NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ECONOMIC IMPACT COMMITTEE

Wednesday, September 14, 2016 Roughrider Room, State Capitol Bismarck, North Dakota

Senator Connie Triplett, Chairman, called the meeting to order at 10:00 a.m.

Members present: Senators Connie Triplett, Randall A. Burckhard, Tom Campbell, Lonnie J. Laffen, Mac Schneider; Representatives Thomas Beadle, Rich S. Becker, Joshua A. Boschee, Matthew M. Klein, Cynthia Schreiber Beck, Garv R. Sukut

Members absent: Senators Jonathan Casper, Terry M. Wanzek; Representatives Ron Guggisberg, Ben Koppelman

Others present: See Appendix A

It was moved by Senator Laffen, seconded by Representative Beadle, and carried on a voice vote that the minutes of the May 24, 2016, meeting be approved as distributed.

EMERGENCY SERVICES COMMUNICATIONS COORDINATING COMMITTEE REPORT

Mr. Terry Traynor, Secretary, Emergency Services Communications Coordinating Committee, presented testimony (<u>Appendix B</u>) regarding the biennial status report (<u>Appendix C</u>) of the Emergency Services Communication in the state.

In response to a question from Chairman Triplett, Mr. Traynor said the Emergency Services Communication Coordinating Committee recommended repealing North Dakota Century Code Section 57-40.6-03.1, relating to 911 database management charges.

In response to a question from Senator Campbell, Mr. Traynor said the new network preserves operations in smaller rural communities because it is easier to maintain the cost of the equipment due to the ability of sharing the equipment among counties. He said counties do not fund the massive and highly technical piece of equipment, the Information Technology Department (ITD) does.

In response to a question from Senator Burckhard, Mr. Traynor said Minot has chosen to utilize the two-call answering equipments that ITD has purchased. He said Minot is big enough to install its own equipment, but choosing to utilize the call answering equipments made more sense because Minot is on a network that more people are on and has more resources to back it up. He said it was an effective cost-saving decision for Minot.

In response to a question from Chairman Triplett, Mr. Jason Horning, Next Generation 9-1-1 Program Manager, North Dakota Association of Counties, said the public safety answering point (PSAP) capability of transferring operations is a manual process. He said the 911 dispatcher or coordinator must call a designated telephone number and request that numbers be rerouted. He said in case of operator emergencies such as stroke or heart attack, calls would continue ringing into the PSAP and notify someone that calls are not being answered. He said an attempt to contact that location will be made and if no operator can be reached, it will automatically be rerouted to the backup PSAP.

In response to a question from Representative Becker, Mr. Traynor said rural telephone cooperative companies are aware business models need to change. He said a majority of the rural telephone cooperative companies are investing heavily in selling broadband connections because Internet access is essential. He said Internet access for individual residences in rural areas is a rising trend which bring opportunities for services, such as voice over Internet protocol calling.

Representative Becker said landline phones have a necessary purpose until wireless services cover every inch of the country. He said he is concerned there will be service gaps, where if you do not have a landline phone you do not have any method of communication.

In response to a question from Chairman Triplett, Mr. Traynor said ITD incurred the upfront costs for two systems that serve nine PSAPs. He said those nine jurisdictions are renting the equipment from ITD and ITD is getting paid for its costs over time, allowing the jurisdictions to collectively pay a much lower rate than the jurisdictions would have paid individually.

Chaiman Triplett called on the Legislative Council staff for presentation of a bill draft [17.0215.01000] regarding the recommended changes to the operating standards for emergency services communications. The Legislative Council staff said the bill draft contains the changes to the operating standards for emergency services communications recommended by Mr. Traynor, except "first \$1" on page 27 of the report was revised to "first one dollar of the fee collected" on page 1, line 20, of the bill draft. He said the revision was not substantive, but technical to avoid any ambiguity.

In response to a question from Chairman Triplett, Mr. Mike Lynk, Director, State Radio, said all states must follow the Federal Bureau of Investigation's National Criminal Information Center (NCIC) standards. He said under the standard, a public safety communicator may not have a felony conviction, regardless of when the conviction occurred. However, he said, there is a provision that permits local review by the Director of the State Radio. He said a board has been appointed to review licensing and felony convictions that may be accepted. He said the criteria for NCIC access is fairly strict. He said the recommended changes to Section 57-40.6-10 are not substantive changes, but are recommended to follow the NCIC guidelines.

In response to a question from Senator Burckhard, Mr. Lynk said NCIC is an information database that comes from the Federal Bureau of Investigation on all national crimes, warrants, and criminal history.

In response to a question from Chairman Triplett, Mr. Traynor said he has discussed the recommended statutory changes to the limit on fees with representatives of the North Dakota Association of Telecommunications Cooperatives and requested their voluntary efforts to reach consistency. He said some jurisdictions do no charge any extra fees and other jurisdictions charge high extra fees. In some instances, he said, the fees were higher than the funds received by the local 911 center. However, he said, no move toward consistency was achieved.

Chairman Triplett invited public comment.

