

Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Table of Contents

- A. General Application Information
- B. Executive Summary, Project Purpose, and Benefits
- C. Partners
- **D.** Congressional Districts
- E. Service Area Details
- F. Community Anchor Summary
- G. Project Benefits
- H. Technology
- I. Project Budget
- J. Historical Financials
- K. Project Readiness
- L. Environmental Questionnaire
- M. Uploads



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

A. General Application Information

Applicant Information	
Name and Federal ID for Applicant	
DUNS Number	153589288
CCR # (CAGE)	5G9A3
Legal Business Name	TROY CABLEVISION, INC.
Point of Contact (POC)	DEBBIE TATUM 3347700938 Ext. dftatum@troycable.net
Alternate POC	VICKI MCPHERSON 3347700937 Ext. vfm@troycable.net
Electronic Business POC	VICKI MCPHERSON 3345663310 Ext. 367 vfm@troycable.net
Alternate Electronic Business POC	DEBBIE TATUM 3345663310 Ext. 365 dftatum@troycable.net

Name and Contact Information of Person to be Contacted on Matters Involving this Application:		
Prefix	Mrs.	
First Name	Vicki	
Middle Name	F.	
Last Name	McPherson	
Suffix		
Telephone Number	334-770-0937	



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Fax Number	334-770-3300
Email	vfm@troycable.net
Title	Chairwoman, Chief Financial Officer

Additional Contact Information of Person to be Contacted on Matters Involving this Application:

Project Role	Name	Phone	Email
Secondary Point of Contact	Mr. Jimmy R, Copeland	3346725005	jcopeland@troyc able.net

Environmental Point of Contact

Prefix: Mrs.

Name: McPherson, Vicki

Suffix:

Telephone Number: 3347700937

Title: Chairwoman, Chief Financial Officer

Prefix: Mr.

Name: Copeland, Jimmy

Suffix:

Telephone Number: 3346725005 Title: Director of Special Projects

Organization Classification	
Type of Organization	For-profit Entity
Is the organization a small business?	Yes
Does the organization meet the definition of a socially and economically disadvantaged	Yes



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

The state of the s	
small business concern?	

Authorized Organizational Representative		
AOR Name	MCPHERSON, VICKI	
Result	Applicant Authorized	

Project Title and Project Description

Project Title: Southeast Alabama SmartBand - Rural Broadband for Economic Development and Energy Management

Project Description: Southeast Alabama SmartBand is a public-private broadband project leveraging technology and community support to raise the standard of living in poor, underserved southeast Alabama. A 789 mile fiber optic network will provide Internet access at Gigabit speeds, reliability and affordability to meet the area's economic development, education, healthcare, public safety and energy needs.

CCI Priority Checklist

The following items were selected from the CCI Priority Checklist:

- 1. This project will deploy Middle Mile broadband infrastructure to community anchor institutions.
- 2. The project will deploy Middle Mile broadband infrastructure and has incorporated a public-private partnership among government, non-profit and for-profits entities, and other key community stakeholders.
- 3. This project will deploy Middle Mile broadband infrastructure in economically distressed areas.
- 4. This project will deploy Middle Mile broadband infrastructure to community colleges.
- 5. This project will deploy Middle Mile broadband infrastructure to public safety entities.
- 6. This project will deploy Middle Mile broadband infrastructure and either includes a Last Mile infrastructure component in unserved or underserved areas or has received commitments from one or more Last Mile broadband service providers to utilize the Middle Mile components. Any Last Mile components in rural areas do not exceed 20% of the total eligible costs of the project.
- 7. This project will deploy Middle Mile broadband infrastructure and the applicant has proposed to contribute 30 percent or more in non-federal cost match.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Comprehensive Community Infrastructure Components

The following items were selected from the Comprehensive Community Infrastructure Components:

Middle Mile

BIP Applicants

Have you also applied to BIP for funding in the sample proposed funded service area?

> No

If Yes, please provide the project title and Easygrants ID number:

Title of Joint BIP Application:

Easygrants ID:

Other Applications

Is this application being submitted in coordination with any other application being submitted during this round of funding?

> Yes

Easygrants ID	Project Title	
6697	New Horizons: Enterprise Public Computer Center	
6680	The Troy University Mobile Broadband Adoption Laboratory	

If YES, please explain any synergies and/or dependencies between this project and any other applications.

This SmartBand application is a stand-alone BTOP CCI application without dependency on any other application or project. However, the SmartBand network supports and complements two Round 2 applications: one Public Computing Center (PCC) and one Sustainable Broadband Adoption (SBA).



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

New Horizons: Enterprise Public Computing Center

The PCC application was submitted by the City of Enterprise in Coffee County and Enterprise State Community College. New Horizons: Enterprise Public Computer Center (EasyGrants ID 6697) seeks funding for a 120-seat computer center in SmartBand's southeast Alabama service area. Using interactive 3-D support for eLearning and simulation and imaging exercises, the center will provide students, faculty, military personnel, families and local businesses with cutting-edge resources for training and job skills development. SmartBand will offer affordable and scalable network connections that will meet the current and future needs of this proposed \$910,982 computing center.

The Troy University Mobile Broadband Adoption Laboratory

The SBA application submitted by Troy University: The Troy University Mobile Broadband Adoption Laboratory (EasyGrants ID 6680) plans a mobile awareness and outreach program throughout the State of Alabama that includes hands-on assistance and training on the use of broadband for job creation and education. Troy University emphasizes the importance of local leadership to use broadband as a vehicle for education and economic development. Troy University and its mobile broadband laboratory will collaborate with strategic institutions including community centers, educational facilities, libraries and public housing in SmartBand's proposed service area.

Individual Background Screening

Is the Applicant exempt from the Department of Commerce requirements regarding individual background screening in connection with any award resulting from this Application?

No, Applicant is subject to these requirements

If the answer to the above question is "No," please identify each key individual associated with the Applicant who would be required to complete Form CD-346, "Applicant for Funding Assistance," in connection with any award resulting from this Application:

Name	Title	Employer
William H. Freeman	President	Troy Cablevision, Inc.
Vicki F.	Chairman, Chief Financial Officer	Troy Cablevision, Inc.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

McPherson		
Jimmy R. Copeland	Project Manager	Troy Cablevision, Inc.

B. Executive Summary, Project Purpose and Benefits

Essay Question

Executive Summary of the proposed project:

The Opportunity

Crenshaw, Pike, Coffee and Dale Counties in southeast Alabama are known for their country character and legacy of overcoming adversity. Fifteen rural communities, dotting the 2,521 square mile landscape are working to achieve growth and compete in the global economy. They strive to establish a sense of community and place amidst a backdrop of economic, education, healthcare, safety and energy challenges. Broadband adoption has all but been out of reach in these rural, underserved communities.

The Solution

Southeast Alabama SmartBand (SmartBand) recognized the communities' needs and established a partnership of private, non-profit and public leaders who could make a difference in these communities. SmartBand represents talent: Troy Cablevision, Inc. (TCV), a privately-held, majority woman-owned SDB broadband service provider, Southeast Alabama Electric Cooperative (SAEC), a non-profit electric cooperative, the Cities of Enterprise, Ozark and Troy, Troy University and the area's community colleges. Together, SmartBand plans to build and operate a fiber optic ring connecting the rural communities to an innovative, sustainable, forward-looking Middle Mile broadband network. TCV will build, own and operate the network. SAEC will drive marketing and SmartGrid energy applications. The public sector will advise and stimulate economic development initiatives. This partnership leverages TCV's 25 year track record operating advanced cable and telecom networks in the region, SAEC's 73-year history serving its electric coop members, and the local governments' commitment to public service. This partnership began between TCV and SAEC for SmartGrid applications and leverages TCV's experience with economic developers, schools, colleges and healthcare to serve



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

the public's interest in creating jobs for the current and future workforce. The SmartBand business model fashions itself after "smart grid" and "smart growth" expectations of innovation, regional view, sustainable, modern and forward-looking policies to establish "Smart [broad]Band".

Demographics

SmartBand's four county network covers 136,106 people, 53,809 households, 3,681 businesses and 673 critical community institutions and public safety entities. The community institutions include 76 schools (K-12), 19 libraries, 222 medical and healthcare providers; 81 public safety entities, 8 community college campuses, 36 public housing facilities, Troy University, 116 community support organizations, and 114 other government facilities.

The network will offer broadband transport, redundancy, and diverse routing/business continuity for strategic community applications and wholesale services for Last Mile providers. Strategic institutions and applications include Alabama's Connecting Classrooms, Educators and Students Statewide (ACCESS), healthcare including mental health initiatives led by Southwest Alabama Mental Health's USDA's "Joining Hands", Organized Community Action Program (OCAP) HeadStart and public housing, New Horizons Enterprise Public Computer Center, Troy University's worldwide Distance Learning, wireless hot spots and interoperability for public safety officials.

Services and Applications

SmartBand will offer fiber optic access, transport, and backhaul wholesale services. Access services range in capacity from 1 Mbps to 1 Gbps (increments of 1, 5, 10, 20, 50, 100, 250, 500 and 1Gbps). Additional Internet, voice and video processing equipment enables direct connections to community anchor institutions and businesses, as well as interconnections with future Last Mile service providers. Transport services to Montgomery and Dothan, AL enables Tier 2 interconnection and transport handoff to Atlanta enables Tier 1 interconnection. SmartBand will offer broadband backhaul to existing and new Last Mile providers in the four county region.

Network Openness

SmartBand is an open network that will feature approximately 21 interconnection points on its Middle Mile ring. Last Mile providers will be encouraged to avail themselves of the SmartBand network's high capacity, reasonable interconnect rates and non-discriminatory practices. TCV currently interconnects with several Last Mile providers in the region, including two independent telephone companies that are RUS borrowers. TCV will serve as the agent of the interconnection access, taking responsibility for displaying non-discriminatory and network neutraltiy policies and managing the relationships. Several Last Mile providers have expressed



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

interest in interconnecting with SmartBand, paving the way for competition, consumer options and economic growth in the region.

