



Broadband Infrastructure Application
Submission to NTIA – Broadband Technology Opportunities Program

Submitted Date: 3/26/2010 9:27:38 PM	Easygrants ID: 5374
Funding Opportunity: Broadband Technology Opportunities Program	Applicant Organization: PYRAMID LAKE PAIUTE TRIBE
Task: Submit Application - BTOP	Applicant Name: Miss Mary Lee Dazey

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A. General Application Information

Applicant Information	
Name and Federal ID for Applicant	
DUNS Number	099539793
CCR # (CAGE)	3V1Y0
Legal Business Name	PYRAMID LAKE PAIUTE TRIBE
Point of Contact (POC)	MERVIN WRIGHT JR. 7755741000 Ext. 102 mwright@plpt.nsn.us
Alternate POC	MARY LEE DAZEY 7755741000 Ext. 103 mdazey@plpt.nsn.us
Electronic Business POC	SANDRA HICKS 7755741000 Ext. 104 shicks@plpt.nsn.us
Alternate Electronic Business POC	GREG GARDNER 7755741000 Ext. 117 ggardner@plpt.nsn.us

Name and Contact Information of Person to be Contacted on Matters Involving this Application:	
Prefix	Miss
First Name	Mary
Middle Name	Lee
Last Name	Dazey
Suffix	
Telephone Number	775-574-1000



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Fax Number	
Email	mdazey@plpt.nsn.us
Title	Compliance Officer

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

Project Role	Name	Phone	Email
Secondary Point of Contact	Mr. Greg Selwyn, Gardner	7755741000 117	ggardner@plpt.nsn.us
Other Contact	Mrs. Robbin , Scholl	7755741000 111	rscholl@plpt.nsn.us

Environmental Point of Contact

Prefix: Mr. Name: Mosley, John Suffix: Telephone Number: 7755740101 Title: Environmental Director

Organization Classification

Type of Organization	Indian Tribe
Is the organization a small business?	No
Does the organization meet the definition of a socially and economically disadvantaged small business concern?	No



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Authorized Organizational Representative	
AOR Name	WRIGHT, MERVIN
Result	Notify

Project Title and Project Description

Project Title: Pyramid Lake Paiute: Natukwena Nagweseno

Project Description: The Pyramid Lake Paiute Tribe is applying for a middle mile CCI fiber project. This project will fiber-connect the anchor institutions on the reservation with the Reno NOC. The Pyramid Lake Reservation with a population of 1580 is a rural, underserved area 35 miles from Reno, NV that encompasses the towns of Wadsworth, Nixon, and Sutcliffe.

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.
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.

Comprehensive Community Infrastructure Components

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

Middle Mile



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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?

- No

Easygrants ID	Project Title

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

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



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B. Executive Summary, Project Purpose and Benefits

Essay Question

Executive Summary of the proposed project:

The Pyramid Lake Paiute Tribe is a federally-recognized Tribe. Our Reservation covers 500,000 acres and includes a 112,000 acres terminal lake.. While one area of the Pyramid Lake Reservation is located 35 miles northeast of Reno, the Tribe is remote in the sense of lack of access to cost effective and fast broadband. There are 1580 residents and 2000 enrolled members who would benefit from bringing fiber access to public facilities and enterprises within the reservation. Residents live in the communities of Wadsworth, Nixon and Sutcliffe that are separated by 20 miles. Distance and disparate levels of internet service means that the communities are like islands within the reservation. Our Project name "Pyramid Lake Paiute: Natukwena Nagweseno" is a Paiute phrase which means "to weave information." If we are funded, the tribe hopes to use the fiber to weave the communities and the outside world together, to level the playing field for those living on the reservation and to bolster economic development and jobs.

The Pyramid Lake middle mile CCI project will fiber-link anchor institutions and key government departments throughout the Pyramid Lake Paiute Reservation. This project will enable the tribe to bring 100 mbps service with expansion capabilities up to 2.5 gbps to the area. This will directly support the growing needs for a community library and medical services; police, rangers, fire and emergency response services; schools, higher education; and economic development. It will assist many tribal departments to become part of an integrated network for information sharing, and provide the quality of service needed for database sharing with other tribal, federal and state agencies at an affordable cost.

Pyramid Lake is a popular recreational area for visitors from Reno/Tahoe, California and around the world. In winter, the tribe opens up Pyramid Lake for prize fishing, and boating, skiing, and swimming in the summer. Eighty thousand permits were issued in 2008, and visitors topped 200,000. Despite the popularity of the Lake in the region and the world, the Pyramid Lake Paiute Reservation Service Area remains underserved and economically disadvantaged. The town of Fernley, three miles from Wadsworth, beyond the reservation boundaries, is a thriving



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community with industrial growth. Our proximity to Fernley poses a great opportunity for economic development especially in the area of providing service to enterprises if a fiber grant was awarded.

The wireless network that currently links tribal departments and services in the three communities is insufficient for interdepartmental networking, accessing remote medicine opportunities, coordinating emergency response, police services, courts and victim services. The high school and health clinic, located in Nixon, pay for T1 service costing \$6,000 to \$14,000 per year. Phone lines are at capacity in Sutcliffe and near capacity in Nixon.

The project has a budget of \$10,957,588. Over 40 miles of fiber conduit will be trenched in and the 24-strand dual-conduit fiber will run along existing roadways. It will pass through the three communities and feed 29 tribal anchor institutions that 1580 tribal members and visitors rely upon. The proposed line will provide splice points for the planned Wadsworth Community Center, currently in the design phase, a planned industrial business park in Wadsworth, as well as the future geothermal energy plant at Astor Pass, north of Sutcliffe. Basic services will be circuits only, shared 100 mbps bandwidth, and dedicated fractional 10 to 100 mbps Metro E. The Wadsworth node will support third party service providers in Fernley. It is estimated that the Pyramid Lake Paiute project will create 119 direct job-years, 76 indirect jobs and 40 induced jobs. With a fiber linked business park, it is estimated that the twenty-five business tenants will eventually create 2500 direct jobs, and 1600 indirect jobs.

The Pyramid Lake Paiute tribe is able to provide an in-kind match of \$2,432,000. The majority of this in-kind match is an IRU for fiber to Reno which the tribe obtained in 1999 in a right-of-way agreement with Williams Communication Inc, now Level (3) Communications. If these dark fiber lines were not available to the Tribe, the cost to link to Level (3) NOC in Reno or Fallon would be cost-prohibitive. With the BTOP funding available, it is now feasible to capitalize on this important resource available to the tribe and use it to boost economic growth as well as improve and expand services to the region.

