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

| | |
|---|---|
| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID: 7541** |
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:**  Crystal  Adams |

# Table of Contents

**A.  General Application Information**

**B.  Executive Summary, Project Purpose, and Benefits**

**C.  Partners**

**D. Congressional Districts**

**E. Service Area Details**

**F. Community Anchor Summary**

**G. Project Benefits**

**H.  Technology**

**I. Project Budget**

**J.  Historical Financials**

**K.  Project Readiness**

**L.  Environmental Questionnaire**

**M.  Uploads**

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
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# A.  General Application Information

| Applicant Information | |
|---|---|
| **Name and Federal ID for Applicant** | |
| **DUNS Number** | 073124562 |
| **CCR # (CAGE)** | 33WB7 |
| **Legal Business Name** | UTE INDIAN TRIBE |
| **Point of Contact (POC)** | LYLE LEMON<br>4357254024<br>Ext.<br>lylel@utetribe.com |
| **Alternate POC** | BARRY JENSEN<br>4357254020<br>Ext.<br>barryj@utetribe.com |
| **Electronic Business POC** | LYLE LEMON<br>4357254024<br>Ext.<br>lylel@utetribe.com |
| **Alternate Electronic Business POC** | BARRY JENSEN<br>4357254020<br>Ext.<br>barryj@utetribe.com |

| Name and Contact Information of Person to be Contacted on Matters Involving this Application: | |
|---|---|
| **Prefix** | |
| **First Name** | Crystal |
| **Middle Name** | |
| **Last Name** | Adams |
| **Suffix** | |
| **Telephone Number** | 435-722-5141 |

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

| Fax Number | |
|---|---|
| Email | uitgrants@utetribe.com |
| Title | |

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

| Project Role | Name | Phone | Email |
|---|---|---|---|
| Other Contact | Mr. Barry , Jensen | 4357225141 4020 | bjensen@utetribe.com |
| Secondary Point of Contact | Cyrstal , Adams | 4357225141 4027 | crystala@utetribe.com |

**Environmental Point of Contact**

Prefix:
Name: Chapoose, Betsy
Suffix:
Telephone Number: 435-722-5141
Title: Cultrual Rights and Protection

| 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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| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

### Authorized Organizational Representative

| AOR Name | JENSEN, BARRY |
|---|---|
| Result | Applicant Authorized |

### Project Title and Project Description

**Project Title**: Ute Indian Tribe of the Uintah and Ouray Reservation Fiber Optic Infrastructure Project

**Project Description**: This project will enable the Ute Indian Tribe to complete the build-out and implementation of a fiber optic network in Fort Duchesne, UT. This infrastructure will connect Tribal Government and critical community institutions, including schools, healthcare, public safety entities, and approximately 100 tribal underserved household of the Uintah and Ouray Reservation.

### 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.

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

**Broadband Infrastructure Application**
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| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID: 7541** |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

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

Middle Mile

Last Mile Rural

---

**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

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:**  Crystal  Adams |

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:**

The Ute Indian Tribe (UIT) a valid and recognized tribal entity, (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b)) proposes to build a fiber infrastructure that is directly in line with the goals of the American Recovery and Reinvestment Act of 2009 (ARRA). It is applying for a grant in the total project amount of $ 2,253,154, with 30 percent, cash match to come from the Ute Indian Tribe, and if approved, ▮ ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮. These funds will finish a project that was underway but halted due to the economic downturn.

The purposes of this project are as follows:

1. Provide a secure network to interconnect Tribal Government, BIA, and other Federal agencies.
2. Substantially upgrade services to all community anchor, education, healthcare, and public safety institutions.
3. Bolster communication between the public-private sector and Tribal Government.
4. Stimulate the demand for broadband by providing Internet service to the entire underserved Fort Duchesne Tribal community.

One of the Tribal Governments' objectives is to make critical decisions that support the Ute Indian Tribe's business strategies, processes and operations; they realize technology enables its people to be more efficient by providing resources necessary to accomplish their jobs better.

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name:  Crystal  Adams |

However, the infrastructure available in the rural setting in which the tribe operates provides some unique challenges; specifically, overcoming the lack of connectivity between vital anchor institutions.

Vital departments such as Indian Health Service's (IHS) and the Alcohol and Drug, Health and Well Being programs, Social Services, and Diabetes center do not have inter-connectivity. This forces each to operate on a less than efficient island, not being able to share electronic medical records (EMR), progress reports, etc. It does not allow them to counter possible pandemics through online education or take advantage of the quick distribution of information. It also forces them to forego cost savings introduced by connectivity.

The tribal government has recognized in the past it has not been in a financial position to take part in the advancement's in technology, and has in recent years made concerted efforts to get its government and people up to "speed". It has invested heavily in the technology in areas public safety, education, accounting controls, and other basic government support programs.

Currently the tribe is implementing Police and Tribal Court systems to allow for electronic case management.  It plans to involve other supporting agencies such as Juvenal court, Probation, Social Services, EMS, Fire, and the Crises and Emergency Management department. However, there is currently no infrastructure between many of these buildings. Therefore, this grant is an opportunity for the current investment to be more effective by creating the critical link between local, inter-tribal, state, and federal agencies.

The purposed connectivity will also allow existing video surveillance platforms to be cohesive; providing the connectivity that is vital for public safety and unforeseen accountability. It will allow for future implementations of surveillance platforms not currently possible, such as traffic cameras and surveillance of critical resources targeted by groups or individuals unsympathetic towards the tribal government. The Education Department of the tribe has made investments in programs that offer the ability for students to continue their work from home as well as adults to further their education. However, many tribal members cannot get, or cannot afford, internet access at home. Building this infrastructure will help bridge that connectivity gap. Wireless hot spots in the community will provide Internet access to the low-income residential areas immediately adjacent to the tribal headquarters. In no un-certain terms this will provide more opportunity for tribal members, helping them to succeed in today's technology driven society.

| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID: 7541** |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:**  Crystal  Adams |

While making sure that networks inter-operate, the larger goal of the tribal government has to be to protect tribal data sovereignty.  In today's information, age this does not only mean the right to keep data private, but also the ability to so do.  If tribes do not control their own networks, computers, and data, they are simply forfeiting sovereignty. Any information that passes through third-party systems is at risk.

Funds made available in the Recovery Act will help the Ute Tribe finish its vision of a connected government and community. The down turn in the economy, and thus the downturn in tribal revenues, has put this project on an indefinite hold. Funds from this grant will aid the tribal government in completing this project and make the most of its prior investments in technology; helping the government to be more efficient in providing critical government services to its constituents.

For all of the above reasons the Ute Tribe of the Uintah and Ouray Reservation grateful for the opportunity to take advantage of the broadband funds made available in the Recovery Act and will build a solid infrastructure to interconnect critical services and still protect tribal sovereignty. Current tribal investments and support from all aforementioned anchor institutions will drive this project through to fruition--Making it a success for all involved.

**Project purpose:**

This project will directly address the lack of infrastructure available to the Ute Tribe Government and the surrounding community in its rural setting.  Most of the locations on the reservation are underserved with offerings of only 1 Mbps via point to point connections over LADA circuits, which are subsequently no longer supported by the local telecomm. Low-grade, low-speed, point-to-point LADA circuits currently makes it virtually impossible to utilize broadband in a fashion that is conducive to community support and or economic development.  Other areas have no connectivity available whatsoever.

