

## Broadband USA Applications Database

**Applicant Name:** OneBroward, Inc.

**Project Title:** OneBroward -Digital Network Access (1B-DNA)

**Project Type:** Middle Mile

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### Executive Summary

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A) Opportunity OneBroward (1B-DNA) provides an innovative solution to the digital divide and the associated problems facing many underserved individuals living in America. The introduction of the Broadband Technology Opportunities Program (BTOP) by Congress in early 2009 was timely and relevant to OneBroward's vision. The work of the OneBroward Consortium however began more than two years before the introduction of the Congressional Stimulus legislation. Representatives from eight key community institutions including K-12, higher education, public safety, local government and healthcare were already concerned about the need to serve their entire community, especially those living in an "un-connected" world. As a result, in 2007 OneBroward was established as a connected community initiative seeking to leverage valuable assets to build an affordable network to provide connectivity and services to the underserved residents of Broward County. By linking anchor Consortium institutions, the OneBroward mission is to improve access to education, healthcare, public safety and government services and to accelerate economic development. Much work has already been done to realize these benefits, however the missing factor has been the required funding. With the economic downturn and stringent financial constraints facing the OneBroward Consortium partners, funding for this viable and necessary project is not available but for BTOP stimulus grant funds. 1B-DNA offers a "shovel-ready" plan to significantly impact Florida's leap into the broadband economy and supports the Recovery Act's core purposes by:

- Dramatically improving service to the underserved areas of Broward County
- Connecting OneBroward's partner organizations and community institutions to deliver faster, more fully connected services in order to serve vulnerable and unconnected residents
- Allowing the 6th largest K-12 School District to extend the learning day and offer students, parents and teachers 24/7 access to existing educational programs
- Providing the means for higher ed to share higher educational research and provide greater community access to the underserved
- Connecting local government including all of its service agencies with internal agencies, other community service organizations and residents
- Ensuring the major hospital systems serving the County will rapidly and securely transfer innovative medical imaging and detailed records
- Enabling the Sheriff's office and other public safety agencies to improve connections and reduce costs
- Facilitating improved public access to government, education and healthcare information and services
- Creating approximately 323 high quality telecommunications and construction related jobs.

B) Proposed Service Area The 1B-DNA plan focuses on connecting the four most underserved areas of the county, comprised of 515 census blocks and 32,560 residents. Broward County consists of 30 municipalities, covers a populated area of almost 500 square miles, and serves a total population of nearly two million people. This network plan will use innovative technology to cover the entire populated area of the County.

C) Number of Households & Businesses Consistent with the

NTIA definition of underserved, OneBroward's management team has confirmed four separate underserved areas which include 1268 businesses and 11,044 households. (Reference maps attached in response to Question 12), While other areas in the County also have low income and/or elderly populations that appear to meet the NTIA definition of underserved, OneBroward is only specifying the four largest underserved areas yet will serve the entire populated area of the County. While more current figures are not available, in 2000 there were 654,445 households and 411,403 businesses operating in Broward County, and 1,150 Community Disadvantaged Business Enterprise firms. As a county-wide network, 1B-DNA is designed to serve community anchor institutions ensuring all its citizens and businesses will benefit from the OneBroward initiative.

D) Number of Anchor Institutions 1B-DNA's design interconnects more than 400 sites of community anchor institutions, focusing first on locations that can provide service to the most users. OneBroward's Consortium includes Broward County Schools, Broward College, Florida Atlantic University, Nova Southeastern University, Broward County Government, Broward County Sheriff's Office, North Broward Hospital District and South Broward Hospital District. Other facilities may also connect to the network, including Public Libraries, other Medical facilities, the Health Department, Public Safety organizations (municipal police departments, sheriff, state troopers, fire department, emergency management), the Court System and Government offices, Community Service locations (water management, public works, economic development, workforce development human services, tax collector, elections supervisor), and Transportation Management (public roads, Florida Turnpike, Tri-Rail commuter rail service, Ft. Lauderdale-Hollywood International Airport, Port Everglades, and the County's bus system.)

