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TELECOMMUNICATIONS IN INDIAN COUNTRY

HEARING

BEFORE THE

COMMITTEE ON INDIAN AFFAIRS
UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

ON

OVERSIGHT HEARING ON THE STATUS OF TELECOMMUNICATIONS IN INDIAN COUNTRY

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TELECOMMUNICATIONS IN INDIAN COUNTRY

THURSDAY, MAY 22, 2003

U.S. SENATE,
COMMITTEE ON INDIAN AFFAIRS,
Washington, DC.

The committee met, pursuant to notice, at 10:02 a.m. in room 485, Russell Senate Office Building, Hon. Daniel K. Inouye (vice chairman of the committee) presiding.

Present: Senators Inouye, Conrad, and Johnson.

STATEMENT OF HON. DANIEL K. INOUYE, U.S. SENATOR FROM HAWAII, VICE CHAIRMAN, COMMITTEE ON INDIAN AFFAIRS

Senator INOUYE. Good morning. This morning, the Committee on Indian Affairs meets to receive testimony on the status of telecommunications in Indian country. Last year, this committee held a joint hearing with the Subcommittee on Communications of the Commerce Committee on some of the issues related to telecommunications serving Native America. Today, we have structured a more comprehensive hearing. I think it is clear that whether it is characterized as a "gap" or a "digital divide" or some other term, Indian country lags far behind the rest of America in some of the most basic services that most Americans take for granted.

Thirty-two percent of all Indian homes nationwide lack basic telephone service. In some areas of the country, like the State of Arizona, 50 percent of tribal homes have no access to telephone services. A study conducted by the Economic Development Administration in 1999 informs us that at that time, only 9 percent of Indian households had computers and only 8 percent had access to the Internet. As always, Indian country has been resourceful in trying to bridge the gap in telecommunications capacity, and some tribal governments, after assessing their communities' needs, have elected to start up their own telephone companies to serve reservation communities and both the Indian and non-Indian residents of those communities.

There are new approaches being explored to connecting Indian country to bridge the absence of sophisticated communications infrastructure, because often the costs associated with putting in land lines in remote rural areas are so prohibitive that land-based communications simply are not an economically viable solution. Then there is the interesting fact that Federal agencies that have a physical presence in tribal communities, such as the Bureau of Indian Affairs and the Indian Health Service, have their own telecommunications infrastructure on tribal lands, but because of var-

ious regulatory restrictions they cannot make that infrastructure available to tribal governments, schools, teachers, students, or to any citizen. So you may have a high-performance computer right next to your home that has no electricity and no telephone service.

Clearly, this basic lack of telecommunications infrastructure means that in an emergency there is no one who can call 9–1–1. And naturally, there is no means for law enforcement officers or emergency medical technicians to know that they are needed. People have died because they cannot reach help in a timely fashion, and tragically it is likely that more people will suffer serious and life-threatening injuries as long as there are no means of communicating with the outside world. I am certain all of you will agree that this gap must be closed.

Finally, we know that at the Federal level, there is no one point of access, nor is there any agency that serves a coordinating function to assure that those existing Federal programs that provide support for community assessments and the development of telecommunications infrastructures and capacities are adapted to the unique needs of Indian country.

So we look forward to receiving your testimony this morning. I would like to note that we have a long witness list today, and a limited amount of time because of new scheduling that was just issued by the leadership. I would like to assure the witnesses that all of their full statements will be made part of the record, and ask that you try your best to summarize your testimony so that there will be time for all witnesses to present their testimony and be heard.

With that, I would like to welcome the first panel—K. Dane Snowden, chief, Consumer and Government Affairs Bureau, Federal Communications Commission; Hilda Gay Legg, administrator, Rural Utilities Service, U.S. Department of Agriculture; Kelly Klegar Levy, associate administrator, National Telecommunications and Information Administration, Department of Commerce.

Ladies and gentleman, welcome.

Mr. Snowden.

STATEMENT OF K. DANE SNOWDEN, CHIEF, CONSUMER AND GOVERNMENT AFFAIRS BUREAU, FEDERAL COMMUNICATIONS COMMISSION

Mr. SNOWDEN. Thank you. Good morning, Mr. Vice Chairman. My name is Dane Snowden. I am the chief of the Consumer and Government Affairs Bureau for the FCC. I appreciate this opportunity to again appear before you and discuss the FCC's role in addressing the continued advancement of telecommunications and information services in Indian country.

Just over 1 year ago, the FCC completed its reorganization. My Bureau established an Intergovernmental Affairs Office in part to honor and respect the government-to-government relationship we have with federally recognized tribes. Establishing this office has resulted in, one, centralizing communications between the tribes and the Commission; and two, raising the profile within the Commission of issues impacting the provision of telecommunications services in Indian country.

Since my appearance 1 year ago, we have aggressively built upon the foundation established by the Commission only 3 years ago to promote telecommunications subscribership and infrastructure deployment within tribal communities, taking on the issues of outreach, consultation, and policy reform. We recognize the need of tribal nations to have the tools and resources available to help them increase access to critical telecommunications services. As a result, the Commission launched the Indian Telecommunications Initiative, or ITI. ITI takes multiple forms—interactive regional workshops, meetings with representatives of individual tribes to address their unique telecommunications issues, participation by Commission senior staff at tribal conferences, and dissemination of educational materials to American Indian tribes and tribal organizations.

Last July, as part of ITI and the launch of a national outreach program to raise awareness of Lifeline and LinkUp, we contacted more than 550 tribes and 25 tribal associations with educational materials about Enhanced Lifeline and LinkUp. Through these efforts and others, participation in Enhanced Lifeline and LinkUp programs has increased almost seven-fold since the year 2000. Commission staff has participated in interactive regional workshops and conferences around the country. Through our participation, we have witnesses first-hand the state of telecommunication in Indian country. Last September, Chairman Powell delivered the keynote at the National Summit on Emerging Tribal Economies. This demonstrates the depth of the Commission's continued commitment to outreach. In February, Chairman Powell and each of the commissioners and bureau and office chiefs hosted a meeting with the National Congress of American Indian executives and members of the NCAI Telecommunications Subcommittee.

A central element set forth in the Commission's statement of policy is the goal and principle that the Commission will consult with tribal governments. When tribes voiced concerns about tower siting and historic preservation consultation, we responded, devoting considerable time and resources to address the issue. Commission staff have consulted directly with tribes and their representatives, as well as the United South and Eastern Tribes in the context of a draft nationwide programmatic agreement. The draft agreement among the Commission, the Advisory Council on Historic Preservation and the National Council of State Historic Preservation Officers proposes to streamline the national Historic Preservation Act review process. Consultations thus far resulted in addressing tribal concerns.

When we realized the initial wireless tribal bidding credit rules may have been too narrow, the FCC improved the tribal bidding credit mechanism by expanding the rules this past March. The Commission also initiated a notice of inquiry, or NOI, asking how to facilitate the provision of spectrum-based services and promote opportunities for rural telephone companies, including tribally owned companies, to provide such services. In another recently released NOI, the Commission seeks data on competitive market conditions with respect to wireless service, particularly seeking data on tribal lands. Just last week, the Commission authorized spectrum leasing in a broad array of wireless services. The Commission

also sought comment on additional steps to improve how secondary markets function. These steps will further promote the development of innovative services in Indian country.

Finally, the Commission recently adopted an order pertaining to, among other things, the Enhanced Lifeline and LinkUp Programs that clarifies the operation of the eligibility criteria. This order also asked how to expand enhanced programs beyond reservation borders. A recent analysis based on 2000 census data indicates that telephone penetration rates of federally recognized tribes has increased from approximately 47 percent to 67 percent in the past 10 years. However, in a Nation that boasts a national penetration rate of 94 percent, we can conclude only that more needs to be done to increase access in Indian country. The Commission will continue to support the development of telecommunications infrastructure in Indian country, bringing basic telephone services to unserved and under-served areas and laying the foundation for the deployment of advanced services, including broadband. We will continue to consult with tribes and engage in a dialogue with industry and other Federal agencies, as well as the States, to determine how, working together, we can best achieve our mutual goals.

I thank you for this opportunity and look forward to answering any questions you have.

[Prepared statement of Mr. Snowden appears in appendix.]

Senator INOUYE. I am most grateful to the position taken by the agency to be open to discussion and be helpful, but I would like to ask a few questions as to something you can do immediately. We have noted that 9 percent of Native households have access to the Internet. My question is, is the FCC willing to consider extending the E-rate discount to tribal institutions and lower-income individuals during hours that schools and libraries are not using the Internet?

Mr. SNOWDEN. I did not follow the last part of the question. That are not willing to what?

Senator INOUYE. During hours when schools and libraries are not using this, would you permit Indian country to use that with the E-rate discount?

Mr. SNOWDEN. I think that is something that we should seriously look at. At the FCC, we are currently evaluating the entire E-rate program to make sure that, first, the funding is still there, to make sure that it is not in jeopardy, which it is not, and we want to continue our efforts in that area. In addition, I think it will be important for us to take what you are asking and take it back to the Commission and have our five commissioners debate that issue.

Senator INOUYE. Will you tell them that this is the most severe situation one can find in the Nation. There is no other community where one can say we have less than 10 percent access to Internet, and that is what it is in Indian country. So I would like to see the time when an Indian child can dial 911, for example, and get the ambulance.

Do you know of anything we can do, that Congress can do to change the laws, besides appropriating additional funds?

Mr. SNOWDEN. I think the U.S. Congress can do whatever the U.S. Congress sees fit to do.

Senator INOUYE. No; but can you suggest something?

Mr. SNOWDEN. I think what we need to do is evaluate the situation. As you referred to the 911 situation, I can say that we are seriously looking at that issue across the board. We recently held an E–9–1–1 coordination initiative to discuss the importance of this issue, and elevate it to a level where someone on a reservation does not have that problem. We do plan to coordinate with the tribes on that particular issue as we move forward. We just held that forum about 2 weeks ago.

Senator INOUYE. Mr. Snowden, I thank you very much, and will you convey to the Commission our gratitude.

Mr. SNOWDEN. Yes, sir.

Senator INOUYE. And tell them to make this their highest priority?

Mr. SNOWDEN. I will. Thank you, sir.

Senator INOUYE. Thank you, sir.

Ms. Legg.

STATEMENT OF HILDA GAY LEGG, ADMINISTRATOR, RURAL UTILITIES SERVICE, DEPARTMENT OF AGRICULTURE

Ms. LEGG. Senator Inouye, vice chairman of the committee, thank you very much for the opportunity to testify at this oversight hearing on the status of telecommunications in Indian country. And thank you also for your vision in understanding what modern and high-speed telecommunications means and how that can make a difference in the quality of life for the folks who live on Native American reservations. Today's advanced telecommunications network will allow Native American communities to become platforms of opportunity for businesses, both new and established businesses, to compete locally, nationally and globally. On behalf of President Bush, Secretary Veneman and Under Secretary Tom Dorr, I assure you that we are committed to enabling and empowering these communities through working with them in whatever way we can.

Whether that be assisting them with development of a sound business plan or making sure the right technology is fitted to the right community, or educating potential customers to the application of cutting-edge technologies, we want to be a driving force in helping to create that economic demand. USDA is very proud of its contributions to improve the infrastructure in many Native American communities. Its Rural Utilities Service [RUS] has worked with telephone companies and cooperatives serving Native Americans since the inception of our program, both in electric, water and waste, and telecommunications. In 1961, RUS made its very first loan to bring electricity to the Navajo Nation. In 1976, we financed the first tribal telephone company, the Cheyenne River Sioux Tribe Telephone Authority, in Eagle Butte, SD. We are especially proud of our efforts working directly with tribally owned and operated telecommunications utilities.

RUS has financed six tribally owned telecommunications companies for service exclusively to the reservation. Unfortunately, there are still many communities without the access to advanced telecom services. And Native Americans living on tribal reservations have some of the lowest telephone penetration rates in the Nation. This lack of telecommunications infrastructure contributes to high unemployment, depressed economic conditions, and reduced edu-

cational opportunities and medical care. Studies show that this trend has begun to change, but the question is, how do we ensure that these access to service numbers will continue to rise?

First, we look for partnerships to develop telecommunications systems. The key to developing a successful telecommunications system is a good sustainable business plan, one that has the support of the tribal community and meets that community's needs. To ensure that success, there must be a willingness of the community to share in the investment. Local ownership and local control have always been the keys to providing quality service and ensuring business success. Local leadership must drive the acceptance of new technologies by being users themselves, such as demonstrating and explaining and understanding the uses of new technologies to local businesses, or designing courses that can be taught over the Internet, or embracing new technologies through their personal use, such as being able to have your own EKG read via telemedicine.

A clear success of this type of partnership is in the Gila River Telecommunications, Inc. story. Gila River is a tribally owned and operated telecom system. It began as a start-up. It had no distribution lines. But by partnering with an independent telephone company, Dobson Communication, it was able to obtain the cash to begin business, and with telecommunications loans from the RUS, Gila River was able to construct an advanced telecom system capable of broadband delivery. As a result, the most remote of Native Americans living on the reservation had access to modern telecommunications services, and the tribal authority was able to build an industrial park and then recruit 50 businesses to locate on the reservation.

Of course, hand-in-hand with job creation, education and health care factors must be considered in an economic development strategy. Our distance learning and telemedicine program, during its 11-year history, has made more than $17 million in grants to provide the critical services of telemedicine and education to Native Americans. And when we speak about telemedicine, the life-saving medical procedures that can be performed via advanced telecom networks, they are boundless and they result in improved quality of life that is truly immeasurable. However, we as a government need to work together to remove barriers such as the fact that the Indian Health Service clinics are considered Federal facilities and are not eligible for our distance learning and telemedicine funding.

One of RUS's greatest success stories for Indian country came recently, on May 16, when Secretary Veneman announced our Community Connect grants. Of the 40 grants that were announced totaling $20 million, 10 of those grants totaling $6.2 million were awarded directly to Native American communities. Another three for almost $2 million were awarded to telecommunications providers to bring service exclusively to Native American reservations. These grants competed on a national level. There were over 300 applications, and yet the Native American projects won on their own merit. It was the quality of the application. There were no automatic set-asides. There were no eligibility parameters. These were good, strong applications and we are delighted that that percentage is so high and we are looking forward to working with them.

As I close, there are many ways in which every facet in the quality of life of rural residents can be impacted positively by the deployment of advanced telecom services. Every industry, every business, every educational institution, every health care facility and truly every home will benefit from the deployment of broadband. It is up to us, as the facilitators to this opportunity, to challenge our rural communities and our partners in the telecom industry to increase the public knowledge of this tremendous life-changing resource and to demand a level that achieves maximum benefit for our Native Americans.

Thank you again for the opportunity, and I will be glad to answer any questions, Senator Inouye.

[Prepared statement of Ms. Legg appears in appendix.]

Senator INOUYE. Thank you very much, Ms. Legg. Your agency is one of the principal agencies that make available grants and funds to Native Americans. I noted in your testimony that there were 300 applicants.

Ms. LEGG. Correct.

Senator INOUYE. And of that number, 20 were selected?

Ms. LEGG. Of that number, sir?

Senator INOUYE. Of that number 20 were selected?

Ms. LEGG. There were 300 applicants, totaling $185 million, and we have $20 million to grant. Of the $20 million, almost $9 million of it will go to serve Native Americans.

Senator INOUYE. Were there many other qualified entities that you could not serve, say tribal groups?

Ms. LEGG. In tribal groups, the greatest need really came from the Native Americans, so they did score very high. There were some applications obviously that we could not serve and there were tribal communities within those applications, yes, sir.

Senator INOUYE. What I am leading to is if you doubled your amount, would you be able to provide more assistance to tribes?

Ms. LEGG. Yes, sir; we would.

Senator INOUYE. If the Communications Subcommittee suggested additional funds, would your agency object to it? [Laughter.]

That is a serious question because oftentimes the Administration says no.

Ms. LEGG. Our agency will carryout whatever Congress directs us to do, sir. This year's budget has $10 million for the broadband grant program, which we call Community Connect, so we will be making some more grants this year.

Senator INOUYE. So you think that at the present time, your agency can distribute more funds effectively?

Ms. LEGG. Yes, sir.

Senator INOUYE. I thank you very much.

Ms. LEGG. Thank you, Senator.

Senator INOUYE. And now may we hear from Ms. Levy.

STATEMENT OF KELLY KLEGAR LEVY, ASSOCIATE ADMINISTRATOR, OFFICE OF POLICY ANALYSIS AND DEVELOPMENT, NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION, DEPARTMENT OF COMMERCE

Ms. LEVY. Mr. Vice Chairman, I thank you for the opportunity to testify this morning on behalf of the National Telecommuni-

cations and Information Administration [NTIA], setting forth our views of the role of the Federal Government in addressing the telecommunication needs in Indian country.

NTIA serves as a principal adviser to the President, Vice President and Secretary of Commerce on domestic and international telecommunications and information policy issues. The Administration shares your interest in ensuring that telecommunications and information networks and services are available in Indian country. Clearly, we face a unique set of challenges here. In general, these communities are low-population densities and low-income areas. We have had difficulties with the data collection, research and analysis that are needed to assess the telecommunication needs of American Indian communities. We need to determine the type of telecommunications technologies that would best serve the needs of these communities and be affordable.

There are also questions as to whether existing telecommunications companies are serving the needs on Indian reservations, how to create and sustain tribal telecommunications companies, and what is the appropriate role of competition with tribal telecommunications companies. On all these issues, tribal input and consultation are critical.

NTIA understands the importance of basic telephony, as well as Internet access for all Americans. We have released a series of reports that profile Americans' access to the Internet at home and outside the home, and how different demographic groups are using the Internet. Our most recent report, entitled A Nation On-Line, which we coauthored with the Department of Commerce's Economics and Statistics Administration, and released in February 2002, analyzed census data taken from 57,000 households. We have been able to report the raw data regarding access to and use of computers and the Internet by American Indians, Eskimos, and Aleuts. Unfortunately, however, because of the small sample size of these populations and the high cost of over-sampling, we have been unable to obtain enough data points for these populations to run economic analysis and draw conclusions on the data in our reports. Our next census survey will be taken in October 2003. We hope that the numbers now will be large enough to provide a statistical baseline for measuring American Indian's use of computers and the Internet. We will be happy to share these findings with you and other interested parties once we have them.

At NTIA, we have worked hard to connect American Indian communities to advanced telecommunications services. Our Technology Opportunities Program [TOP], has been providing matching grants to nonprofit institutions and State, local and tribal governments to demonstrate ways to use advanced information technologies, to provide access to public information and tribal government services, to offer greater access to health care services and tribal cultural services, and to provide job training and opportunities. TOP grants have provided seed funding for such projects that then receive sustaining funding from other sources. Approximately 9 percent of our past TOP grants, which is about $17.5 million, have been awarded to tribes or organizations that serve tribes. For example, TOP grants have been awarded to the White Mountain Apache Tribe, the Pueblo of Santa Ana, the Minneapolis American Indian Center,

the Navajo Technology Empowerment Centers, and the Cherokee Nation for projects establishing community-wide networks that enhance access to educational, economic development, health, government and electoral services, as well as build capacity for e-commerce, e-training and distance learning.

NTIA has also helped to extend the benefits of communications technology to American Indian and Alaska Native communities through the Public Telecommunications Facilities Program [PTFP]. This program has made a significant contribution to the public broadcasting system in Indian country by engaging in outreach efforts and providing critical funding. PTFP has funded seven Native American projects over the past two fiscal years, including grants for Native-oriented public radio service, as well as construction grants to improve the transmission equipment of stations licensed to tribes.

NTIA is not alone in our efforts to address telecommunications needs in Indian country, as my colleagues from the FCC and RUS have testified today. In addition, the Federal Government's efforts on spectrum reform, including authorizing secondary markets and the five GHz allocation will also engender opportunities for meeting the needs in Indian country. These reforms enable us to use the spectrum resource better, and allow for more innovative use of both licensed and unlicensed wireless technologies to meet these needs. For example, as part of a National Science Foundation-funded effort called Advanced Networking with Minority-Serving Institutions, Motorola deployed its unlicensed wireless Canopy service on three Indian reservations, providing them Internet access as well as video and IP telephony services.

Mr. Vice Chairman, I thank you again for the opportunity to testify and welcome any questions you may have for me.

[Prepared statement of Ms. Levy appears in appendix.]

Senator INOUYE. I thank you very much, Ms. Levy. As you are well aware, the primary and largest source of funding is the Department of Agriculture. In the title of that Department, there is no word "communication" or "telecommunication." The second source of funding is the Technology Opportunity Program. I commend you for the $17.5 million that have been spent to date, but why is the President discontinuing this program if it is such a good program?

Ms. LEVY. As I understand it, the President's budget reflects the Administration's belief that the program's mission has been fulfilled. At this point, the President is looking to other programs in the Administration. The programs at RUS, such as the community grants and the broadband grants, the programs at the FCC such as the e–Rate, and the programs at the Department of Education, to implement many of the lessons learned from the TOP program.

Senator INOUYE. Well, the NTIA is going to discontinue the Technology Opportunity Program. The only remaining program that we are aware of is the Agriculture one.

Ms. LEVY. A lot of the distance learning grants that we have provided, we have learned lessons that are now being implemented by the funding over at the Department of Education.

Senator INOUYE. The third source is the Department of Education Community Technology Center Program, is that it?

Ms. LEVY. That is one of them.

Senator INOUYE. The budget proposes no funding for this program.

Ms. LEVY. I think that the President's budget is looking toward the Department of Education's $700 million in its educational technology grants—grants that are delivered directly to the States.

Senator INOUYE. Does it not propose eliminating this Community Technology Center Program?

Ms. LEVY. I believe that is also in the President's budget, yes.

Senator INOUYE. Do you not want to restore it? We are talking about all the problems—about 9 percent having Internet, less than 40 percent with telephone service, no one can use the 9–1–1. I am glad that all of us are saying we are going to do our best, but at the same time while we are saying we are going to do our best, we provide no funding. It is not your fault, I realize that, but will you go back to your leaders and tell them Indian country has a few problems?

Ms. LEVY. I will do that, sir.

Senator INOUYE. And just remind our leaders that in every war in the last century and this century, Indian country has sent more sons and daughters in uniform in the military service of our Nation per capita than any other ethnic group. In many ways, they have paid their dues. It is about time they got the benefits.

[Applause.]

Senator INOUYE. As you can see from the response here, I appreciate the testimony of you three and I know you are doing your best, but please tell your seniors and principals that it is a serious problem and I hope that the Administration will reconsider restoring these programs. They have great promise.

Thank you very much.

Ms. LEVY. Thank you.

Ms. LEGG. Thank you, Mr. Vice Chairman.

Mr. SNOWDEN. Thank you.

Senator INOUYE. Our next panel is made up of the president of Kade L. Twist Consulting of Arizona, Kade L. Twist; and the president of Native Networking Policy Center, Marcia Warren Edelman.

Mr. Twist, it is your show now.

STATEMENT OF KADE L. TWIST, PRESIDENT, KADE L. TWIST CONSULTING

Mr. TWIST. Mr. Vice Chairman, I would like to thank you for inviting me to testify here. It is an honor to be here with you today. I would like to express my sincere appreciation for your continuing efforts to improve the status of telecommunication in Indian country. I think you are providing tremendous leadership on this issue.

My name is Kade L. Twist. I am a member of the Cherokee Nation and president of Kade L. Twist Consulting. I have been conducting research on the subject of telecommunications in Indian country for the past year as a consultant for the Ford Foundation. Prior to that, I was with the Benton Foundation as a policy analyst specializing in telecommunications in Indian country. While at the Benton Foundation, I was a member of a talented and dedicated staff that was responsible for shaping much of the public discourse pertaining to what is now referred to as the digital divide.

Over the course of my research, one significant finding has emerged over and over. That is providing equipment and infrastructure is not a solution in and of itself for the telecommunications development needs of Indian country. Equipment and infrastructure are merely tools. They are only effective when they are applied in a manner that provides for and advances the social, civic and cultural needs of respective Indian communities. Even if every mile of Indian country were to be fully wired, many tribes do not have the knowledge, expertise and organizational capacity to effectively utilize, manage and sustain their infrastructure.

Telecommunications systems are very expensive to sustain, and require a large number of staff with a wide array of skill sets to keep them up and running. These technologies require a great deal of experience, expertise, creativity, community education, community organizing to utilize them in a manner that complements the cultural will of tribal people, while meeting their civic and social needs. Therefore, stakeholders should match their investments in equipment and infrastructure with investments in human capital. It is critical for stakeholders to pay close attention to capacity building and sustainability issues, because Indians have just begun the process of making telecommunications fit their respective cultural and social worlds. This is a new technology. This is a new enterprise. It is a new ball game for us.

Therefore, Indian nations have an intense need for planning, community organizing, training, technical assistance, capacity building assistance and the recruitment of talent with a diversity of skill sets. Indian nations must develop their organizational infrastructures to ensure the appropriate development and sustainability of telecommunications endeavors on tribal lands, as well as ensuring the consumer rights of their respective tribal members.

One of the main issues that I have been addressing is the knowledge and capacity building. During the course of my research and speaking with top Indian telecommunications executives and information managers, practitioners in the field, they have identified knowledge and capacity-building needs as more significant even than funding and development needs. Furthermore, respondents expressed frustration toward existing knowledge and capacity-building resources because they were typically limited to 1-day workshops that do not address the specific needs of their specific communities, and provide very little or no opportunities for ongoing support. The majority of respondents also state that they experienced difficulty accessing capacity-building funds for their respective organizations. That is both through the Federal sector and through the private foundation sector. The following is a list of the most frequently identified knowledge and capacity-building needs. First, is core funding; second, is training and technical assistance; third, is planning; fourth, is community organizing; fifth, is research, data collection and analysis; sixth, is technology selection; seventh, is demand aggregation; eighth, is regulatory systems, regulatory codes; nineth, is fundraising; and tenth, is recruiting staff with advanced skill sets.

Therefore, I have two recommendations at this point. First, is to urge this committee to design and implement a funding mechanism that is specifically designed to meet the telecommunication needs

of Indian country and flexible enough to accommodate pre-development, development, and knowledge and capacity-building endeavors as well.

Indian country needs its own funding mechanism for telecommunications development because Indian nations should not have to compete against States, municipal governments and other incorporated entities to gain access to the benefits of the Federal Government's trust responsibility. Furthermore, Indian country needs a telecommunications funding mechanism that adequately addresses its pre-development and knowledge and capacity-building needs. Currently, no such Federal funding is readily available, including that of the RUS broadband pilot project and the TOP Program. The funding mechanism should be designed to link telecommunications investment with nation-building, economic development, cultural preservation, community networking and efforts to improve upon core public services such as education, health care, housing, law enforcement, fire and public safety and enhanced 9–1–1 services, which as you have already identified as very, very important and critical to public safety right now in Indian country. The key to linking these developments with these services is promoting community-driven telecommunications development that is scalable, efficient, sustainable and better-suited for leveraging diverse sets of resources.

I would like to also mention, and reiterate the comments of Hilda Gay Legg of RUS, that the current broadband pilot project is going to be reduced from $20 million to $10 million, or at least planned to do so. So what progress has been made this year will not be duplicated next year. So it may be a smokescreen of some sort. The second recommendation would be to facilitate the development of a system of training, technical assistance and knowledge and capacity building intermediaries for telecommunications in Indian country. There is a need for a system of American Indian nonprofit telecommunications intermediaries capable of providing training and technical assistance, knowledge and capacity-building assistance, brokering broad-based partnerships, facilitating collaboration, leveraging multi-layered funding sources, and leveraging political clout. There are already such systems in place—training and technical assistance, capacity-building and intermediaries, for TANF, WIA, for housing, for economic development and so on. Yet there is not an organized system for telecommunications.

However, there are individual organizations such as Affiliated Tribes of Northwest Indians and the Southern California Tribal Chairman's Association that have been very successful telecommunications intermediaries. In fact, representatives from both ATNI and SCTCA are here today to testify about their tremendous achievements. These are precisely the types of organizations that should serve as models for building a comprehensive system of telecommunications intermediaries for all of Indian country. Regional intertribal organizations already play a significant role as intermediaries for TANF, WIA, economic development and so on. They are already well-positioned to play a role as intermediaries for telecommunications as well.

Likewise, there are already a number of national American Indian nonprofit organizations such as the Native Networking Policy

Center, the National Indian Telecommunications Institute, and the National Congress of American Indians which are already well-positioned to add value to the work of regional intertribal organizations. All that is needed is funding to support their work and to support their organizing efforts.

In conclusion, funding assistance for telecommunications development that does not include knowledge and capacity-building merely solves half of the equation—the non-human side of the equation. Indian country stands to benefit most from an investment in equipment and infrastructure that is matched equally with an investment in its people. An investment in building the capacity and knowledge of Indian people will contribute to their ability to manage, sustain and adapt these technologies so that they effectively meet the needs of Indian communities.

Thank you very much.

[Prepared statement of Mr. Twist appears in appendix.]

Senator INOUYE. Thank you very much, Mr. Twist. You may be aware that there are 562 recognized tribes in the United States. Of that number, optimistically 20 tribes can be considered to be wealthy and self-sufficient. Most tribes are very, very poor, almost on a deadly level, with unemployment as high as 90 percent. Obviously, these tribes just cannot afford to hire these organizations to give them the expertise and what have you, which leads us into this awful situation where high technology surrounds this Nation, but Indian country is not ready to absorb it. What can we do to make certain that we provide training, expertise and proper assessments of the needs because if you asked the other 460 tribes, they may not know what to do, and they do not have the loose money to spend to hire experts. There are many tribes that can do that, but most tribes do not have the capacity to do that. So we have to be realistic, so you tell me what this committee can do.

Mr. TWIST. I would like to point out one thing before I answer that question specifically, and that is the program like the broadband pilot project, the majority of tribes would not be able to even apply for that because they would not have the $20,000 or $30,000 necessary to get an application completed. That is why it is so critical just to get to that level that we need a system of intermediaries. I would believe that it should be done on a pilot project basis and it should be modeled after the intermediaries that serve TANF, because I believe that TANF is most critically linked to the needs of universal service. I think that a lot of data- sharing can happen to gain a higher enrollment of Native people in the Enhanced Lifeline and LinkUp Programs through that type of collaboration. But I think TANF intermediaries to represent the most comprehensive and effective model out there.

Senator INOUYE. I am going to suggest to the NCAI that they make this their top priority project, so that Indian country can get into this new high technology world. Otherwise, the inequities that will result from this would make a bad situation that we have today worse. So I thank you very much, Mr. Twist.

Mr. TWIST. Thank you.

Senator INOUYE. We will be conferring with you as to what we can do. If you have any suggestions on what we can do legislatively, do not hesitate to share them with us.

Mr. TWIST. Thank you very much, sir.

Senator INOUYE. Ms. Edelman.

STATEMENT OF MARCIA WARREN EDELMAN, PRESIDENT, NATIVE NETWORKING POLICY CENTER

Ms. EDELMAN. Good morning, Vice Chairman Inouye, members of the committee, tribal representatives and leaders, and distinguished guests. Thank you for the invitation to come before the committee today to discuss the current status of telecommunications in Indian country.

My name is Marcia Warren Edelman. I am an enrolled member of the Santa Clara Pueblo located in Northern New Mexico, and the president of a newly formed nonprofit organization, incorporated actually this March 2003, that focuses on facilitating the development of a collaborative policymaking process, building Native capacity, and increasing education outreach among tribes and policymakers at all levels of government on issues regarding the digital divide in Indian country. We are named the Native Networking Policy Center. I am pleased to be here representing our group.

From 1999–2002, as you may be familiar, I served as the Senior Policy Adviser for Native American Affairs at the Department of Commerce, and was fortunate to be there during a time when the digital divide became a national catch-phrase and a national priority. I worked with many issues with NTIA and also with the Secretary's office as we conducted visits to Indian country to examine this particular issue. I am also the co-author of Native Networking in Telecommunications and Information Technology in Indian country, a report that the Benton Foundation published in 1999.

As we have heard before and in last year's testimony, this is an extremely dire situation, an issue that has been brought up in a number of reports that have been referred to—four of them, three published in 1999 by NTIA, by the Economic Development Administration, Benton Foundation. Also the National Congress of American Indians published their own report in 2001 that was based on the findings of their Digital Divide Task Force. In that report, it outlined specific areas of policy and action that can be used as a basis for future collaborative efforts, I believe, between NCAI, regional organizations and policymakers at the tribal and national levels. I would encourage the committee to refer to that report at their Web site, www.ncai.org, or also on their national clearinghouse site, which is Indiantech.org, where they have a number of these reports already available.

In Falling Through the Net: Defining the Digital Divide, the NTIA report, we saw statistics showing that Native American households ranked far below the national average, at 76.4 percent. The national average at that time was 94.1 percent. And showing that the digital divide in this country is really a dial tone divide. The basic service of telephone access was being denied to our own reservations and our own tribal communities at a level that I feel is highly unacceptable. I commend the committee for holding last year's hearing to introduce the issue to members of the Committee on Commerce, and also to the general public, and keeping the issue alive over the past year. As a result of that hearing, I believe that

additional policy efforts were made in Indian country to start discussing on a very real level some recommendations and some forward action items that we could undertake in conjunction with the Federal Government and also Congress.

I would like to bring up three areas that I outlined in my testimony last year as sort of an overview of some of the efforts that have been taking place over the past few years and to provide a current status of policy discussions today. Last year, I noted that there were three obstacles to telecommunications infrastructure deployment in Indian country. First, is the lack of investment capital in technical assistance, as my colleague Mr. Twist has mentioned; second, is a lack of current and accurate information; and third, the lack of ongoing coordination of resources. As we have heard today, we have had some Federal programs that have had great impact in Indian country in terms of capital and technical assistance, namely the TOP program from NTIA, the CTC program at the Department of Education, RUS's program of broadband technology grants, as well as the telemedicine and distance learning grants. Another one that we have not heard too much about, but I believe is still quite important, which is the Department of Treasury's Native American Community Development Financial Institutions Program, which has provided ongoing funding for new organizations, new financial institutions that serve primarily Indian country, to develop and thus provide a new source of capital that can be directly tapped into by Indian nations throughout this country.

Some of these are quite small. Some of them are more developed. However, this is still an important starting point for tribal communities, individual entrepreneurs, and tribal businesses to begin working to develop the kind of capital that they need in order to realize their own business goals.

However, as we have discussed, overall funding for telecommunications and information technology projects in Indian country remains inadequate to address the needs of these communities, especially in the areas of feasibility studies and upgrades and ongoing operations support, and also ongoing technical assistance. I urge the committee to ensure that the Technology Opportunities Program and the CTC Programs are preserved in some way, shape or form, and at the very least that the lessons learned from these programs are not lost.

A second point, the current inaccurate information—over the course of 2 days in February 2003, three important meetings took place which examined telecommunications policy and practice in Indian country. The first was the NCAI Telecommunications Subcommittee conducted a half-day policy and advocacy meeting after the NCAI winter session. The FCC conducted a day-long meeting with a high-level delegation of tribal leaders and representatives of tribal telecommunications companies and organizations to discuss ways to improve access to telecommunications products and services throughout Indian country. Also, this committee invited attendees of both those meetings to an informal brainstorming session to explore ways to develop legislation to address the issue.

We saw the first result of these meetings at the beginning of this month with the release of the new FCC report on telephone subscribership on Indian lands, which shows that 67.9 percent of

American Indians have telephone service, compared to 46.6 percent in the 1990 census. The good news is that of course over the past 10 years there has been a 20-percent increase in residential access. However, the bad news is that we remain well below the national average of 95.1 percent, and that figure is based on July 2002 census current population surveys.

It was also evident during these meetings that even though many efforts have been made to address the need in Indian country for access to infrastructure and funding information technical assistance, these efforts have not resulted in a consistent and coordinated activities process that can best serve tribes and tribal organizations working to close the gap. What is missing is a central repository for policy development, research and educational outreach, which can effectively address the problems being presented to date to the Native community. For this reason, our organization, the Native Networking Policy Center, was created in order to leverage the existing experience, resources and efforts already underway to finally achieve the goal of digital inclusion in Indian country. We were formed as a nonprofit whose mission is to ensure equitable and affordable access to, and the culturally appropriate use of, telecommunications and information technology throughout Indian country. We are working to achieve this mission by addressing the following goals: First, policy development to ensure the inclusion of Native interests in the development and promotion of policies at all levels of government to improve and increase the deployment and use of telecommunications and information technology throughout Indian country; second, research and evaluation, to conduct research and data collection to create a baseline of information to support policy development and education efforts, as well as to inform local and Federal stakeholders of relevant and current information impacting telecom and information technology needs in Indian country; and third, education and outreach, and we wish to analyze, evaluate and disseminate all relevant information and resources to tribes, Native organizations, policymakers and practitioners so that they can develop policies that will promote the appropriate and timely deployment of telecom and information technology infrastructure throughout Indian country.

We feel the expertise to address these issues exists among tribes in the public and private sector today. All that is needed is an organization to focus on providing information and communication between the stakeholders necessary to achieve these results. Our organization is willing to serve in this capacity as an added value to any tribe or public or private sector entity by providing the policy and information tools necessary to best coordinate the efforts, create resources, identify relevant information and promote awareness and action.

I feel today tribes are at a pivotal point in history. Self-determination policies have begun to yield measurable results in Native communities in the development of diversified tribal economies, to the revitalization of Indian languages and culture. Throughout the country, the number of tribal and Indian-owned enterprises has grown dramatically, and many tribes have become active participants in economic and political arenas on both local and national levels. However, the impressive growth we have seen in these areas

will continue to be limited as long as the opportunities afforded by access to the digital economy of this Nation exist beyond the boundaries of infrastructure, funding and regulations existing in our Indian country communities today.

It belongs to those of us in the room today and who we represent to work together to further the progress being made in closing the digital divide in Indian country. I am confident that today's hearing will provide the substance and direction to bring the resolution of this issue into action. I thank you for your invitation to testify, and welcome any questions you may have.

[Prepared statement of Ms. Edelman appears in appendix.]

Senator INOUYE. Ms. Edelman, I would assume that everyone in this room is not only interested in telecommunications, but involved in it in some way. The statistics that I cited when I opened the hearing are tragic statistics. Many of us sitting here comfortably think that the high-tech age is a good thing for us, therefore we want everyone to benefit from it. Is that the feeling in Indian country? Does Indian country really want this?

Ms. EDELMAN. I believe our communities see technology not as the solution to all the problems, but as a valuable tool. I believe that the discussion has really taken root as to how technology can be used in a culturally appropriate way, can be used as a facet of strategic planning to achieve the goals of the community, the vision of the communities. I think we may have passed the point where technology represented the new and interesting area to explore, and has become really more of the realistic facet of planning and implementation of what the community itself sees itself achieving.

Senator INOUYE. Mr. Twist has said that unfortunately most communities are not prepared to absorb the funding or resources that may be available because of the lack of trained personnel and the lack of experience and such. How do we bring this about?

Ms. EDELMAN. One of my greatest——

Senator INOUYE. Are there any places where large numbers of Indians can go to study?

Ms. EDELMAN. For this particular issue? No, that is one area of development that needs to be examined. We do not have as many individuals in Indian country that understand telecommunications.

Senator INOUYE. Do the Indian community colleges provide studies and courses on what to do?

Ms. EDELMAN. Actually, I think Mr. Twist may want respond to that.

Mr. TWIST. I would like to defer that to Carrie Billy who will be providing testimony later on. The American Indian Higher Education Consortium has made a concerted effort to organize the tribal colleges to provide that anchor in the communities that is needed to develop that sort of expertise and awareness of the issues as well, but mainly, the expertise, and to keep that, to retain that expertise within the communities. By far, AHEC has provided the most comprehensive leadership on this issue. I think they should be worked with in addressing that and expanding that to other institutions that serve large populations of Indian people, Native people, like Arizona State University, University of Arizona, University of Oklahoma they have very high Native enrollment.

Senator INOUYE. If I may, I will be sending questions to all of you because we just do not have the time today. I hope you can respond to them.

Ms. EDELMAN. I would be happy to.

Senator INOUYE. I want to thank both of you for joining us today and helping us with your testimony. Thank you very much.

Ms. EDELMAN. Thank you.

Senator INOUYE. Our next panel consists of the Governor of the Gila River Indian Community of Arizona, Richard P. Narcia. He will be accompanied by the chairman and president of the Gila River Telecommunications Inc., Robin N. Fohrenkam. The next witness is the chairperson of the Fort Mojave Indian Tribe of California, Nora McDowell, and the president of Turtle Island Communications, Madonna Peltier Yawakie of North Dakota.

I would like to call upon Governor Narcia. I gather that you have a plane to catch, so please proceed, sir.

STATEMENT OF RICHARD P. NARCIA, GOVERNOR, GILA RIVER INDIAN COMMUNITY, ACCOMPANIED BY ROBIN N. FOHRENKAM, CHAIRMAN AND PRESIDENT, GILA RIVER TELECOMMUNICATIONS, INC., CHANDLER, AZ

Mr. NARCIA. Good morning, Vice Chairman Inouye. My name is Richard Narcia. I am Governor of the Gila River Indian Community, and on behalf of the community I am very pleased to be here to provide some testimony regarding issues of telecommunications and technology implementation that has evolved in our community.

Accompanying me is Robin Fohrenkam, who is the chairman of the board of directors for the Gila River Telecommunications, Inc. [GRTI].

Also, I would like to acknowledge other members of our community that are here from the board: Cecil Antone, former Lieutenant Governor; Reuben Norris, a board member; Steven Lewis; Aiessa Fullen, who is the current general manager of GRTI; and Gary Bohnee, who is my executive assistant.

Over the past several years, the community, through its partnership with its community-owned telecommunications company, and the development of a management information system has devoted significant resources to bring our technology system on par with current levels. A little background on our community—we are composed of two tribes, the Pimas and the Maricopas. The 373,000-acre reservation was established by an Act of Congress in 1859. Today, the community is the home for nearly 50,000 members and is the largest Indian community in the Phoenix metropolitan area.

Traditionally, we are an agricultural people, and in recent years we have attempted to diversify into other various entities and businesses. We have developed industrial parks that are home to local and national companies. The community owns and operates three gaming facilities. Recently, the community has developed a premier destination resort spa and golf facility. Next month, our Sheraton Wild Horse Pass will host the National Congress of American Indians mid-year conference. Additionally, the community has established several tribally chartered corporations including the Gila River Telecommunications, or GRTI as we refer to it.

As the leadership of the community has planned for the diversification of its economy, while also providing essential services to our constituents, it has been vital that we invest adequate resources in technology and telecommunication. A key element in our community's ability to implement technology improvements has been through the efforts of GRTI. GRTI was formed in 1988 for the primary purpose of providing telephone service for our community members. At that time, it was not cost-effective for our community members to receive this type of service. Some services would cost approximately $20,000 for one service. With initial capital funding from the Department of Agriculture Rural Utilities Service and continued support by way of low-interest Government loans for infrastructure and construction from RUS, GRTI has been able to continue providing reasonably priced service for our customers. The model that has evolved has allowed GRTI to use of a combination of private financing, Federal funding, and loan programs. In fulfilling its mission, GRTI has increased the number of telephone subscribers, promotes community employment, improves the quality of service, and provides state-of-the-art technology. Today, the GRTI system consists of 117 miles of fiber optic cable, and 342 miles of copper cable that is deployed throughout the reservation. Starting in 1998, as I mentioned, the basic reason was to provide telephone services, but since that time GRTI has expanded into a variety of services—DSL Internet service, satellite TV service, Web page design, cellular phone sales, data cabling, and business phone systems.

GRTI has also implemented several programs for our community members—first, the Fresh Start Program which allows customers with delinquent accounts to retain phone services; second, a customer incentive program which promotes responsible payment of phone bills; and third, an Enhanced Lifeline and LinkUp Program which allows qualified low-income residents to receive basic phone service. We are recommending that the criteria for this program be included for those on fixed incomes, such as the elderly. I think it is fair to say that GRTI continues to meet the demand of our unique tribal marketplace and the challenges that are present on a daily basis.

As was previously mentioned, the evolution of GRTI has in part been a function of the growth of the community marketplace. Tribal economic development and housing has spurred the need for improvement in technology and telecommunications. We believe our marketplace will allow the business model to work. One of the biggest customers at this time is the tribal government. Over the past 5 years, the demands of equipping a growing tribal workforce of approximately 1,500 employees and approximately 83 departments and programs has presented significant challenges in two major areas—infrastructure and financial resources. The function of the investment in the community's technology effort has always been to meet basic infrastructure needs. While we have established basic connectivity to all of our seven district service centers, we are challenged by the sheer size of our reservation in developing systems that are effective, efficient, and reliable in all circumstances.

Mr. Vice Chairman, in summing up, the community has several recommendations. For the most part, I believe all tribal govern-

ments and tribal corporations like GRTI support the inclusion of Federal programs that allow communities to consider more options in providing and building services. From the Department of Agriculture's Rural Utilities Services grants and loan programs to the National Telecommunications and Information Administration's Technology Opportunities Program, these initiatives, as a matter of policy, should continue to be funded. In addition, the committee should be aware of important issues pending before the FCC. We are recommending to the FCC that the e-rate discount program be continued. Also, Congress must continue the educational process of the unique jurisdictional and regulatory issues that exist in our communities. Finally, Mr. Chairman, it is my hope that the committee will continue to support tribal efforts in the area of technology and telecommunications.

Thank you.

[Prepared statement of Mr. Narcia appears in appendix.]

Senator INOUYE. Governor, I can assure you that this committee will continue to do whatever it can to help you. We will urge the agencies to change their policy so that the programs that we cited will be continued—RUS plus TOP; that much, we can promise you.

