LAUNCHING TRIBAL TELCOS:
A DECISION ANALYSIS TOOLKIT FOR TRIBES

White Paper presented to Native American Telecommunications Association
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We are restoring self-esteem into the community and healing the community by giving tools for training, education, employment, and creating infrastructure for future advancement. We are creating equal opportunities for our people. Telecommunications on reservations is different from telecommunications in rural America because it means empowering our people.

– Vernon James, General Manager, San Carlos Apache Telecommunications Utilities, Inc. [i]

INTRODUCTION

Out of 562 federally recognized Native American tribes in the United States – 275 of which are land-based – only 7 currently provide telecommunication services to members through tribally owned enterprises.[ii] These companies, known in the industry as *tribal telcos* vary in the services they deliver, their visions for meeting tribal needs, governance structure, and regulatory codes. The "ingredients" of their successes and challenges are unique to each tribe, given their resources, context, culture, and most of all, their needs. Each one has a different story to tell.

Yet despite their differences, tribal telcos resemble one another by embodying the ideas that:

- Telecommunications in Indian Country need improved access, technology, and quality;
- Telecommunications is a powerful tool for empowerment and economic development;
- Tribal needs are best served by tribally designed and implemented solutions.

This white paper honors the tenacity with which tribal telcos have served the telecommunication needs of their communities. It recognizes the potential with which telcos can affect change in Indian Country. Indirectly, this paper helps answer the question *Why are there only seven tribal telcos?* by providing a framework for analysis through which tribes can assess if a telco is an appropriate business venture given their own contexts.

A. METHODOLOGY: GOALS, AUDIENCE, SCOPE, AND FRAMEWORK

Research for this white paper was conducted through site visits, interviews with professionals in the tribal telecommunications field, and on-line research in the context of a field-study project for Nation Building II class at the John F. Kennedy School of Government at Harvard University. Due to time constraints, research was limited to data on *existing* tribal telcos; no contact was made with tribes who either currently are in the process of investigating the feasibility of telco or who abandoned business ventures.[iii]

Goals and Audience

This white paper seeks to provide the National Tribal Telecommunication Alliance (NTTA) with an entry-level educational resource to assist tribes in their decision-making process in launching a tribally owned telcos. In addition to tribes, this paper can be used as a tool to educate regulators and vendors about the constraints and opportunities that define the tribal telecom landscape. It assumes that the reader possesses little or no knowledge of the telecommunications industry and thus seeks to outline "macro" issues and questions that tribes face as they look for solutions to their telecommunication needs.

While providing tribes with tools for decision-making, the goals of this paper are to:

1. Help tribes assess capacity in Business Management, Regulation, and Telecommunications to better inform their telecommunication decision;
2. Document lessons learned from tribal telcos to date;
3. Justify the need for tribally designed technical assistance to further guide tribes in the successful development of telcos.

Scope

The decision to operate its own telco is one of *many* solutions that a tribe can choose for economic development and telecommunications. This paper *does not* investigate the many other options that are available that require different business structures and investments.[iv]

In addition, this paper does *not* advocate that establishing a tribal telco is the appropriate solution to the telecommunication needs for *every* tribal community. In fact, as much as this paper can be a tool for tribes who choose to launch a telco, it can be of value if it assists a tribe in identifying justifications *against* launching one.

Telecommunications is a complicated, rapidly changing and technical industry. This white paper cannot address many details that must be incorporated into any telco plan. Tribes who decide to launch their own telcos must commit themselves to an arduous process of education – in technology, regulation, finances, legal, management – details which far exceed the scope of this paper. Fortunately, tribes have access to a myriad of resources – through trade associations and publications, technical assistance providers like the National Indian Technology Institute (NITI) and Indian Telecommunications Training Initiative at the FCC, and advocates like National Congress of American Indians. More than any resource, the knowledge and expertise of existing tribal telcos can assist tribes in making wise decisions. Wherever possible, this white paper connects tribes with existing resources rather than duplicating services, advice, and research that already exist in a rapidly growing and important field.

Decision-Analysis Framework

This paper provides tribes with a hands-on framework of analysis to assist in their telecommunications decision. It is built around four questions:

- **Why** should a tribe own and operate its own telco?
- **Who** should be involved in the planning process?
- **What tools** can assist a tribe in planning?
- How can a tribe assess its capacity in **Business Management, Regulation,** and **Telecommunications?**

Questions not Answers

Tribes will *not* find answers in this white paper. Rather, it is structured around **"key questions"** which are intended to deepen tribe's analysis so that whatever "answer" they arrive at is rooted in strategic inquiry and research. Whenever possible, questions draw on models from in the field. But it is only the tribes themselves who dedicate the time and resources to ask the questions that can determine the "answers."

How to "Use" this Document

Depending upon the reader's familiarity with issues related to telecommunications on reservations, the need for this document will vary. Therefore, it has been designed to be read in any order, at any point during a tribe's decision-making process. Each section does not assume prior experience in any of the areas. Flip through the table of contents and pick and choose the sections that best fit the needs of your tribe. Each chapter concludes with a **chapter summary** and **key questions**. For easy viewing, all **key questions** have been marked with the icon to the left.

CHAPTER 1: OVERVIEW OF THE CONTEXT INFLUENCING TRIBAL TELCOS

A. ECONOMIC REALITIES ON RESERVATIONS [v]

The economic realities of tribal communities vary widely across the country. Many Indian communities – both gaming and nongaming tribes – enjoy viable, healthy economies that derive income from sophisticated enterprises ranging from ski resorts and retirement communities to pencil factories, call centers, and tourism. Tribes with growing, healthy economies "have developed export-oriented enterprises that seek to exploit tribal comparative advantages based upon natural resources, regulator flexibility, human capital or geographic position." [vi] Nationwide, tribes are innovating solutions that draw upon cultural strengths and entrepreneurship.

Yet aggregate data on poverty indicators for Native Americans reveals that on average, tribal communities face severe challenges:[vii]

- The 2000 Census estimates that 26% of all Native Americans are impoverished (more than double the national average);
- 50% of the Indian workforce is unemployed;
- Indian Health Services report that 29% of Indians are homeless and 59% live in "substandard housing".
- In addition, Native Americans remain the poorest of all U.S. minority or ethnic groups.

Clearly, the need for economic development in Indian Country is great. It is against this backdrop of business innovation and economic challenges that tribal telcos emerge as creative solutions to community needs.

B. TELECOMMUNICATIONS TRENDS AND NEEDS ON RESERVATIONS

So much of our work is education and making sure that people understand that tribes are different from other communities in the U.S. – Matt Kuykendall, National Congress of American Indians, speaking about advocacy for Native American telecommunications

Trends in Native American Telecommunications

Just as the economic indicators on reservations vary from tribe to tribe, so, too, do their telecommunication services and needs. Among reservations, access to telecommunications varies according to factors such as geography, infrastructure, costs, local economies, vendors, politics, and regulatory structures. There is no "one-size fits all" telecom solution for all tribes. However, at the same time that one cannot generalize about *all* Native American communities, average trends and anecdotal evidence paints a picture of low-quality service across tribal lands. In addition, the FCC reports that reservation issues are "extreme magnifications" of problems seen in serving rural high-cost areas.[viii]

The "Analogue Divide:" Penetration Rates on Reservations [ix]

While policy makers and technology firms are concerned about the ever-widening gap known as the "digital divide" that separates communities with access to technology from those without, the

"analogue divide" remains a problem in Indian Country. Nationally, phone penetration rates have stabilized at 94.1% and data shows that penetration rates correlate directly with income brackets.

On reservations, data on phone penetration rates vary according to the study. Recent data measures penetration rate on tribal lands to fall significantly below national average:

- 1999 Economic Development Administration reported penetration rate of 39% in tribal households of a small sample of 48 tribes
- 1999 Commerce Dept. Study reported penetration of 76.4%
- The most recent FCC data, released in May 2003, cites 67.9% penetration rates on reservation and off-reservation trust lands using data from the 2000 Dicennial census.[x]

Overall, the FCC reports that Native American communities have the lowest telephone penetration rates of all groups in the U.S. and remain "underserved" and without service in many areas.[xi]

C. Barriers to Telecommunications on Reservations [xii]

Why do the penetration rates and quality of services of telecommunications on some reservations lag so far behind other communities? Whereas the telecommunication needs of each reservation is distinct, the list below outlines common barriers to telecommunications on reservations:

Economic

- High supply costs – remote location, high infrastructure costs, lack of economies of scale
- Demand-side challenges – weak local economies, smaller populations and customer base
- Low or no profit generation – no incentive for non-local providers to "build out" or improve services to reservations
- Due to low profit margins, lack of competition to improve services and innovation.