Mr. John V. Emter, Bismarck, said his telephone fees have increased and now include city, county, state, and federal fees.

It was moved by Representative Sukut, seconded by Senator Laffen, and carried on a roll call vote that the committee accept the report of the Emergency Services Communications Coordinating Committee as required by Section 57-40.6-12, and that the bill draft [17.0215.01000], relating to operating standards for emergency services communications be approved and recommended to the Legislative Management. Senators Triplett, Burckhard, Campbell, Laffen, and Schneider and Representatives Beadle, Becker, Boschee, Klein, Schreiber Beck, and Sukut voted "aye." No negative votes were cast.

CIVILIAN GROUND CENTER NexusND

Chairman Triplett called on Dr. Mark Hagerott, Chancellor, North Dakota University System, for a presentation (Appendix D) relating to NexusND, including data, unmanned aircraft systems, and cybersecurity. He said NexusND is unmanned aircraft systems, data analytics, and cybersecurity coming together as a way to enhance the security of North Dakota, create wealth, and diversify the economy. He said unmanned aircraft systems has and will continue to create economic growth potential for North Dakota. He said the challenge becomes how to keep the data from unmanned aircraft systems safe from breach. He said unmanned aircraft systems would create massive amounts of data and high-performance computing with data analytical capabilities and would be required to store, process, and protect the data collected. He said national initiatives to increase and enhance cyber education technology are being augmented by many states to benefit workforce and society. He said the State Board of Higher Education has a goal for its institutions to increase data analytics, write software, get patents, and have an adequate technical infrastructure. He said as early as the summer of 2017, there may be a graduate certificate and undergraduate minor in cybersecurity at the University of North Dakota.

In response to a question from Chairman Triplett, Dr. Hagerott said experts such as college professors and interns are needed to write the algorithms to have a machine help solve the problem of how to store and analyze the massive amounts of data collected.

In response to a question from Representative Boschee, Dr. Hagerott said science, technology, engineering, art, and mathematics is an artistic element of writing software. He said these fields are a huge component of privacy, law, and technology and the humanities fields should not be sacrificed due to the upcoming budget cuts.

In response to a question from Representative Sukut, Dr. Hagerott said there is an emerging field for a new major in cyber operations/cybersecurity on the drawing board at the University of North Dakota. He said the new major will have more of a human component unlike the major of computer science. He said the cyber operations/cybersecurity major will include courses in cyber law, ethics, and policy.

In response to a question from Representative Becker, Dr. Hagerott said one of the advantages of the midwest is affordable housing costs, which in conjunction with the realistic opportunity to earn a living wage, would be a positive in attracting young engineers and their families.

In response to a question from Chairman Triplett, Dr. Hagerott said representatives of all campuses are mindful of the emerging cyber operation/cybersecurity field and some institutions have implemented basic courses via partnering with other in-state colleges and offering online courses. He said Lake Region State College has a great unmanned aircraft systems agricultural center. He said the entire North Dakota University System is engaged and all North Dakota students have access and can engage in some learning on the topic of cyber operation/cybersecurity.

Cybersecurity Issues

Chairman Triplett called on Lieutenant Governor Drew Wrigley for a presentation relating to the cybersecurity task force findings regarding high-performance computing and data gathering, storage, and analysis. He said the Governor appointed the cybersecurity task force in September 2015. He said North Dakota is not immune from cyber attacks and the goal of the cybersecurity task force included recommending new policies to the Legislative Assembly for mitigating future cyber attacks.

Mr. Mike Ressler, Chief Information Officer, Information Technology Department, presented information (Appendix E) relating to the work of the cybersecurity task force. He said the cybersecurity task force members include 16 state agency department heads and a representative of the the North Dakota Association of Counties. He said the cybersecurity task force shares best practices and reviews network and defense strategies. He said because most state agency data is stored on computers located in the computer center, there is a process in place for protecting the data. Of the types of cybersecurity breaches, he said, hacking is the most prominent type of breach and the biggest weakness is the end user. He said phishing and ransomware are hot ticket techniques in stealing and accessing data. He said most technology is going to the cloud. He said the difference between the cloud and the state data center is that ITD is the cloud for state government. However, he said, it may be advantageous at times to not host the software and give it to a vendor that can host it at the vendor's facility. He said the cybersecurity task force's final report will be out by early October.

In response to a question from Representative Klein, Mr. Ressler said in cases of ransomware, the bad actor will let you know of the breach. He said in other cases, the ITD server has logs that via detection and monitoring look for anomalies.

In response to a question from Senator Schneider, Mr. Ressler said there has been very poor results in catching and prosecuting hackers.

In response to a question from Senator Burckhard, Mr. Ressler said education awareness relating to cybersecurity and data breaches is critical. He said the biggest weakness ITD has is the individual user and lack of awareness is an issue for the individual.

In response to a question from Chairman Triplett, Mr. Ressler said the information he presented pertains only to the three branches of state government. He said privacy concerns of unmanned aircraft systems were outside the realm of the cybersecurity task force objectives. He said all data should stay in North Dakota because ITD is familiar with the polices and procedures in place in keeping the data safe.

