

NORTH DAKOTA LEGISLATIVE MANAGEMENT

Minutes of the

ECONOMIC IMPACT COMMITTEE

Thursday, November 19, 2015

Rooms 116 and 117, Information Technologies Building,
University of North Dakota, 4349 James Ray Drive
Grand Forks, North Dakota

Senator Connie Triplett, Chairman, called the meeting to order at 9:00 a.m.

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

Members absent: Senators Tom Campbell and Terry M. Wanzek; Representative Ben Koppelman

Others present: Mark Sanford, State Representative, Grand Forks
See [Appendix A](#) for additional persons present.

It was moved by Representative Klein, seconded by Representative Schreiber Beck, and carried on a voice vote that the minutes of the September 17, 2015, meeting be approved as distributed.

Senator Ray Holmberg, Chairman, Legislative Management, welcomed the committee to Grand Forks and reviewed the Legislative Assembly's actions regarding unmanned aircraft systems in the last few sessions.

ONE-CALL STUDY

Mr. Marvin E. Nelson, Agricultural Consultant, made a presentation ([Appendix B](#)) on the one-call notification system and soil testers.

In response to a question from Senator Burckhard, Mr. Nelson said most electrical lines are buried at least two feet deep and typically are about four feet deep. He said telephone fiber optic is six feet deep and some copper telephone line may be less than 18 inches. He said he has tried to increase the depth at which one-call must be notified from 18 inches to two feet. He said soil testers are forced to violate the law. He said local telephone companies prefer that soil testers violate the laws so the companies do not have to mark the lines.

In response to a question from Representative Sukut, Mr. Nelson said it is possible to cut a copper line when soil testing because copper lines are less than 18 inches under the surface. He said if there is erosion in an area, the area usually does not have the type of soil that is tested.

In response to a question from Senator Laffen, Mr. Nelson said the committee may desire a bill draft to exclude agricultural testing to a depth of 24 inches. He said this type of bill has been tried before but has not passed. He said the bill would have to be supported by the legislature because utilities would not support it because it lessens regulation and makes the utilities look bad.

In response to a question from Representative Becker, Mr. Nelson said there has been a bill in the last three sessions. He said soil testers in the eastern portion of the state do not use one-call. He said if soil testers used one-call, then the eastern companies would want to get rid of one-call for soil testing.

Ms. Carlee McLeod, Utility Shareholders of North Dakota, provided information to the committee. She said she and Danette Odenbach are working with stakeholders. She said plastic stakes are not better than metal stakes because plastic is as unfriendly to ranchers as metal. She said Minnesota has an 18-inch limit. She said the bill in 2013 received testimony from agricultural representatives that it is not safe to go below 18 inches. She said she supports the highest safety with the least amount of regulatory burden.

Mr. John Lee, Soil Scientist/Marketing Manager, AGVISE Laboratories, provided a handout ([Appendix C](#)) on potential locates per day in North Dakota. He said the handout shows that there would be about 1,800 locates per day in October if the law was followed.

Mr. Dennis Berglund, Central Crop Consulting, provided written testimony ([Appendix D](#)) on soil sampling and the one-call system. He said soil sampling is seldom within 100 feet of an edge of a field and most are in the center of the field. He said this poses less risk to utilities. He said soil sampling should be encouraged because of its economic and environmental benefits. He said only 25 percent of fields are sampled at present. He said if soil samplers complied with the law there would be over 20,000 locates a year. He said the standard should be increased to two feet from 18 inches. He said he has considered going to a maximum depth of 18 inches for soil sampling. He said this would underestimate nitrogen by 20 to 30 percent and result in the over-application of nitrogen. He said the best solution would be an exemption to 24 inches. He said increasing the exemption to 24 inches would reduce the 20,000 locates to 1,000 locates. He said the length of the valid locate should be increased from 21 days

In response to a question from Chairman Triplett, Mr. Berglund suggested the validity of a locate should be expanded for soil samplers during the 90 days from September 1 to December 1.

Ms. Sarah Lovas, Independent Crop Consultant, provided written testimony ([Appendix E](#)) on the one-call notification system and soil testers.

Mr. Mark Huso, Owner, Crop Consultant, Huso Crop Consulting, provided information to the committee. He said his company does approximately 1,500 fields per year and uses global positioning system points. He said the one-call system should use global positioning system points or shape files.

CIVILIAN GROUND CENTER

Mr. Bruce Gjovig, Entrepreneur Coach & Director, University of North Dakota (UND) Center for Innovation Foundation, provided written testimony ([Appendix F](#)) on unmanned aircraft systems and a civilian ground center.

