



Broadband Infrastructure Application
Submission to NTIA – Broadband Technology Opportunities Program

Submitted Date: Easygrants ID: 5637	
Funding Opportunity: Broadband Technology Opportunities Program	Applicant Organization: REGION 18 EDUCATION SVC CTR
Task: Submit Application - BTOP	Applicant Name: James Collett

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A. General Application Information

Applicant Information	
Name and Federal ID for Applicant	
DUNS Number	078557998
CCR # (CAGE)	3Q3T9
Legal Business Name	REGION 18 EDUCATION SVC CTR
Point of Contact (POC)	HELEN WHITEHEAD 4325673213 Ext. hwhite@esc18.net
Alternate POC	JIM COLLETT 4325673220 Ext. jcollett@esc18.net
Electronic Business POC	HELEN WHITEHEAD 4325632380 Ext. hwhite@esc18.net
Alternate Electronic Business POC	GARY BOND 4325632380 Ext. gbond@esc18.net

Name and Contact Information of Person to be Contacted on Matters Involving this Application:	
Prefix	
First Name	James
Middle Name	
Last Name	Collett
Suffix	
Telephone Number	432-567-3220



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Fax Number	
Email	jcollett@esc18.net
Title	Director of S F & T

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

Project Role	Name	Phone	Email
Secondary Point of Contact	Casey , Ritchie	4325673250	critchie@esc18.net

Environmental Point of Contact

Prefix: Name: Ritchie, Casey Suffix: Telephone Number: 4325673250 Title: Coordinator of Technology
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Organization Classification

Type of Organization	State or State Agency
Is the organization a small business?	No
Does the organization meet the definition of a socially and economically disadvantaged small business concern?	No

Authorized Organizational Representative

AOR Name	WHITEHEAD, HELEN
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Result	Applicant Authorized
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Project Title and Project Description

Project Title: Connect Southwest Texas

Project Description: Connect Southwest Texas is a collaborative public-private effort to deploy critical middle mile infrastructure in 19 economically distressed counties. The open access network provides a sustainable, robust broadband connectivity for residents, businesses, governments, public safety and community anchors including medical providers, schools, colleges, libraries and economic development entities.

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.

Comprehensive Community Infrastructure Components

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



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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
6260	TEAL (Technology Expertise, Access, and Learning for all Texans)
1803	Western Texas Broadband Infrastructure Development

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

Western Texas Broadband Infrastructure Development - Easygrants ID 1803 & TEAL (Technology Expertise, Access, and Learning for all Texans) - Easy ID6220

TEAL (Technology Expertise, Access, and Learning for all Texans) - Easy ID6220
Texas State Library & Archives Commission TSLAC
BTOP Computer Center Applicant



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We join TSLAC in their effort to get funding for 38 computer center in libraries across Texas. Connect Southwest Texas CST will provide broadband connectivity to all anchor institutions in 19 southwest Texas counties. It is our goal to work with TSLAC to open computer centers in the 20 libraries in the CST service area.

Public libraries are an invaluable community asset for our fast growing and increasingly diverse population. Rural Libraries in the Permian Basin region of our state will gain faster and less expensive access to the Internet, which in turn will assist the libraries in serving their communities. Between 2000 and 2008, the population of Texas grew by almost 17%, more than twice that of the United States as a whole. Presently, it is estimated that 1,000 people per day are moving to Texas. And Texas is rapidly becoming a majority minority state.

We are proud of the unique elements that draw people to our great state, and we embrace the great melting pot of cultures and languages that we are experiencing; however, we are mindful of the tremendous challenges this poses as we in positions of state leadership focus on high standards for economic stability and growth, educational achievement, and personal betterment while facing a looming multi-billion dollar state deficit.

The CST broadband access will increase the access speed in our libraries, support more robust telecommunications capacity, and reduce the wait time for computer access. These improvements will make it possible for Texas public libraries to help more people acquire and increase computer skills, develop professional resumes, search and apply for jobs, take distance learning courses, work toward receiving a GED or other educational certification, access e-government services, and much more.

TSLAC and CST have agreed to work together to meet our mutual goals.

Western Texas Broadband Infrastructure Development - Easygrants ID 1803
West Tex Coop



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West Tex Coop received Round 1 BTOP award of \$16,891,875 to develop broadband infrastructure to increase Internet availability levels and access speeds in rural areas of western Texas. Our Connect Southwest Texas - CST will provide access to the 19 counties adjacent to Western Texas Broadband Infrastructure Development project.

West Tex Coop is in fact one of the partners in the CST coalition. While these projects are mutually exclusive and do not overlap. The funding of both will dramatically enhance the service area in southwest Texas.

Western Texas Broadband Infrastructure Development and CST have agreed to work together to successfully their mutual goals.

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?

- Yes, Applicant is exempt because it is a unit of a state or local government

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

B. Executive Summary, Project Purpose and Benefits

Essay Question

Executive Summary of the proposed project:



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Connect Southwest Texas (CST) is a collaborative public-private effort to deploy critical middle mile infrastructure (fiber optic network) in a rural 19 county region - one of the most economically distressed regions in the state of Texas. The CST open access network designed by a proven team will provide for sustainable, robust broadband connectivity for residents, businesses, governments, public safety and core community anchors including medical providers, K-12 schools, community colleges, universities, libraries and economic development entities.

A. CST region has seen limited investment in broadband infrastructure largely because of financial concerns - leaving much of the region unserved or underserved by private providers. With long distances to reach customers over difficult terrain and a population density insufficient to deliver a profitable return on investment, private providers are unable to build-out and expand their networks. In many cases the problem is that broadband does not exist while in other parts of the service area bandwidth is insufficient to meet the need of most of the anchor institutions including schools, medical facilities, public safety and community colleges/universities. Private providers and the local governments can not meet the need for a robust cost-effective middle mile infrastructure without stimulus broadband funding. Broadband stimulus funding provides the opportunity to deploy a cost-effective broadband network that will bring the Texas frontier to the forefront in economic growth where individuals, businesses and communities in Southwest Texas access the world equally and compete globally.

CST started with a strategic vision and has worked closely with the public, private and non-profit sector in planning and developing an economically feasible and robust open access broadband network. Under the leadership of the Region 18 Education Service Center (ESC) and the Permian Basin Regional Planning Commission, months of planning have resulted in nineteen (19) counties partnering with six (6) private providers and 203 community anchor institutions including community colleges, universities, K-12 schools, health care institutions, housing entities, workforce centers, libraries including the Texas State Library and Archives Commission, public safety agencies including the Texas Department of Public Safety and numerous other stakeholders.

CST consortium has identified fiber as the optimum solution to meet the current and long-term broadband needs of the region. CST public and private partners will provide in excess of a 30% cash match to the total project cost. Without an infusion of broadband stimulus funding the residents, businesses and community anchor institutions of this 19 county economically distressed region will remain part of the digital divide.