As the reservation is a rural area, virtually all anchor institutions are located on or very near the highway which will be the fiber corridor. The fiber network will pass by a regional youth treatment facility, a future Industrial Business Park, Natchez Elementary School, Day Care Center and Headstart, future Wadsworth Community Center with library and computer center, Nixon Store, Health Clinic, Museum/ Cultural Center, Pyramid Lake High School, Tribal Administration Building, Social Services, Housing, Police Department, Fire Station, Courts, Consolidated Higher Education, Library, Diabetes and Children's Cabinet, Sutcliffe Fire Station, Fisheries Administration, and the Marina/ Ranger Station.



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This fiber network will enable the tribe to provide best in class network data, video and voice services in an open network. All tribal related sites will implement applications which filter content deemed as posing a threat to the security of their internal networks and information systems. The tribe will institute a Telecommunications Committee which will create an acceptable use policy and oversee issues concerning the use and availability of the network. The current website will prominently post these policies. Third party service providers will be encouraged to subscribe to the available circuits and provide competitive broadband services to homes and businesses in these communities and neighboring communities. Pricing will be fair and competitive. Costs will be in line with comparable services in metropolitan areas across the country.

The Paiute tribe currently operates a wireless broadband network throughout the three communities for some of these buildings. The fiber network will deploy the same technologies, including: routers, firewalls, switches, network security software, and bandwidth management software. The tribal office already has a climate-controlled, secured datacenter that houses servers and network equipment. The additional equipment will be housed in this facility. Network services are completely handled by staff; and relationships with outside vendors with network specialties are established to address specific service needs at the expertise level. Our Tribal Finance and Management Team has extensive experience with billing and providing enterprise and utility services to the communities.

We are partnering with Praxis Associates Inc, a California-based architectural and engineering firm on this project. They have experience in both working with Native American tribes and designing and installing fiber networks. They bring the expertise the tribe needs to launch a network of this scope in terms of engineering design, budget, proper documentation and the construction of a state of the art fiber network.

The Pyramid Paiute project will directly benefit the residents of the three communities and enable the tribe to partner with a third party service provider for last mile service. A last mile solution is not part of this project because the fiber project would leverage a no cost solution to bring last mile service to communities that are underserved and unserved. The wireless backbone the tribe is currently using, while inadequate for tribal and enterprise demands, can be dedicated to a home wireless solution. A third party service provider has expressed interest in providing WIMAX wireless service to the unserved homes using the wireless infrastructure.

The Pyramid Lake Paiute Tribe believes that this is a cohesive, comprehensive and worthwhile project that will attain the goals of BTOP and meet the expectations of ARRA.

Project purpose:



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Pyramid Lake Paiute: Natukwena Nagwesenoo will provide the tribe with broadband to bridge the gap between members within three communities, allow for expanded interactivity with government agencies and support economic development.

Many of the tribe's departments are limited by our current wireless system. The Finance Department cannot centralize accounting of the tribe's enterprises. The Pyramid Lake High School and the Health Clinic cannot coordinate with the tribe on grant activities, reporting and audits or link to outside agencies. The Pyramid Lake Police Department cannot integrate services with Washoe County Sheriff's Department. Outside of the Police Department in Nixon, critical information and services cannot be accessed except through radio communications for emergency calls. This project will enable the three tribal public safety providers to access information throughout the reservation.

The existing wireless network is incompatible with many of many of the tribe's new software systems. Client server applications used by the police department, rangers, social services and tribal government cannot operate over wireless networks. The switching technology is inferior to wired networks performing at minimum 100mbps. The result is that access to these databases can only be retrieved from a single site. The Tribe's Court cannot fully utilize the Full Court software which was designed to be interactive with other departments. Personnel with Social Services, Victim Services, Courts, and Police Department can only obtain case information at the Courthouse. Fiber would allow agencies and individuals to access this information offsite.

The police department must pick up tribal detainees from the Washoe County Jail in Reno for their court arraignments in Nixon because our network does not support video arraignment where tribal members in custody at the Washoe County Jail could attend their court arraignments. With this project, the tribal court will now be able to implement video arraignments which will enable police resources by eliminating nearly six hours of time currently needed to handle each arraignment.

The current wireless backbone is too congested for tribal operations to be able to offer service to 110 homes in Sutcliffe and 160 homes in Nixon. With the small number of housing unit, it is cost-prohibitive for an outside service provider to build the infrastructure for wireless service to the homes. If the Tribe was to be awarded this project, the Tribe could dedicate the existing wireless backbone currently in use to home service. This project will provide for minimum 10



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mbps service at almost a 50% reduction in cost. The reason for this is that very expensive circuit charges to the Network Operations Centers in Reno would be eliminated.

Because many of our anchor institutions are spread out over a wide area, it is not possible to partner in a consolidated broadband service and reduce costs for technology and services. Thus, each currently would need T1 service which costs \$6,000 per year for each line.

Benefits of Fiber Service

The Fiber Project would allow the development of the tribe's fiber asset. Fiber strands provided by Williams Communications, in 1999, have been dormant due to the high costs to develop. This grant will enable this asset to be of benefit to the Tribe.

The Project would deliver enough bandwidth to support two major economic development projects :an Industrial/ Business Park and a potential geothermal plant.

The Project will allow access to online public safety training programs offered by federal and state agencies and provide savings.

The project will allow tribal members to connect to the State of Nevada's Library System.

The project will access newly emergent technologies in remote medicine that is cost prohibitive.

Because the clinic is 45 miles from the nearest urgent care facility, this project could save lives.

The project will provide online educational access. With the closest college forty-five miles away, the Tribe's Consolidated Higher Education Program has more demand for online courses than the current system can provide.

Effective Solution:

The fiber network is an effective solution for resolving the needs described above and catalyzing economic development in the region. The fiber network design is robust, costs little to maintain and would provide a connection to the Network Operations Center in Reno where competition for services is available. If the project were funded, the tribe could leverage the wireless backbone for home services.

Broad Significance – Replicated Architecture:

Because the fiber network is on a main corridor across the region and will provide an immediate capability of 24 fibers with conduit inground for doubling, future expansion will be easily handled. Potential customers will be able to access broadband service or create dedicated networks through other entities.

Underserved / Unserved Areas:

The middle mile project will extend through the served area of Wadsworth, the underserved in Nixon, and terminate in the unserved Sutcliffe. While funds are not being requested at this time



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for a Last Mile component in Sutcliffe, the Middle Mile component is critical to serve the homes eventually in this community.

Statutory Purpose:

In summary, the scope of the project satisfies most of the BTOP statutory purpose specifications. The underserved and unserved communities of Nixon and Sutcliffe will receive a comprehensive broadband solution using WIMAX wireless systems and 10 mbps capability. This carries additional significance given the fact that these homes are funded through U.S. Housing and Urban Development. This project will provide fiber connectivity to those departments serving the unemployed and disabled including schools, libraries, medical and health care facilities, higher education office, senior center and social service office.

