Executive Summary

This is the second grant application to fund development and implementation of A-Vu Technology in Winona, Minnesota. While we do not know the specific reasons for the first rejection, this application is different in the following ways: 1. The scale of requested Federal Funding is reduced from $9.3 million to $4.1 million. 2. Significant costs to develop A-Vu enabled medical applications have been shifted to other funding resources. 3. The percentage of matching funds has been increased to 38.1%. 4. New partners and endorsers include Cerner Corporation, and Estes Park Institute. This proposal is more clearly focused on broadband adoption goals of 70% for older adults and the disabled. This focus does not diminish the ultimate value of providing broadband-based healthcare over the new platform but it is also not necessary to fund the healthcare portion of this plan as part of BTOP. For example, A-Vu and its original Winona partners have now joined with Mayo Clinic and other partners in SE Minnesota to apply for the Beacon Community Cooperative Agreement Program (BCCAP) or 'Beacon'. This proposal goes beyond the healthcare applications profiled in the original A-Vu BTOP application and includes the full participation of Mayo Clinic with its internal resources for evaluating outcomes. This A-Vu BTOP application and the Mayo Beacon application are designed to produce significant stand-alone value; neither is dependent on the other. However, if both are awarded the two efforts are fully synergistic and will create significant additional value for both. The 2009 Pew Internet and American Life Project identified four primary factors that impair broadband adoption: availability, affordability, usability, and perceived relevance. Older adults and the disabled often face more than one of these barriers simultaneously. These circumstances must be addressed if strategies that will significantly utilize broadband are to be successfully delivered. These strategies will include communication, information, and healthcare. Since senior and disabled populations represent high-cost healthcare segments, they must be included in all next-generation healthcare technology strategies if desired results are to be achieved. Broadband can and should be a significant resource to reduce isolation, improve quality of life, extend independent living, and improve health status while reducing cost. The most important benefit of this project will be the demonstration of a broadband strategy that can be a model for self-funding commercial implementation throughout the United States. We believe that the A-Vu strategy can create a 70% or greater sustainable broadband adoption rate for older adults and the disabled. Penetration among these populations currently ranges from 5 to 25% in the Winona community. A-Vu Media is a public/private partnership based in Winona, Minnesota, and created by A-Vu Media, Hiawatha Broadband Communications, Winona Health, and Home & Community Options. These organizations already are technology leaders in their respective industries. The partnership is positioned to develop
new broadband solutions for older adults and the disabled. A highly simplified user interface will provide access to an integrated platform providing broadband, video, and phone services to a unified TV/Monitor and phone handset. This level of integrated services has never been offered in a similar way on a secure fully-managed broadband network. Today’s digital technology can be repackaged to deliver the concept. A-Vu will be an application package that can work on any existing high-capacity broadband network. The core system will not require PC capability or any self provisioning; a major barrier in other proposed solutions. The A-Vu system will be managed by a US-based 24/7 customer service unit that has full remote control of all user features. Customer service operators will be hired for their interpersonal skills and experienced in working with older adults and the disabled. These staff members will be trained thoroughly in the technology they will remotely manage. Automated connections will be provisioned for the benefit of the primary user and approved family, friends, and caregivers. The overall strategy addresses the issues of availability, affordability, usability and relevancy of needed services. Automated connections are created for the user to call out and for the user's network to call in or to send information to the primary user. The user’s personal network contacts are expected to be a major influence in the decision to pay for A-Vu services. The managed network creates immediate opportunities for healthcare and community organizations to reach these populations with new and compelling services that have been constrained by a lack of broadband connections or user capability. Healthcare networks, organizations offering services to the disabled, and senior housing facilities at all care levels also have identified significant expected value from implementing the A-Vu system. The same system that creates broadband connections outside a residential facility can create compelling new connections within residential or hospital operations. Other community, county, and state organizations have also made commitments to participate in the development and implementation of this new system. Each has identified value-added applications they can realize through the A-Vu structure and capabilities. Security and privacy will be critical components of the system design and implementation. Use of the system for healthcare applications requires VPN types of structures to produce HIPAA compliance. Individuals will need local camera control so that they can maintain a desired level of privacy. At the same time there will be a structure that will allow a limited number of parties with legal authority to remotely activate a webcam for security and medical emergency applications. One integrated broadband video system is being used primarily for voluntary communications, but the structure also has applications for security and emergency situations. The greater Winona, MN, community is an ideal environment for the alpha test. It is small enough to have substantial community participation but it has enough scale to assess the impact on cost and desired outcomes. The proposed project will include a complete profile of broadband use and related healthcare costs before and after implementation. Budget for the project is $6.7 million, including $4.1 million in Federal funds and a percent participant match of $2.5 million, or 38.1%. A significant portion of the budget is for salaries that create 19 new and 11.5 sustained positions for two years. Implementation in the first year also produces 5 FTEs. The evaluation of this test, based on what it can provide when deployed as a model for similar services throughout the county, provides a deeply compelling case with national implications for older adults, the disabled, innovation in the delivery of healthcare services, and reduction in healthcare costs. Since this is a second grant application for the same applicants we have used some documentation from the first BTOP application. Organization charts, management resumes, and original letters of endorsement had no material change. The original documents were used. Additional letters of
endorsement have been received from Estes Park Institute, Cerner Corporation, and Vidyo. A-Vu Media is a new organization created for the purpose of pursuing this grant as a public/private partnership. As a new company it has no historical financial statements. Financial strength to support this project comes from Winona Health, Hiawatha Broadband and Home & Community Options. Each of these organizations has a vested interest in A-Vu Media. Recent financial statements for these organizations have been included with this application. Audited 2009 statements are not yet available but can be supplied during due diligence. A separate description of the proposed A-Vu technology that includes graphic illustrations of what the user interface will look like has been included as an appendix. These have been included despite uncertainties about how the graphics material would be treated by the online system designed for text. Also available is a computer simulation of the user interface that enables easy understanding. The simulation is the best resource to understand how the tool works. Such a demonstration could be held in Washington, DC, or in Winona.