B. CST network will reach 19 counties in southwest Texas from the border counties of Presidio, Brewster and Terrell to north of Interstate 20. The coverage area of 37,445 square miles is



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larger than the entire state of Indiana. The 19 counties include: Andrews, Brewster, Crane, Culberson, Ector, Glasscock, Howard, Jeff Davis, Loving, Martin, Midland, Pecos, Presidio, Reagan, Reeves, Terrell, Upton, Ward and Winkler.

Using the 2000 Census data, the largest city in the service area is Midland with a population of 94,996 and the smallest city is Ackerly with a population of 82. Twenty-four (24) of the communities are under 5000 in population. There are also unincorporated areas which are not large enough in population to be reported as communities on the census.

C. CST buildout will provide 194 miles of new fiber and direct robust access to an estimated 390,667 population in 134,017 households and 33,741 businesses.

D. CST will connect 203 Community Anchor Institutions to the network including 33 K through 12 schools, 3 community colleges, 2 universities, 20 libraries, 44 medical and healthcare providers, 13 public housing units, 7 workforce centers, 43 public safety entities and 38 governmental bodies including county and local government, courthouses etc. In addition the 3 community colleges and 2 universities are certified Hispanic serving minority institutions.

Region 18 schools broadband capacity is maximized and inadequate to meet the needs of the schools in the service area. CST will result in all 33 K through 12 schools (75,754 students) having available sufficient bandwidth to meet the needs of every school with up to 1Gbps depending on each school's unique telecom/IT bandwidth needs and budgets. By leveraging BTOP grant funds with our cash match funds CST will be able to connect all 33 schools in the region and ensure that all 75,754 students have access to critical broadband network connections.

E. CST has partnered with 6 private providers to offer a menu of services to subscribers. This project builds-out the existing fiber infrastructures of the partner telecoms: Poka Lambro, Big Bend Telephone Company, Dell City Telephone, Grande, West Tex Coop and Hill County Telephone. The results is a standards based ethernet network with a 10Gbps backbone infrastructure. The partner telecommunication companies have existing agreements that allow the entire network to share data in a standard and open manner.

F. CST is committed to the development of an open access and vendor neutral network. CST network is designed for multiple operators and will allow residential and commercial customers, government, public safety, education and medical facilities to acquire broadband services from a wide variety of service providers. It is specifically designed to seamlessly interface with all major communication carriers in North America and worldwide. Existing deployments of the proposed network carry critical medical records, backhaul cellular carriers, provide wholesale long distance connections as well as direct connections to the peering points to the robust broadband pipes of the Tier 1 Internet carriers.



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G. Region 18 Education Service Center (ESC) has extensive project management experience with large complex projects and the operational experience necessary to help ensure continued success. Region 18 manages critical telecommunications, internet and educational systems to deliver applications and interactive services from to and from schools, colleges and universities. Region 18 ESC has an existing wide area network in place that provides Internet and video conferencing services to all school districts, colleges and universities in the area. The network has been in place as a consortium for over 10 years and has provided services to its members by leveraging Chapter 41 funds of the Texas Education Code and discounts provided by the Universal Service Fund. Region 18 has also engaged a professional engineering firm with extensive experience designing, developing and managing communications networks.

CST consortium and Region 18 ESC has chosen to execute its mission to provide robust and affordable broadband network in partnership with the expertise of existing private middle mile operators in the region. Each of CST's six telecommunication partners are locally owned businesses or cooperatives that currently operate successful networks. Each of the private partners has been in business for over 50 years and are highly qualified to deploy and maintain the middle mile network. All of the six telecommunication partners are members of the Texas Lone Star Network (TLSN), a consortium of independent telecommunication companies and their mission is to provide high quality, low cost service on an open and standard network.

H. Because CST is expanding and buildout existing infrastructure provided by the private partner telecommunication companies, the overall projected cost of the project is \$17,307,544 based on engineering studies.

I. CST consortium expects all 33 of the K through 12 schools, 3 community colleges and 2 universities to subscribe to service immediately and anticipate over 50% of the community anchor institutions to subscribe to service within the first two years.

J. It is estimated that 229 jobs will be created and/or saved as a result of this project including construction, network technicians, installers, management and application design and development. But the most important economic indicator of deploying this network is that broadband stimulus funding and local matching funds will ensure a globally competitive future for the citizens, businesses and communities in the region opening up endless economic possibilities as a result of broadband access.

In summary, the CST buildout fills a gap in the middle mile network and addresses the critical current and future bandwidth needs of our public, private and non-profit partners. CST has a well qualified public/private team in place and is ready to build out and operate the CST Network. CST is a shovel-ready project that will commence upon grant award.

Project purpose:



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Project Purpose

A. Connect Southwest Texas (CST) is a highly collaborative, public-private effort to deploy critical middle mile infrastructure (fiber optic network) in a rural 19-county region - one of the most economically distressed regions in Texas. CST region has seen limited investment in broadband infrastructure largely because of financial concerns of private providers, leaving much of the 19-county region unserved (without access to broadband) and underserved in that lower income users have limited broadband options, making service unaffordable for many.

The lack of broadband access and affordability negatively impacts the vulnerable populations in the CST region where many residents are currently experiencing high rates of unemployment. For example, while Texas' unemployment rate is at 8.6%, Reeves County's unemployment rate has risen to 13%. The Texas Bureau of Employment Administration has designated Reeves, as well as three other counties in CST region, as economically distressed. Many of the unemployed in Reeves do not have broadband access to connect to the Workforce Centers. It is vital that these unemployed residents maintain daily connection to the job matching system to monitor job listings and apply for available jobs immediately. This economically distressed designation also indicates that it is critical to improve the lives of individuals in the region including addressing the development of technology. Industry development is dependent on the quality of the workforce and the development of broadband technology provides long-distance learning and occupational skills training to the area. Connection to the available resources for personal development must be present before an individual in a rural area can achieve improved quality of job and life.

B. CST started with a strategic vision and has worked closely with the public, private and non-profit sectors to plan and develop an economically feasible and robust open access broadband network. Under the leadership of the Region 18 Education Service Center (ESC) and the Permian Basin Regional Planning Commission, months of planning have resulted in nineteen (19) counties partnering with six (6) private providers and 196 community anchor institutions including community colleges/ universities, K-12 schools, medical providers, housing entities, workforce centers, libraries including the Texas State Library and Archives Commission, public safety agencies including the Texas Department of Public Safety and numerous other stakeholders important to this project.



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CST consortium has identified fiber as the optimum solution to meet the current and long-term broadband needs of the region. CST will build-out the existing fiber network deployed by six private telecommunication companies who are partners to this project.