Legal

- Complexity with regulatory jurisdiction
- Misunderstanding of tribal sovereignty by service providers, policy makers, and regulators.

Political

- Lack of consolidated federal policies and integration of agencies that augment telecommunications
- Unstable tribal governments – frequent turnover of councils, unstaggered terms, and in some communities, mistrust of tribal government.

Myth: Cultural Barriers

A few studies and interviews speculated that low-penetration rates on reservations could be tied to cultural preferences, suggesting that some Native American communities *prefer* lack of telephones over access due to cultural reasons—for example, preference of face to face communication, close kinship ties, and mistrust of outside influences. This view argued that certain Native American communities did not want technological progress and by default chose their status quo. This idea is rooted in cultural stereotypes that unfairly paint Native Americans in images of the past. Such a myth discourages vendors from taking responsibility for serving needs and perpetuates cycles of poverty.

Education and Awareness

- Tribes do not know full spectrum of rights, options, and advocacy paths available to them to improve service and regulate providers.

D. BENEFITS OF TRIBAL TELCOS

This is a great place to work. The work is meaningful. Employees can see that their mothers and their friends are going to have a phone. They can drive down the road and say, "I built that." It instills pride in them and pride in their work. That's meaningful. We build pride in the community.

– Chuck Wiese, General Manager, Tohono O'odham Utility Authority

Benefits derived from telecommunications in Indian Country can be categorized into two areas – **economic gains** that can be measured through financial returns and impact on economic welfare and **social welfare benefits** which contribute to the lifestyle, health, education, public safety, and cultural needs. Below is a list – by no means exhaustive – of some of the economic and social benefits that are generated by tribal telcos: [xiii]

Economic Gains	Social Welfare Benefits
• Job creation – both direct employment in telecom construction, operations, and contracts and indirect creation through expanded online and regional markets • Training of skilled tribal workforce in technology and management • Improvement of infrastructure to support community-wide economic development projects • Increase tribal ability to compete in markets locally and regionally.	• Improve connectivity and penetration rates • Provide needed service to tribal members at an affordable price • Allow tribal members to have equal opportunity to access of technology as off-reservation • Provide tools for tribe to communicate history and culture • Improve access to health services through telemedicine • Increase public safety through 911 and enhanced police communication • Increase educational opportunities through distance learning • Enhance and promote tribal sovereignty through self-sufficiency and regulation.

Broadening the Definition of Tribal "Economic Development"

When thinking about the link between telecommunications and tribal economic development, it is important that a tribe thinks broadly about the role of telecommunications on the reservation. Unlike other tribally owned businesses like casinos and tourist attractions revenues from a tribal telco will most likely not generate enough profits to *directly* impact the tribe's economy. Therefore, tribes who consider launching a telco must do so thinking broadly about how they define "economic development." In telecommunications, economic development does not mean

that the enterprise itself will generate profits. Rather, it will provide the critical infrastructure that is needed for other projects to succeed. More importantly, telecommunications will improve the social welfare of tribal people and increase their access to future opportunities.

Ultimately, if a tribe is to consider launching a telco, the social benefits must outweigh the economic gains. In this context, tribes who decide to investigate this path must do so knowing that the immediate economic returns on investment are not the "bottom line."

CHAPTER SUMMARY

Just as economic realities vary from tribe to tribe, so, too, do their telecommunication needs. But overall, telephone penetration rates and access to telecommunications on tribal lands lag far below national averages due to economic, legal, political, and educational barriers. As a tribe begins to investigate its telecommunication options, it must consider both the economic and social gains to society generated by tribal telcos. Ultimately, by thinking broadly about economic development, tribal members benefit when social gains outweigh any profit or economic return.

KEY QUESTIONS

- What are the barriers to telecommunications in our community?
- How can we overcome these barriers?
- Do we have the resources to address them? If not, who can help us?
- What are the economic and social benefits that telecommunications can bring to the reservation?
- How do we define "economic development?"

CHAPTER 2: WHY LAUNCH A TRIBAL TELCO?

Before a tribe decides to take on the large costs, debt, and time that are required to run a telco, it is critical that any decision-making process begins with one simple question: *Why?*

Once a tribe answers this fundamental question, it can answer the questions that follow – *Why not? Who should be involved in planning? How do we measure our community telecommunication needs? What resources do we have?* – and ensure that the business path it chooses follows logically.[xiv]

Three key themes emerged from research regarding compelling reasons why tribes might decide to take over telecommunications: **economic development, service,** and **sovereignty.**

A. ECONOMIC DEVELOPMENT

We're a service provider, not a bottom-line revenue generator. We don't make a lot of money for the tribe. We're not going to. – Godfrey Enjady, General Manager, Mescalero Apache Telecommunications, Inc. [xv]

When broadly defined, "economic development" becomes the banner under which most tribes decide to invest in telcos. As explained earlier, economic development does not mean that the specific telco company will generate new revenues for the tribe (except, in some cases, telcos pay taxes to the tribe). Rather, telecommunications becomes inseparatable from economic development. Tribal telco counsel Jim Casey asks: "If tribes are interested in economic development, telecom is one key part of the infrastructure. How can you plan for economic development if don't plan for your telephone, cable, bandwidth? How can economic development benefit your reservation without utilities?" [xvi]

Why launch a telco? Answers from current tribal telcos:

- To increase connectivity
- To improve quality of services
- To foster economic development on the reservation
- To launch new services and products that currently are not offered like DSL, wireless, telemedicine, distant learning
- To provide technical training for tribal members
- To enhance sovereignty.

B. SERVICE

Anyone who wants a line can have one, no one is 'unserved. – Michael Scully, President, Saddleback Communications

Repeatedly, tribal telcos described telecommunications as a *service to the people*. Some spoke of it as a universal right that governments should provide, others as a service that the tribe took over because of market failures and inadequate service providers.

In this regard, when telecom is thought of as a "service," it bears striking resemblances to many of the other services which tribe operate like health care, education, public safety, and environmental protection. Tribes who launched their own telcos often explained that they were

more equipped than nonlocal carriers to provide this service to their people because of the tribe's inherent interest in its members' welfare. In this context, the traditional idea of "customer service" – the mantra that the "customer comes first" in the private sector takes on added importance when customers are tribal members who otherwise would be denied basic access.

More and more, telecommunications on reservations is being linked to critical services that enhance the lives and opportunities of tribal members – from telemedicine and 911, to distance learning in schools and tribal colleges. In this vain, "service" does not end with connects a member's home to a wireline, but connecting members to a future in which they are less isolated from the innovations of medicine, technology, safety, and education.

Service Impact of Tribal Telcos At A Glance:
Customer Base and Penetration Rates [xvii]

Telco	Customer Base At Purchase	Current Customer Base	Penetration Rate At Purchase	Current Penetration Rate
TOUA	396	2,222	15 –20%	70%
Saddle Back Communications	Quest: 2,500 Saddleback: 400	2900	85%	98%
MATI	650	1600-1700	Not Reported	96%
SCATUI	Approx. 500	2,500	Not Reported	76%

Source: Self-Reported by telco General Managers/Presidents, Survey and Interviews, May 2003
Abbreviations: TOUA is Tohono O'odham Utility Authority, MATI is Mescalero Apache Telecom, Inc, and SCATUI is San Carlos Apache Telecommunications Utility, Inc.

C. SOVEREIGNTY

Sovereignty pervades everything that tribes do. Every thing that the tribe does, every service you provide has to answer the two questions: How does this choice affect sovereignty? How does sovereignty affect this action?

– Jim Casey, Tribal Telecommunications Counsel

Tribal sovereignty cannot be divorced from the choices that tribes make about telecommunications. As tribal lawyer Jim Casey explained in an interview, "When you're looking at service to members, you're asking questions about sovereignty. It's a piece of it all, an underpinning."

The role that sovereignty plays in telecom decisions is they key difference that separates tribal telcos from rural telecommunication providers. As Casey explains, "you can't separate the good of a people from the economic development of the people. Everything the tribe does is a sovereign act. It just puts a different spin on the operations of a commercial act."[xviii]

By definition, sovereignty empowers a tribe to make decisions about how it manages its own resources, creates and administers justice, and looks out for the welfare of its people. A path that works for one may not be as effective for another. Ultimately, each tribe must answer questions about how it exercises its sovereignty. No tribe can define acts of sovereignty for another tribe.