You have been saying you have not been consulted as often as you want by these agencies?

Mr. NARCIA. I think there is a need for that consultation at any level as far as—it goes back to the basic question that tribal communities need to be involved in whatever decisionmaking is done, or have a part in it.

Senator INOUYE. Do you think we should have laws enacted to require the FCC to consult with you before they designate certain communications carriers located within your service area?

Mr. NARCIA. I believe that it would be very appropriate to have that type of legislation in place.

Senator INOUYE. I thank you very much, and I know you have got a long trip to take, so thank you for your presence.

Mr. NARCIA. Thank you, Senator, and thank you for your support.

Senator INOUYE. May I know recognize Chairperson McDowell?

STATEMENT OF NORA McDOWELL, CHAIRPERSON, FORT MOJAVE INDIAN TRIBE

Ms. McDOWELL. Good morning, Vice Chairman Inouye, and Patricia and others that are here today, distinguished tribal leaders, and others that are here on behalf of telecommunications throughout the United States, on behalf of tribal governments.

Before I begin, I just want to thank our creator for giving us this day and allowing us to safely be here today to represent the needs of tribal governments throughout not only our communities, but throughout the United States.

On behalf of our tribe, the Fort Mojave Indian Tribe, I want to thank you today for having this hearing to address the status of telecommunications in Indian country. During the early 21st century as we look at needs throughout Indian country, telecommunications obviously is one of the highest technologies that is continuously evolving. Every 6 months there is a new telephone, you know—everybody has a different way and mechanism of commu-

nicating. Tribal governments have historically communicated using communication tools throughout their history and their culture. As most economic factors predicate today, high quality communications services are vital to our communities in Indian country, especially in rural areas.

Without access to high quality services similar to those found in the urban areas and at comparable prices, most Indian youth and people sometimes have to make a heart-wrenching decision whether to stay and seek work off their ancestral lands and-or perhaps never realize their full potential because of the lack of capabilities that are there on reservations that currently exist not only in the telecommunication area, but all economic areas. There is location to be considered. We are fortunate with our tribe to have been located in an area that is diverse. We are located in three States—California, Arizona, and Nevada. Through the efforts or our tribe, when we look at establishing a telecommunications company back in 1988, actually in 1989, our tribe looked at how we could best accomplish and complete our true vision of ensuring tribal sovereignty and actually exercising tribal self-determination. In that, we looked at our communications. We look at our utilities on reservation. We also looked at the unmet needs of our tribal people, the future vision for our people. Most current location for our homesites were in California only. We expanded in 1972 into Arizona and established homes there, and it was virgin territory at that time. The company that had traditionally provided service there for 35 years was a company that was not able to provide service to us just because of remoteness of our location there at that time, and not being able to service that area. And every other mile of land on our reservation was checkerboarded in Arizona, which meant every other mile was tribal-nontribal, tribal-nontribal. As you have probably heard and have seen throughout other testimony from different tribes throughout the United States where the Railroad Act was implemented therein, so our reservation became checkerboarded.

Prior to the formation of the Fort Mojave Telecommunications Inc., our penetration rate of telephone service on my reservation was about 35 percent. During the short life of Fort Mojave Telecommunications, it has increased the penetration rate to an astounding 98 percent, and currently provides 1,016 access lines throughout the reservations in California, Arizona, and Nevada. These significant gains of which my people are collectively proud are made even more noteworthy when you consider that the reservation is in three States, as I mentioned before, consisting of 48,000 acres. In Arizona, the difficulties mount, obviously, as you are aware of the checkerboarded situation.

My tribe wanted its own telecommunications basically because in order to achieve total exercise of its tribal sovereignty and self-determination and because high-quality telecommunications services were vital. Prior to the formation of FMTI, the telephone network consisted solely of copper lines; not all parts of the reservation, especially the remote areas, had access to the network. The Fort Mojave Telecommunications has greatly improved the communication capability of the reservation as is evidenced by the vastly improved penetration rate. It no longer matters where you live. Before, we

only had access to analog services. FMTI has upgraded the network to approximately 75 percent digital. To hit that mark, FMTI has laid over 45 miles of fiber optic cable to increase both the speed and quality of our communications system.

It is really something to sit here today and recount the beginnings and resulting growth of FMTI. I can tell you about all the meetings to determine not whether we needed our own telephone company, for it was quite obvious that we did, but rather the path to that goal. I could relate to you some of the stories of some of our tribal members, especially in the areas that were remote at that time. Sometimes we would be without service for 3 to 5 days. So for us, for some people it was just imperative just to have dial tone, so for us the increase in the capacity that we have been able to achieve throughout our 15 years of development of our company was something the remarkably that our tribal people totally appreciate.

I also have to mention, though, the legal, jurisdictional and political opposition we faced from formation of our company from local service providers who had a monopoly of the area for over 35 years. My tribe certainly had help, obviously, from others such as the Gila River Telecommunications, Cheyenne River, who had gone before us, and from other rural telephone companies who had similar experience in dealing with providing service to rural areas. The establishment of FMTI has been of extraordinary value to my people, not simply because now we can call in when in the world, or we currently run our own Internet-based business, but for the shining example of the Fort Mojave Tribe's self-determination. All the world can now see how my people came together and cooperatively fulfilled a need, and in the end provided ourselves with what had previously been denied.

Far from saying that the path is wrong, Fort Mojave Telecommunications must continue to grow and expand to meet the development needs of the community it serves. The Federal Government has also contributed to the success of FMTI. Key programs such as the Technology Opportunity Program, TOP, RUS grants and loans, and Federal universal service support have enhanced our ability to bring high quality advanced telecommunications service to my tribe. Unfortunately as we look forward to providing for the future needs of the tribe, we are concerned. In the early years of FMTI, the assistance received from RUS was really significant and important to our tribe.

I know there are other funds that also RUS provides for electricity and other rural needs out there. In some areas we have been denied actually access to those Federal dollars because other providers in rural areas had already received grants and funds to provide service to our area, such as electricity. On my reservation, we had difficulty there, and hopefully those will be areas that will be looked at. Also, when you implement programs or grants to Indian reservations, because another rural company coming in without proper authority or jurisdiction over your tribal lands cannot claim your property or say they are going to provide service without consulting with that tribe. We had experienced that with our electricity company. Fortunately, we did not have to go through that with our telephone service, but it is something that is there that

needs to be looked at in any program that is implemented or where funds are appropriated by Congress to be addressed in Indian country.

We are fortunate that we did have that startup money, and currently not many financial institutions, as I am sure you have heard in past testimony from other tribes in looking at economic development. We are willing to sit down with tribes and financial markets throughout Indian country in dealing with tribes, and because of the trust status of lands and/or allotted lands, have created barriers to financing companies such as FMTI, and/or utility services, and/or any other services that are currently provided on our reservation.

Therefore, the grants, loans and loan guarantees that we received from RUS helped to breathe life into FMTI, and continue to assist us in achieving our dream on our reservation. As much help as RUS has provided and continues to provide, there is room for improvement. With input from tribes such as at today's hearing, employees and customers, some programs can be better tailored to have greater impact on our reservations. The recent broadband loan program implemented last year provides low-interest loans and loan guarantees for broadband services. While most reservations would meet the requirements, some tribes seem unable to participate in this program, for instance because a community must first apply for resources from a fund from a specific State. This seems to disqualify reservations which, like mine, stretch over three States. While my tribe could apply to the national fund, this pool is only funded with money left over, if any, from the earlier States' process. A better approach would have been to carve out funds for entities seeking to provide broadband services on tribal lands.

Today, I want to thank you, Mr. Vice Chairman, for your time and attention and thoughtful consideration of the issues I have presented here today. I ask that when you consider the provisioning of communications in Indian country, and especially your committee, you remember the inherent right of a governing body of a nation, which I know you promote and envision and continue to support tribal governments and the tribal sovereignty issues that we face daily, not only here in Congress, but in the States and the counties, and the tribal governments that we represent—that the tribes are best able to meet basic needs based on the distinctive cultural heritage. When a tribe is able to adequately fund and provide for these needs, not only does it strengthen the self-determination of our tribes as a whole, it also provides self- esteem and confidence for every tribal member. In the end, both nations, the tribe and America are stronger and connected for the future.

Today, I thank you for hearing us and having me here today providing our comments on behalf of our tribe, and I am able to answer any questions that you may have. Thank you.

[Prepared statement of Ms. McDowell appears in appendix.]

Senator INOUYE. Thank you very much, Chairperson McDowell. Your testimony has been filled with criticism and citing shortcomings of the Federal agencies and Federal laws. If you have any suggestions as to what can be done to improve, for example, the

designation process of eligible telecommunication carriers, we would like to receive them from you.

Ms. MCDOWELL. Yes; I have suggested a number of items within my testimony, specifically to the FCC and others that have actually those authorities to designate what those would be. I think in Indian country, I think most of us, like my company, is very young. It is a young company that does not have the competitive edge. On reservations, it is a lot different providing services as a tribal government versus an individual entity or corporation or company. I am not saying we should be anti-competitive, but I am also saying that we should be looking at the needs of the communities that we are providing service to. Some reservations I am also advocating for do not have those services. So we need to look at those issues. I would suggest that we also look at providing legislation where there would be a set-aside for tribal governments of any sort, whatever size, that decides to take on the responsibility of providing services on its reservation. There needs to be money carved out in all of the communication areas throughout the Federal Government process that provides that service. But I think the tribes need to be consulted.

We have had different groups and entities that have come together that have addressed those issues. They bring you all together to talk about telecommunication needs, but they do not give you any answers or funds or a mechanism to go to actually start that and develop it. A lot of that takes feasibility studies. It takes analysis. It takes all these technology-based performance results to achieve those goals for your tribe. It may not be in the best interests of you as a tribal government to take that responsibility on, but at the same time you should be afforded that opportunity to decide that, based on the needs of your tribal governments. So I would wholeheartedly ask the Senate and Congress to consider a set-aside for tribal governments for development of technology, much like the energy bill that is before you currently, to address the unmet needs of providing basic electric service needs on reservations. The moneys appropriated for that may not be a whole lot, but it is a beginning, and it is something that tribes that want to enter into that new technology can achieve and have resources available to develop their communities.

Senator INOUYE. We will do our best.

Ms. MCDOWELL. Thank you.

Senator INOUYE. And now may I call upon Madonna Peltier Yawakie, the president of the Turtle Island Communications.

STATEMENT OF MADONNA PELTIER YAWAKIE, PRESIDENT, TURTLE ISLAND COMMUNICATIONS, INC.

Ms. YAWAKIE. Good morning, Mr. Vice Chairman and staff members.

Charles Murphy, chairman of the Standing Rock Sioux Tribe was unable to present testimony at today's hearing due to a scheduling conflict. My name is Madonna Peltier Yawakie. I am the president of Turtle Island Communications, which is a 100-percent Native American-owned telecommunication engineering firm providing consulting services to the Standing Rock Sioux Tribe. I have been asked to testify today on behalf of Chairman Murphy.

The tribe welcomes the opportunity to inform this committee of the obstacles that are faced by the tribe in its efforts to improve telecommunications services on the reservation. Census 2000 figures place the average penetration or average percentage of occupied Indian households with telephone service on the reservation at 69 percent. In stark contrast, non–Indian occupied households on the reservation enjoy a 96-percent telephone penetration rate. These figures represent an entire class of people on the reservation who are denied access to emergency medical and police services, educational and economic opportunities, and the ability to communicate with their government. These basic human needs strike at the heart of commitments made by the United States in the Fort Laramie Treaty of 1868. Ironically, it was Federal law that enabled current telecommunications service providers on the reservation the ability to deploy telecommunication infrastructure in a discriminatory manner.

The tribal council is attempting to correct this serious threat to our communities, but we may need the help of Federal legislation. For a period of time, the non-Indian population exceeded the Indian population on the reservation. However, the 2000 census reveals the vast majority on our reservation are now American Indian. The devastation of the allotment policy allowed for non-Indian acquisition of reservation lands. When these non–Indians needed phones, the BIA generously granted right-of-ways to tribal land areas to telephone companies. These telephone systems are financed with Federal resources and-or subsidies, and were establish with complete disregard for the tribe or its members.

There is inadequate 9–1–1 service provided on the reservation. Emergency calls are routed in such a way that they are long distance calls for many of our tribal members. Those tribal members that meet Lifeline eligibility requirements to obtain telephone service are also required to submit a monetary deposit to the local telecommunication company or have toll-blocking applied to their telephone service. When a tribal member is unable to make a deposit for long distance telephone service and due to lack of extended area service between our tribal districts, many of our community members are unable to place calls to the government and service centers. As an alternative, the tribe offered toll-free access to its members to address this problem, but it became too costly to sustain.

Wireless services are typically considered an alternative where wire length services do not exist. However, cell phone service is effectively nonexistent on the reservation. There are only two cell towers located within the exterior boundaries of the reservation, which encompasses 2.6 million acres. One of these towers is located adjacent to the home of and on the property of a board member of one of the telephone cooperatives. Both cell towers are located in areas that limit service quality and reception. In 2001, the council decided to take corrective action and hired an engineering firm to complete a feasibility study and an attorney to draft the regulatory quote. The feasibility study included telecommunications service improvement options and the financing and funding options available for tribal telecommunication development. Telecommunication wireline infrastructure and wireless license holders were documented that serve all communities within the exterior boundaries

of the reservation. Telecommunication right-of-way easements were obtained from the BIA to review their locations and terms of these existing agreements.

Telecommunication network design options were developed, along with their associated costs that would best meet the long-term service needs and economic objectives of the tribe. Financial statements were completed for this project to demonstrate the economic impact of service improvements and employment opportunities within the tribal land area. A draft utilities service code was developed and distributed for comments to the FCC, the North Dakota Public Service Commission, the South Dakota Public Utility Commission [PUC] and the four LECs providing service on the reservation. The North Dakota Public Service Commission held an informal hearing and offered written comments on the code. To the contrary, the South Dakota PUC did not respond to our request for comments. Similarly, West River Telecom, the principal carrier on the reservation, did not provide its comments until after the comment period. Basically, their only comments were that the tribe lacks jurisdiction to regulate them. West River Cooperative Telephone Company also offered comments to contest the tribe's jurisdiction. The LECs have been communicating with State regulators about our draft code, but not with the tribe. The draft code was revised to address the comments we did receive, and we are again soliciting comments on the revised version, which are due later this month.

According to the FCC report released recently on telephone subscribership on American Indian reservations and off-reservation trust lands, the State of South Dakota ranks 27th and North Dakota ranks 24th in telephone subscriber rates when comparing rates with 33 States where American Indian tribes reside. Though Congress clarified in the 1996 Telecommunications Act that tribes do have jurisdiction in this area, the lack of specific guidance in the act has left the FCC with only recent Supreme Court rulings for direction. More legislation is needed that supports tribal authority to regulate and improve wire-line and wireless telecommunication service levels on tribal land. For instance, the FCC has resorted to the Supreme Court's ruling that applies the test developed in the *United States* v. *Montana,* to decide whether a tribe can assert its jurisdiction over non-Indians on the reservation. The result, which has been applied only in the wireless context, is that tribes have been held to have jurisdiction only over carriers to the extent they are providing service to Indians on the reservation, and the States have been held to have jurisdiction over carriers providing service to non-Indians.

While that jurisdictional arrangement may be somewhat workable, yet awkward, in a wireless context, it becomes even more challenging in a wireline context. It creates checkerboard jurisdiction that is subject to change with the transfer of land ownership or with the voluntary submission to tribal jurisdiction. Nevertheless, that is the jurisdictional scheme we are forced to establish in order to address the lack of service and poor quality service on the reservations. The FCC has fallen prey to loose language of the recent Supreme Court decisions that suggest tribes have jurisdiction only over members of the tribe. Despite Congress' effort to correct

that problem with the *Duro-Fix* legislation, any correction in the telecommunication legislation may need to again, at the very least, clarify that tribes have jurisdiction over all Indians on their reservation, and that States should not be allowed to assert jurisdiction just to collect taxes.

As carriers of last resort, telecommunication providers operating on Indian reservations are required to serve Indian people. Without direction from Congress, we expect that the lack of clarity will only make our efforts more challenging to improve services on the reservation. Regardless of these obstacles, the Lakota and Dakota people of the Standing Rock Sioux Tribe deserve the benefits of a modern society and we will not allow jurisdictional opposition to defeat our efforts.

Again, we thank you for the opportunity to testify on this very important issue.

[Prepared statement of Charles Murphy presented by Ms. Yawakie appears in appendix.]

Senator INOUYE. You have come up with a very basic concern of Indian country—who has jurisdiction over what. I have noted your suggesting that maybe we should revisit *Duro.*

Ms. YAWAKIE. Yes.

Senator INOUYE. And to clarify the language so that it will be jurisdiction over everything in the reservation.

Ms. YAWAKIE. That would be wonderful.

Senator INOUYE. We will at the earliest time consider having appropriate hearings here to see if we can work out something.

Ms. YAWAKIE. Thank you.

Senator INOUYE. Because according to your testimony, the problems you are having, some of the high technology that can be made available may be denied your people. So we will do our best.

Ms. YAWAKIE. Thank you very much.

Senator INOUYE. We appreciate your testimony, and we will be submitting questions if we may. Thank you.

Incidentally, I am going to be presiding until we finish, so if you are getting hungry, I think you should have lunch now or wait until later. It might be good for you to fast a little. [Laughter.]

Our next panel is the president of the Turtle Mountain Community College, Dr. Gerald "Carty" Monette; Director of Technology, Affiliated Tribes of Northwest Indians, Seattle, Elsun Lauesen, accompanied by Valerie Fast-Horse, the Cochair of Telecommunications and Utility Committee, Affiliated Tribes of Northwest Indians, Portland, OR, and Director of Management Information Systems, Coeur d'Alene Tribe of Idaho; and Denis Turner, executive director, Southern California Tribal Chairmen's Association of Tribal Digital Village, California.

I was advised that Mr. Turner has to leave right away, so Mr. Turner.

STATEMENT OF DENIS TURNER, EXECUTIVE DIRECTOR, SOUTHERN CALIFORNIA TRIBAL CHAIRMEN'S ASSOCIATION, TRIBAL DIGITAL VILLAGE

Mr. TURNER. Thank you, Senator. My name is Denis Turner. I am the executive director of the Southern California Tribal Digital Village.

The 19 tribal governments in Southern California recently obtained a grant and made a partnership with the Hewlett-Packard Foundation to develop a wireless communication system within the 19 reservation areas. We believe it is a solution for self-sufficiency for strengthening our sovereignties within Indian country. In doing so, I am providing for the record a written testimony of 5 pages. Hopefully, you have received that, Senator.

Senator INOUYE. It will be made part of the record.

Mr. TURNER. Thank you.

I would just like to briefly tell you, though, that if you look beyond the pages that we have provided and that I have mentioned, we have developed a vision of what we think our solution is. We encourage other tribes to look at our model and consider our vision, because we believe it fits Indian country. It leaves no one behind. It brings everybody up to speed in developing their independent, individual tribal communities, systems connectivity to the bigger Worldwide Web, to developing their own community Internet, as well as an intertribal community Internet, as well call our IntraNet.

So I think that this can only be done with using, as we have in our model, the universities, certainly the tribal colleges that we have used, and engineering and developing the architecture of our first-generation of our wireless system. I think that is constantly and always will be changing as the technology and the inventions and solutions come about in the future. I think that is something that all tribes need to keep abreast of and build their depth into.

I want to just kind of briefly tell you about some of the real things that are more tangible that have happened since we have developed our model. I think that we have seen and other tribes will see in Indian country that by setting up our system ourselves, by building our towers, teaching our people to build the towers for broadband wireless, developing shadow projects through TANF people or other programs within the community for social services, to understand the value of the wireless broadband system, and having academies with the young people and showing them the maintenance, the development, to the final product, is something that really needs to happen. If you just build labs and expect our young people to learn telecommunication and what broadband wireless is, then you are leaving that other important part out.

And how we learn this is that we have a charter school on our reservation. I am a member of the Rincon Band, and over the past years we have had a problem of attendance at our charter school. We have 200-and-some kids at a high school on the reservation, but since the development of our program, Tribal Digital Village, the attendance by the Superintendent of Schools in California cited us, and the State addressed for the Superintendent of Schools, that our charter school since we developed our lab and our Tribal Digital Village had a 99-percent attendance rate. That is very tangible. It shows that our kids are learning the system that all Indian kids throughout Indian country need to learn. This is very valuable. So on a page of our report, we kind of give you an outline and a graph of what it is that Tribal Digital Village is doing in terms of resources for Indian students.

I think that the issue that we face, though, is developing sustainability for our systems, because they are forever changing. That is just the nature of wireless and the nature of the IT business, as we have been taught. We were kind of guided by some defense contractors in the architecture of our system for wireless. They were able to teach us that the sustainability of it can only come, though, that if there is an economic structure that holds it up. We are working on that, but we have found out that even through that system, there are, as has been earlier said, the e-rate discount system in which tribes can build their systems and become self-sustaining. That is our goal. It is part of our vision. Unfortunately, I left behind our vision chart. I will supply that, along with a video that we would like you to see and your committee members to see, Senator, concerning our project in more detail.

We were able to develop a video so that we can share it with the tribes throughout the country on how we developed our wireless broadband system. We do believe it is the solution, not because that is—under H–P, they say invent solutions. This truly is a solution that we ourselves are inventing for Indian country, and would all like to invite all tribal leadership and all Senators on your committee for visiting us and seeing what our model looks like. We truly believe that it can help everybody.

You asked the question earlier, our children, our students and our elders have adopted and do want to be part of the Worldwide Web and communications system and support those efforts. Just in closing, I would like to thank you, as a veteran and other veterans, and our Native American veterans, for providing us for the freedom we have, and a safe place to be able to communicate on this earth.

Thank you, Senator.

[Prepared statement of Mr. Turner appears in appendix.]

Senator INOUYE. Thank you very much, Mr. Turner.

When did you establish your digital center?

Mr. TURNER. We obtained a grant in the year 2000, February 2000. We established a steering committee, a backbone committee composed of everybody from the University down to people who were on public assistance.

Senator INOUYE. Do you have this model already established?

Mr. TURNER. Yes, sir.

Senator INOUYE. And where did the participants receive training?

Mr. TURNER. I am sorry, sir?

Senator INOUYE. Where did they get their training?

Mr. TURNER. We developed some training for our students, for our adults, parents, through classes, through training through the University.

Senator INOUYE. You had an arrangement with the University?

Mr. TURNER. Yes; with the University of California. That is where we feed our wireless from, although we are moving from dot.com to dot.org to dot.gov. In doing so, we have to get off their nonprofit status because we are going to economic development. In doing so, we have purchased another system in California for our wireless system so that we can maintain our own wireless phones, our own wireless communication. I really believe it is something that is a solution for tribes in very other isolated areas.

Senator INOUYE. How much did it cost?

Mr. TURNER. The costs in the last two years have been close to $10 million for the last 24 months.

Senator INOUYE. Where did you get the funding?

Mr. TURNER. One-half of those funds came from the Hewlett-Packard Foundation, in the amount of $5 million a year. The other one-quarter of it came from our tribes. They have some new businesses in Southern California and were able to supplant the Foundation grant, which was not a requirement, but they were able to provide that. And then the Indian people that were interested in it provided the other one-quarter, through various companies that are on the reservations, just providing that. One of the greatest things they have done is that every high school student we are having, and you are welcome, too, Senator, on May 29th, high school graduation for 120 Indian high school students in San Diego County, by which they have committed to provide every high school graduate student a laptop computer that is wireless.

Senator INOUYE. Congratulations.

Mr. TURNER. Thank you, sir.

Senator INOUYE. I thank you very much, Mr. Turner.

Mr. TURNER. Thank you, Senator. It is always an honor to be before you.

Senator INOUYE. Now, may I call upon Dr. Monette.

STATEMENT OF GERALD "CARTY" MONETTE, PRESIDENT, TURTLE MOUNTAIN COMMUNITY COLLEGE

Mr. MONETTE. Vice Chairman Inouye, on behalf of the Nation's 34 tribal colleges, which comprise the American Indian Higher Education Consortium, I thank you for extending us this opportunity to testify today.

I am honored to be here. I, too, am a veteran, not a combat veteran, but a veteran during the Vietnam War. I see you on television and I read about you in the newspaper, and I get the opportunity now to say thank you for what you have given to this country and our people. You are a great supporter of Indian people, as are all members of this committee. The two Senators from our State, Senator Kent Conrad and Senator Byron Dorgan are also tremendous champions for Indian people and tribal colleges.

My name is Carty Monette. I am president of Turtle Mountain Community College, located in North Dakota. We are one of the first of five tribal colleges in the country, and this year we are celebrating our 30th year of existence.

In my summary statement, I will cover three areas. First, I will briefly talk about a strategy that the tribal colleges have already used to plan for and to bring new opportunities to our people. Second, I will talk about the new tribal college wireless Internet backbone project. And third, I will provide a few recommendations for the committee's consideration.

Senator Inouye and Senator Conrad, it is neither necessary for me to provide an assessment of the state of telecommunications in Indian country, nor to review the history of the tribal college movement. The two of you and others on this committee probably know best the history of tribal colleges and the struggles that we faced. I will simply say this: American Indian tribal colleges are young,

geographically isolated and poor. The reservation-based tribal colleges are the poorest institutions of higher education in this country.

About 10 years ago, our tribal colleges began to learn about the Internet and the awesome power that information and communication technology has in bridging the boundaries of geography and time. By that time, technology had already become a fundamental component of teaching, learning and research in higher education. Tribal colleges and universities, because of our poverty and isolation, had the most to gain or to lose from this evolution.

But the new technological revolution was largely passing us by, just as it bypassed most of Indian country. We were faced with two choices: Either we could view our communities' lack of access to technology as a digital divide that most of us would never cross, or we could view technology as a digital opportunity. As tribal colleges, we chose the latter. In late 1999, we began a series of steps that would lead to the creation of a dynamic and broad-based strategic plan to guide our effort to join the technology revolution. Our goal was to reach a circle of prosperity, a place where tribal traditions and new technologies are woven together to build stronger and more sustainable communities. We call our plan the Tribal College Framework for Community Technology. It is a framework of strategic partnerships, resources and tools that is helping us to create locally based economic and social opportunities through information and communication technology and use of the Internet.

We developed the plan in five phases, and information all of these are included in the testimony that I have submitted. I hope that the committee members have a chance to review that testimony. We used a methodology called a Prosperity Game—a highly interactive, fast-paced and effective strategic planning simulation developed by Sandia National Laboratory from strategic war games. The game is designed to help create and sustain productive change through strategy development and negotiation. After much planning, we convened a 2½ day Prosperity Game, led by a team of 13 trained facilitators. Participants interacted in and across 11 sector teams to identify challenges and develop policy options and strategies for the coordinated TCU Framework for Community Technology. We included governments, including tribal governments, education, private sector, information technology providers, research and development, and public. Within weeks of the Prosperity Game, we had a series of other meetings to finalize development of a strategic plan. The result by January 2001 was the first tribal college framework for community technology.

In February 2001, the AHEC Board of Directors adopted a strategic technology plan that embodied the TCU framework community technology. With support from the National Science Foundation, NASA, Microsoft Corporation and others, AHEC established a national coordinating office and launched a series of activities representing the initial phase of the framework. Most important to individual tribal colleges was bringing the framework full circle—back to each tribal college through assistance with community-based information technology planning. In addition, AHEC has undertaken a series of regional IT planning sessions to ensure that the framework and all activities that flow from it are responsive to

the specific and evolving needs of tribal colleges. We have learned that planning on this level is a never-ending process. It is a circle of continuous improvement through locally and nationally based assessment planning, implementation and evaluation that is continually repeated.

I refer you to my testimony for more details on our process and outcomes. In the interest of time, I will only mention two outcomes of this ongoing process. First, everyone of the 34 tribal colleges, despite our remoteness, isolation and poverty, has achieved broadband Internet connectivity for our campuses, most through multiple T–1 lines. We have computer labs and we are developing robust and growing distance education programs. This is a significant change from only a few years ago, when some colleges had only one computer with dial-up Internet access. Second, an example of our efforts over the past few years is AHEC's Wireless Backbone Project. To provide high-speed connectivity to remote institutions and our satellite campuses, where laying fiber optic cable may never be cost-effective, Turtle Mountain Community College and two other tribal colleges are piloting state-of-the-art wide-band wireless backbone technology. We are setting distance records in the process.

Last year, Turtle Mountain Community College, established a point-to-point wireless infrastructure ring around our reservation, running from our college site in Belcourt, North Dakota to several locations in other parts of the reservation. In addition, we established a point-to-multipoint access point at the local radio station tower, which provides line of sight access for a 10-mile radius. The system uses commercially available and cutting edge technologies and unlicensed spectrum. It is providing TMCC and some of our local K–12 schools, tribal governments, tribal courts, other tribal offices with excellent broadband connectivity, significant cost saving over the traditional services, and the ability to deliver broadband multimedia capacity and applications that are not currently available to most rural and tribal communities.

Implementing this pilot system was challenging. We had to educate our local community and the tribal government on the initiative and win their support. We had to obtain local permission to mount and install the wireless transmission equipment at the necessary locations. Finally, we had to establish a working agreement with the local public utilities. Without these relationships in place, our initiative would have failed. I am pleased to report, however, that the system has been in place and performing well for several months now. It is cost-effective, easy to maintain, adequate for our needs, and has pushed wireless technology to a level never before attained in the terms of first-mile access.

I would like to close with a few recommendations. I respectfully request that the committee support our existing tribal college programs, and urge you to ensure that funding is available for comprehensive community-based strategic IT planning for tribal colleges and tribal communities. Currently, as we have heard today, little money is available, and what is available is disappearing rapidly. We urge the committee during reauthorization of the Higher Education Act and the Carl Perkins Act to consider establishing specific technology-related programs for tribal colleges. Likewise, as

national security and cyber-infrastructure programs are developed, we urge you to ensure that tribal colleges are included in any legislative initiatives.

In closing, Senator Inouye and Senator Conrad, I am grateful for this opportunity to present our thoughts and recommendations to the committee. The Nation's tribal colleges and universities are committed to working with the Congress, Federal agencies and the private sector to build a bridge of technological opportunities across our vast Nation. Thank you very much.

[Prepared statement of Mr. Monette appears appendix.]

Senator INOUYE. I thank you very much.

May I recognize the gentleman from North Dakota, Senator Conrad.

Senator CONRAD. Thank you very much, Mr. Chairman. I appreciate your courtesy, as always.

Welcome, Dr. Monette. It is excellent to have you. I was actually on your reservation this weekend. I was with the chairman and we were looking at some of the housing issues, as you know, that exist there. I regretted not having seen you, but we were dealing with other issues, so we missed having an opportunity to visit.

I would be very interested in your prioritization of what needs to be done with respect to telecommunications. If you were to say in a couple of sentences what the priorities are—what are the most important things that we could do that would improve telecommunications services in Indian country, what would they be?

Mr. MONETTE. Senator, of course the broad answer is access. We have to strive to bring access to high-speed Internet to all tribal members. But from the tribal college president's point of view, I look at the teaching and learning part of our need. Teaching and learning is enhanced tremendously when our young people and all of our people have access to technology in the learning process. Earlier there was a comment about education and about tribal colleges, but the role that we have at tribal colleges is multi-folded. We have to raise the level of knowledge of technology so that all tribal peoples recognize the need for technology. Then we have to bring that technology to the communities. On many of our reservations, particularly where the reservation-based tribal colleges are located, if it were not for our institutions, there would be no technology there. Our role is to bring access to technology, and then to teach people how to use that technology. So the greatest need, of course, is money. We need to sustain what we have, but we have to be allowed to grow that so that all people have access to technology.

I hope I answered your question, sir.

Senator CONRAD. Excellent answer. Let me just say that I received a letter, and I would like to put this letter, Mr. Chairman, if I could in the record.

Senator INOUYE. Without objection.

Senator CONRAD. It is from Mick Grosz, the CEO and General Manager of West River Telecommunications Cooperative that is located in Hazen, ND. This does not serve your area. It serves the area of the Standing Rock Sioux Reservation. He goes into substantial detail on what West River Telecommunications Cooperative has done to be responsive to the needs in Indian country, and indi-

cates that their number one goal is to provide quality, affordable service. To this end, they have taken a whole series of steps that are in the letter. At the same time, they have kept rates affordable. Local service rates average less than $12 a month. It goes into some detail as to the quality of services they provide on the reservation that are equivalent to the non-reservation areas, and that their level of penetration is very good. They indicate the Indian households' level of penetration is 69 percent. The FCC study on telecommunication subscribership on reservations gives almost an 80 percent penetration rate for all households on the Standing Rock Reservation; 69 percent for Indian households—far higher than what is seen elsewhere in the country.

He concludes by saying this, and he also goes into some detail of things they have done to broaden the area that you can make toll-free calls in response to requests from the reservation. He said that what they do not need is more regulations or mandates. He says, as a member-owned cooperative, West River is very sensitive and responsive to the needs of its member-owners. We do not need more regulations or mandates. The program is available; the cooperative spirit and the willingness to work together will ensure needed services will be available.

Now, this is not your service area, but this is a very clear signal, at least from one member-owned cooperative, that the answer is not more regulations or mandates. Would you have a reaction to that?

Mr. MONETTE. First of all, I think it would be nice if the other cooperatives talked to this gentleman, and I am sure they do. His target, I believe—he is facing a challenge because it sounds as though his cooperative that he leads, their heart is in the right place. They want to do the right thing. But even the numbers that you just read are far short of where they ought to be. There needs to be a way where the cooperatives can survive and grow and show profit and serve their members, so their members get a return on their investment and good quality service in the process, but also pushing them toward raising those numbers for Indian people. I think the letter that you just read, Senator, and the gentleman that wrote it to you, is on the right road. But I think there may be need for more regulations to nudge them forward a little bit, so that they raise those numbers for all Indian peoples in all areas of the country.

Senator CONRAD. I might add in fairness to Mr. Grosz, he indicates that the numbers that I cited were estimates from a 2000 FCC estimate. On March 27 of this year, he provided my office a worksheet that showed the total number of lines that were actually being paid for at that time. According to that worksheet, the actual penetration rate is in excess of 90 percent. So they have clearly done a very good job in that particular area of improving their services. So I would like to enter this letter into the record, and I thank the Chairman.

Senator INOUYE. Without objection, so ordered.

[Referenced document follows:]

WEST RIVER TELECOMMUNICATIONS COOPERATIVE,
Hazen, ND, May 19, 2003.

Hon. KENT CONRAD,
U.S. Senate Washington, DC.

DEAR SENATOR CONRAD: I am writing in response to the hearing on telecommunications services available for the Indian Tribes scheduled for May 22, 2003. I am the CEO/General Manager of West River Telecommunications Cooperative [WRT] headquartered in Hazen, ND. WRT provides service to the greater part of the Standing Rock Sioux Reservation, which is located in North and South Dakota.

WRT strives to provide quality, affordable telecommunications to all people living within its service area. WRT is a member owned cooperative that is governed by an elected Board of Directors. Margins earned through member's patronage are allocated back to that member and returned to that member as capital credits are retired. As a non-profit company, our No. 1 goal is to provide quality, affordable service. To this end, WRT has constantly upgraded its technology to better serve its member owners. WRT has upgraded to all digital switches and fiber in the loop technology. Local number, dial-up Internet is available to every customer. DSL is available to over 80 percent of its customers both on and off the reservation. WRT has accomplished this and kept rates very affordable. Local service rates average less than $12 per month. The Dial-up Internet cost to the customer is $19.95 per month. The DSL, with Internet service included, cost to the customer is $39.95 per month.

WRT has provided service to the reservation that is equal to or superior than that provided to off reservation exchanges. The exchanges located on the reservation were either the first, or among the first, in our system to have digital switches and fiber-in-the-loop technology installed. Local number, dial-up Internet was introduced on the reservation in the same timeframe as the other exchanges served by WRT. DSL is available to people living on the reservation in approximate proportion as it is to the rest of our membership. WRT has made quality, affordable telecommunications available to people living on the reservation. WRT created an expanded local calling area for three exchanges located on the reservation. This was done in response to the concerns of tribal members. With the expanded local calling area, many more tribal members could call agencies and businesses without incurring a toll charge.

WRT has attained a subscription rate on the reservation that is very good. The FCC study on telecommunication subscribership on reservations released on May 5, 2003 gives a 79.9 percent penetration rate for all households [1895 of 2372] on the Standing Rock reservation and a 68.9 percent penetration rate for Indian households [969 of 1406]. These 2000 FCC estimates are far higher than the 1990 FCC estimates of a 46.6 percent penetration rate. But these are estimates. On March 27, 2003 I provided your office a worksheet that showed the total number of lines that were being paid for at the time. According to that worksheet, the actual penetration rate is in excess of 90 percent.

WRT is working hard to improve the penetration rate on and off the reservation. WRT advertises the availability of the Lifeline and Link-up program that is available for low income consumers. We are very active in promoting the Enhanced Lifeline program that is available for people living on the reservation who qualify. WRT has promoted this program through its monthly newsletter. We have also advertised this through the radio and newspapers. WRT has made the appropriate agencies and authorities aware of this program. In addition, WRT has gone to the various towns and districts located on the reservation on 35 occasions to meet with residents of the reservation to promote the program and sign up qualifying people.

I appreciate and share the concern the Senate Indian Affairs Committee has about the provision of telecommunication services to the various tribes. I feel strongly that we have met and continue to meet the needs of the people in our service area whether they live on or off the reservation. As a member-owned cooperative, WRT is very sensitive and responsive to the needs of its member-owners. We do not need more regulations or mandates. The programs available, the cooperative spirit and a willingness to work together will insure that the needed services will be available to the members of the Standing Rock Sioux Tribe.

I appreciate the opportunity to present this letter to you. Please feel free to share this letter with other members of the Committee. I would be willing to meet with you or any member of the Committee, at a time and place of your convenience, to

discuss this issue. Should you desire, I would be available to present this information to the committee.

Sincerely,

ALBERT "MICK" GROSZ, *CEO/General Manager.*

Senator INOUYE. I was signaled by Ms. Yawakie that she wants to say something on this.

Ms. YAWAKIE. My name is Madonna Peltier Yawakie. I appreciate Senator Conrad bringing that letter to light. I represent Standing Rock Sioux Tribe today. Chairman Charles Murphy was asked to testify today and he asked me to take his place. We have submitted testimony for the Standing Rock Sioux Tribe. I think what I would ask you to do is refer to that testimony. Right now, we are working with the tribes to begin to assert regulatory jurisdiction over West River Telecommunications and three other LECs. We are working, not actually with the South Dakota PUC, but we have submitted a utility code to them. They have not responded to the North Dakota Public Service Commission. They have responded, and right now they have that code for a second round and final round of response and comment. So what I would ask you is that we stay in touch with your staff, because this will be an ongoing effort. The Standing Rock Sioux Tribe is at 69 percent, but they have eight districts and that is an average rate, because some of their districts have 58 percent penetration rate. So while the numbers sound positive, there is a lot of work to be done in that area. I would remind you that West River Telecommunications has been serving that area since 1956. When we began our study, their penetration rate was at 52 percent. Substantial money has been used through universal service funds to up those numbers. However, there is a lot of work to be done, and I wanted to bring that to light. We have met with your staff-person as well.

Thank you.

Senator CONRAD. If I could just inquire, in the letter they say the 69 percent rate was an estimate done in 2000 by the FCC. They say that they have since provided my office a spread sheet that shows the actual penetration rate is now 90 percent.

Ms. YAWAKIE. We actually have our statistics as well, and we would be happy to share those with your office. I think that the tribe, after having been—I am from North Dakota, as a matter of fact. I am from Turtle Mountain, Band of Chippewa, and I am a member there. The state of telecommunications at Standing Rock has been notorious. It has been notorious for years. There are things that are going on, that have gone on with some of the reservation. I think this is a complex issue. The tribe sits in two States. We have some specific detail that we would like to talk with you and your staff about at your convenience, and we look forward to that.

Senator CONRAD. Thank you very much.

Ms. YAWAKIE. Thank you.

Senator INOUYE. Are you finished? Thank you, Senator.

Dr. Monette, your opening remarks were rather painful, pointing out that the community colleges are the lowest-funded schools of higher education in the United States. I am well aware of that. As you may be aware, some of us have been working on a plan for

many years now to establish in the United States a university—a university without walls for Indian country. The problem we have at this moment is, where do we locate that university, so that you can set up a medical school; a school of law; a school of social work—all of those specialties that community colleges do not have. Do you have any suggestions where we can go? We would like to have it in Indian country, not here.

Mr. MONETTE. Senator Inouye, you are correct. I am well aware of the concept, and have mixed feelings about the concept. But overshadowing all those feelings and all those positions I may have is the recognition that we need to provide access to higher educational opportunities for all Indian people of all ages. So having said that, we need to find a way to do that. It is not reasonable, I believe, although it is preferable from my point of view to have a tribal college at each reservation. I believe it is not feasible to do that. So we need to look at ways to provide that access. We are well into the 2000's, and we still have too many Indian people who are not enjoying access to higher education.

A couple of things—I think the current tribal colleges and those that are coming forward now provide a unique and excellent opportunity to deliver some of that access. I think technology provides the tool, the vehicle to do that. Even today, several of the tribal colleges are broadcasting courses over the Internet to places all over the world. Within States, several of the tribal colleges are using interactive video, multi-type approaches to technology used to bring teaching and learning to tribal peoples all over the world. So I think that is an important ingredient to this process—the use of technology. Because I think, and I feel that several of the tribal colleges are near that position. They are almost positioned to provide that service on a broad and grander scale.

If we are talking about bricks and mortar and where that ought to be located, I think to have the research and the scholarship available to students in medicine and in law, you need to have a place where that ought to be. That is a tough question. I believe it ought to be in North Dakota, is where I believe it ought to be. [Laughter.]

Senator CONRAD. That is a very good idea. [Laughter.]

Mr. MONETTE. I knew I would have support for that. I think the Upper Midwest, the Great Plains area, where a tremendous amount of Indian people are located, where a lot of history is located both for Native people and for America, and where the reservations are isolated—the poverty, the poorest counties in the country are located in the Upper Midwest. There is a tremendous need for education at all levels. I would like to see if it had to be bricks and mortar up in the Upper Plains area. But I think before we get to that point, we should assure appropriate funding for the existing institutions, which are tremendously underfunded. The reservation-based colleges like Turtle Mountain Community College are operating on an amount that is about half of what a similar mainstream institution would receive. So we are having to operate our programs on that small amount of money, plus also assist the students who for the most part are not academically prepared for college education, so they require a lot of attention. So a lot of our resources to into that effort, too.

So I think multi-faceted answer here—the use of technology, the bringing up of the current funding level for the tribal colleges so they may continue to provide quality education, but looking at the need to provide access to all Indian people in a location I think would be right in the heart of what I call Indian country, and that is the high plains, Upper Midwest.

Senator INOUYE. Thank you very much, Dr. Monette.

May I now call upon Valerie Fast-Horse of the Telecommunications and Utility Committee of the Affiliated Tribes?

STATEMENT OF VALERIE FAST-HORSE, COCHAIR, TELECOMMUNICATIONS AND UTILITY COMMITTEE, AFFILIATED TRIBES OF NORTHWEST INDIANS, PORTLAND, OREGON, AND DIRECTOR, MANAGEMENT INFORMATION SYSTEMS, COEUR D'ALENE TRIBE OF IDAHO

Ms. FAST-HORSE. Good morning, Mr. Vice Chairman Inouye and Senator Conrad.

My name is Valerie Fast-Horse. I am the Director of the MIS Department for the Coeur d'Alene Tribe. I serve as Cochair of the Telecommunications and Utilities Committee of the Affiliated Tribes of Northwest Indians. I would also like to insert that I, too, am a veteran of the U.S. Army and served in Desert Storm, and I have really been pleased to hear the testimony and the tributes to veterans this morning in this room.

On behalf of the Affiliated Tribes, I am pleased to present testimony today regarding the work of ATNI and how we have been able to address the telecommunications needs of our member tribes. While our written testimony provides greater detail about ATNI and the challenges we face, in this morning's testimony I want to highlight some of the positive steps being taken to overcome these challenges.

First, it is important to outline the framework from which we operate. When we speak to the issues of the digital divide, we see four divides and not one. The four divides are in the areas of transport, distribution, access and content. In order to begin to break these barriers, ATNI developed the Tribal Technologies Project. This project is a giant leap forward for many tribes. Most of our tribes do not have the resources, financial or human, to fully utilize and maintain the technology needed to succeed and prosper in the information age. The Tribal Technologies Project is designed to fill that gap by providing technical assistance to tribes through a structured planning process. The work is accomplished within the framework of formal invitations to ATNI EDC, conveyed through tribal council resolutions. These resolutions authorize the tribal technology team to work with local advisory boards and project staff, describes the tribal resources that are there to support the project activities, provides a time frame to complete the work, and specifies expected results from the assessments.

