ND Senate Finance & Taxation Committee HB 1380, 67th Session, March 17, 2021 Dr. Steve Shirley, President, Minot State University

Chair Bell and members of the committee, for the record, my name is Steve Shirley, and I have the privilege of serving as president of Minot State University. I am here speaking in support of House Bill 1380, in particular the establishment of an economic diversification research fund.

Currently in my seventh year as president of Minot State, I also serve as president of Dakota College at Bottineau. Prior to MSU and DCB, I served for six years as president of Valley City State University. And so I offer a unique perspective, having the distinction over the past 13 years of leading fully one-third of the State's nine primarily undergraduate institutions comprising the North Dakota University System. In that time, I have seen first-hand the research capabilities of our talented faculty across the state:

Impressive aquatic and wildlife research is occurring at Valley City State, including undergraduate-driven work at the Prairie Waters Education & Research Center, a Center I was proud to help launch while there. VCSU engages students with research opportunities in Fisheries & Wildlife, Software Engineering, and Physics, where faculty and students are involved in helping build a sophisticated particle detector one mile underground as part of the Deep Underground Neutrino Experiment, a truly international collaboration;

At Dakota College at Bottineau, through our unique mission of Nature, Technology, & Beyond, faculty provide hands-on research in horticulture, aquaponics, and specialty crop production, and they have helped ensure vital conservation efforts for North Dakota's outdoors, including active wildlife research on ecosystems in important areas like the Turtle Mountains north of Bottineau;

And, at Minot State, I have seen our faculty in chemistry, geology, addiction studies, education, the biological sciences, and other areas conduct impressive research in such diverse fields as behavior and addiction effects of methamphetamines, optimizing usage of the most effective fracking sand, understanding the genetics of certain types of leukemia, design of fungicides for medicine, veterinary, and agricultural uses, and research in the area of Alzheimer's, just to name a few. For a number of years, Dr. Mikhail Bobylev's chemistry students have been selected to present their research at the prestigious Posters on the Hill event at Capitol Hill in Washington DC; MSU has been the only North Dakota

campus to have students selected the past several years, and they have presented alongside students from the likes of UCLA, Purdue, the University of Chicago, the University of Oregon, and Texas A&M; some of the finest colleges and universities in the country. With some skilled mentoring and support, it is clear our North Dakota students can and do compete against the very best. Our faculty are active with publications, research, and grant activities supported by both federal and state agencies, and this bill would allow us to expand research opportunities for students, thereby benefiting North Dakota's future.

There are many examples from the other six NDUS campuses as well, and we've seen highlights in the State Board of Higher Education's Research Committee's meetings — this included a presentation earlier this winter on impressive research being done at Lake Region State College in precision agriculture and wind energy technology.

Many of these research opportunities across our state's nine primarily undergraduate colleges and universities may not get the headlines of a project at NDSU or UND, but please know the research by professors and students across all campuses have incredible potential in further unleashing economic diversification as today's undergraduate students, North Dakota's next generation of leaders, complete their associate and baccalaureate degrees.

On a final note, with our unified System, students can seamlessly move from one campus to another, and an important aspect of that movement is when students at a primarily undergraduate campus pursue a graduate degree at one of the larger institutions. I can think of many students the past 13 years who have moved on to Medical School at UND or those who have pursued a PhD in a science-based program at NDSU. In many of those situations, the research opportunities afforded during their undergraduate program played a critical role in preparing them for success - both getting accepted into the graduate program and then succeeding while enrolled.

All 11 campuses of the NDUS are collectively excited about this program's potential for our students, our faculty and staff, and most importantly, our state. I appreciate your time today. Thank you.