The Ute Tribal Government comprehensive build out plan directly address these issues. Simply put, this plan is to provide 100 Mbps single mode end-point fiber connection to all of the critical facilities within the Fort Duchene community, and additionally to not only use this infrastructure to provide Wi-Fi hot spots for public safety entities but also for surrounding rural residential tribal community.

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

The desired outcomes of this project is to create a network that can support point-to-point public-private networks for community anchor institutions, such as but not limited to Tribal Security, BIA Forestry Fire Station, BIA and Tribal Police Departments, Adult and Juvenile Tribal Court, Victims of Crime, Health Services, Diabetes Center, Alcohol and Drug, Education, Public Library, Ute Tribal Housing, Tribal business endeavors, etc. and to provide upgraded broadband connectivity for these establishments.

Point-to-point connections between anchor institutions will directly improve the security, government functions, and health of the community by providing a means by which appropriate departments can collaborate on private data over virtualized or segmented networks. For instance, our Emergency Medical Services needs to connect to Police and Dispatch. Tribal Security needs to be able to monitor surveillance equipment at several locations. Connecting the Tribal Court with the Police would help to more efficiently process warrants and other information. Tribal business entities need to be able to collaborate with accounting and other departments.

The Tribe also believes that ubiquitous broadband internet services are of no less importance when it comes to the health and safety of its community. These improvements will allow the police department to access information from the county, or to share information with state or federal agencies, it would allow them to file reports in the field. Furthermore, broadband would allow them to be more proactive in posting relevant data for the community such as sex offender information, the list goes on.

As with public safety, this broadband project will also provide a means by which supporting health agencies can share records and information that are private in nature. However, it will also improve the health benefits of the community by allowing the sharing of medical information to the community, such as information on outbreaks of the flu, or West Nile, etc. It inform and educate the public as to the procedures and policies to follow to help eliminate or protect from a possible pandemic, a hazardous materials spill, an accidents, etc.

There is no question that a large portion of this Tribal community is underserved. Federal Communications Commission sources do not specify how many service providers offer 768 Kbps or faster download speeds in our community. Our own sources indicate there is only one broadband service provider who can provide a download speed of 768 Kbps or greater. A price of $60 a month, credit checks, and a minimum of a one-year contract are beyond the means of a

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

majority of the members of the Tribal community. Thus, the proposed Wi-Fi access will be a boon to this area.

Given that the Tribal community is located outside of any major metropolitan area, broadband internet access is essential to job creation and economic development. The deployment of the planned network will immediately create 5 directly; it will also directly sustain several other positions for the duration of the project. However, we expect many more jobs to create due to the ability of our community members to telecommute to jobs in other cities. It will likewise provide opportunity for the creation or expansion of home-based, internet centric businesses, and certainly the expansion of existing businesses thanks to improved broadband internet access. At a minimum, it will give access to the internet to a portion of the community that previously has not had access. Opening up a myriad of possibilities to them, so directly or indirectly--either way, it will create more jobs.

The lack of connectivity throughout the tribal community has prompted the Ute Tribe to directly embrace this project by providing an infrastructure to critical community institutions and households located in Fort Duchesne. Tribal Government concurs with BTOP's statutory purposes and believes that one of the most important services that it can provide its constituents is an opportunity to embrace the fast paced, ever-increasing-highly-technical world.  A secondary result will be a safer, healthier, more educated, more up-to-date population with the ability to enter the workforce with a technical base to offer potential employers, and not only create jobs but also fuel long-term economic growth and opportunity in this community.

**Recovery Act and Other Governmental Collaboration:**

Collaborate with the University of Utah's Utah Education Network (UEN) division that is working on bringing broadband to education including the Head Start program of the Uintah and Ouray Reservation. If we collaborate with UEN we will be able to create a logical network for UEN to more efficiently serve the education departments of the tribe. This is not a duplicate award; it does not overlap.

This project will  address significant interconnect  issues with the Ute Indian Tribe (UIT) ability to collaborate with federally funded departments; Bureau of Indian affairs Police Department, UIT EPA, UIT Housing Authority (HUD), Utah Education Network (UEN), UIT Social Services, UIT Air Quality, UIT Water Quality, to list a few.

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization:<br>UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name:  Crystal  Adams |

It will be a significant aid in the interconnectivity and collaboration of several federally funded and aided departments.

**Fit with BTOP CCI Priorities:**

This project will deploy Middle Mile broadband infrastructure to community anchor institutions on the Uintah and Ouray Indian Reservation.

This project will deploy Middle Mile broadband infrastructure to community anchor institutions. When completed, this project will cover slightly over 6 miles, but it will connect every major anchor institution in the tribal community including education, health, police, tribal government, Ute Enterprises, etc.

The project will deploy Middle Mile broadband infrastructure and has incorporated a public-private partnership among government, non-profit and for-profit entities, and other key community stakeholders. The proposed infrastructure will be a mixture of a fiber ring and fiber star topologies. These networks will be physically separate from each other, but both will connect to the Internet. This network is designed to handle the unique requests often made by organizations in the tribal government, as well as tribal business entities, and community anchor institutes. For instance, the Bureau of Indian affairs (BIA) needs direct and dedicated lines between offices; however, they often move offices, or have small-decentralized groups of workers spread out in several tribal buildings. The educational facilities need a network that teachers and students can have unrestricted access to the internet, while security issues are of the utmost concern for tribal courts and police networks. The Alcohol and Drug prevention and treatment center needs to be able to have a dedicated line to input patient records at Indian Health Services. However, they also need to be able to file grant information with the Tribal Grants department and Accounting. The Tribal community needs connectivity that rivals no other, but has none.

The proposed design will have the bandwidth necessary to create logical sub-networks across this same physical infrastructure as well as the ability create physically separate networks. To connect community anchor organizations as well as enable them to connect to businesses, education departments, and other community stakeholders.

This project will deploy Middle Mile broadband infrastructure in economically distressed area of Fort Duchene. The Bureau of Indian Affairs (BIA) published report on the Native American

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

Indian and Alaska Native population to the Secretary of Interior, for the calendar year 2005 (which is the latest available report) on tribal enrollment, service population, and labor force information for the Nation's federally recognized Indian tribes; according to this report, Native American's live amongst the highest poverty levels and suffer the highest levels of unemployment in America. Those living within these communities and earning wages below the poverty level was 29 percent. However, the more disturbing figure was that in this same report the Ute Indian Tribe with a population of 3174 had a 77% percent unemployment rate among eligible working adults. The Ute Indian Tribe's Vital Statistics department concurs with this report. So, there is no question that Native Americans, and to be more specific, the Native Americans living on the Uintah and Ouray reservation live in an economically distressed area; and again to be more specific, those living in and around the proposed project area of Fort Duchesne.

This project will deploy Middle Mile broadband infrastructure to public safety entities. One of the main justifications for starting this project was so that public safety entities could have connectivity. The Tribe also implemented a Dispatch Center and new database for the Police Department. We still need to connect the Tribal adult Court, Juvenile Court, Social Services, and Emergency Medical Services. These are so important the first phase of the project was designed with this in mind.

