

University of North Dakota

Engaging Local Stakeholders to Create Data Hubs

Local stakeholders have been formally influencing the research and engagement agenda at the University of North Dakota (UND) for nearly 10 years through the Community Connect forum, journal, and website. Area stakeholders have been heavily engaged in shaping has been precision agriculture and the use of unmanned aircraft systems (UAS), more commonly known as drones.

In 2012, the Unmanned Aircraft Systems Research Compliance Committee (UASRCC) was created to apply community standards to its evaluation of UAS research. The committee consists of 15 members representing the community, UND faculty and staff, local government, as well as local public safety departments such as fire and police. All UND UAS related research must be reviewed and approved by the committee before implementation. The committee's work is vitally important to the UAS field because of the need to engage the public in determining the ways this technology can be used efficiently and ethically.

In early 2017, through a grant funded by National Science Foundation to create the Digital Agriculture Spoke for the Midwest Big Data Hub, UND hosted producers, agronomists, agricultural UAS providers, and data experts from research universities, including Iowa State University, Kansas State University, and the University of Nebraska, Lincoln. This forum provided the opportunity for community members and businesses to communicate their needs.

As a relatively new innovation with the potential to dramatically influence agriculture production, a major livelihood of North Dakotans, it is vital for researchers to work

with local communities to set trajectory for research in order to address community needs and concerns.

The big data spoke will provide data to producers, landowners, governments and other entities in the region gathered from sensors in farm and related equipment, aerial imagery, survey data, management and policy models and other sources.

Learn more: <http://und.edu/news/2016/09/big-data-hub.cfm> and <http://midwestbigdatahub.org/about/working-groups/digital-agriculture-spoke/>



PHOTO: JACKIE LORENTZ, UNIVERSITY OF NORTH DAKOTA

UND Assistant Professor of Computer Sciences Travis Desell (center), along with UND High Performance Computing Specialist Aaron Bergstrom (left) and Ron Marsh, chair of the UND Department of Computer Sciences, gather recently in UND's High Performance Computing facility.