E) Proposed Services and Applications 1B-DNA will deliver services ranging from basic broadband to huge transport capacity. It will deliver service to four of the most underserved areas with speeds of 1 Gbps and higher. Three of the four underserved areas are located directly on the proposed fiber route. 1B-DNA will operate a point to multipoint radio system that will deliver up to 10 Mbps to any location within the populated area of the county. This system will target small nonprofit operations and other community anchor institutions. 1B-DNA will provide wireless broadband in the four underserved areas, and intends to resell commercial mobile wireless broadband services once they are deployed.

F) Non-Discrimination 1B-DNA will operate as an open network with no discrimination between the types of content that may be passed or the relative priority of traffic on the fiber network. Its policies will comply with the March 9, 2009 letter from the Open Internet Coalition to the National Telecommunications and Information Administration (NTIA) and adhere to the principles of nondiscrimination and interconnection outlined in the FCC's Internet Policy Statement.

G) Network Type The proposed network architecture is a multi-layer broadband data transport network connecting consortium members to each other and to the community. It proposes to utilize 49.5 miles of existing single-mode fiber, add 36.5 miles of new fiber to existing conduit, and construct 28 miles of new fiber. The resulting 114-mile fiber backbone will have an overlapping ring topology, connecting 32 nodes and two hubs. Anchor institutions and last mile carriers will connect through the 32 fiber nodes. 1B-DNA will also construct a fixed wireless network to serve Consortium members and anchor institutions not directly connected via fiber. It will utilize existing vertical assets, both towers and buildings, for this phase of construction, A combination of Point-to-Point and Point-to-Multipoint technology will be deployed at 20 locations expanding 1B-DNA throughout the populated areas of the County. This wireless network will allow more than 400 additional schools, libraries, healthcare locations, government sites and nonprofit organizations to

connect to the OneBroward Broadband Network. OneBroward also plans to construct wireless sites using WiMAX broadband technology to serve four additional underserved locations (Please reference the Network sections of this Application for additional details. H) Qualifications OneBroward was officially organized in 2007 as a collaborative nonprofit corporation and has a strong foundation in place for this initiative. OneBroward and its consultants have: 1. executed a formal partnership agreement with the Consortium members with a governance model and operating strategy, 2. prepared a comprehensive list of capital assets and identified relevant broadband capacity needs, 3. conducted extensive network and business planning sessions, 4. issued a RFI and a RFP and analyzed the resulting vendor proposals, and 5. cultivated business relationships that can support planning, construction and operations. I) Infrastructure Cost Project costs are estimated at \$24.094 million with a grant request of \$16.638 million. The Consortium will be able to leverage existing assets to keep capital investment costs down while constructing the broadband network. Consortium partners are prepared to grant \$7.336 million in asset rights to 1B-DNA if funding is granted. The replacement cost of just the existing fiber and tower assets would be many times the in-kind value attributed for this application. J) Subscriber Projections 1B-DNA plans to serve over 12,500 middle mile and end user customers directly by year-end 2014. Community anchor institutions and partners like the County Government, the Broward Sheriff's Office and the County's Public Schools will become 1B-DNA subscribers therefore all 1.8 million Broward County citizens will benefit directly or indirectly from their services. Last mile service providers can also utilize 1B-DNA in their own networks and are forecasted to serve more than 100,000 additional subscribers. K) Number of Jobs Created The NTIA's approval of this initiative will create more than 150 design and construction jobs in early 2010 that will continue through 2011. Another 50 jobs are expected to be created by manufacturers and suppliers indirectly supporting this network. The long term operating employee count for the 1B-DNA system and the contractors who will support it are forecasted at 31, bringing the total new job opportunity to more than 231. Economists would estimate an additional 92 "induced" jobs, resulting in a total of more than 323 new positions.