerns regarding any of the projects. She said because agencies are learning the process, agencies are better able to focus on project management.

Ms. Walz submitted proposed language to amend North Dakota Century Code Section 54-34-15.2(10), which relates to the authority of the Information Technology Department to review the cost-benefit analysis of any major information technology project of an executive or judicial branch agency. She said the committee requested the department to provide a draft of an amendment to that subsection to exempt institutions under the control of the State Board of Higher Education with respect to academic and research projects. She said she based the proposed change on the language in Section 54-59-09, which exempts higher education institutions from the information technology standards with respect to academic and research uses.

In response to a question from Senator Solberg, Mr. Wolfe said he believes the proposal is appropriate because it would be a huge burden on the Information Technology Department to monitor all research and academic projects.

In response to a question from Senator St. Aubyn, Ms. Walz said she is comfortable with the department's definition of administrative projects which are generally statewide or systemwide projects. She said the department has some flexibility in defining projects.

It was moved by Senator St. Aubyn, seconded by Representative Ekstrom, and carried on a voice vote that the Legislative Council staff be requested to prepare a bill draft based upon the recommendation from the Information Technology Department addressing the exemption of institutions under the control of the State Board of Higher Education from the cost-benefit review analysis requirement with respect to academic and research projects.

ELECTRONIC DOCUMENT MANAGEMENT SYSTEMS INITIATIVE

Chairman Robinson called on Mr. Bill Roach, Information Technology Department, for comments regarding the Information Technology Department electronic document management systems initiative. Mr. Roach submitted a written summary of his presentation, a copy of which is on file in the Legislative Council office. He said electronic document management systems are a collection of enabling technologies, the common components of which include document management, imaging, electronic forms, workflow, and data stores. He said electronic document management systems work with existing operations. He said electronic document management increases efficiency of information creation, capture, storage, and retrieval; provides a common interface for storing and accessing information; provides increased security of sensitive or confidential

information; and supports decisionmaking by providing access to up-to-date information.

Mr. Roach said the state needs electronic document management systems because information volume is increasing while clerical resources are decreasing. In addition, he said, electronic document management reduces the cost of government, improves service to the public, enables concentration on high-value activities, and allows critical technology to leverage existing information assets. He said building a core electronic document management systems infrastructure will reduce purchase, installation, maintenance, and training costs; enable sharing of information and resources across state government; provide electronic document management system access to a broad range of users; and reduce the expense of back-end services.

Mr. Roach said the Secretary of State and the Workers Compensation Bureau have existing electronic document management systems. In the 1998 information technology plan, he said, 21 agencies submitted plans for implementing electronic document management systems technology. He said the Information Technology Department will be working with agencies to develop a comprehensive strategy, identify current and future applications, develop a strategic plan, select appropriate tools, develop a funding strategy, begin implementation, and track results.

In response to a question from Senator St. Aubyn, Mr. Roach said agencies with large systems in place probably will continue to use those systems. He said the ultimate challenge is to build a system with enough flexibility to meet the needs of most agencies. Because there are not many systems in place, he said, there should not be much negative impact on agencies that have systems in place. He said the benefit of a core technology will be that agencies will have the ability to share information whereas multiple systems are not as easily able to share information.

AGENCY PROJECTS
Judicial System

Chairman Robinson called on Mr. Kurt Schmidt, Supreme Court, for comments regarding two projects being undertaken by the judicial system. Mr. Schmidt said the judicial system is undertaking two pilot projects that will be the basis for cost-benefit analyses. He said one project is an interactive video project that will connect four counties in the south central judicial district. He said equipment is being installed in the four courthouses that are served by T-1 lines. He said the testing of the system will be done through actual court proceedings, and a final report will be completed by September or October. Based upon that final report, he said, the Supreme Court will decide if the interactive video project should be pursued. He said the Information Technology Department assisted in the purchase of the gateway

necessary to connect to the Interactive Video Network.

Mr. Schmidt said the judicial system is also undertaking a digital audio recording pilot project in three courtrooms in Dickinson. He said the courts have changed from a tape system to a server where the court reporter can make notes on a computer which are time-stamped. He said the digital recording system saves storage space, provides easier access to recordings, and may be able to send audio transcripts in the future.