FCC Recognizes Tribal Sovereignty

In June 2000, the FCC released a "Statement of Policy on Establishing a Government-to-Government Relationship With Indian Tribes." Created in collaboration with tribal leaders, it reiterates federal trust responsibilities and affirms tribal sovereignty. Excerpts include:

- [T]he Commission recognizes that the federal government has a longstanding policy of promoting tribal self-sufficiency and economic development as embodied in various federal statutes.
- The Commission also recognizes the rights of Indian Tribal governments to set their own communications priorities and goals for the welfare for the welfare of their membership.
- The Commission will endeavor to work with Indian Tribes on a government-to-government basis consistent with the principles of Tribal self-governance to ensure… that Indian Tribes have adequate access to communication services
- The Commission, in accordance with the federal government's trust responsibility… will consult with Tribal governments prior to implementing any regulatory action or policy that will significantly or uniquely affect Tribal governments, their land and resources.

Source: FCC-00-207

D. WHY *NOT* TO LAUNCH A TELCO: ANSWERS FROM THE FIELD

When analyzing possible solutions to the lack of telecommunications services on tribal lands, it is important to keep in mind that if were easy to make a profit providing telecommunications services on tribal lands, somebody would have done it already.
– "Towards Affordable connectivity In Indian Country" [xix]

Whereas the reasons *why* a tribe might decide to launch its own telecommunications utility are many, research revealed one common reason why tribes should *not* go into telecommunications: to earn a profit. If a tribe is looking at telecom as a way to earn significant new revenues for the tribe, then it most likely will be disappointed. Repeatedly, interviews revealed that a profit-motive is not a realistic justification for tribes to launch their own telco. Infrastructure costs and debts are too high while revenues from customers are too low. Although some tribal telcos do operate in the black and eventually earn a profit (especially certain products), profit is not a financially viable reason for a tribe to invest the time, resources, and risk. Tribal telcos shift their thinking from profit to people.

E. TWO TOOLS FOR ASKING "WHY": ASSESSING NEEDS AND RESOURCES

In the report *"Towards Affordable Connectivity in Indian Country,"* published by the National Indian Telecommunications Institute, tribes are advised to use two tools when determining their path, a **needs assessment** and **resource assessment.** These planning tools help tribes drill deeper into their reasons for wanting to launch a telco and to assess its feasibility:

Step 1. Needs Assessment: This tool "provides tribal leaders with a solid overview of the desires of the tribe. As part of such an assessment, a tribe must ask just what level of services it needs. For example, does the tribe have existing poor services? No service? Cable but not telephone? … These kinds of questions must be thoroughly and honestly answered. In addition, these answers must be forward looking to prevent tribes from adopting an approach that cannot meet changing needs." [xx]

Step 2. Resource Assessment: Tribes survey and identify all existing resources related to telecommunications. Just listing the resources, however, is not sufficient. "These surveys should be aggressively reviewed and questioned. If services are inadequate, a tribal government has both the right and the authority to question why." Ultimately, an aggressive review of resources will provide a tribe with needed information on the existing infrastructure, projected costs of construction and purchase, and … that will be required for upgrade or purchase." [xxi]

D. WHO SHOULD PLAN? BUILDING THE TELCO-TEAM

Once a tribe can answer the question *"Why?"* and is equipped with data from its surveys, decision-makers can begin to answer the questions *"Who?"* and *"How?"* In some interviews with telco general managers, planning team members were brought on board because of a specific set of expertise – for example, strong management skills or experience in the telecom industry – other times, the founders of a tribal telco were selected because of positive working relationships with the council. Some are entrepreneurs – people known as "go-getters" with a long history of community involvement or change agents.

A tribal telco requires a **strong planning team** of key people and allies who, together, possess the following traits:

- ✓ Knowledge and expertise in telecommunications
- ✓ Legal expertise – specifically in regulations and telecommunications
- ✓ Commitment to local community
- ✓ Knowledge and experience in tribal politics
- ✓ Connections to social networks and resources in the community
- ✓ Business management.

Kade Twist, Vice President of Native Networking Policy Center, suggests that tribes need to think as broadly as possible when building the planning team. He advocates that the planning team include more players than the obvious decision makers like the tribe's economic development planner, utility expert, or council member. [xxii] Twist points to successful telcos that link their planning to as many community organizations as possible. He suggests that if telcos are planned only as a business rather than a tool for improving social welfare, costly mistakes that hurt both the company's sustainability and consumers can occur. Thus, feasibility studies and needs assessments should include representatives from *all* agencies interest groups that could benefit from telecommunications – health, safety, education, housing, etc.

Twist suggests that a broad coalition of planners benefits the community in two ways:

A Few Words on Time

If one theme came across loud and clear in research, it was this: planning a tribal telco demands TIME – more time and thus money– than initial estimates and feasibility studies projected. Although some existing tribal telcos – like Mescalero Apache – have been successful in expediting the process for launch due to internal knowledge of telecommunications, councils must be educated about the realistic time frame from planning to service launch and when the company breaks-even. Regulatory requirements for environmental studies and assessment of cultural sites can extend planning phases for months. Gary Braxton, past TOUA Manager of Telephone Operations and current SCATUI Board Member, advises management to prepare themselves for "more than 9–5 days – it's a 12-hour a day job."

1. **Business Sustainability** is more realistic because, from the start, the telco plans for growth by aggregating demand. Challenges associated with diseconomies of scale can be confronted if consumers who can generate demand are included in planning.

2. **Consumer Rights** are protected if more community members are included in the planning stage. This enables customers to voice their dissatisfaction with current telecommunication services and helps create solutions – both with service and in consumer protection codes.

Of course, the challenges associated with such broad-based planning derive from the time and resources needed to coordinate such a task force. The more people involved, the more time and focus is needed to coordinate plans, work through differences of opinion, and identify common goals. The size and scope of the planning committee could be limited by the time frame for the intended launch of the telco.

Are tribal telcos different from rural telcos?
No and Yes….

NO: Tribal telcos must address the same cost and infrastructure barriers that rural telcos face. By definition, many tribal telcos are rural telcos that serve a very specialized market. In this sense, tribal telcos benefit when they join rural telco associations. Tribes, like rural telcos, support high cost operations by accessing public funds. In addition, both tribal and rural telcos must follow FCC regulation for interstate communication.

YES: Tribes are unique from rural telcos for two reasons: political motives and regulatory options. For many tribes, the opportunity to operate its own telco represents a chance to empower tribal members. Secondly, tribes can *choose* their regulatory body for intrastate communication on the reservation – tribes can create their own regulatory codes or follow state codes. Rural telcos must abide by state regulation in their service areas. This *choice* is powerful tool of tribal sovereignty.

CHAPTER SUMMARY

Before jumping into planning a telco, tribes must ask *"Why?"* Three interrelated motivations guide tribal telcos in their decision making-process: economic development, service, and sovereignty. Profit, however, tends not to motivate their choices. Tribes should conduct in depth analysis of needs and resources to determine if a telco is feasible. Telco planning affects the entire community; thus, the tribe should put together a broad-based planning team with representatives from as many community agencies that will benefit from economic development.

KEY QUESTIONS

- Why do we want to run our own telco?
- Who should be on our planning team? What are their roles?
- How will we create a needs assessment?
- How will we assess telecommunications resources?
- What time constraints affect our planning?

CHAPTER 3:
SHOULD WE LAUNCH A TRIBAL TELCO?

Tools for Assessing Capacity

Once a tribe has determined *why* it wants to investigate telecom and *who* to involve in the planning phases, it must determine if it is an appropriate choice given the tribe's resources. Ultimately, just because a tribe *wants* to increase economic development or assert sovereignty through its own telco, does not mean that it possesses the capacity to do so. This next chapter seeks to help tribes assess their capacity by providing a framework for decision-analysis.

Interviews and research highlighted three key areas in which tribes must demonstrate capacity to successfully launch a telco: **Business Management**, **Regulation,** and **Telecommunications**.[xxiii] This chapter provides questions that tribes might ask to assess their capacity in each area and thus guide their decision-making process about whether or not to launch a telco. These three areas were developed broadly to provide tribes with a simplified "check list" for assessment.