CST open access network will provide for affordable and sustainable robust broadband connectivity for residents, businesses, governments, public safety agencies and core community anchors including medical providers, K -12 schools, community colleges, universities, libraries, economic development entities and workforce centers. Some of these community anchor institutions will now have broadband connectivity while others will see enhanced broadband connectivity.

CST consortium will serve as a model for replication for its highly collaborative public, private and non-profit consortium lead by a regional Educational Service Center and a regional Planning Commission. Deploying communication systems is a costly initiative and stand alone systems can no longer be justified financially. Public, private and non-profit entities need to work together on regional solutions to meet the needs of their residents, business, communities, community anchor institutions and public safety entities. If CST can help influence other multi-county, multi-jurisdictional, multi-disciplinary regional partnerships it will be a success.

D. CST region is one of the most economically distressed regions in Texas. CST region has seen limited investment in broadband infrastructure largely because of financial concerns of private providers - leaving much of the 19 county region unserved (without access to broadband) and underserved in that lower income users have limited broadband options which makes service unaffordable for many.

E. CST project specifically meets the statutory objectives of the BTOP by:

- Providing broadband access for unserved areas in the 19-county region
- Providing improved access to the underserved areas in the 19-county region by deploying the infrastructure to support multiple carriers making broadband more affordable
- Creating jobs in the short-term for the economically distressed region
- Providing for long-term economic growth by providing individuals with opportunities to explore web based businesses and entrepreneurship options
- Providing affordable robust broadband services to the core community anchor institutions
- Deploying fiber optic cable, resulting in more advanced public safety services
- Improving the delivery of both healthcare and education to the region



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Recovery Act and Other Governmental Collaboration:

The proposed build-out and expansion of Connect Southwest Texas (CST) network provides opportunities to enhance a variety of projects that are either underway or will begin in the next few years. One project that was recently awarded a BIP/BTOP grant is Wes Tex Broadband Infrastructure Development project (BIP Easygrants ID 1803). Although the Wes Tex Project is located in a different region than CST project, it complements the CST network by further extending the middle mile infrastructure footprint in west Texas.

Other efforts underway with potential for collaboration and impact to the CST region include:

1. The Texas Department of Transportation has established plans for the development of corridors to expand trade between the U.S., Mexico and Canada. Corridors include a new trunk system that places most of the Permian Basin in two routes. The benefits to Pecos and Reeves county could be enormous. Terrell County could benefit as traffic to and from Mexico could travel the natural route through the area, accessing the main thorough ways planned through Pecos County and Reeves County. (Pacifica a La Entrada and Ports to Plains). As a result, the rural communities have the opportunity to establish themselves as ideal distribution centers.
2. The development of alternative energies is having a large impact on the rural areas, but ancillary businesses opportunities and entrepreneurship developments are not realized yet. Alternative energy developments could serve to create new and emerging technologies and businesses for the rural areas of the Permian Basin. The largest oil and gas, solar and wind farm projects are located in the rural areas of Pecos, Reeves and Upton counties. The assurance that technology and broadband are available in the rural areas is critical for the development of those ancillary businesses that would create entrepreneurship opportunities.
3. Most oil and gas management and administrative functions are not located in the rural areas, where the mining and exploration of these natural resources are occurring. The distances between the field operations and administrative centers are dependent on technology. For the management functions to occur in rural areas, the willingness of recruited personnel is not only dependent on the community desirability, but also on the technology necessary to perform those functions.
4. The Summit Project, a coal energy plant, planned for the western part of Ector County has potential for great entrepreneurship and business development in the surrounding rural areas of Pecos, Ward, Reeves, Winkler and Loving counties.

The continued efforts of leaders to diversify the economy of Southwest Texas are dependent on availability of technology. In addition, the recruitment of professionals necessary to maximize



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the opportunities provided by the development of wind, solar, geothermal and bio-mass requires assurances that the connectivity in any area of the Permian Basin is a priority.

Fit with BTOP CCI Priorities:

CST project fits all seven CCI Priorities.

1. CST provides for the deployment of 194 miles of middle mile infrastructure (fiber) throughout the 19 county region to fill gaps in existing infrastructure from prior private deployments. These gaps have left areas of the region unserved and other areas underserved. CST middle mile infrastructure will provide robust, affordable and scalable broadband network access up to 1 GBPS for the 19-county region's 203 community anchor institutions including 33 K-12 schools, 3 community colleges, 2 universities, 20 libraries, 44 medical providers, 13 public housing units, 7 workforce centers, 43 public safety entities and 38 governmental bodies including county and local governments.

K-12 schools serve as a good example of the impact that can be achieved by deploying the CST network. Bandwidth capacity in Region 18 schools has been maximized and is inadequate to meet their needs. Deploying CST will result in all 33 K-12 schools having broadband availability of up to 1Gbps - sufficient bandwidth to meet the needs of every school - depending on each school's unique telecom/IT bandwidth needs and budgets. By leveraging grant funds with our cash match, CST will be able to connect all 33 schools in the region and ensure that all 75,754 students have access to critical broadband connections.

2. CST started with a strategic vision and has worked closely with the public, private and non-profit sectors in planning and developing an economically feasible and robust open access broadband network. Under the leadership of Region 18 Education Service Center (ESC) and the Permian Basin Regional Planning Commission, months of planning resulted in nineteen (19) counties partnering with six (6) private providers and 203 community anchor institutions including community colleges, universities, K-12 schools, health care institutions, housing entities, workforce centers, libraries including the Texas State Library and Archives Commission, public safety agencies including the Texas Department of Public Safety and numerous other stakeholders. Letters of support from CST partners are included with this application.



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3. CST 19 county region is one of the most economically distressed regions in Texas. The following example documents both the economics of region and technology needs: Texas Bureau of Employment Administration(BEA) designated severely economic distressed status to four counties in CST area: Pecos, Reeves, Terrell and Loving. These counties are experiencing critically high rates of unemployment and lack of broadband availability and affordability by the residents of communities is adversely affecting their ability to obtain employment. BEA’s economically distressed designation is an indicator that most of citizens of these counties may not have the computer access to connect to workforce centers. It is vital that the unemployed maintain daily connection to the job matching system to monitor job listings and apply to available jobs immediately. Designation also indicates that it is critical to improve the lives of individuals, including addressing the development of technology. Industry development is dependent on quality of workforce. Deployment of broadband technology will make available long-distance learning and occupational skills training. Developments have occurred in on-line training that must be delivered to the rural and remote areas. Workforce solutions maximize the opportunities provided by the community colleges, but realize that the non-traditional student requires access and computer-based study from home or community centers. CST broadband will increase the access speed in workforce centers, housing units, libraries, and other outreach agencies and support more robust telecommunications capacity, reducing wait time for computer access. These improvements will make it possible to help more people acquire and increase computer skills, develop professional resumes, search and apply for jobs, take distance learning courses, work toward receiving a GED or other educational certification, access e-government services, and much more.