Mr. Joshua M. Riedy, Vice Provost and Chief Strategy Officer, UND, made a presentation ([Appendix G](#)) on high-performance computing initiatives.

In response to a question from Representative Boschee, Mr. Riedy said banking and health care are at the forefront of high-performance computing.

In response to a question from Representative Boschee, Mr. Riedy said who owns the data collected by a drone and sent to a civilian ground center is an issue that will require a delicate balance. He said information for private purposes will have to be tailored to a specific purpose. He said there will have to be a uniform definition for the ownership of the information.

In response to a question from Representative Becker, Mr. Riedy said every industry in the government will rely upon this type of information. He said there will be missed opportunities unless the state develops a civilian ground center. He said the world is not slowing down and the state and industry must focus and be nimble. He said it will take resources to get ahead of the demand.

In response to a question from Senator Casper, Mr. Riedy said the cost to have a computer in the top 500 computers is around \$27 million one-time cost and \$3.2 million annually. He said focusing on a public-private partnership will help address the cost. He said this money would purchase hardware and the people to write code.

In response to a question from Chairman Triplett, Mr. Riedy said the State Board of Higher Education has provided concept level approval for a super computer but there was no request for funds for it in the last session. He said there are three steps in the management of data. He said there is data on one side, compliance and security in the middle, and high-performance computing at the end. He said the high-performance computing processes data and makes the data real time useful and actionable.

In response to a question from Chairman Triplett, Mr. Riedy said getting rid of useless data is good for security.

Mr. Thomas Swoyer, President, Grand Sky Development Company, provided information on efforts to develop a data center industry around the unmanned aircraft systems in Grand Forks. He said unmanned aircraft systems create enormous amounts of data that needs to be turned into useful information. He said North Dakota is leading the nation in unmanned aircraft systems but needs a ground center to process the data. He said a civilian ground center will create jobs but there are issues that need to be resolved, including rules and regulations that are flexible and adjustable, are clear with defined consequences, and provide for third-party independent oversight.

In response to a question from Chairman Triplett, Mr. Swoyer said the state needs to create rules relating to the collection of data and how that data is used. He said there will have to be authorizations for state agencies to use

the data center. He said there will have to be resources and an authorization for a public-private partnership. He said there will have to be a location for the data center. He said there will have to be an independent third party to operate the data center. He said privacy will have to be protected. He said there will be security issues.

Mr. Jason Barton, Founder, KSI Data Sciences, made a presentation ([Appendix H](#)) on a live unmanned aircraft systems robotic and remote sensing platform streaming service. He said the information will have to be properly managed. He said insurance companies, the federal Aviation Administration, the state legislature, and some cities and counties will make rules affecting the collection and use of data.

In response to a question from Senator Casper, Mr. Barton said the one who owns the data is the one who pays for the data. He said some industries have a private cloud for the data and some use the Amazon cloud. He said some states use a university cloud. He said his company gives some access for free, for fisherman for example, but the information may be sold by his company. He said the majority of clients pay for data and don't want to buy a drone. He said there are no rules yet on the data side but he sees rules coming. He said there have been laws created relating to the use by police. He said the police are afraid to record data because of freedom of information requests. He said there needs to be a third party audit for there to be public trust. He said people see unmanned aircraft systems as a spy machine. He said a university housing the data center provides access to talent. He said the test range combined with the data center provides a unique opportunity. He said commercial drone marketing is the next big thing and North Dakota is in the forefront but needs to continue being forward thinking.

Mr. Terry Sando, UAS Sector Senior Manager, Grand Forks Region Economic Development Corporation, provided information on economic development related to a data center industry. He said 50 percent of the data was wasted when he was in the military. He said there will be the same problems in the private sector. He said there needs to be useful information. He said a fusion center is transferred all of the information which is then turned into knowledge for first responders. He said useful information includes pictures for insurance of before and after. He said although an unmanned aircraft system may not be piloted, it takes 40 people per hour in a disaster to use the unmanned aircraft system and process the data.

In response to a question from Chairman Triplett, Mr. Sando said a fusion center is a military term used for a center that pulls together information and pushes it out to the field. He said a fusion center contains the decision makers and is predicated on the North American Aerospace Defense Command system.

Mr. Mark Hagerott, Chancellor, North Dakota University System, provided information on the effect of a data center industry on a university. He said men teamed up with machines in the industrial revolution and unmanned aircraft systems are the beginning of mobile intelligent machines. He said three things that need to be done for the management of data from unmanned aircraft systems are the creation of technology and patents, the control of the technology and cyber security, and the creation of policy and law. He said UND has talent, a nearby Air Force base, open space, and Grand Sky. He said the only thing lacking is a high-performance computer. He said a high-performance computer will help test simulations to create technology. He said it will also collect data and help turn it into information. He said there will need to be a high-level workforce for a data center.

