

A. Executive Summary

Executive Summary of Overall Proposal:

a. UMEZ encompasses the neighborhoods of Central Harlem, East Harlem, Washington Heights and Inwood in New York City. However, a great many of the citizens of Upper Manhattan are currently unable to take advantage of the digital economy uptown because they do not have access to the new broadband technologies and services that are driving this transformation. Recent studies have shown that lack of access to broadband technologies and services threaten to exacerbate existing inequities in these communities resulting in the creation of a broadband digital divide.

b. Silicon Harlem is a broadband technology initiative with the goal of providing lower, lower-middle, and middle-income residents of the Upper Manhattan Empowerment Zone with affordable broadband by the year 2012. Silicon Harlem will provide education, awareness, training, access, equipment, and support to community anchor institutions, support job creation, and address the needs of vulnerable populations.

Silicon Harlem will deploy an advanced, community-based wireless broadband internetwork that will blanket the Upper Manhattan Empowerment Zone from 116th Street to 168th Street. The Silicon Harlem Network will develop and run ten telework centers strategically located in community anchor institutions. Each telework center will use the Silicon Harlem portal to give local residents or small business owners a place where, for no charge, they will be able to do the following:

1. Learn how to use a computer and the Internet
2. Gain online job training
3. Engage in tele-employment
4. Access digital services and products

Silicon Harlem will be under the direction of Columbia University's Center for Technology, Innovation and Community Engagement (CTICE), with support from the Abyssinian Development Corporation (ADC) and the Upper Manhattan Empowerment Zone (UMEZ). Working with ADC and UMEZ, CTICE will organize a consortium to deploy affordable high speed broadband throughout the Upper Manhattan Empowerment Zone in order to bridge the broadband gap and stimulate job creation and economic development.

Silicon Harlem has five goals:

1. Creating jobs
2. Closing the broadband gap
3. Encouraging demand for broadband
4. Spreading high-speed access to schools, universities, libraries, community

centers, job training centers and public safety personnel
5. Jumpstarting the Green Economy in Harlem

Timeline of Implementation

Stage Zero- Preliminary - Consortium Organization (October to December 2009)

Stage One - Infrastructure Deployment (January to June 2010)

Stage Two - Creating the Telework Centers (July to December 2010)

Stage Three - Operationalizing Silicon Harlem (January to June 2011)

Stage Four - Providing Distance Education and Tele-Health Services
(July to December 2011)

Stage Five- Sustainability Period (January 2012- January 2015)

c. The Upper Manhattan Empowerment Zone encompasses the neighborhoods of Central Harlem, East Harlem, Washington Heights, and Inwood. The 2000 census indicates that the approximately 336,576 people who reside in Upper Manhattan are predominately African-American (48.1%) and Hispanic (37.4%). The median household income in Upper Manhattan is \$24,569, compared with the City's overall average of \$34,434, and 34.3% of Upper Manhattan residents have incomes below the poverty line. The Furman Center reports that in 2008, before the current economic collapse, average unemployment in Upper Manhattan was 10.87%, compared with 7.1% in New York City as a whole.

Although educational performance is increasing throughout New York City public schools, in the Districts that make up Upper Manhattan, the percentage of students performing at grade level in reading and math consistently lags behind other parts of the City. Furthermore, more than 35% of Upper Manhattan adults (25 years old and over) do not have high school diplomas, compared with 27.7% of all New Yorkers.

Studies show that in communities of color such as Upper Manhattan, broadband penetration historically skews towards those who have more education and higher incomes. However, a 2009 Pew Internet and American Life study found that —African Americans experienced their second consecutive year of broadband adoption growth that was below average. In 2009, 46% of African Americans had broadband at home. This compares with 43% in 2008. In 2007, 40% of African Americans had broadband at home. This disparity in access to broadband technologies and services threatens to exacerbate existing inequities in these communities.

d. From 1994 until 2004, Bruce Lincoln the Co-PI and Project Director of Silicon Harlem was the Senior Educational Technologist and Manager of Community Outreach at the Institute for Learning Technologies at Teachers College, Columbia University where he [REDACTED] managed a ten-year cycle of projects which includes the Harlem Environmental Access Project (1994-96), The Eiffel Project (1996-2001), The Harlem Renaissance 2001 Project

(1999-2001), The SmartForce E-Learning Digital Scholarship Fund (2000-2002), The New York Online Neighborhood Educational Network Project (2000-2003), and which culminated in the New York City Community Technology Center Bank Project (2001-2004). From 1998 through 2001, under the Clinton Administration, Bruce served as a member of the PITAC, the President's Information Technology Advisory Committee and as an advisor to the White House.

e. Silicon Harlem through its telework programs will create 5,000 new jobs.

f. Silicon Harlem is an \$18.79 million initiative with a five-year timeline, including a two-year deployment and implementation period followed by a three year sustainability period. We have already secured commitments to cover approximately 32 percent of the project's total cost.