4. All 3 community colleges in the region are members of CST consortium. Two of CST’s most active partners in planning CST’s mission are Odessa and Midland community colleges. Increased capacity of CST network will allow them to offer more courses and more diverse training in rural areas of region while increasing productivity. Letters of support from community colleges document both need and commitment to utilize resources of the CST network.

5. CST services will be accessible to all public safety entities in the region including county sheriffs, police departments, and Texas Department of Public Safety (DPS). Public safety agencies will benefit from CST with increased bandwidth and lower monthly recurring costs. Additional bandwidth will allow a new ability to stream live video from and to first responders, provide situational awareness to communications and emergency management facilities and, in



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the case of DPS, to their headquarters in Austin. It will further the goal of interoperability for public safety by providing network connection for radio interoperability between Midland DPS Communications and DPS Headquarters in Austin. In addition, fire departments in the region will have the capability to download blueprints of a burning building when responding to incidents.

6. All 6 private Last Mile partners: Poka Lambro, Big Bend Telephone Company, Dell City Telephone, Grande, West Tex Coop and Hill County Telephone have committed to utilize the middle mile components. There are no last mile costs to the CST project.

7. CST partners have committed to provide a 30.5% cash match to deploy middle mile broadband infrastructure.

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

- No

Is the applicant delinquent on any federal debt?

- No

If Yes, justification for delinquency:

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: Contractor



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Name: Wilson, James
Phone: 4327563393
Email: [REDACTED]
Address 1: [REDACTED]
Address 2:
Address 3:
City: Stanton
State: Texas
Zip Code: 79782-0280
Organization: Wes-Tex Telecommunications, LTD.
Organization Type: Cooperative or Mutual
Small business: No
Socially and economically disadvantaged small business concern: No

Project Role: Contractor
Name: Bergstrom, Denny
Phone: 9159642352
Email: dbergstrom@dellcity.com
Address 1: 610 South Main Street
Address 2: P.O. Box 67
Address 3:
City: Dell City
State: Texas
Zip Code: 79837
Organization: Delcom, Inc.
Organization Type: For-profit Entity
Small business: Yes
Socially and economically disadvantaged small business concern: No

Project Role: Contractor
Name: Pechacek, Larry
Phone: 8306375333
Email: lpechacek@hctc.coop
Address 1: 220 Carolyn
Address 2:
Address 3:
City: Ingram
State: Texas
Zip Code: 78025
Organization: Hill Country Telephone Cooperative
Organization Type: Cooperative or Mutual
Small business: No



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Socially and economically disadvantaged small business concern: No
<p>Project Role: Contractor Name: McEndree, David Phone: 8069247234 Email: dmc@poka.com Address 1: P.O. Box 1340 Address 2: Address 3: City: Tahoka State: Texas Zip Code: 79373-1340 Organization: Poka Lambro Telephone Cooperative Organization Type: Cooperative or Mutual Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Contractor Name: Moore, Rusty Phone: 4323641000 Email: rusty.moore@bbtco.com Address 1: 808 N. 5th Street Address 2: Address 3: City: Alpine State: Texas Zip Code: 79830 Organization: Big Bend Telephone Company Organization Type: For-profit Entity Small business: Yes Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Contractor Name: von Shaumburg, E. J. Phone: 9738794408 Email: ejvs@feeva.com Address 1: 3475 Sheridan Street Address 2: Suite #301 Address 3: City: Hollywood State: Florida Zip Code: 33021</p>



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<p>Organization: Global Technology Solutions Organization Type: For-profit Entity Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Other Name: Moore, Terri Phone: 4325631061 Email: tmoore@pbrpc.org Address 1: P.O. Box 60660 Address 2: 2910 La Force Blvd Address 3: City: Midland State: Texas Zip Code: 79711-0660 Organization: Permian Basin Regional Planning Commission Organization Type: State or State Agency Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Sub-recipient Name: Simpson, Mike Phone: 5124247427 Email: mike.simpson@txdps.state.tx.us Address 1: 5805 N. Lamar - Building G Address 2: P.O. Box 4087 Address 3: City: Austin State: Texas Zip Code: 78773 Organization: Texas Department of Public Safety Organization Type: State or State Agency Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Sub-recipient Name: Finley, Dawn Phone: 4326854528 Email: dfinley@midland.edu Address 1: 3600 N. Garfield Address 2: Address 3:</p>



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<p>City: Midland State: Texas Zip Code: 79705 Organization: Midland College Organization Type: Non-profit Institution Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Sub-recipient Name: Carson, David Phone: 4323356649 Email: dcarson@odessa.edu Address 1: 201 W. University Blvd Address 2: Address 3: City: Odessa State: Texas Zip Code: 79764 Organization: Odessa College Organization Type: Non-profit Institution Small business: No Socially and economically disadvantaged small business concern: No</p>

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

Big Bend Telephone is a technology and broadband provider to the project.

Dell City Telephone, Delcom, is a technology and broadband provider to the project.

Poka Lambro Telephone Cooperative is a technology and broadband provider to the project.

WesTex Telephone and Telecommunications Cooperative is a technology and broadband provider to the project, and contributor with matching funds.

Hill Country Telephone Cooperative is a technology and broadband provider to the project.

The Permian Basin Regional Planning Commission is helping to organize the project and gather support from public safety and other government agencies.



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The Texas Department of Public Safety is providing funds towards the cash match.

Global Technology Solutions is providing financial and engineering oversight of the project.

D. Congressional Districts

Applicant Headquarters

- Texas

Project Service States

Texas

Project Service Areas

Texas - 11

Texas - 19

Texas - 23

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

- No

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

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



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➤ 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: Region 18
Rural Classification of the Last Mile Service Area: Rural
Service Status of the Last Mile Service Area: Underserved

<p>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.</p>
--

Total Square Miles in Service Area: 37,445
Total Population in Proposed Service Area: 390,666
Total Number of Households in Service Area: 134,017
Total Number of Businesses in Service Area: 33,741
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 203
Unemployment Rate in the Service Area: 8
Median Income in the Service Area: 42,365
Estimated Percentage of Households with Access to Broadband: 65
Estimated Percentage of Households Subscribing to Broadband: 35

F. Community Anchor Summary

Community Anchor Summary	
Schools (k-12)	33
Libraries	20



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Medical and Healthcare Providers	44
Public Safety Entities	43
Community Colleges	3
Public Housing	13
Other Institutions of Higher Education	2
Other Community Support Organization	7
Other Government Facilities	38
TOTAL COMMUNITY ANCHOR INSTITUTIONS	203
Historically Black colleges and Universities	0
Tribal Colleges and Universities	0
Alaska Native Serving Institutions	0
Hispanic Serving Institutions	5
Native Hawaiian Serving Institutions	0
TOTAL MINORITY SERVING INSTITUTIONS	5

G. Project Benefits

Demographics

Jobs



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How many direct jobs-years will be created from this project?	21
How many indirect jobs will be created from this project?	70
How many jobs will be induced from this project?	229

Methodology used to estimate jobs:

The combined vendors estimate that 21 new jobs will be created to design, develop, construct and implement the project. The economic development projects dependent on the complete infrastructure development in the communities involved include the creation of 70 jobs. The applicant and community partners including their local elected officials, Workforce Solutions staff, education, Small Business Development and the applicant commit to developing a total of 229 jobs in information technology, web-based self employment businesses, transportation, medical, government and in the alternative ENERGY industries that are emerging in each community.