How do we measure "Capacity?"
Tribes can ask questions like:

- Do we have the human resources?
- What financial resources are needed?
- Are our policies and procedures in place?
- What skill set and knowledge are needed?
- Who are our partners?
- How do we handle risk?

What do we do if we lack capacity? Consider Alternatives[xxiv]

As a tribe begins to assess its capacity, it must also assess alternatives to operating its own telco. For example, if a tribe lacks access to capital for infrastructure or is hesitant to take on large amounts of debt, the tribe could consider partnering with a provider in a joint venture rather than operating on its own. Another option which requires fewer financial investments would be to establish a tribal Telecommunications Commission to set standards for service that all carriers on the reservation must meet.

The path of development must be guided first by the tribe's telecommunication needs – their answers to the question *Why do we want to launch a telco?* Ultimately, there is more than one path to deliver the outcome. Establishing a tribal telco is but one specific way to improve telecommunications on reservations – tribes should contact resources like National Indian Telecommunications Institute (NITI), FCC, and the National Congress of American Indian's website, www.indiantech.org to investigate other viable options.

A. BUSINESS MANAGEMENT

Tribes must assess telco projects with the lens of sound business management. This requires an honest assessment of both internal and external capacity in such areas as: **prior experience with enterprises, governance, human resources, council communication and education, internal strategic planning, operations and financial management,** and **market analysis.**

Tribal Enterprises: The Role of Experience

Tribes might face challenges in launching a telco if the tribe lacks experience with operating a tribal enterprise. For example, some professionals have pointed out that it is not a surprise that so many of the current tribal telcos are run by tribes that already had experience with tribally-chartered, separate businesses like casino's or other utility companies.[xxv] A tribe that has experience establishing an enterprise can apply lessons learned to the tribal telco. For example, the council might already have procedures in place regarding reporting, board relations, and governance. If a tribe already operates utility companies – as was the case in TOUA – it can "piggy back" its administrative and operational functions with the telco, thus saving operational costs and maximizing knowledge transfer.[xxvi]

If a tribe is looking into telco but lacks experience with launching a separate enterprise, it runs the risk that the council may perceive the telco in the same way as a tribal program. But due to differences ranging from financial transactions to objectives, tribal programs must be managed differently from a for-profit company. Research from the Harvard Project on Indian Economic Development demonstrates that successful economic development projects are governed "separately" from the council, thus reducing political influence on business transactions (*See more in Governance below*). As departments under the tribe, tribal programs are often influenced strongly by council intervention. Thus, if a tribe lacks experience with a separately chartered business, the council may require education on appropriate roles and responsibilities.

Key Questions

- Does the tribe have experience running a tribal enterprise?
- If yes, what lessons has the tribe learned in terms of management?
- Are there any other utility companies owned and operated by the tribe?
- Can the telecom cut costs by sharing operations and administration with the other utilities (i.e. personnel, accounting, vehicles, office)?
- How is managing a telco different from managing a tribal program?

Governance

As a tribally chartered enterprise, the tribe owns its telco. Yet ownership does not necessarily entitle the council to governance. One of the first decisions that a tribe must make about its telco is the governance structure and composition of its Board of Directors. As they key decision-

makers for the telco, the board must be thought through strategically to minimize instability and maximize effective business management.

Among the current tribal telcos, board structure, composition, and terms vary. Some require that a certain number of board members possess industry-specific expertise or ties to the community, while others either directly link the board to the council or appoint a position on the board for a council member. See the table below for examples:

Tribal Telco	Size	Board Composition	Terms
TOUA	7	4 must have extensive management experience (3 of which must be in telecom) and 3 must be tribal members	3 years
MATI	5	Tribal Council Members: Tribal President, Vice President, Secretary, Treasurer	2 years
Saddleback Communications	7	President of the Division, 2 Professional Members, 1 Community Council Member, 3 Community Members	Not reported
SCATUI	5	2 tribal members and 3 non-members – all of whom must have telecom expertise	Staggered, maximum of 4 years

Source: Self-reported by General Managers on research surveys, May 2003

Key Questions

- What are the selection criteria for board members? What skills and knowledge do they need?
- What is the role of the council in relation to board? Do council members sit on the board? Do council members have decision-making or appointment powers?
- What are the terms and responsibilities of board members?
- How will the board be shielded from personal and tribal politics?
- How will community interests be represented on the board?

Council Communication and Education

Once the board structure and terms are determined, the board must create an effective communication process to maintain positive relationships with the council. For example, among the telcos interviewed, it is customary for the General Manager to report at least annually to the council on the status and needs of the company. Some, like Saddleback Communications, report to the council at least quarterly.[xxvii] Telcos must strike a delicate balance between educating the council on the financial, regulatory, and service needs of the company while also setting clear guidelines for decision-making and management.

Key Questions

- How will the telco maintain open communication with the council?
- How often will it report to the council?
- What critical information will the council need to know?
- How will we educate the council about technical and financial issues?

How do community attitudes about government affect your telco?

When negotiating boundaries between the tribal council and telco, it is important to honestly assess community attitudes about politics. For example, if a community feels mistrust towards the council due to instability or allegations of financial mismanagement, telco's must strategize how to educate community members about its role in relation to the government. Through newsletters, door-to-door outreach, and public awareness campaigns, telco's can distinguish themselves as a company that is tribally owned and free of political influence.

Human Resources: Leadership and Personnel

This story illustrates the importance of tribal leadership … One of the thing's that's happened as a result of the successful ventures of the Telephone Authority is management expertise. We are training our people to become managers. I think that's key to anything.
– JD Williams, General Manager, Cheyenne River Sioux Tribe Telephone Authority [xxviii]

Leadership, management capacity, and human resources are critical success factors to any business, but in Indian communities, where unemployment and education rates often hover well below the national average, the need for skilled leadership, management, and strong human resources is paramount. Effective management in tribal telcos takes on added meaning when it involves technical training of tribal members.

Each telco must balance its obligations to hire local members and ensure that staff is equipped with the necessary technical and operational knowledge to run the company successfully. Some managers identified low-technical knowledge of local employees as a challenge in startup years, but all addressed it through training and professional development opportunities – either by hiring non-local employees with experience in telecommunications that train others on the job or by actively sending employees to industry training, workshops, and conferences.

Anecdotes from tribal telcos relay positive benefits from hiring policies to train local members. For Cheyenne Rivers Sioux Tribe Telephone Authority, trained local employees are integral to the success of the company:

> The backbone of the C.R.S.T. Telephone Authority is our dedicated, well-trained employees. We maintain a progressive training program in which employees are kept educated on the latest technological advancements. Ninety percent of our employees have been with the company for more than ten years. Also, ninety-five percent of our employees are Native American. [xxix]

One staff member at SCATUI described the "difference" that increased local employees had on company performance, most notably on customer service: "This is our home, our community. We can serve the customers better because we have ties to the community. We *want* things to be better here." [xxx]

Challenges with Retention: Solutions from the Field [xxxi]

An inherent challenge to the professional development of a skilled work force in Indian Country is job retention. In more than one interview, telco managers reported that trained workforce often leave the company and seek employment off the reservation. Two solutions that current tribal telcos involve competitive benefits and mentoring programs:

- **Benefits:** To counter "brain drain" and retain workers, tribal telcos must design competitive wage scales, benefits, and incentives for employees to stay with the company. Chuck Wiese cites that TOUA has been successful in retaining 60% of TOUA's workforce over the past 5 years and approximately 35% of the workforce over the past 10 years due to TOUA's competitive benefits and that the company is known as a "good place to work."

- **Mentoring:** Godfrey Enjady, Director of MATI recruited retired professionals from Verizon and GTE to help launch MATI and mentor tribal members who lacked technical experience and knowledge in telecommunications. "They're learning from about 30 – 35 years of experience every day. We can give them the book and head knowledge, but when you apply it in the field, that's a different thing…. We're giving tribal members real-world knowledge. " He cites that this mentoring program empowers tribal members to in turn mentor other members in the future.

A Snapshot of Native Hiring: Two Cases

Tribal Telco	# Of Employees	% Native American	% Non-Native	Native employees in management and technical positions
Saddleback Communications [xxxii]	35	42%	58%	1 Executive, 2 Customer Service Supervisors, 4 Technicians, 1 Salesperson, 2 Customer Service Representative, 3 Accounting Staff, 1 warehouse, 1 Sales/Marketing
TOUA	90 in Utility Company; 28 in telco	81%	19%	Not reported

Source: Self-reported by General Managers on research surveys, May 2003

Key Questions

- What will be the telco's hiring policies regarding tribal members?
- How will we train staff in technical and management positions?
- What personnel policies and procedures need to be in place (Hiring criteria, grievance, benefits, and professional development?
- How will we offer competitive wages for employees?
- Once local employees are trained, how will we retain them?