Broadband System Design / Technology

The proposed SmartBand fiber optic ring uses a scalable, standards-based open architecture optical system. There are three elements to the SmartBand network: direct connections to anchor institutions and businesses, Middle Mile transport and backhaul. The network will upgrade TCV's 1 Gbps Middle Mile ring to 10 Gbps connecting the master headend to nine remote hubs in Brundidge, Ozark, Midland City, Daleville, Enterprise 1, Enterpise 2, Elba, Brantley and Luverne. A multiservice access platform at each hub will support Metro Ethernet, Active Ethernet and SONET/TDM connections. Internet, video and voice servers will support Last Mile service providers.

New DWDM equipment at each site will initially support two OC-48 wavelengths and two 10 Gbps Ethernet wavelengths and will easily scale to much higher capacity. SmartBand will construct 10Gbps fiber links from TCV's master headend north to Montgomery and from Daleville and Ozark hub sites south to Dothan.

Public Safety backhaul will be achieved with a MetroEthernet connection at 1 Gbps. Oualifications

Troy Cablevision and its partners are qualified and prepared, with substantial experience building and operating telecom networks. Partner Southeast Alabama Electric Cooperative brings more than a century of electrical utility management experience needed for the network's SmartGrid application. Public-sector partners, including the Cities of Ozark, Troy and Enterprise, Troy University and three community college systems, are engaged in economic development initiatives on a daily basis. A SmartBand Advisory Board for partner-members has already begun collaborating efforts in the planning of the network

Infrastructure Cost

The overall infrastructure cost of the SmartBand network is \$41,592,056. Smartband and its partners are making cash and in-kind match contributions equal to 30% of the total project cost.

Subscriber Projections

SmartBand projects annual subscriber growth beginning with 7 anchor tenants and 37 businesses at the end of year 1. By the end of the funding period in year 3 the forecast is 147 anchors and 397 businesses. In year 8 the plan is 323 anchors and 966 businesses.

Number of Jobs Estimated



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Based on the Council of Economic Advisors, Estimates of Job Creation From the American Recovery and Reinvestment Act of 2009, estimates for job-years created indicated that approximately \$92,000 of spending yield one job-year, 64% represent direct and indirect effects and 36% are induced effects. Accordingly, SmartBand has an overall cost of \$41,592,056 therefore it is estimated the SmartBand project will create 452 jobs of which 289 are direct/indirect jobs and 163 induced jobs.

Project purpose:

The Southeast Alabama SmartBand project proposed in this Broadband Technology Opportunities Program CCI grant application aligns with four statutory purposes outlined by the American Recovery and Reinvestment Act of 2009:

- 1) Provides improved access to broadband service to consumers residing in underserved areas of the region. SmartBand's Middle Mile route traverses an underserved, economically distressed region and leverages Last Mile providers serving residential consumers.
- 2) Provides broadband education, awareness, training, access, equipment and support to schools, libraries, medical and health care providers, community colleges and other institutions of higher learning and other community support organizations, including organizations that provide outreach, access, equipment and support services to facilitate greater use of broadband services by vulnerable populations. SmartBand offers broadband access to 76 schools (K-12), 19 libraries, 222 medical and healthcare providers, 81 public safety entities, 8 community colleges and Troy University, 36 public housing facilities, 116 community support organizations and 114 government facilities. Leading initiatives include:
- ACCESS Alabama Connecting Classrooms, Educators and Students Statewide
- South Alabama Electric Cooperative
- Organized Community Action Program
- "Joining Hands" USDA Telemedicine Project
- 3) Improves access to, and use of, broadband service by public safety agencies.

 SmartBand offers broadband access and a fiber backhaul to 81 public safety facilities. Many of these facilities currently have no connectivity or have access only to slow and unreliable dialup service.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

4) Stimulates demand for broadband, economic growth and job creation. Economic Development is at the root of the SmartBand project. The SmartBand model has at its foundation collaborative relationships with economic development, workforce development and job creation professionals in the cities of Ozark, Enterprise and Troy, in the South Alabama Electric Cooperative and at Enterprise State Community College and Troy University.

The Problem SmartBand Addresses

At the core of the Southeast Alabama SmartBand project is the basic tenet that the people of this four county slice of rural America deserve a fighting chance at a better standard of living, better education and training opportunities, more job choices and livable wages, and higher aspirations.

Economically, the residents of Crenshaw, Pike, Coffee and Dale Counties are on the ropes. They struggle to make ends meet with an average per capita income of \$15,950 --26% less than their counterparts across the rest of the nation. Two of the four counties Crenshaw and Dale, are classified as Economically Distressed. U.S. Census Bureau figures indicate more than 20% of individuals and almost 17% of families - nearly twice the national average - in the four county area live in poverty. More than half of the female head of household families (57%) and nearly half of African American families (45%) in Pike County live in poverty. There are 36 public housing campuses serving the area.

While economic development specialists point to advanced broadband as a great "equalizer," a means for overcoming the Digital Divide, broadband has been out of reach for residents and businesses located outside of the municipalities in the region. Even the more densely populated cities and communities offer coaxial and copper-based technologies that will never support meaningful economic development efforts. Between the affordability and availability issues, alone, less than 40% of the region's households subscribe to broadband.

The SmartBand Solution

Despite their economic struggles, these residents are by no means down for the count. The four-county region has assets, including a plethora of assistance programs. It has strong leadership and committed champions. These leaders and champions have a plan to create a better future here by leveraging existing assets with new federal, private and other monies to deploy the Southeast Alabama SmartBand regional network.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

The SmartBand infrastructure project is a 789 mile fiber optic Middle Mile network that will offer connectivity, Middle Mile transport and backhaul from a core network in Troy, Pike County. The network will pass approximately 53,809 households, 3,681 businesses and 673 strategic anchor institutions, including 76 schools (K-12), 8 community colleges and one public university, 19 libraries, 222 medical and healthcare providers, 81 public safety entities, 114 government facilities, 36 public housing campuses and 116 community support organizations. Ultimately, SmartBand has the potential to benefit a population of 136,106 people throughout a 2,521 square-mile area.

Healthcare, Education and Children

SmartBand was conceived as an economic development initiative, based on the premise that infrastructure is critical to attracting and supporting industry. But technology infrastructure isn't the only thing businesses look for when considering where to start up, expand or relocate. They also consider the depth of services available, particularly in regard to healthcare delivery, education and children. The SmartBand network supports such initiatives through strategic community partnerships that provide connectivity and enable increased efficiencies and improved services.

For example, SmartBand will enable local communities to manage the electronic health records and patient medical images that come with participating in a "Joining Hands" USDA telemedicine project. SmartBand will enable Head Start to offer distance learning, healthcare and other services, supporting school readiness for low income children. SmartBand will enable local schools to participate in ACCESS, a state Board of Education program connecting classrooms, educators and students.

Recovery Act and Other Governmental Collaboration:

SmartBand is collaborating with four government initiatives to provide innovative, sustainable solutions for education, healthcare and energy management in southeastern Alabama:

SmartBand connectivity will enable the Southeast Alabama Electric Cooperative (SAEC) to implement an Automated Metering Information (AMI) system necessary to implement a SmartGrid program of optimized energy management for 17,005 electricity consumers in Crenshaw, Pike and Coffee Counties. While this SmartGrid program is not federally-funded, it clearly supports federal energy independence goals and initiatives.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

SmartBand and the U.S. Government Organized Community Action Program (OCAP) Head Start program in Troy will collaborate to promote public awareness and education initiatives related to HUD's Low Income Energy Assistance program (LIHEAP), the Department of Energy Weatherization program and the Residential energy assistance Challenge Program (REACH). The program's 2008 budget was \$8.8 million.

SmartBand will support a U.S. Department of Health and Human Services Head Start program to offer distance learning, healthcare and other services, and fostering school readiness for low income children. The program's 2008 budget was \$5.5 million.

SmartBand will enable healthcare providers in local communities to manage the electronic health records and patient medical images that support participation in a \$600,000 "Joining Hands" telemedicine project. Joining Hands is funded through a joint effort of USDA and the Universal Service Funding Telemedicine Pilot Project, along with state and other funding. The project enhances the ability of participating health care providers to utilize telemedicine strategies to improve patient care.

Fit with BTOP CCI Priorities:

Southeast Alabama SmartBand meets or exceeds all seven BTOP CCI priorities.

Priority 1. SmartBand reaches deep into the underserved areas of its four county region to identify and embrace anchor institutions needing upgraded technology to better serve their students, patients, citizens, clients and patrons. The network will deploy broadband infrastructure to 673 community anchor institutions in the service area. These include 76 schools (K-12), 19 libraries, 222 medical and healthcare providers, 81 public safety entities, 8 community colleges and one public university, 36 public housing facilities, 116 community support organizations, and 114 other government facilities. Even in cases where these anchor institutions have had some level of broadband service, usually an aged copper based system, SmartBand will enable them to advance far beyond their own internal capabilities by interconnecting with other agencies and institutions, improving exponentially the service they provide.

Priority 2. SmartBand's Middle Mile broadband infrastructure incorporates private, public, non-profit and government partners to advance economic development in southeast Alabama. The partnerships forged, which include local, regional, state and federal levels, have grown out of need and demand for access to more advanced broadband. In addition to the formal public-



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

private partnerships driving the SmartBand project, mayors from the Cities of Enterprise, Ozark and Troy and leadership from among the region's eight community college campuses and other stakeholders have defined the direction of the project through its advisory board. Some of the projects that will be made possible by SmartBand, such as the South Alabama Electric Cooperative's SmartGrid program, support government initiatives even though they are not actually government funded.