Project Impact:

CST is a true public-private partnership that has worked over the past months with public, private and non-profit entities to: 1) assess the current state of broadband capabilities in the region, 2) assess the needs and requirements of the individual consortium entities including residents; businesses; and community anchor institutions including K-12 schools, community colleges, universities, health care providers, housing agencies, governmental bodies and public safety entities, 3) develop an effective broadband solution that serves the unserved and underserved segments of the region, 4) address the immediate and future broadband needs of the CST public, private and non-profit partners, 5) provide for both short-term and long-term economic growth in a 19 county economically distressed region, 6) identify common evolving needs of the user community, 7) prioritize the needs of the consortium members to ensure that critical needs would receive proper focus when technology options were examined for capacity, speed, security and availability requirements, 8) develop a vision of the communications infrastructure 5 to 10 years out and 9) develop an effective solution that was first and foremost inclusive, provided more affordable solutions for the underserved community and provided connectivity for the unserved community through a cost-effective total capital investment.

CST region had seen limited investment in broadband infrastructure largely because of financial concerns - leaving much of the region unserved and underserved by private providers. Since there was investment in middle mile infrastructure already deployed in the CST region, the CST partners decided the most cost effective solution was to buildout the middle mile infrastructure to implement a sustainable open access high capacity, robust broadband network.



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CST consortium and Region 18 ESC chose to execute its mission to provide robust and affordable broadband network in partnership with the expertise of existing private middle mile operators in the region. Each of CST’s six telecommunication partners are locally owned businesses or cooperatives that currently operate successful networks. Each of the private partners has been in business for over 50 years and is highly qualified to deploy and maintain the middle mile network. All of the six telecommunication partners are members of the Texas Lone Star Network (TLSN), a consortium of independent telecommunication companies and their mission is to provide high quality, low cost service on an open and standard network.

Project impacts to the CST region:

1. CST network will reach 19 counties in southwest Texas from the border counties of Presidio, Brewster and Terrell to north of Interstate 20 with a coverage area of 37,445 square miles - larger than the entire state of Indiana. CST middle mile infrastructure deployment will impact one of the most economically distressed regions in the state including the counties of: Andrews, Brewster, Crane, Culberson, Ector, Glasscock, Howard, Jeff Davis, Loving, Martin, Midland, Pecos, Presido, Reagan, Reeves, Terrell, Upton, Ward and Winkler.
2. CST will make available 1Gbps broadband service to an estimated 390,667 Texans in 134,017 households and 33,741 businesses. Community Anchor Institutions to the network including 33 K-12 schools, 3 community colleges, 2 universities, 20 libraries, 44 medical and healthcare providers, 13 public housing units, 7 workforce centers, 43 public safety entities and 38 governmental bodies including county and local government entities, courthouses etc.
3. CST deployment will result in all 33 K -12 schools (75,754 students) having available sufficient bandwidth to meet the needs of every school with up to 1 Mbps depending on each school’s unique telecom/IT bandwidth needs and budgets. By leveraging BTOP grant funds with our cash match funds CST will be able to connect all 33 schools in the region and ensure that all 75,754 students have access to critical broadband network connections.
4. It is estimated that 229 jobs will be created and/or saved as a result of this project including construction, network technicians, installers, management and application design and development. But, the most important economic indicator of deploying this network is that broadband stimulus funding and local matching funds will ensure a globally competitive future



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for the citizens, businesses and communities in the region, opening up endless economic possibilities as a result of broadband access.

5. CTS will be accessible to all public safety entities in the service area including county sheriffs, police units and the Texas Department of Public Safety. Public Safety agencies will benefit from this grant with increased bandwidth and anticipated lower monthly recurring costs. The additional bandwidth will allow a new ability to stream live video from first responders and provide situational awareness to our Communications Facilities, Emergency Management Facilities and in the case of DPS to Headquarters in Austin. In addition it will further the goal of interoperability for first responders by providing the network connection for radio interoperability between the Midland DPS Communications Facility, and DPS Headquarters in Austin.

In summary, the CST buildout fills a gap in the middle mile network infrastructure provides an affordable and robust broadband network that meets the needs of our public, private and non-profit partners and residents in unserved and underserved areas of the region.

Vulnerable Populations:

1. The future of Texas depends on a creative, educated, tech-savvy, productive workforce. Texas has the second highest birthrate in the nation and 30% of its population is under 18. It ranks 7th nationwide on the percentage of children living in poverty. Taken together, these statistics highlight the growing number of impoverished youth across the state that are born digital natives, but are very unlikely to have broadband access or the opportunity to develop 21st century skills.
2. Seniors: Senior Texans frequently need help with basic computer skills training, social networking and access to government services. This population uses computers extensively when broadband access is available. Studies indicate that they need computer training and broadband access so that they remain active in the workforce, engaged in their communities and supportive of the local economy.
3. Hispanics and ESL Residents: 36.5% of the population in Texas is Hispanic, more than twice the national average of 15.4%. More than 31% of respondents in Texas speak a language other than English at home, almost twice the national average of 17.9%. Broadband access and ESL is needed for citizenship and GED training in locally relevant languages to this vulnerable group. Learning English is one of the quickest ways to assimilate into the American melting pot, and the first step for many on the path to citizenship.



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4. Disabled: Facilities and agencies for people with disabilities need broadband to provide support to this population with access to government services, educational content and training.
5. Unemployed/low income: Finding and applying for jobs, maintaining contact with employers, training to find better jobs and other basic aspects of employment are increasingly Internet based, leaving those without access or only intermittent access at a serious disadvantage. These problems are exacerbated by low Internet proficiency and limited English literacy. Across Texas, residents look for jobs, file for unemployment, apply for jobs and create resumes at computer centers.