This project will deploy Middle Mile broadband infrastructure and includes a Last Mile infrastructure component. The fiber ring portion of the network, with strategically placed Wi-Fi access points, will be used to build a community accessible wireless network which will reliably provide open internet access to those that live in the local underserved area and have a wireless device such as a computer, smart phone, iPod, etc. This will give the community another option to access broadband Internet. Currently the biggest issue is not what is available, although there is only one provider in the area, but rather what is available is overly expensive to this low-income Native American community. Current rates of the only provider are over $60 a month, which is roughly three times the national average for the cost of broadband in the home. We do not plan to replace that provider; they offer a dedicated DSL service, to which we cannot directly compete. We simply want to make an alternative available to those that could not otherwise afford broadband in the home.

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

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

This project will deploy Middle mile broadband infrastructure and the applicant has proposed to contribute 30 percent or more in non-federal cost match, ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮

The Ute Tribe Government realizes it needs to embrace broadband technologies, by doing so they achieve one of its other goals—to maintain tribal sovereignty. Even in these tough economic times they have not chosen to ask for a waiver, and they have forgone their ability to count contributions such as building leases, right of ways, administration costs, and so on as matching funds, but rather have committed to a 30 percent cash match in hopes this project can move forward.

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

> No

**Is the applicant deliquent on any federal debt?**

> No

If Yes, justification for deliquency:

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

> No

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

> No

# C. Partners

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

If YES, key partners are listed below:

| |
|---|
| Project Role: Contractor<br>Name: Homer, Stanley<br>Phone: 803187650 |

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

Email: bhomer@netitworks.com
Address 1: 1511 East Pheasant run
Address 2:
Address 3:
City: Springville
State: Utah
Zip Code: 84663
Organization: Net-IT-Works, Inc.
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 Ute Tribe department will be the lead on this project, but will really heavily on the experience of Blaine Homer of Net-IT-Works for network design and consulting. He has over 25 years of network experience and has been instrumental in the progress that the tribe has made in the previous 5 years.

Mr. Homer is owner of Net-IT-Works, Inc. an S-Corporation located in the Springville, Utah. Mr. Homer has a bachelor's degree from Brigham Young Universities Marriot School of management in the discipline of Information Systems and Technology. Upon graduation he worked for ▮▮▮▮▮ in several capacities; tech support, product development, Information Systems, and Technical Public Relations. He also worked for ▮▮▮▮▮▮▮▮▮▮ magazine where he tested networking products and software and wrote technical evaluation guides resulting in over 300 magazine articles for the publisher.

Mr. Homer has also authored and co-authored several books for ▮▮▮▮▮▮ and other publishers on subjects concerning networking and Network Operating Systems. He has been a successful Network Integrator operating his own consulting business for over 20 years. He has implemented networks for companies such as ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮▮▮▮▮▮▮, and the Ute Indian Tribe, to name a few.

Since 2001 he has consulted with the Ute Indian Tribe and has helped them build a network from the ground up, with over 300 network workstations and 25 servers. Even without a solid infrastructure he has been able to build a single network that shares one Active Directory domain

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:**  Crystal  Adams |

containing 14 subnets. He understands the issues that are relative to the tribe concerning security, and government sovereignty. He has helped complete projects at the tribe such as a █████ Microwave radio communication system for the UOPD. He was instrumental in the designing and implementation of all local physical CAT 5 wiring and networks as well as in building the VOIP phone network.

He is familiar with the interworking of the Tribal Government and other issues that need to be understood to finish this project. Since he built it, he is intimately familiar with the Ute Tribes current network and understands the steps necessary to take it to the next level.

# D. Congressional Districts

**Applicant Headquarters**

> ➢   Utah

**Project Service States**

Utah

**Project Service Areas**

Utah - 2

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

> ➢   Yes

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

Ute Indian Tribe

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

**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

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**Project Details**

Service Area Type:        Last Mile
Service Area Name:        Fort Duchesne Community
Rural Classification of the Last Mile Service Area: Rural
Service Status of the Last Mile Service Area:        Underserved

| If Service Status is "Underserved" please select at least one applicable option from this list. |
|---|
| The rate of broadband subscribership for the proposed funded service area is 40% of households or less. |

Total Square Miles in Service Area:      3
Total Population in Proposed Service Area:      720
Total Number of Households in Service Area:      185
Total Number of Businesses in Service Area:      10
Total Number of Community Anchor Institutions and Public Safety Entities in Proposed Funded Service Area:      40
Unemployment Rate in the Service Area:      77
Median Income in the Service Area:      27,231
Estimated Percentage of Households with Access to Broadband:      50
Estimated Percentage of Households Subscribing to Broadband:      20

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# F. Community Anchor Summary

**Community Anchor Summary**

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

| | |
|---|---|
| **Schools (k-12)** | 1 |
| **Libraries** | 1 |
| **Medical and Healthcare Providers** | 3 |
| **Public Safety Entities** | 9 |
| **Community Colleges** | 0 |
| **Public Housing** | 2 |
| **Other Institutions of Higher Education** | 1 |
| **Other Community Support Organization** | 14 |
| **Other Government Facilities** | 9 |
| **TOTAL COMMUNITY ANCHOR INSTITUTIONS** | **40** |
| | |
| **Historically Black colleges and Universities** | 0 |
| **Tribal Colleges and Universities** | 0 |
| **Alaska Native Serving Institutions** | 0 |
| **Hispanic Serving Institutions** | 0 |
| **Native Hawaiian Serving Institutions** | 0 |
| **TOTAL MINORITY SERVING INSTITUTIONS** | **0** |

# G. Project Benefits

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

| Demographics |
|---|

| Jobs | |
|---|---|
| How many direct jobs-years will be created from this project? | 25 |
| How many indirect jobs will be created from this project? | 16 |
| How many jobs will be induced from this project? | 9 |

**Methodology used to estimate jobs:**
The methodology for determining job creation is based on the Council of Economic Advisors (CEA) recommendations, which states: 1. direct jobs, which are the job-years created in the actual government-sponsored project. 2. Indirect jobs, which are the job-years created at suppliers who make the materials used in the project. 3. Induced jobs, which are the job-years created elsewhere. Direct jobs created in this project will be 5 jobs, retained is more subjective, but is estimated at 4. However, to be consistent with the guidance from the CEA on government spending projects, which states, "Employment is increased by one job-year for every $92,000 in direct gov spending". We will take the expenditure data and divide by $92,000 to estimate the total job-years created) which is (2253154 /92000) = roughly 25 jobs years (rounded up).Also as per the CEA we use 64% of the total money spent to predict indirect jobs 2253154 x.64 =1442018 divided by 92,000 to get roughly 16 indirect jobs. We used the same math and the CEA recommended 36% to calculated 9 induced jobs. The CEA acknowledges, and we concur this procedure does not account for drastic differences in wages; such as in this PSFA with an average income of those with jobs at $27,000 (1/3 of the recommended $92,000) and a 77 percent unemployment rate, or $0 of income. Again, we reiterate that this macroeconomic model understates the impact for this area and the economic growth it will stimulate.

