

Date: March 26, 2025

To: Senate Education Committee (69th Assembly)

From: Marc Wallman, Vice President for Information Technology and CIO

RE: Testimony in favor of HB 1265

Chair Beard, members of the committee, for the record, my name is Marc Wallman. I serve as the Vice President of Information Technology and Chief Information Officer at North Dakota State University. I am here to offer support for the House Bill 1265, and to offer some information on what NDSU could bring to the table in support of the State's efforts.

The state information technology research center, outlined in House Bill 1265, can serve as a North Dakota hub for initiatives in advanced information technologies such as artificial intelligence, cybersecurity, data analysis, data science, digital literacy, machine learning, quantum computing, and software engineering. It will also provide new opportunities for private sector economic growth in these areas, foster the creation of technology-based startups, and drive productive collaboration between academic researchers/educators and industry in the State to ensure a prosperous future for North Dakota in a world that is growing evermore technology-reliant.

The university's proven track record in research and education, along with its advanced infrastructure, makes NDSU uniquely positioned to support the State's efforts. Strategic partnerships with industry and federal agencies and a commitment to innovation enable the university to drive transformative research and development in the mentioned areas.

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Summary of Support Resources

Research Strengths

1. Top 100 public universities in research funding
2. About 65 research groups focusing on AI related projects
3. Many industry partnerships

Computing Resources

1. SBHE established research computing center since 2003.
2. Over 13,000 CPU cores and 100 NVIDIA GPUs.

Human Resources

1. 13 bachelor's, 7 master's, 4 Ph.D.'s, programs, and numerous certificates in data science, AI/ML, etc.
2. Regular training on research computing.
3. Research facilitation to effectively connect the science and the computing.

Below, I would like to expand on these contributing strengths at NDSU:

Nationally and Internationally Recognized Research Excellence

NDSU is an R1 institution, ranking among the top 100 public universities for research funding. It receives support from federal agencies such as DoD, DOT, NSF, and USDA. Many NDSU researchers are among the top 2% of the most cited scientists worldwide. The university excels in data science, data analysis, software engineering, advanced IT, AI, quantum computing, and cybersecurity. **Currently, about 65 research groups at NDSU focus on AI-related projects**, including agricultural analytics, business, disaster management, healthcare, genomics, materials design, and smart infrastructure.

NDSU researchers interact with and are leveraging partnerships with industry through the NDSU Office of Research and Creative Activity, the NDSU Research and Technology Park, and the NSF Engine: North Dakota Advanced Agriculture Technology Engine.

Comprehensive Academic and Training Programs

NDSU offers degree programs and certificates relevant to data science, AI/ML, data analysis, software engineering, advanced information technology, digital literacy, and cybersecurity. This includes 13 bachelor's, 7 master's, 4 Ph.D.'s, programs and numerous undergraduate and graduate certificates. These

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programs meet industry demand and prepare graduates to lead in an AI-driven economy and facilitate research.

Together with many other programs in related fields, they provide high-quality students for research projects as well as leverage research activities to improve student training.

Advanced Research Infrastructure and Robust Research Support

Founded with approval from the SBHE in 2003 and supported over the years by the North Dakota Legislature, the Center for Computationally Assisted Science and Technology (CCAST) is currently North Dakota's largest academic supercomputing facility with over 13,000 CPU cores and 100 NVIDIA GPUs. It advances research and education by developing and managing computing resources, supporting and facilitating research, and offering rigorous training and internship programs.

In the past five years, CCAST has become a regional resource, providing research computing resources to faculty, staff, and students across NDUS campuses and the tribal colleges in the State. It currently supports nearly 100 research groups in data science, AI/ML, quantum information science, cybersecurity, and other research areas.

In addition, the new Richard Offerdahl '65 Engineering Complex at NDSU, authorized by the State Legislature during the 2023 session, is another state-of-the-art facility that will house cutting-edge research and teaching infrastructure and serve as a hub for interdisciplinary collaboration. This complex enhances NDSU's capabilities in computational sciences and positions the university as a leader in advanced technology research and innovation.

Thank you for providing the opportunity to testify today. With that, I would be happy to answer any questions you might have

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