**PROBLEM STATEMENT:** Recent media and academic articles report rural areas within the Southern Black Belt regions of Alabama are big losers as the South restructures its economy away from its manufacturing base. The Connecting Alabama Project (June 2009) states broadband is widely seen as a necessity to reverse economic decline and population loss in the many struggling rural communities hit hardest by the recession. Broadband is also recognized as the most cost-effective means of meeting state's critical education and health care challenges. Failure to address these challenges statewide puts at risk Alabama's past progress in positioning itself for a bright competitive future in agriculture, biotechnology, aeronautics, alternative energy, tourism and other key sectors. **PROGRAM SOLUTION -** Trillion Communications ("Trillion"), as lead applicant, in partnership with A-Plus Community Solutions, Inc. ("APLUSCSI"), and A2DInc., all minority corporations, and the South Central Alabama Broadband Commission (SBABC) proposes to provide access, and/or connect, anchor institutions to a robust, comprehensive community broadband infrastructure to stimulate the creation and retention of jobs and bolster development. SCABC comprises three Historically Black Colleges and Universities (HBCUs), a two-year technical college, medical facilities, municipalities/faith-based/non-profits, and a Federally-recognized tribe. The project envisions a Middle Mile CCI based on APLUSCSI's Converged Broadband Infrastructure (CBI') Platform Design, which is fiber optic with wireless overlay, that will deliver service-provider-independent connectivity to community anchor institutions and critical facilities, and Last Mile connections to selected commercial and residential households in eight economically distressed counties ("Cluster") in Alabama: Lowndes, Dallas, Wilcox, Escambia, Conecuh, Butler, Crenshaw, and Macon. This CBI' solution has been developed over a 5-year period, and is based on 10 plus years experience with small and large scale projects for multiple corporations, cities and counties. It is scalable, cost-efficient, sustainable and beneficial to all institutions and citizens in the specified Cluster communities to be served. **PROJECT ACTIONS -** The project will implement a next-generation broadband network that assures state-of-art level access with a FTTP Wireless Canopy to connect directly to anchor institutions and critical facilities within the Cluster, including the Poarch Creek Indian Reservation. The network will also connect to residences and businesses in the funded service areas within Lowndes, Escambia, Dallas and Macon Counties. The project encompasses delivery of a FTTP connection with wireless canopy to 30 Medical Organizations, 102 Schools, 191 Government Entities, 8 Emergency Response Groups, 16 Public Safety Organizations, 10 Public Computer Centers, 2 Libraries, 65 Community Support Agencies, and 6 Public Housing Facilities. It will connect directly to 15,635 households, businesses and non-critical institutions within the 8-County Cluster. In addition, the 8-County SCABC Cluster is considered 100% rural. No city, town, or incorporated area within each county
has a population greater than 20K residents. The SCABC Cluster includes Lowndes, Dallas, Butler, Crenshaw, Wilcox, Conecuh, Escambia and Macon County, AL. APPLICANT

QUALIFICATIONS/PARTNERSHIPS - As strategic partners, the Trillion Team will leverage its substantial technical and governmental compliance management experience in projects of similar or larger size and scope. Trillion, as lead applicant, will serve as Managing Partner and Fiduciary of BTOP grant funds. A-PLUS Community Solutions, Inc. will lead Engineering and Construction Asset Management. A2D, Inc. will provide Construction Program Management and oversight of the eCommunity Sustainable Adoption Program. Trillion will oversee an inclusive partnership structure of stakeholders, citizens and governments within the Cluster. To ensure project sustainability, the Team has formed partnerships with and garnered collective support from in-community-based organizations across the Cluster and from national organizations. The SCABC founding members and subgrantees, and Lowndes County, AL have executed a Public/Private Partnership ("PPP") with A-PLUS Community Solutions, Inc. to implement its Converged Broadband Infrastructure ("CBI") throughout Lowndes County, and neighboring communities. Lowndes County has garnered the collective support of neighboring cities, counties and institutions, and the SBABC has garnered the support of the Poarch Band of Creek Indian Nation. Each Sub-Award Municipal Partner will receive the CCI assets within their respective municipal right-of-way to insure that intra-connection to the CBI is always on and remains free to the local community. The PPP vetted and preselected Intelligent Community Enterprise, Inc. ("ICE") to provide all necessary operations and support investments to sustain all facilities within the partnership. This partnership structure achieves project viability by sharing the risk and higher balance sheets through combined assets, experiences and revenues. METHODOLOGY - The total CCI Middle Mile infrastructure cost is $87,002,293. We secured the necessary private-based funding to cover 30% of the total cost of the project. The Trillion Team is requesting $59,939,385 which equates to 70% of the Capital Cost of Construction. The proposed CCI will deliver direct connectivity to 15,635 FTTP sites and will pass 59,761 doors whereas competing wireless ISP's can connect and compete to deliver last mile connectivity via wireless to the remaining households and businesses. The SCABC Team will leverage future private/public funding sources to deliver FTTP connectivity to an additional 24,576 FTTP sites while expanding the middle mile network to neighboring counties in FL, GA and MS. The proposed CCI offers a sustainable community outreach program, called "eCommunity", which ensures all connected to the CCI will have no-cost access to community-support services. The SCABC Team will establish (4) Network Operations Centers called eCommunity Technology Centers (eCTC) all donated in-kind by Tuskegee University, Alabama State University, the Lowndes County Commission, and the Poarch Band of Creek Indians (still finalizing agreements). See "Key Partners" document for more details. SUMMARY OF JOBS CREATED/SAVED -The SCABC Team will generate nearly (1208) jobs (direct/indirect/induced ) during the 2 1/2 year construction period. In addition, the SCABC team estimates that the proposed CCI will contribute to a 2% net reduction in the local unemployment rate due to the ancillary community jobs created by the entry of foreign service providers, direct content providers, and non-profit community service providers. The proposed CCI will help local economic development agencies attract high-tech industry which require superior broadband services. As a result, the overall socio-economic health of the community will improve due to the proposed CCI, SBA and PCC Programs. NETWORK ARCHITECTURE - The SCABC CCI will provide a fully-integrated, terrestrial and mobile Converged Broadband Infrastructure that operates using the IPv6 protocol. Use of this protocol as a standard will allow greater
flexibility for managing bandwidth utilization, prioritization and quality of service across the infrastructure. It is anticipated that most residential and commercial users will initially subscribe to 2x or 3x DSL speeds to the internet and will have no-cost access to 10Mbs-100Mbs via intranet to interconnect with local institutions and facilities. In addition, it is anticipated that most anchor institutions and critical facilities will subscribe to speeds anywhere from 10Mbs to the Internet and 100Mbs-1Gbps via intranet. Regardless of the speed requirements needed, the backbone capacity of the infrastructure is established at synchronous 10Gbs. As adoption reaches 50%, the mobile design will be enhanced to maintain the 45Mbps per user capacity or increase capacity to 100Mbs. Converged Broadband Infrastructure' has the capacity to aggregate the services of multiple local and remote services providers over a single fiber platform to each consumer within the community. As a result, consumers will be permitted to subscribe to any service provider who is physically connected to the CBI' community gateway (TELETOLL') and/or any remote service provider who delivers Over-the-Top (OTT) services via a high-speed connection. This includes, but is not limited to, up to (5) ISP's, (5) Phone Carriers, and (5) Video Providers as well as unlimited VOIP Phone providers & App Service providers.