**Project Impact:**
For all of the reasons below the Ute Tribe of the Uintah and Ouray Reservation would like to take advantage of the broadband funds that have been made available in the Recovery Act and build a solid infrastructure that can help interconnect critical services and more importantly protect tribal sovereignty. Current tribal investments and the support from all aforementioned department heads, as described in attached individual letters, will drive this project through to fruition. Making it a success for all that are involved.
Tribal Government

One of the Tribal Governments' objectives is to make critical IT decisions that support the Ute Indian Tribe's (UIT) business strategies, processes and operations; enabling its people to be more

| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID:** 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

efficient by providing them with resources and IT support necessary to better accomplish their jobs. The government has recognized that in the past it has not been in a financial position to take part in the advancement's in technology, and has in recent years made concerted efforts to get its government and people up to "speed". It has invested heavily in the areas of IT that support public safety, education, accounting controls, and other basic government support programs. However, the infrastructure of the rural setting that the tribe operates in provides some unique challenges; specifically, overcoming the lack of connectivity between vital departments.

Health Care

Vital departments such as Indian Health Service's (IHS) and the Alcohol and Drug, Health and Well Being programs, Social Services, and the Red Horse Diabetes center do not have inter-connectivity. This forces each of them to operate on a less than efficient island, not being able to share electronic medical records (EMR), progress reports, etc. It does not allow them to counter possible pandemics through online education or take advantage of the quick distribution of information. It also forces them to forego cost savings that could otherwise be introduced if connectivity were present.

Public Safety

Implementing broadband services will allow existing video surveillance platforms to be cohesive; providing the connectivity that is vital for public safety and unforeseen accountability. It will also allow for future implementations of surveillance platforms not currently possible, such as traffic cameras and surveillance of critical resources that that will be targets by groups or individuals unsympathetic towards the tribal government.

Education

The Uinta River High School has made an investment in programs that offer the ability for students to continue their work from home. However, many of the local students cannot get, or cannot afford, internet access at home. Building this infrastructure will help bridge that connectivity gap. The Tribe is also willing to donate used lab computers to students at the end of their life cycle. This offer will help insure the success of this project.

Tribal Courts

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

Currently the Tribe is overhauling its court system and bringing them into the information age by implementing an electronic court records case management application. It plans to involve other supporting agencies such as Juvenal Court, Probation, Social Services, and the Police Department. However, there is currently no infrastructure between departments. This grant is an opportunity for the current investment to be more effective by creating the critical link between said departments.

Law enforcement

In order to better serve its people and protect tribal data the Ute Tribal government has made significant investments upgrading the technical systems for law enforcement. There is still much to do. Connectivity between service departments such as the Police Station and the EMS station, Forestry Fire Station, is still not possible without building connectivity infrastructure. The rural location also does not provide adequate wireless coverage in and around the governmental buildings for the police to operate from cars. Remote surveillance equipment will also allow tribal Dispatch to monitor critical locations for public safety.

Underserved residential areas

This program will connect students to education and it will promote family member computer literacy. Residential areas immediately adjacent to the tribal headquarters will be within range of Wi-Fi service. In no un-certain terms this will provide more opportunity for tribal members, helping them to succeed in today's technology driven society.

Funds available from the Recovery Act can benefits the Ute Tribe in maintaining tribal sovereignty by allowing them to build this fiber infrastructure, which in turn allows it to be more efficient in providing critical government services to its people. This grant would also allow it to share information amongst itself, eliminating the hurdles of operating in a remote underserved area.

**Vulnerable Populations:**

Public Law 102-477, the Indian Employment, Training and Related Services Demonstration Act of 1992, mandates that the Bureau of Indian Affairs (BIA) publish a report on the American Indian and Alaska Native population who are eligible for services provided by the Secretary of Interior to American Indian and Alaska Native people.

This report is the latest available and provides 2005 calendar year data on tribal enrollment, service population, and labor force information for the Nation's 561 federally recognized Indian tribes. All the data provided in the report was determined by representatives of each tribe and

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

certified as accurate by their tribal leader or designee. According to this report, tribal unemployment did not change between 2003 and 2005, remaining at 49 percent. In 2005, Native American's earning wages below the poverty level was 29 percent. According to this same report, the Ute Indian Tribe has a population of 3174 with a 77% percent unemployment rate amongst eligible working adults. The Vital Statistics department of the Ute Indian Tribe concurs whit this report. Native Americans live in a vulnerable population, and this vulnerability is just as apparent as it relates to a digital disadvantage.

According to the Extending Wireless Telecommunications Services to Tribal Lands study, WT Docket No 99-266, the Federal Communications Commission found that Native Americans have largely been ignored by federal telecommunications policy and underserved by telecommunications providers. As the Federal Communications Commission noted in 2004, "By virtually any measure, communities on tribal lands have historically had less access to the telecommunications services than any other segments of the population. "
This is definitely the case in the Fort Duchesne area located on the Uintah and Ouray Reservation. ███████████████████████████████████████
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This project would serve these areas by providing ubiquitous point-to-point internet to anchor organizations and will provide open Wi-Fi access to the public internet. To encourage broadband adoption the Ute Indian Tribe government will set up a computer-recycling program. At the end of a computers lifecycle, it will be offered to tribal members.

**Level of Need:**
While making sure that networks inter-operate, the larger goal of the tribal government has to be to protect tribal sovereignty. Today, more than ever before, any information that leaves the tribe is in danger of being exposed. This information is also at risk when it passes through third-party systems. Third-party network people can sample the data that moves through their systems to see what might be of interest. This application cannot stress this need or its importance enough. Imagine if you will federal and state governments having to operate over public networks. This would expose every citizen's vital information, and as citizens, this would not be acceptable.

| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID:** 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal  Adams |

Currently there is no opportunity for the Ute Indian Tribe, other than to rely on public networks, to communicate amongst itself and other federally operated agencies. This not only exposes tribal members but potentially any citizen of the United States.

If the Tribal Government expects to communicate with other federal and state agencies, it needs to be able to guarantee the safety and protection of not only its member's data but also the data, which the Uintah and Ouray Police Department (UOPD) may be pulling off the Utah Criminal Justice Information System (UCJIS). This is only one of the many examples concerning tribal and non-tribal data, which passes through the network.

The Tribal Government cannot secure this data if it is reliant on interconnection points managed and operated by non-tribal vendors, which might not have the tribe's best interests in-mind, or worse, which might not be sympathetic to tribal government, or that might have employees (tribal or non-tribal) that have a grudge or dislike towards tribal government. It simply cannot take the risk. It has to safe guard its most ineffable and entrusted responsibility-data.

The Tribal Government also has a responsibility to the employees who work for the Tribal Government as well as to those that work for the Federal Government, but are in the care of the Tribal Government. This responsibility is to provide them with a means that enables them to complete the job commissioned to them, but also provide them protected broadband and connectivity with other departments, as well as with other government agencies. How else can they collaborate?

It is for these reasons that the Ute Tribe's Business Committee with the advice of it technology staff has begun to build an infrastructure to meet these needs. We believe these needs are directly in line with the commission of BTOP. Provide a secure network to interconnect Tribal Government, BIA, and other Federal agencies. Substantially upgrade services to all community anchor, education, healthcare, and public safety institutions. Bolster communication between the public-private sector and Tribal Government. Stimulate the demand for broadband by providing Internet service to the entire underserved Fort Duchesne Tribal community.