Priority 3. SmartBand will deploy Middle Mile broadband infrastructure with the intent to bolster growth in economically distressed areas. According to the U. S. Census (Year 2000), the SmartBand service area had an averaged per capita income of \$15,950 -- 74% of the national per capita income of \$21,587. Two of the four counties in the SmartBand service area, Crenshaw and Dale, are classified as economically distressed. Economic development professionals in the four county area are poised to promote the availability of reliable, affordable high speed Internet, an asset critical to many companies interested in relocation and expansion. SmartBand will also facilitate growth of existing small businesses in the region and support entrepreneurialism.

Priority 4. SmartBand will deploy Middle Mile broadband infrastructure to Lurleen B. Wallace Community College, Wallace Community College and Enterprise State Community College. Between them, these three post-secondary institutions have eight full-service campuses in the four county region. Altogether these community colleges support a combined student enrollment of 9,013. Between these community colleges and Troy University, the region is prepared to offer workforce training and development services to respond quickly to anticipated business and industry growth and ensuing job creation.

Priority 5. Public safety agencies in the four county service area are arguably the entities most severely impacted by the substandard level of technology available. Citizens are placed in harm's way on a daily basis because of insufficient communication with and between those sworn to serve and protect. SmartBand will deploy Middle Mile broadband infrastructure to 81 public safety entities in the region, establishing - for the first time - connectivity for the City of Ozark police department and fire stations and for the Dale County jail, sheriff's department and volunteer fire departments. SmartBand infrastructure will reach volunteer fire departments, the first responder public safety entities serving the most rural areas, in areas of the region where slow and unreliable dial-up connections are currently the only options. Connectivity for public safety facilities in the more densely populated City of Troy will also be upgraded.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Priority 6. SmartBand's Middle Mile broadband infrastructure includes a Last Mile infrastructure component in underserved areas. The applicant, Troy Cablevision, has existing interconnection agreements already in place with multiple Last Mile service providers. In fact, Troy Cablevision leads the service area in offering connectivity in underserved Last Mile areas. Likewise, SmartBand will offer open interconnection to additional Last Mile providers in underserved areas and has three letters from Last Mile providers who wish to utilize Middle Mile components.

Priority 7. SmartBand will deploy Middle Mile broadband infrastructure as proposed in this application for a total project cost of \$41,592,056. The applicant and its partners will contribute a non-Federal cost match valued at 30% of the total eligible costs of the project.

Is the applicant seeking a waiver of the Buy American provision pursuant to section x.Q of the NOFA?

> No

Is the applicant deliquent on any federal debt?

> No

If Yes, justification for deliquency:

Are you seeking a waiver of any requirement set forth in the NOFA that is not mandated by statute or applicable law?

> No

Is the applicant a current recipient of a grant or loan from RUS?

> No

C. Partners

Are you partnering with any other key institutions, organizations, or other entities for this project?

> Yes

If YES, key partners are listed below:

Project Role: Third party in-kind contributor

Name: Freeman, William



Submitted Date : 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Phone: 3345663310

Email: dfreeman@troycable.net

Address 1: 1006 South Brundidge Street

Address 2: Post Office Box 1228

Address 3: City: Troy State: Alabama Zip Code: 36081

Organization: Troy Cablevision, Inc. Organization Type: For-profit Entity

Small business: Yes

Socially and economically disadvantaged small business concern: Yes

Project Role: Third party in-kind contributor

Name: Davis, Max Phone: 3345662060

Email: maxd@southaec.com Address 1: Post Office Box 449

Address 2: Address 3: City: Troy State: Alabama Zip Code: 36081-0449

Organization: South Alabama Electric Cooperative Organization Type: Cooperative or Mutual

Small business: No

Socially and economically disadvantaged small business concern: No

Project Role: Third party in-kind contributor

Name: Hicks, Steve Phone: 3343471211

Email: cityclerk@entercomp.com Address 1: 501 South Main Street Address 2: Post Office Box 311000

Address 3: City: Enterprise State: Alabama Zip Code: 36331

Organization: City of Enterprise

Organization Type: City or Township Government

Small business: No

Socially and economically disadvantaged small business concern: No



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Project Role: Third party in-kind contributor

Name: Minton, Larry Phone: 3347745393

Email: mrobinson@ozarkalabama.us Address 1: 275 N. Union Avenue Address 2: Post Office Box 1987

Address 3: City: Ozark State: Alabama Zip Code: 36361

Organization: City of Ozark

Organization Type: City or Township Government

Small business: No

Socially and economically disadvantaged small business concern: No

Project Role: Third party in-kind contributor

Name: Starling, Alton Phone: 3345660177

Email: astarling@troycable.net Address 1: Post Office Box 549

Address 2: Address 3: City: Troy State: Alabama Zip Code: 36081

Organization: City of Troy

Organization Type: City or Township Government

Small business: No

Socially and economically disadvantaged small business concern: No

Project Role: Third party in-kind contributor

Name: Livingston, Kim Phone: 3345661712 Email: kiml@troycable.net

Address 1: 5074 N Three Notch Street Address 2: Post Office Box 908

Address 3: City: Troy State: Alabama Zip Code: 36081

Organization: Organized Community Action Program



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Organization Type: Non-profit Corporation

Small business: No

Socially and economically disadvantaged small business concern: No

Project Role: Third party in-kind contributor

Name: Edwards, Judson Phone: 3346703524 Email: jcedwards@troy.edu

Address 1: 338 Wallace Hall

Address 2: Address 3: City: Troy State: Alabama Zip Code: 36082

Organization: Troy University

Organization Type: State or State Agency

Small business: No

Socially and economically disadvantaged small business concern: No

Description of the involvement of the partners listed above in the project.

It is often said the whole is greater than the sum of its parts, and that is indeed the case for the Southeast Alabama SmartBand project. The strength of its partnerships is among the project's greatest assets. SmartBand is the result of a melding of private, public, government and non-profit community interests to improve the standard of living and create opportunity in a four county area. Much more than a construction project; it is a means of meeting the region's needs for economic development, education, healthcare, public safety and energy - all toward the goal of a more prosperous future for this underserved area.

Troy Cablevision, Inc.

Troy Cablevision, Inc. (TCV) provided the vision and initial leadership for the project and is the applicant for BTOP grant funding for Southeast Alabama SmartBand. The Troy, Alabama-based telecommunications company is a majority woman-owned and operated SDB (socially and economically disadvantaged small business concern) in operation for more than 25 years. TCV will design, build and operate the network and will be responsible for Network Operations Center management and troubleshooting. Experienced with interconnection issues through its ongoing relationships with Last Mile and transport providers, TCV will manage SmartBand's



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

interconnect agreements. Marketing, customer care, accounting and billing will also be TCV functions.

In addition to the skills and experience TCV brings to the project, TCV will contribute 194 miles of fiber, equipment and other assets and \$3,432,997 in cash. In return, Troy Cablevision expects that all budgeted, eligible, allocable and reasonable costs for these services incurred during the grant period will be paid for by grant funds.

South Alabama Electric Cooperative

South Alabama Electric Cooperative (SAEC), a non-profit 501(c)12 member-owned corporation, provides electric services in seven southeast Alabama counties, including Crenshaw, Pike, Coffee and Dale in SmartBand's service area. The SAEC will install SmartGrid technology - specifically, an Automated Metering Infrastructure - in the region in support of SmartBand's energy efficiency goals. Among other benefits, this new technology will enable some 17,005 residents and businesses to better manage their energy usage and costs. TCV will extend the needed broadband service to the SAEC's

13 substations, and will realize considerable cost savings by running the fiber optic cable over SAEC's poles instead of burying it underground. In addition to SmartGrid technology and the use of its utility poles, SAEC will contribute substation facility space, installation and testing of communications equipment, use of property, rack space and backup power, and marketing services, all valued at \$92,248.

Organized Community Action Program

The Organized Community Action Program (OCAP) serves vulnerable populations in seven counties, including the four in SmartBand's service area. OCAP manages and provides training and public awareness building services for the Weatherization Program, Residential Energy Assistance Challenge Option Program and Head Start. These services complement the work of the Southeast Alabama Electric Cooperative and support SmartBand's energy efficiency goals. In exchange for these contributions, OCAP will receive an anchor institution discount.

Cities of Enterprise, Ozark, and Troy

The Cities of Enterprise, Ozark and Troy each have economic development professionals keenly aware of the value SmartBand will bring to the region. They will promote SmartBand on an ongoing basis, encouraging existing businesses to explore new technology applications and recruiting new businesses eager to locate in an area with high-speed, reliable and affordable



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

broadband. Each city will contribute engineering design services and will, in consideration of their partnerships, receive an anchor institution discount on their broadband service.

Troy University is a leader in distance learning with a 20+ year worldwide program. The university is proposing a broadband sustainability adoption program to BTOP (EasyGrants #6680) for broadband training and awareness building aimed at rural consumers, business people, farmers, job-seekers and others. They will leverage their experience in creating local leaders who can promote broadband for economic development and jobs creation.

Community Involvement in SmartBand

TCV has created an advisory board with each of the four counties in the SmartBand service area. These advisory boards will ensure each community served by the network has a voice in the products and services offered by the federally-enabled Southeast Alabama SmartBand network.

D. Congressional Districts

Applicant Headquarters

Alabama

Project Service States

Alabama

Project Service Areas

Alabama - 2

Will any portion of your proposed project serve federally recognized tribal entities?

> No

Indicate each federally recognized tribal entity your proposed project will serve.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Have you consulted with each of the federally recognized tribal entities identified above?

> No

E. Service Area Details

Is the applicant seeking a waiver for providing less than 100% coverage of a service area?

> No

Project Details

Service Area Type: Middle Mile

Service Area Name: Southeast Alabama Smartband

Rural Classification of the Last Mile Service Area: Rural

Service Status of the Last Mile Service Area: Underserved

If Service Status is "Underserved" please select at least one applicable option from this list.