Recovery Act and Other Governmental Collaboration:

Through the Department of Energy, Recovery Act funding has been awarded to the Pyramid Lake Paiute Tribe and contractors to identify the optimal geothermal well site location at Astor Pass, an area determined by analysis from an earlier project, to have a proven geothermal resource. The grant (DE – EE0002842) is for \$4,845,534. The fiber grant will be a major bonus to leverage funding as well as partnership interest to build a power plant since fiber (located 15 miles from Astor Pass) will be critical to the needs of a power plant.

The Tribe received an award (# B-06-SP-NV-0700) under the HUD Economic Development Initiative for \$495,000 to design/ bid a Community Center in Wadsworth. The tribe is currently in the process of forming a contract with the architect selected from the bidding process. This Center will provide a major anchor to this fiber project in the Wadsworth Community, providing the community and the reservation with a main library, state of the arts computer center, and police department. The Fiber Project would boost our ability to leverage funding for a Indian Communities Development Block Grant from HUD as well as USDA Community Facilities grant to build the facility.

Through the Department of the Interior, the Pyramid Lake Paiute tribe has received funding under Recovery Act Roads Project to construct a highway bypass in Wadsworth. The bypass highway will be a feeder route for the proposed business park. The fiber project will provide interconnect points for expansion into the business park once the road is completed. This award (# OTH61T651PO) is for \$501,000. With the design in progress, the splice points can be put where needed.

Fit with BTOP CCI Priorities:



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The Pyramid Lake Paiute Project fulfills most of the BTOP priorities pertaining to the CCI project.

- 1) The Project will deploy a Middle Mile solution to existing and planned anchor institutions. The project will create fiber connectivity to the Pyramid Lake High School, Natchez Grade School, Nevada Skies Regional Youth Treatment Center, the Pyramid Lake Medical Clinic in Nixon, and the Pyramid Lake Fisheries in Sutcliffe, among other institutions, as well as the Wadsworth Community Center and Library in Wadsworth currently being designed.
- 2) The Project is a Middle Mile Project with Public / Private Partnerships. The project will enable the tribe to meet the need imposed by the Washoe County Justice Department of a fiber connection so that the Pyramid Lake Paiute Tribe can partner with the county in bringing video arraignment capacity to the Pyramid Lake Courthouse. We will also partner with the Pyramid Lake Medical Clinic and Indian Health Services to expand the broadband capability in order to implement intensive remote medicine technologies. In addition, the Tribe plans to partner with High Desert Wireless to provide home broadband service to the underserved community in Nixon and the unserved community of Sutcliffe.
- 3) The Project is a Middle Mile Project to bolster growth in economically distressed areas. The project's service area is wholly contained within the Pyramid Lake Paiute Reservation and comprises the 9401 US Census Tract. Statistics are drawn from the US Dept. of Interior Bureau of Indian Affairs 2002 labor data for the communities of Wadsworth, Nixon and Sutcliffe. Of the 2,055 tribal residents, 1107 are of working age. The unemployed and employed below poverty level exceeds 55%. This project will benefit many of these people with improved internet access for education, job training and job hunting. Future projects, including the business park and geothermal plant, will benefit from this fiber project and provide many jobs in the area.
- 4) The Project is a Middle Mile Project to serve community colleges. The Pyramid Lake Paiute Tribe does not have a tribal college. Instead, we have a Higher Education Program which provides college services for residents. This includes a remote learning facility which provides online courses in partnership with Truckee Meadows Community College in Reno, NV. This project will enable the facility to support high demand online video course work and expanded access for students.
- 5) The Project is a Middle Mile Project that serves public safety entities. This project will directly serve the Pyramid Lake Police Department, the Pyramid Lake Rangers, The Nixon Emergency Response Center, and the Sutcliffe Emergency Response Fire Department.
- 6) The Project includes a last mile infrastructure component. This project will enable the underserved community of Nixon and the unserved community of Sutcliffe to have access to a



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10mbps WIMAX network using the existing wireless backbone, and expanding coverage through intended partnership with High Desert Wireless. Coverage of the three communities will then be comprehensive and services and equipment will be included in that partnership.(not sure if this is needed.)

7) The Project provides a 23.4% match. The Tribe is able to supply a 22.8% in-kind match and is petitioning for a waiver for the remainder.

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 Name: Ort, Mike Phone: 7075518220 Email: mort@praxisfiber.com Address 1: 1101 Nimitz Avenue Address 2: Address 3: City: Vallejo



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<p>State: California Zip Code: 94592 Organization: Praxis Organization Type: For-profit Entity Small business: Yes Socially and economically disadvantaged small business concern: Yes</p>
<p>Project Role: Third party in-kind contributor Name: Wright, Mervin Phone: 7755741000 Email: mwright@plpt.nsn.us Address 1: 208 Capitol Hill Address 2: Address 3: City: Nixon State: Nevada Zip Code: 89424 Organization: Pyramid Lake Paiute Tribe Organization Type: Indian Tribe Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Other Name: Carey, Scott Phone: 7755741000 Email: scarey@plpt.nsn.us Address 1: P.O. Box 256 Address 2: Address 3: City: Nixon State: Nevada Zip Code: 89424 Organization: Economic Development Organization Type: Indian Tribe Small business: No Socially and economically disadvantaged small business concern: No</p>
<p>Project Role: Other Name: Dawson, Doug Phone: 7755759593 Email: doug@hdiss.net Address 1: P.P. Box 494</p>



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Address 2:
Address 3:
City: Fernley
State: Nevada
Zip Code: 89408
Organization: High Desert Internet
Organization Type: For-profit Entity
Small business: Yes
Socially and economically disadvantaged small business concern: No

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

The key partners on this project are: Praxis Fiber, the Pyramid Lake Paiute Tribe, Level (3) Communications, the Pyramid Lake Paiute Tribe's Economic Development Department, High Desert Internet and a host of anchor institutions on the reservation.

Praxis Fiber is providing the engineering and budget estimation for the installation of the fiber infrastructure, the installation of the interconnect points, and the configuration of the networking equipment. Because of the lack of time for a formal bid process, Tribal procurement policy, conforming with federal guidelines for this project, was taken into consideration and the Pyramid Lake Paiute Tribal Council passed a resolution to partner with Praxis in the pre-application process and the construction process. Guidelines used were the lack of time for a formal bid process and Praxis experience in preparing documentation for other federal grant projects. Praxis's role will be that of a contractor.

