Testimony in Opposition – Mark Andresen, Principal

My name is Mark Andresen and I am the principal at Mandan High School in Mandan, ND where I have been for the principal for the last 18 years. Prior to that I was a science teacher in the same building for 9 years where I taught Biology, Physical Science, and Physics. I write today in opposition to House Bill 1507 as I do not believe that this process has been researched enough as to the cause and effect on all schools both large and small. Some of the issues (with explanation) that will arise in my school alone are as follows:

1. Who is going to teach the class and how are you getting these people highly qualified when we already have teacher shortages in North Dakota? I currently have one teacher that teaches a single section of Intro to CSI and AP Computer Science. This program is limited to 20 students per period due to space and equipment. My average class size at MHS is 320 students beginning next year. This will be an increase of 3.0 FTE's and the need for three rooms and 63 additional computers due to the fact that a teacher will teach about 100 students daily for both semesters in a single room.

2. Where are the funds coming from to cover the teachers, rooms, and infrastructure / equipment? IPads and Chromebooks are efficient for an introductory course but not for a programming course. Many schools have removed their computer labs and do not have the needed equipment to do a full year of the course. Also, we are currently building a new high school due to the fact that we have no extra classrooms. I do not believe that this will reduce the number classes as students will continue to take other math / science courses and in essence will cause further issues and reduced numbers in our elective programs which are already a concern for size. Students that are college bound will not forgo their math sequence which essentially will hurt electives even more.

3. Why are we reducing mathematics credit and substituting in a CSI / Cyber course when upper level mathematics is required for degrees in some of these programs? Cyber security requires lower levels of math (College Algebra) but CSI courses require Calc 1 / Calc 2 / Probability and Statistics / Discrete Mathematics.

4. How are schools going to meet the needs for some of the different levels of Special Education students when the wording in the bill states: **Three units of mathematics, which MUST include one unit of computer science and cyber security.** I do not believe that it is doable for some of my Special Education students as they struggle with their math level the way it is as many are in the 5-8 grade level as a senior. Having them try to understand complex programming and cyber security curriculum will be very confusing and extra challenging especially if it is a mandatory requirement.

Please understand that I am not opposed by any means to having CSI or Cyber Security programs as part of the programming that we offer at schools. I am strongly opposed to these programs being pushed onto schools and mandated for all students as a graduation requirement without having been researched, funded, or providing the schools with the necessary resources for it to be successful.