Current initiatives being done within this framework in the Northwest, which we hope will serve as models for other ATNI tribes, includes the following. First, the Makah Tribal Portal Initiative. We see this initiative as a comprehensive solution that addresses both the content and the access issues in the Makah tribal community. The Makah Tribe is the most remote tribe of ATNI. It

is located in Neah Bay in the Northwestern Olympic Peninsula in Washington. The concept is to create locally controlled content and to provide local services as a gateway to the Internet. The use of electronic documents and messaging boards among the households will be used to enhance tribal communications. The development and archiving of cultural content will enhance the use of cultural resources for the tribe. Local news, weather, sports and a local market trading area on the site will increase use and penetration of the technology in many tribal members homes. Because more households have TV's than PC's, the use of set-top devices for TV owners is being tested to increase access to the tribal portal. Another program that is being carried out by ATNI is the Tribal Telephone Outreach Program. This program was developed to address the access issue. It has two outreach advocates who provide training to tribes on telecommunication issues. This includes training on the Lifeline and LinkUp Programs for tribal lands and consumer rights issues. In addition, they have also impacted policy at the local, State and Federal levels. Through written and verbal testimony to the Public Utility Commission, they have contributed to the change of consumer laws in the State of Washington. These changes will make it easier for low-income families to reestablish phone service when old phone debt is an issue, and will protect the rights to privacy for all consumers.

In addition to their outreach work, they also serve on the SEC Consumer Advisory Committee as well. We believe this program is an excellent model that could be replicated in other areas of Indian country. Although this program has helped hundreds of families, it is in serious jeopardy now due to lack of funding.

Another initiative I would like to outline is the Tribal Teleport Initiative. This initiative addresses both distributive and transport issues. The Lower Elwha Tribe acquired property which contains a 300-foot microwave tower and facility. The facilities are part of the old Cold War Alaska Communication System. ATNI is cooperating with Lower Elwha and five other Olympic Peninsula tribes, including Makah, to convert the microwave facility into a teleport site. This site will link the tribes to an open access backbone, NoaNet, through a point of presence owned by the S'Klallam County PUD. There will be a fiber link from the S'Klallam County POP to the Lower Elwha tower. The circuit will then be transmitted to participating communities. The Makah Tribe and others will have a wireless point of presence built that will receive the signal and redistribute it to the end-users PC's and set-top devices. This will allow cost-effective access to be established. The tribes will operate as the content experts and the ISP for the system. Subscribers will pay for their connection at a wholesale rate, plus capital costs and transportation costs estimate to be around $25 per month for the equivalent of a fractional T–1 line.

The last initiative I would like to outline is the Coeur d'Alene Tribe Broadband Initiative. This is a project that is designed to address the transport, distribution, access and content issues on the Coeur d'Alene Reservation. The tribe was recently awarded a $2.78 million community broadband grant from the USDA Rural Utilities Service. Through this grant, the tribe will build a state-of-the-art Tribal Community Technology Center and deploy a wireless

broadband transmission system that will be adequate enough to support the tribal government, public safety personnel, medical facilities, educational institutes, new development and reservation communities. In addition to providing access to free broadband, the Technology Center will serve other purposes as well. We plan to use the center for the tribe's higher education, career renewal and workforce training needs. We have been collaborating with North Idaho College to bring instructor-led courses, online courses and interactive video conferencing courses to the Center. The Center will also be a focal point for e-government activities. We are currently developing a Web portal that integrates government and culturally relevant content together in order to attract users to the Center.

These initiatives represent what ATNI hopes will be a locally empowering solution addressing all of the digital divides in Northwest Indian country. However, in order to continue along this positive path, ATNI also offers the following recommendations.

No. 1, support open access backbones for rural America, such as the Northwest Open Access Network, NoaNet, throughout the United States. The presence of these backbones are similar to the public interstate highway system that links our great Nation together. A fair and equitable subscriber system could support the development of these systems and the interconnect costs to remote communities to be served by them.

No. 2, support landing rights for World Trade Organization telecommunications satellite transponders for Indian country and other underserved rural areas. Intelsat, Telesat Canada, and other systems are capable of serving domestic U.S. markets. These systems could provide redundancy, links to peering services and signal repeating services for remote networks.

No. 3, continue funding and supporting programs such as the Technologies Opportunities Program under the Department of Commerce, and the multiple programs supported through the Rural Utilities Service—projects such as the Teleport project and the Coeur d'Alene Tribe's broadband project simply would not exist without programs like these. RUS provides critical support for tribes. However, the corporate culture at RUS is driven by the utility power and telephone sector. While RUS does excellent work in rural America, there is a need for linking the operations of this corporate culture with the trust responsibility to Indian tribes. On that note, it is ATNI's position that there should be an Indian Desk at RUS.

We also advocate support for the Economic Development Administration. EDA has been a dependable friend of rural America and Indian country throughout the years. EDA is a public partner in the assessment work currently being conducted by ATNI EDC. These programs provide important investment funding for public projects that help build the capacity of our Nations. However, we are finding out that much more work still needs to be done.

No. 4, in particular we are requesting the support of this committee for a proposed congressionally sponsored appropriation specifically targeting the work of the Northwest Tribes, which is intended to support projects much like those described earlier throughout Northwest Indian country. This funding would dovetail the assess-

ment and planning work being sponsored by private foundations in the Northwest over the next 24 months.

Finally, in relation to homeland security, we urge this committee to be mindful of the unique opportunity for Indian country to support the security of our Nation. Indian nations are often inholders within the vast tracts of wilderness and federally managed areas that are potentially vulnerable to infiltration by terrorists, smugglers, and other criminal agents. We are co-managers with Federal agencies in many areas, including fisheries, water resources and environmental management. Native Alaskans served on the technological front lines of America's Cold War, engineering and operating the district early warning sites along coastal Alaska. Native Americans have served this Nation with distinction when called upon to do so. In this context, the Cold War era microwave tower at Lower Elwha closes that loop of history in these challenging times. When this remnant of the Cold War is converted for peaceful uses of our tribes, it may yet perhaps be a service to the domestic security of our Nation. The Office of Homeland Security does recognize the government-to-government relationship between the United States and federally recognized tribes. In this connection, we urge the committee to ensure that there will be a strong role for tribes as that office shapes its strategic thinking and the deployment of our Nation's security resources.

Thank you for this opportunity to come before the committee and thank you for your diligence on behalf of the Northwest Tribes.

[Prepared statement of Ms. Fast-Horse appears in appendix.]

Senator INOUYE. Thank you very much, Ms. Fast-Horse. In your closing remarks, you mentioned the Tribal Teleport Initiative. I believe you have an application with the Commerce Department's TOP program? I am certain you have heard that the Commerce Department and the President do not recommend funding for this program. Do you have any alternative sources for funding?

Ms. FAST-HORSE. I am sorry. I am not sure that—it seems to me like the only alternative sources we have in Indian country are the philanthropic efforts of private foundations, but that takes a lot of work in educating them in what the issues are to Indian country. I do not know. I am not sure what other——

Senator INOUYE. In other words, this committee must do something to overcome the President's proposal.

Ms. FAST-HORSE. Yes, sir.

Senator INOUYE. We will do our best.

Ms. FAST-HORSE. Thank you.

Senator INOUYE. Your statement has been extremely helpful. We will be sending you questions, if we may, on other specifics.

Ms. FAST-HORSE. Yes, sir.

Senator INOUYE. You are doing a good job there, and incidentally my first visit to a tribe as chairman of this committee was a visit to Makah.

Ms. FAST-HORSE. You are aware of the remoteness of the Makah Nation.

Senator INOUYE. It was not one of my most pleasant, because—[Laughter.]

I was in an aircraft in a storm, and they have an air base about the size of this room. [Laughter.]

But I landed. We left the Makah reservation by car. [Laughter.]

Senator INOUYE. It is safer that way.

Do you have any questions?

Senator CONRAD. No additional questions, Mr. Chairman.

I would like to just say a word of thanks to you for, first 1, your holding this hearing, along with Chairman Campbell, and most of all your extraordinary patience and willingness to listen. It is deeply appreciated throughout Indian country.

Senator INOUYE. You are very kind. Thank you.

Thank you very much, Dr. Monette. And now our next panel is: Cora Whiting-Hildebrand, member of the Oglala Sioux Tribal Council of Pine Ridge, SD; the vice president of Regulatory Affairs of the Western Wireless Corporation of Bellevue, Washington, Gene Dejordy.

Ms. Whiting.

STATEMENT OF CORA WHITING-HILDEBRAND, OGLALA SIOUX TRIBAL COUNCIL MEMBER

Ms. WHITING-HILDEBRAND. Thank you, Mr. Chairman.

My name is Cora Whiting-Hildebrand. I am a member of the Oglala Lakota Tribal Council. On behalf of President Yellow Bird Steele, the Oglala Lakota Tribal Council and the Oglala Lakota people that we serve, I appreciate the opportunity to appear before you today. We have a good story to tell here. I submitted testimony for the record and I will summarize.

Reliable and affordable telephone service is essential for all Americans, including those Americans on the Pine Ridge Reservation. Eighteen months ago, only 30 percent of the homes on our reservation had telephones. This service was wireline and the provider did not make the reservation-based consumers aware of Lifeline or LinkUp assistance available to them. At $38 a month for basic services, with an average reservation household yearly income of $3,500, this meant 13 percent of the average household income was spent just to have a phone line. In other words, if a family in Toledo was making a household income of $40,000, by comparison they would be paying $433 a month for basic service. We are happy with Western Wireless and the competition. It is good to have LinkUp and Enhanced Lifeline universal service fund access. Ninety-nine percent of the Western Wireless subscribers on our reservation qualify.

Next, Congress and the FCC must respect our sovereign authority. We know our need. We know our numbers. We know ourselves. We do not trust with good cause that our use of Lifeline and LinkUp assistance would have occurred without the competition created by Western Wireless Services. We would appreciate advice and assistance from the appropriate parties in educating ourselves about wise and responsible use of our regulatory, financial and service options.

In conclusion, the Oglala Lakota people are happy with Western Wireless service. We know that without Western Wireless having eligible telecommunication carrier status, our mutually beneficial services would not have been possible. Before I finish, I want to give you an example of why the Oglala people are happy with Western Wireless. There are two sisters who live in my district,

which is the Pejuta Haka District. They live about 20 miles out of town, right on the edge of the Badlands. They each have their own little one-bedroom houses. They have no electricity, no running water, and they use wood stoves to heat and cook. They have one old pick-up that they share. They use to haul wood and everything. They have never had a telephone in their whole lives. But now, they both have cell phones due to Western Wireless, and that keeps them connected to their doctors, to their family, to the tribal government, and it gives them 9–1–1 access if they ever happen to need it.

With that, I would like to say thank you for allowing me this opportunity, and I will be happy to answer your questions if I can.

[Prepared statement of Ms. Whiting-Hildebrand appears in apppendix.]

Senator INOUYE. Ms. Whiting, I thank you very much for your testimony. It has been extremely helpful.

May I now recognize the gentleman from South Dakota, Senator Johnson.

STATEMENT OF HON. TIM JOHNSON, U.S. SENATOR FROM SOUTH DAKOTA

Senator JOHNSON. Thank you, Senator Inouye. Unfortunately, I have been tied up with an Appropriations Committee hearing this morning. We are dealing with a lot of rural issues in that regard, so I had to excuse myself from here. But I did want to make a particular point of dropping by this morning to welcome Councilwoman Cora Whiting-Hildebrand to the Indian Affairs Committee. Cora is one of nine councilwoman, now one-half of the Oglala Sioux Tribe Council on the Pine Ridge, and providing extraordinary new leadership for the OST. I am just so very pleased that she could join us here to share insights that she has relative to telecommunications. Cora wears a lot of hats. She provides leadership in many different respects, but in this particular one I appreciate all that she does relative to telecommunications in our part of the country. Particularly in Indian country, telecommunications is not a luxury. It is not just a matter of economic opportunity. It is a matter of public safety. So it is so important that we have high quality, affordable, reliable telecommunications capabilities in Indian country. I have a very high regard for Councilwoman Whiting-Hildebrand's experience, her insights on what has worked well and what has not worked well on the Pine Ridge, and I am grateful for her leadership. I just wanted to make a special personal welcome to her. I saw her the other day at a committee hearing as well, but I did want to stop into this hearing to express my thanks for her leadership on the telecommunications issues in particular.

Thank you, Mr. Chairman.

Senator INOUYE. What can I say beyond that? Thank you very much.

Mr. Dejordy, I do not think you need to testify. She has done it for you. [Laughter.]

STATEMENT OF GENE DEJORDY, VICE PRESIDENT, REGULATORY AFFAIRS, WESTERN WIRELESS CORPORATION

Mr. DEJORDY. No kidding. I do not know what else to say here. But Senator Inouye, Senator Johnson, I appreciate the opportunity to appear before the committee and further expand upon Cora's statements with respect to Pine Ridge.

I think what is noteworthy is that Pine Ridge is an exciting and real-world story of how we can bridge the telephone divide as well as the digital divide in Indian country. What it represents is how a tribe and a private sector company can work together for the benefit of Native Americans, and how government can make a difference in the lives of tribal members on reservations, as well as the value of a competitive universal service system and how it translates into significant consumer benefits.

Let me just briefly touch upon each one of those subjects. In terms of the tribal and private sector cooperation that took place here, it all started several years ago with a vision by the Oglala Lakota Tribe that they wanted to enhance their lives, they wanted a better telecommunications system. And together, Western Wireless and the Oglala Lakota Tribe worked to address those issues. We put aside any preconceived notions of how the system should work, how the arrangement should be structured. We sat down with each other and tried to work out what would be the best arrangement for both the tribe and for Western Wireless. In the end, that culminated in the Tate Woglaka service agreement, which we had a signing ceremony here several years ago before you, Senator Inouye.

I think it is important to recognize that every tribe and their telecommunications needs are potentially unique and may require a different solution. There are tribally owned telephone companies that are doing a very good job; there are some telephone companies that are not from reservations and are serving reservations. And then there are some tribes like the Oglala Lakota Tribe who have developed a cooperative arrangement with Western Wireless, and that has served their needs well. The point, I think, is that the tribes should decide which approach best meets their needs and be able to count on the government and the private sector to assist them. That is what we tried to do in this arrangement here.

Next, I would like to just touch upon how the Government can make a difference. The Pine Ridge story would not have been possible but for the FCC assuming jurisdiction in granting ETC status to Western Wireless for the purposes of universal service on the reservation itself. Universal service was the form of funding that was available to us to build out the network and the infrastructure on the reservation, which prior to us doing that there essentially was no wireless services on the reservation and very little wireline service.

This raises, however, an important issue that needs to be resolved. Currently, the law is not entirely clear as to whether the FCC or the State commissions have jurisdiction over the designation of eligible carriers on reservations. In the Pine Ridge case, the FCC did a commendable job in resolving the jurisdictional issue in expeditiously granting ETC status within nine months. In our experience with being an ETC in 14 States and on the Pine Ridge

Reservation, that was the quickest process that unfolded in getting us into the market.

However, the jurisdictional uncertainty in the regulatory process can and does create a barrier to competitive carriers seeking to obtain ETC status on reservations. Therefore, we would recommend that there be some clarity to the section 214(e)(6) process that makes it clear that the FCC, in consultation with the tribes, has the authority and the jurisdiction to address ETC applications on reservations. What I would like to stress is that Western Wireless agrees that tribal support for an ETC application should continue to be a prerequisite to any carrier seeking to provide service on the reservations, whether that is a competitive carrier such as ourselves or the incumbent carrier. That is certainly what we did in this process before we even tried to obtain eligible status on the Pine Ridge Reservation. We worked with the tribe and obtained their full consent, as well as subjected ourselves to the jurisdiction of the tribe in terms of addressing service-related issues that may arise.

The next point I would like to address is really the value of competitive universal service on Pine Ridge. The importance of this form of funding that is available to most tribal-owned telephone companies, as well as competitive carriers who want to serve reservations. It is really the mechanism that is in place for companies like Western Wireless to obtain the funding necessary to build out an infrastructure and serve the reservation. Prior to our entry into this agreement with the tribe, we had one antenna tower that partially served the reservation, and then after we entered into this agreement, we constructed three additional towers on the reservation and essentially have ubiquitous service throughout the reservation. Recently, it has come to our attention there are some areas of the reservation where there are gaps in coverage, and we are addressing that issue by constructing additional antenna facilities on the reservation.

As Cora mentioned in her testimony, prior to our entry into the market, telephone penetration rates were about 32 percent. It took long-distance calling to call many communities from within the reservation, from one community to the another community on a reservation. The incumbent telephone company was not terribly responsive to the needs of the tribal members, as Cora mentioned. After Western Wireless entered into the market, the penetration rate has now increased to approximately 70 percent, if not more. We have implemented local calling area for the entire reservation, as well as Rapid City. All of this was very much based on us sitting down with the tribe and identifying what their needs were and implementing a system that addressed their needs. I think oftentimes, a telephone company which could be competitive carriers, they may enter a reservation and may not necessarily consult the tribal government to determine what the reservation needs were. That is not what we did, and I think in the end the tribal citizens are better off for it. They have 9–1–1 service today. In fact, they have a more responsive incumbent telephone company. So it is not just us that providing our service on the reservation, but it is also true that the incumbent service provider that has gotten better at what it is doing.

In sum, I would just like to stress that Pine Ridge is a success story. I think it can be duplicated with the right Government policies. I thank you for the opportunity to testify.

[Prepared statement of Mr. Dejordy appears in appendix.]

Senator INOUYE. Thank you very much.

In prior testimony by other witnesses, they noted that the designation process for ETCs may be very difficult, but you found yours to be rather expeditious and easy.

Mr. DEJORDY. Yes.

Senator INOUYE. To what do you account for the difference? The others were tribal organizations. Would you say they were lacking in experience?

Mr. DEJORDY. This is the FCC? Yes, that was a big issue when we first presented the application. The threshold question that the FCC has to answer is whether they have jurisdiction. There is a question in the FCC's mind as to whether they have jurisdiction over a carrier that would seek to be an ETC just on the reservation, not counting areas outside of the reservation. The FCC has developed a legal process that they would undergo to determine whether they have jurisdiction. It is not entirely clear what the outcome would be of that jurisdictional analysis. In the context of Pine Ridge, it worked out, but it was a very painful process that, to the FCC's credit they went through it incredibly quickly and did it at the same time that they granted our ETC application. But I do not anticipate that that is the normal course of events, so when I suggest that there is clarification to the 214(e)(6) process, I think that would solidify the FCCs jurisdiction and then they would not have to undergo an jurisdictional analysis to decide if they even want to hear the application.

Senator INOUYE. We will look at your recommendations and I think we can work out something.

Senator Johnson.

Senator JOHNSON. Just briefly, Councilwoman Whiting-Hildebrand—I am not supposed to say Cora, I guess, here in a formal setting—but one of the facts of life across much of the most rural parts of South Dakota, as you well know, is that cell phone coverage, we have a lot of gaps in places where there just is not a signal. Do you feel pretty comfortable that we are making good progress in the Pine Ridge in filling in those gaps so we have a very continuous level of coverage no matter where you might be on the Pine Ridge?

Ms. WHITING-HILDEBRAND. Yes; they work pretty much all over the reservation, and actually I have a cell phone with Cellular One out of Rapid City, and my husband has a cell phone through Western Wireless. His phone works in more areas than my phone will. The only place that neither of our phones will work is in Yellow Bear Canyon, and probably because it is in a canyon.

Senator JOHNSON. Well, you get in a canyon, yes, you get into the Black Hills or into some of those canyons and you are going to have some trouble, no doubt. But you feel, particularly because of our concern about 9–1–1 signals and things like that, it is important that people can be sure that their signal can get across.

That brings me to the other point. When we began to adopt 9–1–1 through South Dakota through a lot of our rural areas, one of

the first issues we had to deal with is an awful lot of people did not really have an address per se. As we went through voter registration and so on on the Pine Ridge last year, we discovered that was one of the hurdles we had to kind of get over because a lot of people had a box number, but not really an identifiable location number. How are we dealing with that on the Pine Ridge so that the 9–1–1 really works so we can get rescue help to people when they really need it?

Ms. WHITING-HILDEBRAND. Well, our dispatchers and our emergency service people, the ambulance drivers and police officers, they have maps posted and they go by BIA highway numbers, and just basically landmarks of where people live. After an officer has worked in the district for awhile, they usually figure out where people live.

Senator JOHNSON. There is nothing quite like using local people and people who are familiar with the communities to really make that work. I think that is interesting. I really commend the tribe for what it has done. I think that is a huge new enhancement of safety and quality of life for a lot of people to have that option in the event that they have got anything from a car accident to a heart attack that they can get immediate attention.

I appreciate your observations as well that this is not just a matter of technology. It is also a matter of implementing technology in a way that honors the sovereignty of the tribe, and it is done in a very closely consultative manner. I wish that all the things the Government did was as consultative, but I applaud your work in that regard.

With that, Mr. Chairman, that is all the questions that I have.

Senator INOUYE. Thank you very much. I would like to thank Cora Whiting-Hildebrand, and Mr. Dejordy—thank you very much.

Ms. WHITING-HILDEBRAND. Thank you.

Mr. DEJORDY. Thank you very much.

Senator INOUYE. And now the final panel: the managing director and vice president of Privacy Council Inc. of Washington, Roanne Robinson Shaddox; the CEO and general counsel of the Montana Independent Telecommunications Systems, Mike Strand; the chief information officer of the Tohono O'Odham Nation—executive branch, Ben H. Standifer, Jr.

Ms. Shaddox.

STATEMENT OF ROANNE ROBINSON SHADDOX, SENIOR ADVISOR/EXTERNAL RELATIONS, PRIVACY COUNCIL

Ms. SHADDOX. Thank you, Mr. Vice Chairman Inouye and distinguished tribal leaders and guests.

My name is Roanne Robinson Shaddox, and I am managing director and vice president of the Privacy Council, and the former chief of staff of the National Telecommunications and Information Administration. I am also a founding board member of the Native Networking Policy Center and a member of the Hopi Tribe of Arizona.

Thank you for the opportunity to provide my personal observations on the important role of the Federal Government in addressing telecommunication needs in Indian country. During my 6 years with NTIA, I primarily worked on efforts to close the digital divide.

As the most senior Native American involved in telecommunications policy development for the Clinton administration, I tried to ensure that Indian country was included in these important efforts.

At the outset, a key priority was educating Federal officials about the need in Indian country and bringing tribes and tribal organizations into the fast-moving telecommunications debate. Toward that end, we held the first of a series of public field hearings in Albuquerque, NM so that senior Commerce, NTIA and FCC officials could learn first-hand about the lack of service on tribal lands. For many people, they had never heard that tribes and Indian people did not have phone service, so it was very educational.

We also successfully pushed for the appointment of a Native American to the first White House National Information Infrastructure Advisory Council that, too, held a hearing focused on Native issues. In addition, we worked to increase tribal access and awareness about the TOP program that you have heard a lot about today, and alerted the BIA officials about the new e-rate program which today is credited for connecting most BIA schools to the Internet.

We also prominently highlighted Native issues at our major conferences on universal service, which further helped to bring the issue of the digital divide to the mainstream attention. Most notable, however, were our efforts to include data on the status of Native American household connectivity in our landmark Falling Through the Net reports. These reports received widespread national media attention, and with the President's call to action, helped to spur a wide range of public and private sector initiatives, including those by AOL, Microsoft and others, that helped to target the Indian communities' needs. I think these efforts also should be credited for helping to finally spur the FCC into action, which up to that point had not paid much attention to Indian issues.

As a small agency, we had very few resources in which to do this. However, I mention these accomplishments because they demonstrate the powerful role that the Federal Government can play on issues of national importance. As tribes transition into the digital age, we need the Federal Government to continue to help in several important ways. Policy advocacy is one of those. With the rapidly changing telecommunications policy landscape, now more than ever tribes need an advocate within the Executive Branch to ensure that their voice is heard in major policy debates when possible ideas to create an office within NTIA or even to reestablish the Department of Commerce Indian Desk to monitor and advocate tribal interests on a wide range of policy issues, both inside and outside the agency.

There are several such hot issues today, ongoing debates about universal service, broadband deployment, wireless and unlicensed wireless technologies, and the future of radio spectrum management. We also know that with the move to e-government, issues such as privacy and security in the online environment are going to be very important to tribal communities.

We also need more Federal coordination. I think that we all know that. This is needed to improve tribal investments or Federal investments on tribal land. These existing projects that occur today

throughout all the Federal agencies with all these different programs need to be further examined, better coordinated, and we need further information about them so that this information can be widely shared to avoid other agencies; reinventing the wheel. For example, I recently heard that over at HHS the Public Health Service is making Internet access in their clinics a number one priority, and how is this type of initiative being rolled out and going to impact other projects that might be going on over at IHS?

As you have heard overwhelmingly today, the Federal Government must continue to provide funds for tribal connectivity efforts. Programs such as TOP must be retained and fully funded to meet the strong demand not only from tribes, but from States, universities and other nonprofits. As we have heard today, TOP has played an important role in bringing these technologies to tribal communities, and can also play a very important role as these communities look to improve emergency communications in response to the war on terrorism.

Also, as you have heard today, besides NTIA's TOP program, there is the PTFP program. There is also EDA's technical assistance and public works programs, and the Department of Education's CTC programs. I respectfully disagree with the Bush administration in thinking that these programs, specifically CTC and PTFP and TOP, have exceeded or met their mission. I think the need has been very well established today that these programs need to be retained and fully funded.

I think these programs also become vitally important as we look at the FCC's June 2 vote on media concentration. The argument has been made that with the advent of the Internet and access to those technologies that why do we need to have diversity of media ownership. So I think if we are going to be in a world of further concentration, that having access to other alternative resources or sources for news and information on local events is very important for tribal communities.

The guidelines and requirements for these programs should be periodically reviewed to make sure that they do not impede tribal participation, and timely reports very much need to be published on these projects, especially those that can serve as other models. We have also heard a lot about data collection. I cannot underscore the importance of the Federal Government engaging more and getting good baseline data for our communities. Only through good baseline data are we going to know how to best target policies and programs that can serve the needs on tribal lands. I believe that increased funding actually may be required for NTIA's next Nation Online survey to ensure that reservation households are adequately addressed in that data collection effort.

I think finally what we have also heard a lot about today is that the FCC continues to need to build and strengthen their relationship with tribes and tribal organizations. Although tribes are on their way toward building a solid dialog with the FCC, we have many, many tribal communities that do not have the resources or expertise or the time to engage in formal Commission proceedings. My fear is that this could be misconstrued that tribes either are not interested or that they are not affected by all the issues that are before the FCC today. So the FCC should be encouraged to con-

tinue its dialog with tribes and find new ways to ensure that tribal views are heard and addressed at all levels, particularly on these tough jurisdictional issues.

Moreover, the FCC should dedicate more resources to do effective consultation, enforce the universal service and build-out requirements of telecommunication providers that serve tribal lands, as well as to perform further outreach to Native American consumers about the Lifeline and LinkUp Programs, among other things. I also think the letter that Senators Daschle and Johnson and Baucus sent to the FCC recently asking them about these types of activities is very important in terms of seeing more oversight of these programs. They need to know that you are interested and that you care, and certainly this hearing today does that.

In conclusion, the Federal Government must continue to play a strong role in support of tribal connectivity efforts. I urge the committee to take the steps necessary to protect and promote Federal programs and policies that best address the communication needs in Indian country. Only through your leadership will our communities soon enjoy true universal service and the wide range of benefits that come with today's technologies.

Thank you again for the opportunity to testify, and I look forward to your questions.

[Prepared statement of Ms. Shaddox appears in appendix.]

Senator INOUYE. Thank you very much, Ms. Shaddox. I was just reminded that on my visit to the Hopi Nation, I met your mother, Mrs. Robinson.

Ms. SHADDOX. Thank you. Thank you.

Senator INOUYE. You have had experience with NTIA. At the present time, do the Native Americans have any voice in the activities of NTIA?

Ms. SHADDOX. Unfortunately, I think very little today. I do not think it is a lack of interest as much as that it is a very small agency with very limited resources. Unless you have somebody there all the time basically nagging them about Indian issues, it is very easy to get caught up in some of the big debates that are being driven by much larger interests and lobbies. I think that is why, I know when I was there a lot of my work was just going and trying to educate—who are Indians, that they do exist, about the government-to-government relationship, and then educating them, trying to get good information to them about the status of access. I think everybody in this room who encounters folks at these agencies or working with the larger non-Indian community, you find most people today still do not know that there are a lot of folks that do not have a basic telephone in their households. So the education process has to be continuous. We tried to, and we did successfully get an Indian desk in the Office of the Secretary. That unfortunately no longer exists. I think as we have heard at other agencies, it takes someone in there working day to day, side by side with these professionals to keep Indian interests at the forefront.

Senator INOUYE. Does the White House have any Indian voice?

Ms. SHADDOX. Not to my knowledge. I believe there is somebody in that area responsible for Indian affairs. My guess it is in the intergovernmental affairs area of the White House, but I have not heard of any major outreach.

Senator INOUYE. Do you believe that the so-called consultation carried out by Federal agencies with Indian country meet the intent of the law?

Ms. SHADDOX. I am not sure exactly which law. I do not think it meets the intent of the full trust responsibility in government-to-government relationships. As we all know, consultation is an extraordinarily difficult process to do, particularly if you do not have any resources to conduct that. I think that is why a lot of agencies turn to organizations like NCAI, hopefully the National Tribal Telephone Alliance and others, to get the word out about programs and issues, and to get feedback. I think if you look at the BIA's consultation policy, it looks great on paper, but trying to execute that without significant resources to do so is difficult. Then, we are hindered by the fact that only until recently have all the tribes actually gotten fax machines. So if you want to alert them to information that they may have an interest in, we have gotten to that point. We need to get tribes and communities connected so it can be a seamless instantaneous communication process back and forth.

Senator INOUYE. Thank you very much, Ms. Shaddox.

Mr. Strand.

STATEMENT OF MIKE STRAND, CHIEF EXECUTIVE OFFICER AND GENERAL COUNSEL, MONTANA INDEPENDENT TELECOMMUNICATIONS SYSTEMS

Mr. STRAND. Good afternoon, Vice Chairman Inouye. Thank you very much for having me. For the record, my name is Mike Strand. I am the CEO and General Counsel for Montana Independent Telecommunications Systems, that represents telephone cooperatives operating across Montana. I am also the CEO and General Counsel for an organization called iConnect Montana that builds neutral co-location facilities and data centers across Montana. I am a member of the Governor's blue ribbon Telecommunications Task Force, a long-time member of the 9–1–1 Advisory Council and a founding board member of the Yellowstone Regional Internet Exchange, which provides the only Internet peering point in the Great Plains region.

I would like to thank the committee for allowing me this time to offer my observations with respect to basic and advanced telecommunications services to Native Americans. I represent seven small telephone companies operating in Montana. They range in size from about 1,600 lines to about 10,000 lines. Their service areas include all or part of five reservations—Fort Peck, Fort Belknap, Rocky Boy, Blackfeet, and Crow. These rural telephone companies are not tribally owned. However, several of them are cooperatives, so their subscribers on the reservation are owners of the cooperatives, along with the other cooperative members.

While the policy of the companies I represent is to offer the same quality of service on reservations as we do off the reservations, it is nonetheless true that the reservation areas pose a number of unique challenges to our operations. First, our most current information is that the average per capita income on the reservations we serve is less than $10,000 per year, and unemployment is often greater than 30 percent. The Enhanced Lifeline Program that

makes local service available for $1 per month helps the poorest get service, but most still have difficulty paying long distance charges or paying for more advanced telecommunication services like high-speed Internet access.

Second, many residents, particularly among the elderly, speak primarily in their Native language and we cannot assume fluency in English. This creates certain challenges from a customer service standpoint. Third, there is often a pervasive mistrust of programs and projects offered on the reservation by non–Indians. Therefore, we have met some initial resistance even to programs like the Enhanced Lifeline Program I mentioned earlier. And then fourth, finally and perhaps most importantly, we acquired much of the reservation areas we serve from the local Bell company in 1994. When we acquired those areas, we found that the telecommunications facilities were antiquated, lacked adequate capacity to handle calling volumes, and had not been deployed to many homes or businesses. Therefore, subscribership among Native Americans in those areas was as low as 50 percent at the time we acquired them.

Faced with these challenges, we were forced to come up with a number of different strategies to improve service and boost subscribership. I would like to outline some of these strategies for the committee because I think they are instructive for any company, tribal or otherwise, seeking to improve service in reservation areas. Then I would like to identify three areas in which we believe further improvements can be made.

The example I will use is Project Telephone Company, which serves most of the Crow Indian Reservation in Southeast Montana. Project's experience is representative of the experiences of the other companies I represent. Our first challenge upon acquiring the Bell company's facilities on the Crow Reservation was to reengineer the physical telecommunications network so that it was not only capable of serving all of the residents, but also capable of providing the full range of basic and advanced telecommunications service. We found that the calling traffic capacity of the Bell company's old copper lines was exhausted in many areas, and that switching equipment was old analog equipment. There was no way for us to improve subscribership without installing new copper lines with greater capacity, as well as a certain amount of fiber optic cable to handle increased calling traffic. Further, there was no way for us to offer advanced services like high-speed Internet access, voice mail, caller ID, call waiting, call forwarding, et cetera, without converting the antiquated switching equipment to digital equipment. This required an investment of over $2 million on top of the price we had to pay for the Bell company system.

The reason I emphasize this point is that those companies, tribal or otherwise, must identify who they intend to serve, where those people are located, as they construct their networks and their capacity in order to adequately handle calling volumes. Further, they need to identify up front what kinds of services they intend to offer, so the correct technology platform is built that can deliver those services. We intended to offer not just voice services, but also high-speed Internet and video conferencing services to the Crow, so we upgraded using wireline technology, fiber optic technology, coupled with digital switching.

In addition to the Bell company's facilities being antiquated, they simply did not reach a large segment of the population. Our understanding was that the Bell company's construction policy required a substantial financial contribution from the individual customers before lines would be installed to their homes or businesses. We were told that many customers did not have service because they could not afford to pay the thousands of dollars the Bell company demanded in construction assistance before it would install phone lines to rural customers. To boost subscribership, we established a policy under which any customer that was within one mile of our lines could get service without construction charges. Nearly every resident of the reservation was within this distance, so construction charges pretty much became a non-issue. In order to address the language and suspicion barriers, we hired Crow-speaking customer service representatives and field technicians to do our hookups. We also appointed a tribal member to our board of directors to help determine tribal policy.

While all of the measures I mentioned boosted overall subscribership, we found that we were seeing a significant number of reservation residents dropping service due to an inability to pay long distance charges. At the time we acquired the reservation areas, calls between the telephone exchanges on the reservation and between the reservation exchanges and the nearest large community were long distance charges. So for that reason, we petitioned the Montana Public Utility Commission to expand the local calling area so that all the exchanges on the reservation could call each other as local calls and not toll calls, and so they could also call the nearest large community as a local call without toll charges. Although that process was long, as regulatory processes often are, and it took us almost two years to accomplish this, we were successful, and now calls between all of the reservation communities and the largest city in Montana are local toll-free calls.

As the 2000 census shows, all of these efforts enabled us to boost subscribership among the Crow from around 50 percent to 87 percent. Our subscribership has continued to grow since 2000 due in no small part to the Enhanced Lifeline and LinkUp programs that make local service available to qualifying Native Americans for a dollar per month. We advertise the programs very aggressively on the Crow Reservation, and our customer service representatives contacted individual residents on a house-to-house basis to foster further awareness of the programs. Of the 1,400 residential lines on the Crow Reservation, 591 or 41.8 percent of the Crow residents are now on the Enhanced Lifeline Program. We believe that we are one of the most successful companies in the Nation in promoting the Enhanced Lifeline Program.

In addition to the improvements to voice services, we also made dial-up Internet access available to all customers on the Crow Reservation. We have made high-speed Internet access using DSL technology available to two-thirds of the tribal members. Finally, we have installed fully interactive video conferencing studios in the tribal college and in the K through 12 schools, so students are able to share teaching resources with other schools across the country and across Montana.

All in all, we believe we have made remarkable progress in making available basic and advanced telecommunications services to the Crow Reservation. However, there are still a few areas that remain troublesome. First, while we have been able to alleviate some of the problems with long distance charges by expanding the local calling area, many residents still find themselves with large long distance bills for calls made to areas outside that local calling area. When those bills become unaffordable, we find some residents simply disconnect their service. Second, while we have made broadband access available to the Crow Reservation, we have not yet seen great demand for those services. In part, we believe this is because of the economic conditions on the reservation, which simply prevents people from purchasing the service. We also believe that many residents of the reservation simply do not yet see why such access is relevant to their day-to-day lives. Our hope is that young people who use broadband services in the tribal college and K through 12 schools will over time create greater demand for similar services in the reservation's homes and businesses.

Finally, there is a wrinkle in the FCC's rules regarding the distribution of universal service support for companies serving the reservations. Currently, if a competitor comes to the Crow Reservation and is designated as an ETC and are able to receive universal service, that competitor receives funding based not on their own costs of providing service, but on our costs. This creates a kind of catch–22 dilemma for us in so far as the more we invest in services on the Crow Reservation, the more funding becomes available to our competitors. For the first time, our board of directors and management have to think about how much investment we continue to make in the reservation when the cost of making those investments result in greater support to our competitors. This issue is of no doubt substantial concern not just to us, but to the tribally owned companies as well because they have the same exposure.

As a final note, I would just like to take a few seconds and read the penetration numbers for the eight reservations in Montana: Blackfeet, 89.5 percent; Crow, 87.4 percent; Flathead, 95.9 percent; Fort Belknap, 89.3 percent; Fort Peck, 92.3 percent; Northern Cheyenne, 75.4 percent; Rocky Boy, 90.1 percent; Turtle Mountain, the portion that is in Montana, 94.3 percent. So we certainly appreciate the grave difficulties that many reservations are experiencing across the country, but we are shocked and dismayed at the 69 percent average and the much lower percentages we hear about, particularly in the desert Southwest. Clearly, those kinds of experiences are completely foreign to us in Montana, and we stand ready and willing to share our experiences and any advice we can give folks that are having a more difficult time getting penetration, and talk about our successes.

Thank you.

[Prepared statement of Mr. Strand appears in appendix.]

Senator INOUYE. With your background and experience, do you think your involvement in the south might make a difference—a company of similar background and experience?

Mr. STRAND. In the southern part of the United States, sir? Yes, I believe that we have made so much effort in boosting penetration on Indian reservations that I think that we could be of great value

to companies in the southwestern part of the United States. Quite frankly, the cooperative model is a particularly good model for improving subscribership because it gives all of the subscribers—Native American and non–Native American alike—ownership in the company and a place in determining the policy. So I think that is a particularly good model.

Senator INOUYE. Thank you very much, Mr. Strand.

And now may I call upon Mr. Standifer.

STATEMENT OF BEN H. STANDIFER, JR., CHIEF INFORMATION OFFICER, TOHONO O'ODHAM NATION—EXECUTIVE BRANCH

Mr. STANDIFER. Thank you, Mr. Vice Chairman. I am honored to present this written testimony to the Senate Committee on Indian Affairs on behalf of my people of the Tohono O'odham Nation. I would also like to acknowledge our chief technology officer, who is with me today. I especially want to thank Senator Inouye for inviting us and allowing us to provide this written testimony on behalf of the Tohono O'odham Nation.

The hearing being held here is to discuss the status of telecommunications in Indian country. Although I cannot speak on behalf of all Indian country, I do realize that Indian country is faced with many unique challenges and opportunities to improve the state of telecommunications on its lands. There are few tribes that have the opportunity to enmesh their infrastructure with urban areas, but there are many who are challenged by the rural remoteness of their lands. Indian country has been subjected to the overpopularized term digital divide, where a traditional understanding of the digital divide as a series of gaps and rates of physical access to computers and the Internet fail to capture the full picture of the divide—its stronghold, its educational, social, cultural and economic ramifications.

Events such as September 11 have shifted focus from filling the divide to securing the divide. As priorities of the Nation change, Indian country is faced with dealing with changes never really quite conquering the divide. The Tohono O'odham Nation in its best effort in dealing with the divide is now faced with unique challenges to secure a 75-mile international border with Mexico—a challenge unique only to the Tohono O'odham Nation, and dealing with the after-effects of a "more secure border". As Chief Information Officer of the Tohono O'odham Nation's Department of Information and Technology, I can say that the status of telecommunication is inching forward, but there are unique opportunities for gaining access to funding, interoperability, cost of broadband services, technical assistance for some projects, and availability of a skilled information technology workforce.

The Tohono O'odham Nation is fortunate to own and operate the Tohono O'odham Utility Authority, an enterprise that provides electrical, water, telephone, cellular, Internet and broadband service. This enterprise has been able to provide affordable phone service to over 3,500 homes and businesses on the reservation, and Internet service to 450 dial-up customers. Its current telecommunications service covers 75 percent of the Nation, and will expand to 95 percent over the next 5 years.

The growth of these services are partly due to the National Exchange Carrier Association or NECA pool, but participation in this pool requires tariffs that regulate charges for telecommunications services. The charges regulated the tariffs have challenged the development of telecommunications solutions that include the use of broadband services. The Department of Information and Technology pays costs three to four times more than the average monthly costs of non-rural customers to provide high-speed Internet services. These monthly costs are neither economical or sustainable for the tribal government, the service departments, and programs. In a study conducted by NECA in 2002, titled the Middle Mile Broadband Cost Study, it focused on the costs of transporting Internet traffic from an Internet service provider operating in a rural telephone company territory like TOUA, to an Internet backbone provider—this so-called middle mile.

As I quote from the study, the study concludes that without support programs, high-speed Internet connections are not economical in many rural telephone company territories because serving areas are located a great distance from the Internet backbone provider. The study also demonstrates that revenue shortfalls do not just disappear as the market grows, but actually increases, because operating margins become more negative as customers need higher data speeds or when serving higher demand levels. This sobering conclusion suggests that high speed Internet service may not be sustainable in many rural areas. This is based simply on the economic costs of the telephone company broadband network upgrade and the need to route traffic over greater distances to reach the Internet backbone.

This particular anomaly in costs has forced the Tohono O'odham Nation to leverage wireless solutions for connectivity opportunities, to reconsider its strategy in servicing programs such as departments and districts, but still challenges TOUA and the Tohono O'odham Nation to deliver broadband Internet access to all 4,600 miles of its reservation.

The Tohono O'odham Nation, since forming the Department of Information and Technology, has been challenged with servicing a need that is greater than its resources. It has realized that effective tribal community-based planning was necessary to develop a strategic plan that would include the interests of all stakeholders, to include tribal governments, community college, human service, police department, cultural museums, nursing homes and other services. A winter IT summit was held in 2000 to provide a greet and meet opportunity for IT professionals who had an interest in the development of IT initiatives on the Tohono O'odham Nation. What proceeded were small cell meetings that resolved issues of connectivity, redundancy and availability. An initiative that the Tohono O'odham Nation created was standardization of hardware and software and key application where information could be shared across departments electronically, standards such as the Institute of Electrical and Electronics Engineers, IEEE, American National Standards Institute, ANSI, and the Design Criteria Standard for Electronic Records Management Software Applications, or DOD 5015.2, is providing framework for development. These standards will create better collaboration with entities that

adopt similar standards while safeguarding their integrity. The Tohono O'odham Community College detailing our community-based planning process will provide a written testimony to this committee.

For many years, access to Federal funding has been limited to tribal governments, mainly by the absence of acknowledgement of tribal governments and tribal entities eligibility for funding. Many Federal funding opportunities are written acknowledging State and local government eligibility, but exclude tribal governments and entities from participating through proposal submission. The addition of words, tribal government or tribal entities, should be included on all Federal funding opportunities. This language needs to be added to the Appropriations Committee or in a bill to include tribal governments and entities.

In his opening statement to this committee in 1996, the Director of the Indian Health Services said:

> We must expand our search for partners in the health care arena. To become more efficient and effective, we have to look to foundations, universities, independent organizations and others who can assist us in the delivery of care.

This CIO echoes this same sentiment for the future of technology and telecommunications for the Tohono O'odham Nation. We must become more effective and efficient and we must look to foundations, universities, corporations and Federal agencies that can assist in the further development of delivery of technology-based solutions. There is need for public-private sector partnership in providing the required infrastructure. Through more funding opportunities, economic and capital investments, research and developmental projects will allow the furtherance in the development of wireless infrastructure, health care and public safety initiatives that affect communities, visitors and Federal workers.

An example of this model that continues to thrive today has been the collaborative efforts between the Tohono O'odham Nation and the Department of Homeland Security. The Tohono O'odham Nation shares a 75-mile international border with Mexico where undocumented workers become problematic, incursions from Mexican Federals; the presence of five Federal agencies, many of which fall under the Department of Homeland defense; the existing radio infrastructure inadequately covers 70 percent of the large contiguous land mass; and the Tohono O'odham police and fire department lack the necessary interoperability with each other and their Federal counterparts.

The Director of Wireless Communications of the Department of Homeland Defense met with the Tohono O'odham Nation and pledged his commitment and resources to develop an interim solution to create the interoperability between all public safety agencies, both tribal and Federal. His resources included telecommunications experts from the Secret Service, Border Patrol and Customs, engineers and security analysts to develop an interim solution that would create the much-needed interoperability.

This example is what can happen when the Federal Government and tribal government commit to solve a problem with the motivation of better serving people and communities. This project delivered an interim interoperability solution within 45 days and began a long-term commitment between the two governments.

Finally, I close with the discussion regarding the need for technical assistance or the higher need of growing your own. The Department of Information and Technology has taken the position of providing quality services to the Tohono O'odham, but commits its resources to developing an IT workforce for its membership to support the IT interests today and in the future. In a complex and sometimes complicated field such as technology, the Tohono O'odham Nation believes that its members can provide these services, create a skilled IT workforce, and create a real solution that is best for the interests of the communities, districts and people of the Tohono O'odham Nation. The gap between the information rich and the information poor is being reduced by planned projects with the Tohono O'odham Nation and the community college to establish community information centers. These centers are to be equipped with multimedia PCs and relevant software to enable even those who are illiterate to use computers using icons and the mouse.