The Pyramid Lake Paiute Tribe is providing an in-kind match of goods and services to the project. The Pyramid Lake Paiute Tribes Fisheries, and the Environment and Technology Departments are contributing services. The Tribe is contributing 6,428 sq. ft. of land for two node sites in Wadsworth and Sutcliffe and we have included two fiber lines that are dedicated to the Pyramid Lake Paiute Tribe to use through a right-of-way agreement with Williams Communication, Inc., now Level (3) Communications.

Department of Health & Human Services, Indian Health Service, is taking steps to implement advanced services for telemedicine and electronic health record management.



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Pyramid Lake Paiute Tribe's Economic Development Department is providing the development plan for e-commerce related enterprises at the Industrial Business Park in Wadsworth.

High Desert Internet will be a partner as a result of this project. Although, this application is strictly for a Middle Mile Project, we anticipate that if awarded we would direct existing wireless backbone towards providing last mile internet to homes in the underserved and unserved areas. Thus, the WIMAX last mile aspect of the project will be implemented by the Tribe without federal grant funds. If awarded, High Desert Internet would benefit as the tribe would hire them as an outside service provider to install the access points on this infrastructure and connect home or business subscribers as requested. These costs will be covered by High Desert Wireless and covered by subscriptions to the service.

Anchor Institutions: There are a total of 29 anchor institutions that would benefit from this fiber grant. We have received letters of support from the Pyramid Lake Fisheries, Pyramid Lake Tribal Court, Pyramid Lake Consolidated Higher Education Program, Pyramid Lake Police Department, and the Pyramid Lake Health Clinic .

D. Congressional Districts

Applicant Headquarters

- Nevada

Project Service States

Nevada

Project Service Areas

Nevada - 2

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



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- Yes

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

Pyramid Lake Paiute Tribal Council

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

- Yes

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: Pyramid Lake Reservation
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>
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Total Square Miles in Service Area: 742
Total Population in Proposed Service Area: 2,400
Total Number of Households in Service Area: 1,580
Total Number of Businesses in Service Area: 8
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area: 29
Unemployment Rate in the Service Area: 20
Median Income in the Service Area: 28,000
Estimated Percentage of Households with Access to Broadband: 60
Estimated Percentage of Households Subscribing to Broadband: 26



**Broadband Infrastructure Application
Submission to NTIA – Broadband Technology Opportunities Program**

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F. Community Anchor Summary

Community Anchor Summary	
Schools (k-12)	2
Libraries	2
Medical and Healthcare Providers	3
Public Safety Entities	4
Community Colleges	0
Public Housing	0
Other Institutions of Higher Education	1
Other Community Support Organization	2
Other Government Facilities	15
TOTAL COMMUNITY ANCHOR INSTITUTIONS	29
Historically Black colleges and Universities	0
Tribal Colleges and Universities	0
Alaska Native Serving Institutions	0
Hispanic Serving Institutions	0



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Native Hawaiian Serving Institutions	0
TOTAL MINORITY SERVING INSTITUTIONS	0

G. Project Benefits

Demographics

Jobs	
How many direct jobs-years will be created from this project?	119
How many indirect jobs will be created from this project?	76
How many jobs will be induced from this project?	40

Methodology used to estimate jobs:

The Methodology used to calculate the jobs and job years for this project is taken from the Council of Economic Advisors.

Job Factor is 92,000. Total Budget is 10,957,588. Budget funding divided by 92,000 gives us 119 job years. Direct job effects is $120 \times .64$ to get 76 Direct/Indirect job effect. $120 \times .36$ gives us 40 induced job effects.

As another aspect of the job creation, this project will provide the broadband infrastructure for the proposed business park. The economic development coordinator submitted a support letter that estimates 2500 jobs permanent jobs would be created and 1600 jobs indirectly created. His formulations were based upon area growth and surveys conducted by the U.S. Chamber of Commerce regarding industrial workers in rural towns

Project Impact:

Anchor Institutions

This project will provide middle mile and last mile fiber connectivity to all of the anchor institutions in the three service areas. Because the anchor institutions are located on or very close to the primary routes, this makes the goal of connecting the anchor institutions very easy. Interconnect nodes and splice points in each community will account for any possible future expansion. All data, VOIP, extended network and video services will be available at any bandwidth level, only restricted by reasonable and competitive costs. Services will be on par with any offered in a metropolitan market.



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The fiber network will connect twenty-nine anchor institutions with minimum 10 mbps service. These include two courthouses, a grade school, high school, and a higher education facility, two HeadStart facilities, two Childcare facilities, a Children’s Cabinet office, two medical and healthcare facilities, a cultural center, a planned community center & library, a secondary library, a police station and a ranger station and two emergency response facilities, a social services center, housing center, and a tribal government office building. Because most of the anchor institutions are currently under the umbrella of the tribe’s network services, they will be subscribers of the new network. Because we will be able to offer comparable if not improved service immediately at reduced costs and the fact that greater bandwidth offered through fiber will increase the efficiencies of these anchor institutions, the Tribe hopes that these institutions will be able to contribute as subscribers.

Services to the community members will be greatly improved as these anchor institutions have increased capacity through fiber. It will allow the Pyramid Lake Health Clinic to be able to take advantage of technologies like remote medicine; the Police Department, Courts and Victim Services to share the Full Court database and for the Police Department to be able to have video arraignments and not have to transport those in custody to Pyramid Lake for their arraignments and, public safety training, and government services.

The implementation of VOIP for tribal institutions and enterprises will provide superior communications at significantly reduced costs for phone services. Since many of the agencies have relationships with outside institutions, increased quality of service will enable them to install client-server applications for database access and sharing. This will increase their efficiency and facilitate improved services for the community members that they serve.

Homes

All homes in the three communities without high speed internet service will have at least one available provider to choose from. The Pyramid Lake Paiute project will enable the tribe to dedicate the wireless backbone to home hookups. At least one service provider, High Desert Wireless, has expressed interest in taking advantage of this and deploying WIMAX over the three communities with download speeds up to 10 mbps available. Over time, as the Tribe moves forward in its economic development plan, we expect to be able to provide the resources for bringing fiber to all the homes on the reservation. The design and capability of the fiber network infrastructure for the Pyramid Paiute Project will enable this phase to be a natural extension.

Businesses

Businesses will be able to choose whether to connect to the fiber network for extensive services or to the WIMAX wireless network for basic high speed internet service. Because the middle mile fiber will run along the major roads on the reservation, new businesses will be in close



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proximity to splice points and interconnect points. Businesses, including any broadband providers, who want to have service available through the fiber network for resale, will have the same level and type of service available at the bandwidth they need as those in the metropolitan area. The pricing for these levels of service will be competitive with those in metropolitan area .. We also will be investigating the opportunity to provide the backhaul feeds for the cellular sites in the area, which include Verizon and AT&T.