Level of Need:

Connect Southwest Texas (CST) is a highly collaborative public-private effort to deploy critical middle mile infrastructure (fiber optic network) in Region 18, which includes 19 rural counties in southwest Texas. This area covers more than 37,000 square miles, which is larger than the state of Indiana and one of the most economically distressed areas in the state of Texas. Although Region 18 is rural, there are more than 200 community anchor institutions in the area including 33 K-12 schools, three community colleges, two universities, 20 libraries, 44 medical and healthcare providers, 13 public housing units, 7 workforce centers, 43 public safety entities and 38 governmental bodies including county and local government, courthouses etc. In addition the three community colleges and two universities are certified Hispanic serving minority institutions.

The CST region has seen limited investment in broadband infrastructure largely because of financial concerns - leaving much of the region unserved or underserved by private providers. In fact, the rate of broadband subscribership for the proposed funded service area is estimated at only 35%. In addition, there is very little competition among existing broadband and Internet services providers in the area, especially in the middle mile market. With long distances to reach customers over difficult terrain and a population density insufficient to deliver a profitable return on investment, private providers are unable to build-out and expand their networks. The need for a cost-effective networking infrastructure far exceeds what private providers and governmental entities could deploy on their own. However, the independently owned telephone companies in the region are willing to partner with Region 18 Education Service Center to extend their existing networks and create a vast network with competitive middle mile pricing.

Currently, the anchor institutions in the rural areas must rely on legacy T1s or DSL lines for broadband access. This project will allow these locally owned independent telephone companies



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to expand their networks and provide high speed, fiber based broadband to these anchor institutions, which will then have access to broadband speeds of up to 1 Gbps.

The private providers and governmental entities in this region cannot make the needed investment in the middle mile infrastructure without the stimulus broadband grant funding. CST public-private partnership is a once-in-a-lifetime opportunity to deploy a cost-effective broadband network that will bring the Texas “frontier” to the forefront in economic growth where individuals, businesses and communities in Southwest Texas access the world equally and compete globally.

H. Technology

Technology Type

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

Wireline - xDSL

Wireline - Fiber-optic Cable

Wireless - Terrestrial Fixed

Other

Other: Metro Ethernet

Technology Questions

Methodology for Area Status:

Connect Southwest Texas is comprised of 19 counties in southwest Texas. This area is the most rural and one of the most economically distressed areas in the state of Texas. Although broadband is offered in the residential areas there are few, if any, choices in providers. In the rural and frontier areas of the region, high speed broadband (5 Mbps or greater) is expensive and can be unreliable at times. Schools, colleges and other anchor institutions, which should have broadband speeds of 100 Mbps or greater, currently have to rely on T1 technology, which is only 1.5 Mbps. Clearly, these institutions must have access to higher speed broadband in order to remain competitive.



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The application team conducted market research and surveys by contacting service providers and anchor institutions in the rural areas. Local knowledge from years of working in the area serving education also played a key role in determining the area status. We have found that only the institutions located in the more populated areas have access to high speed broadband.

Description of Network Openness:

Multi-service Network

The architecture of the proposed CST network is engineered to carry multiple applications simultaneously in complete security. This multi-service network provides critical communication circuits for schools, public safety backbones, government, SCADA, telemetry, video surveillance and broadband for residential and commercial users.

Network within the Network

The implementation of this multi-service network includes the ability for service operators, such as ISP's and wholesale carriers, to provide residential and commercial broadband service. Each service operator establishes its own network within the network, using VLAN tagging and a variety of other enabling technologies, to provision services to its own customers. On a customer by customer basis, the service operator can monitor performance, turn service on or off, control speed and volume and for all practical purpose operate as a standalone network. The service operator can acquire their Internet access from any wholesale vendor and use that Internet access to provision their customers. It is possible that two different service operators using the same proposed network, could purchase different wholesale internet connections, setup different customer performance criteria (speeds, content and volume) resulting in their customers having entirely different experiences. Each individual service operator is limited to the overall bandwidth it has contracted and will not be able to disrupt the performance of a competitor, even when the customers are right next door.

The proposed CST architecture eliminates traditional communication silos. Previously, public safety demanded its own network for control and reliability. Schools had a separate set of criteria to make sure they could receive e-Rate subsidies. There was no way dedicated and encrypted government connections could co-exist with residential broadband services. The proposed network and supporting architecture expansion and buildout allows the community to build and share one network that solves each of their connectivity needs.



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Open Access

This network will allow internet service providers and their residential customers, commercial customers, government, public safety, education and medical facilities to acquire broadband services. Our proposed network provides a level playing field for all.

These nondiscrimination and interconnection requirements apply to the grantee, and do not apply to any existing network arrangements or to non-awardees using the network. However, the grantee may negotiate contractual covenants with broadband service providers to deploy or operate the network facilities and pass these conditions through to them. The grantee will have in place safeguards to ensure that the network nondiscrimination and interconnection obligations are met.

System Design:

This project will expand upon existing infrastructure that is already in place. This existing infrastructure is owned and operated by local independent telecommunication providers. These providers will use ethernet and DSL service on a fiber optic backbone to provide service to end users and anchor institutions. New POPs will be installed in the cities of Balmorhea, Pecos, Kermit, Wink, Monahans, Mentone, Iraan, Marathon, Fort Davis, Valentine and Big Lake. All of these new POPs will connect to existing networks that are interconnected to 10 Gbps ethernet based fiber optic backbone.

This project will take advantage of existing infrastructure, which already consists of buried fiber on a 10 Gbps backbone, and expand upon that to offer high speed broadband service to anchor institutions, homes and businesses. Because the network is ethernet based, anchor institutions will be able to order as little as 1 Mbps of service or as much as 1 Gbps of service. The existing networks are built with 10 Gbps backbone rings which provides a high degree of reliability while still providing high speeds and capacity for future growth. This method is much more cost effective than legacy SONET based networks.

System can be upgraded by simply upgrading the electronics at the end of the fiber. As technology advances, 10 Gbps networks will eventually be replaced by 100 Gbps networks. This system will be able to be upgraded over time by upgrading the network electronics without the need to replace fiber in the ground. Because of the reliability and redundancy built into the network, these upgrades can usually be put in place without causing any disruption in service.



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This network will use existing telecommunication companies facilities and peering arrangements. Because we are utilizing existing networks, we will take advantage of existing telecommunication facilities located throughout the region. These facilities are distributed across Region 18 which are owned and operated by the partner telecommunication providers in the project. These partner providers already have points of interconnection in McCamey, Midland International Airport, Midland Sun glow POP and Midland Wilco building POP. These interconnection points also provide access to other providers, such as Grande Communications, AT&T, Verizon, and Layer 3.