Strategic Planning

Telcos requires long-term planning. Repeatedly, managers and researchers stressed the need for strategic planning both at the front-end and continuously throughout the telco's growth. One general manager described the strategy to be like a "chess game" – stressing that at any moment, a manager has to operate while thinking about his future moves and always keeping an eye on the other players (competition, vendors, tribal council, staff, regulators, customers). In some cases, like in San Carlos, telcos benefit by connecting their plans with the tribes' strategic vision and missions.[xxxiii] By framing the telcos' business objectives in the lens of the tribes' strategic plans, telcos can communicate how they "fit" into the bigger picture of tribal development.

Tribes must be cautious to avoid "quick fixes" to their telecommunication needs. In the report *Towards Affordable Connectivity in Indian Country*, tribes are warned:

> Telecommunications infrastructure is not a buy once proposition. Whatever approach a tribe determines to take, it must ensure sustainability of the business and the services provided. Stopgap measures will only make the tribe worse off in the long run by inefficiently allocating and wasting limited resources…No solution is useful to a tribe if it is a stagnant, one-time fix. The proposed solution must be able to be scaled to meet future growth and changing needs and it must be structured and operated in a manner that is sustainable for the foreseeable future. [xxxiv]

The greatest challenges to strategic planning is accurately forecasting growth and thus, projecting costs for infrastructure. Although all telcos interviewed unanimously advised tribes to plan for over subscription, large time lags between plans, construction, and service launch force telcos to try to anticipate what customer needs might be far into the future. Gary Braxton, former Manager of Telephone Operations of TOUA and current board member of SCATUI adds: "It's even harder to project how many people will want service in a community that has never had phones before. You can estimate your customer base ahead of time, but once the switch is turned on and people like what they see, you may be in a totally different game." [xxxv] Limitations in federal funding, which tribes rely on for investments in infrastructure, also restrict telcos' ability to plan for long-term growth.

Finally, the other inherent challenge in long-term planning relates to technology. Because the industry is rapidly changing, it requires that plans must be constantly updated and works in progress. More advice on technology will be addressed in Section C.

Key Questions

- What will be our community's telecommunication needs in 5 – 10 years?
- What resources do we need to meet these needs? Do we have the infrastructure in place now to support them?
- How does our vision of telecommunications fit into the tribe's strategic vision?
- How will we offer competitive wages for employees?
- How will we adapt and change our plan to leverage developing technology?

Internal Operations and Financial Management

Although tribal telcos are not in business to make a profit, they must, like all businesses, pay close attention to internal operations and financial management. Internally, a tribal telco must be prepared to administer a high-volume and costly customer service. This includes setting up operations and internal systems for accounts, customer service, and IT. Some telcos – like Mescalero Apache and San Carlos – had to build their administrative systems from scratch whereas others were able to share resources with existing utilities. Financial management may require new skill sets and accounting tools than those used for tribal programs. Telcos must closely monitor revenues from services, loans, access fees, "pools," and map them against ongoing operational and administrative expenses. Financing telco is a complicated process that demands expertise in resource management. Telcos need to learn how to access public funds through RUS, NECA, and publicize discounted-services to customers through programs like the FCC's Enhanced Lifeline and Link Up Program. More details on financing will be discussed in Section C.

Budget Advice from the Field About Hidden Costs

Tribes often neglect to include "hidden costs" of consultants and legal fees that are so critical to planning. When telco's create budget forecasts, remember to include legal and consulting fees.

Key Questions

- Do we have the IT and administrative systems to track business?
- How will we manage financial accounts?
- Do we effectively manage resources?
- What "hidden costs" do we need to look out for in our budget?

Market Analysis [xxxvi]

Finally, before launching their telco tribes need to understand their local market – both in terms of supply and demand. Of course, the market for each potential service is different – wire line, broadband (e.g.: DSL, cable, satellite), wireless, etc. From a supply-side analysis, market analysis involves looking at the current service providers, infrastructure, operation and investment costs, and any barriers to service delivery (such as geography or, in the case of wireless, opening the company up to competition if cell phone towers are constructed). From a demand-side analysis, tribes need to conduct customer surveys, forecast differences in demand between business and residential use, identify potential barriers to customer use (such as lack of information about options or ability to pay), project growth, as well as forecast untapped, potential markets associated with new communities, off-reservation, or emerging technologies. As pointed out in earlier chapters, tribes should consider the disadvantages of lacking economies of scale and, if possible, investigate ways to aggregate demand.

Key Questions

- What is our target market?
- What are the barriers to entry? Is there competition?
- How do markets differ for each service and customer base?
- What is the relationship between supply costs and price demanded?
- How will we ensure that our customers can afford our services? What price are they willing to pay? [xxxvii]
- What emerging markets present opportunities for growth?
- Do we want to offer services off-reservation?
- How will we aggregate demand?

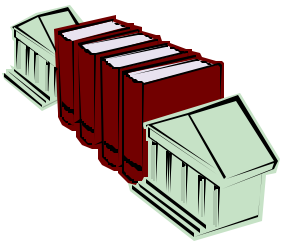
A Word About Price and Rates: Tariffs

Rates that companies charge customers for each service must be filed to regulatory bodies in a pricing document called **tariffs.** Such regulation protects customers against companies passing on high-supply costs to them through unfair prices (for example, in rural areas and on reservations). Tribes who follow tribal regulation have the authority to set their own tariffs for *intrastate* communication and tribes that follow state codes must abide by tariffs set by states. For *interstate* communication, tribes must follow FCC guidelines; as members of the National Exchange Commission Association (NECA), tribal telco's sets rates according to national tariffs and, in return, receive money back from a price pool to which all NECA members contribute. For more information, see Sections B on Regulation and C on Telecommunication Industry.

Sources: FCC Document, Expanding Telecommunications Access in Indian Country.

BUSINESS MANAGEMENT SUMMARY

As tribes assess their capacity to run a telco, they must analyze their business management skills. This requires shifting thinking from a management of tribal programs that are often dependent upon grants to management of a for-profit company. Specifically, tribes should evaluate prior experience with enterprises, governance, human resources, operations and financial management, strategic planning, and market analysis.



B. REGULATION

Tribes possess a unique opportunity to differentiate themselves from local telecommunication carriers in the area of regulation.[xxxviii] As sovereign nations, tribes have the freedom to decide their own regulatory processes for intrastate carriers that offer service within the boundaries of tribal land.[xxxix]

The puzzle of regulation in Indian Country, however, is far from simple. As Kade Twist writes:

> The relationship between the federal government, states, and Indian nations has always been a complex one. More telecommunications laws and regulations intersect Indian Country than any other land base in America. And as a result, there are very few legal litmus tests on tribal lands. Sorting out something as potentially simple as jurisdiction authority requires a tribal-specific and context-specific analysis of relevant case law, statutes, treaties, and Congressional orders.[xl]

Twist points out that if regulation is not understood, lack of clarity can negatively impact economic development because "it restricts the speed of business and impedes flow of capital."[xli]

This section seeks to help tribes understand their regulatory options. It provides a brief overview of the regulatory landscape, advises questions that tribes should consider about tribal or state regulatory authority, provides a sample baseline for regulatory codes, highlights emerging options in regulation, and offers recommendations for enforcement. Above all, this section seeks to educate tribes on the legal resources that are required to regulate telecommunications.

Telecommunications Regulatory Landscape At A Glance

Regulation protects customers and vendors from unfair business practices. It assures that common standards are upheld universally. In telecommunications, regulation depends both upon the service and technology (i.e. local toll versus long distance or wireless) and government jurisdiction.[xlii] Regulatory authority is divided between federal and non-federal agencies.[xliii] The Telecommunications Act of 1996 (which amended the 1934 Communications Act) decentralized regulation so that, in general, states regulate *intrastate* communications and FCC regulates *interstate* communication. Tribes, of course, fall in between. Therefore, within tribal telecommunications, the key players are:

- **Federal Communications Commission (FCC):** Federal agency that reports directly to Congress and regulates interstate communications for long distance phone service, radio, TV, wireless, satellite, and cable.[xliv]

- **State Public Utilities or Public Service Commissions:** Intrastate regulatory agencies that regulate wireline local telephone service – responsible tasks such as: certification of intrastate telephone carriers (ETC's), consumer protection, and monitoring tariffs (prices). State regulation includes jurisdiction over bi-ways through reservations.