Mr. Schmidt said the judicial system is also undertaking a case management integration project to tie the case management systems in the judicial districts together. Although there has been some resistance to change in Cass County, he said, Cass County officials and representatives of the Supreme Court appear to have come to an agreement as to how to proceed. He said the state court system is also working with municipal courts to install programs and bring municipal court case management systems into the state system.

Mr. Schmidt said the state judicial system hopes to continue its current initiatives during the next biennium if appropriate. In addition, he said, the judicial system will need to find ways to provide support to the clerks of court after the clerk of court consolidation is completed.

Department of Human Services

Chairman Robinson called on Mr. Roger Hertz, Department of Human Services, for comments regarding projects being undertaken by the Department of Human Services. Mr. Hertz submitted a written summary of the cost-benefit analysis of the fully automated child support enforcement system project and a summary of the Health Insurance Portability and Accountability Act potential project, copies of which are on file in the Legislative Council office. He said the appropriation for the child support project is $2.6 million and estimated costs for the project through September 2000 are $1.4 million. He said the project is scheduled to be completed by June 2001. He said numerous changes in the project have been federally mandated, and accumulative costs for the project since 1989 and continuing through 2005 are $16 million. Accumulative benefits from the project which began in 1996, he said, and continuing through 2005 are $20 million. He said benefits already derived from the project are an increase in child support collections of over $4 million and a cost avoidance of $340,000 for employees not hired at the central office and regional child support offices. He said future benefits of the project include an estimated $13 million in increased collections and $2 million in cost avoidance for the reduction in employees at the central and regional offices.

In response to a question from Senator St. Aubyn, Mr. Hertz said it is likely that new federal regulations

will require updates in the system. He said the new regulations are often the result of changes in the law made by Congress.

In response to a question from Senator St. Aubyn, Mr. Mike Schwindt, Department of Human Services, said representatives of the department have not discussed their frustrations regarding continual changes in federal regulations with the North Dakota Congressional Delegation. However, he said, there is a steady stream of information going to Washington, D.C., from the state regarding the changes in regulations. He said there are 32 bills pending before Congress that relate to child support.

Mr. Hertz said the Health Insurance Portability and Accountability Act will likely require the department to begin a significant information technology project. He said the goal of the Act is to provide standardization for providing and paying in health care. He said the technology would benefit the public and the private sector. However, he said, the system must be implemented within two years and 60 days after the regulations are issued. He said the regulations are at least one year behind schedule. Because no regulations have been issued, he said, the department did not include funds in its 1999-2001 budget for implementation of the system.

Mr. Hertz said industry estimates regarding the project indicate the project may cost double what was spent nationwide on year 2000 remediation. He said the project could take many years to implement depending upon when the regulations are released. Depending upon the final regulations, he said, the department may be looking at a project that is estimated to cost at least $6 million.

In response to a question from Senator St. Aubyn, Mr. Hertz said there would be financial penalties for not meeting deadlines with respect to implementation of a project. He said the department does not have the resources to implement such a project.

Senator Robinson said representatives of the Department of Human Services should inform the North Dakota Congressional Delegation regarding the burdens of the federal requirements.

North Dakota University System
Priority Projects

Chairman Robinson called on Ms. Laura Glatt, North Dakota University System, for comments regarding priority information technology needs of the University System. Ms. Glatt submitted a written summary of her comments, a copy of which is on file in the Legislative Council office. She said the second goal of the State Board of Higher Education strategic plan states that the board emphasize enhanced use of technology to improve access to programs and services and as a regular component for instructional services and research. She said the University System has been experiencing a 100 percent growth in demand for Internet-based services for the past

three years. She said it is expected that demand for Internet services will continue to grow at the 100 percent a year level over the next three to five years. As a result, she said, monthly access fees have increased. She said demands for new service will drive network demands up significantly. Because certain grant funds are ending in the coming year, higher education institutions will be facing additional funding concerns to continue support of Internet 2 and other in-state upgrades in bandwidth. She said the additional funding for the 2001-03 biennium is estimated to be $800,000 to $1.2 million.

