

# **Pueblo of Santa Ana Tribal Community Empowerment: Innovation through Wireless Tribal Government Service Delivery**

## **EXECUTIVE SUMMARY**

This is a project intended for the Community Networking and Services primary application area and Lifelong Learning and the Arts as a secondary application area. The Pueblo of Santa Ana is a federally recognized sovereign Tribal community located midway between Santa Fe and Albuquerque in New Mexico. Despite recent growth in these two regions, the Santa Ana community continues to experience the negative and compounding effects associated with the digital divide and last-mile costs of telecommunications providers. The Pueblo of Santa Ana, Georgia Institute of Technology, and Southwestern Indian Polytechnic Institute are partnering to overcome these barriers to Tribal self-sufficiency within this rural Native American reservation while implementing the Tribe's shared values and cultural heritage in a contemporary setting.

Citizens and the Government of the Pueblo of Santa Ana realize the importance of telecommunications access and digital skills in today's fast-paced economy and seek to incorporate the use of these technologies into Tribal operations in a manner consistent with the Tribe's culture. Currently, the Tribe faces four barriers to self-sufficiency that it seeks to use telecommunications technologies to overcome:

- I. Tribal government leaders and community members must rely on in-person and static communication channels to spread news about Pueblo events. This is highly inefficient for a Tribe of 646 people on nearly 80,000 acres of land and prohibits timely response to economic development opportunities.
- II. Few Tribal members have expertise in telecommunications technologies and as a result, the Tribe must hire non-Tribal employees to fill technology-related government positions.
- III. Tribal members with post-secondary level educations have few employment opportunities available to them within the Tribe.
- IV. The increasing reliance on electronic information sources such as the Internet are marginalizing Tribal members in two ways: 1) They do not have easy access to the Internet; and 2) Many do not consider resources available on the Internet as relevant to their specific culture and daily lives.

To overcome these four difficulties, the Pueblo of Santa Ana seeks to implement a broadband wireless community network that will link all of the Tribe's 12 government departments and 188 citizen homes using an innovative and cost-effective approach. The network will include: 1) a *Santa Ana community intranet* to facilitate information sharing among the Tribal Government and community members in their homes using set-top boxes and computers; 2) *Internet access* for all government departments and community members; and 3) a *Santa Ana Government local area network (LAN)* for secure information sharing.

The Pueblo of Santa Ana Tribal Community Empowerment networking model proposes to empower the Tribe to meet its objective of self-sufficiency through six primary project outcomes: 1) Active participation in Tribal decision-making through improved communication among government entities and Santa Ana community members; 2) Improved community access to government resources via access to the Tribe's intranet with content available in written and spoken English and spoken Keresan in each community member's home; 3) Leadership and 21<sup>st</sup> century skills in the younger population via internships and mentorships in Tribal Government units and tailored courses provided by the Southwestern Indian Polytechnic Institute; 4) Information literacy and digital skills among all age groups of the Santa Ana community; 5) An innovative, cost-effective, and scaleable model of wireless broadband telecommunications application in a rural community; and 6) Participatory research as a component of project evaluation for ongoing project improvements and project replication in other communities.

## TABLE OF CONTENTS

STANDARD FORM 424

EXECUTIVE SUMMARY

TABLE OF CONTENTS

PROJECT NARRATIVE	1
Project Purpose	1
Innovation	5
Diffusion Potential	5
Project Feasibility	6
Technical Approach	
Partner Qualifications	
Budget, Implementation Schedule, and Timeline	
Project Sustainment	
Community Involvement	6
Partnerships	
Involvement of the Community	
Support for End Users	
Privacy Protection	
Reducing Disparities	8
Evaluation and Documentation	8
APPENDICES	
Outcomes Model	A-1
Pueblo of Santa Ana Tribal Government Organizational Chart	A-2
Project Timeline	A-3
Technology Goals Statement	A-6
Results of Santa Ana's Government Departments' Survey for Potential Intranet Use	A-7
Partner Qualifications	A-8
Pueblo of Santa Ana	
Georgia Institute of Technology	
Southwestern Indian Polytechnic Institute	
Key Personnel Biosketches	A-9
Open Job Positions	A-11
Educational Courses and Gates Foundation Grant	A-12
Technology Approach	A-13
Santa Ana Pueblo Network Design	
Network Applications	
Evaluation Plan	A-21
Evaluation Questions	
Evaluation Strategy	
Data Collection	
Data Analysis	
Evaluators	
Evaluation Budget	
Letters of Support	
Georgia Tech Research Institute	A-25
Southwestern Indian Polytechnic Institute	A-26
All Indian Pueblo Council	A-27
New Mexico Department of Labor	A-28

Los Alamos National Laboratory  
National Indian Telecommunications Institute  
New Mexico Economic Development Department

A-29  
A-30  
A-31

STANDARD FORM 424A

BUDGET NARRATIVE

STATEMENT OF MATCHING FUNDS

STANDARD FORM 424B

STANDARD FORM CD-511

STANDARD FORM LLL