EXECUTIVE SUMMARY ' Western Michigan Low-Income Housing WiFi Initiative A report from the U.S. Bureau of Labor Statistics noted, 'Michigan again recorded the highest unemployment rate among the states, 14.3 percent in January (2010.)' (Source: U.S. Bureau of Labor Statistics, March, 2010) The automobile industry, associated companies, and manufacturing in general have lost hundreds of thousands of jobs in Michigan over the past two years. A forecast by the University of Michigan offered little hope of improvement, predicting, 'A severe jobs crisis will continue to haunt Michigan as the state's unemployment rate tops 15 percent through the end of 2011'' (Source: Ann Arbor.com, University of Michigan, November 20, 2009) As expected, with significant unemployment, Michigan's poverty rate grew to 14.4 percent compared with the national poverty rate of 13.2 percent. Among U.S. states, Michigan's poverty level was 16th highest according to the U.S. Bureau of Labor Statistics. For Michigan's African Americans, the poverty level is just over 30 percent, and about 40 percent of Michigan's African American children live in poverty. (Source: Michigan League for Human Services, March, 2010) In fact, 69% of all children in Michigan live in low-income households (but not necessarily in poverty) where housing costs exceed 30 percent of the family's income. (Source: Kids Count, The Annie E. Casey Foundation, 2008) Employment and poverty levels have a direct impact on broadband adoption. This 'digital divide' is evidenced by two studies ' one by Social Science Research Council (SSRC) and the other by the FCC. An important finding of the SSRC's study was: 'Broadband access is increasingly a requirement of socio-economic inclusion, not an outcome of it' and residents of low-income communities know this.' (Source: Broadband Adoption in Low-Income Communities, Social Science Research Council, 2010) The FCC's 'Broadband Adoption and Use in America' report released in March, 2010 noted: '65 percent of adults are broadband adopters.' 52 percent of Americans in households with annual incomes of $50,000 or below have broadband at home, compared with 87 percent of those households with higher incomes. ' Among low-income Americans ' those whose annual household incomes fall below $20,000 ' broadband adoption stands at 40 percent. ' On average, Americans pay nearly $41 per month for broadband service' 36 percent of non-adopters cite cost as the main reason they do not have high-speed Internet at home. ' 22 percent of non-adopters cite factors pointing to lack of digital literacy as the main reason they are not online. The findings are clear ' the unemployment and poverty levels in Michigan are the highest or near the highest in the country. Residents of low-income housing have a lower broadband adoption rate than other elements of the population. Broadband access is an increasing requirement for socio-economic inclusion. Price is the number one reason given for not adopting broadband. Children and minority groups are uniquely impacted. This BTOP SBA Application proposes to change this for 7,278 families in 29 Western Michigan
low-income housing communities. This Application introduces a total broadband solution tailored for
low-income housing. The solution not only addresses the requirement for high-speed Internet access at
a price one-fourth the national average, but also provides three other fundamental programs designed
to meet the needs of disadvantaged individuals residing in the communities (housing commissions): 1. 
High-Speed Broadband ' Utilizing wireless, mesh-networked WiFi radios, the broadband service coverage
area will include the entire residential community, both inside and outside the building facilities. This
approach was chosen for WiFi's proven performance, high-speed data delivery, low-cost and ready
available receivers, and utilization of standards-based technology. Minimal speeds will be 1 Mbps down
and 256 Kbps up and pricing will be maintained for the first three years at $10 per month for each
subscriber. 2. Resident Training and Education ' Two highly-qualified trainers will hold quarterly training
and educational sessions at each of the 29 communities with almost 20,000 residents. The 227 sessions
consist of 750 hours of training over the three-year period and will be designed to assist users
understand how to better navigate the Internet, to provide tools and insights into understanding
terminology and nuances of the system, including search engines use and social networking sites, and to
address specific issues that might arise related to performance, applications, security, viruses, and the
like. Special attention will be given to maintaining kids' interests with emphasis on 'safe-use.' 3. Web
Portals ' Highly localized Web sites called 'Web Portals' will be developed for each of the 29 low-income
housing communities. The Portals will provide links to local job listings, local economic information, local
healthcare, childcare and family care information, local governmental services, local and national non-
profits, and other local and state public services. The Portals will also be used as a community 'bulletin
board' that can be used to post important community announcements and advertisements as needs
dictate. Furthermore, the Portal will provide automatic subscriber enrollment, allowing the Applicant to
specifically determine the number of subscribers at any given time and thereby measure, record, and
track real-time broadband adoption. 4. Laptop Check-out/Check-In Program ' Realizing that there could
be many families in the low-income housing communities that may not be able to afford personal
computers (PCs) either for themselves or their children, the Applicant proposes to make 921 laptops
available (one per eight housing units) similar to library books on a 'check-out/check-in basis. The
program will be managed by the housing commission management staff. In addition to providing
services for over 19,000 low-income housing residents, the services will also be available to public safety
officials, including EMT's, police, fire, and other first responders upon request. Other programs are also
under consideration, including additional discounts to veterans and the physically disabled. A major
objective for the current project is to obtain and sustain a 40% penetration rate (2,911 Units) within
three years and grow that level going forward. (The Applicant strongly believes that a much higher
adoption rate is possible and will aggressively pursue.) The total cost of the project is $3,346,287 with
30.1% of this amount matched by the Applicant through 'in-kind' services and a portion of the Program
Income. The total three-year cost for broadband access, plus the extensive educational training
programs, the 29 localized Web Portals, and the proposed Laptop Program is $1,150 per subscriber. The
computed Federal contribution is $804 per subscriber, or a total of $2,339,850. In order to ensure a
sustaining operation in a post-grant period, it may be necessary to increase monthly subscriber fees.
Current financial views based on the Applicant's experience indicate that a monthly fee of $12 with a
40% adoption rate will be sufficient; however, the Applicant fully intends for the adoption rate to far
exceed this minimum level. In business since 2002, the Applicant meets the definition of a
disadvantaged business by the Small Business Act and has an extensive track record providing WiFi services in the Western Michigan service area. During the past three years, the Applicant has completed over 25 similar WiFi projects for clients, including one involving 1,600 households for Michigan-based Kentland Corporation. The business is organizationally capable, having over 20 employees and $3.3 million dollars in revenue during an economically depressed CY2009. Net income was almost $600,000 during the same period. The business is a Microsoft Gold Certified Business Partner and a Cisco Premier Business Partner, among other citations. Applicant's employees hold the following certifications: 5 'MCSE; 3 'CCVP; 2 - CCNP; 1 - CISSP; 7 - CCNA; 4 - Net+; 3 - A+ Finally, this project would not be possible without the dedication of, and partnerships with, the 29 low-income housing commissions and their contribution in supporting this program. Representative letters and notes from ten of the partners are included as attachments. Other greatly appreciated support has been received from Michigan's two U.S. Senators (Senators Levin and Stabenow), four of Michigan's U.S. Representatives (Hoekstra, Ehlers, Upton and Rogers), three state representatives (Genetski, Garcia, and Amash), and president of the National Association of Housing Redevelopment Officials (NAHRO). The Applicant is very appreciative and looks forward to beginning this life-changing project.