Tribal Libraries

The Why: Tribal Libraries are essential infrastructure in their communities in building sustainable futures and resilient communities.

In most tribal communities, the Library is the only place for free internet connectivity which provides access to resources that are technologically driven:

- Job applications, resume writing, job searches, unemployment claims. Library staff provides help in filling out the forms and using websites. Job applications for many employers including the State of New Mexico are only available online.
- After school homework help and online live tutoring K-college in all subject areas. *Brainfuse is a free database through the New Mexico State Library available through local libraries.*
- Health and wellness information. *Information about medical conditions, drugs, health maintenance and insurance options.*
- Social services for senior, disabled and veterans e.g. Social Security, Medicare, Veterans services.
 Libraries are especially critical for rural communities who don't have access to walk in social service facilities.
- High school students complete applications for FAFSA and college. *Many students do not have online computer access at home.*
- Online classes for professional development, degree programs, GED and basic literacy.

 Various sites are available for free through the public library. GED testing is only available now online.
- Center for connectivity during emergencies; libraries and schools traditional gathering places during weather emergencies i.e. floods, fires, etc.
 - Recently the Isleta Library served as an emergency center for flood victims.
- Driving test and video to get NM license. Both are necessary to obtain a NM driver's license.
- Video and test online for New Mexico food handlers permit. Food Handler Certification from the Indian Health Service to sell or prepare food on tribal lands.
- Filing Federal and State Taxes. *Printed forms are not readily available.*
- Permits and safety course for NM Game and Fish. These are required for hunting and fishing in NM.

Many Tribal libraries also provide:

- Language and cultural preservation with language classes and story time in the Native Language, archiving and preservation of language and cultural materials.
- Libraries bind communities with intergenerational activities including crafts for all ages, language
 programs, local storytellers, reading as a family activity, community presentations by their community
 elders, artists, Tribal service departments.
- Libraries often provide English as a Second language classes
- Meeting rooms to various community organizations i.e. Veterans, Housing, Educational meetings with parents, Tribal Utilities
- Summer programs and summer reading activities for children and teens
- Year round programming for all ages in community
- A safe place for all ages
- Notarizing, copying, faxing
- Ask the librarian (reference questions)
- Inter-library loan (borrowing books from other libraries)
- Voter registration and voting site
- Extension service for farmers and ranchers
- Basic computer classes
- Host site for TANF volunteers
- Transit site (transportation in rural areas)

Using resources available, from DoIT site and others, compile current statistics of broadband accessibility for all library types across the state.

Currently, there are 19 tribal libraries in the State of New Mexico. Of those, only one library (Pueblo of Isleta) meets the current broadband speed of 100 Mbps for libraries serving a population of less than 50,000 as designated by the FCC E-Rate Modernization Order. This is an increase from 1.5 Mbps in 2015.

Between 2015 and today, eleven tribal libraries have increased speeds anywhere from 100% to 6567%, although the average speed, 36 Mbps, is well below the FCC standard. Expensive and slow T1 copper lines are steadily being replaced with fiber-based Internet connections. In 2015, thirteen tribal libraries had T1 connections compared to four in 2017. In 2015, five tribal libraries had fiber-based Internet connections although they subscribed at slow connection speeds. As participation in E-rate increases, tribal libraries can realistically aim to reach the 100 Mbps initial speed.

With respect to E-Rate, only four of the nineteen tribal libraries participated in E-Rate in 2015. According to the 2016 NM State Library Annual Report, thirteen tribal libraries reported that they would apply for E-Rate in FY2018, measuring a stark increase in E-Rate interest. In the last E-Rate cycle, FY 2017, eight successfully submitted 471 applications. Additionally, two FY2016 tribal library consortia applications are currently being implemented and should resulting in six tribal libraries increasing to 100 Mbps. Of the FY2017 applications, one application was Out-of-Window, two applied for Category 2 equipment only after not receiving viable Category 1 Internet Access proposals, two are under review, and four have been committed.

E-rate success is directly tied with tribal library access to technical assistance for application support and technology advisement. The E-rate program option to form consortium to aggregate demand, build networks, and share matching obligations offer the most potential for successful tribal library E-rate participation. The following table summarizes the E-rate application outcomes for FY 2017:

FY2017 NM Tribal Library E-Rate Applications (EPC User Portal data):					
No – Developing Library	1	Torreon			
No - Tied to Tribal Administration		Sandia, Ohkay Owingeh, Santa Clara, Taytsugeh			
		Oweengeh, Pojoaque, Zuni			
No - But Tried	3	Acoma, Jicarilla, Isleta			
Yes – Consortia (Committed/Pending)		Jemez, Cochiti, San Felipe, Santa Ana, Santo Domingo,			
		Zia			
No - ?	3	Laguna, Mescalero, San Ildefonso			
Total:	19				