Furthermore, it has a responsibility to its constituents to try to help get them out of the 77 percent low income situation in which they live (remember these unemployment figures are based on 2005 numbers when the economy was not as stagnant). The Tribal Government needs to stimulate its economy, to try to create jobs, to try to train its people ▉▉▉▉▉▉▉▉▉▉▉▉

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

███████ This is not an easy endeavor to accomplish, nor is it a problem that can be solved in one day.

However, today they can chart a solution and build a network that can securely protect data and yet allow for collaboration of inner-department and inter-agencies and provide opportunity to those that might not otherwise be able to afford broadband.

It is exciting and encouraging to see the types of ideas that have come forth from this organization when it has had the opportunity to be connected. For instance, the Ute Audio and Video department, in anticipation of this project has been converting 30 to 40 year old Video tapes to AVI and MPG files. With the increased bandwidth, they intend to create an online library of these tapes, which consist of previously recorded historical Pow-Wows, interview's with elders speaking the Ute language, and telling of personal histories. They also want to create a photo library of pictures taken of ancestors and historical tribal leaders, which previously have not been available to the public. Additionally they want to make old newspapers written and stored since the inception of the Ute Bulletin available to the public. One reason they want to make these converted videos available to the tribal community is that the Ute Language is starting to slip away. Very few of the new generation speak it fluently.

In the past several years the tribe has made leaps and bounds in its embrace of technology and believes that technology can and will play a significant role in the future success of the organization. The first leg of this project is actually complete, and should provide evidence that the tribe's IT department with it partnership with Net-IT-Works is very capable, and if given the opportunity, will finish this project within the allotted time.

## 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

Wireless - Terrestrial Fixed

| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID:** 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:**<br>UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:**  Crystal  Adams |

Other:

**Technology Questions**

**Methodology for Area Status:**

Served? Underserved? Unserved? That seems to be the question. As we understand it, the definition of these terms is about access to the technology and not about urban or rural, small or large; in fact, it is not at all about geography. Or is it? According to the BTOP map we are a rural area. Is that what it is about? Others say these terms are about the available speeds . Down or up? What is fast, or fast enough? From what we take from the NOFA an unserved area is defined as one or more contiguous census blocks, where at least 90 percent of households lack access to terrestrial broadband service, either fixed or mobile, at the minimum broadband transmission speed. It goes on to indicate that access is defined as "if the household can readily subscribe to that service upon request." Well, what if you cannot afford it? Do you still qualify?  So is it about money? Yes, we believe it is. If money was not available--dependent on the definition-- then we would probably all be able to agree on how that definition should read.

Furthermore, we know that most of those that live within our community cannot afford high- speed service, regardless of the definition. The area we purpose to serve, according to the Bureau of Indian Affairs has a 77 percent unemployment rate among working age adults.

However, here is what we do know? We have been trying to build a community infrastructure in Fort Duchesne for over five years. The locations that we do have interconnected are connected with voice grade LADA circuits, each offering 512Kbps. If we use a net extender we can combine four of them and get 2048Kbps, however this technology is not full duplex so in the end it is two pair for transmit and two pair for receive, resulting in 1028 Kbps up and 1028Kbps down. This is not for a single dwelling household; this is for a community infrastructure organization with 20-25 people, and sometimes more. These are vital community anchor institutions i.e. the Police Department.  Additionally, these same lines support the VOIP phone network, so we certainly have voice traffic prioritized, which further reduces our available data bandwidth.

Why are we living with this? How can we live with it? The answer is a simple. We cannot live without it! It is all that is available, and so we are happy to have it. In conclusion, our definition of unserved is if you have to connect your Court House to the Police Department, or the Fire Station to the EMS building using voice grade LADA circuits, you are probably unserved.

| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID: 7541** |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

**Description of Network Openness:**

All anchor organizations of the community concerning this project and are excited about its potential. Each organization will get a 100MB connection back to tribal headquarters with no organizational cost involved (as all organizations have ties with the tribe). From there they will share a 20MB connection to the Internet. Providing these at no additional cost to the organization will get us 100 percent saturation of implementation.

As for the community wireless connections, meetings will be held to discuss the desires of the people; that is, as to the accessibility of the Wi-Fi network. We currently plan to leave the security at a minimum to provide the easiest and most open network possible. However, we will listen to the community and we plan to adhere to the community's requests. For instance, some parents may want to have some restrictions on access. If they are worried about content and or usage, we will refer them to free applications ▆▆▆▆▆▆▆ that will help resolve both these issues in their own home. This will be our preferred method to resolve this issue. However, we will listen and these issues and make decisions by majority vote of the community and its leaders.

As previously mentioned, we want to make this an open network with no filtering or restrictions. However, reasonable throttling and management deployed. The management focus will not be to restrict access or enforce discrimination among content or applications, but simply to take reasonable measures to combat spam, denial of service attacks, illegal content, port scans, and other counterproductive internet traffic—management will be to simply monitor usage and to avoid disruption of services.

**System Design:**

The network will be built across a carrier-class infrastructure and support leading edge IPv4, IPv6, multicast, and other advanced networking protocols, as well as the ability to more easily and flexibly increase its capacity should needs arise. It will offer dedicated bandwidth for the most demanding applications to vital organizations looking for long-term, static, point-to-point connections to cost-effectively extend their network connectivity and internet presence within the Fort Duchesne Community.

To accomplish this network, 96 and 48 strand single mode fiber optic cable will be laid in a ring topology; however additional pairs will be dropped at every anchor facility with in the

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

community, thus allowing for point to point network solutions to any particular building or buildings. This is necessary to accommodate the unique nature of BIA, Tribal, and other government agencies within the community.

Single Mode Fibers' strength is that it uses a relatively narrow diameter; through which only one mode will propagate typically 1310 or 1550nm this narrow diameter allows it to carry a higher bandwidth a greater distance than multimode fiber. In this project we will use two strands of fiber per point-to-point connection, one for transmitting the other for receiving. We will also use a minimum of four fiber strands to form the fiber ring. Even though some locations are with-in the distance realm of multi-mode fiber, we believe that consistency within the project outweighs any advantages of a more complex intertwined multi-mode single-mode solution. Thus, all fiber will be single mode.

All termination, butt-termination as well as end-point termination, will be done using a fusion splicer, thus allowing for the lowest levels of degradation possible. Splices will be cleaved not manually cut. Each splice is will be enclosed in splice sleeves to ensure durability. Each splice will be documented as to its particular decibel of loss, so that any combination of redirects can be properly designed and engineered to meet the specific needs of equipment being installed.

Outside plant termination will be done inside a fiber trailer and enclosed in splice trays, which are in turn enclosed in a FOSC (Fiber Optic Splice Closure). The FOSC will have a dome to base clamping system, to ensure a water tight seal and be filled with 5lbs of air pressure to flash test seals. These FOSC's also offer gel-sealing technology instead of heat-shrink, which will automatically adjust to cable size and shape, and they do not require special tools, tapes or mastics to install. They are also re-usable, which provides for easy removal of cables and gel seals if the need for repair arises.

All outdoor fiber FOSC will be additionally protected by being placed inside of an in-ground pull box, allowing for future access. Pull boxes will be made from non-conductive composite material and buried at ground level as to have a minimal impact on the environment. Each location will be mapped as well as have a locater placed inside the vault.