Economic Development

The Pyramid Paiute Project has the potential for stimulating significant local economic development within the reservation as well as in the broader community. The Interstate 80 corridor is one one of the main fiber corridors between the East and West Coast. Within the last five years, Reno has expanded significantly in population and businesses especially from California as the price of real estate market has skyrocketed. Even though Northern Nevada has grown significantly, the Pyramid Lake Paiute Tribe has not moved along with it due to our remote location.

Fernley is three miles outside the Pyramid Lake Reservation on the other side of I-80. It has seen significant growth as well as a result of the population and economic expansion in the region. The population of Fernley has grown from 13,000 to 19,000 in just four years. The Crossroads Industrial Park in Fernley has become a major distribution center for Amazon.com, UPS, Honeywell, Quebecor World, Trex Company, Sherwin-Williams and Home Depot. We see continued growth in the industrial commercial sector. Being that the Pyramid Paiute Project would provide the area with the only commercial source of fiber- based services into the Level 3 NOC in Reno, NV, The tribe will be in a very good market for wholesale services. Ideally, we will want to see a local service provider purchase wholesale service offerings from the Tribe. The timing for this funding is aligned with the proposed Industrial Park in the Wadsworth Service Area as well as the proposed Wadsworth highway bypass that the Tribe has received American Recovery and Reinvestment Act (ARRA) funding for. This Industrial Business Park will be poised to stimulate growth in the area, as businesses seek to lower their costs of operations outside of Reno. High-quality bandwidth will be a great incentive to new businesses seeking to relocate to Wadsworth. These new companies will have the ability to use a full menu of services to use for everything such as VOIP and video services. That will generate jobs and services which in turn will boost the economy of the region. It is estimated that that this could conservatively create 2500 direct jobs and 1600 indirect jobs.

Alternative Energy Development

The Pyramid Lake Paiute Tribe is in the second phase of geothermal development. With a grant from the Department of Energy for well-production testing, we anticipate that the Tribe will



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work in consortium with an Energy Developer to create a geothermal plant twenty miles north of the Sutcliffe. The potential for generating revenue for the Tribe and boosting the availability of regional jobs is great. In addition, the availability of a fiber interconnect point in Sutcliffe will significantly reduce the cost of providing a comparable network feed. Although the required level of service is not known, this should be a significant revenue stream for the Pyramid Lake Paiute Tribe.

Vulnerable Populations:

The Pyramid Lake Reservation Service Area includes the three communities of Wadsworth, Nixon and Sutcliffe. They are the only communities within and wholly contained by the boundaries of the Pyramid Lake Paiute Reservation. The residents are primarily Native Americans of the federally recognized Pyramid Lake Paiute Tribe. The following data is from the census 2000 - tract 940100.

Sutcliffe has a population of 281. Native Americans make up 47.7 %, other minorities number 10.7%, whites number 41.6%. The per capita income is \$13,629, 63% of the national average. 30.5% of the population live under the poverty level, compared to the national average of 12.4%. Nixon has a population of 418. Native Americans make up 96.4% of the population. Per capita income is \$9,926 , 46% of the national average. 26.3% of the population live under the poverty level, compared to the national average of 12.4%.

Wadsworth has a population of 881. Native Americans make up 64.8% of the population. The per capita income is \$14,756, 68% of the national average.

Level of Need:

The Current Infrastructure & Variation among Service Areas

The Pyramid Lake Paiute Tribe runs a wireless network that links many of its tribal buildings in the three towns. The Internet connection is currently a T1 (1.5 mbps), and costs \$14,000 per year. The backbone linking the three towns is a 45 mbps system. Access in each town is through a shared 10 mbps connection. In Wadsworth, the I80 Store /RV Park, and Big Bend RV Park, cannot access this system due to line of sight problems. The system is at maximum capacity most of the time, and the cost per connection exceeds \$1,000. The power service in the communities of Nixon and Sutcliffe is antiquated and there are frequent outages due to significant weather which causes network problems at most of the sites.. Dirty power causes equipment malfunctions in spite of protective UPS equipment.

Competitive Landscape

Wadsworth is one town of three within the reservation and is located near Interstate 80. The population is 881 (CDP) with about 360 homes. The median family income is \$32,000; and only



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7.1% of its residents have a college education. Most homes have Charter cable and many homes are able to subscribe to Clearwire for wireless broadband. The cost of broadband service from Clearwire is \$29/month, but the combined speed is 2 mbps maximum. Charter provides 5mbps speeds at \$49/month. Some anchor institutions are able to get T1 service, however annual costs exceed \$6,000 per year. The only businesses in the Wadsworth community are the I80 Store/ Gas Station & RV Park and the Big Bend RV Park. The I80 Store only has access to Verizon wireless and cannot be served by the tribe's current wireless network. The cost for two connections is \$110 / month; and each connection is not able to achieve 700 kbps. Big Bend RV Park uses charter cable. Both are tribal enterprises; however neither one has access to the tribe's network and finance systems. DSL is not available in the community

The community of Nixon has only one wireless service that can provide broadband to perhaps half the homes. High Desert Wireless provides 1.2 Mbps service at a cost of \$75/month. The problem with expanding their service in Nixon is that the access point is on a tower ten miles away. Terrain issues prevent some of the homes and ranches from having the necessary line of sight. Internet demands are significant for the medical clinic and high school in Nixon and additional T1s are required but they cost up to \$14,000 year each. . Expansion of high-speed business class service is severely restricted due to the number of available phone circuits. The only business in Nixon is the Nixon Store / Gas Station. It shares the tribe's wireless network, however this network is not capable of the level of service needed to access the tribe's finance system. DSL and cable services are not available in Nixon.

Broadband wireless service is not available in the Sutcliffe community. Business class broadband service is not available because AT&T has reached maximum capacity for phone circuits. Due to the significant costs and small subscriber base, AT&T has never expanded services and added phone circuits. Telephone circuits are near capacity. Due to limited population and the lack of growth, outside companies have shown no interest in expanding coverage due to the significant costs. The businesses in Sutcliffe are the Crosby Lodge and the Marina RV park. DSL and cable services are not available. Because of the distance to Reno, business class T1 service on this traditional copper wire connection is prohibitively expensive due to the high circuit charges. VOIP and video conferencing services are needed, but the infrastructure cannot support these technologies.

Existing Infrastructure with Value Added Services

The fact that our communities are small in population means that investment by existing providers would not yield a positive return. In addition, while it is highly unlikely to ever see cable or DSL service in Nixon and Sutcliffe, these services do not provide an integrated network solution that would benefit both tribal and non-tribal anchor institutions. Wireless service



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requires the construction of towers on tribal lands to service a small number of subscribers. Again, this is a costly proposition with little chance of a return on investment.

