

HB 1379 – In Support  
Senate Appropriations Committee  
68<sup>th</sup> ND Legislative Session, March 22, 2023  
Dr. Steve Shirley, President, Minot State University & Dakota College at Bottineau

Chair Bekkedahl and members of the Appropriations committee, for the record, my name is Steve Shirley, and I serve as president of Minot State University. I provide testimony today supporting House Bill 1379, in particular the economic diversification research portion of the bill.

Now in my ninth year at Minot State, in this role I also serve as president of Dakota College at Bottineau. Before MSU and DCB, I was Valley City State's president for six years. I share this so you understand my perspective having served three of the nine NDUS campuses with significantly smaller research agendas than UND or NDSU. During these 15 years, I have seen first-hand research performed across the state:

Aquatic and wildlife activities at Valley City State, including research at the Prairie Waters Education & Research Center; additional VCSU research in Software Engineering and Physics, where high performance computing tutorials are developed supporting students involved with the international Deep Underground Neutrino Experiment, or DUNE;

At Dakota College at Bottineau, with our vision of Nature, Technology, & Beyond, hands-on research has been conducted with high-tunnel farming techniques, small mammal habitat research in the Turtle Mountains, and assisting producers with development activities for our state's increasing farmers markets;

At MSU, professors in the physical and life sciences, addiction studies, education, and other areas conduct research such as addiction effects of methamphetamines, optimizing usage of fracking sand, understanding the genetics of certain types of leukemia, design of fungicides for medicinal or agricultural uses, and teaching techniques for the deaf and hard of hearing, just to name a few. For many years, Dr. Mikhail Bobylev's Minot State chemistry students have been selected for the esteemed Posters on the Hill event at Capitol Hill in Washington DC; MSU has been the only North Dakota campus with students selected the past few years including again last year, and they have presented their research alongside students from the likes of Auburn, the University of Florida, and Michigan State University, some of the largest and best research universities in the nation. Indeed our North Dakota students can compete with the very best in the land.

There are numerous examples from the other six smaller NDUS campuses as well – we've seen those highlighted during the State Board of Higher Education's monthly Research Committee meetings, and they've included such topics as soil nutrient ion exchange, the effects of wheat bran compounds in cancer intervention, 3D bioprinting, comparing till vs. no-till crop plotting, the effects of equine therapy for PTSD, wind energy technology research, and UAV photography in crop monitoring.

These activities may not get the headlines of a larger project at NDSU or UND, but please know the research being conducted at your other nine campuses have incredible potential to

help unleash economic diversification as our undergraduate students, North Dakota's future leaders, hone their research skills. This bill would help expand research opportunities for these faculty and their students.

On a final note, the North Dakota University System is an integrated system. An important aspect of that is when students at a smaller campus move on to a graduate degree at a larger campus; I can recall many students the past 15 years who moved on to UND or NDSU to pursue a PhD program or complete additional professional training in medicine, law, or allied health. In many of those cases, the research opportunities they had as undergraduates played a key role in preparing them for success - both getting accepted into the graduate program and then succeeding in that program.

All 11 NDUS campuses are excited about this bill's potential for our students, our faculty and staff, and most importantly, our state. I appreciate your time, and am happy to answer any questions. Thank you.