Ms. Glatt said video services are an emerging demand that will require coordinated improvements in infrastructure. She said the inclusion of desktop video will cost an additional $740,000 in the 2001-03 biennium and $260,000 in the 2003-05 biennium for equipment, increased operating expenses, and new technical personnel. In addition, she said, there will be continuing costs to maintain the Interactive Video Network. However, she said, with appropriate budget increases, the network could support networking and scheduling for all state Internet video users as well as provide orientation and training on effective application of video technology.

Ms. Glatt said the University System administrative systems were designed about 20 years ago with an architecture that focused on individual campus autonomy. She said that model is no longer sustainable and the maintenance burden is increasing as the system gets older. She said efforts are being made to open the administrative systems to students and end-user access and input while retaining the integrity of the data. Because students are expecting access to information for registration, admission, and other uses, she said, the current administrative system must be replaced. She said a phased replacement is planned that will provide the potential to share business applications and cost with governmental entities beyond higher education, provide the ability to purchase rather than develop upgrades that take advantage of new business practices and technology, and provide the ability of standards-based interfaces to add other applications such as course management systems, alumni development systems, and others as needed. She said the estimated cost of the replacement of the system is approximately $10 million to $15 million for student records, $7 million to $12 million for the financial portion, and $7 million to $12 million for the human resources portion.

Ms. Glatt said the end date for the software for the automated library network is estimated to be June 30, 2004. She said there should be a vendor selected and migration to the new vendor software should begin by the summer of 2000 to assure an orderly and successful migration. She said the estimated cost of the project is $2 million.

Ms. Glatt said information technology staff salaries are approximately 25 percent below the local market.

Therefore, she said, it is becoming increasingly difficult to attract and retain staff. She said the estimated cost to bring information technology staff salaries to regional competitive levels is $1 million to $1.2 million. She said the University System's 2001-03 biennium needs-based budget request will include $1.2 million for technology and networking increases for the higher education network and $7 million for technology applications and access for the campuses and the system.

Job Service North Dakota Projects

Chairman Robinson called on Ms. Cheri Giesen, Job Service North Dakota, for comments regarding two proposed Job Service projects. Ms. Giesen said a centralized unemployment insurance claims center would allow claimants to file claims from home and monitor the claim eligibility. She said 36 states have some type of call system, and Job Service will attempt to utilize the best practices of those other systems. She said the project is in the analysis phase, and Job Service has contracted with a consultant to provide an analysis by September of this year. She said the tentative implementation date for the project is May 2002. She said the estimated cost for the initial investment in the project is $2.5 million.

Ms. Giesen said the one-stop solution project would facilitate a one-stop initiative for employment services and the Work Force Investment Act. She said the project would allow self-service for customers, support new reporting requirements, and assist the case management staff. She said the project is in the analysis phase and Job Service is evaluating vendors. She said a decision is expected by May 2000, and the tentative implementation date for the project is July 2001. She said the estimated initial investment for the project is approximately $3.6 million.

Department of Public Instruction Initiatives

Chairman Robinson called on Mr. Duane Schell, Department of Public Instruction, for comments regarding Department of Public Instruction information technology initiatives. Mr. Schell submitted a written summary of his testimony, a copy of which is on file in the Legislative Council office. He said the department has made significant progress during the biennium in its effort to satisfy the legislative intent specified in 1999 Senate Bill No. 2013, which directed the department to aggressively pursue technologies to make information available to and collect information from schools and school districts electronically. He said the goal of the initiative is to reduce printing and mailing costs and increase efficiencies in the transfer of information.

Mr. Schell said nearly all the publications and documents that have been historically produced by the department are now available on-line. He said the department has substantially reduced the number of printed documents and publications and has eliminated or will eliminate some paper versions entirely. He said preliminary work is underway on a system that would allow access to the actual data contained in many of the department's publications which would provide the ability of filtering, sorting, and formatting the information in a more beneficial manner. He said he anticipates the system will evolve over time, but the goal is to have a base system available in the fall of this year. He said traffic on the department's web site has increased 27 percent since the beginning of the school year and has doubled since last year at this time.

Mr. Schell said because the number of school personnel who have obtained e-mail access has increased, the department has begun using e-mail for general communications and reporting purposes. He said beginning next month, foundation aid payment reports will be sent via e-mail to business managers and administrators.