All Fiber will be outdoor direct bury fiber with gopher proof shielding. For further protection, all fiber will be inside poly tubing. Outdoor termination points as well as the fiber path will be clearly marked. Location tape will buried with the fiber so is detectable above ground.

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization:<br>UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

Furthermore, a GPS will plot the course of the fiber, which in turn will be registered with the UTE Indian Tribe easement and right-of-way division as well as with the public services department.

Single-fiber tight-buffered cables will be used as pigtails so that all butt- terminations can be fusion spliced with factory ends and can be hooked to fiber breakout boxes for flexibility. Core location will use 96 position breakout boxes, while end-point buildings will use wall mount 12 position enclosures. Patch cords will be used to connect directly into optoelectronic transmitters, receivers, and other active components. All patch cords will utilize the small form factor high-density FDDI ends, to accommodate the latest in fiber switches that utilize GBIC technology.

Endpoint termination will be enclosed in a construction quality two panel NEMA rated enclosure to offer a flexible connectivity and distribution solution. These enclosures, as well as all other passive equipment, will use SC Fiber feed thru panels to connect equipment. This will offer easy identification, but more importantly by differentiating passive termination with SC end and active equipment with FDDI ends, it will help eliminate the possibility of plugging active devices into other active devices, causing unwanted loops in the network. SC to SC patch cables will be used to re-direct or break-off point-to-point connections between physically isolated networks, and to host virtual network segments that need special security and connectivity back to the public or other virtual networks. Layer two switching and routing equipment will used to set Quality of services for traffic such as Voice over IP. Likewise, layer two switches will be used to tag and un-tag sub-networks as they leave the fiber network.

When completed, an OTDR tester will test fiber runs to measure distance and attenuation over the entire fiber link. The OTDR will identify specific points along the link where losses occur, such as splices. A power meter will test shorter indoor fiber runs.

To summarize, indoor and out-side plant termination will be of the highest possible splice quality, all enclosures and other equipment will be carrier class and installed to vendor specifications. Layer two capable switches will specify quality of service and forward sub-network traffic to the desired destination. Thus, the network should provide the best possible throughput, reliability, flexibility and scalability.

**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?**

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

No

# I. Project Budget

| Project Budget | | |
|---|---|---|
| | **Federal Grant Request** | **Match** |
| **Last Mile** | 174,152 | 74,637 |
| **Middle Mile** | 1,403,056 | 601,309 |
| **Total** | 1,577,208 | 675,946 |

**Project Budget Total:** $2,253,154

**Match Percent:** 30.0%

**Projects Outside Recommended Funding Range:**

This project is of the utmost importance to Tribal Government. It started on the endeavor to build this comprehensive community infrastructure for the benefit of its anchor organizations by itself. Upon completion of this project there will be slightly over six miles of fiber in the project (very small by middle mile standards) but no less important to this Native American community.

████████████████████████████████████████████████. They have run inside CAT 5 cable and invested in other IT infrastructure enhancements.

Six miles for a comprehensive community infrastructure project is small. However, it encompasses all of the Uintah and Ouray Reservations tribal community of Fort Duchesne, including but not limited to schools, healthcare, public safety, and government offices. This project may be small, but it is the cornerstone that will sustain all other investments in technology made by health, safety, education, and other social service endeavors the Tribal Government and anchor institutions in the community have previously made.

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

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|---|---|
| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID: 7541** |
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

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|---|---|
| **Matching cost detail** | We used a very simple approach to figure out the matching detail. We have agreed to match 30 percent across all budget items for the total eligible cost of the project.<br><br> All matching funds will be from Tribal General Membership funds cash accounts, which do not include any Federal Grants or Awards. Money in this account is derived from Tribal Business and other assets.<br><br>██████████████████████████████████<br><br>████████████████████████ The cost of the first leg of this project ran roughly 50 dollars per linear foot. This includes all dark fiber that will be used to connect to this proposed fiber infrastructure. This price takes into consideration funds used to termination and bury the fiber from tribal Headquarters to its current endpoint termination location. It does not include any servers or cost of manpower, as most of the work was completed by tribal employees.<br><br>████████████████████████████████<br>██████████████████████████<br>██████████████████████████<br>████████████████████████████<br>█████████████████<br><br>██████████████████████████<br>████████████████████████████████<br>████████████████████████<br>████████████████████████████<br>█████████████ |
| **Unjust enrichment** | This project is not receiving any State or Federal Government funds from other grants or sources. However, it will be helping to support several other several other federally funded departments; Bureau of Indian affairs Police Department, UIT EPA, UIT Housing Authority (HUD), Utah Education Network (UEN). It will be a significant aid in the interconnectivity and collaboration of several federally funded and Grant Award recipients. |
| **Disclosure of federal** | This project is not recieving any grants or awards from state of federal agencies. The |

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

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| **and/or state funding sources** | Tribe, however, has several grants and awards. We can provide more detail on these grants when and if required. |
| **Budget reasonableness** | The budget for this project includes only the infrastructure elements that are consistent with the NOFA requirements, and does not include any fiber or equipment that has been previously installed by the Tribe. The Tribe is also aware that the infrastructure for each building i.e. network cabling, will be completed before this project is awarded and is therefore is not consistent with this projects requirements and thus, the Tribe will continue these improvements separately.<br><br>Upon completion of this project, there will be slightly over 6 miles of fiber in the project. ▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆▆ We have also created a physically separated network between the BIA and BIA Forestry buildings to accommodate the BIA's federal mandated closed network policy. All network runs in use have been tested, certified, and are currently functional with a 100Mbs fiber connection; providing Internet access, VOIP services, and interconnectivity to these first locations.<br><br>It is this successful experience and installation of 1/6 of this project that the entire budget was based. We found that our expenses where about 50 dollars a linear foot of cable laid. This is consistent with the submitted budget. Products previously utilized, such as Draka Fiber and Tyco Fiber FOSC's, are listed on RUS list of materials for buy American. This consistency will not require any material changes in the project and allows us to predict that the costs associated with the first mile will remain consistent through the entire project.<br><br>Laying the first mile also gave us good understanding of the cost to trench. The ground is often bedrock and a typical trencher would not work. A backhoe had to complete several sections where we discovered we could only dig approximately 50 feet per hours at cost |

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|---|---|
| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID:** 7541 |
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:**  Crystal  Adams |

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| | of $100 per hour.<br><br>A Project manager will be hired and oversee the trenching, laying, and burring of fiber, and to handle all reporting requirements. We will also hire three labor positions. The Tribe's Emergency Employment and Human Resources departments will advertise all positions. If adequate help is not hired, we will use the money to contract out the labor.<br><br>Consulting expense is based on $125 per hour for consulting services, UIT IT support, and engineering support, which is consistent with the first mile of this project. Splicing costs, equipment rental, and testing are also consistent with the first section of the project.<br>We do not see variations from the budget; we believe the experience gained from the first leg of this project will prove invaluable to help complete this project on time and on budget. |
| **Demonstration of need** | This project is "shovel ready" and poised to be a success story for the BTOP program. Because this project has already been started all the hurdles have previously been visited i.e. right-of-ways, easements, community support, damn crossing, anchor organization support, etc. have all been addressed. This project was and is a victim of the down turn in the economy. With support from grant funds it can immediately be re-invigorated.<br><br>Five years ago the tribe had very few computers, and no network to speak of—accounting had 8 dumb terminals connected to a ▮▮▮ server, unthinkable for an organization of its size and scope. After significant investment and efforts they now have wired most of the structure's with CAT5 cable, have created a network to support multiple organizations, have created an Active Directory organization with over 14 connected sites, and over 300 plus workstations, have implemented a 300 plus node VOIP network, a corporate wide email system, they have implemented an industry standard accounting system, a vital statistics database,  a ▮▮ microwave communication system for public safety organizations, a Police Department application, they have developed custom applications to better track |

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:**<br>UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

<table>
<tr><td></td><td>oil and gas resources, the tribe court is in the process of installing court management software, the list goes on.