In response to a question from Chairman Triplett, Mr. Hagerott said the Governor's task force on cyber security has academic members who are focused on workforce and cyber security that is education centric.

In response to a question from Chairman Triplett, Mr. Riedy said the university needs to focus on the state's needs, not just the needs of the university. Mr. Hagerott said the university is focused on workforce. Mr. Riedy said it is a collaborative effort that will have to operate like the northern tier effort.

Mr. Greg Wilz, Director, Homeland Security Division, North Dakota Emergency Services, provided written testimony ([Appendix I](#)) on the desirability of a data center. His testimony provided a list of databases currently being maintained by the Department of Emergency Services.

In response to a question from Representative Guggisberg, Mr. Wilz said some of the databases on the list have a public face. He said anything with personal information is protected by law. He said a database that identifies critical infrastructure is not public. He said there are concerns with drones and privacy but drones may be beneficial and provide for the greater good. He said there needs to be more in-depth rules for investment.

In response to a question from Chairman Triplett, Mr. Wilz said North Dakota has a fusion center that has been funded by the federal government since 2006. He said the North Dakota State and Local Intelligence Center is geared toward criminal action.

Chairman Triplett said a fusion center denotes a top-down military. She said the term creates fear that there may be a federalizing of all policing. She said a data center is a different concept.

Mr. Tim Wiedrich, Education Technology, State Department of Health, made a presentation ([Appendix J](#)) on emergency preparedness and response. He said unmanned aircraft systems can provide an efficient, cost-effective, and safe method of collecting information in an emergency.

In response to a question from Representative Guggisberg, Mr. Wiedrich said a video of a defibrillator on a drone is of a prototype in a foreign country.

Mr. B. J. Maxson, Lieutenant, Grand Forks County Sheriff's office, presented information to the committee. He said the Sheriff's office has three aircraft that serve a 16-county area. He said six types of missions are authorized--crash scenes, crime scenes, fleeing suspects, missing people, disaster scenes, and traffic events. He said there have been 25 missions and privacy issues have been at the forefront. He said signs are placed on the road when drones are out. He said the permission of the owner and renter are received before going over agricultural land. He said there are strict controls on the chain of evidence for the data collected by an aircraft.

In response to a question from Senator Burckhard, Mr. Maxson said crossing traffic is avoided and the drone is landed and carried over bridges and roads for safety reasons.

In response to a question from Representative Boschee, Mr. Maxson said the Sheriff's office, when acting as an agent for another agency, takes the data card to the other entity.

In response to a question from Representative Boschee, Mr. Maxson said if information is inadvertently obtained without a warrant, it is fruit of the poisonous tree and may not be used as evidence unless there is an exception to the warrant requirement. He said there is no warrant obtained for search and rescue.

In response to a question from Representative Guggisberg, Mr. Maxson said if another agency wants an aircraft it contacts the public safety answering point, which locates the chief pilot, which locates Mr. Maxson. He said he locates the Sheriff if the drone is to be flown outside the county. He said the drone is driven to the location and then launched.

In response to a question from Senator Burckhard, Mr. Maxson said the drone is flown in the line of sight. He said chase vehicles may be used.

Ms. Jennifer Cook, Policy Director, American Civil Liberties Union of North Dakota, provided written testimony ([Appendix K](#)) on privacy concerns relating to the creation of a civilian ground center and the use of unmanned aerial vehicles.

In response to a question from Representative Schreiber Beck, Ms. Cook said there are privacy concerns with manned aircraft but there is a diminished level of privacy related to unmanned aircraft. She said the use of manned aircraft is expensive and the level of technology used is not of the level used on an unmanned aircraft system.

In response to a question from Chairman Triplett, Mr. Gjovig said a data center creates an opportunity for the development of industry. He said the main issues relate to the ownership of information, creating public-private partnerships, security, and privacy. He said there may need to be legislative authorization for data sharing with state agencies. He said states with some rules are Oklahoma, Virginia, and North Carolina.

Mr. Jeff Thorsteinson, Chief Security Officer, Involta, did not appear but provided written testimony ([Appendix L](#)) on this state serving as a national or world disaster recovery center.

No further business appearing, Chairman Triplett adjourned the meeting at 2:00 p.m.

Timothy J. Dawson
Counsel

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