Mr. Schell said the department has made significant progress in designing systems that will allow school districts to transfer all reports and information required by the department in an electronic manner. He said the department has developed a web-based application that provides school districts with the ability to complete forms required by the department. He said the department has received positive feedback from schools that have utilized the system. He said the department is developing a component that will provide for the collection of school personnel data that is used primarily by the approval and accreditation process. He said the plan is to have the project completed by early September and ready for the fall 2000 data collections. He said the next phase of the development will be in the school finance area through which data is collected for computation of the foundation aid payments. Barring any unforeseen challenges, he said, all major and the most burdensome data collection activities will be available on-line by the end of the biennium. He said the lack of quality and affordable bandwidth has been the most significant limitation on the system. However, he said, he is encouraged by the progress toward the development of a statewide network.

Department of Banking and Financial Institutions

Chairman Robinson called on Mr. Gary D. Preszler, Commissioner, Department of Banking and Financial Institutions, for comments regarding information technology initiatives by the department. Mr. Preszler submitted written testimony, a copy of which is on file in the Legislative Council office. He said the department recently upgraded its computers to enable users to connect to a network system that allows sharing of files and daily backup. He said the next phase of the department's information technology plan is to obtain programming that will

automate all records kept by the department during the 2001-03 biennium. He said a large increase in the number of companies licensed as money brokers and collection agencies precipitates a large number of inquiries and complaints concerning the business practices of those companies. He said automating department records would expedite the process of responding to those inquiries and provide a method of tracking complaints. He said the programming will also automate the licensing procedures to allow for more efficient and timely processing of licensure requests. During the 2003-05 biennium, he said, the department is planning to convert numerous records to image documents to allow retrieval from remote locations. He said electronic storage of files will also enable the department to reduce costs associated with physical storage. He said the department will continue to consult with the Information Technology Department to ensure that data is stored in the most secure manner and transmitted in an encrypted form.

Public Employees Retirement System

Chairman Robinson called on Ms. Sharon Schiermeister, North Dakota Public Employees Retirement System, for comments regarding initiatives by the Public Employees Retirement System (PERS). Ms. Schiermeister said PERS has been heavily dependent on paper through the years. She said information can be obtained by phone or in person. However, she said, PERS is looking at expanding its telephone system to allow members to dial into account information, order forms, and allow enrollments in programs such as flexcomp. She said PERS also hopes to expand its e-business so it can provide access around the clock. She said on-line access would reduce paper and costs. However, she said, there are concerns that need to be addressed regarding security and confidentiality. She said PERS will include its information technology initiatives in its budget request for the next biennium.

Central Services Division

Chairman Robinson called on Ms. Linda Engmann, Central Services Division, for comments regarding information technology projects being considered in the State Procurement Office and in Surplus Property. Ms. Engmann submitted written testimony, a copy of which is on file in the Legislative Council office. She said the 1997 Legislative Assembly appropriated funds to develop a vendor data base and an on-line web-based requisition system. She said the vendor data base system went into production on June 1, 1999, and the requisition system went into production February 1, 2000. She said the systems were a cooperative effort between the State Procurement Office and the Information Technology Department.

Ms. Engmann said the State Procurement Office maintains a data base of companies wishing to do business with the state by using a commodity code system. She said the data base is available for use by all state agencies. She said the 1999 Legislative Assembly appropriated funds to develop the third phase of the project, which is the electronic purchase order system. She said this system would allow the state to create all its purchase orders electronically to speed up the ordering process, eliminate paper, and enable the state to track its purchasing activities. However, she said, because of the explosion of information and services regarding e-government, the State Procurement Office is rethinking the scope of the third phase. She said the State Procurement Office is investing in enhancements to the systems developed to this point which would improve those systems as well as expanding the original scope of the purchase order system to fully automate the procurement process within currently appropriated funding.

Ms. Engmann said enhancements to the vendor registration process would allow vendors to complete, submit, and update registration forms over the web. She said a web-based requisition system, which is in place, allows requisitions to be submitted electronically to the State Procurement Office. Because of security and electronic signature issues, she said, only informal unsealed bids may be received electronically. However, she said, enhancement of the electronic receiving of bids would streamline the bid process for agencies and vendors. She said electronic verification of receipt of goods by an ordering agency would eliminate redundant rehandling of purchase orders and streamline the accounts payable process.