- **Tribes:** Tribes have the authority to regulate interstate carriers on tribal land. However, "in most cases… because the tribes have not exercised their authority to regulate telecommunications services within reservation boundaries, the state regulatory agencies have exercised jurisdiction over telecommunications services within Indian Country by default" [xlv] To do so, tribes must establish regulatory procedures and a code that meet established telecommunication standards.

As a tribe faces telecommunications decisions, it must "map" out the regulatory landscape of the reservation – knowing where state and federal codes apply, where tribes have authority, and how difference services fall under codes. During construction and operation, telcos must also abide by appropriate state, tribal, and federal laws for environmental, historical, and cultural preservation as well as follow property laws related to land status, like right-a-way procedures.[xlvi]

Assessing Regulatory Capacity

Before deciding whether or not to regulate telecommunications on the reservation, tribes must step back and assess their legal capacity to create and enforce codes. Whereas asserting tribal regulation over telecommunications is an expression of sovereignty, tribes who choose to do so must educate themselves on the legal specificities of telecommunications and, equally importantly, create mechanisms to uphold regulatory standards. Casey encourages tribes to ask three guiding questions about regulation:[xlvii]

Key Questions

- What are the legal issues that need to be addressed?
- Do we have the regulatory expertise within our tribe?
- How will we enforce regulation?

Advice from the Field: Seek Specialized Legal Counsel

Interviews stressed that traditional tribal lawyers most often do not possess the narrow expertise that are needed to navigate and establish telecom regulatory bodies. Lawyer needs to understand the different regulations for services (i.e. wireline vs. spectrum), FCC requirements, and jurisdictional issues related to state bi-ways, tribal, and non-tribal land.

Who Should Regulate? State or Tribe?

Six of the seven tribal telcos are regulated by tribal telecommunications codes. Ultimately, each tribe must make its own decision about regulation. There is no evidence to date that the regulatory choice of a telco – whether it subjects itself to state regulation or tribal – impacts the quality of service offered. Based on feedback from the field, below is a list of options that tribes should consider when deciding about regulation:

Criteria for State Regulation	Criteria for Tribal Regulation
Time restrictions: tribe faces too short time a frame to set up regulatory codes	Planning time is sufficient to create codes
Tribe lacks technical expertise in telecommunications	Tribe consults with telecom lawyer and tribal telcos to help advise codes
Off-Reservation business ventures: tribe can compete for market share and offer services "like any other telco" statewide	Business plan of telco does not include off-reservation ventures
Unstable tribal government	Tribal government is stable and educated properly on legal authority
Tribe lacks regulatory enforcement mechanisms	Tribe can enforce codes throughout reservation
Strong relationships with state agencies	Strong relationship with FCC

State-Regulated Tribal Telco: Mescalero Apache Telecommunications, Inc.[xlviii]
Godfrey Enjady, General Manager of MATI, speaks candidly about the benefits and reasons that Mescalero Apache set up their telco under state regulation. With a background in telecommunications – 15 years working for Verizon – Enjady identified two benefits to state regulation: 1) competitive advantage – the ability to be an "equal player" like any other telco in New Mexico and 2) lack of technical knowledge in the tribe. Enjady saw state regulation as a potential venue for business expansion beyond the reservation and thus, as a tool for tribal economic development. He also stressed that his experience in the industry taught him that the tribe needed specified knowledge in order to regulate, which it lacked. Thus, he drew upon existing positive relationships with state agencies to abide by state regulations. It was a choice that he stresses expedited the timeframe for launching the telco and draw down available funds.

Enjady points to MATI's performance indicators – a penetration rate of 1600-1700 customers from the customer base of 650 and operations in the black which, for the first 5 years of business plan were projected to be in the red, as indication that the regulatory structure has not impeded MATI's service to tribal customers. When asked about the claims that this decision is an abdication of sovereignty – a frequent criticism of MATI's decision – Enjady explains that the tribe exercised sovereignty by *choosing* its regulatory system, rather than accepting one that was imposed by default. Meanwhile, he points to tribal control of the board and company leadership as a further example of sovereignty.

Key Questions

- What are the benefits of tribal regulation?
- What are the benefits of state regulation?
- How does state or tribal regulation match our business plan?
- How can we assert tribal sovereignty with either regulatory scheme?

Why are there so many tribal telcos in Arizona?

According to Casey and the Benton Foundation, Arizona law has clearly ruled that the state does not have jurisdiction over telecommunications on tribal land. Thus, the regulatory landscape within Arizona is more "friendly" to tribally owned and regulated telcos than in other states. What's the lesson? Tribes should investigate state attitude towards tribal jurisdiction even when setting up their own codes.

Sample Baselines for Telecommunications Regulations
What does a telecommunication regulatory code look like? According to Casey, tribes should include the following baseline in their telecommunications regulations. This list is of course, not exhaustive, and should be created by appropriate counsel:

1. **Licensing requirements** that grant carriers authority to do business on the reservation.
2. **Service quality requirements**: establish benchmarks that carriers must provide a reasonable quality of service to customers.
3. **Pricing guidelines**: Rules that carriers cannot raise prices more than x % per year.
4. **Service Provision Requirements:** Establish a "Carrier of last resort" to ensure that carriers must serve everyone who asks for service. This prohibits carriers from discriminating against customers based upon location and cost of service (i.e.: even if building out to a rural area costs $5000, a carrier cannot refuse to offer service).
5. **Nondiscrimination policies.**
6. **Dispute mechanisms:** Processes for filing and following up with complaints from customers to commission.
7. **Permission for Business:** Explicit statement that carrier must conduct business on the reservation at the permission of the Tribe (passes the "Montana" legal test).

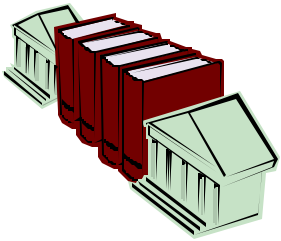
If tribes seek models of regulatory codes, they can obtain "boiler plate" codes from state agencies or from existing tribal telcos.

Regulatory Options: When Tribes Don't Have to Choose [xlix]
Recent developments in tribal telecommunications point to trends that provide innovative models that do not force tribes to choose between *either* tribal regulation *or* state regulation. Karen Buller of the National Indian Telecommunications Institute and Casey advocate that tribes who are investigating telcos consider some "hybrid" models in regulation:

- **State Regulatory Subsidiary:** If tribes foresee that they might want to conduct off-reservation business ventures, Casey suggests that they have another option available to them other than subsuming the entire telecommunication carrier to state regulation. He encourages tribes to investigate establishing *two* separate regulatory entities – one that is governed by the tribe and oversees all business within reservation boundaries and a second subsidiary that is subject to state regulation and applies only to the off-reservation ventures. This "hybrid" approach clearly establishes regulatory procedures for on-reservation and off-reservation ventures.

- **Tribal Telecommunications Commissions:** Some tribes who have not launched their own telcos have moved forward in regulating telecommunications on their reservations by establishing Telecommunications Commissions (example: Navajo). Modeled like the state commissions, these bodies regulate all telecommunications on reservations that are not subject to federal regulation. The benefit of this model is that it empowers tribes to establish regulatory authority without incurring the costs of service provision. Casey suggests that this commission could be a "first step" for tribes who are interested in telcos, but do not know if they have the capacity to launch one in the short-run.

Enforcement
Beyond regulatory capacity, tribes need to be prepared to enforce codes. The challenge to stringent telecommunications codes is that they could force tribes to say to a company, "Either you follow this rule or you can't provide service on the reservation. Then it's a catch 22 – the company could leave and members would be without service."[xl] Tribes must be prepared to enforce regulation through proper dispute-resolution mechanisms and strong tribal courts.

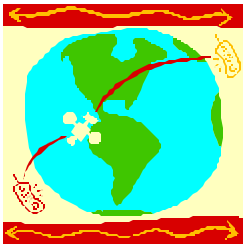


REGULATION SUMMARY
Complex regulatory landscapes require tribes to seek legal counsel when planning telecommunications projects. There is no "right" answer regarding a tribe's choice to design its own regulatory codes or choose to follow state codes. If a tribe designs its own codes, it must ensure that it has capacity to enforce them. In addition, tribes should educate themselves on the options that are possible with regulation – for example, setting up a Telecommunications Commission even if the tribe decides against launching a telco or establishing a subsidiary that abides by state regulation to oversee off-reservation business ventures.