The rate of broadband subscribership for the proposed funded service area is 40% of households or less.

Total Square Miles in Service Area: 2,521

Total Population in Proposed Service Area: 136,106
Total Number of Households in Service Area: 53,809
Total Number of Businesses in Service Area: 3,681

Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service

Area: 673 Unemployment Rate in the Service Area: 9

Median Income in the Service Area: 29,317

Estimated Percentage of Households with Access to Broadband: 65 Estimated Percentage of Households Subscribing to Broadband: 38



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

F. Community Anchor Summary

Community Anchor Summa	ry
Schools (k-12)	76
Libraries	19
Medical and Healthcare Providers	222
Public Safety Entities	81
Community Colleges	8
Public Housing	36
Other Institutions of Higher Education	1
Other Community Support Organization	116
Other Government Facilities	114
TOTAL COMMUNITY ANCHOR INSTITUTIONS	673
Historically Black colleges and Universities	0
Tribal Colleges and Universities	0
Alaska Native Serving Institutions	О
Hispanic Serving Institutions	О
Native Hawaiian Serving Institutions	0
TOTAL MINORITY SERVING INSTITUTIONS	0



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

G. Project Benefits

Demographics

Jobs	
How many direct jobs-years will be created from this project?	185
How many indirect jobs will be created from this project?	104
How many jobs will be induced from this project?	163

Methodology used to estimate jobs:

Southeast Alabama SmartBand intends to stimulate the local economy in the four county region of Crenshaw, Pike, Coffee and Dale Counties, by creating 452 job-years through direct spending, direct hiring, investment, indirect spending secondary to hiring, indirect spending secondary to purchasing and many other factors direct, indirect and induced as described in the U.S. Government generated document titled Estimates of Job Creation From the American Recovery and Reinvestment Act of 2009 (Executive Office of The President, May 2009). The simple rule for estimating job years created by government spending, according to the US Council of Economic Advisors would be: for \$92,000 of government spending, 1 job-year is created. Of that job year, 64% of the job-years represent direct and indirect effects and 36% of the job-years are induced effects. These calculations result in 452 total jobs consisting of 185 direct job years, 104 indirect jobs and 163 induced job years.

The types of jobs created or retrained will consist of sales, operational management, billing support, network management, provisioning and customer care.

Project Impact:

Overview

Southeast Alabama SmartBand (SmartBand), impacts 136,106 people living in 53,809 households in Crenshaw, Pike, Coffee and Dale counties and working in 3,681 businesses. Serving this underserved area are 76 K-12 Schools with 27,000 students, 19 public libraries, 222 medical and healthcare providers, 81 Public Safety entities, 8 community college campuses with 9,013 students, Troy University, 36 Public Housing campuses, 116 Community Support Organizations and 114 Government facilities for a total of 673 Community Anchor Institutions. Federal grant assistance to the public-private SmartBand initiative would enable an open Gigabit fiber optic network, unique to the area, for the benefit of economic development, education, healthcare, public safety, energy management and job creation.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

SmartBand will comprehensively meet all the broadband needs of the communities in the proposed four county service area with a coordinated strategy based on an open Middle Mile fiber optic network, local community leadership and project partners who have the experience and passion to serve their communities.

Architecture. SmartBand connects the two largest regional hubs, Montgomery and Dothan, with Atlanta – with about 100 miles distance between each—using existing and new fiber to reach wholesale backhaul providers. Eliminating the bottleneck currently at the hubs, SmartBand's open network will encourage competition and improve prices. The network serves as a versatile, high performance (10G – 40G) platform, accommodating multiple access technologies (IP, Active Ethernet, SONET) for all user requirements.

Leadership and Partners. Partners who will support and promote SmartBand include: the Cities of Ozark, Enterprise and Troy; South Alabama Electric Cooperative; Organized Community Action Program; Opp Utilities Board; Troy University; and Enterprise State Community College. Their participation, leadership and influence on the SmartBand Advisory Board will be a major factor in promoting broadband adoption.

Community Needs

The SmartBand team researched and interviewed professionals and leaders from government, medicine, business, education, community service and economic development to understand their needs for broadband prior to developing the business plan. The SmartBand network design evolved from listening and responding to these voices. SmartBand will be the first redundant, open access fiber broadband Middle Mile network in the region. This new broadband Super Highway will change the economy in this southeastern area of Alabama.

As one economic developer in the region pointed out, "the availability of broadband service helps the industries directly, and it helps recruit employees who have needed talents and abilities. ..."

Education -- The Alabama Super Computer Authority will provide high speed connections from more than 35 local Boards of Education, high schools and community colleges to a regional hub at Troy University. SmartBand will strengthen and expand this relationship to all 76 schools (K-12) and 8 community college campuses. Teachers can use the latest on-line lessons, educational portals, distance learning, video streaming and other tools to prepare students to enter a new Internet-enabled workforce.

SmartBand will provide connections to the Department of Health and Human Services' Head Start locations, where distance learning, healthcare and other services support school readiness



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

for low income children. The Organized Community Action Program will provide new educational opportunities for children, health training for parents and staff, improved access to Policy Council meetings for parents and the acquisition of mandated AA and BS degrees by Head Start classroom teachers.

Healthcare -- Support of the Southwest Alabama Mental Health/MR Board's USDA "Joining Hands" Telemedicine Project will be further supported by SmartBand This project joins the resources of four rural Alabama Community Mental Health Agencies with 18 locations and a child health center to utilize telemedicine strategies to improve patient care. Joining Hands provides for the needs of approximately 12,000 patients in the most impoverished and medically underserved counties in Alabama and the nation. Regional participants are four community mental health agencies, 33 patient service locations and a child health center. Broadband is essential to managing the electronic health records and patient medical images.

Public Safety – Emergency services in rural areas of the four county region are provided by volunteer fire departments. Connectivity is often provided by dial-up connectivity and in some cases there is no connectivity at all. SmartBand will enable broadband connections from 10M to 1G to these critical public safety responders. These connections will provide region-wide emergency notification, coordination and cooperation in responding to emergencies and on-line training and certification of personnel.

Support Organizations -- The US Government Organized Community Action Program receives Stimulus funds for low income residents in Crenshaw, Dale and Pike counties. The program will assist with public awareness and education initiatives using their established HUD "HOME" project Low Income Energy Assistance Program "LIHEAP", Department of Energy, "Weatherization" Program, Residential Energy Assistance Challenge Option Program "REACH".

Troy University – A BTOP Round 2 Applicant, The Troy University Mobile Broadband Laboratory (EasyGrant # 6680) will provide training and awareness of broadband for economic development and job creation. Special attention will be spent on developing local leadership for sustainability.

The City of Enterprise in Coffee County and Enterprise State Community College – Another BTOP Round 2 Applicant, New Horizon: Enterprise Public Computing Center (EasyGrant #6697), will offer a state-of-the- art Library for 3-D eLearning, simulation and imaging exercises for job preparedness and skills enhancement.

City of Ozark -- has established the model of a consolidated fiber-based network for connecting its 138 anchor institutions with a Wide Area Network (WAN). This project includes libraries, medical and healthcare providers, community support organizations, government facilities,



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

community shelters, a Sheriff's Department and a jail, while also providing public safety entities with its first public hot spots.

City of Troy -- anticipates connectivity of their hospital and fiber expansions to water wells for remote monitoring.

Businesses – Businesses of all sizes will avail themselves of the full range of broadband access, transport and backhaul products for communicating with out-of-state headquarters facilities, conducting market research, performing competitive analyses, achieving supply chain efficiencies, creating Web presence, employing eCommerce and much more.

Residents – SmartBand's Middle Mile network will connect to 36 public housing projects directly. Southeast Alabama Electric Cooperative will invest over to offer SmartGrid energy management to its 17,005 customers using its own automated monitoring devices enabled by SmartBand's broadband network.

SmartBand is an open network, and Last Mile providers will be encouraged to leverage the high capacity Middle Mile network to serve residents. Troy Cablevision is itself, a Last Mile provider, who will leverage its experience in providing video, data and voice services. At least two other Last Mile providers have indicated their immediate interest to leverage the SmartBand's network.

Network Services

SmartBand offers access, transport and backhaul services. Unique features compared with the incumbent providers:

- a. Flat-rate pricing. There is no distance meter or penalty.
- b. Single provider of Tier 1 peering (Atlanta) and Tier 2 peering (Montgomery and Dothan). This increases performance, reduces latency and is cost effective
- c. Fully redundant fiber-based offer. Robust and resilient.
- d. Flexible supports multiple access technologies (IP, Active Ethernet, SONET)
- e. Scalable currently scales to 40G, will migrate with standards

Wholesale Services

SmartBand has 21 interconnection points. SmartBand invites Last Mile providers to interconnect on its open network with full privileges of network neutrality, regardless of the type of network traffic. TCV has a history of interconnecting with local service providers and has already had requests from Last Mile providers to interconnect on SmartBand.

SmartBand mitigates against a "field of dreams" (build it and they will come) by organizing a public-private partnership with roots in the local community, a commitment to leadership and an experienced team of support stakeholders – institutional and business to harness broadband for economic development and job creation.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Vulnerable Populations:

The young and the old are considered vulnerable populations in the SmartBand service area, as nearly one in every six adults over the age of 65 and one in every three children under the age of 18 lives in poverty. Several SmartBand partnerships will provide technology that can help community's better meet the needs of these special groups. For example, the network will pass scores of K-12 schools, libraries, medical and healthcare providers and public housing campuses. SmartBand will improve response times for dozens of public safety entities. And project partnerships will support Head Start services for low-income children, classroom connectivity initiatives, mental health telemedicine projects and even energy saving programs that will reduce high electric bills. South Central Alabama Development Commission serves as the Area Agency on Aging, providing services specifically for this vulnerable population. As a strong supporter of SmartBand, they will encourage and facilitate the older population to use broadband. Each of these programs has the capacity to have a positive impact on these vulnerable populations.