Proportion of underserved, unserved areas

Wadsworth has 360 homes, many which are served. Nixon has 160 homes and is underserved, and Sutcliffe with 110 homes, is unserved. Thus, the proportion of underserved/unserved homes to served homes is 57%. FCC 477 filings indicate the complete service area has less than a 20% subscription rate.

Economic Conditions

Data for this purpose is taken from the US Census Bureau 2000. The total population of the communities within the Pyramid Lake Paiute Tribe is 1580 people 71% of whom are Native American. The median household income is \$29,288 which is 70% of the national median. 21.8% live below poverty level compared to the national rate of 12.4%. The per capita income is \$12,760 which is 59% of the national average. All three communities are classified as economically distressed areas.

The fact that 21.8 % of the families on our reservation are below the poverty level and the remoteness of the reservation are crippling factors for the tribe when looking to expand its business enterprises; especially without an internet infrastructure that supports development. The tribe is working to expand on many levels. We have received a grant from the Department of Energy to study geothermal energy potential on the reservation north of Pyramid Lake in an area known to have geothermal energy resources and in Wadsworth, we have a plan to build a business park, both of which will require fiber a state of the art communication systems and data services that only fiber can deliver. Another resource that the tribe hopes to cater to are the two hundred thousand visitors to the lake, many of whom have requested wireless hotspots.

Economic expansion is not the only imperative. Because the tribe provides services as a combined city, county, state and federal government entity, the tribal agencies must be equipped with a sound network in order to serve its members as well as perform compliantly with the agencies of the federal and state government. The fact that tribal offices and businesses are dispersed throughout the three towns on the reservation, makes it imperative that they be linked. Existing wireless networks in some areas cannot run the critical software applications that link services. Information from one agency is not available to another, despite critical needs. For example, the police department does not have access to the Tribal Court database.

Efficiency of the Project

Any solution ultimately has to focus on the issue of a fiber link to the Reno NOC. The tribe's access to fiber, acquired but unused since 1999, makes the goal of this project realistic and opportunistic. The cost to lease the fiber is about \$1,000,000 and \$50,000 month just for the



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access and connection, a prohibitive cost if we did not have this asset. At&T owns the copper cabling, and traditional copper solutions would exceed \$1,000,000 per year. Even if the tribe were to afford these prices we would still be unable to bring the network to Sutcliffe due to the lack of circuits. Wireless technology has already proven inadequate for satisfying the technological demands required to satisfy the critical needs.

There are three reasons this project is the best solution to our technical needs The fiber routing will require more capital up front; but operating, maintenance, and bandwidth costs will be significantly lower than the alternatives. There isn't a network solution that is more stable, faster and as long-lasting as a fiber solution. Lastly, this solution is the only one that will open up economic opportunity and job growth in the service areas.

Capital Investment

If the Pyramid Lake Paiute Tribe and the anchor institutions on our reservation continue with existing services and needed increase in service, the total costs across a twenty-five year period at \$75,000 per year would be \$1,875,000 without value-added services. Direct savings in this period as a result of fiber would reduce those bandwidth costs and result in \$1,000,000 in savings over a twenty-five year period.

Only the fiber network can enable the economic development that the tribe envisions commensurate with economic development. Current projects should be able to generate revenue as conservatively estimated. With the projected business park supporting 25 businesses requiring on average a minimum business class service equivalent to a T1, sales could easily exceed four million dollars in a twenty year period And revenue for the tribe would approach two million dollars. If the geothermal plant goes online in five years, that would result in potentially one million dollars in revenue over a twenty year period. Bandwidth can also be sold into the nearby markets outside of tribal boundaries. It should be noted that Fernley, three miles outside the reservation has been growing in the industrial area. A number of major companies like Amazon and Home Depot have set up West Coast distribution centers. One 10 mbps customer in this neighboring district. will result in another one million dollars in revenue over a twenty-five year period. Additional economic growth will result in demand from anchor institutions for more bandwidth which will generate additional revenue.

This analysis takes the conservative approach and presumes no change in wholesale or resale pricing of bandwidth with wholesale purchasing based on 10 mbps increments, roughly \$14,000 per year. Revenue would naturally rise if this bandwidth was ultimately purchased wholesale at 155 mbps rates which are less than \$100,000 per year compared to \$225,000 per year when purchased in 10 mbps blocks. The total estimated return on investment should easily exceed seven million dollars over a twenty-five year period.



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Current Market Conditions for Infrastructure and Business Class Service

Minimum business class service is considered to be equivalent to a T1 which guarantees 1.5 mbps down and up and a quality of service equivalent to 99.99 % uptime. This level of bandwidth is clearly insufficient to deploy additional services such as VOIP, video services and virtual networks. The cost for this service is at least \$6,000 per year for each increment. Costs do not include customer site equipment or maintenance on that equipment. On average, all anchor institutions with T1s are paying this amount.

Summary

By definition, the service areas are all considered economically distressed. The small population and rural aspect of the communities are a deterrent to a provider making the necessary capital investment. Even if that occurred, revenue generated from the area would not be reinvested in the economic development or job creation of the area. Infrastructure improvement in the service area is dependent upon the Pyramid Lake Paiute Tribe. Financial resources are not available at this time for the tribe to implement the project. The grant funding is necessary.

Without this grant, the service area will not see an improvement in the infrastructure for at least twenty years. Without the economic development opportunities this grant would fuel, the area's depressed economy will remain stagnant for the next twenty years. Without the benefits derived by this technology, medical services, public safety and educational services will not improve over the next twenty years. Without the opportunities afforded by this advancement in technological services, education levels and the chances for improvement of quality of life by the residents will likely remain unchanged for the next twenty years.

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:

Pyramid Lake Paiute Reservation – Service Area



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The Pyramid Lake Reservation is the defined service area, and the three communities of Wadsworth, Nixon, and Sutcliffe are within its boundaries. Fernley, NV is three miles from Wadsworth and has a population of 19,629, according to city data from 2008. Fernley is not within the Service Area or within reservation boundaries. All communities in the service area are within the 940100 census tract, and the census tract does not include any other communities. All referenced data is from Census 2000.

Wadsworth –

Most of the households and anchor institutions have access to either Charter Communications cable broadband, Clearwire wireless or High Desert Wireless. T1s are available.

Clearwire offers download speeds up to 1.2 mbps on a shared system. Advertised price is 29.99/month.

