Executive Summary

The proposed upgrades and installation of improved broadband connections within HCSD will allow for improved access to students and staff to a 21st century curriculum and resources within the school setting. Current connectivity limits the ability for students to utilize the vast resources found on the internet and also access web based resources to enrich and remediate learning. With increased connectivity, HCSD will have the opportunity to expand teaching and learning beyond the normal school day and year as students could access learning tools at all times and locations. Potential uses include educational software that would allow the district to offer access to classes K-12 from school and from any location with a computer and internet access within the county. This would greatly expand the opportunities for student learning. Also by increasing connectivity, HCSD will be able to better utilize current formative assessments such as NWEA's Measures of Academic Progress (MAP). HCSD currently uses this assessment to determine where students are at in relation to the Nevada Content Standards and then monitor individual student growth over time. This has been a powerful tool for students, teachers, administrators and parents as the results are available instantly and the test is adaptive. Yet limits exist as connectivity causes issues while students are testing and HCSD is forced to stagger when schools test in order to minimize these issues. With increased broadband connectivity HCSD could maximize testing and the use of the data to inform instruction and monitor individual student growth over time. Humboldt County is located in northwestern Nevada. The county encompasses just over 9650 square miles and has 5 schools within the city limits of Winnemucca and also services 6 schools within the other county communities of Grass Valley, Denio, Paradise Valley, Orovada, Kings River and McDermitt. This project seeks to fund the installation of fiber optic lines to Lowry High School, French Ford Middle School, Sonoma Heights Elementary School, Grass Valley Elementary School and Winnemucca Grammar School. Due to the distance of the communities of Denio, Kings River, Orovada, Paradise Valley and McDermitt, fiber does not seem a realistic option at this point. This combined with the fact that student populations are limited in these communities will allow us to find alternate means of maximizing their connectivity through equipment upgrades such as routers and increased T-1 lines if needed. The overall cost for the project is $234,501. This would include fiber to all five schools within the city limits of Winnemucca, new equipment at all 11 sites to handle the upgrades and eliminate 'bottlenecks,' and the installation of new wiring and cable drops to better maximize each schools connectivity. Although varying in need, all 11 schools will see an increase in broadband capabilities. These upgrades will allow for expanding current videoconferencing capabilities with community colleges that offer college level classes to our 2 high schools. Access to web based software and programs to enrich, remediate and support learners will benefit every student within the county. Maximizing the use
of formative assessments will allow the district to monitor all students growth in a timely manner that will not impede classroom instruction. This project will provide 1.8 indirect jobs and .8 induced jobs.