Level of Need:

Overview

SmartBand's proposed service area, Crenshaw, Pike, Coffee and Dale Counties, extends over 2,521 squares miles with sporadic islands of broadband surrounded by vast expanses of underserved population. According to maps available from Connecting Alabama, "the region in which the SmartBand service area sits has the highest percentage of area that is virtually unserved by broadband services of any region in the state." The four county area has only a 38% subscription rate. Of the four counties, Crenshaw and Pike also have the lowest per capital income, \$15,950 which is 74% of the US poverty level.

W. Frank Thompson, Jr, CEcD, Executive Director, Enterprise Coffee Geneva Economic Development Corporation, said, "We recently interviewed industries in our service area as part of Alabama Governor Bob Riley's Existing Industries Initiative. Several of our industries confirmed the need for better access to broadband service and expressed to us how this lack of service in rural areas of Alabama impacts their ability to conduct business."

Limited availability, lack of functionality, cost-prohibitive prices (especially for the area's lower income levels) and lack of innovation from incumbent providers all contribute to a stagnated broadband market in the proposed service area. Frustration is apparent. The four counties' businesses, strategic institutions and residents are poised for growth, yet stunted in their ability to access the broadband services they need to be competitive in business, education, healthcare, public safety and energy management.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Competitive Landscape

Currently, five Last Mile service providers offer broadband services in the proposed service area: AT&T, TDS Telecom, CenturyTel, Charter Communications Inc., and Time Warner Inc. The telephone and cable companies each enjoy their own unique geographical footprint resulting in a situation where the service providers are protected from competition and avoid the market forces that stimulate innovation and competitive pricing. It is this very situation that stunts business growth and economic development, preempting end user choices. Three of the service providers offer broadband services in the densely populated locations: CenturyTel provides DSL in Ozark, Enterprise, Daleville, Luverne, Brantley, Midland City, Brundidge and Elba. Charter Communications offers cable broadband in Ozark, Elba, Brundidge and Troy. AT&T provides DSL broadband in Troy. TDS Telecom offers DSL in Goshen. Time Warner offers cable modem service in Daleville, Enterprise, New Brockton and Newton. All these services rely on antiquated, copper based technologies, using aged twisted pair or coaxial systems. These incumbents are limited in their ability to scale to accommodate increasing capacity or multiple service needs. Incidentally, dark fiber is non-existent in the four proposed counties. Tyson Howard, Executive Director for South Central Alabama Development Commission said, "As we work with our member governments, access to quality broadband service is a frequent complaint in their efforts to recruit businesses and industries and to provide quality educational and healthcare services." In contrast to the existing service providers, the SmartBand network is a standards-based open architecture optical transport design using Dense Wavelength Division Multiplexing (DWDM) for flexibility and with initial scalability to 40G. Implementation of the SmartBand project would provide the broadband services necessary to attract business, support local services and develop a competitive playing field among service providers.

Comparable Services / Support

There are three service considerations in the service area: access, wholesale transport and backhaul for peering. These services ride on legacy copper or coax networks using DSL or T1 architectures, which have limited capacity, scalability and flexibility – the very features needed by businesses for a innovation and growth.

Incumbent Telcos and cable providers offer DSL in geographically constrained areas near their central offices or head ends in areas supported by a critical mass of population. High demand businesses and strategic institutions rely on the T1 as the most common networking technology for Wide Area Networking (WAN). Market intelligence indicates that T1's are generally priced at \$700 - \$900 per T1 (that is, \$466 - \$600 per M) in the area, with prices dependant on mileage



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

factors. Installations generally take 60-120 days from the date of contract with the local incumbents, and installations are rarely completed by the scheduled dates. By contrast, SmartBand's price, somewhat comparable to a T1, is flat-rate and seven times the capacity and offers a cost savings of \$540 per Mb. SmartBand's access offer of 10 Mbps is \$600, which is equivalent to \$60 per Mb. This Tier 1 connection to Telix in Atlanta will be fundamental for reducing the per Megabit pricing to well below the proposed pricing model. Troy Cablevision generally is able to activate a dedicated fiber customer in less than two weeks. Today, there is a single transport option in the service area. One of the largest incumbents offers transport via an IP-only connection. These connections have a limited capacity and increase the cost of wholesale Internet bandwidth by 20-30 times what is available in a major metropolitan area. Installation charges range from \$3,000-\$5,000 and can be negotiated with a term contract greater than 2 years. This bottleneck makes economical Internet access unobtainable and slows adoption rates. Customers become frustrated by the poor throughput and business innovation stalls.

One of SmartBand's prospective Last Mile providers, who needs transport to the Tier 2 hub in Montgomery and then on to the Tier 1 interconnection hub in Atlanta, said "We can save \$20,000 a month to Montgomery in transport right away with the SmartBand network!" The reduced expense means this Last Mile provider can pass along more competitive pricing to end users and stimulate business growth and job creation.

Proposed Network Efficiency

SmartBand proposes a fiber optic, fully redundant ring using a scalable, standards-based open architecture. SmartBand bridges between the economic hubs of Atlanta, Montgomery, Dothan, Enterprise, Fort Rucker, Ozark and Troy, providing the only fully redundant network in the area with the capacity to meet the demands and growth potential of the area. Fiber is a highly reliable and secure medium – safe from climate conditions, electrical conduction and unwelcome intruders. The Dense Wavelength Division Multiplexing (DWDM) technology provides for scalable bandwidth capabilities. DWDM transport begins with 10G access platform and is designed to scale to 40G. Following standards ratification, the DWDM platform will scale to 100G. The access platform is modular, so it transparently carries multiple media types such as Metro Ethernet, Active Ethernet and SONET/TDM services. Field upgradeable expansions of wavelength and bandwidth ensure growth for service providers and stakeholders. Finally, the connections to Telix in Atlanta, diverse fiber routes and DWDM optical switching will bring a level of bandwidth never before available to this service area. These connections are critical to bringing low cost high bandwidth connectivity for anchor and business uses.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

SmartBand's service offerings and customer care policies are affordable, competitive and designed with the needs of the fast-paced end user in mind. SmartBand's advanced architecture supports rapid installation in days rather than weeks. All transport treats users equally with flat-rate monthly recovering revenue pricing, regardless of the distance or time of day.

Existing network constraints

Local economic developers say broadband is necessary infrastructure for recruiting businesses and encouraging talented workers to move to rural communities, especially when they have previously enjoyed the benefits of metropolitan broadband. But prospective businesses are not alone in their needs for broadband. Among the existing businesses in the four county area, there are many success stories that SmartBand can replicate—and many opportunities to promote more successes with a reliable, redundant, scalable, flexible and affordable fiber optic ring.

The City of Ozark will be a success story. The City needs a fiber infrastructure to connect its anchor institutions with a Wide Area Network (WAN). The WAN will service libraries, medical and healthcare providers, public safety entities, a Sheriff's Department and jail, community support organizations and other government facilities. From among all the incumbent providers in the area, only Troy Cablevision could offer the fiber-based consolidation solution, performance and cost-effective pricing. Both the company and the city value this partnership. Troy Cablevision invited the City of Ozark to serve on the SmartBand Advisory Board and plans to replicate this model throughout the four counties.

Emergency service providers in rural areas, particularly firefighters, are most often volunteer organizations that are generally underfunded and reliant upon less than state-of-the-art facilities and equipment. Due to the time necessary to activate a volunteer response team, it is imperative that all other delays be decreased to the maximum extent possible. Slow network service for location information is one of those delays. The Firefighters Association understands the proposed SmartBand network will offer an interconnection to the proposed Public Safety wireless mesh located in Ozark, AL. The Public Safety wireless mesh will have a guaranteed service level for officials and will be completely private. Volunteer firefighters will no longer wait on slow downloads of images. They will be able to move rapidly to save lives. SanBuck Insurance Company typifies many business owners in southeast Alabama. Over the past thirty years, SanBuck has grown to two locations, one in Pike and one in Coffee County Customers are their most valuable asset, serving them with the utmost in customer service is paramount. When pursuing a seamless connection between the two offices, AT&T installed a T-1 data line that was "expensive, complicated and never met the demands of the insurance



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

business." SanBuck has since removed the T-1, seeking a more scalable, flexible solution that delivers the customer service infrastructure he needs to grow. He understands SmartBand's fiber optic network is the technology solution that will afford him "the upper hand in a competitive landscape".

Southeast Alabama Electric Cooperative wants to innovate its business by offering SmartGrid technology to its 17,005 subscribers. As clearly stated by Max Davis, SAEC's General Manager, "The proposed Alabama SmartBand project is not the only option available for the SAEC Smart Grid data transfer; it is, however, by far, the most effective and reliable option. Not only does the fiber over the power lines provide effective data transfer, it will do so with minimal interference from climatic conditions and minimal electrical conduction associated with power substations. ... The SAEC Smart Grid system, however, will not work without the transfer of data from the substations to the SAEC's headquarters in Troy. Troy Cable has the capacity to effectively provide data transfer and management of the network through the proposed Southeast Alabama SmartBand project. With these factors in mind, the SAEC believes that the Alabama SmartBand project is the essential missing component to the deployment of the SAEC Smart Grid initiative." In summary, SmartBand is not the only broadband option, but it is the only broadband fiber optic solution for the pent up demand that provides Gigabit speed, reliability and affordability to help meet the region's economic development, education, healthcare, public safety and energy needs.