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		
	Federal Grant Request	Match
Last Mile	0	0
Middle Mile	12,036,811	5,271,733
Total	12,036,811	5,271,733

Project Budget Total: \$17,308,544

Match Percent: 30.5%

Projects Outside Recommended Funding Range:



Outside Leverage	
Applicant is providing matching funds of at least 20% towards the total eligible project costs?	Yes



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Matching cost detail	<p>Cash Matching Funds detail:</p> <ul style="list-style-type: none"> a) Region 18 Education Service Center b) \$5,121,733 Cash Match, 30% of total budget c) Type of funding is cash grant match d) The use of the funding is building infrastructure and providing working capital e) Region 18 ESC is the fiscal agent for the funding of the project <p>Additional source of Cash Matching Funds:</p> <ul style="list-style-type: none"> a) Texas Department of Public Safety b) \$150,000 Cash Match , .1% of total budget c) Type of funding is cash grant match d) The use of the funding is for capital expenditure of vehicle purchase e) No key terms or conditions
Unjust enrichment	No Federal support for non-recurring costs have been received or applied for.
Disclosure of federal and/or state funding sources	Universal Service Fund
Budget reasonableness	<p>Network and Access Equipment: Routers - 2 units for telecom company routing equipment needs for providing access, prices based on manufacturer's prices.</p> <p>Outside Plant: Cables - \$57,010 per mile for laying fiber optic cable through 194 miles of rugged west Texas terrain. Ditching in hard rock, burying the fiber in extremely rural areas, some in mountainous regions, by skilled workers, travel and sustenance costs for labor, equipment costs for digging ditches and fuel costs account for the high cost per mile.</p> <p>Towers - one microwave tower, including design, materials and labor for construction. This is for an area where ditching is impractical.</p> <p>Operating equipment:</p>



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	<p>Vehicles - IC4U - One Multi-use heavy duty vehicle for educational and public safety @ \$500,000, equipped with high tech communications devices for emergencies and disasters, interoperability with all responders and ability to travel anywhere, any terrain at any time. Cost comparable to other similar vehicles owned by state in other regions.</p> <p>Professional Services:</p> <p>Engineering - Telecom company engineering support for design and specifications for extending existing infrastructure of partner telecommunications partners to ensure fidelity and interoperability of the project. Costs based on estimates of time and effort by professional engineers at rate paid by partner telecom companies.</p> <p>Project - Salaries for 7 positions for the term of the grant period, based on current salary scale. 1 director, 1 manager, 4 technicians and 1 financial agent.</p> <p>Consulting - Additional overall project engineering by outside firm. Based on local fee structure for service.</p> <p>Other - travel by grant personnel to customer sites in a 37,000 square mile region. No public transportation available, all travel by automobile, often requiring overnight due to distances. \$30,000 total travel cost for mileage and sustenance.</p> <p>Other - Videoconferencing infrastructure codec, bridge and related devices to provide IHEs with videoconferencing capability to remote community sites and LEAs. 10 units, amounts based on manufacturer's estimated prices.</p> <p>Customer Premise Equipment:</p> <p>Other - layer 3 Ethernet switches, 40 to be placed on-site of partner LEAs and IHEs. These CPE devices provide the ability to access up to 1Gpbs of bandwidth. The \$7,500 unit cost is based no manufacturer's</p>
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	<p>price estimate.</p> <p>Billing Support and Operation Support Systems: Customer Care - Software Licenses fees of \$1,000 for 100 users for the videoconference bridge licenses so that partner entities can participate in videoconferences. Price based on current fee estimate from software vendor.</p> <p>Advertising - \$14,500 total budgeted for newspaper public notices and bids required by law for construction of tower, ditching and cabling, and acquisition of capital equipment. Amount estimated based on current local newspaper advertising space rate</p>
Demonstration of need	<p>This project cannot be implemented without the federal assistance available through this grant project. This project entails extending an existing network that functions mostly through T1 lines and DSL lines. The network has reached and its capacity and demands for bandwidth are exceed the consortium's ability to meet the needs of the clients. The members of the consortium are independent school districts, county governments, health care and public safety organizations. All are struggling to meet annual budgets and are without the funds needed to invest in technology infrastructure. All of the entities are non-profit organizations. The telecommunication partner companies are small, locally owned, independent and could not pass on the expenses of expanding broadband to the entities that require it. The possible recapture of the investment revenue is impractical, considering the sparsity of populations and the vast distances to be covered in the region - over 37,000 square miles.</p> <p>The applying organization is fortunate to have enough cash reserve, accumulated over a period of many years, to be able to commit the matching funds required of the project. The organization does not have nearly enough cash reserve to undertake a project of this size to reach all of the entities that need the services.</p> <p>As you can see from the financials provided, without federal</p>



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	assistance, the private sector could clearly not make the economics works, NPV value of -3.1M. However, with federal assistance, we are extremely confident, based on our conservative subscriber additions over the eight year period, we can make this project self sustaining; NPV \$2.9M. We have used the 15% discount rate as prescribe on page 105 of the grant guidance document.
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Funds to States/Territories

States	Amount of Federal Grant Request
Texas	12,036,811

Funds to States/Territories Total: \$12,036,811

J. Historical Financials

Matching Funds			
	2007	2008	2009
Revenue	15,797,396	14,645,238	15,221,964
Expenditures	12,627,503	14,026,986	12,451,353
Net Assets	12,277,809	18,129,267	20,763,512
Change in Net Assets from Prior Year	3,931,806	1,919,652	2,940,113
Bond Rating (if applicable)			

K. Project Readiness

BTOP Organizational Readiness

Region 18 Education Service Center will has negotiated management and operating arrangements with the partner telecommunication providers in the project. Each



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telecommunication partner will manage and operate the broadband network within their respective serving areas. Each telecommunication partner will be responsible for sales, marketing, operation, customer care, provisioning, etc... Region 18 Education Service Center will negotiate contracts with each telecommunication partner to guarantee the management and operation of the overall network will be sustained over the long term. Because we are expanding the existing networks, these companies already have the management and operation support systems in place that are necessary to sustain the network.

Construction and Vendor Contracts

Region 18 Education Service Center will rely entirely on contractors and vendors to deploy the networks facilities. Although we do not have signed contracts in place, we do have letters of intent from the partner telecommunication companies to provide these services. When the application is approved, Region 18 Education Service Center will immediately begin negotiations with each partner company to implement signed contracts detailing responsibility, cost, and deadlines. All partner companies have indicated they are ready and willing to sign contracts, as soon as the project application is approved.

Customer Base

While the overall project will be managed by Region 18 Education Service Center, each telecommunication partner will be responsible for managing their own customer base. Each partner company already provides services to residential, business, community anchor institutions and third party service providers. This project will allow these partner companies to expand to additional customers at a competitive price. This project covers over 37,455 square miles, 390,000 people, 134,000 households, 33,741 businesses, and over 200 community anchor institutions. It is estimated that between 90% and 100% of these will be passed in this project.

Licenses, Regulatory Approvals and Agreements

Wireline does not need any licenses. Any buildings involved in the project are already owned and operated by the existing telecommunication companies.

