

South Dakota

Community Programs • Community Facility Technical Assistance Training Grant

Enhanced Fire Protection Service is Essential for the Pine Ridge Reservation

Founded in 1885, the South Dakota School of Mines & Technology (SD Mines) is a public institution of higher learning in Rapid City, South Dakota. Through a USDA Rural Development Community Facility Technical Assistance and Training grant, SD Mines has partnered with Banner Associates, Inc. (formerly Louis Berger, Inc.) to provide technical assistance to the Oglala Sioux Tribe (OST). With the funds, engineering and architectural assistance will be provided to assist the tribe in developing the framework for the establishment of an integrated emergency response system, with a special emphasis on structural fire protection, to serve the Pine Ridge Reservation.

The federal funds of \$146,124 are being used to provide travel, internships, and technical and professional advising and support in the development and planning for emergency services. More than one dozen SD Mines undergraduate and graduate students have been engaged in this project, through course credits and/or internships, and all have had the opportunities to work alongside OST tribal representatives and community members in the nine districts on the Pine Ridge Reservation.



Pictured are South Dakota School of Mines students assisting with this project.

The students have utilized computerized maps to determine where to place new fire, police, and ambulance stations to improve EMS response times during emergency situations. Students have spent many hours calculating travel times, plotting current infrastructure like power and water lines to determine the optimal locations for new facilities. Along with data collection and analyses, the students are hosting charrettes in each of the districts in order to better understand each area's needs for emergency services before conceptual designs for new emergency facilities are developed. The new emergency facilities will ideally be substations for housing ambulance, fire, health and law enforcement, along with resources for emergency shelter capacity.

This project exemplifies a successful public-private partnership and it will benefit the entire reservation as emergency response times are greatly reduced.

"This effort has the potential to save lives and build a brighter future together," said Jennifer Benning, Ph.D., an associate professor of civil and environmental engineering who leads the project at SD Mines. "This project is particularly motivating for students, because they are communicating with tribal representatives and hearing very real and personal stories about the critical need for an improved emergency management system on Pine Ridge. The students are engaging in hands-on learning while making a real difference in these communities."

Obligation Amount: \$146,124 Community Facility Technical Assistance Training Grant

Date of Obligation: 09/20/2017

Congressional District: At Large, Senator Thune, Senator Rounds, and Congressman Johnson

Partners: South Dakota School of Mines & Technology, Banner Associates, Inc., Oglala Sioux Tribe, and

USDA Rural Development

Demographics: Founded in 1885, the South Dakota Schools of Mines & Technology is a public institution of

higher learning in Rapid City, South Dakota.

Impact: This project exemplifies a successful public-private partnership and it will benefit the entire

reservation as emergency response times are greatly reduced.