Current State of Broadband Accessibility								
Tribal Libraries	CITY	Current Provider	Type of Technology	Advertised Download	Advertised Upload	Provide Wi-Fi		
Pueblo of Isleta	Citt	Horiaci	recimology	Download	Орюши	••••		
Library	Isleta Pueblo	Century Link	Fiber	100	100	Yes		
Santa Ana Pueblo	Santa Ana	,						
Community Library*	Pueblo	Level 3	Fiber	70	70	Yes		
Mescalero Community								
Library	Mescalero	MATI	DSL	40	40	Yes		
P'oe Tsawa	Ohkay							
Community Library	Owingeh	RediNet	Fiber	40	40	Yes		
Taytsugeh Oweengeh	Tesuque							
Library	Pueblo	RediNet	Fiber	30	30	Yes		
Jemez Pueblo								
Community Library*	Jemez Pueblo	Windstream	DSL	20	20	Yes		
Santa Clara Pueblo	Santa Clara							
Community Library	Pueblo	RediNet	Fiber	20	20			
Pueblo of Pojoaque	Pojoaque							
Public Library	Pueblo	RediNet	Microwave	20-30	20-30	Yes		
Zuni Public Library	Zuni Pueblo	Century Link		10-20	10-20	No		
Pueblo de Cochiti								
Library*	Cochiti Pueblo	Verizon	LTE	12	8	No		
Zia Enrichment								
Library*	Zia Pueblo	UNM	Microwave	10	10	Yes		
Sandia Pueblo								
Learning Resource								
Center	Sandia Pueblo	Century Link	Microwave	7	1.75	Yes		
Acoma Learning	Pueblo of							
Center	Acoma	Century Link	T1	3	3	Yes		
Laguna Public Library	Laguna Pueblo	Century Link	T1	3	3	Yes		
Pueblo of San Felipe	San Felipe							
Community Library*	Pueblo	Century Link	T1	3	3	Yes		
Santo Domingo	Santo Domingo							
Pueblo Library*	Pueblo	Hughes Net	Satellite	3	1	No		
Pueblo de San								
Ildefonso Library	San Ildefonso	Century Link	T1	1.5	1.5	Yes		
Jicarilla Public Library	Dulce	Windstream	T1			No		
Torreon Community								
Library	Cuba	Frontier	T1			No		

^{*} Part of on-going 2016 E-Rate consortium implementation efforts. Upon completion will receive 100 Mbps from UNM

Current E-Rate Applications (FY2017)								
Tribal Libraries	Library Receives E-Rate	Will Apply for E-Rate	2017 471	Туре	Mbps	Cos	st	Provider
Pueblo of Isleta Library	No	Yes	Out-of-Window	Fiber	100	\$	2,029	Century Link
Jemez Pueblo Community Library	No	Yes	In Review	Fiber	100	\$	690	UNM
Zia Enrichment Library	No	No	In Review	Fiber	100	\$	690	UNM
Santa Ana Pueblo Community Library	No	Yes	Committed	Fiber	100	\$	415	UNM
Pueblo de Cochiti Library	Yes	Yes	Committed	Fiber	100	\$	415	UNM
Pueblo of San Felipe Community Library	Yes	Yes	Committed	Fiber	100	\$	415	UNM
Santo Domingo Pueblo Library	Yes	Yes	Committed	Fiber	100	\$	415	UNM
Mescalero Community Library	No	Yes	No					
P'oe Tsawa Community Library	No	No	No					
Taytsugeh Oweengeh Library	No	Yes	No					
Santa Clara Pueblo Community Library	No	No	No					
Pueblo of Pojoaque Public Library	No	Yes	No					
Sandia Pueblo Learning Resource Center	No	No	No					
Zuni Public Library	No	Yes	No					
Acoma Learning Center	Yes	Yes	Cat 2 Only					
Laguna Public Library	No	Yes	No					
Pueblo de San Ildefonso Library	No	No	No					
Jicarilla Public Library	No	No	Cat 2 Only					
Torreon Community Library	No	Yes	No					

