INTRODUCTION

In 2014, Connect Alaska embarked on the Alaska School Broadband Audit project to fully understand the needs of the state's educational institutions. In a state so large and diverse with 72% of schools located in rural areas, Connect Alaska set out to travel the districts, collect and analyze data, and talk with administrators and technology teams to gain priceless information on how schools use technology, the speeds and connectivity with which they are working, and their current and perceived future needs.

Understanding that broadband has the power to bring world-class learning opportunities to even the most remote of regions, Alaska educators were found to be pursuing education technology endeavors with great commitment and enthusiasm. However, many schools suffered from slow speeds, poor bandwidth, insufficient latency, and outdated devices. At a time when the Federal Communications Commission (FCC) has set Gigabit connectivity and ubiquitous in-school Wi-Fi as key targets for the E-rate program, these connectivity challenges are more important to document and work toward overcoming now than ever before. With insufficient school broadband, Alaska students are at risk of falling into a widening digital divide that will even further hinder educational opportunities.

An important purpose of the Audit is to provide complete, comprehensive, and validated information and data to educators, school administrators, parents, and policymakers. This data includes bandwidth capacity and quality at schools, the prices paid for that connectivity, the technologies used for broadband, and the number and age of school-provided electronic devices, such as tablets, computers, or laptops, used in K-12 schools. By taking the data gathered from surveys, site visits, and state and national external resources, Connect Alaska prepared an in-depth analysis of broadband and education in Alaska, reviewing Alaska's movement toward national benchmarks, regional comparisons, E-rate changes and implications for Alaska schools, and recommendations for closing the digital divide in the state. The substantial information gathered was also presented in an online visualization portal and district-by-district summaries (See Appendix 3) were created for efficient use by local and state educators.

The collection and presentation of broadband infrastructure and use across Alaska allows state leaders to take informed action toward improving the quality of the educational experience for students as even the most remote areas seek to gain access to affordable and reliable Internet service.