

Broadband USA Applications Database

Applicant Name: The University of Montana

Project Title: Montana Public Broadband Access Centers (MtPBAC)

Project Type: Public Computer Center

Executive Summary

The Montana Public Broadband Access Centers project (MtPBAC) will create a set of PCCs in selected communities in rural/frontier northwestern Montana. The PCCs will be operated by the Montana University System (MtUS) and thus linked to the Montana higher education system, including online educational programs in development by the MtUS through other ARRA funded projects.

The PCCs will be located at healthcare anchors in their communities. The PCCs will be linked into a Montana FCC Rural Healthcare Pilot Project, the Health Information Exchange of Montana (HIEM). The new PCCs will be hosted by HIEM members and acquire network connectivity by piggybacking onto a high-speed network HIEM is developing through the FCC RHCPP.

The MtPBAC project will place PCCs in strategically important rural communities, use the expertise of the MtUS to link the PCCs with key educational and healthcare online activities, and tie them together in a sustainable manner by collaboration with a compatible federal program (FCC RHCPP). We think this proposal is sustainable and meets all the major goals of the PCC program.

The MtPBAC project starts with a base of PCCs located at ten Montana University System (MtUS) campus sites, connected by the existing MtUS network. These existing PCCs are prominent and widely used, but limited to campus sites located in the state's population centers. To meet PCC program goals, we aim to reach sites that do not have MtUS campuses. The proposed sites align with the rural, unserved or underserved target of the PCC program, while maintaining linkages to the educational materials associated with the MtUS PCCs.

Northwestern Montana makes an ideal starting point for rural PCCs because of its geography, economy and existing or emerging infrastructure. The region is bisected by the Continental Divide and includes wilderness areas and Glacier National Park. These factors have long limited the deployment of telecommunication infrastructure in the region. The region also includes strategically important communities on or near Native American reservations. Economically, the four counties affected by this

proposal rank 45th, 53rd, 55th and 56th among 56 Montana counties in employment rate. Finally, a new high-speed networking infrastructure being developed in the region by HIEM under its FCC RHCPP grant provides the infrastructure to make this project feasible.

The MBPAC project proposes to place new PCCs at HIEM community healthcare provider sites; use the HIEM network to connect the sites to the MtUS network; use the MtUS network to provide links to commodity and research/education networks; and use virtual networking technology to make them appear to users as extensions of existing MtUS PCCs. The PCCs acquire their connectivity from emerging MtUS and HIEM infrastructure, and no new broadband build-out is required. We will acquire network connectivity to the entire set of new PCCs with a single, long-term agreement between the MtUS and HIEM. When combined with existing MtUS PCCs, the resulting set of PCCs (see map in Supplemental Information) make a significant start in moving beyond the existing MTUS footprint to reach other rural and remote communities in the state.

The MtUS and HIEM have both the PCC experience and network expertise to implement the project. Campuses of MtUS have operated public computer access points for years. The MtUS has also long cooperated with the State of Montana to form and manage shared infrastructure, which provides virtual private networks for the State and MtUS. The two research universities of MtUS—The University of Montana-Missoula and Montana State University-Bozeman—are charter members in the Northern Tier Network Consortium, a collection of universities and government labs now building and operating a multi-10Gbps wave network from Seattle to Chicago (www.ntnc.org). HIEM has spent the last two years building out similar infrastructure in northwest Montana, with The University of Montana as an active partner. The MtpBAC project will use these emerging networks rather than build new duplicative networks, and thus focus on establishing and sustaining community based PCCs.

The goal of the MtpBAC—aligned with that of the PCC program—is to promote a more educated workforce. In this effort, the MtpBAC aligns with two projects supported by state ARRA funding: a Virtual Academy (AKA virtual high school) providing online high school equivalency coursework, and a Two Year Education and Training project focused on providing online training courses and introductory college coursework. In addition, the proposed project includes the development of other locally relevant material, including material focused on “Getting Started with Broadband,” “Access to Healthcare in Montana,” and “Access to Education and Training in Montana.”

The total cost of the proposed project is about \$3.7M. This will buy and/or leverage the following:

- Creation of seven PCCs in six communities;

- Acquisition of long term, sustainable, high-speed networking to each PCC at a low on-going cost;
- Development of online materials by the Virtual Academy and Two Year Education and Training projects, and;
- Development of locally relevant healthcare related materials.

Key to the long-term success of the project are the low on-going costs of the underlying networking and the major commitment made in other projects to the educational and healthcare linkages. With any PCC project, the long term barrier is “who pays on-going costs to sustain infrastructure and program?” By linking to other important projects, partners and funding, we think we have assured the long-term viability of the MtPBAC.