Improved Broadband Tribal Library Connections (Current vs. 2015)									
Tribal Libraries	Current Speed (Down)	Current Provider	2015 Speed (Down)	2015 Provider	Current vs. 2015 (Mbps)	Percent Increase			
Pueblo of Isleta Library	100	Century Link	1.5	Century Link	98.5	6567%			
Mescalero Community Library	40	MATI	1.5	MATI	38.5	2567%			
Taytsugeh Oweengeh									
Library	30	RediNet	1.5	Century Link	28.5	1900%			
Zia Enrichment Library*	10	UNM	1.5	Century Link	8.5	567%			
Pueblo de Cochiti Library*	12	Verizon	1.5	Century Link	10.5	700%			
Sandia Pueblo Learning Resource Center	7	Century Link	1.5	Cellular One	5.5	367%			
Santa Clara Pueblo	,	Cerreary Errik	1.5	centalar one	3.3	30770			
Community Library	20	RediNet	3	Windstream	10	333%			
Jemez Pueblo Community									
Library*	20	Windstream	10	Windstream	10	100%			
Acoma Learning Center	3	Century Link	1.5	Century Link	1.5	100%			
Laguna Public Library	3	Century Link	1.5	Century Link	1.5	100%			
Santo Domingo Pueblo Library*	3	Hughes Net	1.5	Century Link	1.5	100%			
Santa Ana Pueblo		riugiles ivet	1.5	Century Link	1.5	10070			
Community Library*	70	Level 3	40	Level 3	30	75%			
P'oe Tsawa Community		2010.0		2010.0		70,0			
Library	40	RediNet	40	RediNet	0	0%			
Pueblo of San Felipe									
Community Library*	3	Century Link	3	Century Link	0	0%			
Pueblo de San Ildefonso									
Library	1.5	Century Link	1.5	Century Link	0	0%			
Torreon Community									
Library	1.5	Windstream	1.5	None	0	0%			
Jicarilla Public Library	1.5	Frontier	1.5	Windstream	0	0%			
Pueblo of Pojoaque Public	20-30	DadiNat	1 [Contumediale					
Library	(reported) 10-20	RediNet	1.5	Century Link					
Zuni Public Library	(reported)	Century Link	1.5	Century Link					

^{*} Part of on-going 2016 E-Rate consortium implementation efforts. Upon completion will receive 100 Mbps from UNM

1. Make recommendations for e-rate and broadband education

- Personalized technical assistance in the application process is essential to increase participation in E-Rate. With just cause E-Rate is known as a difficult process and previous negative experiences with the program leave lasting impressions that create a deterrent for future participation. Outreach and trainings do not suffice.
- State efforts should focus to promote consortia efforts for E-rate applications, project management for implementation, and to seek library-specific IT services. State efforts can identify logical consortia and create systems of support, for both E-rate and non-E-Rate components for success.

2. Encourage strategies for school and libraries to participate in e-rate funding opportunities

- An understanding of tribal administration and organizational structure as it relates to the time sensitive E-Rate filings, which can make it difficult to complete applications and projects, is essential to application and implementation success. Perhaps identifying alternative fiscal agents for E-Rate could be explored. Alternatively, establishing and continuing positive relationships with tribal leadership, education departments, and tribal schools provides a network that can navigate tribal bureaucracies. This can be facilitated by regular meetings between, at least, tribal schools and libraries, increasing collaboration around common needs.
- Tribal Community participation is essential for libraries to participate in E-Rate opportunities.
 The other tribal community anchor institutions such as public safety, health and tribal government have common connectivity challenges that can be expensive and complicated to solve. Connectivity issues need to be addressed as a community with solutions that are designed to aggregate demand to reduce costs and achieve efficiencies. While E-Rate is not the complete solution for all tribal needs it can play a critical central role that can be coupled with other broadband funding opportunities.
- Working together is essential for success, especially reaching across the aisle to work with State broadband efforts that might not be library – or tribally - specific but provides a new set of resources. While the New Mexico's Broadband Deficiencies Correction Program did not include financial support for tribal libraries, it did provide other assistance such as providing access to E-Rate consultants (for consortia applicants) and help to coordinate applications between eligible schools districts, libraries and tribes.
- An understanding of tribal administration and organizational structure as it relates to the time sensitive E-Rate filings, which can make it difficult to complete applications and projects, is essential to application and implementation success. Perhaps identifying alternative fiscal agents for E-Rate could be explored. Alternatively, establishing a continuing positive relationship with tribal leadership, education departments, and tribal schools provides a network that can navigate tribal bureaucracies. This can be facilitated by regular meetings between, at least, tribal schools and libraries, increasing collaboration on common needs.

- Another complexity is lack of technical expertise to complete competitive bidding for network
 equipment and infrastructure at the local level. Clustering group applications makes the process
 more manageable. Leveraging consortium options could provide success. IT support for
 consortia can also provide technical solutions to balance mandatory E-Rate CIPA compliance
 with adult patron rights to access to information. Paid technical assistance at a consortium level,
 increases efficiency and cost-savings compared to individual libraries absorbing these costs
 alone.
- Tribal Libraries often share facilities with other tribal government offices resulting in a reliance
 on tribal IT services which are already overextended. Tribal governments themselves have
 limited choice in affordable high speed internet and are often unable to provide tribal libraries
 with robust bandwidth needed for critical community services. Dedicated library Internet
 accounts and equipment eases E-rate application and compliance issues as well as increasing
 agency for the tribal libraries to increase bandwidth as they see fit.
- Shared internet connections, equipment, and billing provide additional challenges to cost
 allocate services and equipment to participate in E-Rate as well as reimbursements from the
 State. Invoices from vendors need to be compliant with E-rate and state reimbursement. To
 receive state reimbursements and to be successful in E-rate, tribal finance personnel and others
 involved in procurement should be trained on program compliance, including invoicing and
 document retention.