H. Technology

Technology Type

Indicate the technology that will be used to deliver last mile services. The following items were selected:

Wireline - Fiber-optic Cable

Other

Technology Questions

Methodology for Area Status:

Best practices, as highlighted in Round 2 Grant Guidance, were used to determine whether service areas are classified as "unserved" or "underserved" for purposes of this application. Two separate and independent sources were used:



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

- 1) Maps provided by Alabama Broadband Initiative (www.connectingalabama.gov), an NTIA-funded, state website designed to identify and fill gaps in the state's broadband access, along with follow-up review and discussion with personnel. (See uploaded maps in 18.18 Supplemental Information)
- 2) Inside Information, Inc., a telephone survey company routinely used and trusted by SmartBand partner Southeast Alabama Electric Cooperative. A database of 17,005 utility consumers from the four county SmartBand service area was identified and an interviewer polled consumers about the availability and use of internet, voice and video services. The interviewer asked about type of service subscribed, whether the service was available and cost range for subscribed services. Contact information Inside Information, Inc., 4855 South Clay Court, Springfield, MO 65810, 417.823.9997, www.inside-info.com

Results

Both sources confirmed a broadband availability rate of 65% and a broadband subscription rate of 38%. The findings were consistent and confirmed the four-county proposed service area is underserved according to the NOFA definition, "(iii) the rate of terrestrial broadband subscribership for the Last Mile or Middle Mile Service Area is 40 percent of households or less."

Description of Network Openness:

In addition to the principles in FCC 05-151, Troy Cablevision (TCV) agrees to offer Middle Mile interconnection where technically feasible and within current or reasonably anticipated capacity limitations, at reasonable rates and terms to be negotiated with requesting parties. This will include both the ability to connect to the public Internet and physical interconnection for the exchange of traffic. TCV agrees to disclose proposed interconnection, nondiscrimination, and network management practices as noted herein. TCV agrees to display the interconnection policies in a prominent location on TCV's website, www.troycable.net, and to provide timely notice to customers of changes to these policies.

TCV agrees to adhere to the principles contained in the FCC's Internet Policy Statement FCC 05-151, adopted August 5, 2005. Facilitated by an intelligent and remotely accessible Fiber to the Premise network, TCV also agrees not to favor any lawful Internet applications and content over others, and to display any network management policies in a prominent location on the TCV website and to provide notice to customers of changes to these policies. If awarded funds,



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

TCV agrees to describe any business practices or technical mechanisms TCV might employ, other than standard best efforts Internet delivery, to allocate capacity; differentiate among applications, providers, or sources; and manage illegal or harmful content; connect to the public Internet directly or indirectly, such that the Southeast Alabama SmartBand Project is not an entirely private closed network, and offer interconnection where technically feasible and within current or reasonably anticipated capacity limitations, at reasonable rates and terms to be negotiated with requesting parties.

System Design:

The proposed SmartBand fiber optic ring uses a scalable, standards-based, open architecture optical transport system. The network core will be located in Troy, AL with northbound and southbound fiber routes terminating into two primary Internet Points of Presence. The north and south connections will be essential conduits to a major Internet access point for high capacity Internet bandwidth and will enable transport and last-mile provider access to this isolated region of southeast Alabama. The north and south routes will create a physically diverse path for mitigating risks associated with physical cuts and equipment failure. A reliable and fault tolerant infrastructure will be the essence of promoting economic development in industries where 99.999% reliability is crucial for sustainability. From the core of the network in Troy creating a loop traversing south Alabama cities and bridging communities, the backbone will consist of 194 miles of existing fiber optic cabling and 595 miles of fiber optical infrastructure to be built.

Dense Wavelength Division Multiplexing (DWDM) technology is widely accepted as the most efficient open technology for providing bandwidth capacities. The DWDM platform will promote openness and bring a level of scalability expected to meet tomorrow's technological requirements. The proposed DWDM design continues in this tradition – initially designed for 40G per wavelength, transport transparency, service level flexibility (2.5G – 40G) and robust operations, administration and maintenance. The SmartBand system provides an effective platform for the current and future growth needs of the proposed service area. The system design has provision protection at the wavelength (L0) and sub-wavelength (L1) levels. Field upgradeable expansions of wavelength and bandwidth capacities ensure growth for service providers' and stakeholders' IP, video, storage and/or SONET applications. This ensures the SmartBand system will provide a highly reliable and robust platform.

The transport system scales 2G - 10G client services into 2 - OTU2 DWDM line side wavelengths. The frame structure adheres to the standard ITU G.709 OTN technology ensures



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

the proposed platform provides a flexible transport mechanism that is 100% transparent to the individual services it carries. This transparent transport mechanism enables the flexible accommodation of a variety of services from IP to SONET. The SmartBand system design facilitates an open network interconnect policy meeting both service provider and stakeholder needs.

Initially, a 10G access backbone will be connected to the DWDM transport network utilizing 5% of the available lambdas or light frequency. This access platform will utilize a modular architecture allowing for various media types such as Metro Ethernet, Active Ethernet and SONET/TDM Services. This architecture and modular approach has the economical benefit of a pay-as-you-go cost model. Layer three or IP intelligence will be delivered into the network by two high capacity Internet routers using the BGP protocols for route redundancy on the local and public Internet. The routers will be configured in a high-availability fail-over cluster and physically separated to maintain continuity in case of failure or natural disaster. Coupled together with the physically diverse fiber routes and the optical switching capabilities of the DWDM platform, high levels of availability can be achieved through a self-healing architecture, boasting sub 50ms fail-over, future capacity and interconnection flexibility.

To enable access to the Middle Mile network, wireless mesh routers will be placed at strategic locations to provide wireless connectivity to public safety entities and other community support organizations. The wireless Point of Interconnection's will allow connectivity between remote sites and backhaul to the headquarters of the public safety entity.

Initially, through a public-private partnership with the City of Opp, Utilities Board, a municipal energy and communication provider located along the route will be enabled to provide digital video services and faster, more affordable Internet bandwidth to meet the needs of local citizens. Further west, a neighboring Last Mile provider, T V Cable Company of Andalusia, Inc., will be enabled to provide enhanced services to its customers wanting faster broadband connectivity. Southeast Alabama Electric Cooperative, a regional energy provider, will utilize the network to connect its substations together to begin deployment of a SmartGrid. SmartGrid will provide consumers with vital information for making wiser energy consumption choices with the goal being more efficient use of energy. TCV will provide Last Mile services to customers across this platform, normally an economic strain to provide.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

It is the goal of the SmartBand network to provide a feature rich, flexible architecture enabling interconnection and service delivery over many media types. This will promote ease of use and enable cost effective product lines to fit key stakeholders' and customers' budgets.

Is the applicant seeking a waiver pursuant to section IX.C of the NOFA so as to sell or lease portions of the award-funded broadband facilities during their life?

No

I. Project Budget

Project Budget		
300	Federal Grant Request	Match
Last Mile	0	0
Middle Mile	29,112,167	12,479,889
Total	29,112,167	12,479,889

Project Budget Total: \$41,592,056

Match Percent: 30.0%

Projects Outside Recommended Funding Range:

➤ The Southeast Alabama SmartBand total project budget is \$41,592,056, making it well within the project size range recommended in the NOFA (\$5M - \$150M).

Outside Leverage	
Applicant is providing matching funds of at least 20% towards the total eligible project costs?	Yes
Matching cost detail	Matching funds of \$12,479,889, representing 30% of the total project budget, will be provided to the SmartBand project. SmartBand was carefully planned to take full advantage of the core network currently in service by Troy Cablevision, Inc. (TCV), while expanding its capabilities and its geographic reach to serve the needs of the Proposed Funded Service Area. Of the total



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

matching funds, \$9,046,892 will be "In Kind" contributions from SmartBand applicant TCV. These "In Kind" contributions consist of existing fiber infrastructure, outside plant electronics and hub & head end electronics. SmartBand will receive matching funds in cash of \$3,432,997 Troy Cablevision, Inc. plans to borrow from its private lender, CoBank. SmartBand has also developed partnerships with local municipalities and community organizations. Those partnerships have contributed to the partnership in the form of over \$100,000 in "In Kind" matching contributions. The City of Ozark will contribute \$25,000 toward the construction of outside plant along with Southeast Alabama Electric Cooperative's contribution of over \$92,000. The fair market of the items being purchased for the project was used to value the items owned by Troy Cable in its existing plant for the calculation of the in kind contributions. It is important to note that SmartBand intends to fund its own Working Capital over and above the matching contributions towards the Project. SmartBand has forecast that Working Capital demands over the three years of build out will require over \$6.5 million. These funds will be generated from private lenders and the reserves of TCV.

Cash Match:

Kevin A. Oliver, Vice President CoBank, ACB 900 Circle 75 Parkway Suite 1400 Atlanta, Georgia 30339 770.618.3214

\$3,340,479 which is 8.03% of the total budget will be provided to TCV from financing provided by CoBank to fund the cash match for the Southeast Alabama SmartBand project. These funds will be used to provide the matching funds for the project for the purchase of



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Network & Access Equipment, Outside Plant, Buildings and Land, Billing and Operational Support Systems and Engineering and Professional Services. CoBank has been Troy Cable's primary bank for several years.

Cash Match:

Max Davis, General Manager South Alabama Electric Cooperative 13192 U. S. Highway 231 Troy, Alabama 36081 334.566.2060

\$92,248 which is 0.22 % of the total budget is the cash match provided by SAEC. These funds will be used for Outside Plant (cables, conduits, ducts, poles, towers, repeaters, etc.)

In-Kind Match:

Troy Cablevision, Inc. 1006 South Brundidge Street Post Office Box 1228 Troy, Alabama 36081-1228 334.566.3310

\$9,021,892 which is 21.69% of the total budget will be used for Network & Access Equipment, Outside Plant, Buildings and Land, Engineering Professional Services, and Testing.