KEY QUESTIONS
- Do we understand the telecommunications regulatory landscape?
- What criteria will determine if we follow state regulation or design tribal regulation codes?
- What models or "boiler plates" for codes can we draw upon?
- How will we enforce regulatory codes?
- What other regulatory options have we looked at?

KEY RESOURCES
For detailed information on regulation, tribes should consult the Benton Foundation Report: *Native Networking: Telecommunications and Information Technology in Indian Country.* Available online at: http://www.benton.org/Library/Native/

Tribes should also consult the "Tribal Home Page" on the FCC website for regulatory links and assistance: www.fcc.gov/indians/



C. TELECOMMUNICATIONS INDUSTRY

Repeatedly, interviews and research revealed the dominant theme that tribes need to know about telecommunications. *But what do tribes need to know?* This section educates tribes on key themes that they should be aware of in the telecommunications industry and introduces three financing options for tribes that are available for telcos.

Key Themes in the Telecommunications Industry
The following themes are key considerations that tribes need to take into account when making decisions about a potential telco:

- Telecom is **highly regulated.** As evident in the previous section, regulation on tribal lands in complex and requires a high-level of legal attention. In addition, tribes must be prepared to take on an active advocacy role with the FCC and vendors.
- Technology **constantly changes** and demands a **steep learning curve.** This means that tribes must invest in recruiting, training, and retaining individuals with technical knowledge and an adaptive capacity to stay on top of upcoming trends.
- Industry knowledge is **specialized**. From cost-consultants and engineers who advise feasibility studies, to lawyers who negotiate terms of sale and codes, to financial advisors who compile loan packages, to plant managers and customer service providers, the knowledge areas required to operate a telco is narrow. Human resources are extremely valuable when they require so much training and industry-specific knowledge.
- Telecommunications in rural areas like reservations are **high-cost investments** – both for equipment and infrastructure. Revenues generated from services will often not cover the expenses required to finance infrastructure and systems. Specific **financing options** are available to reduce the debt burden to tribes, but tribes must be willing to take on the debt capacity and manage complex funding streams.

Financing Options [li]

Once tribes make the decision to launch a telco, they have access to resource to help. Cost-assessments follow specific procedures and regulations according to each financing source. The three most common sources of assistance are **RUS Loans**, **Universal Service Funds**, and **NECA Pools**:

Telco Terms

Universal Service: Established by the 1934 Telecommunication Act and revised in 1996 to protect public interests, "universal service" laws ensure that no customer can be denied quality services or affordable rates. The FCC established criteria that all providers must follow to guarantee access, nondiscrimination, and affordable and "reasonable" services. All companies contribute to the Universal Service Fund that allocates assistance to carriers to provide universal service.

Eligible Telecommunications Carrier (ETC): To receive Universal Service Funds, a telco must be certified as an "ETC" as defined by the FCC. ETC status is generally granted by states. However, on reservations, the FCC grants ETC status for tribes who follow tribal regulation and states certify telco's who follow state codes.

NECA: The FCC established the National Exchange Carrier Association (NECA) in 1983 after the AT&T break up to handle interstate tariff filings, administer long distance carrier "access charges," and distribute revenues from access charges among members based on costs. NECA also assists with FCC compliance for members and offers trainings. Currently, NECA serves approximately 1,150 members.

Sources: FCC Glossary of Terms and www.neca.org

- **Rural Utility Services (RUS) Loans** fund telecommunication infrastructure in high-cost, rural areas. RUS is a federal credit agency housed in US Dept of Agriculture. Many telcos identify RUS loans as a "backbone" to their operations, most operate from multiple rounds of loans. One of the many challenges associated with RUS loans relates to tribal debt-capacity: essentially, because RUS loans fund high-cost infrastructure, it benefits telcos to invest in infrastructure and thus, to take on debt. However, some tribes are hesitant to take on long-term debt. Therefore, a tribe must be educated on loan terms and benefits.

- **Universal Service Fund:** Administered by the Universal Service Administration Company (USAC), USF provides affordable telephone services throughout the US. The funds were established to enhance "universal service" – equal access to telephone for all, no matter income or geographic barriers. By law, "companies, not consumers are required by law to contribute to this fund. " [lii] Repeatedly, tribal telcos point to USF funds as one of the key ingredients in their ability to maintain operations. According to Gary Braxton, tribal telcos receive approximately 35% of their operating revenues from USF. [liii] Funds from USF include: High cost program, Low-Income Program (Lifeline/ LinkUp), Rural Health Care Program, and Schools and Library Program. [liv] Funding for the USF is paid by all providers through rates charged to customers ("end users") on their monthly bills. To qualify for USF funding, telcos must be a certified carrier or "ETC."

- **NECA "Pools":** As members of National Exchange Carrier Association (NECA), a tribal telco can "recover its expenses and taxes associated with providing access services and earn a return on its investment" through two revenue-distribution pools, the Common

Line pool and Traffic Sensative pool"[lv]. According to NECA, the benefits of pooling are as follows:

1. Financially shields pooling members from fluctuations in revenue and expenses
2. Eliminates burden of developing own rates and filing own tariff
3. Allows companies to recover costs using average schedules.[lvi]

Telcos submit expenses and receive dispersements bi-annually from the NECA pool.

This paper does not explain all the revenue sources associated with different products (local toll, access charges, user fees, etc). A more in-depth understanding should be understood as a tribe weighs its decision about operating a telco. For more information, refer to the diagrams on operational and capital revenues provided by Gila River Telecommunications, Inc in Appendix.

Enhanced Link-Up and Lifeline:
Affordable Service for Tribal Customers

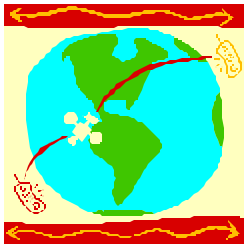
"[T]he FCC has adopted enhanced programs, as part of the Universal Service Fund, to promote telecommunication subscribership and infrastructure deployment on tribal lands." **Enhanced Lifeline for Tribal Lands** provides qualifying customers living on tribal lands with discounts on "monthly basic telephone service," reducing customer prices as low as $1 per month, depending upon local rates. **Enhanced Link-Up** provides eligible customers on tribal lands with discounts up to $100 on installment and connection charges and permits deferred payments. All ETC's on tribal lands must publicize these programs to customers. *For information, see FCC Tribal Fact Sheet at: www.fcc.gov/cgb/consumerfacts/tribalfactsheet.html.*

Products and Services

How do tribes choose the right products for their members? What technology is most appropriate? Guidance in choosing telecommunication services is outside the scope of this paper. Ultimately, market forces, infrastructure capacity, and geographic and financial constraints must determine the decision. Consulting industry-specific resources and other tribal telcos will help educate tribes on their options. For more information on the services provided by tribal telcos, see Appendix.

Lesson from the Field: Educate but Watch Out for Latest Trends

"I read everything I can get my hands on," SCATUI General Manager Vernon James explains when asked how he educated himself about telecommunications after a career in human services. James, like other telco managers, immerses himself in industry reports, conferences, and updates to keep his eyes open for the newest opportunity to benefit the tribe. "But I don't get tempted," he adds. I remember what our community needs." James warns tribes against getting pulled into the latest trend just because it's in the news. "Just because a product is popular, does not mean it's right for your reservation."



TELECOMMUNICATIONS INDUSTRY SUMMARY

Tribes must dedicate time and resources to educate themselves about telecommunications industry. Before deciding if a telco is an appropriate business venture, tribes should assess if they have the needed technical expertise in such areas as regulation, technology, and financing. Deciding about services and products must be tied to market, infrastructure, and community needs.

KEY QUESTIONS

- Are we knowledgeable about the telecommunications industry?
- Who are our "telco" experts?
- How will we stay informed and make decisions about technology changes?
- Do we understand the financing options?
- What criteria will we use to determine our services?

CONCLUSION AND NEXT STEPS: HOW DO WE LAUNCH A TRIBAL TELCO?

In the end, it doesn't matter how you do it as long as you are providing a means for a better future for people on the reservation. That's the bottom line. That's what telecom is about. We're making lives better for people on the reservation.[lvii]

– Godfrey Enjady, Mescalero Apache Telecommunications Utility, Inc.

