Good afternoon. My name is Julie Marlette and I am the Director of Governmental Relations for the New York State School Boards Association. I want to start by thanking Senator Rachel May, Assembly Member Angelo Santabarbara and Assembly Member Fred Thiele for bringing us together today to discuss these important topics.

New York has been deemed the 4\textsuperscript{th} most connected state by Broadband Now, an independent broadband availability website. Broadband coverage is measured by individuals who have access to 25 megabits or more per second (Mbps), and we should feel proud that, as a state, we have reached 98\% broadband coverage. However, when the data is broken up by county, it is evident that access is not distributed equally throughout the state and our more rural counties have less access to broadband coverage than the more heavily populated counties. For instance, Nassau and Suffolk counties have 100\% coverage while Hamilton County in the North Country has a mere 21.5\%. There are currently over 325,000 people in New York without access to a wired connection capable of 25 Mbps download speeds and another 112,000 people with no wired internet providers available where they live.

Nationwide, approximately 70\% of teachers assign homework that requires broadband connection. For example, IXL is a popular subscription-based personalized learning website for various K-12 studies through which many teachers assign homework. Foreign language teachers often decide to supplement class assignments with personalized learning apps such as DuoLingo. Additionally, many teachers communicate with their students and parents exclusively through online sites such as Google Classroom. In fact, it is common practice for teachers to email weekly updates to parents covering their child’s homework assignments and expectations for each class. For those with limited to no broadband access at home, students must struggle to keep up with the day to day demands of a 21\textsuperscript{st} century learning environment, and
their parents are not provided adequate information regarding what their child must accomplish in order to be a successful student. This results in a homework gap that has been suggested to negatively affect a student’s ability to graduate high school.

Recommendations of steps school districts could take to address the homework gap include allowing students early or after school access to the school network and encouraging local libraries to give students priority access to their computers. However, many rural school districts face unique challenges including geographic barriers that make it difficult to travel to libraries daily or spend time on school campuses beyond the scheduled instructional day if extended busing options are not available. Equipping school buses with WiFi hotspots is another solution that some school districts have sought. However, it is unrealistic to expect students to complete complex homework assignments on devices such as cell phones while surrounded by distractions.

Limited bandwidth can also affect a student’s ability to complete his or her assignments online. At a town hall in Sherburne, NY held in August 2019, one middle school student explained that many of his online assignments that are supposed to take 30 minutes to complete end up taking him three hours.

Increased bandwidth is a requisite for school districts seeking to participate in computer-based adaptive testing. Many testing vendors require a minimum bandwidth higher than 25 Mbps in order to administer exams on desktop computers. Some require a minimum of 100 Mbps. Considering that the statewide average speed is 67.9 Mbps, accessing the recommended bandwidth to properly administer computer-based adaptive testing remains outside the realm of possibility for too many school districts, especially those in rural areas.

Another concern is that many districts have begun or are planning to implement 1:1 technology programs that allow each student to use an electronic device, such as a Chromebook, to access the internet, digital course materials and digital textbooks. Based on the Federal Communications Commission’s (FCC) goals and common practice in the field, districts that currently use technology moderately but plan to implement a 1:1 program would initially need around 100 Mbps with growth of 50% to 100% each year for 5 years in order to equip their schools with adequate bandwidth to effectively implement such program.
Moreover, the FCC’s decision to roll back long standing net neutrality protections in 2017 may exacerbate already uneven access. Despite speculation that doing so would encourage innovation and thereby increase broadband access due to increased investments in infrastructure resulting from reduced regulatory burdens, such shifts have not occurred. According to experts from the Technology Policy Institute, data show that the expansion of broadband access has not shifted since the patterns in place during the final years of the Obama administration.

Access to online educational resources can help school districts save money while exposing them to the most innovative and effective practices. However, if schools and students are still dependent on the internet technology of decades past, not all districts and their students will be able to access these programs and innovations, exacerbating educational inequities. It is critical that investments are made that will ensure that all parts of the state have access to high quality broadband and that opportunities for access are available equitably to all students.

Thank you for the time you have granted me on behalf of the New York State School Boards Association, and I am happy to take any questions you may have.