Testimony on MNDOT CAV program before the

Minnesota Senate Transportation Committee

February 5, 2025

CHS Inc.

Chair Dibble and Chair Jasinski, members of the Committee, my name is Heidi St. Clair, Director of Supply Chain Automation for CHS. With leadership from the MN DOT Connected and Automated Vehicle program, I have the privilege of being a member of the Governor's Automated Vehicle Advisory Council, co-chairing the safety and innovation committee.

Governed by a 17-member farmer board, CHS is a diversified agriculture and energy cooperative based in Inver Grove Heights, Minnesota.

One challenge we face – and many businesses face – is demographic trends that forecast an increasing shortage of labor. As we work to address that challenge, we look to innovation and technology that could help supplement our workforce. CHS is committed to exploring the latest innovations and technology and how they connect to benefit the agriculture industry and supplement our supply chain capabilities and staffing. And, at the end of the day, we explore technologies that will ultimately help CHS deliver value to our owners. Some of the areas of innovation and technology CHS invests includes drones, robotic process automation (RPAs), generative and machine learning artificial intelligence (AI) and mechanical autonomous technologies.

In many cases, these technologies enhance our human workforce by completing repetitive or time-consuming tasks, while allowing employees to focus on higher-value, strategic activities. In some cases, technology solutions can also help increase safety for our employees.

Since 2022, CHS has been evaluating autonomous technology to supplement our workforce and streamline some of our operations. Autonomous technology applications are available in passenger vehicles, trucks and on-farm equipment. Therefore, CHS is conducting research and development on how automated driving systems might further support our integrated, end-to-end supply chain. We have extensive organizational experience supporting agricultural adoption of complex technologies, many of which often involve precision controls

and advanced technologies. This familiarity with semi-autonomous machinery and variable terrain provides valuable insights into system functionality and real-world adaptability.

The leader-follower platoon pilot project has been active for the past three years. When we first embarked on this journey, we agreed that safety is the number one priority for testing automated driving technology. Together with MnDOT and our technology vendor, CHS developed a rigorous testing plan for the automated driving system technology. We have a specialized team of drivers participating in this pilot project who are trained to expertly guide and monitor the vehicles. When we first started, we progressed from a closed track to road testing, which is active at certain times during the year. We have specific benchmarks and safety measures we track closely as part of this pilot project.

In the past two years, the automated driving technology pilot at CHS has resulted in:

- Logging more than 20,000 miles with a safety driver at the helm
- More than 250 loads and 12.4 million pounds of soybean oil moved between CHS facilities in Mankato and Fairmont, Minnesota
- Completion of trips in a variety of weather scenarios including winter road conditions

My testimony today aims to urge you, as elected officials, to help Minnesota companies remain competitive, maintain supply chains, and ensure that our state develops a framework for automated driving technology testing focused on safety, accessibility, and economic growth.

CHS supports the work of the MNDOT Connected and Automated Vehicle Program and looks forward to working with you and partners like the Minnesota Trucking Association and Minnesota Chamber to incorporate automated vehicle technology safely in agriculture, energy and transportation supply chains.

Thank you for your time and consideration.