In-Kind Match:

Billy Blackwell, Mayor



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

	City of Ozark 1807 Highway 231 South Ozark, Alabama 36361 334.774.3300
	\$25,000 which is 0.06% of the total budget will be used for the purchase of Outside Plant. The City of Ozark will receive assistance with a wireless backhaul connection to remote public safety buildings, along with linking community anchor institutions and businesses in their community at competitive pricing for their services. The City of Ozark believes the SmartBand network will spur much needed economic development in their community.
	The Cities of Enterprise, the City of Troy, Organized Community Action Program and Troy University are partners and will be contributing time, knowledge and leadership as members of the Advisory Board.
Unjust enrichment	The Southeast Alabama SmartBand project is not receiving and has not applied for any federal support for non-recurring costs in the four county area.
Disclosure of federal and/or state funding sources	There is no federal or state funding requested for the Southeast Alabama SmartBand Project.
Budget reasonableness	Southeast Alabama SmartBand's ("SmartBand") total project budget is \$41,592,056. This budget is made up of four primary components: Construction (50%), Site Work (33%), Administration and Legal (4%), and Land and Structures (5%). The SmartBand project has, as a foundation, TCV's existing Middle Mile infrastructure and the experienced team of TCV professionals who have built and operated the company for the last 30 years. TCV has also secured the assistance of outside consultants and engineers to complement its inhouse expertise during the planning and budgeting process. The starting point for planning SmartBand was TCV's existing Middle Mile network, and this network infrastructure represents a substantial in-kind contribution toward the overall project budget. TCV has involved its current and prospective partners, community leaders and other stakeholders in the SmartBand planning process in order to



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

	assure that SmartBand will match the current needs of the area served,
	will scale to the area's future needs, and that its budget represents the
	most cost effective way of meeting these ends. TCV's staff, its
	consultants and SmartBand stakeholders worked together to develop a
	plan for a comprehensive and efficient project.
	A detailed budget was then developed by a three-step process:
	1. Project engineers developed detailed specifications for all major
	network elements including fiber optic cabling, network electronics,
	and facilities: e.g. points of presence (POPs). A bill-of-materials
	(BOM) was developed to define "assemblies" for these major
	elements. For example, several types of POP assemblies were
	defined, along with their various components, including physical
	facilities, electrical systems, air handling equipment, network
	electronics, labor, etc. Once developed, these assemblies were
	combined into an overall "project inventory".
	2. Interviews were conducted with vendors to review and compare
	components and to ascertain their costs. Vendors interviewed
	included Adtran, Cisco, Hitachi, and Huawei. We obtained data to
	enable us to compare and contrast efficiency, scalability, price per
	performance and other factors pertinent in determining budgetary
	estimates. SmartBand is not bound or obligated to any vendor and will
	continue to consider all alternatives for system components. The
	primary purpose of meeting with the vendors was to develop a
	database of products, capabilities and prices preparatory competitive
	procurement process.
	3. TCV's staff, its engineering consultants and its business analysts
	collaborated throughout the planning and budgeting process to
	coordinate and balance technical, business and policy factors. An
	integrated software environment was used to produce all cost
	estimates for the final project budget.
	SmartBand is requesting \$29,112,167 and offering \$12,479,889 in cash and in-kind contributions to build a Gigabit fiber optic network
Demonstration of need	The state of the s
Demonstration of need	serving Crenshaw, Pike, Coffee and Dale Counties in southeast Alabama. Despite five incumbent service providers, no comparable
	broadband network exists in this proposed service area, leaving these
	broadband network exists in this proposed service area, leaving these



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

communities in a broadband abyss.

SmartBand investigated State and Commercial options for financial assistance - to no avail. Alabama Department of Economic and Community Affairs budget was cut, personnel vacancies can't be filled. Alabama's prorated budget in 2010 was 5% less than 2009 and 2009 ended in proration, the worst two years since 2003. Local Banks and governments have noted without a boost in the economy they cannot fund new projects.

The SmartBand project is not feasible without federal funds. Within the proposed funded service area, no private or public entity has tried to accomplish a similar project due to the unfavorable economics. Those adverse economics are evidenced by the net present value (NPV) and internal rate of returns (IRR) shown below from the forecast:

With BTOP Funds Without BTOP Funds



SmartBand is requesting \$29M from BTOP, which is less than the \$34M NPV gap for the NPV without BTOP Funds shown above. Although the project does have unfavorable economics, with BTOP funds the project is sustainable. SmartBand is able to maintain its operations with substantial free cash flow, reinvest in its network assets yearly for maintenance and routine upgrades, and provide service through its 45 employees. The partners' confidence in its sustainability is reflected in their 30% matching funds. While 15% is a reasonable discount rate for telecommunications projects, SmartBand is not seeking a substantial return on its operations. It is instead investing in economically distressed counties and providing support to local anchor institutions through its 25% discount in recurring monthly pricing.

In the current economic climate, it is extremely notable three partners have stepped forward with cash and in-kind contributions

demonstrating support and commitment to funding an investment in



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TROY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

1	
	the region. Troy Cable, the Applicant, will contribute \$3,432,997 in
	cash (8.25%) and in kind valued at \$9,046,892 (21.75%). SAEC
	committed \$92,248 (0.22%) toward the broadband project. The City
	of Ozark committed \$25,000 (0.06%) as their support of SmartBand.
	These contributions along with federal BTOP funding for the
	SmartBand network will make possible the plans for the City of Ozark
	to consolidate their government facilities, improve interoperability and
	responsiveness and replicate their success throughout the fifteen
	similar cities. SAEC and other partners will advance the opportunities
	for broadband with applications, awareness and training.

Funds to States/Territories

States	Amount of Federal Grant Request
Alabama	29,112,167

Funds to States/Territories Total: \$29,112,167

J. Historical Financials

Matching Funds			
	2007	2008	2009
Revenue			
Expenditures			8
Net Assets			
Change in Net Assets from Prior Year			
Bond Rating (if applicable)			



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

K. Project Readiness

BTOP Organizational Readiness

SmartBand partners are well prepared and ready to implement, manage and operate the proposed broadband Middle Mile network. With over 100 years of management experience, knowledge and presence in the local communities, the partners have organized according to their core expertise. SmartBand is poised to launch the project immediately upon award.

Organizational Model

SmartBand functions as a public private initiative, with the Applicant leadership of Troy Cablevision, Inc. (TCV) and key partner expertise. SmartBand has an Advisory Board and an Operations Team. The Advisory Board is composed of partner executives. The Advisory Board monitors industry trends and offers guidance for local priorities. The Operations Team -- TCV management, provides design, build, operations, sales, service and financial / administrative / compliance functions. SmartGrid Applications team – South Alabama Electric Cooperative (SAEC) management, directs the energy management implementation. The Cities of Enterprise, Ozark and Troy rely on their economic development professionals for stimulating growth and business retention activities. Troy University and Organized Community Action Program (OCAP) lead broadband awareness and training initiatives. TCV encourages and manages Last Mile providers' interconnections with SmartBand. Dedicated and experienced project management and the organizations' proven governance will ensure SmartBand's successful implementation.

Organizational Leadership

Applicant, TCV, selected its executive leadership team of William H. (Dick) Freeman, TCV President and Vicki McPherson, TCV Chairwoman & CFO to lead the SmartBand Operations Team. Each partner organization is identifying its executive leadership to participate in the Advisory Board and support functions.

SmartBand engaged consulting organizations Key Bridges, Inc. with Civitium, LLC and Millennium Marketing for business and technical advisory guidance from project inception and values and anticipates their continued support.

Organizational Methods

SmartBand will rely on TCV's engineering, construction and operations teams experience in building and deploying a fiber optic broadband network. SmartBand will use similar or compatible equipment and software in TCV's head end, centralized hub sites, NOC provisioning and monitoring, and back office customer care and billing systems. Customer care is local in each area of the network convenient to each service area and manned with local personnel



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

familiar with the community. TCV follows standard General Accepted Accounting Principles (GAAP) for its accounting and compliance. TCV currently has interconnect agreements with five incumbent providers and will foster interconnections with Last Mile providers. TCV will add capacity and personnel as needed to support SmartBand's growth.

Construction and Vendor Contracts

Two commitments from construction firms to support the Southeast Alabama Broadband project have been received; thus increasing Troy's capacity for outside plant construction. B & L Cable Construction, LLC has a construction capacity of sixteen miles of aerial fiber and two miles of underground per week. This addition of contract support and equipment will bring Troy's construction capacity to twenty miles of aerial per week, three miles per week of underground plowing and 2,500 feet per week of boring. TCV is confident the SmartBand project will be substantially complete in two years and complete in three. TCV is well positioned with qualified vendors to provide the resources for the successful completion of the project. Contact information:

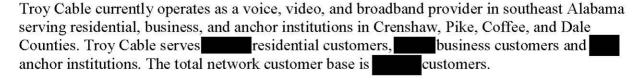
Mr. Ken Olsen, Senior Vice President, Sales and Marketing, TVC Communications, LLC, Corporate Offices 800 Airport Road, Annville, PA 17003, 717.838.3306 Greg M. Rabren, B & L Cable Construction, 21533 Rabren Road, Andalusia, AL 36421, 334.427.0888

Trawick Construction Company, Inc., 1555 South Blvd., Post Office Box 1037, Chipley, FL 32428, 850.638.0429

Mr. Tony Finger, Vice President Sales, Southeast Region, CommScope, Inc., 1100 CommScope Place, SE, Post Office Box 1729, Hickory, North Carolina 28603-1729, 828.324.2200 Mr. Jeff Crosswell, Vice President Sales, ARRIS, 3871 Lakefield Drive, Suwanee, GA 30024, 678.473.8400

Mr. Jerry Watts, Vice President, Deltacom, 7037 Old Madison Place, Huntsville, Alabama 35806, 256.382.3843

Customer Base





Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Troy Cable collaborates with other Last Mile providers which include TV Cable Company of Andalusia, Inc., Hayneville Fiber Transport, Inc., Bright House Networks, LLC, Charter Communications, MonCre Telephone Cooperative, City of Opp, Utilities Board, and One Source Communications, LLC. Troy Cable provides services throughout this network consisting of Internet bandwidth, transport and interconnection to the seven Last Mile service providers.