The Department of Information and Technology has developed and outreach program titled Vital Link that provides mentoring and internships for junior and senior level high school students to experience a career in the field of technology. Students should be able to access the Internet in certain learning environments and use various technologies to display their knowledge. All students should learn to locate, acquire organize and evaluate information from a variety of sources, including electronic resources. Our goal is to influence the decision of our youth to complete high school and consider a career in technology. Other career programs that have been instituted internal to DOIT have been the Grow Your Own program, where technical and some professional staff who have minimally accomplished an associates degree or applicable experiences are put into a career ladder where they learn while developing their skill sets to provide the function of that position. These activities are just a few initiatives that are being used to create the required IT workforce necessary for sustaining the O'odham people.

Consideration of mentoring programs for IT staff with Federal agencies who can provide additional support, skill sets, and encouragement for O'odham IT workers could be a good opportunity that will support the efforts of self-determination, because it is not a hand out, but a hand up.

I am privileged to provide this written testimony to the Senate committee, and hope that you will consider the challenges and opportunities that rest in Indian country, in particular with the Tohono O'odham Nation.

Thank you.

[Prepared statement of Mr. Standifer appears in appendix.]

Senator INOUYE. I thank you very much, Mr. Standifer. Your Department of Information Technology has made great progress in providing telecommunications services to your people. Do you have any outreach program to share this experience of yours with other tribes and nations in your vicinity?

Mr. STANDIFER. Our outreach program is about two years old. We are actually graduating our first year students that came through our program, so it is still rather new.

Senator INOUYE. Are some from other nations?

Mr. STANDIFER. I am sorry?

Senator INOUYE. From other nations?

Mr. STANDIFER. No, sir; from the Tohono O'odham Nation. We have not yet provided that information to the other tribes, but are willing to do so.

Senator INOUYE. I think they would be most grateful if you shared your experience with them.

Mr. STANDIFER. Thank you.

Senator INOUYE. I have been advised that there will be a working meeting for those who are interested in participating in room 836 of the Hart Senate Office Building at 2:30 this afternoon. It is 1 hour from now. We would like to invite all of the witnesses who participated this morning to be there. I think meeting together may be helpful mutually.

With that, I thank all of you for your participation today. I know you are hungry, so get to lunch.

Thank you very much.

[Whereupon, at 1:27 p.m., the committee was adjourned, to reconvene at the call of the Chair.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

PREPARED STATEMENT OF MIKE STRAND, EXECUTIVE VICE PRESIDENT AND GENERAL COUNSEL MITS—MONTANA INDEPENDENT TELECOMMUNICATIONS SYSTEMS

Good Morning. I would like to thank the committee for allowing me this time to offer my observations with respect to basic and advanced telecommunications services to Native Americans.

I represent seven small rural telephone companies operating in Montana. They range in size from about 1,600 lines to about 10,000 lines. Their service areas include all or part of five reservations: Fort Peck, Fort Belknap, Rocky Boy, Blackfeet, and Crow. These rural telephone cooperatives are not tribally owned, however several of them are cooperatives, so their subscribers on the reservation are owners of the cooperatives along with the other cooperative members.

While the policy of all of the companies I represent is to offer the same quality of service on reservations as we do off the reservation, it is nonetheless true that reservation areas pose unique challenges to our operations:

No. 1. Our most current information is that the average per capita income on the reservations we serve is less than $10,000 per year and unemployment is often greater than 30 percent. The enhanced Lifeline program that makes local service available for $1 per month helps the poorest get service, but most still have difficulty paying long distance charges or paying for more advanced telecommunications services like high-speed Internet access.

No. 2. Many residents, particularly among the elderly, speak primarily in their native language, and we cannot assume fluency in English. This creates challenges from a customer support standpoint.

No. 3. There is often a pervasive mistrust of programs and projects offered on the reservation by non-Indians. Therefore we have met some initial resistance even to programs like the enhanced Lifeline program I mentioned before.

No. 4. Finally, and perhaps most importantly, we acquired much of the reservation areas we serve from the local Bell company in 1994. We found that the telecommunications facilities we acquired were antiquated, lacked adequate capacity to handle calling volumes, and had not been deployed to many homes or businesses. Therefore subscribership among Native Americans in such areas was as low as 50 percent.

Faced with these challenges, we were forced to come up with a number of different strategies to improve service and boost subscribership. I would like to outline some of these strategies for the committee because I think they are instructive for any company seeking to improve service to reservation areas. Then I would like to identify three areas in which we believe further improvements could be made.

The example I will use is Project Telephone Company, which serves most of the Crow Indian Reservation in Southeast Montana. Project's experience is representative of the experiences of the other companies I represent.

No. 1. Our first challenge upon acquiring the Bell company's facilities on the Crow Reservation was to re-engineer the physical telecommunications network so that it was not only capable of serving all of the residents, but also capable of providing

the full range of basic and advanced telecommunications service. We found that the calling traffic capacity of the Bell company's old copper lines was exhausted in many areas and that the switching equipment was old analog equipment.

There was no way we could improve subscribership without installing new copper lines with greater capacity as well as certain amount of fiber optic cable to handle increased calling traffic. Further, there was no way to offer more advanced services like high-speed Internet access, voice mail, caller ID, call waiting, call forwarding, etc. without converting the antiquated switching equipment to digital equipment. This required an investment of over $2 million on top of the price we had paid for the Bell company's system.

The reason I emphasize this point is that those companies, tribal or otherwise, must identify who they intend to serve and where those people are located as they construct their network in order to ensure that the network has both the proper geographic coverage and adequate capacity to handle calling volumes. Further, they need to identify what kinds of services they intend to offer so that the correct technology platform is built that can deliver those services. We intended to offer not just voice services but also high-speed Internet and videoconferencing services to the Crow, so we upgraded using wireline technology coupled with digital switching.

No. 2. In addition to the Bell Company's facilities being antiquated, they simply did not reach a large segment of the population. Our understanding was that the Bell company's construction policy required a substantial financial contribution from the customer before lines would be installed. We were told that many customers did not have service because they could not afford to pay the thousands of dollars it demanded in construction assistance before it would install phone service to rural customers. To boost subscribership, we established a policy under which any customer that was within one mile of one of our lines could get service without construction charges. Nearly every resident of the reservation was within this distance, so construction charges pretty much became a non-issue.

No. 4. In order to address the language and suspicion barriers, we hired Crow-speaking customer service representatives and field technicians to do hook-ups. We also appointed a tribal member to our Board of Directors.

No. 5. While all of the measures I have mentioned boosted overall subscribership, we found that we were seeing a significant number of reservation residents were dropping service due to an inability to pay their long distance charges. At that time calls between the telephone exchanges on the reservation were long distance calls and so were calls to the largest nearby city, Billings, MT. For this reason, we petitioned the state public utility commission for permission to establish a local calling area that included all of the reservation exchanges as well as the Billings exchange. Although the regulatory process took us nearly 2 years, we were ultimately successful and now calls between reservation communities and Billings are local, toll-free calls.

As the 2000 census shows, all of these efforts enabled us to boost subscribership among the Crow from around 50 percent to 84 percent. Our subscribership has continued to grow since 2000, due in no small part to the enhanced Lifeline and Link-Up programs that make local service available to qualifying Native Americans for $1 per month.

We advertised the programs very aggressively on the Crow Reservation and our customer service representatives even contacted individual residents to further foster awareness. Of the 1,413 residential lines on the Crow Reservation, 591 or 41.8 percent are now on the enhanced Lifeline program.

In addition to the improvements to voice services, we also made dial-up Internet access available to all customers. We have made high-speed Internet access using DSL technology available to nearly two-thirds of the tribal members. Finally, we have installed videoconferencing studios in the tribal college and K–12 schools so students are able to share teaching resources with other schools across the country.

All in all, we believe remarkable progress has been made regarding the availability of basic and advanced telecommunications services on the Crow Reservation. However, there are still a few areas that remain troublesome.

No. 1. While we have been able to alleviate some of the problems with long distance charges by expanding the local calling area, many residents still find themselves with large long distance bills for calls made to areas outside the local calling area. When those bills become unaffordable, we find some residents simply disconnecting their service.

No. 2. While we have made broadband access available to the Crow Reservation, we have not seen great demand yet for such services. In part, we believe this is because economic conditions on the reservation simply prevent people from purchasing the service. We also believe that many residents of the reservation simply do not yet see why such access is relevant to their day-to-day lives. Our hope is that young

people who use broadband services in the tribal schools will over time create demand for similar services in the reservation's homes and businesses.

No. 3. Finally, there is a "wrinkle" in the FCC's rules regarding the distribution of universal service support to companies serving the reservation. Currently, if a competitor comes to the Crow reservation and is designated as being eligible to receive universal service funding, that competitor receives funding based on the costs we incur to provide service and not on the competitor's own costs. This creates a kind of "catch 22" dilemma for us insofar as the more we invest on the Crow reservation, the more funding that would be available to our competitors. For the first time, our Board of Directors and management have to think about more than just how we can improve service when considering further investment on the reservation because such investment may actually harm our competitive position. This issue is no doubt of substantial concern to the tribally owned companies as well because they have the same exposure. The FCC is currently reviewing these rules.

Thank you very much for allowing me this time to share our experiences and to discuss some continuing challenges. I would be happy to answer questions at the appropriate time.

Statement

of

K. DANE SNOWDEN
CHIEF
CONSUMER AND GOVERNMENTAL AFFAIRS BUREAU
FEDERAL COMMUNICATIONS COMMISSION

Before the

SENATE SELECT COMMITTEE ON INDIAN AFFAIRS

On

STATUS OF TELECOMMUNICATIONS IN INDIAN COUNTRY

Thursday, May 22, 2003
10:00 a.m.

United States Senate
485 Russell Senate Office Building
Washington, D.C.

I. INTRODUCTION

Good morning Mr. Chairman and Members of the Committee. My name is K. Dane Snowden, and I am Chief of the Consumer and Governmental Affairs Bureau of the Federal Communications Commission ("FCC" or "Commission"). I appreciate this opportunity to again appear before you to discuss the FCC's role in addressing issues central to the continued advancement of telecommunications and information services in Indian Country.

A little more than one year ago, the FCC formally completed its reorganization and established the Consumer and Governmental Affairs Bureau. Of greatest significance for today's discussion is the extensive work of the Bureau's intergovernmental affairs office, which serves as the Agency's primary liaison with Tribal governments.

The Bureau's intergovernmental affairs office was created in part to honor and respect the government-to-government relationship we have with federally-recognized Tribes. The Bureau has primary responsibility within the agency for establishing and developing relationships with federally-recognized American Indian Tribes. In this capacity, the Bureau works closely with the Commission's other bureaus and offices and the Tribes to address telecommunications issues within the ambit of the Commission's authority. In sum, the consequence of the establishment of this office has been to centralize communications between the Tribes and the Commission and raise the profile within the Commission of issues impacting the provision of telecommunications services in Indian Country.

II. BACKGROUND

As I discussed in my previous appearance, the Telecommunications Act of 1996 codified the Commission's historical commitment to promote universal service to ensure that all Americans have access to affordable, quality telecommunications services. Congress articulated

a mission that "consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high-cost areas, should have access to telecommunications and information services . . ." Against this backdrop, and in recognition that, based on 1990 Census data, only 47 percent of Native American households on Tribal lands had a telephone compared to approximately 94 percent of all households in the United States, the Commission embarked on a comprehensive program to promote telecommunications subscribership and infrastructure deployment within American Indian and Alaska Native Tribal communities. This program established the foundation for the actions the Commission has taken since our last meeting and is the subject of what I will discuss today.

A central part of the Commission's overarching program included the adoption of a Statement of Policy, reaffirming the Commission's recognition of Tribal sovereignty and the special trust relationship that exists between the federal government and federally-recognized Tribes. In this statement, the FCC committed to endeavoring to work with Indian Tribes to ensure, through its regulations and policy initiatives and consistent with the Communications Act, that Indian Tribes have access to affordable, quality telecommunications services.

The Commission's Statement of Policy sets forth several points that pertain directly to Tribal consultation. Chief among these is the goal and principle that "[t]he Commission, in accordance with the federal government's trust responsibility, and to the extent practicable, 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." The Commission committed to working with Tribal governments to identify innovative mechanisms to facilitate Tribal consultation in agency regulatory processes that uniquely affect telecommunications service-related issues on Tribal lands. The Statement of Policy serves as the cornerstone of our

consultation with the Tribes on these matters. The agency also welcomed submissions from Tribal governments and other concerned parties as to other actions it might take to further the goals and principles recognized in the Statement of Policy.

The next element of the Commission's overarching program to address telecommunications in Indian Country involved adoption of two comprehensive rulemakings - each intended to address the historically lower than average telephone penetration rates on Tribal lands. First, the Commission amended its universal service low-income programs rules to provide additional, targeted support under the Lifeline and LinkUp programs. Second, the Commission established the Tribal lands bidding credit program to provide incentives for wireless telecommunication carriers to serve Tribal lands.

The universal service programs, available to low-income individuals throughout the United States, help defray the cost of monthly service and offset initial connection charges and line extension costs associated with the initiation of service. Under the Enhanced Lifeline and LinkUp programs implemented by the Commission, qualifying individuals living on Tribal lands receive up to an additional $25.00 per month in additional federal support bringing basic monthly rates down to $1.00 in most instances. The Commission also increased the LinkUp support amount for low-income consumers living on Tribal lands to pay up to $100 of eligible costs associated with the initiation of service.

The Commission also broadened the criteria for consumers to qualify as low-income consumers on Tribal lands to include income-dependent eligibility criteria. This is particularly important where Native Americans may have higher participation rates in such means-tested programs as Bureau of Indian Affairs general assistance, Tribally Administered Temporary Assistance for Needy Families (or TTANF), Head Start or the National School Lunch Program.

Additionally, the Commission adopted rules requiring telecommunications carriers that participate in these programs to publicize the availability of the programs to reach those most likely to qualify for them.

These programs have become one of the primary vehicles by which the Commission improves access to telecommunications services on Tribal lands. By increasing the amount of low-income support to consumers living on Tribal lands, the Commission intended to create financial incentives for carriers eligible to receive such support to serve and deploy facilities in areas that may have previously been regarded as high-risk and unprofitable.

The Commission also established a framework designed to streamline the process for eligibility designation of carriers providing service on Tribal lands. With such designation, carriers are eligible to receive universal service support. Under this framework, a carrier seeking an eligibility designation for the provision of service on Tribal lands may petition the Commission for such designation. This framework was intended to, among other things, provide a fallback for those carriers and their host Tribe that are unwilling to have the question of whether the carrier is subject to state jurisdiction resolved by a state commission. Implementation of this framework permits the Tribes to have the issue resolved before the Commission in a manner that carefully balances the principles of Tribal sovereignty and the need for access to telecommunications services on Tribal lands against the appropriate exercise of state jurisdiction over such carriers.

In addition to our work with wireline carriers, the Commission, in a June 2000 rulemaking, also established the Tribal lands bidding credit program to provide incentives for wireless telecommunication carriers to serve Tribal lands. Under this program, auction bidding credits are awarded to winning bidders who pledge to deploy facilities and provide service to

federally-recognized Tribal areas that have a telephone service penetration rate below 70 percent. As I will discuss later, the Commission recently revised this program to encourage greater participation in the Tribal lands bidding credit program.

The strides we see in penetration rates, subscribership, and facility deployment, reflect the Commission's resolve to assure that all Americans, including individuals living in Indian Country, have access to telecommunications services. As we embark upon the digital migration of telecommunications, we risk, without the Commission's commitment otherwise, leaving individuals on Tribal lands without basic telecommunications services, much less the opportunity to enjoy the bounty of innovative technologies.

III. ACTIONS TAKEN

In my previous appearance before this Committee, in addition to describing the steps the FCC had taken to address historically lower-than-average telephone penetration rates on Tribal lands, I outlined the steps the Commission envisioned taking to build on these foundations to further promote telecommunications subscribership and infrastructure deployment within American Indian and Alaska Native Tribal communities. More importantly, I assured the Committee of the Commission's commitment to work with Indian Tribes on a government-to-government basis consistent with principles of Tribal self-governance to ensure, through its regulations and policy initiatives and consistent with the Communications Act, that Indian Tribes have adequate access to communications services.

I am pleased to report that since my appearance one year ago, the Commission has aggressively and rapidly built upon this foundation. Through its policy reform, outreach efforts and through consultation with the Tribes, the Commission continues to address these critical issues.

A. OUTREACH

The Commission has an obligation to ensure Tribal nations' awareness of the tools and resources available at the FCC to help them increase access to much-needed telecommunications services, both as consumers and, for some, as providers of those services. In July 2002 the Commission launched a national outreach program called, "Get Connected: Afford-A-Phone," intended to increase awareness of the availability of the Lifeline and LinkUp programs. As part of this initiative, the Consumer and Governmental Affairs Bureau, building upon the broadened eligibility criteria for the Tribal Enhanced Lifeline and LinkUp programs, specifically targeted Tribal communities, contacting each of the more than 550 federally-recognized Tribes, as well as 25 Tribal associations. Our targeted outreach provided non-technical information and guidance on how to take advantage of these enhanced universal service programs. Building on your stewardship on tribal issues, each of the Members of the Committee, as well as numerous other Senators and Members of Congress, received courtesy copies of this informative.

As a result of this targeted outreach effort and our work with Tribal governments and carriers, there have been significant improvements in Tribal subscribership rates. In 2000, 20,709 consumers participated in the Enhanced Lifeline and LinkUp programs. In 2001, the number of participants rose to 79,547, and in 2002, the figure jumped to 136,147. The significant increase in the number of Enhanced Lifeline and LinkUp participants results in the rise in subscribership levels on Tribal lands. This activity amounted to payouts of $16.9 million in Enhanced Lifeline support and $802,000 in Enhanced LinkUp support in 2002. I emphasize that as we continue with these efforts, we hope that you and your staff will continue to promote these efforts. For more information about these programs see http://www.fcc.gov/cgb/consumerfacts/lowincome.

This targeted initiative reflects one of the multiple forms of outreach encompassed under the Commission's "Indian Telecommunications Initiative" ("ITI"), the umbrella term we use to describe our program aimed at increasing access to critical telecommunications services, and improving the quality of life, in Indian Country. In addition to promoting Enhanced Lifeline and LinkUp, this comprehensive program seeks to explore all possible solutions to access issues while recognizing the unique cultural characteristics of American Indian Tribes and that promote Tribal objectives. One such solution explored with Tribes is the possible formation of Tribally-owned and operated telecommunications companies. In addition, the ITI program seeks to examine opportunities to enjoy the digital migration and deploy alternative telecommunications platforms including cable, wireless, wireline, and satellite systems.

The Commission's comprehensive outreach efforts take multiple forms: interactive regional workshops; meetings with representatives of individual Tribes to address their unique telecommunications issues; attendance and participation by Commission senior staff at conferences sponsored by Tribal organizations; and dissemination of educational materials to American Indian Tribes and Tribal organizations.

Since our last meeting, Commission staff has attended and actively participated in interactive regional workshops and widely attended conferences and forums around the country, on topics that address, such issues as removing impediments to the provision of telecommunications services and deployment of telecommunications facilities in Indian Country. These include events sponsored by the National Congress of American Indians ("NCAI") and the National Center for American Indian Enterprise Development.

More direct forms of this outreach include meetings with individual Tribes. Commission leaders, including Chairman Michael K. Powell and senior staff, have visited Tribal communities

across the Nation, witnessing firsthand the state of telecommunications services in Indian Country. Last summer, I met, along with members of my staff, with members of the Chehalis Tribe in Washington State and listened to the views of Tribal members regarding their experiences with the availability of telecommunication services in their communities. In February 2003, the FCC hosted a meeting among the NCAI Executives, Members of the NCAI Telecommunications Subcommittee and with Chairman Powell; FCC Commissioners Kathleen Q. Abernathy, Michael J. Copps, Kevin Martin, Jonathan Adelstein; and Bureau and Office Chiefs. Last month, Commissioner Abernathy and I visited the Fort Mojave reservation where we met with members of the Tribe, as well as representatives of several Tribally-owned telephone companies.

In short, the Commission recognizes and is committed to a continuing dialogue with federally-recognized Tribes. I need point only to the fact that Chairman Powell delivered the keynote speech on the Federal Agency Day at the last National Summit on Emerging Tribal Economies to demonstrate the depth of the Commission's continued commitment. A more comprehensive list of activities undertaken through ITI is appended to this testimony.

B. CONSULTATION

A central goal and principle set forth in the Commission's Statement of Policy states that "[t]he Commission, in accordance with the federal government's trust responsibility, and to the extent practicable, 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." The most recent and significant area of consultation undertaken by the Commission with Tribal governments is in the area of communications tower siting and historic preservation.

This topic has been one of great concern among the Tribes. As a result, we have devoted considerable time and resources to addressing these concerns.

In the context of a draft Nationwide Programmatic Agreement among the Commission, the Advisory Council on Historic Preservation, and the National Council of State Historic Preservation Officers, to streamline and tailor the review process under the National Historic Preservation Act ("NHPA"), Commission staff has consulted directly with several Tribes and their representatives, as well as Tribal associations, such as the United South and Eastern Tribes ("USET"). Senior Commission staff is currently involved in ongoing consultation with USET representatives concerning this draft Nationwide Programmatic Agreement and a possible memorandum of understanding regarding the development of protocols to govern cell tower siting on properties of religious and cultural significance to Tribes. This government-to-government consultation has already resulted in new provisions addressing matters of concern to the Tribes being added to the draft Nationwide Programmatic Agreement for public comment in the related Notice of Proposed Rulemaking.

The Commission has taken a number of other steps to inform and involve Tribes in historic preservation issues confronting the Commission. For example, we have prepared scoping documents for Tribal meetings and conferences that we have attended, to outline and highlighting the issues of particular concern to Tribes. We also have sent mailings directly to all federally-recognized Tribes, their Tribal leaders, Tribal historic preservations officers, and other Tribal representatives. Relevant information also is posted on the FCC's Tribal homepage. Additionally, Commission staff have participated in regional meetings and Tribal events nationwide to discuss historic preservation and other issues, and consulted directly with individual Tribes and their Tribal leaders on matters involving individual tower siting issues.

Furthermore, nationwide Tribal consultation will be undertaken on historic preservation issues to ensure that the Commission complies with both the letter and the spirit of its obligations under the NHPA.

On a more general basis, the Commission is examining how it can consult with Tribes on each of the Chairman's priority objectives. For example, on the homeland security front – a matter of great concern to our Nation overall – we have raised the need to consult with Tribes on these issues with the Commission's Homeland Security Policy Council. We also discussed homeland security issues with the NCAI Tribal representatives when they visited with us this past February 2002. In addition, we invited Tribal leaders and representatives to join the Commission in a day-long public meeting held on April 29, 2003, to address wireless E911 services and how those services can be deployed quickly and efficiently. We look forward to continuing to discuss homeland security issues with Tribal leaders and representatives and consulting on a government-to-government basis to improve our Nation's ability to respond in a crisis situation to protect all Americans.

C. REGULATORY INITIATIVES GENERALLY

As I noted earlier, by virtue of the work of the Bureau and the Commission's recognition of the government-to-government relationship with the Tribes, the profile of issues impacting the provision of telecommunications services in Indian Country before the Commission has been heightened. The Commission's recent regulatory activities attest to this and acknowledge the Commission's commitment to address these issues.

When the Commission realized that the initial wireless Tribal bidding credit rules may have been too narrow, the Commission expanded upon these rules. On March 14, 2003, the Commission released an Order improving the bidding credit mechanism which provides credits

for use by winning bidders in spectrum auctions who pledge to deploy facilities and provide service within three years to federally-recognized Tribal areas. This Order contemplates that winning bidders will consult with the Tribal government regarding the siting of facilities and deployment of services on Tribal lands. At the same time, the Commission opened an inquiry seeking comment on ways that this mechanism can be improved even further. The Commission also has initiated a Notice of Inquiry seeking comment on ways to facilitate the provision of spectrum-based services and promote opportunities for rural telephone companies, including Tribally-owned companies, to provide spectrum-based services. In the most recently released Notice of Inquiry seeking data on competitive market conditions with respect to wireless service, the Commission specifically seeks comment on data on the state of telecommunications access on Tribal lands. In addition, just last week, the Commission authorized spectrum leasing in a broad array of wireless services and sought comment on additional steps to improve the functioning of secondary markets. These steps will further promote the development of innovative services in rural areas, including Indian Country.

Finally, the Commission recently adopted an Order that, among other things, clarifies the operation of the eligibility criteria for the Enhanced Lifeline and LinkUp programs to address confusion among otherwise eligible consumers, as well as telephone companies providing services pursuant to these programs. Attached to this order is a Notice of Proposed Rulemaking in which the Commission seeks information on ways to expand the availability of the enhanced programs beyond the borders of Federally-recognized reservations. A more extensive list of Commission actions impacting Indian Country can be found on the webpage, www.fcc.gov/indians/, which the Commission maintains to ensure Tribal communities are made aware of such actions.

IV. CONCLUSION

A recent analysis undertaken by the Commission based on 2000 Census data indicates that the telephone penetration rate among federally-recognized Tribes has increased from approximately 47 percent to approximately 67 percent over the last ten years. Other evidence supports this positive trend. However, in a nation that boasts a national penetration rate of 94 percent, we can conclude only that much more needs to be done to increase access to telecommunications and information services in Indian Country. When telecommunications access is so essential to economic and personal well-being, the FCC must continue to enhance connectivity for all of Indian Country.

In sum, the Commission will continue to support the development of telecommunications infrastructure to bring basic telephone services to unserved and underserved areas of Indian Country and ultimately lay the foundation for the deployment of advanced services – including broadband. We will continue to consult with Tribes and engage in dialogue with Tribes, industry, and other Federal agencies as well as the states to determine how – working together – we can best achieve our mutual goals.

I look forward to answering any questions you have.

FEDERAL COMMUNICATIONS COMMISSION

Tribal Outreach Activities[1]
2002 – 2003

2002

June 2002 – Bismarck, ND: FCC Senior Staff attends National Congress of American Indians Mid-Year Session.

July 2002 – Confederated Tribes of the Chehalis: FCC Consumer and Governmental Affairs Bureau Chief K. Dane Snowden and CGB Senior Staff tour Chehalis Indian Reservation and meet with Chehalis Business Council and Affiliated Tribes of Northwest Indians-Economic Development Corporation in Oakville, WA to discussion telecommunications access in Indian Country.

August 2002 – Temecula, CA: FCC Deputy Bureau Chief Kris Monteith gives presentation on telecommunications issues at Tribal Technology Workshop sponsored by Cerritos College.

September 2002 – Phoenix, AZ: FCC Chairman Michael K. Powell gives key note opening Federal Agencies' Day at National Summit on Emerging Tribal Economies; FCC sponsors day-long program, "Telecommunications: The Foundation to Building and Sustaining Economic Development;" FCC Senior Staff attend full three-day summit; FCC exhibits at National Summit.

September 2002 – Gila River Indian Community: FCC Chairman Michael K. Powell, FCC Commissioner Michael J. Copps and FCC Senior Staff meet with Gila River Indian Community Tribal Council, tour the Community and Gila River Telecommunications, Inc.

September 2002 – Onondaga Indian Nation: FCC Staff attend the Federal Interagency Meeting on Coordination Tribal Cultural Preservation Consultation.

September 2002 – Washington, DC: FCC hires Cultural Resources Specialist to assist in and advise on National Historic Preservation Act Section 106 review.

[1] This listing references activities undertaken since the Federal Communications Commission last testified before the Senate Committee on Indian Affairs in May 2002.

October 2002 – Las Cruces, NM: FCC Staff attend the 7th Annual New Mexico Infrastructure Conference including Tribal issues panels.

November 2002 – San Diego, CA: FCC Senior Staff attend the National Congress of American Indians 59th Annual Session and "Connecting for the Future I; Issues in Tribal Telecommunications and Information Technology Breakout Session;" FCC Staff serve as panel moderator; FCC Staff give presentation on FCC's historic preservation activities; FCC Staff give "Federal Report" to National Congress of American Indians Telecom Subcommittee.

November 2002 – Washington, DC: FCC's observes National American Indian Heritage Month and hosts celebration honoring the WWII U.S. Army Comanche Codetalkers and last surviving Comanche Codetalker Charles Chibitty.

November 2002 – Washington, DC: FCC Senior Staff serves as speaker in the Census Bureau National American Indian Heritage Month Celebration, addressing the FCC's Indian Telecommunications Initiatives, aimed at increasing telephone penetration rates in Indian Country.

2003

February 2003 – Arlington, VA: FCC Senior Staff meet with USET President, Tribal Leaders, Executive Director and Culture and Heritage Committee members
United South and Eastern Tribes Annual Impact Week Meeting.

February 2003 – Washington, DC: FCC Staff attend National Congress of American Indians 59th Annual Session and "Connecting for the Future II; FCC Staff serve as moderator for panel on "Issues in Tribal Telecommunications and Information Technology Breakout Session;" FCC Staff provide "Federal Report" on telecommunications issues.

February 2003 – Portland, OR: FCC Senior Staff attend and participate as speaker in conference of the Affiliated Tribes of Northwest Indians Winter Conference, meet with Culture and Elders Committee, Natural Resources/Land Committee, Telecommunications and Utility Subcommittee of Economic Development Committee.

February 2003 – Washington, DC: FCC Consumer & Governmental Affairs Bureau hosts meeting between National Congress of American Indians Executives and Members of the NCAI Telecommunications Subcommittee; FCC Chairman Michael K. Powell, Commissioners Abernathy, Copps, Martin and Adelstein attend meeting; FCC Bureau and Office Chiefs give overview of activities within their respective organizations.

March 2003-April 2003 – Washington, D.C.: FCC Senior Staff continue consultation with United South and Eastern Tribes on historic preservation issues under the National Historic Preservation Act.

May 2003 – Fort Mojave Indian Reservation: FCC Commissioner Kathleen Abernathy and FCC Consumer & Governmental Affairs Bureau Chief K. Dane Snowden participate in roundtable discussion with Fort Mojave Tribal Council Tribal representatives from Fort Mojave Telecommunications, Inc., and Gila River Telecommunications, Inc.; Commissioner Abernathy and Bureau Chief Snowden tour Fort Mojave Telecommunications, Inc. telecom facilities and Fort Mojave Tribal education and health sites.

May 2003 – Taos Pueblo: FCC Senior Staff and Cultural Resources Officer meet with Taos Pueblo Governor and Taos Pueblo officials and representatives as part of ongoing National Historic Preservation Act Section 106 Tribal Consultation.

For release only by the
Senate Committee on Indian Affairs
May 22, 2003
Room 485, Russell Senate Building
10:00 a.m.

U.S. DEPARTMENT OF AGRICULTURE
RURAL DEVELOPMENT
RURAL UTILITIES SERVICE

Statement of Hilda Gay Legg, Administrator, before the Committee on Indian Affairs.

Mr. Chairman, Members of the Committee, I appreciate the opportunity to come before this committee to testify, on behalf of the U.S. Department of Agriculture, on the Rural Utilities Service's role in addressing the telecommunications needs in Indian Country.

The Rural Utilities Service (RUS) is an agency of Rural Development within the United States Department of Agriculture, which actively supports and promotes the universal availability of telecommunications as well as the expansion of information services in defined circumstances in rural America through its Telecommunications Program. The agency also administers programs to help finance the provision of electricity, safe drinking water, distance learning and telemedicine services, and the removal and disposal of wastewater in rural areas. It is the successor agency to the Rural Electrification Administration (REA) and has been helping rural communities finance modern telecommunications facilities and services for over fifty years.

While electric, telephone, and water and waste disposal services have been taken for granted in American cities since the 1920's and before, if you lived in a rural area only 50 years ago, chances are you went without these necessities of modern life and the high standard of living they make possible. Regretfully, this is far too often true in much of Indian country today. However, with the financing made available through the Rural Utilities Service, this, too, is changing.

Modern utilities came to rural America and many of the tribal lands through one of the most successful government initiatives in American history, carried out through the United States Department of Agriculture working with rural cooperatives, tribal governments, nonprofit associations, public bodies, and for-profit utilities. Today, USDA's Rural Utilities Service carries on this tradition helping rural utilities expand and keep their technology up to date, helping establish new and vital services such as distance learning and telemedicine.

As we are all aware, the building and delivery of an advanced telecommunications network is having a profound effect on our nation's economy, its strength, and its growth. In discussing the importance of advanced, high-speed access -- commonly referred to as "broadband service" -- at the Economic Forum in Waco this past summer, President Bush said: "In order to make sure the economy grows, we must bring the promise of broadband technology to millions of Americans. And broadband technology is going to be incredibly important for us to stay on the cutting edge of innovation here in America."

Just as our citizens in our cities and suburbs benefit from access to advanced telecommunications services, so should our rural residents, particularly those living in some of our most remote rural areas, the tribal reservations. Modern telecommunications service is important to rural America. It plays an enhancing role in solving the problems created by time, distance, location, and lack of resources.

Today's advanced telecommunications networks will allow Native American communities to become platforms of opportunity for businesses, both new and established, to compete locally, nationally and globally. These networks will help ensure that no rural resident – from students to parents and teachers, from patients to doctors, or from consumers to entrepreneurs – will be left behind in this new century.

USDA is proud of its contributions to improved infrastructure services in many Native American communities. RUS has worked with telephone companies and cooperatives serving Native Americans since the inception of our programs to bring modern, reliable electric, telecommunications and water and sewage systems to Native American residents. In 1961, RUS made its first loan for electric service to the Navajo Nation and in 1976, RUS financed its first tribal telephone company, the Cheyenne River Sioux Tribe Telephone Authority in Eagle Butte, South Dakota.

Unfortunately, there are still rural communities without access to telecommunications services. In particular, Native Americans living on tribal reservations have some of the lowest telephone penetration rates in the nation. This lack of telecommunications infrastructure also contributes to high unemployment, depressed economic conditions, reduced educational opportunities and reduced medical care.

In partnership with our small, rural independent and cooperative telecommunications systems, USDA is making significant investments in infrastructure in Native American communities. We have financed over 60 local exchange carriers that serve tribal reservations. These companies are providing telecommunications service to over 27,000 Native Americans.

We are especially proud of our efforts working directly with tribally-owned and operated telecommunications utilities. The Rural Utilities Service has financed six tribally owned telecommunications companies for service exclusively on the reservations. They are: the Tohono O'odham Utility Authority, in Sells, Arizona; Gila River Telecommunications, Inc., in Chandler, Arizona; San Carlos Apache Telecommunications Utility, Inc., in San Carlos, Arizona; Fort Mojave Telecommunications, Inc., in Mohave Valley, Arizona; the Cheyenne River Sioux Tribe Telephone Authority, in Eagle Butte, South Dakota; and

Mescalero Apache Telecom, Inc., Mescalero, New Mexico. These six companies currently serve 15,036 Native American subscribers.

Additionally, we are having ongoing discussions with other tribal entities about the possibility of obtaining RUS financing. Most recently, we have met with the Colorado Indians, the Hopi Tribe, the Navajo Tribal Utility Authority, the White Mountain Apache Tribe; the Pascua Yaqui Tribe, the Yavapai-Apache Tribe, and the Quechan Indian Tribe all located within the state of Arizona as well as the, Yurok Tribe, in California.

USDA has been active in disseminating information on its programs to those in Indian Country. We have made numerous presentations at Native American conventions, seminars, and workshops to discuss how tribal entities may participate in RUS programs. Our General Field Representatives routinely visit tribal authorities who are interested in improving telecommunications service to discuss how RUS financing can promote these improvements. However, many reservations are served by telephone companies that do not borrow from RUS, and these companies do not always work with tribal authorities on matters that may impact on service to the reservation. In such cases, it may be necessary to form a den company before RUS can be of assistance. Therefore, in those instances, RUS involvement will likely come from loans made to newly-formed tribal telecommunications entities.

Forming a telecommunications company in any rural community is a formidable task. In today's telecommunications market, it is even more so. There are substantial financial hurdles to conquer and the industry is going through some difficult changes since the passage of the Telecommunications Act of 1996. Telecommunications companies today must be able to address a changing environment in toll separations, access charges, plant accounting, unbundling requirements, universal service fund issues and competitive service issues.

The key to developing a successful telecommunications system is a good, sustainable business plan – one that has the support of the tribal community and meets the community's individual needs. Because RUS is an infrastructure financier, we do not finance operating costs. Therefore, it is necessary for the tribal system to have sufficient cash reserves to meets its operating expenses, particularly during the construction phase when subscriber take rates are low. In certain instances, the tribal authority, itself, has infused cash into the telecommunications system. In other instances, the tribally-owned telecommunications system has partnered with an independent telephone company until it was financially well established and able to purchase the independent company's investment interest.

Knowing the tribal community's needs and meeting those needs is critically important. A good business plan and marketing survey will help the tribally-owned utility recognize the service requirements of the community and its residents. Is the tribe attempting to attract businesses into the reservation by having high-speed data connections? Are the members of the tribe attempting to establish home-based businesses from which to market their native crafts. Is the community attempting to enhance the learning opportunities of its young people by connecting, through distance learning, to tribal colleges? By knowing the answers to these questions during the initial planning phase,

the telecommunications system can be developed to meet the specific needs of its customers.

RUS can provide advice and assistance in formulating plans for the design and construction of telecommunications plant and for formulating a business plan that will support a loan from RUS. We do not, however, assist potential borrowers in the actual formation of a telecommunications business. There are many legal, regulatory and financial issues that must be addressed by a tribal entity before making a decision to form a telecommunications company.

A prime example of just such a situation is Gila River Telecommunications, Inc. Gila River is a tribally-owned and operated telecommunications system. It began as a start-up company with no subscriber lines, by partnering with an independent telephone company, Dobson Communications, it was able to obtain the cash necessary to begin operations. With telecommunications loans from RUS, Gila River was able to construct an advanced telecommunications system capable of broadband delivery. As a result, the most remote of Native Americans living on the reservation have access to modern telecommunications services and the Tribal Authority was able to build a large Industrial Park and attract more than 50 businesses to locate on the reservation.

In this fiscal year alone, the RUS has almost $660 million available for telecommunications infrastructure financing and another $1.45 billion in broadband infrastructure financing. Native American entities are eligible to apply for this assistance for improving the quality of life in Indian Country.

Together with RUS-financed telecommunications systems, tribal schools and hospital can, and have, availed themselves of our Distance Learning and Telemedicine program, or DLT as we call it. This program provides grant funds for end-user equipment in schools and libraries to deliver the services made possible by E-Rate. Through these advanced telecommunications systems, Indian schools can connect with other tribal and non-tribal educational institutions to bring enhanced learning opportunities to the most remote of locations. Not only will the young people of the reservation benefit but the tribe, as a whole, will benefit. Health care and educational professionals can complete their necessary continuing professional education requirements. Adults can learn new job skills that will allow them to participate in today's global economy without leaving the reservation. The latest in dietary and nutritional information can be made available to help curtail the increase in the number of cases of diabetes, which is common among many Native American communities.

The Distance Learning and Telemedicine Program, during its 11-year history has made more than $17 million in grants that went to providing these critical services to Native Americans. For this fiscal year, RUS has $27 million in grant funds and $300 million in loan funds available.

One of RUS' greatest success stories for Indian Country came just last week when Secretary of Agriculture, Ann Veneman, announced our "Community Connect" grants on Friday, May 16. The focus of this program was to literally "connect a community" with broadband infrastructure, infrastructure that was currently not available and

because of the rurality and the current economic situations of the community, may never be available. Grant funds were made available to deploy broadband service to all critical community facilities, which we defined as local schools, hospitals, medical clinics and police, fire, and rescue services. Included in the grant was the cost of providing broadband service, free of charge, to these facilities for the first two years of operations. Grant funds were also available for establishing a community "broadband" center with a minimum of 10 computer stations where residents could come to learn about and use the Internet and to take classes via the Internet. Once again the grant provided funds for the cost of the broadband service to the community center for the first 2 years. Grant funds were also made available to connect all residential and business customers wanting service in the community.

This was the first time we offered this program, using $20 million in funding provided by Congress and the President. As you can well imagine, the interest in this program was phenomenal. We received over 300 applications totaling more than $185 million in funding requests. In what became an extremely competitive program, our Native American communities submitted outstanding applications, so much so that they submitted one-fourth of the successful applications and were awarded more than one-third of the total funding available. Of the 40 grants awarded totaling $20,185,000, 10 grants totaling $6,270,374 were awarded directly to Native American communities. Another 3 grants totaling $1,949,747 were award to telecommunications providers to exclusively serve Native American communities.

In this information age, there is an obvious connection between telecommunications and economic growth. Establishing a new, tribal telecommunications company is not a trivial task, with no guarantee of success. When successful, the rewards are tremendous – the quality of service improves, penetration rates increase, a wider range of services are offered and rates will be reasonable. The telecommunications company will also be a source of training and jobs on the reservation and the improved infrastructure will promote enhanced educational and medical care and additional economic development and growth. RUS is proud to be able to participate in this improvement in quality of life for Native Americans. Thank you, Mr. Chairman, for this opportunity to testify before the Committee on Indian Affairs.

Statement of Kelly Klegar Levy
Associate Administrator
Office of Policy Analysis and Development
National Telecommunications and Information Administration
U.S. Department of Commerce

Before the
Senate Committee on Indian Affairs

Hearing on the Status of Telecommunications in Indian Country
May 22, 2003

Mr. Chairman and Members of the Committee, I thank you for the opportunity to testify this morning, setting forth the views of the National Telecommunications and Information Administration (NTIA) with respect to the role of the Federal government in addressing the telecommunications needs in Indian country. NTIA serves as a principal adviser to the President, Vice President, and Secretary of Commerce on domestic and international telecommunications and information policy issues.

The Administration shares your interest in ensuring that telecommunications and information networks and services are available in Indian country. Clearly, we face a unique set of challenges in Indian country. In general, these communities have low population densities as well as low incomes. We have had difficulties with the data collection, research, and analysis that are needed to assess the telecommunications needs of American Indian communities. We need to determine the type of telecommunications technologies that would best serve the needs of these communities and be affordable. There are also questions as to whether existing telecommunications companies are serving the needs on Indian reservations, how to create and sustain tribal telecommunications companies, and what is the appropriate role of competition with tribal telecommunications companies. On all these issues, tribal input and consultation are critical. We look forward to working together with Congress as well as with the tribes to bring the benefits of telecommunications and information services to these American Indian communities.

The Department of Commerce has worked closely with American Indian and Alaskan Native communities for over 35 years. The Department's mission is to promote job creation and improved living standards for all Americans through economic growth, technological competitiveness, and sustainable development. We work with tribal communities on critical economic issues, including economic development, infrastructure, and natural resource management.

NTIA understands the importance of Internet access for all Americans. We have released a series of reports that profile Americans' access to the Internet at home and outside the home

and how different demographic groups use the Internet. Our most recent report, *A Nation Online,* which we co-authored with the Department of Commerce's Economics and Statistics Administration, was released in February 2002 and analyzed Census data taken from 57,000 households. We have been able to report the raw data for access to and use of computers and the Internet by "American Indians, Eskimos, and Aleuts (AIEA)." Unfortunately, because of the small sample size of the American Indian, Eskimo, and Aleut populations and the high costs of oversampling, we have been unable to obtain enough data points for these populations to run economic analysis and draw conclusions on this data in our reports. Our next Census survey will be taken in October 2003, and we hope that the numbers will be large enough to provide a statistical baseline for measuring American Indians' use of computers and the Internet. We will be happy to share the findings of our next survey with this Committee and any other interested parties.

At NTIA, we have worked to connect American Indian communities to advanced telecommunications services. The Technology Opportunities Program (TOP) has provided matching grants to non-profit institutions and state, local, and tribal governments to demonstrate ways to use advanced information technologies to provide access to public information and tribal government services, offer greater access to health care services and tribal cultural services, and provide job training and opportunities. TOP grants often have provided seed funding for such projects that then receive sustaining funding from other sources.

Approximately 9 percent of past TOP grants ($17.5 million) have been awarded to tribes or organizations that serve tribes. For example, TOP grants have been awarded to the White Mountain Apache Tribe, the Pueblo of Santa Ana, the Minneapolis American Indian Center, Navajo Technology Empowerment Centers, and the Cherokee Nation for projects establishing community-wide networks that enhance access to educational, economic development, health, government, and electoral services as well build capacity for e-commerce, e-training and distance learning. A list of TOP grants to American Indian and Native Alaskan entities is attached to my statement.

NTIA has also helped to extend the benefits of information and communications technology to American Indian and Alaska Native communities through the Public Telecommunications Facilities Program (PTFP). PTFP has made a significant contribution to the public broadcasting system in Indian country by (1) engaging in outreach efforts and (2) providing critical funding.

PTFP has worked with several organizations to provide direct outreach to Native American stations and communities. In June 2001, a PTFP program officer attended the Inter Tribal Native Radio Summit at the Confederated Tribes of Warm Springs Reservation in Oregon. Over 200 representatives from 25 native radio stations, American Indian Radio On Satellite distribution service, and the KOAHNIC Broadcasting service (Native American station in Anchorage AK) attended the event. As a follow-up to the Summit, the National Federation of Community Broadcasters hosted a PTFP application workshop in November 2001. PTFP

program officers gave a full day presentation at the Acoma Pueblo in New Mexico that was attended by 15 representatives from 7 stations and 2 radio projects in the planning stages. In March 2003, PTFP met with Native stations at the National Federation of Community Broadcasters annual conference in San Francisco. In late March 2003, PTFP participated in the Department of Commerce workshop at the American Indian Higher Education Consortium annual meeting in Fargo, South Dakota.