Telecommunications provide tribes with a powerful tool to empower tribal members and provide them with access to future opportunities. In an effort to support tribes in their critical decision about whether or not to launch a telco, this white paper has identified questions and issues that tribes must consider before embarking down a challenging and cost-intensive path of development. By encouraging tribes to invest time and resources in asking questions about their capacity in business management, regulation, and telecommunications, this paper serves as a springboard for more in-depth research that is needed to launch a successful telco.

This paper began with the simple question: *Why launch a telco?* After investigating questions of context, planning, and capacity it concludes with one question: *How?*

Ultimately, this decision rests in the hands of the tribal telco planning team and, more importantly, in the tribal members whose needs must be met through telecommunications. Equipped with knowledge and expertise, tribes must determine the telecommunication path that best serves their needs, overcomes the unique challenges in their communities, and opens the doors to future opportunities.

Next Steps: Tribal Solutions for Tribal Telecommunications Needs

Telecommunications technology has the potential to accelerate and strengthen the drive for Native empowerment; if rooted in local expertise and control, it can also help reverse the historical tendency of Native Americans to be subordinated to technologies and governing processes developed by the majority society.

– Policy Framework for Native American Telecommunications [lviii]

Why are there only 7 tribal telcos? Through its decision-making analysis, this paper has highlighted some of the reasons that explain the small number of tribes who have chosen to operate their own telco. The seven telcos that operate today can provide interested tribes with a wealth of expertise and best practices. Many of today's telcos attribute their own successes to lessons learned from their tribal colleagues. At present, the learning network among tribal networks is strong, but informal. It is clear that additional resources should be dedicated to create thorough, tribally designed technical assistance to help guide tribes through the intracies of telecommunications.

NTTA is in a unique position to assist other tribes while speaking up as an advocate for telecommunications in Indian Country. The creation of a in-depth resources like a tribal "telco cook book" – a technical resource that guides tribes through step by step complexities – will

provide tribes with the resources they need while documenting the innovation and expertise of tribal telcos. [lix] Already, NCAI has begun this process by launching a "best practice" section on the website www.indiantech.org; NTTA could partner with NCAI and other advocacy groups and technical service providers to leverage information. In addition to helping other tribes, this centralized resource could educate policy makers, regulators, vendors, and existing providers about the telecommunications landscape in Indian Country.

As this paper has shown, the field of tribal telecommunications is riddled with complexity and technicalities. It relies heavily upon the specialized knowledge of high-cost consultants, engineers, and lawyers. But within Indian Country, seven companies are creating a path to a promising future. With tools and models to follow, it is a future that other tribes can create for themselves, if they choose to do so, to solve their telecommunications needs *on their own terms.*

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Graphics

All Native American graphics in this paper were downloaded from www.blackfeetnation.com. The remaining graphics were imported from "Clip Art" in Microsoft Word.

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[i] Interview, April 2003.

[ii] See appendix for map.

[iii] Based upon research from the field, it is evident that some of the most useful lessons are gained from "mistakes" or challenges. Thus, I recommend that any further study of tribal telco's or a "cook book" should incorporate data from tribes who have attempted but not yet successfully launched their own company.

[iv] For an excellent roadmap of available options to tribes and critical decision-making criteria, see the 2001 report *Towards Affordable Connectivity in Indian Country*, published by the National Indian Telecommunications Institute. This report divides options into three categories: non-investment strategies, investment strategies, and partnering strategies.

[v] This paragraph draws from information written in the paper I wrote for PED 328 entitled: *When Money is Not The Bottom Line: How Sovereignty, Trust Land Status, and Jurisdiction affect Microlending in Indian Country.*

[vi] *Native Americans in the New Millennium,* Published by the Harvard Project on American Indian Economic Development, p 144.

[vii] All statistics for this section are cited from the source above.

[viii] FCC 00-207

[ix] All statistics for this section have been compiled from the report *Falling Through the Net, Defining the Digital Divide,* FCC website, FCC 00-207 and NCAI's website www.indiantech.org.

[x] FCC Press Release, May 5, 2003

[xi] www.fcc.org

[xii] The list of barriers below has been combined from multiple sources – FCC-00-207, NCAI reports on telecommunications in Indian Country, the OTA Policy Framework paper, and Belinda Nelson's PowerPoint on establishing a tribal telco for the NCAI conference.

[xiii] The list below has been compiled based on information from interviews, Belinda Nelson's powerpoint presentation to the NCAI conference, *Native Networking: Telecommunications and Information Technology in Indian Country, Toward Affordable Connectivity in Indian Country,* and the OTA Report, *Policy Framework for Native American Telecommunications.*

[xiv] Source: Interviews with Jim Casey, Karen Buller, and Geoff Blackwell.

[xv] Interview, May 2003

[xvi] Interview, May 2003

[xvii] "Customer base" refers to wireline current subscribers – both business and residential. Some telco's reported data separately, others did not. "Customer base" does not include number of access lines available. Telco's continue to have capacity to increase customer base through additional access lines.

[xviii] Interview, May 2003

[xix] NITI report, p 13- 14.

[xx] *Ibid.*

[xxi] *Ibid.*

[xxii] Interview, May 2003

[xxiii] As a more technical "cook book" is developed, tribes will need assessment tools to help them determine if they have the capacity in such specialized areas as debt-management, financial planning, and any technology or legal issue that are linked to emerging.
[xxiv] All alternatives in this section were guided by conversations with Jim Casey, Karen Buller, and resources published by NITI.
[xxv] Interview with Karen Buller, May 2003
[xxvi] Interviews with Chuck Wiese and Gary Braxton, April 2003.
[xxvii] Survey Response, Michael Scully, President of Saddleback Communications, May 2003
[xxviii] *Policy Framework for Native American Telecommunications*, published by OTA, p104.
[xxix] http://www.crstta.com/pages/aboutus.html
[xxx] Interview with Jo Lazo, SCATUI Customer Service Manager, April 2003
[xxxi] Interviews, April 2003 and May 2003
[xxxii] Saddleback partners with an off-reservation company to provide services. It owns 50% of the off-reservation company.
[xxxiii] SCATUI Annual Report to San Carlos Apache Tribal Council, FY 2002.
[xxxiv] Pages 14 and 16.
[xxxv] Interview, April 2003
[xxxvi] Sources for this market analysis discussion include interviews with Vernon James, Gary Braxton, Chuck Wiese, and Kade Twist.
[xxxvii] PowerPoint created by Vernon James and SCATUI Annual Report to San Carlos Apache Tribal Council, FY 2002
[xxxviii] Interview with Karen Buller, May 2003
[xxxix] According to counsel from Jim Casey, at present, telecommunication regulatory precedent is not different on checkerboard reservations than on reservations with only tribal land. He claims that tribal codes can apply within the boundaries of reservations.
[xl] www.digitaldividenetwork.org/content/stories/index.cfm?key=24
[xli] *Ibid.*
[xlii] FCC Document: *Expanding Telecommunications Access in Indian Country*, p7.
[xliii] All data on regulation in this section has been referenced from the Benton Foundation's report, *Native Networking: Telecommunications and Information Technology in Indian Country*, p 12-14.
[xliv] "Essentials of Telecommunications" slideshow, developed by NECA
[xlv] *Native Networking: Telecommunications and Information Technology in Indian Country*, p15
[xlvi] FCC Document: *Expanding Telecommunications Access in Indian Country*, p7.
[xlvii] Interview, May 2003
[xlviii] Interview with Jim Casey and Karen Buller, May 2003
[xlix] Interviews, May 2003
[l] Interview with Jim Casey, May 2003
[li] Essentials of Telecommunications" slideshow, developed by NECA
[lii] FCC Document: *Expanding Telecommunications Access in Indian Country*, p7.
[liii] Interview, May 2003.
[liv] "Essentials of Telecommunications" slideshow, developed by NECA. Note that in 2000, "Enhanced Link Up" and "Enhance Life Line" were created to provide additional financial support to low-income telephone subscribers on tribal lands.
[lv] *Ibid.*
[lvi] These benefits are quoted directly from "Essentials of Telecommunications" slideshow, developed by NECA.
[lvii] Interview, May 2003
[lviii] Page 96.
[lix] In the report *Connecting Indian Country: Tribally-Driven Telecommunications Policy*, NCAI recommends that "(m)odel programs and success stories should be highlighted" as a formal recommendation for improving telecommunications in Indian Country. It supports the creation of a "toolkit of best practices"(p 11).

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