Minneapolis Public Schools ('MPS,' 'the district'), the third largest school district in Minnesota with an enrollment of 34,570 students, is seeking $14,385,117 in BTOP funding to launch an innovative, district wide Sustainable Adoption effort aimed at 7th - 12th graders and their families that will substantially increase broadband adoption among vulnerable populations and actively address the academic achievement gap between the district's low income students of color and their economically stable, white peers. Broadband adoption rates and school achievement rates follow similar trajectories along racial and socioeconomic measurements. Department of Commerce reports show that while overall broadband adoption has increased over the past two years, critical gaps remain, particularly with regard to income, age and race. In terms of income, there is a direct correlation between family earnings and broadband adoption, as families with incomes of less than $15,000 had the lowest rate of broadband adoption (29.9%) while families with incomes of more than $150,000 had the highest rate of broadband adoption (88.7%). Approximately 65% of middle and high school students in the district qualify for free or reduced lunch, meeting thresholds for low-income or poverty ratings. In terms of race, both white and Asian Americans led the way in broadband adoption, as 65.7% of whites and 67.3% of Asians reported having a home broadband connection in 2009. Hispanics had the lowest level of home broadband use in 2009, with only 39.7%. Both African-Americans (45.9%) and Native Americans (42.6%) also reported having relatively low rates of broadband adoption. Of the total student enrolment in the MPS system, African-Americans comprise 40% and Hispanics comprise 17% of the student body. Despite earnest efforts to correct achievement levels in students from vulnerable populations, a discrepancy along racial and socioeconomic lines that mirrors broadband adoption exists in the district. Students of color, particularly African-Americans, lag behind their white peers in overall basic skills assessments, math and reading. The majority of MPS' total student enrollment hails from vulnerable populations, including but not limited to students living in poverty (65%), racial/ethnic minorities (70%), disabled/Special Education (16%), homeless/highly mobile (6.4%), and English Language Learners (23%). In order to adequately train our future workforce they must learn by 'using the technology that professionals in various disciplines use. Professionals routinely use the web and tools such as wikis, blogs, and digital content for the research, collaboration, and communication demanded in their jobs. They gather data and analyze it using inquiry and visualization tools. They use graphical and 3D modeling tools for design. For students, using these real-world tools creates learning opportunities that allow them to grapple with real-world problems ' opportunities that prepare them to be more productive members of a globally competitive workforce.' [National Educational Technology Plan 2010] To address the shortfalls in broadband adoption and student achievement among vulnerable
populations, MPS will implement a system-wide shift in curricula to include widespread integration of broadband-based learning inside and outside the classroom setting. This will be accomplished by bringing 'the bottom up,' which is to say adequately equipping all students at the same level, effectively raising the students with the least broadband access and poorest achievement rates up to same playing field as their more affluent peers. In 2006, in partnership with USI Wireless, Minneapolis launched a City-wide wifi system, 'Wireless Minneapolis,' to bring broadband technology to its residents and businesses. The wireless network covers all 59 square miles of Minneapolis providing residents, businesses and visitors with wireless broadband access anywhere in the City. As part of its Community Benefits Agreement with the City, USI Wireless hosts the free Civic Garden web portal for access to community, city, county and state resources regardless of a user holding a paid subscription to the wireless network. The MPS portal page, including access to student's online classroom content, the Parent Portal, and many other free tools, is included in the Civic Garden. USI Wireless has agreed to provide MPS households with discounted full Internet subscriptions should they so choose to access those additional resources. MPS will leverage Wireless Minneapolis and the Civic Garden making it a key component to the district's broadband learning initiative. The district will design and deliver a highly effective broadband-based curricula, training 1,400 teachers in the pedagogical and technical aspects online teaching and leveraging of resources. Moving forward, everything relating to curriculum adoption will be included on the Civic Garden. Teachers will make use of online learning tools such as Moodles, wikis, tutorials and PowerPoint presentations. MPS will distribute broadband equipment to all 12,947 students in the 7th ' 12th grades in three phases beginning with Early Adopters who will shape best practices throughout the course of the grant period and beyond. Equipping students with laptops in a one-to-one ratio will allow the classroom learning experience to move beyond school walls. Students will have access to the Civic Garden portal via Wireless Minneapolis in virtually any location, pushing learning to the very boundaries of the city. In partnership with USI Wireless, MPS will provide additional broadband equipment for households needing antennas to receive an adequate wifi signal. Students and their parents will receive training on the use of broadband Internet and equipment prior to participation in the project. MPS wishes to include parents in this technology initiative wherever possible, in order to boost sustainable adoption rates in the broader community and increase parent involvement in their children's academic careers. Research has highlighted a strong correlation between parental involvement and student achievement. Under this proposal, MPS will train 27,294 students, teachers and parents in the use of broadband Internet and equipment. Through an efficient and widespread Awareness Campaign, MPS will reach out to at least 155,000 constituents to disseminate information about the Civic Garden, the MPS student and Parent Portals, and the BTOP funding initiative. Messaging efforts will make use of an already sophisticated system of communications within the district as well as traditional and culturally targeted television, radio and newspaper media outlets. The district will also make strategic use of broadband-based awareness methods, such as email distribution lists, the freely accessible online portals as well as social networking sites Facebook and Twitter. In a culmination of these efforts, MPS anticipates 25,000 new home subscribers through the grant period of three years. This project has a high sustainability factor, thanks to the constant influx of new students into the district each year. Further, participation on a minimal level is free of cost to families who would otherwise be unlikely to access broadband due to prohibitive costs, making this initiative accessible and sustainable for even the most vulnerable of populations. MPS is committed to
this broadband initiative and will take the steps necessary to ensure recurring costs are supported beyond the grant period, including adding technology referendums to annual City ballots. However, without a large, one-time infusion of BTOP funds to act as a catalyst for widespread sustainable adoption, this project will be unable to launch Minneapolis Public Schools and its students into 21st Century learning. This project will inject more than $18.9M into the American economy, create 26 full-time jobs for skilled adults and 18 paid internships for students from low-income households. Wherever possible, MPS will weave student learning experiences into the actual implementation of the project, leading to greater project efficiencies while maximizing high-tech skills attainment opportunities. The stage is set. The infrastructure for ubiquitous access to broadband is in place in Minneapolis. We have a team of dedicated teaching professionals eager to implement technology in their classrooms. MPS has a strong history of providing online coursework for students and innovating technology-based instruction. Our district-wide strategic technology plan funnels all of our technology integration efforts towards student achievement. The only piece missing is real-time access to the wealth of digital resources inclusive of all our students and their families.