PTFP has also funded seven Native American projects over the past two fiscal years. In FY 2001, we gave a planning grant to the Tanana Chiefs Conference, Inc., to plan for Native-oriented public radio service in Fairbanks, Alaska, and throughout its service area in the Alaskan Interior Region. PTFP also gave two construction grants, to improve the transmission equipment of KSUT-FM and KUTE-FM, both stations licensed to the Southern Ute tribe in Ignacio, Colorado. In FY 2002, we have two construction grants, one to KBRW-AM, in Barrow, Alaska, and one to KYUK-FM in Bethel, Alaska (both stations licensed to Native American corporations). We also awarded two planning grants, one to the Grants-Cibola County School District for a joint project with the Laguna and Acoma Pueblos, New Mexico, to plan for a radio station; and one to Leech Lake Tribal College to plan for a radio station in Cass Lake, Minnesota.

NTIA is not alone in our efforts to address telecommunications needs in Indian Country. Our colleagues at other Federal agencies have also focused their attention on this issue. Over the past few years, the Federal Communications Commission (FCC) has undertaken a number of initiatives for bringing telecommunications services to Indian country. Under its mandate to promote universal service to all consumers, the FCC has been working with American Indian tribes and Alaska Native villages to ensure that people on tribal lands have access to telecommunications and information services. The FCC has released studies on telephone subscribership on tribal lands, confirming that American Indian and Alaska Native communities, on average, have the lowest reported telephone subscribership levels in the country. Its latest study, released May 5, 2003, shows that only two-thirds of all American Indian households living on American Indian Reservations and Off-Reservation Trust Lands: Federal have telephone service. While this figure is actually an improvement for American Indians, it is still far below the national average of 95 percent of American households that have telephone service. To help remedy this situation, the FCC has adopted enhanced programs, as part of the Universal Service Fund, to promote telecommunications subscribership and infrastructure deployment on tribal lands. The FCC has worked hard to promote its Lifeline and Link-Up Enhanced Support programs for tribal lands.

The Department of Agriculture's Rural Utility Service (RUS) has also worked hard to extend telecommunications networks and services into Indian country. RUS provides many programs for financing rural America's telecommunications infrastructure, including the Rural Telephone Bank; the Distance Learning and Telemedicine grants and loan program; the Broadband Pilot Program, a loan program designed specifically to increase the rate of deployment of broadband technology to small towns in rural areas; and the Weather Radio grant program, which provides funding for weather radio transmitters in rural areas.

The Administration in general and NTIA in particular will continue to work with the FCC and RUS to support its important initiatives for bringing the benefits of telecommunications and information technologies to American Indian communities.

The Federal government's efforts on spectrum reform, including authorizing secondary markets and the 5 GHz allocation, will also engender opportunities for meeting the telecommunications needs of Indian Country. These reforms enable us to use the resource better and allow for more innovative use of both licensed and unlicensed wireless technologies to meet the needs of rural communities. For example, as part of a National Science Foundation funded effort called "Advanced Networking with Minority-Serving Institutions (AN-MSI)," Motorola deployed its unlicensed wireless "Canopy" service on three Indian reservations, providing an advanced networking infrastructure in remote and high cost areas. Residents of the Turtle Mountain and the Fort Berthold reservations in North Dakota and the Fort Peck reservation in Montana now Internet access as well as video and IP telephony service. At Fort Berthold, Motorola's Canopy solution set a distance record for these types of wireless products of 27 miles delivering 20 megabits of bandwidth.

Mr. Chairman and members of the Committee, I thank you again for the opportunity to testify on this critical issue of the role of the Federal government in addressing the telecommunications needs in Indian country. I welcome any questions you may have for me.

TOP GRANTS TO AMERICAN INDIAN AND NATIVE ALASKAN ENTITIES

North Slope Borough: To connect eight rural communities above the Arctic Circle to share resources among hospitals and clinics, the school district, and administrative services, such as police and firefighting systems.
October 1, 1996; Barrow, AK; $350,000

Galena City School District: To bring affordable Internet access to a remote, rural region of Alaska.
October 1, 1996; Galena, AK; $230,928

Alaska Pacific University: Providing distance learning to underserved Alaska Native adult learners in remote villages.
October 1, 1998; Anchorage, AK; $240,000

Navajo Technology Empowerment Centers (NAVTEC): To establish a digital network for e-commerce development, e-training, and an electronic election system for all Navajo Nation general elections in the Western Navajo Agency.
October 1, 2001; Window Rock, AZ; $875,000

White Mountain Apache Tribe: To connect the schools, local hospitals, and tribal offices of a remote, economically disadvantaged tribal community to the Internet.
October 1, 1996; Whiteriver, AZ; $249,459

Pima County Community College: Connecting a community college, university, and a reservation to deliver online science modules.
October 1, 1998; Tucson, AZ; $500,000

Seba Dalkai Boarding School, Inc.: Implementing a wireless, satellite community network to link 110 local chapter houses (local tribal government entities) of the southwest Navajo Nation.
October 1, 1999; Flagstaff, AZ; $475,000

Round Valley Indian Health Center, Inc.: Using telemedicine to bring better health care services to a medically underserved, isolated area, which includes an American Indian reservation.
October 1, 2000; Covelo, CA; $140,000

Southern Ute Indian Tribe: Providing Internet access to the Southern Ute Indian Tribe, located in a rural, isolated part of the state.
November 1, 1995; Durango, CO; $214,000

Hawaii Area Health Education Center, Hawaii Unified Telehealth (H.U.T.) Program: To

advance health education through distance learning and intergenerational peer education using statewide video teleconferencing systems.
October 1, 2001; Honolulu, HI; $699,396

Lewis-Clark State College: To develop a plan addressing issues of access for the entire community and the delivery of social and government services.
October 15, 1994; Lewiston, ID; $30,929

NAES College: To link two college campuses in urban Native American communities and two reservations to a central facility in Chicago for workforce and educational training.
October 1, 1996; Chicago, IL; $152,576

Minneapolis American Indian Center: Creating a network to promote access to a wide range of social services for American Indian persons living in an urban area, while also developing communication capacities within the Twin Cities American Indian Community, the larger Twin Cities community, and select tribal governments.
October 1, 1997; Minneapolis, MN; $650,000

Leech Lake Tribal Council: Creating a tele-wellness infrastructure on a medically-underserved Tribal Reservation to provide health information as well as education for clinic staff.
October 1, 1999; Cass Lake, MN; $574,998

Montana State University, Montana Indian Technology and Cultural Heritage (TeCH) Learning Centers: To establish reservation-based technology training centers at which tribal elders and leaders will work with local youth, tribal college educators, and others on the digital preservation of their tribe's historical, cultural, and language resources.
October 1, 2001; Bozeman, MT; $809,365

Montana State University: To provide six tribal colleges, and the low income, rural communities they serve, with training in creating, maintaining, and using computer networks.
October 1, 1996; Bozeman, MT; $300,000

Saint Vincent Foundation: Integrating the Telemedicine Instrumentation Pack (TIP) unit, previously developed for spaceflight medical applications, with a terrestrial telemedicine network linking the Crow Reservation to St. Vincent Hospital.
October 1, 1997; Billings, MT; $464,264

Native American Public Broadcasting Consortium, Inc.: Planning to link 500 Native American tribes via the Internet, including a ten-site demonstration project.
October 15, 1994; Lincoln, NE; $155,844

Pyramid Lake Paiute Tribe: To establish a broadband, wireless network on a remote reservation to allow the tribe and its governmental departments to participate in government discussions and policymaking, and to gain access to information on programs, services, and

council meetings.
October 1, 2001; Nixon, NV; $314,077

Santa Ana Pueblo: Using a wireless community network to provide Internet access to the pueblo and information-sharing among tribal government departments.
October 1, 2000; Bernalillo, NM; $487,111

Rio Arriba Family Care Network, Inc.: Creating an online patient record system to let health care providers in a rural area exchange electronic medical records.
October 1, 2000; Espanola, NM; $533,515

University of New Mexico, Cyber Sovereignty - The Tribal Access Grid for Museums and Culture Centers: To provide five Native American museums/culture centers with broadband Internet connections for distance education and training, e-commerce, and viewing of web-based exhibitions and databases.
October 1, 2001; Albuquerque, NM; $815,784

Alamo Navajo School Board, Inc.: Increasing access to medical services from the Albuquerque Indian Health Service Hospital for 1,800 residents of the Alamo Reservation through on-site diagnostic consultation using interactive video teleconferencing, which will also be used to support staff development and training.
October 1, 1997; Magdalena, NM; $133,280

National Indian Telecommunication Institute: Creating an Internet-based interactive teaching tool to train curators at Native American museums.
October 1, 1998; Sante Fe, NM; $244,059 21.

Fort Berthold Community College: Creating a partnership with the Three Affiliated Tribes (Mandan, Hidatsa, and Arikara Nations), community organizations, the reservation school, the Job Service, and the Bureau of Indian Affairs to develop a reservation-wide telecommunications system to provide education, culture, and training to all areas of the reservation.
October 1, 1997; New Town, ND; $234,350

Cherokee Nation: Cherokee FIRST (Friendly Information Referral Service Team): To link electronically seven Cherokee community centers to allow end users in rural and remote areas of Northeast Oklahoma to participate in a wide variety of services (some in the Cherokee language), including health, human services, housing, education, and public safety.
October 1, 2001; Tahlequah, OK; $652,586

National Indian Child Welfare Association, NICWAnet: Improving Indian Child Welfare Services and Outcomes Through Access to Technology: To improve the well-being of American Indian children and families, to improve the child welfare services that they receive, and to strengthen tribal and state Indian child welfare programs via the Internet.
October 1, 2001; Portland, OR; $765,469

Columbia River Inter-Tribal Fish Commission: Planning a community network to link Indian tribes in the Columbia River Basin.
October 15, 1995; Portland, OR; $46,237

Northwest Portland Area Indian Health Board: Creating a computer network to track disease patterns and plan public health interventions in geographically remote tribal communities in the Pacific Northwest.
October 1, 1997; Portland, OR; $625,045

Intertribal GIS Council, Inc.: Providing tribes with a Geographical Information System and creating a database to manage tribal natural resources.
October 1, 1998; Pendleton, OR; $113,804

Rural Alliance, Inc.: Using information technology to provide online resources for pregnant mothers and families with young children in a rural area of the state.
October 1, 2000; Rapid City, SD; $300,000

Mni Sose Intertribal Water Rights Coalition, Inc.: Planning a telecommunications network among 23 Indian tribes in five states.
October 15, 1995; Rapid City, SD; $233,290 29.

Oglala Sioux Tribe: Developing a digital wireless home health care service network for residents of the Pine Ridge Reservation to coordinate responses form health services and emergency services to high-risk patients.
October 1, 1997; Pine Ridge, SD; $208,989

University of South Dakota, School of Medicine: Establishing a two-way interactive link between McKennan Hospital in Sioux Falls and the Yankton Sioux Reservation to deliver child psychiatry services to Native American children with Attention Deficit Hyperactivity Disorder (ADHD).
October 1, 1997; Sioux Falls, SD; $54,880

Suquamish Indian Tribe: Using wireless technology to provide educational services to the tribal families and children.
October 1, 2000; Suquamish, WA; $410,000

Kalispel Tribe of Indians: To develop broadband digital network technologies to assist Indian tribes in eastern Washington preserve and sustain their shared tribal culture, history, and language.
October 1, 2002; Usk, WA; $505,000

Testimony of
Kade L. Twist Consulting
Before the United States Senate Committee on Indian Affairs
On the Status of Telecommunications in Indian Country
May 22, 2003

Introduction

Chairman Campbell, Vice Chairman Inouye, and distinguished Members of the Committee, thank you for inviting me to testify before the Committee on Indian Affairs. It is an honor to be here with you today. I would like to express my sincere appreciation for your continuing efforts to improve the status of telecommunications in Indian Country.

My name is Kade L. Twist. I am a member of the Cherokee Nation and President of Kade L. Twist Consulting. I have been conducting research on the subject of telecommunications in Indian Country for the past year as a consultant to the Ford Foundation.

In my research I have worked with over 30 American Indian executives and practitioners in the field of tribal telecommunications. My research has also benefited from high level tribal meetings with FCC Commissioners and FCC bureau directors, Senate Indian Affairs Committee meetings, National Congress of American Indians Telecommunications Subcommittee meetings and National Tribal Telecommunications Association meetings.

Over the course of my research one significant finding has emerged: providing cutting edge equipment and infrastructure is not a solution, in and of itself, for the development needs of American Indian telecommunications. ***Equipment and infrastructure are merely tools. They are only effective when they are applied in a manner that provides for—and advances—the social, civic and cultural needs of respective Indian communities.***

Even if every mile of Indian Country were wired the majority of tribes would not have the knowledge, expertise and organizational capacity to effectively utilize, manage and sustain their infrastructure. Telecommunications systems are expensive to sustain and require a large number of staff with wide array of skill sets to keep them up and running. Furthermore, it requires a great deal of experience, expertise, creativity, community education and community organizing to utilize telecommunications systems in a manner that compliments the cultural will of tribal people while meeting their social and civic needs.

It is critical for Native telecommunications stakeholders to look beyond immediate infrastructure and equipment deficiencies. Instead, stakeholders should evaluate how the deployment of infrastructure and equipment can complement larger community development, nation building, social service, education and cultural preservation

strategies. Telecommunications development must be driven by practical applications that benefit the largest number of community members possible.

Furthermore, it is also critical for stakeholders to pay close attention to capacity building and sustainability issues. ***Indians have just begun the processes of making telecommunications fit their respective cultural and social wills.*** Therefore, Indian Nations have an intense need for planning, community organizing, training, technical assistance, capacity building assistance and the recruitment of talent with a diversity of skill-sets. Indian Nations must develop their organizational infrastructures, regulatory codes and regulatory bodies to ensure the appropriate development and sustainability of telecommunications endeavors on tribal lands, as well as, ensuring the consumer rights of their respective tribal members.

Background

Telecommunications in Indian Country is severely underdeveloped, underfunded, misunderstood and poorly utilized. According to the FCC's most recent data, which is based upon the 2000 Census, only 67.9% of American Indian households on tribal lands have telephone service—while 96% of the rest of America have telephone service. Only 10% have household Internet access.[1] Much like media, telecommunications has taken a backseat to tribal needs with higher priorities, such as providing food, basic social services, healthcare and education. Furthermore, barriers such as geographic isolation, rugged and diverse terrain, low population densities and the lack of existing telecommunications infrastructure make the development of telecommunications even more difficult. The following are brief descriptions of the structural barriers to tribal telecommunications development:

- **Lack of economic development:** The lack of tribal and private enterprises make it difficult to provide a compelling (and sustainable) business case for private sector investment.

- **Lack of existing infrastructure:** Efforts to deploy infrastructure are very expensive because there isn't a foundation to build on. And quite often, infrastructure that does

[1] U.S. Department of Commerce, Economic Development Agency, *Assessment of Technology Infrastructure in Native Communities,* October 1999.

exist is not capable of being used because its old, in poor condition, has insufficient bandwidth capacity, and not worth the investment of upgrading.

- **Geographic isolation, low population densities and rugged terrain:** These characteristics, especially when combined, substantially raise the cost of developing and sustaining technology infrastructure.

Fortunately, the need to develop and sustain telecommunications infrastructure is finally beginning to appear on the radar screen of tribal decision makers. Elected tribal leaders have begun to understand that telecommunications, if effectively utilized, has the potential to enhance and expand educational and healthcare opportunities, expedite the delivery of public services, support the provision of enhanced emergency services, create employment opportunities and facilitate economic development.

There is a urgency among leaders in Indian Country to simultaneously build-out telecommunications infrastructure, deploy new services and applications, and gain a sufficient base of knowledge of these technologies so that tribal leaders can maximize their positive impacts (e.g., economic development, healthcare, education, etc.) and minimize their negative impacts (e.g., assimilation, consumerism, cultural commodification, etc.) on community members.

Yet, tribal leaders are still grappling with the question of how to utilize telecommunications effectively. And they are also struggling to find ways to fund the high costs associated with deployment and long-term sustainability without diverting already limited resources needed to provide for the basic needs of community members. There is a steep learning curve and large number of vulture-consultants hovering around waiting for the opportunity to take advantage of a tribe's lack of expertise.

Lack of Infrastructure

There are already a number of previous studies that discuss the lack of telecommunications infrastructure in great detail.[2] However, the data chart below provides a clear snapshot of the telecommunications deficiencies in Indian Country.

[2] Please see: *Telecommunications Technology and Native Americans: Opportunities and Challenges,* U.S. Congress, Office of Technology Assessment, *Telecommunications Technology and Native Americans: Opportunities and Challenges,* OTA-ITC-621, August 1995; U.S. Department of Commerce, Economic Development Agency, *Assessment of Technology Infrastructure in Native Communities,* October 1999; Benton Foundation, *Native Networking: Telecommunications and Information Technology in Indian Country,* April 1999.).

Technology	2,500 pop. or more Households	Rural Households	% of Businesses	% of Schools and Libraries	% of Health Care
Cable	50%	34%	24%	46%	29%
Telephone[3]	67.9%	39%	n/a	n/a	n/a
Computer	15%	14%	73%	90%	88%
Internet	10%	8%	43%	82%	62%

Percentages of Homes, Businesses, Schools, and Health Care Providers with Cable, Computers and Internet. (Source: U.S. Department of Commerce, Economic Development Agency, *Assessment of Technology Infrastructure in Native Communities,* October 1999.)

Obviously, there is a telecommunications crisis in Indian Country that is undermining the potential for expanding the human, economic and civic capacities of Indian Nations and tribal members. The data chart above reveals that ubiquitous telephone and Internet access is far from attainable in the near future. The concepts of equity, access and diversity among public communications systems are redlined around most of Indian Country. It's a bleak picture that raises a number of critical social justice issues. For instance, without household telephone service American Indians are dying in their homes because they don't have access to 911 services; they are unable to attain employment because they don't have a phone; they are unable to communicate effectively with their children's teachers or elected leaders.

Without household Internet access American Indians are unable to reap the benefits of an e-government democracy; they are unable to contribute to the public sphere; they are unable to contribute to the diversity and richness of mainstream America through the sharing of their stories, experiences, languages and cultures. Unfortunately, there has not been an adequate study of how the Indian Country digital divide has impacted American Indians from a social justice perspective. Clearly there is a need for more research and analysis of this topic.

Knowledge and Capacity Building

Efforts to bridge the digital divide in Indian Country are subject to lingering efforts to bridge the analog divide. In addition to "catching up" technologically, Indian Country must also solve existing deficiencies resulting from the analog age. This puts a tremendous burden upon tribes and Indian nonprofits to develop organizing processes that address remedial needs and more advanced needs simultaneously. Therefore, the

[3] 2000 Census, as compiled by the FCC, 2003.

needs for building organizational capacity and planning assistance should be viewed all stakeholders (tribal, federal, state, corporate, nonprofit, and philanthropic) as a top priority. Currently, the majority of Indian Country does not have the organizational capacity or planning resources to expeditiously and efficiently build-out needed infrastructure or effectively manage and utilize infrastructure once it is in place. Addressing the organizational capacity building and planning assistance needs of Indian Country is not only essential to building out infrastructure, it is also essential to sustaining technology investments.

During the course of my research the majority of survey responses identified knowledge and capacity building needs as more significant than funding for development. Furthermore, respondents expressed frustration toward existing knowledge and capacity building resources because, like those available for Native media, they are typically limited to one-day workshops that don't address the needs of specific communities and provide little or no opportunities for on-going support. The majority of respondents also stated that they experienced difficulty accessing capacity building funds for their respective organizations. This is another area where Native media and telecommunications organizations share similar needs and frustrations.

A system of intermediary programs within existing organizations could provide regularly scheduled cluster training and technical assistance sessions followed up with on-going support through on-site visits. Organizations such as the Southern California Tribal Chairman Association and the Affiliate Tribes of Northwest Indians already function successfully as knowledge and capacity building intermediaries. Facilitating collaboration among these and similar organizations might represent the most viable and valuable solution.

The following is a list of the most frequently identified knowledge and capacity building needs:

Challenges

Core funding: The lack of funding for staff and knowledge and capacity building activities poses serious limitations upon the ability of tribes and nonprofits to improve upon the current state of Native telecommunications. The lack of core is the leading barrier to: 1) maintaining organizational stability; 2) effectively and efficiently administering projects and programs that require broad-based collaboration; 3) seizing opportunities to build broad-based partnerships; and 4) building and retaining a highly-skilled, professional staff.

Training and technical assistance: The training and technical assistance component is critical to all knowledge and capacity building endeavors. As previously discussed, a system of training and technical assistance intermediaries is needed to provide support that is specifically designed for the needs of tribes and Native telecommunications organizations.

Planning: Only 17% of tribes have developed technology plans.[4] Federal and foundation funding priorities do not adequately address the telecommunications planning needs of Indian Country. Appropriate and sustainable telecommunications development cannot take place without sufficient planning. There is a tremendous need for funding for planning processes that leverage resources and promote collaboration among tribes and nonprofits, as well as, strategic partnerships among tribes, nonprofits and the private sector.

Community organizing: It is essential for tribal telecommunications development efforts to be linked with existing education, healthcare and economic development efforts. Many tribes have been unable to develop such linkages, and as a result, they are duplicating efforts, failing to leverage resources and failing develop fully integrated systems. Unfortunately, funding for this type of community organizing has not been made available to tribes or nonprofits. As a result, potential efficiencies and market development opportunities have been unrealized.

Research: There is a need for research, data, analysis and assessments regarding specific reservations and regions of Indian Country. There is a lack of understanding of what infrastructure exists. This lack of understanding makes community technology planning difficult and expensive.

Technology selection: Tribes need access to advanced technical assistance and peer-to-peer technical assistance so that they can successfully choose appropriate technologies for their specific geographic needs and applications needs. Unfortunately, federal and foundation resources fail to adequately provide for this type of technical assistance.

Demand aggregation: There is a strong need for Intertribal collaboration for telecommunications development. Tribes that share geographic regions and have similar telecommunications needs should pool and leverage resources collectively to purchase equipment and contract with vendors and service providers at high volume, reduced rates. Many states, such as Arizona and Oklahoma have been successful in doing this as they have deployed public broadband networks. Unfortunately, this type of collaborative

[4] U.S. Department of Commerce, Economic Development Agency, *Assessment of Technology Infrastructure in Native Communities,* October 1999

model requires a level of training and technical assistance that is beyond the scope of current federal and foundation funding priorities.

Regulatory systems: Only a small handful of tribes have regulatory codes and regulatory bodies for telecommunications. As a result, tribes are unable to hold service providers accountable to tribally mandated business standards and are unable to ensure the protection of consumer rights for their tribal members. Furthermore, it complicates the process of establishing tribal telecommunications companies, prevents tribes from providing services off reservations, and opens the door to disputes over matters of state, federal and tribal jurisdiction. Federal and foundation resources have not been made available for the training and technical assistance tribes need to develop regulatory systems for telecommunications.

Fundraising: Determining how and where to access funds for specific projects and media programming. The lack of crossover appeal of Native narratives limits the success of typical fundraising approaches. There is a severe disparity in funding between Native produced content and mainstream content.

Recruiting staff with advanced skill-sets: There is a shortage of American Indian telecommunications professionals. There is a strong need for internship programs and education and outreach programs aimed at recruiting high school and college students to pursue a career in tribal telecommunications. Unfortunately, advanced skill-sets are difficult to recruit and retain in Indian Country due to the inability of reservation economies to compete with metropolitan economies. An increase in core funding for federal and foundation programs targeting Indian Country would alleviate this problem.

Professional development: Professional development not only improves the value and technical ability of staff, it also improves staff self-esteem and provides incentive to achieve and, in the very least, maintain their employment.

Leadership development: Effective leadership is critical to building and sustaining organizational capacity. Effective leaders have the creativity, knowledge, networking skills and organizing skills to attract a motivated and capable staff, tap into a variety of private, public and foundation resources, build value-added partnerships with private sector and academic institutions, and garner community support for their endeavors. Leadership development organizations such as Americans for Indian Opportunity have had a tremendous impact on the current generation of Indian leaders. However, there is not one leadership development program that specifically targets Native telecommunications professionals.

The Need for Further Research and Analysis

There is a tremendous need for a more comprehensive assessment of existing communications technology infrastructure and services subscribed to in Indian Country. Currently, there is a lack of accurate data and appropriately contextualized data for telecommunications infrastructure, available services and services subscribed to on a reservation-by-reservation basis. Data that does exist is either outdated, lacks integrity due to small sample sizes and inappropriate collection methods, or has not been made available on a reservation-by-reservation basis.

The lack of quality data prevents tribal leaders from adequately measuring the severity of their telecommunications and information technology deficiencies, and thus, limits their ability to make decisions that will effectively reverse these deficiencies. The lack of data also severely limits the effectiveness in which tribal leaders are able to participate in an already limiting federal decision making process.

Having access to quality data is also crucial for future telecommunications development. Making such data available dramatically increases the potential for attracting private investment and forging partnerships with private enterprise. Quality data enable tribal communities to map their telecommunications assets and aggregate telecommunications service demand, which are critical processes to providing the private sector with a good business case for future investment.

There also needs to be more research and analysis of communications technology development processes such as tribal collaboration, community planning, demand aggregation, attaining right-of-ways, establishing tribal telecommunications companies, setting up telecommunications regulatory bodies and codes, etc. Best practices for these processes need to be identified and analyzed as a means of promoting the most effective, efficient and affordable means for deploying new technology infrastructure. Best practice models enable tribal leaders to develop successful strategies for future technology development efforts. Furthermore, best practice models can be used to inform the development of federal policies.

Recommendations

Design and implement a funding mechanism that is specifically designed to meet the telecommunications needs of Indian Country and flexible enough to accommodate pre-development, development, *and* knowledge and capacity building endeavors.

The funding mechanism should link telecommunications investment with nation building, economic development, cultural preservation, community networking and efforts to

improve upon core public services, such as: education, healthcare, housing, law enforcement, fire and public safety, and enhanced 911 services.

$25 million dollars should be appropriated annually, for a period of at least five years, to provide grants to tribal governments and incorporated entities on tribal lands for the purposes of :

- Training and technical assistance, planning, market assessments, aggregating, demand, research, data collection, community organizing, technology selection and system design;

- The construction, acquisition, or lease of facilities, including spectrum, to deploy broadband transmission services to all critical community facilities and to offer such service to all residential and business customers located within the proposed service area;

- The improvement, expansion, construction, or acquisition of a community center that furnishes free access to broadband Internet service, provided that the community center is open and accessible to area residents before and after normal working hours and on Saturday or Sunday. Grant funds provided for the community center are limited to the greater of $100,000 or 5% of the grant amount requested. The costs of the computer access points, their installation, connection to the broadband transmission system are not included in this limitation;

- The purchase of end-user equipment needed to carry out the project;

- Operating expenses incurred in providing broadband transmission service to critical community facilities for the first 2 years of operations and to provide training and instruction. Salary and administrative expenses will be subject to review, and may be limited, by RUS, for reasonableness in relation to the scope of the project; and

- The purchase of land, buildings, or building construction needed to carry out the project.

Grant awards should start at $50,000 and have no set limit. Grants should be awarded on a competitive basis. A 25% match of non-federal funds should be required. An emphasis on leveraging resources should be applied to all grants awarded.

Conclusion

It is important for Native telecommunications stakeholders to look beyond the current overwhelming lack of infrastructure. Instead, stakeholders should focus on identifying processes of development that complement larger economic development, social service, education and cultural preservation strategies. This will enable the use of scalable development strategies that can be funded incrementally from a broad range of resources. Furthermore, telecommunications development must be driven by practical applications that have a high level of community relevancy.

In this exuberant rush to develop Native telecommunications, it is critical for stakeholders to pay close attention to capacity building and sustainability issues. As previously stated, *Indians have just begun the processes of making telecommunications fit their respective cultural and social wills.* Indian Country has a steep and expensive learning curve to climb. Therefore, Indian Nations have an intense need for planning, community organizing, training, technical assistance, capacity building assistance and the recruitment of talent with a diversity of skill-sets. Indian Nations must also develop regulatory codes and regulatory bodies to ensure the protection of their members' rights as consumers.

Moving the Native telecommunications agenda forward is critical, since these technologies enable tribes to jump over some of the biggest hurdles in developing economic and human potential. Therefore, I urge the Committee to take the necessary steps to design and implement a funding mechanism for telecommunications development in Indian Country that is flexible enough to meet the diverse needs of tribes and aggressive enough to assist tribes in overcoming their enormous telecommunications deficiencies. Funding assistance for telecommunications development without funding assistance for knowledge and capacity building merely solves half of the equation—the non-human side of the equation. Indian Country stands to benefit most from an investment in equipment and infrastructure that is matched with an investment in its people; an investment in building the capacity and knowledge of its people to manage, sustain, and culturally appropriate telecommunications so that these technologies can be made Indian.

Statement of
Marcia Warren Edelman
President, Native Networking Policy Center (NNPC)/ former Senior Policy Advisor for Native American Affairs, U.S. Department Of Commerce

Testimony before the Senate Committee on Indian Affairs
Oversight Hearing on the Current Status of Telecommunications in Indian Country
May 22, 2003

Good morning Chairman Nighthorse Campbell and Vice Chairman Inouye, members of the Committee, tribal representatives and leaders, and distinguished guests. Thank you for your invitation to come before the Committee today to present testimony on the current status of telecommunications access in Indian Country.

My name is Marcia Warren Edelman and I am the President of the Native Networking Policy Center (NNPC), a new non-profit organization incorporated in March 2003 that focuses on facilitating the development of a collaborative policy-making process, building Native capacity, and increasing education and outreach among tribes and policy-makers at all levels of government on issues regarding the Digital Divide in Indian Country.

I also serve as the President of S.M.E. LLC, a consulting firm that provides strategic planning and business development services in the areas of Native American policy, economic development, and telecommunications and information technology, and from 1999 to 2002, served as the first Senior Policy Advisor to the Secretary for Native American Affairs for the U.S. Department of Commerce in Washington, D.C. During that time, I had the opportunity to lead an intra-departmental Native American Affairs Working Group in the development of a five-year strategic plan for Indian programs and policy; coordinate the "Digital Opportunities in Indian Country" site visit on Secretary Norman Mineta's *Digital Opportunities Tour*; and serve as the Department's representative to the White House Domestic Policy Council's Working Group on American Indians and Alaska Natives, and to the National Congress of American Indian's (NCAI) Digital Divide Task Force. I am also the co-author of "Native Networking: Telecommunications and Information Technology in Indian Country," a policy report and resource manual published by the Benton Foundation in 1999.

I am pleased to come before the Committee today to provide background information and an overview of the Digital Divide in Indian Country, and discuss a number of current policy and advocacy efforts that have been taking place in the last few years.

Digital Divide in Indian Country: An Overview

In 1999, the term "Digital Divide" emerged as a new cultural catch phrase, describing the country's state of connectivity to the rapidly growing world of the Internet and its partner technologies. On one level, the Digital Divide spoke to the need for additional infrastructure to bring the Internet to the entire country, not unlike early discussions regarding the national highway system. But on a deeper level, it highlighted familiar divisions within our society, those

of race, income and access to economic opportunities. In essence, the Digital Divide made the country re-examine and recognize who falls into the categories of "haves" and "have-nots," while providing the banner phrase that would begin an unprecedented effort in both the public and private sectors to equalize these groups under the umbrella of technology.

But for some of the "have-nots," namely Native Americans, access to technology was not as simple as establishing the highest-speed connection or purchasing the optimal computer system. For the majority of American Indians, the Digital Divide reflected a much more basic problem. According to three reports released in 1999, over half of American Indians were excluded from the emerging digital economy at its very point of entry—the telephone line:

"Falling Through the Net: Defining the Digital Divide" published by the Commerce Department's National Telecommunications and Information Administration (NTIA) found that:

- For telephone penetration, rural Native American households (76.4%) ranked far below the national average (94.1%).
- Rural Native American households' access to computers (26.8%) was also lower than the national average (42.1%).
- Overall, Native Americans were also behind in their access to the Internet (18.9%), compared to the national average (26.2%).

The Economic Development Administration (EDA) supported these findings in their report, "Assessment of Technology Infrastructure in Native Communities," with similar data and identified the dilemma faced by many tribes in this area:

> "Today, many Native communities find themselves in a vicious circle. The weak economic base of these communities makes it difficult to support infrastructure investment. And in turn, the poor state of infrastructure undermines their ability to undertake and attract successful economic development initiatives."

Finally, the Benton Foundation's report, "Native Networking: Telecommunications and Information Technology in Indian Country," provided not only an effective guide to the policies and resources affecting tribes, but also presented the following challenge:

> "Tribes must begin at home to define the needs and goals important to their communities, and then reach out and forge the relationships necessary to achieve those goals. As well, federal agencies, foundations, businesses and policy makers must include tribes and Indian people in their scope of telecommunications and technology growth and opportunities. Only then, when these two spheres meet and a new network of relationships is created, will the mandate of the Information Superhighway truly be fulfilled."

Two years later, in July 2001, the National Congress of American Indians (NCAI) released their own report on the issue, "Connecting Indian Country: Tribally-Driven Telecommunications Policy." Based on the work of the NCAI Digital Divide Task Force, it provided valuable policy recommendations and emphasized the need in Indian country for additional coordination of resources, and access to capital and technical assistance in order to fully address the challenges faced by tribes today.

The findings of these reports made it clear that for Native communities in this country, the Digital Divide was, in reality, a "Dial-Tone Divide." This urgent situation continues to exist

today where the current infrastructure capabilities of these areas fall far behind that of the rest of the country, threatening the economic, educational and cultural self-sufficiency of tribes and their communities.

Current Policy and Advocacy Efforts in Indian Country

Last May this Committee held a joint oversight hearing on tribal telecommunications issues. In my testimony at that time, I identified three reasons that contribute to the fact that the telecommunications infrastructure needed to support connectivity for every Indian individual in his or her home or community continues to remain, for the most part, unavailable and unaffordable. These reasons were as follows:

- Lack of investment capital and technical assistance
- Lack of current and accurate information
- Lack of ongoing coordination of resources

Investment Capital and Technical Assistance

Since that time, we have seen some progress in addressing the funding question, beginning with the preservation of two important federal programs which continue to have a significant impact for tribes: the National Telecommunications and Information Administration's Technology Opportunities Program (TOP) and the U.S. Department of Education's Community Technology Center (CTC) Program. We have also seen the U.S. Department of Agriculture's Rural Utilities Service Broadband Technology Grant award $8.2 million to 13 Native American communities this year, and the continued funding to Native American Community Development Financial Institutions (CDFIs) under the Department of Treasury. All of these programs provide much-needed funds for initial investment and ongoing technical assistance; however, overall funding for telecommunications and information technology projects in Indian Country remains inadequate to address the needs of these communities, especially in the areas of feasibility studies and upgrades/ongoing operations support.

Current and Accurate Information

In the past four months that we have seen a marked resurgence in examining the telecommunications and information technology landscape in Indian Country, both in terms of policy development and current data. Over the course of two days in February 2003, these issues were examined in three very important meetings:

1. The National Congress of American Indians' (NCAI) Telecommunications Subcommittee conducted a half-day policy and advocacy meeting after the NCAI Winter Session;
2. The Federal Communications Commission (FCC) Chairman Michael K. Powell and Commissioners Kathleen Q. Abernathy, Michael J. Copps and Jonathan S. Adelstein, and several bureau chiefs held a day-long meeting with a high-level delegation of tribal leaders and representatives of tribal telecommunications companies and organizations to discuss ways to improve access to telecommunications products and services throughout Indian Country; and,

3. The U.S. Senate Committee on Indian Affairs invited attendees of both meeting above to an informal brainstorming session to explore ways to develop legislation to address this issue.

The fact that these meetings took place highlights the increasing recognition of the federal government and national tribal organizations of the importance of closing the telecommunications gap in Indian Country, and marked an important milestone in the efforts of those involved to bringing possible solutions to policy-makers at all levels.

We saw the first result of those meetings at the beginning of this month with the release of a new FCC report, "Telephone Subscribership on American Indian Reservations and Off-Reservation Trust Lands." This report based its findings on data from the 2000 Decennial Census, showing that **67.9 %** of American Indian homes currently have telephone service compared to **46.6%** in the 1990 Census. The good news is that over the past ten years, there has been a **20% increase** in residential access to telephone service throughout Indian Country; however, the bad news is that Native communities remain well below the **national average of 95.1%** (based on figures from the July 2002 Census Current Population Survey).

Ongoing Coordination of Resources

It was evident during the meetings that even though many efforts have been made to address the need in Indian Country for access to infrastructure, funding, information and technical assistance, yet these efforts have not resulted in consistent and coordinated activities that can best serve tribes and tribal organizations working to close the gap. Specifically, tribal governments, regional intertribal organizations and national Indian organizations are not adequately participating in policy-making processes, and as a result lack:

- notification and guidance regarding policy making proceedings impacting Indian Country;
- a well-defined and coordinated policy advocacy strategy; and,
- adequate research, data and analysis to support policy advocacy endeavors.

What is missing is a central repository for policy development, research and educational outreach, which can effectively address the problems being presented today to the Native community.

For this reason, the **Native Networking Policy Center (NNPC)** was created in order to leverage the existing expertise, resources and efforts already underway to finally achieve the goal of digital inclusion in Indian country. In March 2003, the NNPC was formed as a non-profit organization whose mission is to ensure equitable and affordable access to, and the culturally appropriate use of, telecommunications and information technology throughout Indian Country. NNPC is working to achieve this mission by addressing the following goals:

- **Policy Development** – Ensure the inclusion of Native interests in the development and promotion of policies on all levels of government to improve and increase the deployment and use of telecommunications and information technology throughout Indian country.

- **Research and Evaluation** – Conduct research and data collection to create a baseline of information to support NNPC policy development and education efforts, as well as inform local and federal stakeholders of relevant and current information impacting telecommunications and information technology needs deployment in Indian country.

- **Education and Outreach** – Analyze, evaluate and disseminate all relevant information and resources to tribes, Native organizations, policymakers and practitioners so that they can develop policies that will promote the appropriate and timely deployment of telecommunications and information technology infrastructure and services throughout Indian Country.

We feel that the expertise to address these issues exists among tribes and the public and private sector today – all that is needed is an organization to focus on providing the information and communication between the stakeholders necessary to achieve results. NNPC is willing to serve in this capacity as an **added value** to any tribe and/or public or private sector entity by providing the policy and information tools necessary to best coordinate efforts, create resources, identify relevant information and promote awareness and action.

Conclusion

Today, tribes are at a pivotal point in history. Self-determination policies have begun to yield measurable results in Native communities, from the development of diversified tribal economies to the revitalization of Indian languages and culture. Throughout the country, the number of tribal and Indian-owned enterprises has grown dramatically, and many tribes have become active participants in economic and political arenas, on both local and national levels. However, the impressive growth we see in these areas will continue to be limited as long as the opportunities afforded by access to the digital economy of the nation exist beyond the boundaries of infrastructure, funding and regulations.

It belongs to those of us in the room today and who we represent – individual tribes, regional and national tribal organizations, Congress and the federal government – to work together to further the progress being made in closing the Digital Divide in Indian Country. I am confident that today's hearing will provide the substance and direction to bring the resolution of this issue into action. Thank you again for your invitation to testify, and I welcome any questions you may have.

Statement of
Richard P. Narcia
Governor
Gila River Indian Community

Testimony before the Senate Committee on Indian Affairs
Hearing on the Status of Telecommunications in Indian Country
May 22, 2003

Good morning, Chairman Campbell, Vice Chairman Inouye, and members of the Committee. My name is Richard Narcia, Governor of the Gila River Indian Community. On behalf of the Community, I am pleased to be here today to provide testimony on the issues of telecommunications and technology implementation that has evolved in our community. In an effort to be brief, Mr. Chairman, I would like to provide just a few of the important highlights that are included in my written statement that has already been submitted.

Accompanying me this morning is Mr. Robin Fohrenkam who is the presently the Chairman of the Board of Directors of the Gila River Telecommunications Company (GRTI).

I find it a great honor to be speaking to the Committee today about this issue; particularly because I believe the Gila River Indian Community can provide valuable insight into the process a tribal government goes through to address the telecommunications needs of its community. Since the late 1990's, we have come to use the term "Digital Divide" to describe the gap between those who have access to telecommunications services and those who do not. Over the past several years the Community, through its partnership with the Community-owned telecommunications company and development of a Management Information Systems Department (MIS), has devoted significant resources to bring our technology systems up to par with other similar entities.

BACKGROUND

By way of background, the Community and its people have historically been modest yet industrious people. The Gila River Indian Community traces its roots to the Hohokam, prehistoric Indians who lived and farmed along the Gila River Basin centuries ago. Composed of two tribes, the Pima and Maricopas, the 600 square mile reservation was established by an Act of Congress in 1859 and formally established by Constitution in 1939. Today, the Community is home to nearly 15,000 people and is the largest Indian Community in the Phoenix metropolitan, located in two separate counties. In fact, several of the cities with the highest growth in the Phoenix area, share common boundaries with the Community. The cities of Phoenix, Gilbert, Mesa, Chandler, and Casa Grande are a few of the cities that continue to grow along our border area.
While the tradition of the Community has historically been agriculture, in recent years we have attempted to diversify the economic base to include:

- The development of three industrial parks that are home to several local and national companies. One park, Lone Butte Industrial Corporation, is nationally acclaimed as one of the most successful Indian industrial parks in the United States.
- Established a tribal farming operation that has nearly 15,000 acres in production. Cotton, hay, and citrus are just of the few of the crops harvested annually.
- Under a tribal/state gaming compact the Community owns and operates three gaming facilities that have served as the catalyst for the economic engine of the Community.
- Resorts and recreation: The Community recently opened the Sheraton Wild Horse Pass Resort and Spa, a 500-room resort, spa and golf destination property.
- The Community has established several corporations that generate revenue and provide services back to the Community, including The Gila River Telecommunications Inc. (GRTI).

Telecommunications and Technology

As the leadership of the Community has planned for the diversification of its economy, while also providing essential services to the residents and members, it has been incumbent to invest adequate resources in technology and telecommunications. I am happy to say that over the past few years the progress we are making has become very evident; however, we still have a long way to go.

Gila River Telecommunications Inc.

A central component to the community's ability to role out technology improvements has been the activity of the Community's telecommunications company *Gila River Telecommunication Inc. (GRTI).* When GRTI was formed in 1988 the primary purpose was to provide Community members with reasonably priced phone service from a familiar, friendly face. At that time, for example, new service could have cost up to $20,000 to provide **one phone line** to one customer. With initial capital funding from the U.S. Department of Agriculture's Rural Utilities Service (RUS), and continued support in the way of low-interest government loans for infrastructure construction from RUS, GRTI is able to continue providing affordable services to its customers.

GRTI Business Model:

GRTI was established as a separate business entity from the Community on July 6, 1988 primarily through federal and private financing, and was supported by the Gila River General Cellular Partnership. This partnership was formed when GRTI won the license for cellular service and was approached by Dobson Operating Company, US West, and the Tohono O'odham Utility Authority.

In 1990, GRTI was secured its first loans from a private bank and the U.S. Department of Agriculture's Rural Electrification Administration (which today is known as the Rural Utilities Service (RUS)), both of which were collateralized by GRTI's interest in the Gila

River General Cellular Partnership. With this funding, GRTI was able to start operations and begin construction on its facilities and telecommunications infrastructure. From 1990 to 1992, GRTI acquired one central office and all cable facilities within the Gila River Indian Community from US West. We were also able to construct five additional central office buildings, seven digital central office switches, and our headquarters, as well as build out fiber optic cable and electronics to all those offices. At the end of March 1992, GRTI was operating approximately 1,100 access lines and had built out copper cable to connect previously unserved customers.

In 1993, additional financing was secured from the RUS, the Rural Telephone Bank (RTB) and the Federal Finance Bank (FFB) to upgrade switches for advanced custom calling features, bring in additional cable for subscriber growth and US West replacement, establish Digital Loop Carrier (DLC) concentrators, and build out additional fiber optic cable to service DLC carriers and the Community's businesses.

In the last ten years, GRTI has continued to secure private and federal financing to ensure our services and equipment are state-of-the-art. Our most recent loan, again from the RUS, enabled us to perform additional switch upgrades, fiber optic transport upgrades and replacements, deployment of the DLC and begin establishing a redundant fiber loop.

The GRTI business model can be seen as a successful model of the use of complimentary private financing and federal funding programs, as well as the creation of a joint venture with both tribal and private investors to secure such financing

GRTI Business and Service

As a tribal telecommunications company, GRTI's primary purpose is to provide affordable service to over 15,000 enrolled members residing on the reservation. In order to achieve this mission, GRTI has established annual goals to increase the number of telephone subscribers, promote employment for Community members, improve the quality of service to the Community, provide state-of-the-art technology for a better quality of life, and promote self-determination for the Gila River Indian Community in the telecommunications industry. I am pleased to say that GRTI has been able to consistently achieve these goals year after year of its operations.

Let me provide some details on the business activities of GRTI. GRTI's telephone infrastructure covers seven exchanges and consists of a state-of-the-art telecommunications system. The network is robust and is able to handle any voice, data and future video applications. GRTI's network is a host-remote configuration, with a tandem office in the Lone Butte exchange. Fiber optic cable connects all central offices, as well as serving ten Next Generation Digital Loop Carrier concentrator units. The total system consists of approximately 117 miles of fiber optic cable and 342 miles of buried copper cable to serve the Gila River Indian Community, which spans 620 square miles.