The Tribal Government believes this project to be of the utmost importance and actually started on the endeavor to complete this community fiber infrastructure by itself. However, with the down turn in the economy other more pressing social support issues have taken priority, and like all small governments across the country budgets for new projects have suffered.

Furthermore, this project will not generate significant expenses to operate, and thus does not have to rely on generating revenue, thus sustainability for this project will be directly reflected in the ability of the infrastructure to accommodate the ever changing needs of the community and tribal organization.  That is why fiber was selected as a medium for connectivity; fiber has long term sustainability and is flexible.  Overtime some repairs will be need to be made, and perhaps active equipment might need to be upgraded, but very little cost will be occurred after project completion. We believe that is the key to sustainability—because of this project no additional burden will placed on the Tribal Government and they will reap the rewards of this project for years to come.</td></tr>
</table>

**Funds to States/Territories**

| States | Amount of Federal Grant Request |
|---|---|
| Utah | 1,577,208 |

**Funds to States/Territories Total:** $1,577,208

# J. Historical Financials

**Matching Funds**

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

| | 2007 | 2008 | 2009 |
|---|---|---|---|
| Revenue | 121,813,487 | 135,618,300 | 0 |
| Expenditures | 88,179,503 | 92,204,316 | 0 |
| Net Assets | 451,803,069 | 495,217,053 | 0 |
| Change in Net Assets from Prior Year | 33,633,984 | 43,413,984 | 0 |
| Bond Rating (if applicable) | | | |

# K. Project Readiness

**BTOP Organizational Readiness**

This project is "shovel" ready. It has been previously started and because of the economic situation it was halted. Thus, all community organizations are aware of the project and have been waiting with anticipation for its completion. Consultants and vendors have been previously used, contractors for trenching are wondering when the project will resume. Previously rented equipment has been verified ready and available. Right-of-ways and easements have been granted by the Tribe to complete the project. Easements and actually conduit has been previously placed under the only major highway that will be crossed.

The Tribal Government believes this project is important and has passed a resolution in its support and is waiting to hear if there application was accepted. To re-iterate the Tribe actually started on this community fiber infrastructure by itself, but because of economic reason had to cut budgets. When completed this project consist of just over 6 miles of total fiber in the project (not including to building runs). ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ The hard part is already done--that is getting started.

The overall project plan does not need to be developed and the building of this networks first leg has been successful implemented. Are team is still inplace and would like to finish the project. We have the community and the Tribal Government on our side, so we see no hurdles that would keep us from finishing this project and delivering the proposed services.

We realize that this project may be different than most of the applicants, however, we hope it is considered. We feel it meets the requirements of BTOP to serve critical community anchor institutions and health and public safety organizations.

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

We also want to help get broadband affordable broadband to the community of that live in the Fort Duchesne proposed service area. It has a 77 percent unemployment rate and is a tribal community with a median income of around 27,000 dollars.

This project will also collaborate with several other federally funded projects to help them be successful. Helping them to report and fulfill the obligations for which they are obligated. IT infrastructure and technical knowledge is one of the biggest issues that this Native organization has to deal with. We think this project will help give tribal employees the knowledge and skills to not only competently complete their jobs for the tribal government, but also give them the skills and knowledge they need to work in today's high tech world.

**Construction and Vendor Contracts**

Contractors and vendors have been contacted and are willing to engage in more formal agreements when and if funding becomes available. Budgets are all based on written quotes, however these quotes may expire. However, we do not expect a major change in the price of any of the budget items.

This project is "shovel" ready. It has been previously started and because of the economic situation it was halted. Thus, all community organizations are aware of the project and have been waiting with anticipation for its completion. Consultants and vendors have been previously used, contractors for trenching are wondering when the project will resume. Previously rented equipment has been verified ready and available. Right-of-ways and easements have been granted by the Tribe to complete the project. Easements and actually conduit has been previously placed under the only major highway that will be crossed.

**Customer Base**

The governing body of the Ute Indian Tribe is the Ute Tribe Business Committee (BC). All Tribal businesses and departments report to this governing body. The BC is behind this project and has passed a resolution for us apply for this BTOP funding opportunity. The reservation contains Indian properties covering approximately 1.2 million surfaced-owned acres, and 400,000 mineral-owned acres within the 4 million acre jurisdictional boundary--larger than some states.

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name: Crystal Adams |

There are approximately 4000 members of the Ute Tribe and about 2700 live on the Uintah and Ouray reservation. The largest population center is Fort Duchesne and adjacent communities with a combined population of 720.

This area encompasses 100 percent of Tribal Gov. offices, federally operated Tribal agencies, Tribal owned business and most of the BIA and Tribal managed housing. It has 40-community anchor institutions, such as Tribal Public Safety and Health centers. It is the location of the Tribal Adult education and K-12 Uintah River High School. It is the location of most of the Head Start and Daycare—it is the hub of the Uintah and Ouray Reservation.

The Tribe is also a part of several for profit business located in this service area. There are a few privately owned tribal businesses in the area, but the area is economically disadvantaged so there are not a lot of entrepreneurial opportunities. All locations within this area will be connected with 100Mb fiber or 54Mbs Wi-Fi.

**Licenses, Regulatory Approvals and Agreements**

Tower Leases, Equipment Leases, Building Leases, Land Leases, right of ways, easements and other approvals are all handled by the Tribe. With a resolution previously been passed by the Ute Tribal Government Business Committee (with unanimous vote) we do not foresee any issues arising from the Tribal Government.

**SPIN Number**

# L. Environmental Questionnaire

**Project Description**

This project will consist of lying ▮▮▮▮▮▮▮▮ fiber optic cable and putting up 8 Wi-Fi hot spots on the Uintah and Ouray reservation in Fort Duchesne UT. This infrastructure will connect Tribal Government and critical community institutions, including schools, healthcare, public safety entities, and approximately 100 tribal underserved household of the Uintah and

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | Applicant Organization: UTE INDIAN TRIBE |
| Task: Submit Application - BTOP | Applicant Name:  Crystal  Adams |

Ouray Reservation. This project will directly address the lack of infrastructure available to the Ute Tribe Government and the surrounding community in its rural setting.

The network will be built across a carrier-class infrastructure and support leading edge IPv4, IPv6, multicast, and other advanced networking protocols, as well as the ability to more easily and flexibly increase its capacity should needs arise. It will offer dedicated bandwidth for the most demanding applications to vital organizations looking for long-term, static, point-to-point connections to cost-effectively extend their network connectivity and internet presence within the Fort Duchesne Community.