Charter Communications advertises four service levels. 1) 1mbps download 128kbps upload for 19.99/month; 2) 8mbps download 1 mbps upload for 29.99/month; 3) 16 mbps download 2mbps upload for 39.99/month; 4) and 25mbps download 3mbps upload for 54.99/month

High Desert Wireless advertises 3 service levels. 1) 768 kbps for \$49.95/month; 2) 1.2 mbps for \$74.95/month; and 3) 1.5 mbps download 1.5 mbps upload for \$300/month.

T1 service is available from a number of vendors with pricing starting at \$450 / month. Because of the Truckee River canyon and a number of ranches outside of the town limits, about 10% of the households and enterprises cannot subscribe to any service. A random phone survey of 50 households showed 23 had broadband service. This translates to 46%, or 166 of the 360 housing units, have internet service.

Nixon

Available services for this service area are limited to High Desert Wireless for home services and T1 services for anchor institutions. Again due to the rural setting, the Truckee River canyon, and a number of ranches in the area, some households have no access to service.

High Desert Wireless advertises 3 service levels. 1) 768 kbps for \$49.95/month; 2) 1.2 mbps for \$74.95/month; and 3) 1.5 mbps download 1.5 mbps upload for \$300/month.

Description of Network Openness:

The Pyramid Lake Paiute Tribe will operate the network with existing resources, and additional resources from the subscribing anchor institutions. It is in the tribe's best interest to eventually enable third party service providers to become the source for services to potential subscribers. A Communications Committee will be created to provide oversight on the broadband and related services available. The committee will draft a policy statement that addresses network openness regarding non-discrimination and interconnection. It will also draft an acceptable use policy that



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addresses illegal and harmful activities. The Pyramid Lake Paiute Tribal Council will approve all posted policy statements.

Services will be made available that provide wholesale bundles so that third party service providers have access to the network services for resale purposes. All services will be made available on the tribe's website. All policies will be prominently displayed on the website. Although anchor institutions may be given certain considerations for discounting on retail services, Pricing will remain competitive yet affordable.

One example of this openness is the tribe's intent to make the wireless backbone available and provide broadband services from fiber service to a third party for bringing wireless service to the unserved portions of the service area. High Desert Wireless has already indicated an interest in providing these services to the homes.

The tribe will also provide access to fiber interconnect points for retail or wholesale services, regardless of where the termination point is. It is actually in the best interests of the tribe when the business park construction begins to contract with a third party service provider to manage, maintain and provide services to the resident businesses.

System Design:

[REDACTED]

[REDACTED]

[REDACTED]



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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	8,525,588	2,432,000
Total	8,525,588	2,432,000



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	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
Demonstration of need	<p>The Pyramid Lake Paiute project is not possible without this opportunity for federal funding at the level needed. The Pyramid Lake Paiute Tribe is in a difficult financial position due to the economic downturn. There is a tremendous need for stimulus to jumpstart economic development. The fiber project provides the infrastructure to do that.</p> <p>The only broadband for the tribe’s operations was provided by the Dept of Commerce under a TOP grant back in 2002. The wireless technology was just emerging and extremely expensive and provided a minimal solution. Subsequent applications for RUS grants from the USDA were made, but the demand was great, the funding limited, and the tribe was unable to obtain funding. After a number of years of research into public and private funding opportunities for this kind of project, it was clear that funding at this level was not available.</p> <p>The NPV analysis from the financial proforma without BTOP funds is calculate to -\$10,324,724 . The budget is \$10,987,588. This indicates that the project should be fully funded the NPV might be slightly skewed because the tribe is contributing money to the project from the existing Network Operations budget over the eight year period. The amount is equivalent to approximately \$400,000. This indicates that the project does require the full funding amount requested.</p>

Funds to States/Territories



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States	Amount of Federal Grant Request
Nevada	8,525,588

Funds to States/Territories Total: \$8,525,588

J. Historical Financials

Matching Funds			
	2007	2008	2009
Revenue	20,296,122	21,536,312	0
Expenditures	15,430,576	13,954,644	0
Net Assets	115,487,241	123,116,479	0
Change in Net Assets from Prior Year	5,869,453	7,629,238	0
Bond Rating (if applicable)			

K. Project Readiness

BTOP Organizational Readiness

The Pyramid Lake Paiute Tribe is both a government agency and an enterprise management organization. As such the essential organizational mechanisms are in place for the implementation, management and operation of the broadband service network

The tribal administration has managed numerous major projects in the past, and policies and procedures are in place for construction management, material procurement and legal / contract processes. The tribe is fully qualified for grant management and reporting being that it is well established with numerous other federal grants.

The Finance department has established accounting processes in place for customer billing, enterprise budget management, and revenue management of receivables. The Tribal Environmental department is experienced in meeting NEPA requirements.



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The tribe is partnering with Praxis Fiber for the design, construction and implementation of the network services. They will also oversee the network management for the term of the grant period.

The Technology department already operates a multi-organizational network that bridges the three communities within the service area. Relationships with service providers and network support companies in Reno, NV are already established. Anchor institution customer support is already in place for most of the anchor institutions that will be connected.

The tribe will eventually work with third-party service providers when the business and wholesale services component take hold.

Construction and Vendor Contracts

The Pyramid Lake Paiute Tribe will rely solely upon Praxis Fiber for the construction of the fiber, the implementation of the network, and management of the network during the grant period.

Praxis has already partnered with the tribe and provided all the engineering, budgeting and design of the project.

Because the tribe doesn't have the funds to contract with a company for the costly process determined by the BTOP requirements, it became clear that the tribe needed to find a partner that was capable of performing these tasks at no charge. In assessing the availability of such a partner, three companies in the Reno area and Praxis were considered.

Addressing procurement policies and NTIA guidelines, the Pyramid Lake Paiute Tribal Council determined that it was in the tribe's best interest to partner with Praxis for the complete project. Their established credentials in meeting grant application requirements and their success in construction of a fiber network for the Tule River Tribe with federal and state funding, and the lack of time to obtain detailed competing bids were mitigating factors.

Included in the attachments is the Tribal Resolution to partner and contract with Praxis, a letter of intent from Praxis.

Customer Base

The Pyramid Lake Paiute Tribe currently supplies the broadband service and support to 17 anchor institutions including all of the public safety and Tribal anchor institutions. One tribal enterprise business, the Nixon Store, is also on the tribal network. Anchor institutions not currently on the network include Nevada Skies Treatment center, the Medical clinic and grade school.



**Broadband Infrastructure Application
Submission to NTIA – Broadband Technology Opportunities Program**

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The tribe does not currently provide broadband services to residences, third-party service providers, and other businesses.

