

Testimony to the Interim Economic Impact Committee
Chair Connie Triplett
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Chair Triplett and members of the committee, my name is Tom Swoyer of Infinity Development Partners and Grand Sky. I am here today to urge this committee to support the continued growth of the Unmanned Aerial Systems (“UAS”) industry in North Dakota.

This state, while making great strides to date, is still in a race to develop UAS related opportunities, businesses and to attract the best companies in this space. Tremendous gains have been made since the last biennium and hundreds of jobs have been created with thousands more on the horizon.

The three pillars of the burgeoning UAS industry include infrastructure, agriculture and military/law enforcement. This affords North Dakota tremendous opportunity to leverage investments that have been made in these industries.

As companies, from small start-ups to large multi-nationals (Northrop Grumman, General Atomics) look to North Dakota to develop their UAS businesses, we need to examine the fundamental elements that will allow the industry to grow.

Growth of the UAS industry in North Dakota needs to spread beyond the core supporters of the Universities, test site and military. We need to bring all the rest of the state agencies into the conversation and explore how their operations can be improved through the use of UAS technology.

Also, the core organizations--again, the universities, test site and even Grand Sky--need to take a quantum leap forward in advancing the industry through innovation and investment in the core infrastructure required to create the opportunities that will create jobs

Core infrastructure still needs to be created to support the new industry. That infrastructure includes support for access to the national airspace for beyond-line-of-sight flights. It includes data and communications infrastructure to support safe and cyber-secure command and control of UAS. It includes the ability to get data from the UAS, to a place where it can be processed and then sent back to an end user on a timely enough basis that it can be used as actionable information.

North Dakota needs to take the lead in delivering actionable information, derived from UAS operations to end users regardless of industry (ag, energy, law enforcement, emergency response). Specifically, I would like to make the following observations and recommendations:

- As a committee, you have been exploring the state's involvement in a ground station to support UAS. The ground station can support emergency / disaster response in North Dakota and elsewhere in the country.
- It is important that we distinguish between a traditional data center where customer or end user data is stored and moved from one place to another and a ground station where data may be stored in a traditional sense but where the data goes to be processed, managed, analyzed and even combined with other types of data. This may not even need to be a physical facility. We could possibly do this in the cloud but there needs to be a command and control center that manages the process and ensures privacy and state and federal rules are met.
- The ground station can be developed in one of several business models:
 1. Government funded and owned ground station / data center where multiple state agencies use the capabilities for their own needs. This model could support "sensitive" information (like highway patrol investigation derived data) as well as

"common" information (like volumetric calculations of lake levels). The facility would be able to lease or otherwise make available its capabilities to the private sector when it wasn't using them thereby creating a revenue stream.

2. Private sector funded and owned ground station / data center where the private sector fully funds the operation and the state contracts or leases access to the capabilities on an as-needed basis.
 3. Public / Private partnership where the state and private sector contribute to the development and operation of a jointly used facility.
- Ultimately, the goal of this facility is to support the acquisition of data from UAS, to combine it with other data sources (tax assessor's maps, river system maps, soil maps, etc) and make it available to end users

Madam Chair and members of the committee, this is an exciting time. North Dakota is on the cutting edge of UAS development. To keep that sharp edge, we need to continue to leverage state and private resources and together build the infrastructure that will make North Dakota the premier hub for research, development and commercialization of UAS technology. I would be happy to answer any questions.