**Property Changes**

This project contains no new buildings or construction or installing of prefabricated buildings;

This project contains no substantial internal modifications, or equipment additions to buildings or other structures (e.g., relocating interior walls or adding computer facilities);

A 3 foot trench will be dug and fiber lay in the trench and then the trench will be covered. Fiber will be housed in fiber conduit. Occasionally there will be a passive "man hole" or pull boxe made out of composite material buried at ground level. These pull box locations will be for future building or other strategic repair locations (either side of a road).

This project does not contain installation of telecommunications transmission facilities or satellite dishes. It does however consist of wireless antennas approximately two feet in height, which will be placed on several tribally owned buildings. These antennas are very unobtrusive and will barley be noticeable.

**Buildings**

No construction of any building is required for this building. Existing buildings will be entered will water proof conduit's placed in unseen areas. Wireless antennas will be placed on several tribally owned buildings. These antennas that are place on the buildings are very unobtrusive and will barley be noticeable.

**Wetlands**

This project is not located near wetlands and no wetlands will be affected by construction according to the maps of wetlands may be obtained from the U.S. Fish and Wildlife Service's

| **Submitted Date:** 3/26/2010 8:48:39 PM | **Easygrants ID: 7541** |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:** Crystal Adams |

National Wetland. We have also verified this information with Ute Tribe Fish and Wildlife services.

**Critical Habitats**

This project or any of its project sites will directly or indirectly affect any threatened, endangered or candidate species or is within or near critical habitats.

**Floodplain**

No facilities or sites in this project are located within a 100-year floodplain.

**Protected Land**

According to the State Historic Preservation Office (SHPO) of the State of Utah there are no historic properties, i.e., properties listed in or eligible for listing in the National Register of Historic Places, which are located in or within a one-mile radius of the project area, in your respective State.

However, the entire project will be located on tribal lands, meaning lands within the boundaries of the Uintah and Ouray Indian reservation. We have contacted the Cultural Rights and Tribal Historic Preservation Officer (THPO) and at the time of this application the only potential issue is how we go around the cemetery. We will be working with the right of way along the road that by passes the cemetery. We will continue to be in contact with the tribes preservation department and mitigate any potential historical sites.

**Coastal Area**

The project is not within the boundaries of a coastal zone management area (CZMA).

**Brownfield**

This project is not located within a brownfield site. Or any property complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:**  Crystal  Adams |

## 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 | UIT upload+template+-+CCI+-+Service+Offerings+Competitor+Data.xls | Adams, Crystal | 03/26/2010 |
| Network Diagram | UIT Proposed Network.pdf | Adams, Crystal | 03/26/2010 |
| Network Diagram | UIT Network Linear - Current.pdf | Adams, Crystal | 03/26/2010 |
| Network Diagram | UIT Network logical - Current.pdf | Adams, Crystal | 03/26/2010 |
| Build Out Timeline | UIT upload+template+-+CCI+-+Build-out+Timeline.doc | Adams, Crystal | 03/26/2010 |
| List of Community Anchors and Points of Interest | UIT CCI Anchor Detail and POI Attachment.xls | Adams, Crystal | 03/25/2010 |
| Management Team Resumes and Organization Chart | UIT Org Chart.pdf | Adams, Crystal | 03/26/2010 |
| Management Team Resumes and Organization Chart | UIT Keith Young.pdf | Adams, Crystal | 03/26/2010 |

| Submitted Date: 3/26/2010 8:48:39 PM | | Easygrants ID: 7541 | |
|---|---|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | | **Applicant Organization:** UTE INDIAN TRIBE | |
| **Task:** Submit Application - BTOP | | **Applicant Name:** Crystal Adams | |

| Historical Financial Statements | UIT Letter Accounting.pdf | Adams, Crystal | 03/25/2010 |
|---|---|---|---|
| Historical Financial Statements | UIT Net Assets 2006.pdf | Adams, Crystal | 03/25/2010 |
| Historical Financial Statements | UIT 2005 audited.pdf | Adams, Crystal | 03/25/2010 |
| Historical Financial Statements | UIT 2007 & 2008 unaudited financial info.pdf | Adams, Crystal | 03/25/2010 |
| Budget Narrative | UIT CCI Budget Narrative Attachment.docx | Adams, Crystal | 03/26/2010 |
| Detailed Budget | UIT detailed budget.xls | Adams, Crystal | 03/25/2010 |
| Pro-forma Forecast | UIT upload+template+-+CCI+-+Pro+Forma+Financial+Projections.xls | Adams, Crystal | 03/26/2010 |
| Subscriber Estimates | UIT CCI Subscriber Estimates Attachment.xls | Adams, Crystal | 03/25/2010 |
| Dashboard Metrics | UIT Key Metrics dashboard.doc | Adams, Crystal | 03/26/2010 |
| Service Area Data | UIT CCI service Area Template.xls | Adams, Crystal | 03/25/2010 |
| Network Maps | UIT Current Network.pdf | Adams, Crystal | 03/26/2010 |

| Submitted Date: 3/26/2010 8:48:39 PM | | Easygrants ID: 7541 | |
|---|---|---|---|
| Funding Opportunity: Broadband Technology Opportunities Program | | Applicant Organization: UTE INDIAN TRIBE | |
| Task: Submit Application - BTOP | | Applicant Name: Crystal Adams | |

| Network Maps | Current and Proposed Fiber Path.JPG | Adams, Crystal | 03/26/2010 |
|---|---|---|---|
| Network Maps | Wireless Coverage Map2.JPG | Adams, Crystal | 03/26/2010 |
| BTOP Certifications | UIT Authorization.pdf | Adams, Crystal | 03/25/2010 |
| BTOP Certifications | UIT Attorneys Letter.pdf | Adams, Crystal | 03/25/2010 |
| SF-424 C and D | SF-424c signature page.pdf | Adams, Crystal | 03/26/2010 |
| SF-424 C and D | UIT SF424c.pdf | Adams, Crystal | 03/25/2010 |
| Supplemental Information | UIT notes to reviewers.pdf | Adams, Crystal | 03/26/2010 |
| Supplemental Information | UIT Letter Courts.pdf | Adams, Crystal | 03/26/2010 |
| Supplemental Information | UIT Letter Ute Tribe Exe Dir.pdf | Adams, Crystal | 03/26/2010 |
| Supplemental Information | UIT Letter UOPD.pdf | Adams, Crystal | 03/26/2010 |
| Supplemental Information | UIT Letter EMS.pdf | Adams, Crystal | 03/25/2010 |
| Supplemental | UIT Letter Trading Post.pdf | Adams, Crystal | 03/25/2010 |

| Submitted Date: 3/26/2010 8:48:39 PM | Easygrants ID: 7541 |
|---|---|
| **Funding Opportunity**: Broadband Technology Opportunities Program | **Applicant Organization:** UTE INDIAN TRIBE |
| **Task:** Submit Application - BTOP | **Applicant Name:**  Crystal  Adams |

| Information | | | |
|---|---|---|---|
| Supplemental Information | UIT Letter Headstart.pdf | Adams, Crystal | 03/25/2010 |
| Supplemental Information | UIT Letter EPA.pdf | Adams, Crystal | 03/25/2010 |