Ms. Engmann said development of a state "e-mall" would allow all commodities on term contracts to be compiled into one catalog based on the commodity code system. She said agencies would inquire by commodity name or by commodity code as to whether an item is on contract. She said links would be provided to the contractor and the purchase order and payment to the vendor would be handled electronically.

Ms. Engmann said the State Procurement Office initiatives will leverage the state's buying power by tracking and managing the state's procurement activities on a statewide basis; increase competition, which results in better prices; increase exposure of the state's business, which increases opportunities for vendors to participate; save staff time, postage, and paper for the state and the vendor; increase efficiency of the procurement process on a statewide basis; provide for timely receipt of goods; and improve customer service.

Ms. Engmann said selling surplus property on-line would increase exposure, increase competition, and likely bring more revenue to the state than simply selling surplus property by public auction. In addition, she said, there would likely be savings in labor and

material costs. She said several on-line services offer Internet auction capabilities.

INFORMATION TECHNOLOGY DEPARTMENT SERVICE RATES FOR THE 2001-03 BIENNIUM

Chairman Robinson called on Mr. Mike Ressler, Information Technology Department, for a review of proposed Information Technology Department rates for the 2001-03 biennium. Mr. Ressler submitted a written summary of his presentation, a copy of which is on file in the Legislative Council office. He said there will likely be an increase in the rates for programming and systems analysts and an increase in network rates. He said there will likely be decreases in the rates for telephone service, mainframe CPU rates, and disk storage rates.

Mr. Ressler said the programming rate will likely increase from $45 per hour to $49 per hour for the 2001-03 biennium. He said based on the average usage of agencies, there will be an additional cost of $421,440 for the biennium. He said the systems analyst rate will likely increase from $48.50 per hour to $53 per hour based on the average usage. As a result, he said, there will be an additional cost for state agencies of $841,536 for the 2001-03 biennium.

Mr. Ressler said the telephone service rate will likely decrease $2 per station per month to $22.50 per station per month during the next biennium. He said based on average usage, the savings will result in approximately $324,960 for the biennium. He said the mainframe CPU rate will decrease from 98 cents per second to 85 cents per second. Based on average usage, he said, there will be an estimated savings of $1,638,017 for the biennium. He said the disk storage rate will decrease from two cents per track each month to one-half cent per track per month. Based on average usage, he said, there is an estimated savings of $1,892,385 for the biennium.

Mr. Ressler said the wide area network and fiber optic rates will likely increase from $16 per device per month and $19.50 per device per month, respectively, to $25 per device per month and $28 per device per month. He said based upon the average usage, the estimated additional cost for the biennium will be $1,382,124. He said the 56K circuit rate will likely increase from $300 per circuit per month to $650 per circuit per month. He said the T-1 circuit rate will likely increase from $500 per circuit per month to $850 per circuit per month. Based on the average usage, he said, there will be an estimated additional cost of $1,671,600 for the biennium.

Mr. Ressler said there is estimated to be an overall savings of $244,641 for state agencies as a result of the proposed rate changes. He said the estimated savings are based on average usage from March 2000. He said the proposed rates are not final and are subject to change.

In response to a question from Senator Solberg, Mr. Ressler said the rates will be adjusted depending on the results of the request for proposals. He said there may be significant changes in technology throughout the biennium that will require flexibility in the rating structure.

MISCELLANEOUS DISCUSSION

Senator Robinson said it is vital that the state not delay in identifying existing funds that can be reallocated to help implement and support the statewide network and to coordinate efforts.

Representative Weisz said there must be someone in charge of the coordination effort.

In response to a question from Senator Solberg, Mr. Wolfe said seeking grants are part of the objective. He said a strategic plan must be developed to allocate funds to achieve goals.

It was moved by Senator St. Aubyn, seconded by Representative Ekstrom, and carried on a roll call vote that the chairman of the Legislative Council be requested to encourage the Governor to establish a task force to address funding issues related to the implementation and utilization of the statewide network. Senators Robinson, Solberg, and St. Aubyn and Representatives Ekstrom and Weisz voted "aye." No negative votes were cast.

There being no further business, Chairman Robinson adjourned the meeting at 4:20 p.m.

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John D. Bjornson
Committee Counsel

ATTACH:1