GRTI offers a cafeteria of services besides landline phone service. Dial-up and DSL Internet service, satellite TV service, web page designing, cellular phone sales, data cabling, and business phone systems are also offered. GRTI is also a 25% minority partner in the Gila River General Cellular Partnership with Verizon Wireless, RSA-5 of Arizona. The service area consists of Pinal and Gila counties in Arizona, which includes

Interstate 10 between Phoenix and Tucson. Verizon Wireless is the managing partner and has committed itself to working with GRTI to improve cellular coverage in and around the Gila River Indian Community.

As a customer service oriented company, GRTI always strives to find new ways to meet the customer's needs, whether the customer is an individual, business, or the Community as a whole. GRTI publishes its own newsletter, which is sent to customers on a monthly basis and provides information on new products and services, sales promotions, upcoming changes in the telecommunications industry, and highlights GRTI's employees of the month and year. The company also provides three important programs to attract and retain customers in the Community:

1. The GRTI "Fresh Start" Program: GRTI created this program to allow customers who had been previously disconnected due to unpaid bills to reconnect their phone service and place calls anywhere within the Community. In order to participate, interested customers fill out an application in the GRTI office, make arrangements for monthly payments on their old phone bill, and agree to have a toll block placed on the reconnected phone service until the old phone bill is paid in full. This program has helped a number of customers in retaining their phone service and has been well received by the Community.

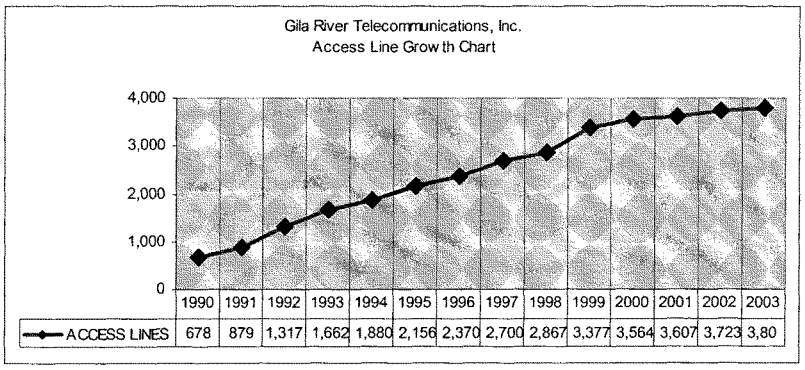
2. The GRTI Customer Incentive Program: This program focuses on providing incentives to encourage customers to pay their phone bills on time. When a customer pays their account in full by the 15th of the month, they are automatically entered into a drawing to win one of four prizes. Prizes range from stereo systems, 2-way radios, movie theatre tickets, a $50 credit on their phone bill and more. As a result of this program, GRTI has seen an increase in timely customer payments.

3. Enhanced Lifeline and Link-Up: Created by a Congressional mandate under the Federal Communication Commission (FCC), this low-income program provides discounts on telephone installation and monthly telephone service to qualifying consumers. Telephone service is considered a necessity for daily modern life in most of the United States, with a penetration rate of 94.5% according to recent federal reports. However, the rate on tribal lands is less than half at 47%, making this program one of the most important services a tribal telecommunications company can provide to its community. The Lifeline program provides certain discounts on monthly service for qualified telephone subscribers and the Link-Up program helps qualified low-income consumers to initiate telephone service by offering a discount of one-half of the installation fees. Residents of Native American communities may qualify for Enhanced Lifeline support (up to an additional $25 in support beyond current levels) and Expanded Link-Up support (up to $70 in additional support beyond current levels). Currently, GRTI receives 16% of its revenue from Universal Service Funds and has over 900 residential customers benefiting from the discounts offered through this program.

Impact of GRTI on the Gila River Indian Community

Before GRTI, approximately 75% of our homes did not have basic access to telephone service and our businesses growth was highly limited by the number of business access lines (only 650 lines were in operation in 1989). Today, GRTI has increased the rate of residential telephone service from **34% to close to 50%** of the homes in the Community as little as six years, and has dramatically increased the number of business access lines to over 3,800 to better serve the growing demand of the public and private sectors. GRTI's business lines make up close to **50%** of the total access lines it operates (which is high for the telecommunications industry) and GRTI is confident that it will continue to see steady growth in its residential service, in an effort to bring the Community closer to the national average for residential phone access of 94.5%.

Through all of GRTI's efforts to increase residential and business access lines, the company has experienced a growth rate of **10-12%**, which is higher than the national average of 4%. The chart below shows the growth trend the company has experienced over the last 14 years:



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
ACCESS LINES	678	879	1,317	1,662	1,880	2,156	2,370	2,700	2,867	3,377	3,564	3,607	3,723	3,80

By building out a technological infrastructure, the Community has benefited directly from GRTI's presence.

GRTI is also an active part of the community through its sponsorships and educational programs. In addition, GRTI was recently named as one of the most successful tribal telecommunications companies in the April 2003 issue of "American Indian Report" and was featured in the March-April 2003 issue of "Rural Telecommunications" for its continued efforts to promote Enhanced Lifeline and Expanded Link-Up to the Gila River Indian Community.

We feel its success is due in great part to the company's planning activities and the hard working employees. Since its establishment, GRTI has continued to adapt the needs of the Community in providing basic telecommunications services while also being a vital partner in the public and private sectors of the Community.

Gila River Tribal Government

The evolution of GRTI has, in part, been a function of the growth of the Community overall. Today, one of the biggest customers of GRTI service is the tribal governmental operations. This partnership between GRTI and the Community government is an important one as the infrastructure needs are a common element in the ability to roll-out reliable service. Over the past five years the demands of equipping a growing tribal workforce has presented significant challenges in two major areas: Infrastructure and financial resources.

For example, today the tribal government employs nearly 1,500 people, administers nearly 83 different programs, with an annual operating budget that approaches $100 million. Much of this growth has taken place within the last five to seven years. As a result, the Community governmental operations have been challenged with providing efficient services to our constituents and developing internal systems to allow government to operate at a certain level of efficiency. While we are making progress we have a long way to go.

The Community realizes that the utilization of technology is going to be the primary way of developing effective communication systems throughout the reservation. To begin to meet the basic demands of connectivity and begin to pro-active in rolling out up to date technology, the community has begun to invest heavily in developing a foundation from which to build upon.

- Established a Management Information Systems Department (MIS) in 2001. Annual operating budget for MIS is $1.6 million with a current staff of 16.
- $1.5 million annual computer equipment budget for community wide procurement. To date nearly 1,500 users of the community network system.
- $2.5 million capital projects budget. This represents the development and roll-out of several key initiatives:
    - Several automation projects in the area of finance, procurement, human resources and further development of internet and intranet capacity.
    - Continued build-out of fiber optic capacity to all tribal departments and districts.

These statistics represent an initial investment in bringing the governmental infrastructure to an acceptable level of performance. However, I know that we need to continue to make substantial investments in technology to improve how we conduct business and just to keep pace with where technology is going today.

Infrastructure

A function of the ongoing investment in the Community's technology efforts are the basic infrastructure needs. To date, the tribal governmental technology upgrades have focused primarily in one area of the Community that is home to many of the tribal

programs. While we have established basic connectivity to all of our seven district service centers we are challenged with the sheer size of the reservation in developing systems that are effective, efficient, and reliable in all circumstances. Again, this is where the partnership between the Community government and GRTI is important. In order to meet the technology demands throughout our Community both as a customer and a service provider each entity is rather dependent on the other. However, as we look forward I believe that this public, private partnership could be a model for other Indian communities as they look to develop their systems.

Recommendations

Mr. Chairman, the development and implementation of technology that I have described from the Community's perspective has been able to evolve in a positive way for many reasons.

- Adequate planning has taken place to assess the needs of the Community.
- Partnership with GRTI and the Community in working together to identify future needs.
- Dedicated human resource to develop and maintain existing systems on a daily basis.
- Significant investment of tribal resources
- Utilization of existing federal resources to build capacity

However, we also realize that it is important that existing federal resources, as a matter of policy, should continue. In the model of GRTI several programs have provided the seeds for providing key services to its customer base. As the committee continues its deliberations on this important topic, I provide the following recommendations.

Recommendations

Federal Loan and Grant Programs: The U.S. Department of Agriculture's Rural Utilities Service provided our community with the means to create a viable telecommunications company, and continues to support our efforts as we expand and develop our technology infrastructure to venture into new areas such as broadband and digital communication. The Gila River Indian Community recommends strongly that Congress provide strong and consistent funding to federal programs that provide loans and grants supporting the establishment of telecommunication and information technology infrastructure, such as the RUS, the U.S. Department of Commerce's Economic Development Administration (EDA) and National Telecommunications and Information Administration (NTIA), and the Department of Education's Community Technology Center programs. Recently, the RUS announced that 13 American Indian and Alaska Native communities would be receiving $8.2 million in grants under its new Broadband Technology Grant. NTIA's Technology Opportunities Program (TOP) has funded over 20 tribes and enabled a number of progressive and innovative projects to be realized. Similarly, EDA has provided tribes with planning and construction funding for technology projects. It is clear that without federal programs such as these, the burden of cost on the tribes would

be excessive and would greatly limit the ability of our tribes to serve the telecommunications needs of their members.

Competitive Eligible Telecommunications Carrier (ETC) designation: Gila River Indian Community does not support the designation of a competitive ETC serving tribal lands without having a decision-making process in place involving the tribal government, primarily for the reason that many Native American communities and the markets they represent cannot support two or more telecommunications carriers without driving up the cost of providing service. Tribal telecommunications companies are carriers of last resort, meaning, they provide services in high-cost markets with limited economic viability due to geographic isolation, low population densities, lack of private enterprise, and chronic poverty. The competitive ETC process saturates these markets and results in subsidized competition, rather than market driven competition, which distorts already fragile markets and poses additional barriers to investing in the further deployment of advanced services and the sustainability of such investments. The Federal Communications Commission (FCC) will be putting this issue forward for comments in the near future, and we encourage both the tribes and Congress to ensure that tribal telecommunications companies are not placed in a position where outside companies benefit from Universal Service funding and reduce the quality and accessibility of services that are meant to be provided by ETCs serving tribal lands.

Jurisdiction on regulatory issues between states and the FCC: Gila River Indian Community recommends that the FCC recognize the sovereign status of tribes and uphold a consistent policy of consultation with the tribes in all matters of telecommunications regulation and policy that affect tribes. In many cases, the issue of jurisdiction (for example, in ETC designation) is unclear and can cause delay regarding business start-up or expansion. The Community is pleased at the recent efforts of the FCC to engage tribes and tribal telecommunications companies in matters of policy, and encourages the FCC to continue to seek out opportunities to ensure the voice of tribal nations are included in the decision-making process.

Lifeline/Link Up Program eligibility: Gila River Indian Community supports the efforts of the FCC in examining the eligibility requirements for these two programs, and recommends that additional requirements be adopted that increase the number of Native Americans enrolled in the programs. We have seen that in spite of the opportunities provided by Enhanced Lifeline/Link-Up programs, enrollment in these programs remains lower than what it should be—especially when considering that the vast majority of households on tribal lands have incomes well below the federal poverty guidelines. This problem is largely due to the following: 1) eligibility is determined by participation in federal means-tested programs rather than being determined solely by income; and 2) the failure of carriers to provide appropriate information regarding the Lifeline/Link-Up programs to the tribal communities in which they serve. We urge the FCC to modify the eligibility criteria for the Lifeline/Link-Up programs on tribal lands to include:

- *Households that are eligible for federal means-tested programs, but do not actually participate in them.*

- *Household income as an additional means to qualify for Lifeline/Link-Up on tribal lands. In this respect, GRTI urges the Commission to expand Lifeline/Link-up eligibility on tribal lands to include consumers with incomes up to 150 percent of the federal poverty guidelines.*

In addition, we also encourage the FCC to adopt additional outreach requirements to ensure that carriers serving tribal lands consult with local tribal governments to develop appropriate methods of promoting enrollment in Lifeline/Link-Up on tribal lands. To this end, Gila River Indian Community urges the FCC to take appropriate action against those carriers that fail to consult with tribal governments located within their service areas and fail to provide adequate outreach to consumers on tribal lands.

Conclusion

Mr. Chairman, I encourage the Committee to support tribal efforts as they move forward into the technology arena, and to ensure that private and federal entities are responsive to these needs as they seek funding and technical support to realize their goals. In addition, I commend the Committee for holding this oversight hearing. At this time Mr. Fohrenkam and I, would be happy to answer any questions from the Committee.

Thank you.

Fort Mojave Indian Tribe

Testimony On

The Status Of Telecommunications In Indian Country

Presented by: Nora McDowell, Tribal Chairperson

Before the United States Senate, Committee on Indian Affairs

May 22, 2003

Good morning. Before I begin, I want to thank our Creator for giving us this day and allowing us to come safely together as representatives of sovereign nations, in the hope of providing for the economic needs of our peoples.

Chairman Campbell, Vice-Chairman Inouye, and members of the Committee, I would like to thank you for inviting me to speak with you today on behalf of my people, the Fort Mojave Indian Tribe, regarding the status of telecommunications in Indian Country. During these early years of the 21st Century, communication services are becoming increasingly crucial to every community. As with most economic factors, high-quality communication services are absolutely imperative in rural communities, such as mine. Without access to high-quality services similar to those found in urban areas and at comparable prices, most Indian young adults must make a heart-wrenching decision -- to either seek work off their ancestral lands or remain, perhaps never realizing their full potential.

My tribe is very fortunate. Through fifteen years of hard work, innovative thinking and community support, Fort Mojave Indian Tribe is one of a handful of tribes which owns and operates its own telecommunications company. Prior to Fort Mojave Telecommunications (FMTI) forming in 1988, the penetration rate of telephone service on my reservation was an abysmal 35 percent. During its short life, FMTI has increased the penetration rate to an astounding 98 percent and currently provides 1016 access lines.

These significant gains, of which my people are collectively proud, are made even more noteworthy when you consider that the Fort Mojave reservation is scattered through three states -- Arizona, California and Nevada. In Arizona, the difficulties mount as our land is checkerboarded. Approximately, every other mile is reservation. This is why, when we read of right-of-way difficulties in metropolitan areas, we always have to smile a bit. You don't know right-of-way problems until you try to lay fiber in the Arizona desert!

My tribe wanted its own telecommunications company because high-quality communication services are vital to providing an economic future for our community. Prior to the formation of FMTI, the telephone network consisted solely of copper lines. Your ability to have a phone depended on where you lived. Not all parts of reservation, especially the most remote areas, had access to the network.

FMTI has greatly improved the communications capability of the reservation. As is evidenced by

the vastly improved penetration rate, it no longer matters where you live. Now, you can have a telephone even in the farthest corners. Our access to the Internet is about to get much faster, as DSL is coming in the near future. Where before, we only had access to analog services, FMTI has upgraded the network to approximately 75% digital. To hit that mark, FMTI laid over 45 miles of fiber to both increase the speed and quality of our communications system.

Later this year, my tribe will open a new medical clinic and a new library. Both will have a fiber link directly to the network. Through these links, new worlds will open to my people. Telemedicine and long-distance learning are but two of the benefits. Maybe, the next time you ask me to speak, I could participate via a live videostream!

It is something to sit here this morning with you and recount the beginnings and resulting growth of FMTI. I can tell you about all of the meetings to determine -- not whether we needed our own telephone company for it was quite obvious that we did -- but, rather the path to that goal. I could relate to you how we asked the members of the tribe, "What services do you want?" The large majority simply wanted to be certain that when they picked up the phone, there would be a dial tone. Due to the paucity of the telephone network before, most of my people were quite isolated and had little idea regarding what a powerful tool a high-quality telecommunications system can be.

My tribe certainly had help -- from our brothers and sisters at Cheyenne River and Gila River who had gone before us, and from other rural telephone companies with more experience. The establishment of FMTI has been of extraordinary value to my people -- not simply because now we can call anyone in the world or run an Internet-based business -- but for the shining example that FMTI provides of the Fort Mojave Indian Tribe's self-determination. All the world can now see how my people came together and cooperatively fulfilled a need and, in the end, provided for ourselves what had previously been denied.

However, to say that this path has ended is wrong. FMTI must to continue to grow and expand to meet the ongoing needs of the community it serves. The employees and board members of FMTI are in an ongoing dialogue with their customers as to wants, needs and desires. The members of my tribe are no different than most Americans -- mainly, they want a better future for their children. Thanks in part to FMTI and the telecommunications network we provided, most parents and grandparents living on the reservation can now envision that future.

The federal government has also contributed to the success of FMTI. Key programs such as the Technology Opportunity Program (TOP), Rural Utilities Service (RUS) grants and loans, and federal universal service support have enhanced our ability to bring high-quality, advanced telecommunications service to my tribe. Unfortunately, as we look toward providing for the future needs of the tribe, we are concerned. For two years including the budget request you are now considering, the Bush Administration has requested zero funding for the TOP grant program, in effect, an attempt to starve this critical effort. I urge you today to restore full funding to the TOP program.

In the early years of FMTI, the assistance received from RUS was fairly important. As you can well imagine, not many financial institutions were even willing to sit down with a tribal government,

much less loan it money. Therefore, the grants, loans and loan guarantees that we received from RUS helped to breathe life into FMTI and assist us with achieving our dream. Other assistance offered by RUS, including the lists of approved equipment, was also useful. With not much experience, it was beneficial to feel that someone with the necessary expertise had determined that this particular switch was of value.

As much help as the RUS provided (and continues to provide), there is room for improvement. With input from tribal telcos, employees and customers, some programs could be better tailored to have greater impact. The recent broadband loan program, implemented by last year's Farm Act, provides low-interest loans and loan guarantees for broadband services. While most reservations would meet the requirements, some tribes seem unable to participate in this program. For instance, because a community must first apply for resources from a fund for its specific state, this seems to disqualify reservations which, like mine, stretch over two or more states. While my tribe could apply to the national fund, this pool is only funded with money left over, if any, from the earlier states process. A better approach would have been to carve out funds for entities seeking to provide broadband services on tribal lands.

As we continue to assess our future needs, we at FMTI are most concerned about the Federal Communications Commission's (FCC) policy regarding the designation of Eligible Telecommunications Companies (ETCs). To receive access to federal high-cost support mechanisms, a carrier must receive designation as an ETC from either the state utility commission or the FCC. FMTI has been designated an ETC and, as such, receives support for the provisioning, maintenance and upgrading of facilities and services.

I want to distinguish the support that FMTI, as an ETC receives from the other components of the federal universal service program. High-cost support is **not** a subsidy or a discount program, as so often thought. It is quite simply a mechanism put in place by the FCC in order to reach a goal stated in the Telecommunications Act of 1996 -- that **all** Americans, including those living in rural and high-cost areas, have access to telecommunications services that are reasonably comparable to those available in urban areas and at reasonably comparable rates. The money that FMTI receives through the high-cost mechanism has strings attached. FMTI only receives federal high-cost support for **actual** investment in facilities serving high-cost areas. Further, FMTI begins to receive the support of these investments **two years after** making the investment. For FMTI, this money is not "found money;" it is the recovery of necessary costs incurred by providing telephone service to some of the most remote areas of the country.

I make this distinction because, quite frankly, as competition comes to the telecommunications industry, it appears as if policymakers, including the FCC, seem to consider high-cost funding as a bonus to be given to all comers, regardless of whether the goal of universal service is furthered. Please do not misinterpret my comments as anti-competitive. As a community leader, I would be very happy to see that my community of 773 could support multi-providers of communication services. However, as a member of a governing body, I expect that any public policy would be applied evenly and in a neutral manner. Regrettably, the current policy being advanced by the FCC states that any competitive carrier receiving high-cost support, receives such support based on the incumbent provider's costs, not its own. Not only do these guidelines provide zero incentive to the

competitor to invest in high-cost areas, but the end result can be competitors going after windfall amounts of federal support, instead of making proper business decisions of where to best provide service.

The FCC has promulgated a specific process for designating ETCs on tribal lands. However, given recent designations by the FCC of competitive ETCs (CETCs) serving rural areas that imposed rather lax requirements upon those carriers, I believe that it is necessary to reconsider that process. For example, the tribal-specific process does not seem to anticipate that the community is being served by any carrier, when in fact, as you are well aware, tribes are currently running and setting up their own telecommunication companies. The process has no way of determining the unique impact of a tribally-owned carrier within the community. While similar to the impact of a rural incumbent provider, in many cases, the tribal telco is among the first in the community to employ tribe members. The tribal telco may still be immature and not yet ready to face the winds of competition. Finally, the enhanced Lifeline and Link-up programs available to residents living on tribal lands combined with the windfall of federal high-cost support as I previously explained, could be sending improper economic signals. Instead of incenting investment in remote areas, the ETC designation process for tribal lands could be viewed as a money grab for federal dollars. I request today that this Committee, in its consideration of the status of telecommunications service in tribal areas, ask the FCC to carefully reconsider the ETC designation process as it pertains to tribal lands.

Chairman Campbell and members of the Committee, I thank you for your time, attention and thoughtful consideration of the issues I have presented. I ask, that when you consider the provisioning of communication services in Indian country, you remember that it is an inherent right of a governing body of a nation to provide for its people. We, the tribe, are best able to meet basic needs, based on our distinctive culture and heritage. When a tribe is able to adequately provide for these needs, not only does this strengthen the self-determination of the tribe as a whole, it also provides self-esteem and confidence for every individual member. In the end, both nations, the tribe and America, are stronger.

SENATE INDIAN AFFAIRS COMMITTEE
OVERSIGHT HEARING ON THE STATUS OF
TELECOMMUNICATIONS IN INDIAN COUNTRY

MAY 22, 2003

TESTIMONY OF CHARLES W. MURPHY
CHAIRMAN, STANDING ROCK SIOUX TRIBE

GOOD MORNING MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE. MR. CHARLES MURPHY, CHAIRMAN OF THE STANDING ROCK SIOUX TRIBE WAS UNABLE TO PRESENT TESTIMONY AT TODAY'S HEARING DUE TO A SCHEDULING CONFLICT. MY NAME IS MADONNA PELTIER YAWAKIE. I AM THE PRESIDENT OF TURTLE ISLAND COMMUNICATIONS WHICH IS A 100% NATIVE AMERICAN OWNED TELECOMMUNICATION ENGINEERING FIRM PROVIDING CONSULTING SERVICES TO THE STANDING ROCK SIOUX TRIBE. I HAVE BEEN ASKED TO TESTIFY TODAY ON BEHALF OF CHAIRMAN MURPHY.

THE TRIBE WELCOMES THE OPPORTUNITY TO INFORM THIS COMMITTEE OF THE OBSTACLES THAT ARE FACED BY THE TRIBE IN ITS EFFORTS TO IMPROVE TELECOMMUNICATION SERVICES ON THE RESERVATION. OUR TELEPHONE PENETRATION RATE ON THE RESERVATION ILLUSTRATES HOW MANY TRIBES MUST CONTEND WITH THE REMNANTS OF THE LONG-CONDEMNED GENERAL ALLOTMENT POLICY OF THE UNITED STATES.

WE KNOW THAT THE 2000 CENSUS SUFFERS FROM SIGNIFICANT UNDERCOUNTS OF INDIAN HOUSEHOLDS ON THE RESERVATION. EVEN WITH ITS UNDERCOUNT DEFICIENCIES, THE CENSUS FIGURES PLACE THE AVERAGE PERCENTAGE OF OCCUPIED INDIAN HOUSEHOLDS WITH TELEPHONE SERVICE ON THE RESERVATION AT 69 PERCENT. IN STARK CONTRAST, NON-INDIAN OCCUPIED HOUSEHOLDS ON THE RESERVATION ENJOY A 96 PECENT TELEPHONE PENETRATION RATE. THESE FIGURES REPRESENT MORE THAN JUST MEANINGLESS STATISTICS. THEY REPRESENT AN ENTIRE CLASS OF PEOPLE ON THE RESERVATION WHO ARE DENIED ACCESS TO EMERGENCY MEDICAL AND POLICE SERVICES, EDUCATIONAL AND ECONOMIC OPPORTUNITIES, AND THE ABILITY TO COMMUNICATE WITH THEIR GOVERNMENT. THESE BASIC HUMAN NEEDS—HEALTH CARE, POLICE PROTECTION, EDUCATION, ECONOMIC OPPORTUNITY, AND POLITICAL PARTICIPATION—STRIKE AT THE HEART OF COMMITMENTS MADE BY THE UNITED STATES IN THE FORT LARAMIE TREATY OF 1868. IRONICALLY, IT WAS FEDERAL LAW THAT ENABLED CURRENT TELECOMMUNICATION SERVICE PROVIDERS ON THE RESERVATION THE ABILITY TO DEPLOY TELECOMMUNICATION INFRASTRUCTURE IN A DISCRIMINATORY MANNER. THE TRIBAL COUNCIL IS ATTEMPTING TO CORRECT THIS SERIOUS THREAT TO OUR COMMUNITIES, BUT WE MAY NEED THE HELP OF FEDERAL LEGISLATION.

AS THIS COMMITTEE IS WELL AWARE, THE DEVASTATION OF THE ALLOTMENT POLICY ALLOWED FOR NON-INDIAN ACQUISITION OF RESERVATION LANDS. FOR A PERIOD OF TIME, THE NON-INDIAN POPULATION EXCEEDED THE INDIAN POPULATION ON THE RESERVATION. NOW, HOWEVER, EVEN WITH THE UNDERCOUNTS, THE 2000 CENSUS REVEALS THE VAST MAJORITY ON OUR RESERVATION ARE AMERICAN INDIAN.

DURING THE ALLOTMENT ERA, MORE AND MORE NON-INDIANS ACQUIRED THE BEST FARM AND GRAZING LANDS ON THE RESERVATION. ONCE THESE NON-INDIAN FARMERS NEEDED PHONES, THE BIA GENEROUSLY

GRANTED RIGHTS OF WAY THROUGH TRIBAL LAND AREAS AND TELEPHONE COOPERATIVES SPRUNG UP ON AND AROUND THE RESERVATION. THESE TELEPHONE SYSTEMS, FINANCED WITH FEDERAL RESOURCES AND SUBSIDIES, WERE ESTABLISHED WITH COMPLETE DISREGARD FOR THE TRIBE OR ITS MEMBERS. THEY ARE EFFECTIVELY UNREGULATED AND CONTINUE TO RECEIVE FEDERAL SUPPORT.

ACCORDING TO THE FCC REPORT ON TELEPHONE SUBSCRIBERSHIP ON AMERICAN INDIAN RESERVATIONS AND OFF RESERVATION TRUST LANDS, THE STATE OF SOUTH DAKOTA RANKS 27TH; AND NORTH DAKOTA RANKS 24TH; IN TELEPHONE SUBSCRIBER RATES WHEN COMPARING RATES WITH 33 STATES WHERE AMERICAN INDIAN TRIBES RESIDE.

TO OUR KNOWLEDGE, NO INDIAN PERSON HAS REPRESENTED THE TRIBE ON ANY TELECOMMUNICATION COMPANY'S BOARD OF DIRECTORS. NOR, HAS THE TRIBE BEEN ASKED TO PROVIDE ADVICE TO REGULATORS OR CARRIERS ON HOW SERVICE TERRITORIES, OR COST STUDY AREAS SHOULD BE ESTABLISHED, SO THAT SERVICES MAY BE IMPROVED. THE STATE TAXES COLLECTED FROM THESE PROVIDERS OFFER MINIMAL BENEFITS TO THE TRIBE AND ITS MEMBERS.

THERE IS INADEQUATE 911 SERVICE PROVIDED ON THE RESERVATION. EMERGENCY CALLS ARE ROUTED IN SUCH A WAY THAT THEY ARE LONG-DISTANCE CALLS FOR MANY OF OUR TRIBAL MEMBERS. THEREFORE, EVEN THOSE WHO HAVE PHONES AND HAVE NO LONG-DISTANCE SERVICE CANNOT ACCESS EMERGENCY SERVICES, WITHOUT INCURRING A LONG DISTANCE FEE.

THOSE TRIBAL MEMBERS THAT MEET LIFELINE ELIGIBILITY REQUIREMENTS TO OBTAIN TELEPHONE SERVICE ARE ALSO REQUIRED TO SUBMIT A MONETARY DEPOSIT TO THE LOCAL TELECOMMUNICATION COMPANY, OR HAVE TOLL BLOCKING APPLIED TO THEIR TELEPHONE SERVICE. WHEN A TRIBAL MEMBER IS UNABLE TO MAKE A DEPOSIT FOR LONG DISTANCE TELEPHONE SERVICE, AND BECAUSE OF A LACK OF EXTENDED AREA SERVICE BETWEEN OUR TRIBAL DISTRICTS, MANY OF OUR COMMUNITY MEMBERS ARE UNABLE TO PLACE CALLS TO THE GOVERNMENT CENTER, HEALTH CARE FACILITY, OR POLICE DEPARTMENT. AS AN ALTERNATIVE, THE TRIBE OFFERED TOLL-FREE ACCESS TO ITS MEMBERS TO ADDRESS THIS PROBLEM, BUT IT BECAME TOO COSTLY TO SUSTAIN AT APPROXIMATELY $9,000 PER MONTH.

WIRELESS SERVICES ARE TYPICALLY CONSIDERED AN ALTERNATIVE WHERE WIRELINE SERVICES DON'T EXIST. HOWEVER, CELL PHONE SERVICE IS EFFECTIVELY NON-EXISTENT ON THE RESERVATION. THERE ARE ONLY TWO CELL TOWERS LOCATED WITHIN THE EXTERIOR BOUNDARIES OF THE RESERVATION, WHICH ENCOMPASSES 2.6 MILLION ACRES. ONE OF THESE TOWERS IS LOCATED ADJACENT TO THE HOME OF, AND ON THE PROPERTY OF, A BOARD MEMBER OF ONE OF THE TELEPHONE COOPERATIVES. BOTH CELL TOWERS ARE LOCATED IN AREAS THAT LIMIT SERVICE QUALITY AND RECEPTION FOR THOSE AT THE TRIBAL HEADQUARTERS AND TRIBAL MEMBERS THROUGHOUT THE RESERVATION TO SERVE ANY USEFUL PURPOSE.

IN JUNE 2001, THE COUNCIL DECIDED TO TAKE CORRECTIVE ACTION AND HIRED AN ENGINEERING FIRM TO COMPLETE A TELECOMMUNICATION FEASIBILITY STUDY; AND A CONSULTING ATTORNEY TO DRAFT A REGULATORY CODE. THE FEASIBILITY STUDY INCLUDED TELECOMMUNICATION SERVICE IMPROVEMENT OPTIONS. THE STUDY ALSO PROVIDED INFORMATION ABOUT THE RURAL TELEPHONE INDUSTRY AND

THE FINANCING AND FUNDING OPTIONS AVAILABLE FOR RURAL AND TRIBAL TELECOMMUNICATION DEVELOPMENT.

THE LAND AREAS UNDER CONSIDERATION FOR THE PROJECT INCLUDED THE EIGHT DISTRICTS WITHIN THE STANDING ROCK SIOUX TRIBE LAND AREA. DATA THAT WAS USED TO COMPLETE THE STUDY WAS OBTAINED FROM SURVEY RESPONDENTS, STATE AND FEDERAL AGENCIES, TELECOMMUNICATION VENDORS, AND LIMITED INFORMATION FROM ONE OF THE TELEPHONE COOPERATIVES THAT PROVIDES SERVICE TO THE TRIBE. TURTLE ISLAND COMMUNICATIONS INITIATIED THIS PROJECT WITH A TELECOMMUNICATION SURVEY REQUEST THAT WAS COMPLETED BY AREA SCHOOLS, TRIBAL GOVERNMENT PROGRAMS AND SERVICES, THE INDIAN HEALTH SERVICE, THE BUREAU OF INDIAN AFFAIRS AND LOCAL BUSINESSES.

A SITE SURVEY WAS CONDUCTED TO DOCUMENT EXISTING TELECOMMUNICATION SWITCHING EQUIPMENT AND CENTRAL OFFICES THAT SERVE BOTH TRIBAL AND NON-TRIBAL COMMUNITIES WITHIN THE EXTERIOR BOUNDARIES OF THE TRIBAL LAND AREA. EXISTING WIRELESS LICENSE HOLDERS AND SERVICE PROVIDERS WERE IDENTIFIED WITHIN THE TRIBAL SERVICE AREA. TELECOMMUNICATION RIGHT OF WAY EASEMENTS WERE OBTAINED FROM THE BUREAU OF INDIAN AFFAIRS TO REVIEW THEIR LOCATIONS AND TERMS OF THESE EXISTING AGREEMENTS.

THE ABOVE INFORMATION WAS USED TO DEVELOP TELECOMMUNICATION NETWORK DESIGN OPTIONS ALONG WITH THEIR ASSOCIATED COSTS THAT WOULD BEST MEET THE LONG TERM SERVICE NEEDS AND ECONOMIC OBJECTIVES OF THE TRIBE. FINANCIAL STATEMENTS WERE COMPLETED FOR THIS PROJECT TO DEMONSTRATE THE ECONOMIC IMPACT OF SERVICE IMPROVEMENTS WITHIN THE TRIBAL LAND AREA.

TO BEGIN THE REGULATORY OVERSIGHT OF EXISTING SERVICE PROVIDERS THAT WILL ASSURE SERVICE IMPROVEMENTS TO TRIBAL COMMUNITIES, A DRAFT TELECOMMUNICATION UTILITY SERVICE CODE WAS DEVELOPED AND DISTRIBUTED FOR COMMENTS TO THE FCC, THE NORTH DAKOTA PSC, THE SOUTH DAKOTA PUC, AND THE FOUR LEC'S PROVIDING SERVICE ON THE RESERVATION. TO ADDRESS THE ISSUES RAISED BY THE CODE, THE NORTH DAKOTA PSC HELD AN INFORMAL HEARING ON MARCH 12, 2003, AND OFFERED WRITTEN COMMENTS ON THE CODE. TO THE CONTRARY, THE SOUTH DAKOTA PUC DID NOT RESPOND TO OUR REQUEST FOR COMMENTS AND MADE NO EFFORT TO CONTACT US. SIMILARLY, WEST RIVER TELECOM, THE PRINCIPAL CARRIER ON THE RESERVATION, DID NOT PROVIDE US COMMENTS UNTIL MAY 7, WELL AFTER THE COMMENT PERIOD. BASICALLY, THEIR ONLY COMMENTS WERE THAT THE TRIBE LACKS JURISDICTION TO REGULATE THEM. WEST RIVER COOPERATIVE TELEPHONE COMPANY, A SMALL COOPERATIVE SERVING A VERY SMALL PORTION OF THE RESERVATION, DID OFFER COMMENTS, BUT ONLY TO CONTEST THE TRIBE'S JURISDICTION. THE CARRIERS HAVE BEEN COMMUNICATING WITH STATE REGULATORS ABOUT OUR DRAFT CODE, BUT NOT WITH THE TRIBE. THE DRAFT CODE WAS REVISED TO ADDRESS THE COMMENTS WE DID RECEIVE AND WE ARE AGAIN SOLICITING COMMENTS ON THE REVISED VERSION WHICH ARE DUE LATER THIS MONTH.

THOUGH CONGRESS CLARIFIED IN THE 1996 TELECOMMUNICATIONS ACT THAT TRIBES DO HAVE JURISDICTION IN THIS AREA, THE LACK OF SPECIFIC GUIDANCE IN THE ACT HAS LEFT THE FCC WITH ONLY RECENT SUPREME COURT RULINGS FOR DIRECTION. MORE LEGISLATION IS NEEDED THAT SUPPORTS TRIBAL AUTHORITY TO REGULATE AND IMPROVE WIRELINE

AND WIRELESS TELECOMMUNICATION SERVICE LEVELS ON TRIBAL LAND.

FOR INSTANCE, THE FCC HAS RESORTED TO THE SUPREME COURT'S RULINGS THAT APPLY THE TEST DEVELOPED IN UNITED STATES V. MONTANA TO DECIDE WHETHER A TRIBE CAN ASSERT IT'S JURISDICTION OVER NON-INDIANS ON THE RESERVATION. THE RESULT, WHICH HAS BEEN APPLIED ONLY IN THE WIRELESS CONTEXT, IS THAT TRIBES HAVE BEEN HELD TO HAVE JURISDICTION ONLY OVER CARRIERS TO THE EXTENT THEY ARE PROVIDING SERVICE TO INDIANS ON THE RESERVATION, AND THE STATES HAVE BEEN HELD TO HAVE JURISDICTION OVER CARRIERS PROVIDING SERVICE TO NON-INDIANS. WHILE THAT JURISDICTIONAL ARRANGEMENT MAY BE SOMEWHAT WORKABLE YET AWKWARD IN A WIRELESS CONTEXT, IT BECOMES EVEN MORE CHALLENGING IN A WIRELINE CONTEXT. IT CREATES CHECKERBOARD JURISDICTION THAT IS SUBJECT TO CHANGE WITH THE TRANSFER OF LAND OWNERSHIP OR WITH THE VOLUNTARY SUBMISSION TO TRIBAL JURISDICTION. NEVERTHELESS, THAT IS THE JURISDICTIONAL SCHEME WE WERE FORCED TO ESTABLISH IN ORDER TO ADDRESS THE LACK OF SERVICE AND POOR QUALITY SERVICE ON THE RESERVATION.

TO MAKE MATTERS WORSE, THE FCC HAS FALLEN PREY TO LOOSE LANGUAGE OF THE RECENT SUPREME COURT DECISIONS THAT SUGGESTS TRIBES HAVE JURISDICTION ONLY OVER "MEMBERS" OF THE TRIBE. DESPITE CONGRESS' EFFORTS TO CORRECT THAT PROBLEM WITH THE DURO-FIX LEGISLATION, ANY CORRECTIVE LEGISLATION IN THE TELECOMMUNICAITONS LEGISLATION MAY NEED TO AGAIN, AT THE VERY LEAST, CLARIFY THAT TRIBES HAVE JURISDICTION OVER ALL INDIANS ON THEIR RESERVATIONS.

CORRECTIVE LEGISLATION SHOULD MAKE CLEAR THAT TRIBES HAVE REGULATORY JURISDICTION OVER ALL PERSONS WITHIN THEIR TERRITORIES. INDIVIDUAL LAND OWNERSHIP MAY HAVE CHANGED, BUT RESERVATION BOUNDARIES WERE ESTABLISHED FOR A REASON: SO THE TRIBES CAN MAINTAIN A PERMANENT HOMELAND. CORRECTIVE LEGISLATION SHOULD ALSO CLARIFY THAT STATES CANNOT ASSERT TELECOMMUNICATION JURISDICTION WITHIN THOSE BOUNDARIES. IN THE VERY LEAST, THEY SHOULD NOT BE ALLOWED TO ASSERT JURISDICTION JUST TO COLLECT TAXES.

ENTRENCHED PREJUDICES ARE DIFFICULT ENOUGH TO CONFRONT. CONGRESS CREATED THIS PROBLEM THROUGH THE ALLOTMENT ACT AND RIGHTS OF WAY LAWS THAT FAILED TO CONFIRM TREATY COMMITMENTS AND TRIBAL JURISDICTION. IT MAY TAKE CONRESSIONAL ACTION TO REVERSE THIS REMNANT OF THE NOW-DEFUNCT ALLOTMENT ERA AND TO REQUIRE THAT TELECOMMUNICATION SERVICES BE PROVIDED TO ALL INDIANS ON OUR RESERVATION THAT DESIRE THESE SERVICES, AND AT AFFORTABLE RATES. AS CARRIERS OF LAST RESORT, TELECOMMUNICATION PROVIDERS OPERATING ON INDIAN RESERVATIONS ARE REQUIRED TO SERVE INDIAN PEOPLE. WITHOUT DIRECTION FROM CONGRESS, WE EXPECT THAT THE LACK OF CLARITY WILL ONLY MAKE OUR EFFORTS MORE CHALLENGING TO IMPROVE SERVICES ON THE RESERVATION. REGARDLESS OF THESE OBSTACLES, THE LAKOTA AND DAKOTA PEOPLE OF THE STANDING ROCK SIOUX TRIBE DESERVE THE BENEFITS OF A MODERN SOCIETY, AND WE WILL NOT ALLOW JURISDICTIONAL OPPOSITION TO DEFEAT OUR EFFORTS.

AGAIN, WE THANK YOU FOR THE OPPORTUNITY TO TESTIFY ON THIS VERY IMPORTANT ISSUE.

Testimony of the Southern California Tribal Chairmen's Association before the Senate Committee on Indian Affairs May 22, 2003

In order to address the Internet access problem for Tribal Communities a resource support system must be in place. The issues of initial setup, on-going support and high sopeed internet access need to be addressed: Wireless is one viable delivery system in rural areas both among communities and within the community. The issues of licensed bandwidth for tribal use will also need attention. One step would be the inclusion of Tribal Schools and Libraries in the e-rate funding legislation as defined by the Sovereign Tribes and a discount rate that reflects Tribal Communities not nearby public schools. (see page 5 for suggested language)

Southern California Tribal Digital Village Story

The Tribal Digital Village is a program in partnership with Hewlett-Packard to bridge the digital divide for the 18 rural Tribes in San Diego County, California. This is the third year of a three year grant. The grant was for 1.5 million dollars in cash to build a high speed backbone among the tribes and for 3.5 million in equipment from HP.

1.1 SCTDV overall Project Objectives

To create an Information Technology Infrastructure that enables the members of the Southern California Tribal community to have access to information and services as fast and as well as the citizens in urban areas facilitating regional communication and collaboration mirroring the historical trade and kinship networks.

To increase the knowledge of the Native American language and culture among the members and incorporate an understanding of the sovereignty of the tribes and a sense of pride in the youth in belonging to this community.

To improve the quality of education, using Educational Resource Centers, Tribal Schools and Tribal Libraries, in the community and increase the number of students graduating from high school and pursuing college degrees.

To provide easy and wide spread access to community services enhancing current services and creating new ones.

To provide better economic opportunity to the members by creating new IT related jobs, access to new markets for Native American goods and services, IT skills training and creating an environment where small businesses can form and thrive.

Next Step Goals

- To create a robust network infrastructure that can be supported and maintained by the tribes
- To professionally execute the plans for the areas of focus within the SCTDV plan
- To deliver end user services that are deemed important and are in line with achieving the overall goals of the SCTDV project
- Create a plan at the SCTCA level to sustain and expand the Tribal Digital Village

1.3 Program areas and goals

The SCTDV Project is partitioned into distinct areas of development. They are:
1 Infrastructure, 2 Culture, 3 Education, 4 Economic Development and 5 Tribal Community Services.
. Development of all are will occur simultaneously.

Internet Infrastructure Program

A major task of this program is to establish broadband Internet access and related technology infrastructure serving the various tribal locations, which are dispersed among several hundred square miles of rural mountainous terrain.

The goals of the Internet Infrastructure program are:

1. Reliable High performance Internet Connectivity: Provide high-speed connectivity from each tribe to the Internet and also connect tribes to each other through an Intranet.
2. Managed Web services infrastructure: so that those tribes that are connected can communicate effectively and efficiently and can access the services.
3. Several access points: Personal access from home and shared access from public locations will be available. Community Resource Centers will have Learning Centers within them with several computers, printers, scanners and cameras that can be used by all members of the community
4. A web site with a wealth of information and service offerings (www.sctdv.net): The web site will serve as the portal for SCTDV related information, conducting tribal business and providing services to the community members.

These four components of the Internet Infrastructure are being developed concurrently and integrated periodically.

Culture Program

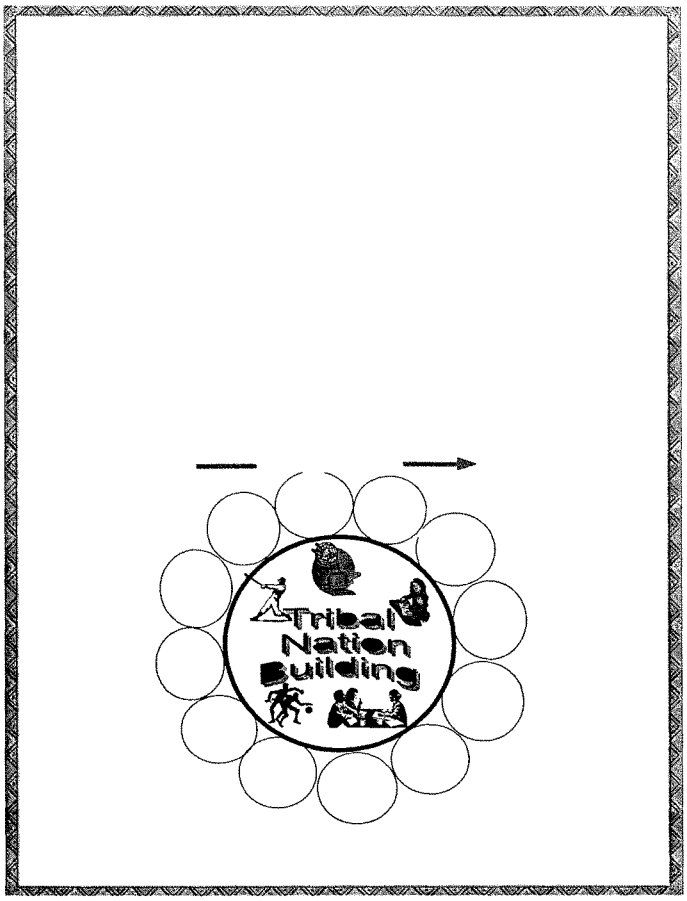
"We believe that constructing a digital network that parallels the powerful interlinking of people performed by kinship in Southern California, Indian societies will unleash innovative ways of strengthening both tribal culture and meaningful relationships with non-tribal institutions."

Cultural material components include video and audio ethnography, storytelling, music, collecting and archiving cultural materials in digital form and setting up web-based access to cultural resources.