Troy Cable and its Last Mile partners collaborate through the ACCESS Project and Information Transport Solutions, Inc. to make available high speed connectivity for K-12 schools, libraries, community colleges, and an institution of higher learning.

These collaborations demonstrate Troy Cable is capable and, in fact, already serving the goals of the Broadband Stimulus Program.

Licenses, Regulatory Approvals and Agreements

All licenses, regulatory approvals and agreements are current and provide the necessary entitlements to implement and operate the SmartBand Project. Troy Cablevision, Inc. (TCV) is authorized by the State of Alabama to do business in the State and authorized to perform services under the following agreements:

Tower Leases - none required

Equipment Leases – none required

Building Leases - 1006 South Brundidge Street, Troy, AL; 1298 Andrews Avenue, Ozark, AL

Land Leases - none required

FCC Authorization - none required

State Authorization Business License

"CLEC" Facilities-Based Competitive Local Exchange

Video Franchise Agreements

County Approved – Crenshaw, Pike, Coffee, Dale

Incorporated Alabama Cities and Towns Approved

Banks, Brantley, Brundidge, Daleville, Elba, Glenwood, Luverne, Ozark, Rutledge, Troy,

Pending Approval by 9.30.2010

Enterprise, Goshen, Midland City, New Brockton, Newton, Pinckard

Interconnection, Master Services, Traffic Exchange, Resale and Internet Transit Agreements – all approved



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

United States Army Aviation Center of Excellence
BellSouth Telecommunications, Inc.
TDS Telecom
CenturyTel of Alabama, LLC
Interstate FiberNet, Inc.
BellSouth Business Systems, Inc.
Knology Provider Solutions Group, Inc.
T V Cable Company of Andalusia, Inc.
City of Opp, Utilities
One Source Communications, LLC
Hayneville Fiber Transport, Inc.
MonCre Telephone

SPIN Number

Troy Cablevision, Inc.

SPIN Number 143019481

L. Environmental Questionnaire

Project Description

Southeast Alabama SmartBand understands and complies with this request for submission of clarifications and documents requested in the "Environmental Questionnaire", and commits fully to design considerations, methodologies and construction activities that will not have adverse affect on the environment.

The Southeast Alabama SmartBand Project consists of the installation of 595 miles of fiber optic cable containing 144, 72 and 48 strand counts. The preferred method of placement will be pole mounted aerial cable, and where not applicable, buried underground cable/conduit will be utilized. Project also contains the construction/installation of three new telecom shelters ("Hub sites") for which the site locations have been reviewed. As such, it has been determined that there will be minimal need for land clearing and minimal ground disruption associated with said sites. There will be two new telecom shelters located in Enterprise and one telecom shelter



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

located in Midland City. Southeast Alabama SmartBand nonetheless commits fully to design considerations, methodologies and construction activities that will not have adverse affect on the environment. Equipment upgrades only will be necessary in seven other existing hub sites to accommodate serving Southeast Alabama SmartBand.

Property Changes

The property changes for each construction element are described as follows: 476 lineal miles of aerial fiber optic cable construction on existing utility pole mounted infrastructure. This construction substantially utilizes existing utility pole infrastructure and will not require new digging, except in the event where a utility pole replacement or augmentation is needed within current right-of-way. The exact locations will be determined, however SmartBand calculates 726 new utility poles are required to accommodate aerial fiber optic cabling. In addition, 119 lineal miles of underground construction at a depth of 40" and composed of 102 miles direct buried method and approximately 17 miles of directional bore method that utilizes 2" highdensity polyethylene conduit containing fiber optic cable will be installed along city, county and state right-of-ways. The underground cabling deployment is anticipated to occur completely within previously disturbed city, county and state right-of-ways. Three new pre-fabricated telecom shelters will be installed throughout the region. Each pre-fabricated shelter will sit on a concrete slab and have dimensions no larger than 12' x 20' and will be located within a secured fenced area with a total footprint of 50' x 50'. The facilities will have utilities including power and natural gas lines. These sites will be situated on private property within proper zoning specifications with minimal impact on surrounding environment.

Buildings

Three new 12' x 20' pre-fabricated telecom shelters ("Hub sites") will be installed at various disclosed locations. These buildings will sit on a concrete slab and be located within a secured, fenced area with a total footprint of 50' x 50'. The facility will have utilities including power and a back up generator fed by natural gas lines. These sites will be situated in previously disturbed soil located on private property with minimal impact to the surrounding environment. Troy Cablevision, Inc. will contribute 7 other existing hub sites where there will be interior installation of new electronic devices. New fiber optic cabling will be installed to these locations via a utility pole mounted aerial method where pole infrastructure already exists and is available to the Southeast Alabama SmartBand through agreements with Dixie Electric Cooperative, City of Troy, South Alabama Electric Cooperative, City of Luverne, Covington Electric Cooperative,



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Pea River Electric Cooperative, City of Elba, City of Brundidge, Alabama Power, AT&T and Century Tel. Where utility pole infrastructure is not available, an underground-buried cable/conduit will be used along previously disturbed city, county and state right-of-way.

Wetlands

Southeast Alabama SmartBand has reviewed the maps displaying wetlands in the proposed funded service area. Southeast Alabama SmartBand has no intention of disturbing any wetlands. In the event that our cable infrastructure traverses over any wetland areas, Southeast Alabama SmartBand commits to attach to existing utility poles through the use of vehicles that are bucket equipped, resulting in minimal to no ground disturbance. Please note that all cable paths will be deployed within previously disturbed rights-of-way. No undisturbed wetland areas will be affected during the deployment of the Alabama SmartBand infrastructure.

Critical Habitats

Southeast Alabama SmartBand has reviewed the threatened, endangered and candidate species lists from the U.S. Fish and Wildlife Service's website and commits that no critical habitat will be threatened during the construction of the Southeast Alabama SmartBand (SmartBand) network. Before the commencement of network construction, SmartBand will conduct a network-wide review with a certified environmental specialist or a representative from the Alabama Department of Natural Resources. In the event that any critical habitat is identified at any construction site, Alabama SmartBand commits to modify the location of buildings, structures or cable paths in the interest of protection of the identified critical habitat.

Floodplain

Southeast Alabama SmartBand has reviewed all available maps and information pertaining to floodplains as floodplains relate to the construction activities of the SmartBand Project. Southeast Alabama SmartBand has downloaded all applicable FEMA "FIRMettes" and has determined that none of the proposed construction activities will be affected by either 100 or 500 year floodplains.

Protected Land

Southeast Alabama SmartBand has reviewed the Alabama Register of Historic Sites and Buildings. SmartBand has determined there are no site locations in close proximity to the proposed network construction and no historic buildings will be affected.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Coastal Area

The Alabama Coastal Zone Management Area encompasses two counties that border tidally influenced waters. Alabama's coastal zone extends inland to the continuous 10-foot elevation contour in Baldwin and Mobile Counties, Alabama. Neither of these counties identified are within, nor border the Southeast Alabama SmartBand serving area that is located in Crenshaw, Pike, Coffee and Dale counties.

Brownfield

Southeast Alabama SmartBand has reviewed all documented active Brownfield locations throughout the proposed service area and has determined that the network infrastructure is not in close proximity to any such sites. If, in the unlikely event, any undocumented sites occur SmartBand commits to deviate its route to avoid such sites.



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Uploads

The following pages contain the following uploads provided by the applicant:

Upload Name	File Name	Uploaded By	Uploaded Date
Service Offerings and Competitor Data	CCI Service Offerings and Competitor Data Attachment.xls	McPherson, Vicki	03/26/2010
Network Diagram	Network Maps Complete.pdf	McPherson, Vicki	03/26/2010
Build Out Timeline	CCI Build-Out Timeline Attachment.doc	McPherson, Vicki	03/26/2010
List of Community Anchors and Points of Interest	18.4 Community Anchor Institutions & Points of Interest.xls	McPherson, Vicki	03/25/2010
Management Team Resumes and Organization Chart	SmartBandOrg-With Resumes.pdf	McPherson, Vicki	03/26/2010
Government and Key Partnerships	18.6 Government and Key Partnerships.pdf	McPherson, Vicki	03/26/2010
Historical Financial Statements	18.7 Historical Financials.2009.2008.pdf	McPherson, Vicki	03/17/2010
Budget Narrative	CCI Budget Narrative Attachment.doc	McPherson, Vicki	03/26/2010



Submitted Date: 3/26/2010 9:40:05 PM	Easygrants ID: 4331
Funding Opportunity: Broadband	Applicant Organization:
Technology Opportunities Program	TRÔY CABLEVISION, INC.
Task: Submit Application - BTOP	Applicant Name: Mrs. Vicki F. McPherson

Detailed Budget	18. CCI Detailed Budget Attachment.xls	McPherson, Vicki	03/26/2010
Pro-forma Forecast	Troy Financial Forecast upload.xls	McPherson, Vicki	03/26/2010
Subscriber Estimates	Troy 18.11 Subscriber Estimates.xls	McPherson, Vicki	03/26/2010
Dashboard Metrics	Troy Metric Dashboard.doc	McPherson, Vicki	03/26/2010
Service Area Data	18.13 Service Areas.xls	McPherson, Vicki	03/26/2010
Network Maps	18.15 Network Map.pdf	McPherson, Vicki	03/25/2010
BTOP Certifications	18.16 BTOP Certifications.pdf	McPherson, Vicki	03/17/2010
SF-424 C and D	18.17 SF-424C and SF- 424D.pdf	McPherson, Vicki	03/26/2010
Supplemental Information	18 18 Supplemental Information.pdf	McPherson, Vicki	03/26/2010