Broadband USA Applications Database

Applicant Name: Northern Neck Planning District Commission

Project Title: Northern Neck and Middle Peninsula Regional Broadband Network

Project Type: Middle Mile

_____Executive Summary_____

The success of this application rests with our reviewers' willingness to apply not only a standard of compliance, but also associate the words and data contained herein to the thousands of hardworking citizens the Northern Neck Planning District Commission (NNPDC) represents. It is our belief these applications for funding should not only delve into the narrow confines of remote, rural, unserved and underserved areas of bandwidth coverage; they should also explore how the United States government, her citizens, local governments, and businesses will achieve real economic, environmental, health care delivery, transportation, educational and smart utility advances by deploying true broadband. This submission considered the perceived intent of the American Recovery and Reinvestment Act (ARRA) of 2009 as much as it did the methods, technologies and worthiness of implementing this project. The stated goal of the ARRA is to disperse funding to worthy projects for stimulating job growth and delivering bandwidth deep into the rural areas of the country; the NNPDC believes their project warrants full consideration. To the reviewers who have volunteered their time and expertise—we thank you all. The NNPDC submission is comprised of ten (10) Virginia Counties that seek federal funding under the ARRA. The Broadband Authorities currently being formed will own the infrastructure as a completely open access network where operations and services to the end users are provided by others. The estimated overall cost of the infrastructure is $17,486,176.00. Within the funded area there are two major regions; those regions are the Northern Neck region which is composed of Lancaster, Northumberland, Richmond and Westmorland Counties and the Middle Peninsula composed of Essex, King and Queen, King William, Middlesex, Mathews and Gloucester Counties. Of this whole area of eastern Virginia over 75% of the population is either underserved or unserved. Additionally, large pockets of population are considered vulnerable low and middle income persons. Detailed maps of the proposed fiber network and the low and middle income percentages overlay are located in the upload section (43) Supplemental Information file names NNMP LIM Map.pdf and NNPDC Existing and Proposed Network.pdf. With funding from the Department of Commerce (NTIA) under the BTOP program, the NNPDC will have the opportunity to provide a broadband middle mile solution combining wireline and wireless technology serving this area of eastern Virginia. It is not envisioned this application would apply under RUS (BIP) criteria. The network will consist of a middle mile fiber core network consisting of 223 miles of new fiber interconnecting with 201 miles of existing fiber owned by private providers. By using existing fiber through agreements the overall deployment costs are significantly reduced and greatly leveraging ARRA funding. Wireless towers will be built to provide additional broadband coverage and that data will be backhauled on the fiber network to aggregation points and then to long haul data transport. A network design diagram is located in the upload section file name 08)

Q30 Network Diagram NNMP.pdf. The combined ten county populations are approximately 139,352 with a total number of residences of 59,673 and businesses of 4248. Of the businesses 2956 of them employ four (4) or less with only five (5) companies employing more than 250. There is only one (1) anchor tenant employing 1000 or more people. If any one of these five businesses, all located in Gloucester County, were to fail or relocate, the job loss would be devastating to the area. The jobs created were calculated based on the document entitled "Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009", published by the Council of Economic Advisers in May 2009. Their methodology was used on a quarter by quarter basis to calculate the number of jobs created or saved. That number changes over each quarter of the project peaking at 16 in quarter 5 of the two year buildout (number created or saved by quarter starting at quarter 1: 1,1 3,12,16,11,10, and 10). It is imperative these jobs are retained and broadband interconnectivity is one key factor in keeping those jobs. The whole business and government community within the NNPDC has been actively supportive as is evidenced by the huge number of support letters received. Businesses large and small; political and educational leadership; public safety leadership; and health care providers are all hopeful this project will deliver much needed services to their operations. Please note the letter of support from one service provider MetroCast that exhibits this support. This letter of support is in the uploads section (43) Supplemental Information and in the question 41 letters of support government and key partnerships under the file name Letter of Support Metrocast.pdf. An estimate of subscriber acceptance has been calculated for years one through five in the specific categories of service this network will provide. The service providers who have expressed interest in utilizing the network will provide Internet (data) connectivity and in the case of the cable operator Cable Television (video). The subscriber estimates used for this application are very conservative. Internet Service type 1 to residential customers estimates cumulative subscribers grow from zero (0) in year one to six thousand four hundred and forty five (6445) by the fourth quarter (Q4) of year five. Service type 1 for Internet to business customers estimates cumulative subscribers grow from zero (0) to thirty by Q4 of year five. Service type 2 cable to business and residence customers estimates cumulative subscribers grow from zero (0) to nine hundred ninety four (994) by Q4 of year five. For strategic institutions such as hospitals, schools, and other community anchors the Service type 1 Internet grows from zero (0) to eighty-one (81) by Q4 of year five. The NNPDC is committed to the non-discrimination and interconnection obligations under the FOCA and will include those stipulations in any agreement signed with any service provider. Through a technology based economic development initiative called NeckTech formed in 2003 many of the organizers and leaders for NNPDC became immersed in broadband study. As a middle mile open access system there is no intent to operate the system or provide last mile services by the NNPDC. The expertise exists within this organization to do so but there is little appetite for competing against established incumbent service providers. The existing service providers cannot make a business case for deploying the infrastructure but can realize a return on investment by riding on the NNPDC network. Only by this public and private collaboration can the citizens of the NNPDC achieve service levels approaching the definition of served. The NNPDC network will be sustainable and managed by the NNPDC team. Since 2003, the NNPDC counties have spent their treasure and their time seeking solutions for their citizens to provide true high speed bandwidth into areas underserved or unserved by any service provider. They were working on this problem long before the ARRA of 2009 was enacted. These counties do not represent a few high dollar developments that want services so they might telecommute; they represent hard working

people spread out in the countryside who need and deserve good jobs, good health care and good education within their own communities. These are jobs and services that will only continue to exist if adequate connectivity to the outside world is available. It all comes down to whether their communities can survive if good jobs, education and health care are unavailable. These United States citizens deserve good health care and education no less than people living in more densely populated areas where more desirable returns on investment for incumbent service providers exist. They need the help of the ARRA programs to ever be adequately served with bandwidth connections that allow them access to centers of excellence for learning, health care, art and commerce.