Education Program

SCTDV will be working with all the members of the community to deliver educational programs. The Internet Infrastructure will address the needs of various groups within the community such as K-12 children, adults, job seekers and homemakers on a personalized, user driven model.

This idea has been conceptualized as the Community Resource Program. This program is envisioned to build and enhance existing program within each community. In addition to academic education, through this program, we will teach people to be proficient in technology, be better leaders and learn more about their culture.



Economic Development Program

Having a world class Internet infrastructure will enable the Southern California tribal community to improve its economy in several ways. The economic development program will be structured to take advantage of the opportunities created by having an IT skilled and computer savvy workforce. In addition, the HP grant provides the capital to start small IT related business ventures that can mature and become self-sustaining.

The broadband Internet access will enable members of the community to create and run web-based businesses from within the reservations. Existing businesses can use the Internet to enhance their marketing capabilities and provide more information for their clients.

The Program goals are:

1. Creating a tribally owned business that runs the TDV infrastructure as a Utility
2. Creating IT related job opportunities within the tribal community
3. Fostering an inter-tribal entrepreneurial environment by creating and managing new businesses such as a Cutting Edge Variable Digital Printing Advertising business
4. Using the TDV Internet infrastructure to competitively bid for federal jobs reserved for Native Americans
5. Providing access to new markets for arts, crafts, and other goods produced by the tribal community

Tribal Community Services Program

The project will also enable the various organizations within the tribal community such as, tribal governments, Indian Health, fire stations, schools etc., to take advantage of the broadband network.

Under this program we will be focusing on two critical elements:

1. Making tribal government more effective using Information technology
2. Provide greater community services to community members

Tribal Operations

In order to make Tribal Government more effective, we want to empower Tribal Operations by means of improved communications and training through technology.

Today's tribes are finding themselves challenged with ideas and goals of new economics and well being, which pushes Tribal Leadership to transition our world of custom and tradition, to mainstream society norms (I.e. Commercial Zoning, Business Management, EPA, Clean Water, Land Management, Housing, Roads, Enhanced Financial Accountability, Tribal Administration, Public Health and Safety-Tribal Law Enforcement/Fire Protection/Tribal Courts.), while maintaining our traditional ways of Tribal Government.

Enhanced Community Services

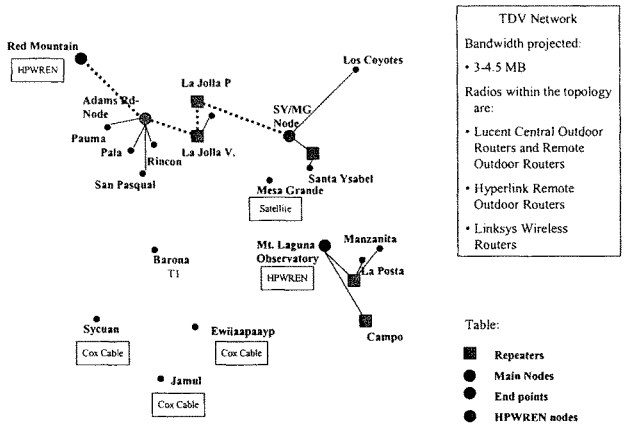
Services such as fire stations, health centers and law and order institutions will be connected to TDV net providing both Internet Service and the ability to communicate amongst these services.

These service organizations will be able to communicate better with the community through the use of the SVTDV.net portal. Event calendars, education seminars etc. can be delivered through this portal.

Internet Infrastructure: TDV High Speed Wireless backbone and service providers:

We have leveraged the technology developed by the HPWREN project at UCSD to create the TDV Backbone network. Here is the current picture of the backbone network.

TDV Network Infrastructure



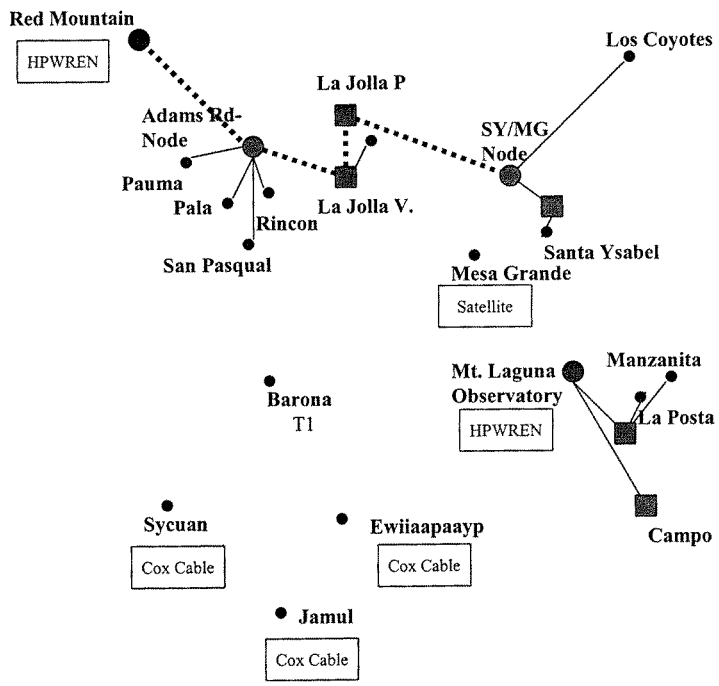
In order to achieve these goals an important element would be to have access to the E-rate funding to support the internet access for Tribal Libraries and Tribal Schools. Unfortunately the Library Services and Technology Act (
20 U.S.C. 9121 et seq.). Section 254(h)(4) now reads as follows:

> ELIGIBILITY OF USERS. - No entity listed in this subsection shall be entitled to preferential rates or treatment as required by this subsection, if such entity operates as a for-profit business, is a school described in paragraph (5)(A) with an endowment of more than $50,000,000, or

is a library or library consortium not eligible for assistance from a State library administrative agency under the Library Services and Technology Act.

> If Section 254(h)(4) were amended to add a sentence at the end that says something like....**"Tribally designated libraries shall be eligible for inclusion as eligible entities based on certification that the libraries are designated as such under proper tribal authority and function essentially as libraries as defined under the Library Services and Technology Act regardless of eligibility for assistance from a State library administrative agency."**

TDV Network Infrastructure



TDV Network

Bandwidth projected:

- 3-4.5 MB

Radios within the topology are:

- Lucent Central Outdoor Routers and Remote Outdoor Routers
- Hyperlink Remote Outdoor Routers
- Linksys Wireless Routers

Table:

- **Repeaters**
- **Main Nodes**
- **End points**
- **HPWREN nodes**

STATEMENT OF THE AMERICAN INDIAN HIGHER EDUCATION CONSORTIUM
DR. GERALD MONETTE
PRESIDENT, TURTLE MOUNTAIN COMMUNITY COLLEGE
CHAIRMAN, AIHEC COMMITTEE ON SCIENCE, TECHNOLOGY ENGINEERING, & MATHEMATICS
HEARING ON TELECOMMUNICATIONS IN INDIAN COUNTRY
COMMITTEE ON INDIAN AFFAIRS
UNITED STATES SENATE
SR-485
May 22, 2003

Mr. Chairman and distinguished members of the Committee, thank you for inviting me to testify today. My name is Dr. Gerald Monette. I am honored to be here as spokesperson for the American Indian Higher Education Consortium and as president of Turtle Mountain Community College, which is located in north-central North Dakota on the Turtle Mountain Band of Chippewa Reservation.

On behalf of this nation's 34 Tribal Colleges and Universities (TCUs), I want to thank the members of this Committee for your support of our institutions. The faculty and staff at our institutions work hard every day to help build a better life for our children through education. It is good to know that you are working with us, in this important place, for the benefit of our children and our communities.

For today's hearing, I have organized my testimony in three parts: (1) background on technology development at the tribal colleges and strategies we have taken to bring new technological opportunities to our people; (2) some specific examples of telecommunications development and innovation at the tribal colleges, including Turtle Mountain Community College's wireless Internet backbone project; and (3) a few recommendations on legislative initiatives for the Committee's consideration.

TECHNOLOGY DEVELOPMENT AT TRIBAL COLLEGES & UNIVERSITIES: *THE CIRCLE OF PROSPERITY PLANNING PROCESS*

Mr. Chairman, I do not believe it is necessary for me to provide an assessment of the state of telecommunications in Indian Country, or to review the history of the Tribal College Movement. Ample testimony has been provided on the former; and as to the latter, this Committee alone in the Congress knows our history well. I will simply say this: American Indian Tribal Colleges are young, geographically isolated, and poor – the poorest institutions of higher education in this country.

For the past three decades or so, Tribal Colleges have been working with our chartering tribal governments to protect what was ours: our land, our language, our communities, and our culture. At the same time, we are striving to ensure that our children have access to high quality educational opportunities and that our communities have the tools

they need to successfully join in this nation's economic prosperity. Isolated reservation-based Tribal Colleges do all of this on budgets that are far less – about $3,800 per student – than any other group of colleges and universities in this country.

It is in the context that people at the Tribal Colleges first learned of the Internet and the awesome power that information and communication technologies have in bridging the boundaries of geography and time.

By the 1990s, information and communication technologies had become fundamental components of teaching, learning, and research in higher education. Tribal Colleges and Universities – because of our poverty and isolation institutions -- had the most to gain, or lose from this evolution. Yet, the new technological revolution was largely passing us by, just as it bypassed most of Indian Country. We were faced with two choices: either we could view our communities' lack of access to technology as a "Digital Divide" that most of us would never cross; or we could view technology as a "digital opportunity."

We chose the latter. In late 1999, we began implementing a series of steps that would lead to the creation of a dynamic and broad-based strategic plan to guide our collective effort to join the technology revolution. Our goal: to reach a "Circle of Prosperity," a place where tribal traditions and new technologies are woven together to build stronger and more sustainable communities. We call our plan the "Tribal College Framework for Community Technology." It is a framework of strategic partnerships, resources, and tools that is helping us create locally based economic and social opportunities through information and communications technology and use of the Internet. We developed our plan through a series of five phases:

Phase I (Spring 1999): Tribal College presidents agreed collectively on two goals, which are the core of the *Circle of Prosperity* initiative. These goals are:

(1) to enable each tribal college to improve its technology infrastructure in a manner that fulfills its mission and objectives related to the needs of its students and community; and

(2) to develop tribally and culturally centered applications of information technology.

In addition, key Tribal College faculty and staff launched an educational awareness campaigned, called the "TCU High Performance Computing Initiative."

Phase II (Summer 2000): Tribal College and University presidents and their representatives met in a half-day session to review our progress, re-assess our priorities, and began planning strategies for a comprehensive framework to be considered during Phase III, the Tribal Technology Prosperity Game.™ Using a format for highly interactive and systemic dialogue, each participant had the opportunity to explore questions and apprehensions about the initiative and its implementation and, together, we discussed visions for the future and specific action steps for achieving a unified ICT vision.

Phase III (Fall 2000): To develop the most cost-effective and locally-relevant strategies for achieving the goals, the Tribal Colleges undertook a process never before attempted in Indian Country. We reached out to 11 major local, national, and international stakeholder groups and ask more than 150 representatives to help us develop, plan, and refine a process for bringing the opportunities of technology to Tribal Colleges and Universities. To begin our work, the colleges used a methodology called a "Prosperity Game," a highly interactive, fast-paced, and remarkably effective strategic planning simulation developed by Sandia National Laboratory from strategic war games and designed to help create and sustain productive change through strategy development and negotiation. During the 2.5-day Prosperity Game, which was led by a team of 13 trained facilitators, participants engaged in team interaction aimed at identifying challenges and developing policy options and strategies for the coordinated TCU Framework for Community Technology. Sector teams included:

- Governments (including tribal governments)
- Education (including tribal colleges and their education partners)
- Private Sector (IT providers)
- Research & Development
- Public (including tribal elders and community members)

The format of the event encouraged collaboration and coordinated action and resulted in the development of new resources, agreements, options, and plans that were further refined in the Phase IV "crafting circle" event.

Phase IV (Winter 2000-2001): Within weeks of the Prosperity Game, a smaller Prosperity team met for 2.5 days to refine the plans and Framework initiated at the Game. Following a facilitated format for decision-making, which included rotating "crafting circles" and cutting edge computer modeling and simulation, approximately 40 participants (most of whom had attended the Prosperity Game) began to identify the what, who, how, and when of the strategic plan. The result, by January 2001, was the first iteration of the "TCU Framework for Community Technology."

Phase V (February 2001 and Ongoing): In February 2001, the AIHEC Board of Directors adopted a strategic technology plan that embodies the TCU Framework for Community Technology. With support from the National Science Foundation, NASA, Microsoft Corporation, and others, AIHEC established a national coordinating office and launched a series of activities representing the initial phase of TCU Framework implementation. Most important, AIHEC is bringing the Framework full circle, back to each Tribal College individually, through the encouragement of and assistance with community-based strategic IT planning. In addition, AIHEC is undertaking a series of regional IT planning sessions to ensure that the Framework and all activities that flow from it are responsive to the specific and evolving needs of the tribal colleges. We have learned that planning on this level is a never ending process. It is a circle of continuous improvement through locally and nationally-based assessment, planning, implementation, and evaluation that is continually repeated.

Without going into detail about all of the activities that have been developed as a result of the Framework, the following is a summary of the original eight strategic areas that comprise the TCU Framework for Community Technology:

- **INFRASTRUCTURE:** To ensure that resources and relationships are in place to help develop and sustain appropriate technology-related infrastructure at each TCU, including connectivity, facilities, hardware, and software.

- **CULTURE:** To establish an advisory network of cultural experts from TCU communities who will assist in developing culturally appropriate applications for the virtual library and other initiatives; and establish and strengthen linkages with other technology-based national and international indigenous initiatives, including development of ongoing projects with the National Museum of the American Indian.

- **LEADERSHIP & COORDINATION:** To facilitate the development and continuous evaluation of individual TCU technology strategic plans; establish a national TCU technology advisory board; and develop policy and funding strategies.

- **PARTNERSHIPS:** To build partnerships with industry, federal agencies, other colleges and universities, K-12 schools, and communities to assist TCUs and their communities in improving their education systems, developing their economies, enriching and protecting their heritage, and improving quality of life.

- **EDUCATION & HUMAN RESOURCES:** To ensure that TCUs have the capacity to evaluate and adopt emerging technology-mediated teaching tools and strategies; encourage development of on-line degree programs offered individually and through consortia; assist in creating faculty development programs to ensure that instructors are competent to teach and use emerging technologies; increase access to online curricular materials; create adjunct faculty resource pools that can be shared by all TCUs; and assist TCUs in implementing student assessment strategies.

- **RESEARCH & DEVELOPMENT:** To enhance TCU research capabilities by encouraging linkages to national super-computing infrastructure initiatives (e.g. the Access Grid); participating in Internet2; establishing local cluster computing projects; adopting low-cost Internet-based collaborative tools (teaching and research collaboratories); creating opportunities for research partnerships with non-TCU centers and laboratories and among TCUs; developing research projects targeting critical areas (i.e. health, environment, energy); and developing community-based technology transfer programs involving TCUs and industry.

TCU DEVELOPMENTS & INNOVATIONS IN TECHNOLOGY

A. Infrastructure Development.

Mr. Chairman, just a few short years ago, a number of Tribal Colleges had only one computer on their entire campus connected to the Internet, and that connection was

through dial-up access! These institutions had no computer labs, or if they did, the labs were stocked with old and cast-off equipment. Many colleges could not meet requirements by federal agencies that grant proposals, reports, and other documents be submitted on-line. Their students could not access the wealth of research information available via the AIHEC virtual library, nor could their share courses and instructors through web-based delivery systems.

Today, I am proud to say that every one of the 34 Tribal Colleges, despite our remoteness and poverty, has achieved broadband Internet connectivity for our campuses, most through multiple T-1 lines. Our colleges have well-equipped computer labs; we have robust and growing distance education programs; and we are using technology to enhance teaching and learning in new and innovative ways.

Without question, we still face significant challenges: our communities lack Internet access; the lifespan of technology-related equipment is short and upgrades are expensive and complex; the standards for basic ICT infrastructure are changing rapidly. Most important, our institutions lack adequate human and fiscal resources. But even in the face of these challenges and more, our accomplishments over the past few years are significant.

B. Wireless Backbone Project.

An interesting example of our efforts over the past few years is AIHEC's wireless backbone project. To provide high-speed connectivity to remote institutions and our satellite campuses (where laying fiber optic cable may never be cost effective), three Tribal Colleges – including Turtle Mountain Community College -- are piloting state-of-the-art wide-band wireless backbone technology. And we are setting distance records in the process.

Last year, TMCC established a point-to-point 20 Mbps wireless infrastructure ring around our reservation, running from our College site in Belcourt to several locations in other parts of the reservation. In addition, we established a point-to-multipoint access point at the local radio station tower, KEYA-FM, which provides line-of-sight (LOS) access for a ten-mile radius around the site. The system uses commercially available and cutting edge technologies – pushing them to new distance limits -- and unlicensed spectrum. It is providing TMCC, some local K-12 schools, tribal courts, and other tribal offices with excellent broadband connectivity, significant cost-savings over traditional services, and the ability to deliver broadband multi-media capacity and applications that are not currently available in most rural and tribal communities.

However, installing the wireless backbone was not without its challenges. Our institution first had to educate the local community and the tribal government on the initiative and win their support for our effort. We had to obtain local permissions to mount and install the wireless transmission equipment at the necessary locations. Finally, we had to establish a working agreement with the local public utility. Without these relationships in place, our initiative would have failed.

I am pleased to report that the system has been in place and performing well for several months. It is cost-effective, easy to maintain, and adequate for our needs. And it has pushed wireless technology to a level never before attained in terms of "First Mile" access.

As the next step in our technological evolution, TMCC is working with all of the Tribal Colleges in North Dakota through our regional consortium, the North Dakota Association of Tribal Colleges, to develop a tribal college Internet network within the new state network structure, STAGEnet. Through our partnership with the State, we will be able to improve out Internet connectivity, significantly reduce Internet Service Provider costs, avoid duplication of network services, and improve distance education delivery capacity at all of our Tribal Colleges.

B. Additional Framework Activities

Distance Education: Through the Internet and other information technology applications, all but five Tribal Colleges offer technology-mediated education. An expanding ability to network with other colleges, universities, and tribal institutions is enabling our colleges to share knowledge beyond reservation boundaries and bring to their communities technology and information that can be transferred to support community and economic development. For example, Bay Mills Community College, located in a refurbished fish plant in Michigan's Upper Peninsula, is using technology and distance learning to deliver higher education to all 11 tribes in Michigan and to people in 17 other states, from Florida to Alaska.

Virtual Library: Through our virtual library initiative – a partnership including AIHEC, the University of Michigan's School of Information IBM, and the W.K. Kellogg Foundation -- the tribal colleges are beginning to develop an Internet-based library designed to enhance the limited library resources traditionally available in Indian Country. The virtual library, which uses open source software, has been installed at nearly every tribal college. Each college has a locally controlled library web site, which: (1) provides student and community access to local TCU library and curricula resources; and (2) interfaces with a much larger AIHEC virtual library data base of commonly-available and licensed resources (i.e. national and international education journals).

Already, the virtual library has made a difference in the accreditation status of at least five tribal colleges. Last year, the National Science Foundation awarded AIHEC a planning grant to collaborate with NSF's National Science, Mathematics, Engineering, and Technology Education Digital Library community. Unfortunately, funding for the AIHEC virtual library will expire in June 2003. Without additional support, this valuable resource may be forced to shut down.

AN-MSI: Through a $6 million 4-year grant from the National Science Foundation to EDUCAUSE, AIHEC is partnering with other MSIs and the extensive EDUCAUSE

network on the "Advanced Networking with Minority Serving Institutions" (AN-MSI) project. (www.anmsi.org) The project is designed to improve networking architecture; improve Internet connectivity in remote areas served by MSIs; assist college presidents and administrators in improving our knowledge of technology; and improve technical support through collaboration (i.e. remote technical support).

Through AN-MSI's limited funding, we have been able to achieve incredible results, including the above mentioned wireless project, largely because we have worked concertedly to develop a strong network of technical expertise within the tribal college system and because we leverage this funding to the maximum extent possible.

A number of initiatives are currently underway, including vitally important information security support and education projects. However, AN-MSI's funding is also set to expire this year. If additional funding is not secured for this project, the federal government's only cross-community collaborative technology initiative for minority serving institutions will cease to exist.

LEGISLATIVE RECOMMENDATIONS: QUANTIFIABLE TCU-ICT GOALS FOR CONGRESS AND FEDERAL AGENCIES

First, AIHEC thanks the members of the Committee who cosponsored **S. 196, the Digital and Wireless Network Technology Program Act.** We are pleased that the bill passed the Senate recently with your strong support. We believe S. 196 represents significant steps forward in our efforts to develop and use technology in a manner consistent with our respective missions and tribal communities. Other initiatives and issues to support or address include:

1. TCU Framework for Community Technology: Federal agencies, foundations, and the private sector should support the TCU Framework for Community Technology with specific initiatives as set forth in the Framework.

2. Existing TCU-Federal Agency Partnerships: Funding should be increased at reasonable increments over the next three years in specific areas:

- **National Science Foundation Tribal Colleges & Universities Program:** Expand from $10 million to $30 million per year.
- **National Aeronautics and Space Administration Cooperative Agreement**: Expand from $2.1 million to $6 million per year.
- **DoD Equipment and Instrumentation**: Expand from $3.3 to $17 million per year

3. Strategic IT Planning: The need for ongoing strategic planning is paramount to any major initiative or institution. In this area, with technology rapidly evolving and new opportunities becoming available from all sectors, strategic planning for coordination and growth is essential. Specifically, planning needs to be focused on the unique

nature and mission of institutions of higher education. Possible models include a partnership to provide technical assistance to Tribal Colleges, which AIHEC with the Information Technology Association of America (ITAA) and the Advanced Networking with Minority Serving Institutions project (AN-MSI). Funded by the National Science Foundation, AIHEC, ITAA and AN-MSI are sponsoring technical assistance teams that visit colleges to: (1) document, assess, and, if necessary, help improve current networking architecture; (2) increase awareness of technology trends and issues among college leadership and faculty; and (3) begin or expand the process of community-based IT strategic planning. Authorization and funding to expand this effort and ensure strategic IT would be a wise investment. Federal agencies including the National Science Foundation, NASA, and the Department of Education should allocate specific funding to ensure that all tribal colleges and universities have access to strategic IT planning tools and resources.

4. Opportunity Parity: As new federally funded programs are developed, federal agencies and the private sector should bear in mind the degree to which institutions vary and strive to make opportunities available to all. An institution should not be penalized because it currently lacks basic connectivity and e-mail service, but neither should an institution be excluded from participation because it made investments early, before dedicated funding existed, and now seeks upgrades or replacement for aging equipment. All programs must address this fundamental issue of "opportunity parity."

At the same time, programs specifically established for the youngest and poorest institutions of higher education in this country -- Tribal Colleges and Universities – and based firmly on federal trust responsibility and treaty obligations whose consideration was the exchange of millions of acres of land, should be reserved for the benefit of these institutions. The programs should not be available to large, well established state- and privately-chartered institutions that already have Internet 2 connectivity, Research 1 status, comfortable endowments, and adequate public or private funding.

Federal funding should be targeted at institutions that meet the spirit and letter of the law with respect to tribally-controlled colleges and universities. In short, programs intended for Tribal Colleges and Universities should exclude Research 1 institutions, institutions with significant endowments, institutions that are unable to sufficiently verify defined minority status, and institutions with proven track records of successful competition in an agency's more complex programs. For example, with respect to the National Science Foundation's TCU program, the Agency should be prohibited from accepting applications from institutions with endowments over a certain size, institutions with multiple NSF grants, or institutions with NSF grants totaling more than a pre-determined dollar amount.

5. Higher Education Act and Carl Perkins Act Reauthorizations: Specific programs should be authorized and funded to establish Tribal College technology development and workforce programs, including an American Indian ICT Workforce Development and Technical Assistance program.

6. National Security Programs: As members of the Committee know, long expanses of our nation's borders with Mexico and Canada include Indian reservations and tribal lands. In fact, three Tribal Colleges – Turtle Mountain Community College in North Dakota, Tohono O'odham Community College in Arizona, and Blackfeet Community College in Montana -- are located in very close proximity to international borders. Several other Tribal Colleges are not far away from our borders. As potentially key players in the nation's effort to secure our homeland, Tribal Colleges and Universities should be included in new research, infrastructure, and education and training initiatives involving information and communications technology security and disaster preparedness and recovery. As new legislation is developed, provisions should be included specifically addressing this important point.

7. Cyberinfrastructure & Grid Computing: We urge the members of the Committee to be aware of a powerful new report by the National Science Foundation's Blue Ribbon Panel on Cyberinfrastruture. Entitled "Revolutionizing Science and Engineering Through Cyberinfrastructure," the report makes specific recommendations related to Tribal Colleges and Universities and other minority-serving institutions. Following careful study of the report, I urge this Committee to take steps to ensure that the National Science Foundation implements the panel's recommendations. Specifically, NSF should develop a timetable for implementing the Report's recommendations related to Tribal Colleges and Universities and other minority-serving institutions. Further, as other Senate Committees put forth legislation and appropriations related to the U.S. cyberinfrastructure, we urge members of this Committee to ensure that Tribal Colleges are included.

8. E-rate Eligibility: The federally created E-rate program has been tremendously successful in bringing affordable telephone and Internet services to the nation's K-12 schools. Recently, the Bureau of Indian Affairs successfully completed connecting all of its schools to the Internet, and most, if not all, of these schools receive some level of E-rate funding. Currently, the program is not available to tribal colleges, despite the extensive work we do with our K-12 schools. We respectfully request that the Congress consider expanding the E-rate program to include tribal colleges.

9. "Indians into Technology" Program: We urge the Committee to support an initiative first endorsed by Senator Dorgan to establish an "Indians into Technology" program. This proposal is based on a similar and highly successful program created by Congress in the mid-1970s to help address the critical need for medical professionals from and working in Native communities. Through the innovative "Indians Into Medicine" (INMED) program, which began at the University of North Dakota-Grand Forks (http://www.med.und.nodak.edu/depts/inmed/), American Indian students receive vitally needed educational and personal support from elementary through professional school. INMED includes summer sessions for students from elementary school through college; junior and senior high school bridge programs; a tribal college bridge program; summer medical school preparation program for college juniors and seniors and recent graduates; and ongoing educational and personal support programs for medical and graduate school students.

Because of similarities in demographics and need, a similar comprehensive education and support program could significantly impact efforts to develop and maintain an American Indian information technology workforce. Under our proposal, Tribal Colleges could address areas of critical need, including:

- campus information technology infrastructure and science, technology, engineering, and mathematics (STEM) programs;
- educational and personal support for students from elementary through professional school, including summer sessions for students from elementary school through college;
- 12-13 and 14-15 bridge programs and summer preparation programs;

10. Remote Technical Support and Distributed Learning Infrastructures: Because the tribal colleges are small, underfunded and geographically remote, hiring, training, and retaining qualified information technology support staff is very difficult. We have very good people at our schools, but often, they need a little extra support and guidance. The National Science Foundation or Department of Education's Title III program, should make funding available to encourage and sustain remote technical support, training cohort programs, and student-based ICT technical support models at tribal colleges and universities.

In closing, Mr. Chairman, I will reiterate the Tribal Colleges and Universities that comprise the American Indian Higher Education Consortium are committed to working with all of our partners toward a new age of discovery and knowledge. At the same time, we are committed to revitalizing our communities and America's economy through entrepreneurship. And we are committed to working with the Congress, federal agencies, and the private sector to build a bridge of technological opportunity across our vast nation. Thank you.

For Additional Information, contact:

Carrie L. Billy
Director of Technology Development
AIHEC
703.838.0400 x107
703.838.0388 (fax)
cbilly@aihec.org

Meg Goetz
Director of Congressional Relations
AIHEC
703.838.0400 x111
703.838.0388 (fax)
mgoetz@aihec.org

CHALLENGES AND OPPORTUNITIES IN NORTHWEST INDIAN COUNTRY: SOME BROADBAND INITIATIVES

Testimony Prepared for The Senate Committee on Indian Affairs

Valerie Fast-Horse, Co-Chair (Presenter)
Telecommunications & Utility Committee
Affiliated Tribes of Northwest Indians
and
Director, Management Information Systems
Coeur d'Alene Tribe of Idaho
P.O. Box 408
Plummer, ID 83851-0408

Elstun W. Lauesen, Director of Technology
Affiliated Tribes of Northwest Indians
18130 Midvale Avenue N
Seattle, Washington 98133

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Introduction and background

My name is Valerie Fast Horse. I am the Director of the Management Information Systems Department for the Coeur d'Alene Tribe, and I serve as Co-Chair of the Telecommunications and Utilities Committee of the Affiliated Tribes of Northwest Indians (ATNI). I am also an advisor to the Tribal Technology Program of the Affiliated Tribe's Economic Development Corporation (EDC). On behalf of the Affiliated Tribes, I am pleased to present testimony today regarding the work of ATNI-EDC and how we have been able to address the telecommunications needs of our member tribes.

In my presentation this morning I will provide some background information about ATNI and its Economic Development Corporation (EDC). I will also review some of the challenges we face, but more importantly, illustrate the positive steps being taken to overcome these challenges through the Tribal Technologies Program and tribal initiatives.

The Affiliated Tribes of Northwest Indians Economic Development Corporation (ATNI EDC) is a 501 (c)(3) corporation that was organized in 1995. The strength of ATNI EDC is its active board of directors who serve without compensation, and its current 10-member professional staff.

The ATNI EDC is a subsidiary of The Affiliated Tribes of Northwest Indians, a 49-year-old organization serving the interests of its 55 member tribes from the seven state region of Alaska, California, Idaho, Montana, Nevada, Oregon and Washington. ATNI's interests and initiatives are identified by hundreds of tribal leaders who participate in an annual meeting and three working conferences each year. It is ATNI EDC's mission to then provide financial and technical assistance in the areas of community and economic development as agreed upon in these annual meetings and working conferences.

In November 1997, the ATNI EDC held an Economic Summit in Seattle, Washington. Over 125 Tribal leaders and economic planners gathered to discuss the challenges of economic development in Pacific Northwest Indian Country. The focus was to identify ways to collaborate on programs of mutual interest. Program priorities identified by the participants are the foundation of ATNI EDC's current financial and technical assistance program activities, so it is no surprise that telecommunications and information technology was identified as one of the top priorities.

Native American tribes in the Pacific Northwest face digital divide barriers as characterized in the National Telecommunication and Information Administration's 1999 study, *Falling Through the Net: Defining the Digital Divide*, that include:

- Telephone penetration for rural Native American households is 76.4%; the national average is 94.1%.
- Rural Native American households' access to computers is 26.8%; the national average 42.1%.
- Native American household access to the Internet is 18.6%; the national average is 26.6%.
- The "rural digital divide" greatly impacts the tribes' ability to attract new investments, deal with high unemployment, provide new opportunities to significant numbers of working poor living on reservations, and difficulty in achieving economies of scale in delivering health care, social services, education and training.

he 2000 US Census data suggests that unless Washington's Native Americans living on servations are able to engage in the world economy, their socioeconomic conditions ill deteriorate.

- Native American fertility rates are higher than the general population with a large percentage of the population under twenty years of age.
- Native American educational attainment is low in comparison with other populations: youth are less likely to complete high school (66%) and postsecondary education (9%). Too many reservation residents lack the skills needed to join the Information Age economy.
- Direct investment for entrepreneurship and private sector development is limited and discouraged by the lack of supporting business infrastructure, including the availability of broadband telecommunications services, and a lack of technologically skilled employee and customer bases.

TNI EDC Tribal Technologies Project

order to begin to break these barriers, the ATNI EDC developed the **Tribal echnologies Project**. The Tribal Technologies Project is a giant leap for many Native mericans. Most individual tribes do not have the resources–financial or human–to

secure the proposed skills to fully utilize and maintain the level of technology needed to succeed and prosper in the Information Age. ATNI EDC's eight years of experience serving the tribes, and its collaborative approach in embracing participating tribes, telecommunications service providers, project consultants, and state agencies, makes it uniquely qualified to make the Tribal Technologies Project a success.

Tribal Technologies Project team members provide technical assistance to tribes through a structured planning process. The work is accomplished within the framework of formal invitations to ATNI EDC conveyed through tribal council resolutions. The resolutions authorize organizing tribal technology teams to work with project staff, describe tribal resources dedicated to supporting project activities, provide a timeframe for completing the initial strategic planning work, and specify expected results from the assessments, demonstrations and planning efforts.

While the challenges facing our member tribes are daunting, it is important today to discuss some of the positive efforts being undertaken in our region.

FOUR DIVIDES NOT ONE

When we speak of 'the digital divide' ATNI-EDC sees four divides, not one. The typical Internet network system consists of 'transport', 'distribution', 'access', and 'content'.

1. TRANSPORT is the system component that delivers the bandwidth to the local area;
2. DISTRIBUTION is the part of the network that distributes the bandwidth around the community;
3. ACCESS is the link between the end-user and the distributive network; and
4. CONTENT is the character of the data that drives network use.

Several years ago when the Benton Foundation began the great work of defining and addressing digital divide issues, the 'divide' was seen as a lack of ACCESS: most rural

homes lagged behind in access to dialup, and most rural homes did not have computers. While schools, clinics and libraries received broadband connectivity under e-rate subsidies, the community-at-large remained shut out of that DISTRIBUTION network. Only the State of Alaska requested and received (in 2001) a waiver from e-Rate restrictions to resolve the DISTRIBUTIVE divide in Alaska's remote, rural communities.

The 'last' or 'first' mile (depending on your perspective) among Northwest Tribes is largely managed by Local Exchange Carriers (LECs) who provide internet services as an 'unbundled layer' of services to compliment the small revenue center established through telephone services. In this sense, the LECs are the shuttle carriers to the super-highway located on a fiber in the backbone, which TRANSPORTS the data along the Internet network. Because unbundled data TRANSPORT is a minor revenue stream for the local exchange, significant investment in copper or fiber plant to bring carrier-class broadband services to a small rural community simply does not meet most business case Return-On-Investment (ROI) criteria. This is not to say that some DSLAMs (Digital Subscriber Line Access Multiplexer) have not been built to support DSL (Digital Subscriber Line) services in rural communities served by PSTN (Public Switched Telephone Network) exchanges; they have. The fact is, however, that broadband services are still largely unavailable in Northwest Indian Country.

Digital data networking is much different from the world of analog radio and television information systems. Digital networks allow users to manage CONTENT more easily. Web-based Virtual Private Networks to dedicated intranetworks allow users to aggregate and target their data use. Moreover, the low cost of new networking technologies makes the management and development of local content much more affordable.

Tribal Assessments. The ATNI-EDC model for bridging these four divides is to form local advisory boards to help define the CONTENT applications of the users of the system under design. Once CONTENT is defined, then a supply side assessment is conducted of:

1. Availability of computers or set tops or other devices to determine where deficiencies exist. This is for both public and private uses of technology (ACCESS).
2. Local infrastructure in order to secure key sites of nodal aggregation for WAN architecture (DISTRIBUTION).
3. Access and cost options for broadband with fewest links to the 'source' or backbone (TRANSPORT).

Tribal Initiatives. Three current initiatives, which we hope will serve as models for other ATNI tribes, include the Tribal Portal initiative, the Tribal Teleport initiative, and the Coeur d'Alene Tribe Broadband initiative.

1. The **Tribal Portal Initiative** is testing a comprehensive solution to both CONTENT and ACCESS. The Tribal Portal is currently being tested in a partnership with the Makah Tribe, the most remote tribe located in Neah Bay in the Northwestern Olympic Peninsula. The concept is to create locally controlled content and to provide local services as a gateway to the Internet. The utilization of electronic documents and messaging boards among the households will enhance communication; the development and archiving of cultural content in secure conference areas on the portal will enhance the use of cultural resources for the Tribe. Local 'news, weather and sports' and a local market/trading area on the site will increase use and penetration of households of the technology. While 40% of the households have at least a dialup connection, almost 80% of tribal households have a television. The use of a set-top device for television owners is being tested to increase ACCESS to the CONTENT service.
2. The **Tribal Teleport Initiative** addresses the DISTRIBUTIVE and TRANSPORT issues. The Lower Elwha Tribe acquired property, which contains a 350 foot Microwave Tower and facility. The facilities are part of the old Cold War Alaska Communication System. ATNI-EDC is cooperating with Lower Elwha and five other Olympic Peninsula Tribes, including Makah, to convert the microwave facility into a teleport site, which will link the tribes to the NoaNet Backbone via a point-of-presence, owned by Clallam County Public Utility

District (CCPUD). The assessment calls for a fiber link from the CCPUD Point of Presence (POP) to the Lower Elwha Tower. From the Lower Elwha Tower the circuit will be transmitted via 5.8 Ghz Direct Sequencing radio signal to participating communities. The Makah Tribe, discussed above, and the others will have a so-called WiPoP (Wireless Point-of-Presence) built that will receive the signal and redistribute it in an 802.11(b) wireless cloud. This will allow cost-effective access to be established using PC cards for both the computers and the set-tops being served by the Portal. The tribe will operate as the content experts and the ISP for this system. Subscribers will pay for their connection through a utility bill at a wholesale rate plus capital cost and transportation cost, estimated to be around $25 per month for the equivalent of a fractional T-1.

3. The **Coeur d'Alene Tribe Broadband Initiative** is a project that will address the TRANSPORT, DISTRIBUTION, ACCESS and CONTENT issues on the Coeur d'Alene Indian Reservation. The Coeur d'Alene Tribe was recently awarded a $2.78 million community broadband grant from the United States Department of Agriculture Rural Utilities Services. Receiving this award will allow the tribe build a state-of-the-art Tribal Community Technology Center, and to deploy a wireless broadband transmission system that will be adequate enough to support the Tribal Government, public safety personnel (fire/medical/police), medical facilities, educational institutes, new development, and reservation communities. The program objectives are to:

    a. Deploy basic broadband service to critical community facilities free of all charges for at least 2 years located within our service delivery area.

    b. Offer basic broadband transmission service to residential and business customers, as well as isolated farms and rural home sites. End-user equipment will be provided during the first two years of the grant. Installation and configuration services will be provided by technology center staff. The end-user equipment will include: EtherAnt II 802.11b

Ethernet Converters built into 18dBi Flat Panel antennas, 50 ft. outdoor Ethernet cables, 110VAC wall adapters, and CAT5 DC power injectors.

c. Build and operate a Tribal Community Technology Center. In addition to having access to free broadband, users of the lab will have access to state-of-the art equipment. The lab will be equipped with 35 Dell Precision Workstations and 5 iMac 500MHz Power PC G3s, which will be placed in the "Kids Corner." Community children will benefit from the "Kids Corner" for their education, schoolwork, and recreation needs.

d. Utilize the Tribal Community Technology Center for higher education, career renewal, and workforce training needs. We have been working with North Idaho College to bring instructor led courses, on-line courses, and interactive video-conferencing courses to the center.

e. Develop a web portal to give tribal members better access to information about the tribal government and services provided by tribal programs. The system will also include Tribal language modules, historical and cultural content, and community news and events.

The primary transport will be a 45Mbps DS-3 back-haul from the tribe's Network Operations Center to NoaNet's point of presence (POP) in Spokane, WA. Distribution will be done through a Wireless Local Loop, which will consist of five communications towers and microwave systems using the 2.4 GHz and 5GHz frequency spectrums and 802.11b standards.

These initiatives represent what ATNI-EDC hopes will be a locally empowering solution addressing ALL of the digital divides in Northwest Indian Country.

RECOMMENDATIONS

Homeland Security. We urge the committee to be mindful of the unique opportunity for Indian Country to support the security of our nations. Recently the Agriculture Department's inspector general audit called upon the U.S. Forest Service to come up with a plan to improve coverage of national forests near the borders of our country. The audit notes that the Forest Service oversees areas *"that are potentially vulnerable to infiltration by terrorists, smugglers and other criminal agents"* Our Indian nations are often inholders within the vast tracts of wilderness and federal management areas. We are co-managers with federal agencies in many areas including fisheries, water resources and environmental management. Native Alaskans served on the technological front lines of America's cold war, engineering and operating the District Early Warning sites along coastal Alaska. Native Americans have served this nation with distinction when called upon to do so. In this context, the cold war era Microwave Tower at Lower Elwha, which we discussed above, closes that loop of history in these challenging times. When this remnant of the cold war is converted for the peaceful uses of our Tribes, it may yet, perhaps, be a service to the Domestic security of our nations. The Office of Homeland Security does recognize the Government-to-Government relationship between the United States and federally-recognized Tribes. In this connection, we urge the Committee to ensure that there will be a strong role for Tribes as that Office shapes its strategic thinking and the deployment of our nations' security resources.

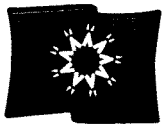
Other Recommendations:

1. Support Open Access Backbones for rural America, such as the Northwest Open Access Network (NoaNet) throughout the United States. The presence of these backbones are analogous to the public interstate highway system that links our great nation together; Just as the public highways are supported by a gas tax, so could a fair and equitable subscriber fee system support the development of these systems and the interconnect costs to remote communities to be served by them.
2. Support 'Landing Rights' for World Trade Organization telecommunication satellite transponders for Indian Country as well as underserved rural areas where a diversity of communication options are not available. Intelsat, Telesat Canada

and other systems are capable of serving domestic U.S. markets. These systems could provide redundancy, links to peering services, and signal repeating services for remote networks requiring point-to-point/point to multipoint signal support.

3. Continue funding and support of programs such as the Technology Opportunities Program under the U.S. Department of Commerce, NTIA. The teleport project described above is part of a request submitted to the TOP program. Along with TOPS/NTIA are the multiple programs supported through the Rural Utility Service, The project described above for the Coeur d'Alene Tribes is funded partially by the RUS. And the Economic Development Administration (EDA) has been a dependable friend of rural America and Indian Country through the years. EDA is a public partner in the assessment work currently being conducted by ATNI-EDC. These programs provide important investment funding for public projects that help to build the capacity of our nations.
4. In particular, we are requesting the support of this Committee for a proposed Congressionally Sponsored Appropriation (CSA) for approximately $15 Million, which is intended to support a multiplicity of projects throughout Northwest Indian Country. The types of projects that would be supported by this appropriation are described above. The funding would dovetail the assessment and planning work being sponsored by private foundations in the Northwest over the next 24 months.

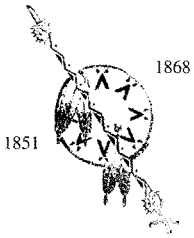
Thank you for this opportunity to come before the Committee and thank you for your diligence in behalf of all of our people.



Oglala Sioux Tribe

Office of the President

PO Box 2070
Pine Ridge, SD 57770
Phone: 605.867.5821
Fax: 605.867.6076



TESTIMONY OF

CORA WHITING-HILDEBRAND

COUNCIL REPRESENTATIVE, OGLALA LAKOTA TRIBE

BEFORE

THE SENATE COMMITTEE ON INDIAN AFFAIRS

OVERSIGHT HEARING ON

THE STATUS OF TELECOMMUNICATIONS IN INDIAN COUNTRY

MAY 22, 2003

Mr. Chairman, Vice-Chairman and Members of the Committee, my name is Cora Whiting-Hildebrand and I am a member of the Oglala Lakota Tribal Council. On behalf of President Steele, the Tribal Council, and the Oglala Lakota people, I am pleased to present testimony on the importance of having eligible telecommunications carrier (ETC) status for the telephone service providers to provide wireless telephone service on the Pine Ridge reservation.

Following the devastation of a tornado that struck our reservation in 1999, Western Wireless came to Pine Ridge with a cell-on-wheels program and thirty cell phones to provide emergency wireless telephone services for disaster workers, tribal council members, and other tribal officials. In the many weeks it took for the situation to stabilize, we became accustomed to wireless phone services. The project demonstrated the benefits of wireless service to us and emphasized our need for local wireless service on our reservation. In the year 2000, after negotiations with Western Wireless, the Tribe entered into the Tate Woglaka ("talking wind") service agreement.

In 1999, prior to the signing of Tate Woglaka, tribal officials performed an analysis of the need for residential phone service on our reservation. The tribal Council and president's office confirmed the results of the study, conducted by tribal employees, which found that 4,100 homes out of the 6,000 total homes on Pine Ridge were without telephones. That was a penetration rate of only 32%. Contributing to our problem was the overwhelming cost of basic telephone service. In 1999, the average price for basic monthly service was $38 for a residential phone. We were unaware that lifeline and linkup services were offered or that our people could be eligible for them. The local telephone company was minimally responsive to the needs of our residents. You can see

by these statistics, conditions and facts why it was essential to have a phone service alternative to the one we had.

I am pleased to tell you that today, following the Tate Woglaka agreement, we have 4,027 subscribers, 99% of whom receive lifeline and linkup services. Initial subscribership was so strong that it over-worked the system. Average phone use on the reservation is now 946 minutes per month per subscriber, the great majority of whom did not have phone access prior to the year 2000.

Western Wireless' universal service offering was developed in consultation with the Tribe to address the specific needs of the residents such as an expanded local calling area; mobility of service; coverage throughout most of the reservation and in some of the most remote areas of the reservation; no or minimum installation costs of service; and, a rate plan designed with the financial concerns of low-income residents considered. The process of establishing Western Wireless's services respected our Oglala Lakota tribal sovereignty. This respect is embodied in the Tate Woglaka agreement. We felt this was important for Western Wireless to secure ETC status. While ETC status for Western Wireless was the key to insuring success, our tribal participation in the decision-making process was essential.