Licenses, Regulatory Approvals and Agreements

The construction of the Pyramid Lake Paiute project will occur wholly on Tribal lands. This project will not require any licensing. All permitting for construction, fire and safety, and environmental reports for NEPA is provided by the tribe’s agencies. The BIA must approve the project, and that approval is pending. Almost all fiber construction will occur along state highway. NDOT manages the highways on reservation land, and the tribe is already in contact with them for acquiring the necessary right-of-way permits. NDOT has always cooperated with the tribe in these matters. This however is pending. Contact has already been made with Level 3 for implementing the tribe’s fiber connection in Reno. This indefeasible IRU was established in 1999 for consideration in granting right-of-way with Williams, purchased by Level 3.

SPIN Number

L. Environmental Questionnaire

Project Description

The project involves the trenching and laying of fiber conduit, the setup of two 12ft x 20ft prefabricated equipment huts, and the conversion of an existing communications room into the main network hub. The interconnection in Reno is at an existing network colocation facility owned by Level 3. The trenching for the fiber conduit will be along 40 miles of public roadway . One river bridge will be crossed, but the conduit will be attached to the existing structure. The first equipment hut will be built approximately 50 feet from an existing roadway on tribal land. The site will just need to be leveled and a foundation set, as it is already a flat dirt area near one of the tribal government buildings. The second hut will be similarly located on tribal land approximately 50 feet off the roadway on a flat dirt area. Both huts will be on lateral roads off the main highway. The two sites will require power from the nearby utility poles. This involves a cable drop to the buildings.



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The network operations center will be in an existing building. Equipment racks and additional electrical equipment will be added and existing equipment will be moved. This Environmental questionnaire was filled out with the assistance of the Pyramid Lake Paiute Tribe’s Environmental Dept. which is recognized by the BIA and Dept of Interior as qualified for filing environmental reports that meet NEPA requirements.

Property Changes

The project will use trenching machinery for laying the fiber conduit. It is estimated that 3,906,349 sq ft of ground will be disturbed. This is primarily alongside roads and highways using existing utility easements and right-of-ways, either owned by the Nevada Dept. of Transportation or the Pyramid Lake Paiute Tribe. Being a rural area, this is readily accessible and the route is absent of sidewalks, trees or other flora. Lateral trenching involves short runs through similar terrain, void of plants, trees or other flora. All trenching will be on tribal land, which is held in trust by the Department of Interior.

Buildings

Two 12ft by 20ft (240 square ft.) pre-fabricated buildings will be placed on land already set aside and zoned for such use. The Nixon node will be located in the room of an existing tribal building where similar IT equipment is housed. No modifications are required. The carrier “hotel” interconnection site at 200 S. Virginia St., Reno, will be collocated with other service providers, requiring equipment installation in existing racks. The specific route for the fiber optic network is entirely on the Pyramid Lake Paiute Reservation, except for the “dark fiber” existing in a Level 3 cable that parallels I-80. It will not be accessed or disturbed. Those sections of the route on the Reservation were chosen to minimize the exposure of project activities to undisturbed environments and will follow existing disturbed rights-of-way.

Wetlands

Wetlands: Wetlands are not present on the sites of construction and the closest wetlands are at least ½ of a mile near the road and runs adjacent to the Truckee River and wetlands and Pyramid Lake, including freshwater emergent and freshwater shrub wetlands, but will not be affected by the project. The fiber optic line will be installed within existing Nevada Department of Transportation rights-of-way or tribe-maintained roads. The areas anticipated to be affected by the project are already disturbed by past construction and ROW maintenance activities.



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Critical Habitats

Critical Habitats: The project will neither directly nor indirectly affect any critical habitat for any threatened or endangered species. The closest critical habitat is the Truckee River for the Cui-ui fish, which crosses the project area once via bridge. Construction will not affect this habitat.

Floodplain

Floodplain: The project site crosses the floodplain in one section, in the town of Wadsworth along a bridge which crosses the Truckee River. The bridge is stable and there is no threat to the proposed activities.

Protected Land

Protected Land: The project site is within the exterior boundaries of the Pyramid Lake Paiute Reservation and occurs in an existing NDOT Right Of Way that has been previously disturbed. No cultural resources are present or have been found in this area and is not located or will affect any properties on the National Register of Historic Places within a one mile radius. There is one property within a 1 mile radius of the project area, listed as the “Wadsworth Union Church” at the Junction of Lincoln Highway and Railroad Avenue, Wadsworth. This site will not be impacted by any activities related to this project.

Coastal Area

Coastal Area: There are no costal sites near the project area. The project occurs in an enclosed basin that has no outlet to the ocean or is near the coast.

Brownfield

Brownsfield: The route of the fiber optic cable for the proposed service area is not located within a Brownsfield site as defined by this questionnaire or the USEPA.



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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	upload+template++CCI++Service+Offerings+Competitor+Data.xls	Dazey, Mary	03/23/2010
Network Diagram	18.2 Network Diagram_Pyramid.pdf	Dazey, Mary	03/22/2010
Build Out Timeline	BuildOutTimeline.pdf	Dazey, Mary	03/26/2010
List of Community Anchors and Points of Interest	CCI Anchor Detail and POI Attachment Final.xls	Dazey, Mary	03/23/2010
Management Team Resumes and Organization Chart	Management Team Resumes & Organizational Chart.pdf	Dazey, Mary	03/26/2010
Government and Key Partnerships	PartnerLetters.pdf	Dazey, Mary	03/26/2010
Historical Financial Statements	Financials.pdf	Dazey, Mary	03/26/2010
Budget Narrative	upload+template++CCI++Budget+Narrative_Final.doc	Dazey, Mary	03/26/2010



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Detailed Budget	upload+template++CCI++Detailed+Budget_Final.xls	Dazey, Mary	03/26/2010
Pro-forma Forecast	upload+template++Pro+Forma+Financial+Projections.xls	Dazey, Mary	03/26/2010
Pro-forma Forecast	ITProjections Final2 .xls	Dazey, Mary	03/26/2010
Subscriber Estimates	upload+template++CCI++Subscriber+Estimates.xls	Dazey, Mary	03/26/2010
Dashboard Metrics	upload+template++CCI++Key+Metrics+Dashboard.doc	Dazey, Mary	03/26/2010
Dashboard Metrics	upload+template++CCI++Key+Metrics+Dashboard.doc	Dazey, Mary	03/26/2010
Service Area Data	CCI Service Areas Attachment.xls	Dazey, Mary	03/24/2010
Waivers	CCI Waiver Attachment.doc	Dazey, Mary	03/26/2010
Network Maps	18.15 Network Maps_Pyramid.pdf	Dazey, Mary	03/22/2010
BTOP Certifications	BTOP Authentication and Certifications.pdf	Dazey, Mary	03/26/2010
SF-424 C and D	SF424C.pdf	Dazey, Mary	03/26/2010



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