Permits already exist for projects located in WesTex Telephone serving area.

Permits for right of way, easements etc. need to be obtained for Big Bend Telephone serving area.



**Broadband Infrastructure Application
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Permits for right of way, easements etc. need to be obtained for Poka Lambro Telephone Cooperative serving area.

Permits for right of way, easements etc. need to be obtained for Dell City Telephone Cooperative serving area.

Permits for right of way, easements etc. need to be obtained for Hill Country Telephone Cooperative serving area.

Each telephone carrier already possess the credentials to operate as a carrier.

SPIN Number

- Wes-Tex Telephone Cooperative, Inc. SPIN: 143002426
- Wes-Tex Telecommunications LTD. SPIN: 143001046
- Dell Telephone Cooperative, Inc. SPIN: 143002422
- Delcom, Inc. SPIN: 143003929
- Hill Country Telecommunications. SPIN: 143666666
- Big Bend Telecommunications LTD. SPIN: 143033962
- Poka Lambro Telecommunications, Inc. SPIN: 143001263
- Region 18 Education Service Center. SPIN: 143005981

L. Environmental Questionnaire

Project Description

This project will involve the construction of new facilities; approximately 194 miles of outside plant facilities in order to provide broadband serve to schools, county agencies, city agencies, public safety agencies, and health entities in rural Texas. The proposed construction will take place in Glasscock, Howard, Martin, Midland, Andrews, Reagan, Upton, Ector, Culberson, Reeves, Ward, Winkler, Brewster, Crane, Jeff Davis, Pecos, Presidio, Terrell and Loving counties of Texas, as served by Wes-Tex Telephone Cooperative, Inc. (Wes-Tex), Wes-Tex Telecommunications, LTD. (Telecom), Dell Telephone Cooperative, Inc., Delcom, Inc., Hill



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Country Telecommunications, Big Bend Telecommunications, Inc., and Poka Lambro Telecommunications, Inc. These companies will use Rural Development Utilities Program (RDUP) approved materials and construction techniques for the broadband system in this project.

Property Changes

This project will involve the construction of 194 miles of outside plant facilities in Glasscock, Howard, Martin, Midland, Andrews, Reagan, Upton, Ector, Culberson, Reeves, Ward, Winkler, Brewster, Crane, Jeff Davis, Pecos, Presidio, Terrell and Loving counties of Texas. The buried plant will consist of fiber optic cables placed at a minimum depth of 36 to 42 inches below the surface in most areas along established streets, roadways or travel routes in town areas. Cable installed adjacent to road ROW will generally be within 5 to 10 feet of the public easement. This construction requires plowing of the cable with a ripper attachment. The ripper opens a narrow slot, inserts the cable and covers in one operation. This is useful in areas where rock contents are minimal and construction paths are free of obstructions. An alternate method, used when applicable, is making a trench, placing the appropriate sized cables, backfilling and compacting to restore the ground to its original condition. If concrete or paving is required to be cut, it is restored as appropriate. In situations where the cable must be placed under large roads, a bore will be made under the obstruction. The cable will then be pulled through the bore into place leaving only a minimal surface disturbance. When river or stream crossings or U.S. water crossings are encountered, the construction will be either bored or via bridge attachments. Every effort is made to minimize environmental damage.

Buildings

No building constructions are proposed for this project. This project is a linear construction project that is to be located within previously disturbed rights-of-way.

Wetlands

Generally, stream crossings will be via bridge attachments, aerial inserts, or bores under the streambeds. All construction activities will be designed to avoid or minimize impacts on wetlands, floodplains, and riparian drainage.

Critical Habitats



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The project does not anticipate any disturbance to any threatened or endangered species and will take necessary precautions to be aware of these species during construction. Upon encountering any threatened or endangered species or habitats during construction or along construction ROW, construction will be stopped in that area and the appropriate agencies will be notified immediately.

Floodplain

The FEMA maps do not indicate that any of the proposed construction is located within a floodplain.

Protected Land

Per data from the Texas Historical Commission (THC) website, listings of National Register of Historic Places are within one mile of the proposed construction routes in Howard County, Texas. A project description and map of the proposed construction map will be submitted to THC. The proposed construction shall be no closer than two city blocks from any historical location.

Culberson County has the following historical sites: 41CU9, Lobo Valley Petro glyph Site, Clark Hotel, Culberson County Courthouse (1912), Culberson County Courthouse (1964), First Presbyterian Church, Granado Cave, Guadalupe Ranch, McKittrick Canyon Archeological District, Guadalupe Mountains National Park, Pinery Station, Pratt, Wallace Lodge.

Loving County has the following historical sites: Loving County Court House.

Ward County has the following historical sites: Ward County Court House, Mobley Hotel.

Winkler County has the following historical sites: Winkler County Court House.

All proposed construction shall be contained within existing street and road rights-of-ways and shall consist of boring or trenching within these existing rights-of-ways. No above ground level construction will be performed in these areas.

Coastal Area

There are no coastal areas affected by this project.

Brownfield

There are brownfield sites located within the project area. The attached map shows the location of brownfield sites in relation to the proposed project. Construction methods and routes can be altered to avoid disturbance of any sites.



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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 Competitor Data.xls	Collett, James	03/25/2010
Network Diagram	Network Diagrams.pdf	Collett, James	03/25/2010
Build Out Timeline	CCI Build-out Timeline.pdf	Collett, James	03/25/2010
List of Community Anchors and Points of Interest	CCI Anchor Detail and POI.xls	Collett, James	03/25/2010
Management Team Resumes and Organization Chart	Grant Resumes.pdf	Collett, James	03/25/2010
Government and Key Partnerships	Support Letter.pdf	Collett, James	03/25/2010
Historical Financial Statements	Historical Financial Statements.pdf	Collett, James	03/25/2010
Budget Narrative	CCI Budget Narrative.doc	Collett, James	03/25/2010



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Detailed Budget	CCI Detailed Budget.xls	Collett, James	03/25/2010
Pro-forma Forecast	JR-CCI Pro Forma Financial Projections Attachment EJVS.xlsx	Collett, James	03/26/2010
Subscriber Estimates	CCI Subscriber Estimates Attachment.xlsx	Collett, James	03/25/2010
Dashboard Metrics	CCI Key Metrics Dashboard.doc	Collett, James	03/26/2010
Service Area Data	CCI Service Areas.xls	Collett, James	03/25/2010
Network Maps	Network Map.pdf	Collett, James	03/25/2010
BTOP Certifications	certification.pdf	Collett, James	03/25/2010
SF-424 C and D	SF-424c.pdf	Collett, James	03/25/2010
Supplemental Information	JR-Capital asset depreciation schedule1.xlsx	Collett, James	03/26/2010