Even with the success that followed Tate Woglaka, we consider our reservation phone service is still a work in progress. Recently, over 1,500 subscribers were disconnected for various reasons, all of which could have been avoided if there existed better consumer education. We like the service, competition, and convenience of our new services, yet there are definite problems that need to be addressed:

1. President Steele came to Washington, D.C. to seek the assistance of the Federal Communications Commission (FCC) in gaining ETC eligibility for Western Wireless. Under the trust relationship, it is neither legal nor appropriate for the Oglala Lakota Tribe to have to negotiate with the State of South Dakota or the FCC, for that matter, to establish ETC eligibility on our reservation. It should be the Tribe, with FCC advice and assistance, that decides who is eligible to have ETC status for our reservation. Unlike the FCC and incumbent carriers, the Tribe certainly would not be predisposed to limiting service to enrolled members of the Tribe only. For example, there are currently 72,000 individuals pending enrollment who are restricted by the FCC from having Western Wireless phone services because they are not enrolled. Congress must make it clear that the FCC has to be responsive to what the tribes want. In every circumstance, we, like every other tribe in the United States, oppose deferring our tribal sovereign authority to the state utility commission. We demand that nothing occur in the process of establishing reliable phone service on our reservation that would erode or diminish Oglala Sioux tribal sovereignty.

2. Within its Consumer and Governmental Affairs Bureau, the FCC houses the Indian desk designed to work with tribal governments and address telecommunications issues in Indian Country. The Oglala Lakota Tribe feels that this bureau should be solely responsible for handling American Indian telecommunications issues. The Tribe neither welcomes nor needs unsolicited advice or action from anyone in any other bureau which does not come through the Bureau of Consumer & Governmental Affairs. In addition, we feel there should be a clear congressional mandate that Indian tribes should have some

input and/or educated and sensitive authority in the FCC's Office of the General Counsel., because it serves as the chief legal advisor to the entire Commission and all of its bureaus and offices.

3. The Oglala Lakota Tribe requests consumer educational advice and assistance from the FCC on the Tribe's regulatory role and responsibility through the telecommunications body of law. The FCC as well as Western Wireless have a burden of responsibility to us to provide education to the individual consumer. Educational assistance includes help with pay schedules and USF assistance, as well as care for phone units.

In conclusion, make no mistake: the Oglala Lakota people are happy with the service. We are thrilled to have 4,027 current subscribers with reliable phone service. With a reservation of 1.8 million acres, it is important for tribal citizens to have phones in their cars and their homes. For law enforcement services, for education, and for individuals with health concerns such as diabetes, it is necessary to maintain constant phone contact. The importance of reliable and affordable service is evident by the average residential service use, which is now 946 minutes per month per subscriber, which does not include long distance.

Western Wireless' entry into the telephone market on the reservation has enabled the tribal government to function more efficiently with constant communications, has empowered residents to better manage their personal and business affairs, and has inspired the incumbent local telephone company to be responsive to the needs of the

tribe. Nevertheless, restrictive and inappropriate federal government policies undermine the ability of the Oglala Lakota Tribe to provide wireless telephone service for all the people in all the communities within the jurisdictional exterior boundaries of the reservation. We believe the federal government's role in our telecommunication needs is an important one, but one that should support our decision-making processes rather than one which restricts and limits. Thank you.

TESTIMONY OF

GENE DEJORDY

VICE PRESIDENT OF REGULATORY AFFAIRS

WESTERN WIRELESS CORPORATION

Committee on Indian Affairs

United States Senate

"Wireless Universal Telecommunications Service on Pine Ridge Indian Reservation"

May 22, 2003

Western Wireless Corporation
3650 131st Avenue SE, Suite 400
Bellevue, Washington 98006
425-586-8736

401 9th St., NW., Suite 550
Washington, DC 20004
202-654-5903

INTRODUCTION

Mr. Chairman and members of the Committee, I commend you and your colleagues for conducting this hearing to examine the critically important issue of how best to improve telecommunications service to individuals residing on tribal lands in America. I especially appreciate this opportunity given to Western Wireless to address a subject that is not only of great interest to this committee, but also a subject that is at the core of the business mission of my company, Western Wireless. Wireless telecommunications is essential to growing numbers of Americans, many of who are increasingly using wireless as a substitute for wireline service. This is especially true on the Pine Ridge Indian reservation, where many tribal residents exclusively use wireless service for their telecommunications needs.

As we sit here today, more than four thousand members of the Oglala Lakota Tribe on the Pine Ridge Indian reservation in South Dakota have telephone service, including access to emergency 911 services, in their homes for the very first time because of a unique cooperative arrangement between Western Wireless and the Oglala Lakota Tribe, which can be replicated in other areas of the country only if action is taken to eliminate barriers to universal availability of telecommunications services. In this testimony, I identify: (i) the successes and challenges associated with the current system that attempts to provide universal service to all Americans,

including Native Americans; (ii) the steps that need to be taken to allow all individuals residing in rural America to enjoy the benefits of access to basic and advanced wireless telecommunications services; and (iii) Western Wireless' experiences obtaining eligibility and authority to provide telecommunications service on the Pine Ridge Indian reservation.

BACKGROUND

Western Wireless has built a successful business providing wireless telecommunications services in rural America. The company holds cellular licenses to provide service in 19 western states, which include more than 85 Indian reservations and American Indian communities. The Company is the second largest wireless carrier in the country based upon geography served with its cellular licenses covering about 25 percent of the land in the continental U.S. With a service area that has an average population density of approximately eleven people per square mile, Western Wireless serves many areas that do not have access to basic telephone service, much less advanced telecommunications services.

Western Wireless has a long history of providing service to unserved and underserved consumers. In 1994, through a unique arrangement with the Nevada Public Utilities Commission and the incumbent local exchange carrier, Western

Wireless began providing wireless local loop service to small businesses and residential consumers in a remote area of Nevada that did not have access to wireline local telephone service. In 1999, Western Wireless began offering wireless local loop service in Senator Dorgan's hometown of Regent, a community of less than 300 people, which represented one of the first competitive local telephone service offerings in rural America and made available new and innovative services to consumers. More recently, Western Wireless has entered the universal service market by obtaining Eligible Telecommunications Carrier ("ETC") status for purposes of universal service support in 14 states, plus the Pine Ridge Indian reservation. Western Wireless has emerged as the preeminent competitive universal service provider in the United States and now provides competitive universal service in numerous rural communities within its service area. Western Wireless' entry into the universal service market has directly resulted in numerous benefits to consumers and rural economic development. The Pine Ridge Indian reservation story illustrates the importance of competition in the universal service market.

The Pine Ridge Story

Recognizing that many American Indians living on reservations and in tribal communities lack access to basic telecommunications services, Western Wireless has undertaken several initiatives to bridge the telecommunications divide and

"make available . . . to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service" as required by the Communications Act of 1934, as amended. Specifically, in August 2000, Western Wireless entered into a historic agreement called *Tate Woglaka* (Talking Wind) with the Oglala Lakota Tribe on the Pine Ridge reservation. The purpose of Tate Woglaka agreement is to build a state-of-the-art telecommunication infrastructure necessary for economic and social development.

Western Wireless is very proud of our efforts to provide telecommunications service on tribal lands, and, most particularly, on Pine Ridge. The Pine Ridge Indian reservation is a very rural, economically depressed area lacking many of the basic necessities of life, including affordable telecommunications services. In fact, the Census Bureau identifies Shannon County consistently as the one of the poorest counties in America.

The success of the Pine Ridge service offering can be attributed, in part, to the relationship developed between Western Wireless and the Oglala Lakota Tribe. In 1999, Western Wireless responded to a devastating tornado that hit the town of Oglala on the reservation by providing emergency cellular service to rescue workers and tribal officials. When it became apparent that there was a need for

basic telephone service on the reservation, we negotiated the Tate Woglaka service agreement. The Indian Affairs Committee was so gracious to host the ceremonial signing of that document here in December 2000.

The highlights of the agreement include:

- A sharing of rights and obligations related to operations, sales, and maintenance;
- Cooperation between the tribe and Western Wireless on customer service offerings;
- $1 monthly rate plan for *Lifeline* eligible residents;
- An expanded local calling area that eliminates all toll charges previously associated with making certain calls on the reservation and to Rapid City;
- Access to a local Emergency Service Provider on the Reservation;
- Long distance service, prepaid services, and enhanced services;
- Access to advanced telecommunications services capabilities; and
- 24-hour customer service.

The Pine Ridge offering statistics speak for themselves:

- More than four thousand tribal residents are being served by Western Wireless on the reservation;
- 99% of the tribal residents qualify for the basic and enhanced Lifeline discounts, resulting in a basic rate of $1.00 per month.
- Approximately 68% of tribal residents did not previously have landline telephone service.

- The average monthly minutes of use is 946 for wireless users on the reservation.

Clearly, by any measure, the wireless service offering on the Pine Ridge Indian reservation has achieved its objective of bridging the telephone divide and has provided tribal residents with a valuable telecommunications service that furthers consumer welfare and economic development. Regulatory challenges, however, remain if we are to duplicate the success of Pine Ridge on other reservations.

The Regulatory Challenges

Beyond the business issues related to providing service on reservations, the biggest challenges to bridging the telephone and digital divide on reservations are the regulatory issues, both in terms of market entry and a level playing field.

Level Playing Field. It has been a national policy since 1934 to make available to all Americans, regardless of the location of their residence, affordable telecommunications services. In too many cases, rural areas have been effectively excluded from the benefits of a competitive telecommunications market because incumbent local telephone companies have historically monopolized access to universal service support necessary to provide affordable telecommunications services in these rural, high-cost areas. For example, the cost of providing telephone service in many rural areas exceeds $100.00 per line per month, and yet

consumers pay as little as $10.00 or less per month, with universal service funding making up the difference. Clearly, a competitive carrier that does not have access to universal service funds would not choose to enter the local market and compete with incumbent carriers who do have access to universal service support.

LifeLine Discounts. Not only is universal service support necessary for competitive carriers to compete in the marketplace, but eligibility for universal service support allows competitive carriers to offer qualified low-income consumers with discounts on the monthly cost of service (*Lifeline* discounts) and installation costs (*LinkUp* discounts). Although Lifeline and LinkUp are available to all qualifying low-income consumers, the FCC's enhanced Lifeline and LinkUp programs provide special additional discounts to qualifying subscribers living on tribal lands. The enhanced Lifeline program for qualified subscribers on American Indian trust lands and in Alaska Native village communities provides federal discounts of up to $30.25 off monthly telephone bills. Additional discounts are sometimes available under state Lifeline programs. As a result, depending on current rates, many eligible subscribers on reservations are eligible to receive basic local phone service for $1 per month. All of Western Wireless' Lifeline customers on the Pine Ridge reservation receive service at $1.00 per month, which, together with an attractive service offering, has greatly increased telephone penetration rates from approximately 32% to 68% on the reservation. The enhanced LinkUp program for

qualified subscribers on Native American Indian and Alaska Native village communities also offsets up to $100 for installation costs, which has greatly reduced a barrier to obtaining telephone wireless telephone service.

A Competitive Universal Service Market. The residents of Pine Ridge would not have access to the services offered under the Tate Woglaka Service Agreement, if it was not for the progressive thinking of Congress in passing the Telecommunications Act of 1996 ("1996 Act") and the pro-competitive universal service policies adopted by the FCC that, together, have enabled consumers in rural and high-cost areas to realize the benefits of local competition. These benefits include more competitive pricing structures for telecommunications services, more responsive service providers spurred by competition, and more rapid deployment of new technologies and service packages. Aided by federal universal service policies that are consistent with competitive entry into local telephone markets, competitive carriers are developing new ways of providing basic telephone service and are making progress in serving historically underserved and hard-to-reach markets.

Obtaining ETC Status for Market Entry. Four years ago, Western Wireless embarked upon an effort to bring the benefits of competition to the local telephone market in rural and tribal America. The centerpiece of this effort has been the Company's petitions, pursuant to Section 214(e), for designation as an ETC for

purposes of universal service support, which is necessary to provide affordable telecommunications services in many rural, high-cost areas. To date, Western Wireless has been designated as an ETC in 14 states and on the Pine Ridge Indian reservation and is working with the FCC and state commissions on furthering the goals of universal service. Section 214(e)(2) of the Communications Act provides that state commissions shall review applications by common carriers for designation as an ETC for purposes of universal service support, and Section 214(e)(6) of the Act provides that the FCC shall review applications by common carriers not subject to the jurisdiction of a state commission for designation as an ETC for purposes of universal service support. Recognizing the sovereignty of the Oglala Lakota Tribe, Western Wireless filed an ETC application with the FCC under Section 214(e)(6) on January 19, 2001. Under Section 214(e)(6), FCC assumes jurisdiction when "a common carrier . . . is not subject to the jurisdiction of a State commission." Because the Oglala Lakota Tribe asserted its sovereignty and its jurisdiction over Western Wireless' service offering on the reservation, the state commission did not have jurisdiction over Western Wireless' ETC application. In comments filed on Western Wireless' ETC application, the Oglala Lakota Tribe unconditionally supported the application. Several parties opposed the application, however, claiming that the state commission, not the FCC and the tribe, has jurisdiction over Western Wireless' ETC application and service offering on the reservation. The FCC ultimately assumed jurisdiction and designated Western

Wireless an ETC on the Pine Ridge reservation on October 5, 2001. It should be noted that the FCC did a commendable job in resolving the jurisdictional issue and ruling on Western Wireless' ETC application within 9 months.

Bridging the Telephone and Digital Divide on Reservations

Although the issues with respect to Western Wireless' ETC application for the Pine Ridge Indian reservation were resolved by the FCC in an expeditious manner, the experience reveals a problem that needs to be resolved: jurisdictional uncertainty, procedural wrangling, and legal maneuvering, which together pose a significant barrier to any carrier's interest in providing service on reservations and effectively denies service to rural consumers.

To create a process that simply recognizes the domestic sovereign authority of tribes and allows the tribes to benefit from telecommunication service offerings that meet their needs, the following steps need to be considered by Congress:

(1) Establish Section 214(e)(6) as a clear vehicle for common carriers to file applications at the FCC for ETC status on reservations; and

(2) Support the FCC's self-imposed 6-month deadline for action on ETC applications.

CONCLUSION

The Pine Ridge story illustrates how one carrier and one tribe have worked together to bring the benefits of access to telecommunications to tribal members. The story can, and should, be duplicated on other reservations with an interest in bringing the benefits of competition to tribal members. However, Congressional action is necessary to resolve jurisdictional uncertainties over ETC applications and pave the way for more tribes and carriers to work cooperatively on establishing a telecommunications infrastructure on reservations that meets the tribes' interests.

Universal Service Profile of

Pine Ridge Indian Reservation, South Dakota

May 2003

Name of Community: Pine Ridge Indian Reservation, South Dakota.

Population of Community: approximately 20,000 on the reservation.

Description of Wireline Service Offering: Local telephone service is available to certain individuals on the reservation who reside in areas where landline facilities are available. The telephone company typically charges a $60.00 deposit for local telephone service that must be paid prior to hook-up and will be applied to the first bill. Thereafter, the monthly rate is approximately $20.00 per month, with the $1.00 Enhanced Lifeline rate available for eligible residents. Since Western Wireless' entry into the market, the local telephone company has responded to competition by offering residents new and better services.

Description of Competitive Wireless Service Offering: Western Wireless' universal service offering is priced at $14.99 per month for unlimited local usage with a local calling area that includes all the communities in and around the reservation plus Rapid City. Tribal members who reside on the reservation may also qualify for the Enhanced Lifeline $1.00 rate plan. Other attributes of Western Wireless' service offering includes mobility, data services, and prompt and efficient customer service that is available 24 hours a day, seven days a week.

Benefits of Competitive Universal Service: Many residents on the Pine Ridge reservation did not previously have telephone service from the incumbent local exchange carrier either because the service was not available, the installation costs were prohibitive, or the service did not meet their needs. Western Wireless' entry into the market greatly expanded telephone penetration on the reservation, which now stands at approximately 75%. Western Wireless' service offering was specifically designed based upon input from the tribe and consumer needs. Having the ability to call Rapid City as a local call has been extremely beneficial for Pine Ridge residents because Rapid City is the second largest city in South Dakota and a place where many of the residents go for shopping and medial purposes. Other benefits include mobility, data services, and prompt and efficient customer service that is available 24 hours a day, seven days a week.

Voices from the Community:

"I am writing this letter in regards to the residential phone service offered by CellularOne here on the reservation. I am very glad that this phone service is available; I had to use it more than once in an emergency situation. I'm sure that one day it could be a lifesaver for someone. Please keep up the good work.

Thank you! Lyn J. Pine"

"I, Winerra Hagen, have used CellularOne and it has great benefits to me. When my father was ill in the hospital in Rapid City, I could call him and have no long distance charges to my phone. I knew that this phone will help when I need it in extreme emergencies and the rest of the people on the reservation also agree.

Thank you. Winerra Hagen Long Soldier"

"To whom it may concern, my name is Jonathan P. Horse, in my opinion these phones are very convenient and helpful to the people. And speaking for myself, I really like the phones and very much appreciative of them."

"To whom it may concern: I am writing this short not to thank CellularOne for the excellent service. The cell phones are very handy & convenient for emergencies as well as everyday use.

Thank you. Mary Horse"

Western Wireless

About Western Wireless

- Western Wireless is a regional CMRS carrier that focuses on providing high-quality cellular service to consumers in rural areas.
  - Western Wireless provides service to over 1.1 million consumers, primarily under the Cellular One® brand name, in all or parts of 19 western states – Arizona, Arkansas, California, Colorado, Idaho, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming.
  - Western Wireless' licenses consist of 88 Rural Service Areas ("RSAs") and 18 Metropolitan Statistical Areas ("MSAs"), covering approximately 25% of the landmass of the continental U.S., but just over 3% of the population. The areas served by Western Wireless have a combined population of over 10 million people and an average population density of 11 people per square mile.
  - Western Wireless has recently undertaken a major network upgrade to offer digital cellular service to approximately 75% of the population in its service area, and expects to complete the deployment of digital technology, and to more broadly deploy next generation digital technology, *e.g.*, 1XRTT, in the near future.
  - Western Wireless has been designated as an Eligible Telecommunications Carrier in 14 states – California, Colorado, Iowa, Kansas, Minnesota, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming – and on the Pine Ridge Reservation in South Dakota.
- Western Wireless' offers competitive universal service in rural areas using Wireless Local Loop customer equipment, as well as cellular handsets. Wireless/wireline competition is increasingly important in the rural area Western Wireless serves.
  - A recent poll by an independent market research firm found that, of the consumers in rural areas served by Western Wireless who had wireless service, one-half stated that their cellular phone has become more important to them and their landline phone has become less important.
- The same survey found that 51% of consumers said that wireless service has replaced some or a large percentage of their home landline telephone service; 48% reported that wireless service has replaced 90% or more of their landline long distance; and 23% of respondents reported that they consider their wireless phone to be their primary phone.

STATEMENT OF ROANNE ROBINSON SHADDOX
MANAGING DIRECTOR AND VICE PRESIDENT, PRIVACY COUNCIL INC.
BEFORE THE
SENATE COMMITTEE ON INDIAN AFFAIRS
ON THE
STATUS OF TELECOMMUNICATIONS IN INDIAN COUNTRY

Thursday, May 22, 2003

Vice Chairman Inouye and members of the Committee, my name is Roanne Robinson Shaddox. I am Managing Director and Vice President of Privacy Council Inc. and the former Chief of Staff of the National Telecommunications and Information Administration, U.S. Department of Commerce. I also am a founding board member of the newly formed Native Networking Policy Center. Thank you for the opportunity to provide my observations on the role of the Federal government in addressing the telecommunications needs in Indian Country.

During my six years at NTIA, I primarily worked on the agency's initiatives to promote universal service and to close the digital divide in underserved communities. As the most senior Native American involved in telecommunications policy development for the Clinton Administration, I worked to ensure that Indian Country was included in these efforts to connect all Americans.

A key first step in this effort was to educate Federal officials about the critical communications needs in Indian Country and to get tribal representatives more involved in the debate. Toward that end, NTIA held its first of a series of public field hearings on universal service issues in Albuquerque, New Mexico, so that senior NTIA, Commerce Department and Federal Communications Commission officials could specifically learn about Native issues. Following the hearing, the delegation of Federal officials visited the Institute for American Indian Arts to see how Native students were using computers in their graphics design work and visited San Juan Pueblo to learn about the tribe's need for computers and Internet, particularly in their small library.

Working with tribes, tribal organizations and a handful of Native American telecommunications advocates, we also ensured that a Native American was appointed to the White House National Information Infrastructure Advisory Council; increased tribal participation in the Technology Opportunities Program, which has funded dozens of tribal projects across the country to date; and, ensured that Bureau of Indian Affairs education officials were aware of the E-rate program, which, today, is credited for playing a major role in getting all BIA schools connected to the Internet.

Most notable, however, was NTIA's efforts to include Native Americans in its landmark "Falling Through the Net" report. Based on Census Population Survey data, the report was the first Federal study of household telephone, computer and

Internet access in America. Although, we struggled to obtain statistically valid data on reservation household access due to the small sample size, we had enough anecdotal and other information to highlight the alarming need in Indian Country. As a result of the report and related conference work, NTIA ensured that the digital divide in Indian Country was brought to the nation's attention. With the President's leadership, these reports helped to spur a wide range of private sector, philanthropic, Executive Branch and FCC efforts aimed at addressing this issue.

It is clear that we've come a long way with respect to closing the digital divide in Indian Country since I joined NTIA ten years ago. When I left the agency in late 1999, it was with the knowledge that NTIA had played an important role in bringing this issue to the forefront as well as providing a critical funding solution through the TOP program. And, it was through this process that I learned the important role that the Federal government can and should play in highlighting and addressing issues of national importance and to make sure that debate is not just dominated by the needs of industry and the states, but also addresses the needs of tribes.

Therefore, it is imperative that the Federal government continues to play an active role in this effort in close consultation with tribes. Some areas in which I believe the Federal government has a significant responsibility include:

***Policy Development and Advocacy for Tribes*: With the rapidly changing telecommunications policy landscape, now more than ever tribes need an advocate within the Executive Branch to ensure that their voice is heard. For example, an office could be created within NTIA to monitor and advocate for tribal interests in the wide-range of telecommunications policymaking activities that occur every day at the agency on behalf of the President. Also, such an office could ensure that relevant NTIA filings at the FCC on behalf of the Executive Branch reflect tribal views. It is critical that tribes not be left out of important national debates on subjects such as universal service, broadband deployment, unlicensed wireless technologies, and the future of radio spectrum management.**

***Improving Coordination Among Federal Agencies*: There is a critical need for improved coordination among Federal agencies when it comes to investing in telecommunications on tribal lands. Federal agencies must be encouraged to work together to ensure that Federal investments are leveraged for the widest possible benefit in tribal communities. There should be an examination of existing projects and investments on tribal lands and information about these projects should be shared as widely as possible so that agencies don't launch new initiatives that re-invent the wheel. For example, I recently learned that the Department of Health and Human Services plans to make Internet access a priority in its public health clinics. How will this initiative affect existing tribal connectivity efforts by other Federal agencies? The proposed aforementioned office could help to ensure that Federal agencies are aware of existing efforts and promote collaboration so that Federal funds are used efficiently and effectively in addressing the need.**

Supporting Local Tribal Connectivity Efforts: **Fortunately, for those tribes seeking to build their own telephone networks, they can turn to a significant loan program at the U.S. Department of Agriculture's Rural Utility Service. Unfortunately, for those tribes seeking to build community networks, the Federal funding outlook is not so bright. One of the key programs for tribal connectivity efforts – NTIA's Technology Opportunities Program -- is threatened. TOP plays an important role in bringing critical telecommunications and information technologies to our nation's communities for improving healthcare, education, public safety and the delivery of government services. Unfortunately, the demand from tribes, states, universities and other non-profits for TOP funding always far exceeds the actual funds provided for this program. It is critical that this program be retained, as it provides an important funding source for tribal networking projects. Moreover, I believe the need for TOP funding will only increase as tribes and other communities look to the program for help with improving their emergency communication networks in support of the war on terrorism.**

There are other Federal programs that have played an important role in assisting tribes with their communications needs that should be noted. NTIA's Public Telecommunications Facilities Program supports the planning and construction of public radio and television stations on tribal lands. The Economic Development Administration provides technical assistance funds for feasibility studies and the construction of telecommunications projects. The Department of Education's Community Technology Centers program can help tribal communities develop centers to provide children and adults the computer literacy and high tech skills needed for today's information economy. With the FCC's likely adoption of rules that will lead to further concentration of mainstream media outlets, these programs, along with TOP, provide the resources necessary to ensure that Native communities have alternative ways to access critical local news and information.

With all such programs, the application guidelines and matching requirements should be looked at carefully to make sure that they do not provide an impediment to tribal participation. Also, these programs should be encouraged to provide timely reports on tribal projects that can serve as models for other communities.

Improving Data Collection on Tribal Connectivity: **A major priority of the Federal government should be improved collection of baseline data on telephone, computer, Internet and broadband access for reservation households. Only through good baseline data will we know as a nation how to best target policies and funding sources to meet the need on tribal lands. Toward that end, increased funding may be required for NTIA's next "A Nation Online" survey to ensure that reservation households are adequately reported. Or, perhaps the Federal agencies with a strong interest in this issue should be encouraged to pool their resources to support the collection of reservation household data in this area.**

***Strengthening Tribal Interests at the FCC*: With unprecedented access, tribes are on their way toward building a solid dialogue with the FCC comparable to that enjoyed by major telecommunications industries and the states. However, despite the FCC's outreach efforts, many tribes and tribal organizations do not have the time, resources or expertise to participate in Commission proceedings. One concern is that this lack of participation may be wrongly interpreted that tribes do not care about or are not affected by the many issues pending before the FCC. Rather, the FCC should be encouraged to continue its dialogue with tribes and to find new ways to ensure that tribal views are heard and addressed at all levels of the Commission. I am encouraged by Chairman Powell's and the FCC staff's recent efforts to engage and assist the Indian community, including the release of telephone subscribership numbers for reservations households. Also, the Commission should be commended for elevating and expanding the responsibilities of the Indian Desk. Overall, the Commission has taken important steps to building awareness inside the agency about the needs of tribal communities and to consulting with tribes before major decisions are made that impact their lands. The Commission should be encouraged to provide greater resources to effectively conduct consultation with tribes; to enforce the universal service and build-out requirements of telecommunications providers that serve tribal lands; and to perform outreach to Native American consumers about the Lifeline and LinkUp programs, among other things.**

In conclusion, during this time of transition for tribes into the digital age, the Federal government must continue to play a strong role. I urge the Committee to take the steps necessary to protect, support, create and promote Federal programs and policies that best address the basic and advanced communications needs in Indian Country. With your leadership, Native communities will soon realize true universal service and enjoy the wide range of economic and societal benefits associated with the deployment of these critical technologies.

Thank you again for allowing me to share my observations and I look forward to your questions.

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WRITTEN TESTIMONY TO THE SENATE COMMITTEE ON INDIAN AFFAIRS

Provided by

Ben H. Standifer, Jr, MSCIS
Chief Information Officer
Tohono O'odham Nation – Executive Branch
May 22, 2003

Provided to

United States Senate
Committee on Indian Affairs

WRITTEN TESTIMONY TO THE SENATE COMMITTEE ON INDIAN AFFAIRS

I am honored to present this written testimony to this esteemed Senate Committee on Indian Affairs on behalf of my people of the Tohono O'odham Nation. A special thanks to Senator Inouye, (Hawaii) for inviting us and allowing us to provide this written testimony on behalf of the Tohono O'odham Nation. The hearing being held is to discuss the status of telecommunications in Indian Country, although I cannot speak on behalf of all of Indian Country, I do realize that Indian Country is faced with many unique challenges and opportunities to improve the state of telecommunications on its lands. There are a few tribes that have the opportunities to mesh their infrastructure with urban areas, but there are still many who are challenged by rural and the remoteness of their lands. Indian Country has been subjected to the over-popularized term *Digital Divide* where a "traditional understanding of the Digital Divide as a series of gaps in rates of physical access to computers and the Internet fails to capture the full picture of the divide, its stronghold, and its educational, social, cultural, and economic ramifications."[1]

Events such as September 11th and the War in Iraq has shifted focus from filling the divide to securing the divide, and as the priorities of a Nation changes, Indian Country is faced with dealing with the changes, never really ever conquering the divide. The Tohono O'odham Nation in its best effort in dealing with the divide, is now faced with the need to secure a seventy-five (75) mile international border with Mexico, a challenge unique only to O'odham, and dealing with the after effects of a *more secure border*.

As Chief Information Officer of the Tohono O'odham Nation's Department of Information Technology (DoIT), I can say that the status of telecommunication is inching

[1] Gorski, P. (2002). Dismantling the digital divide: A multicultural education framework. *Multicultural Education*; San Francisco; Fall (10) pp.28-30.

forward, but there are still the unique opportunities of gaining access to funding, interoperability, costs of broadband services, technical assistance for some projects and availability of a skilled information technology (IT) workforce.

The Tohono O'odham Nation is fortunate to own and operate the Tohono O'odham Utility Authority (TOUA), an enterprise that provides electrical, water, telephone, cellular, Internet and broadband services. This enterprise has been able to provide affordable phone service to over 3500 homes and business on the reservation and Internet services to 450 dial-up customers. Its current telecommunication services covers 75% of the Nation and will expand to 90-95% over the next five years. [2]

The growths of these services are partly due to the National Exchange Carrier Association (NECA) pool, but participation in this pool requires tariffs that regulate charges for telecommunication services. The charges regulated by the tariffs have challenged the development of telecommunication solutions that include the use of broadband services. DoIT pays costs three to four times more than the average monthly cost of non-rural customers to providing high-speed Internet service. These monthly costs are neither economical nor sustainable for the tribal government, service departments, and programs. In a study conducted by NECA in 2001 titled, the *Middle Mile Broadband Cost Study,* it focused on the cost of transporting Internet traffic from an Internet Service Provider (ISP) operating in a rural telephone company's territory, like TOUA, to an Internet Backbone Provider (IBP), the so called *middle mile.*

> "The study concludes that without support programs, high speed Internet connections are not economical in many rural telephone company territories because serving areas are located a great distance from the IBP. The study also demonstrates that revenue shortfalls don't disappear as the market grows, but

[2] Per Perry Ketterling, Telephone Manager, Tohono O'odham Utility Authority, requested and received on May 19, 2003.

> actually increase because operating margins become more negative as customers need higher data speeds or when serving higher demand levels. This sobering conclusion suggests that high speed Internet service may not be sustainable in many rural areas. This is based simply on the economic costs of the telephone company broadband network upgrade and the need to route traffic over greater distances to reach the Internet backbone."[3]

This particular anomaly in costs has forced the Tohono O'odham Nation to leverage wireless solutions to connectivity opportunities, reconsider its strategy in servicing programs such as department and districts, but still challenges TOUA and the Tohono O'odham Nation to deliver broadband Internet access to all 4,600 square miles of reservation.

The Tohono O'odham Nation, since forming DoIT, has been challenged with servicing a need that is greater than its resources, it was then realized that effective tribal community-based planning was necessary to develop a strategic plan that would include the interest of all stakeholders, to include tribal government, community college, human services, police department, cultural museum, nursing home, Indian Health Services, Bureau of Indian Affairs schools and county supported schools. A winter IT Summit was held in 2000 to provide a meet and greet opportunity for IT professionals who had an interest in the development of IT initiatives on the Tohono O'odham Nation. What proceeded were small cell meetings that resolved issues of connectivity, redundancy, and availability.

An initiative that the Tohono O'odham Nation created was standardization of hardware and software and key application where information could be shared across departments electronically, standards such as Institute of Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and the Design Criteria Standard for Electronic Records Management Software Applications (DoD 5015.2-STD) is providing framework for

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[3] *Paving the Digital Highway*, (2001). National Exchange Carriers Network Market Survey. Retrieved from www.neca.org on May 12, 2003

development. The standards will create better collaboration with entities that adopt similar standards while safeguarding their integrity. The Tohono O'odham Community College detailing our community-based planning process will provide a written testimony to this committee.

For many years, access to Federal funding has been limited to tribal governments mainly by the absence of acknowledgement of tribal governments and tribal entities eligibility for funding. Many Federal funding opportunities are written acknowledging state and local governments eligibility, but exclude tribal governments and entities from participating through proposal submission. The addition of words, *tribal government or tribal entities*, should be included on all federal funding opportunities. This language needs to be added to the Appropriations committee in a bill to include tribal governments and entities.

In his opening statement to this committee in April 1996, Michael Trujillo, Director of the Indian Health Service, said, "We must expand our search for partners in the health care arena. To become more efficient and effective, we have to look to foundations, Universities, independent organizations and others who can assist us in the delivery of care."[4] This CIO echoes Trujillo's same sentiment for the future of technology and telecommunications for the Tohono O'odham Nation. We must become more effective and efficient, and we must look to foundations, universities, corporations, and federal agencies that can assist in the further development of delivery of technology base solutions. There is need for public-private sector partnership in providing the required infrastructure. Through more funding opportunities, economic and capital investments, research and developmental projects will allow the

[4] Buchanan, H., Morris, R., & Kauley, T. (1999). Serving native health needs: Merging technology and traditional information services. *Western Journal of Medicine*; Nov/Dec, (171) pp. 373-375

furtherance in the development of wireless infrastructure, healthcare and public safety initiatives that affect communities, visitors and federal workers.

An example of this model that continues to thrive today, has been the collaborative efforts between the Tohono O'odham Nation and the Department of Homeland Defense. The Tohono O'odham Nation shares a 75-mile international border with Mexico, where:

1. Undocumented workers and illegal aliens become problematic,
2. Incursions from Mexican Federals,
3. The presence of five federal agencies, many of which fall under the Department of Homeland defense,
4. The existing radio infrastructure adequately covered 70% of the large contiguous land mass,
5. The Tohono O'odham Police and Fire department lacked the necessary interoperability with each other and their federal counterparts.

Charles Cape, Executive Director of Wireless Communication of the Department of Homeland Defense, met with the Tohono O'odham Nation, pledged his commitment and resources to develop an interim solution to create interoperability between all public safety agencies both tribal and federal. Mr. Cape's resources included telecommunications experts from the Secret Services, Border Patrol and Customs, engineers, and security analysts to develop an interim solution that would create the much-needed interoperability.

This example is what can happen when the Federal government and tribal government commit to solve a problem with the motivation of better serving people and communities. This project delivered an interim interoperability solution within 45 days and began a long-term commitment between the two governments. There were other agencies and individuals who committed their interest and time to listen to the issues and opportunities, such as Jennifer

Farley of Inter-government Affairs with the White House, Paul Marsden out of the e-Government office of Indian Affairs, Department of Interior, Carl "Bud" Ross of Border Patrol - Tucson Sector and a host of others, who we are truly thankful.

These partnerships and/or collaborations do not challenge our sovereignty or strike at our will to be self-sufficient, it only strengthens our resolve to create innovative solutions and utilize the best and most accessible resources to meet and exceed our internal goals.

Finally, I close with the discussion regarding the need for technical assistance or the higher need of *growing your own*. DoIT has taken the position of providing quality services to the Tohono O'odham but commits its resources to developing an IT workforce from its membership to support the IT interests today and in the future. In a complex and sometimes complicated field such as technology, the Tohono O'odham Nation believes that its members can provided these services, create a skill IT workforce and create *real solution* that are in the best interests of communities, districts and people of the Tohono O'odham Nation. The gap between the information rich and the information poor is being reduced by planned projects with the Tohono O'odham Nation and the community college to establish community information centers. These centers are to be equipped with multimedia PCs and relevant software to enable even those who are illiterate to use computers using icons and the mouse.

DoIT has developed an outreach program titled *Vital Link* that provides mentoring and internships for Junior and Senior level high school students to experience a career in the field of technology. "Students should be able to access the Internet in certain learning environments and use various technologies to display their knowledge. All students should learn to locate, acquire, organize, and evaluate information from a variety of sources,

including electronic resources."[5] Our goal is to influence the decision of our youth to complete high school and consider a career in technology. Other programs that have been instituted internal to DoIT have been the *Grow your Own* program where technical and some professional staff who have minimally accomplished an associates degree or a two year apprenticeship or applicable experience are put into a career ladder where they learn while developing the skills sets to provide the function of that position. These activities are just a few initiatives that are being used to create the required IT workforce necessary for sustaining the O'odham people.

Consideration of mentoring programs for IT staff with federal agencies who can provide additional support, skills sets and encouragement for O'odham IT workers could be a good opportunity that will support the efforts of self determination, because it is not a hand out but a hand up.

I am privileged to provide this written testimony to this Senate committee and hope that your will consider the challenges and opportunities that rest in Indian Country, in particular with the Tohono O'odham Nation.

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[5] These are many of the skills required by business leaders in the U.S. Department of Labor (1991) SCANS Report. Educators and technology standards: Influencing the digital divide Journal of Research on Technology in Education; Eugene; Spring 2002; Colleen Swain; Tamara Pearson v. 34, (3), pp 326-335

TESTIMONY BY THE MESCALERO APACHE TELECOMMUNICATIONS INCORPORATED ON THE STATUS TELELECOMMUNICATIONS IN INDIAN COUNTRY

Status:

You have convened this hearing to assess the status of telecommunications in Indian Country. From the vantage point of one community, from among 570 tribal communities, the progress of telecommunications access and solutions in Indian country has been painfully slow and might be arguably at a standstill.

The Positives:

In 1999, the Federal Communications Commission, for the first time in 65 years of its history finally focused on the barriers to telecom service for tribal communities. The FCC held field hearings, visited tribal communities, developed a tribal trust policy, created an Indian desk, and passed two rule makings that included enhancements to provide service to tribal communities. The Commission also sponsored the Indian Telecommunications Training Initiative in 2000, a doing business with Indian country forum, and several interagency collaborative conferences, including the Summit on Emerging Tribal Economies in September 2002. The FCC recently initiated a wireless licensing opportunity educational campaign targeted at tribal communities.

The Bureau of Indian Affairs has similarly begun to focus on issues of connectivity for tribal communities. (Although the BIA lacks email and broadband connectivity for itself, proving a burden for tribal communities trying to communicate with the BIA.)

Agencies such as HHS and the Department of Education, as well as the Department of Justice have devoted technology links to their data systems in order to administer their programs on the reservations.

The Department of Agriculture's Rural Utility Services continues to support rural telecommunications deployment through a series of congressionally mandated grant and loan programs, some of which have benefited tribal communities.

A recent intra-agency effort, including the BIA, has been to hold discussions with Indian country and with private vendors about providing a homeland security safety net of communications services for national defense purposes.

And in Congress and in public policy forums, there has been discussion of the digital divide, with some attention to tribal communities, and a growing focus on the lack of rural broadband deployment.

The Realities:

While some studies are pointing to greater telecommunications service access to tribal communities, we have some serious concerns about the general trend of telecommunications service and access in Indian country. Increased public and federal attention to lack of digital and analog service and independent competition, as well as tribal emphasis on connectivity, has helped to increase telephone service access. On the other hand, the underlying fundamentals that have led to under-service in tribal communities continue to be barriers to service for tribal communities.

Few people in public realize that the substantial majority of independent rural telecommunications companies ("telecos") owe their startup capital to the Rural Utility Service loan program. Few rural telecos are able to find private funding to run a telephone service. The trend has not been changed.

Few people also realize that the substantial portions of a rural teleco's revenues are derived from the universal service support funds collected nationally and collected within states to serve rural "high cost" areas. The fees collected from ratepayer customers will not cover the costs of operations or capital investments to run a rural telephone service. Building a self-sustaining business model in rural communities is almost impossible. That trend has not changed.

While the universal service funds have spurred extensive service to rural communities, the very last mile or last quarter mile of rural or rural tribal communities remains an unmet challenge under the current support distribution schemes. The reasons are the high costs required to build the final or final quarter mile of service, the resistance of incumbent carriers to share what is perceived to be limited rural service funds for the last investment push, and, the regulatory barriers erected and defended by states and incumbent carriers fail to provide sufficient incentive to build out the last mile or quarter mile of service. That trend is deeply entrenched.

And, for that reason, the regional Bell operating companies ("RBOCs") and larger local exchange carriers ("LECs") are selling off their rural exchange service areas. To exacerbate the problem for tribal communities, the sales of these exchanges typically occur as the LECs' facilities are reaching the end of their life cycles. Thus, as independent companies purchase the incumbent's facilities, they not only inherit regulatory status that deprive them of adequate universal service support, but also require extensive rehabilitation costs just to render the network useable. That trend is growing.

Where federal agencies have focused on the tribal communities, there are stories of frustrations resulting from federal inefficiencies. For example, the Indian Health Service and the Education Department occasionally fund T-1 lines in certain communities. However, a tribe cannot use these T-1s for any other tribal purposes than for the specific federal services. Such inefficiencies and failed opportunities to provide a broad-based connectivity for a community result in communities not being adequately served,

promoting redundancy and lack of coordination. That trend predominates in Indian country.

Public safety communications capability continues to be a challenge in Indian country. A call for 911 at Windowrock is routed first to Albuquerque, and then back to the reservation. In addition, there is not a coordinated frequency that serves a tribal community's public and safety services. The FCC continues to work on a coordinated public safety solution. The recent Homeland Security Taskforce efforts are targeted at coordinating a defense security network that hopefully may be applied by communities to coordinate its local public safety services. The great disappointment, however lies in that this initiative will not solve the lack of telecommunications access and broadband needs in Indian country.

The Great Divide

Indian country continues to face not only a digital divide, but also an analog divide.

Several years ago service access figures described life in different communities. 96 percent of American families enjoy access to basic telephone service, 85 percent of minority communities have telephone service, and 76 percent of farm families have telephone service, while only 45 to 65 percent of tribal families—depending on the source--have telephone service. In many communities, and among the tribal communities as a whole, the trend is increasing for access to telephone service. However, many remote communities have not attained major improvements. In the largest tribal community in America, the Navajo Nation, only 27 percent, or one in four families have access to basic telephone service.

The Federal – State Tension

Because universal service support plays such a critical role in the capacity of a rural carrier to survive and to generate revenue, attaining an "eligible telecommunications carrier" ("ETC") status is absolutely crucial. Tribal communities have stated a need for tribal choice whether to seek regulatory approval from the FCC or from the state. However, under current FCC rules and section 214(e)(6) of the Telecom Act, the FCC does not have the authority to supercede state jurisdiction on tribal telecommunications regulation. If a state asserts jurisdiction on tribal telecommunications regulation, the Federal government would have to accede to the state's authority. This failure of Congress to support tribal choice has resulted in frustrating the efforts of tribal communities to expand services to themselves or to other communities.

Tribes that have applied for certification through a state in order to do business in a state have not yielded their sovereignty. A Federal statute might strengthen that interpretation that by working through a state certification process, to compete in a broader state market does not hamper a tribe's sovereignty. A Federal statute should state clearly that a state couldn't on its own action curtail a tribe's sovereignty.

The Mescalero Story

The Mescalero community's experience with telecommunications solutions illustrates both the barriers in telecommunications as well as the hope for a different future for tribal communities.

At the turn of 1990, less than 10 percent of the residents had access to basic telephone service and the community suffered from the lack of economic opportunity.

In response, the Mescalero community launched an economic development initiative to launch several tribal enterprises. The tribe also recognized that building a utility infrastructure was crucial to building self-sufficiency for the tribe. But more importantly, the community discovered that by building and managing its own telecommunications solutions, the company can provide critical support for the growth of the tribe's enterprises, as well as to enhance its governance of the tribe.

The impact of the tribal telecommunications strategy on the community has been dramatic. Today, two years after a protracted and difficult negotiation to purchase facilities from GTE, the tribe has nearly tripled its residential subscribers with 95 percent residential connectivity. More importantly, MATI built a state-of-the-art telecommunications infrastructure that provides digital subscriber loop (DSL) broadband access to 95 percent of the residential community. The Mescalero Apache Telecommunications Company has connected the tribal government, tribal and private enterprises, the health clinic and the public school--with its 600 computers--to the global market with broadband capacity.

The National Center on American Indian Enterprise Development has recognized the Mescalero Apache Telecommunications Incorporated as the Indian Enterprise of the year in February. Last September, the National Summit on Emerging Tribal Economies also recognized MATI as the model tribal utility service.

The Need To Do More

There is much more that needs to be done by Congress, by the FCC and other federal agencies, by the carriers, and by tribal governments to prioritize the attainment of quality telecommunications service to support the growth of their economies and the ability to govern the tribe.

The biggest hurdle is the cost of attaining telecommunications service equity in Indian country. Much more funding should be devoted to helping tribes assess, plan and implement their own telecommunications solutions.

There needs to be resources established to help tribal communities to assert their consumer rights, with outreach, strengthening the capacity of the Lifeline and Linkup

program, and with sanctions with carriers that purposefully fail to serve tribal communities or under-serve tribal communities.

Federal and state regulations need to be changed to provide incentive to build and deploy services to the last-served communities of America. Statutory language needs to clarify the sovereignty of tribes with regard to state jurisdiction in telecommunications regulation.

The Mescalero community intends to do its part. In October last year, the Mescalero Apache Telecommunications Company hosted a training session on how to operate a tribally owned telecommunications company, attended by over 15 tribes. On August 8-10, the tribe will be conducting another educational conference on operating a tribal teleco in order to share its lessons and experience with other tribal communities.

Mr. Chairman and Members of the Committee, the Mescalero Apache community is ready to assist you with any efforts to improve the status quo of telecommunications in Indian country. Thank you for permitting me to testify before you.

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