Chairman Triplett said policy questions such as privacy concerns should be answered now before the industry expands too much.

Unmanned Aircraft Systems Test Site

Mr. Robert Becklund, Executive Director, Northern Plains Unmanned Aircraft Systems Test Site, presented testimony (Appendix F) regarding the unmanned aircraft systems test site report.

In response to a question from Senator Campbell, Mr. Becklund said the Northern Plains Unmanned Aircraft Systems Test Site was consulted by the Federal Aviation Administration (FAA) indirectly, through providing the FAA with input and comments. He said waivers are available to fly over individuals and to fly at night. He said without a waiver both are prohibited.

In response to a question from Chairman Triplett, Mr. Becklund said he does not know whether the FAA will come out with a beyond visual line-of-sight-rule, but he does not believe the technology exists for that to occur.

In response to a question from Senator Burckhard, Mr. Becklund said the Northern Plains Unmanned Aircraft Systems Test Site is doing two projects with the National Aeronautics Space Administration. He said the first project is called the Unmanned Aircraft Systems Traffic Management. He said the Unmanned Aircraft Systems Traffic Management is a nationwide software system that allows operators to register airplanes so that other operators know where your airplane is located. He said the second project is a live virtually constructed distributed environment, which is a simulated program in which an individual may fly a live or simulated aircraft in complicated scenarios for purposes of research.

In response to a question from Representative Shreiber Beck, Mr. Becklund said intellectual property and privacy concerns relating to data stemming from unmanned aircraft systems will be the subject of policy questions. He said those questions likely will be handled through the court system as lawsuits occur.

Chairman Triplett discussed a bill draft [17.0238.01000] regarding the frequency of the Department of Commerce's status report of the unmanned aircraft systems program. She said the frequency of the report would be amended from semiannually to annually under the bill draft.

Mr. Becklund said reporting to the committee semiannually is not a burden to the department and is welcomed.

High-Performance Computing

Chairman Triplett called on Dr. Jeff Layton, Technical Business Development Manager, Amazon Web Services, for a presentation (Appendix G) on the role of high-performance computing in education, energy research, aerospace, and economic development. He said cloud computing enables organizations to more easily build technology applications. He said cloud computing is the on-demand delivery of information technology resources over public or private networks. He said cloud computing paves the way for innovation and drives an innovative ecosystem. He said high-performance computing is any technically related computing requiring more than a single server. He said aerospace has been a key high-performance computing user for many years and most aircraft are designed using high-performance computing.

In response to a question from Representative Beadle, Dr. Layton said because Amazon Web Services needs programmers, Amazon offers certification programs. Otherwise, he said, he is unaware of any program instituted by a university or other education program to issue a certification upon completion. He said Amazon would be willing to partner with educational institutions to offer such certifications.

Data Enhancement Center

Chairman Triplett called on Mr. Thomas Swoyer, President, Grand Sky Development Company, to provide testimony (<u>Appendix H</u>) regarding the creation of a data enhancement center.

In response to a question from Chairman Triplett, Mr. Swoyer said he is not aware if the \$10 million is incorporated in the budgeting process of the State Board of Higher Education, but a portion of the amount may have been included in some of the Department of Commerce's funding. He said Grand Sky Development Company submitted a budget request of \$4 million to the Department of Commerce for the data enhancement center. He said his preference and recommendation would be to include funding for a Department of Commerce bill draft rather than the State Board of Higher Education bill draft for a data enhancement center. He said he does not have recommended legislation.

In response to a question from Representative Beadle, Mr. Swoyer said there were conversations with the University of North Dakota regarding high-performance computing, but the university had a change in leadership. He said the next step is to have a detailed conversation with representatives of the University of North Dakota.

Representative Becker said representatives of Grand Sky Development Company should work with the State Board of Higher Education and the Department of Commerce to keep North Dakota number one in this field and ensure North Dakota does not miss any economic advancement opportunity.

In response to a question from Chairman Triplett, Mr. Paul Lucy, Director, Economic Development and Finance Division, Department of Commerce, said under the direction of the Governor's office, there is not funding for this particular purpose within the submitted budget of the department.

It was moved by Senator Laffen, seconded by Representative Beadle, and carried on a roll call vote that the Chairman and the Legislative Council staff be requested to prepare a report and the bill draft recommended by the committee and to present the report and recommended bill draft to the Legislative Management. Senators Triplett, Burckhard, Campbell, and Laffen and Representatives Beadle, Becker, Boschee, Klein, Schreiber Beck, and Sukut voted "aye." No negative votes were cast.

It was moved by Senator Laffen, seconded by Senator Burckhard, and carried on a roll call vote that the committee be adjourned sine die. Senators Triplett, Burckhard, Campbell, and Laffen and Representatives Beadle, Becker, Boschee, Klein, Schreiber Beck, and Sukut voted "aye." No negative votes were cast.

No further business appearing, Chairman Triplett adjourned the meeting at 3:45 p.m.

Christopher S. Joseph Counsel

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