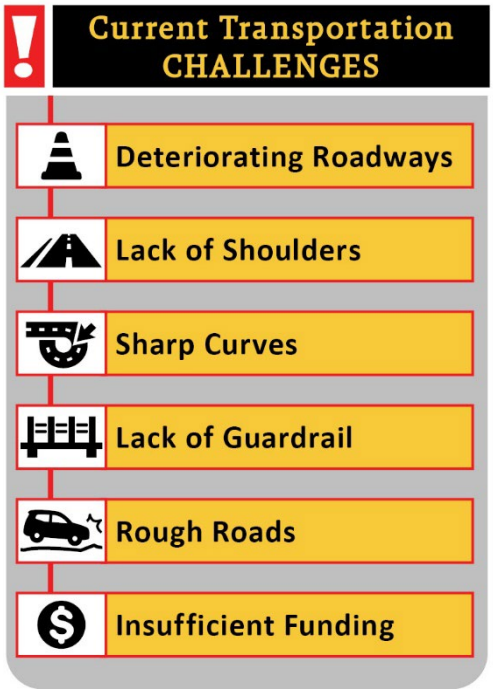
PINE RIDGE INDIAN RESERVATION
Pavement Resiliency and Restoration Project

Project Description



The Oglala Sioux Tribe (OST) is requesting $37,581,600 for the Pine Ridge Indian Reservation Pavement Resiliency and Restoration Project (the Project). The RURAL Project encompasses BIA Routes 2, 14, 25, 27, 28, 33, and 41, which are located on the Pine Ridge Indian Reservation and along or adjacent to the Tribally designated Crazy Horse Scenic Byway (CHSB). BIA 2 is an arterial east/west route and BIA 27 and BIA 41 are north/south arterials connecting to the largest Reservation community of Pine Ridge Village and larger cities of Rapid City, SD approximately 40 miles northwest, and Chadron, NE approximately 20 miles southwest. BIA 14, 25, 28, and 33 are essential routes connecting Tribal communities. Sections of BIA 27 and BIA 41 also run adjacent to the Badlands National Park South Unit. This area receives visitors from all over the world, providing a positive impact to the local and regional economy. The Tribe barely receives enough road maintenance funding to control snow and ice, let alone upgrade or repair roads. The current condition of the roadway is deteriorating, insufficient to meet the traffic needs, and presents safety, accessibility, and sustainability risks. These sections of roadway need to be reconstructed, restored, and made more resilient for the safety of travelers and enjoyment of visitors. The proposed construction project will address these issues and ensure consistent, year-round access for visitors of the Badlands National Park and improve the safety and accessibility of the transportation system within the rural tribal communities, provide opportunity for future economic and tourism development, and connect residents to employment, education, health care, goods and services, and Tribal programs on the Pine Ridge Indian Reservation. The Project directly aligns with the RURAL purpose of improving and expanding infrastructure in rural areas and aligning with USDOT's strategic goals of improving safety, economic strength and global competitiveness, equity, and climate and sustainability.



Detailed Statement of Work

The Project includes roadways that pass through several Tribal communities on the Pine Ridge Indian Reservation. Areas include the communities of Red Shirt, Loneman, Oglala, Rockyford, Sharps Corner, Kyle, Manderson, and Wounded Knee. These roadways are the arterial transportation network connecting these smaller tribal communities to the major communities of Pine Ridge, Rapid City and into Nebraska. The

roadways are owned by BIA and maintained by the Tribe. Many of them were constructed more than 50 years ago and are now suffering from deteriorating infrastructure that does not meet current design standards. The infrastructure issues are similar throughout the different areas and not only include poor pavement conditions or lack of pavement, but also safety, accessibility, and sustainability concerns. As a result, this project considers the connectivity throughout the Reservation as a whole and would like to address all the individual project areas as one overall Reservation project to resolve the current infrastructure needs.

Asphalt Pavement Replacement



The Project proposes to reconstruct the asphalt pavement structure on BIA 28 and portions of BIA 41. BIA 28 is located between BIA 2 at the community of Wounded Knee and travels 8.8 miles northwest to the community of Manderson where it ends at BIA 33. BIA 28 has large transverse cracks which are difficult to seal and cause a rough ride. BIA 41 stretches between the north Reservation line to the south Reservation/state line. Portions of the highway have deteriorated asphalt pavement with ruts, cracks, and potholes. The most northern 6.5 miles is very narrow, rutted and doesn't drain properly resulting in water, snow and ice remaining on the surface causing dangerous driving conditions. Approximately 16.3 miles south of the Reservation line is another 4-mile section which has severe cracking and potholes. Approximately 2.5 miles north of US18 is a 0.7-mile narrow section which has severe heaving along a horizontal and vertical curve. This is an especially dangerous section due to the road heaving. The Project will reconstruct the asphalt pavement structure and widen the roadway to incorporate at least 2-foot asphalt shoulders to improve safety of the traveling public, maintain usability, and to keep pavement from further deterioration. The existing asphalt will be milled, recycled, and reused in new asphalt concrete pavement. The remaining base course will be salvaged for reuse in the reconstructed road base. The new pavement structure will consist of geotextile separator fabric between the subgrade and base course and tri-axial geogrid between layers of base course.

Route	Location	Length	Improvements
BIA 28	Wounded Knee to Manderson	8.8 miles	Replace asphalt pavement structure with geotextiles, 2-foot shoulders, rumble strips, and pavement striping
BIA 41	North Reservation line to 6.5 miles south	6.5 miles	Replace asphalt pavement structure with geotextiles, add 2-foot shoulders, rumble strips, and pavement striping
BIA 41	16.3 miles south of the north Reservation line to 4 miles south	4 miles	Replace asphalt pavement structure with geotextiles, 4-foot shoulders, rumble strips, and pavement striping
BIA 41	2.5 miles north of US18 to 0.7 miles north	0.7 miles	Replace asphalt pavement structure with geotextiles, add 4-foot shoulders, rumble strips, add High Friction Surface Treatment, and pavement striping

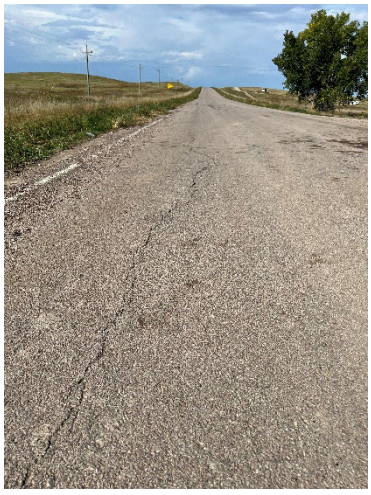
New Asphalt Pavement Surfacing

The Project proposes to construct new asphalt pavement on BIA 25 and the unpaved portion of BIA 41. BIA 25 is located northwest of the community of Kyle from BIA 2 to 5 miles north. BIA 25 was reconstructed in 2013 and although it was designed to have an asphalt paved surface, the Tribe did not have sufficient funding for all of the work needed. It was completed with a base course surfacing ready for asphalt pavement when funding is available. BIA 41 stretches between the north Reservation line to the south Reservation/state line. The most southern 7 miles was paved many years ago but had deteriorated so severely it is a gravel road with chunks of asphalt partially exposed. Because this road connects to Chadron, Nebraska, a resource to Tribal members for goods and services, education, employment, and health care, it is essential the road have a hard surface top. On BIA 25, damaged geotextile separator fabric will be repaired, and base course replenished. On BIA 41 the existing asphalt chunks will be salvaged and used for gravel surfacing on a nearby roadway. New geotextile separator fabric will be placed over reshaped and recompacted subgrade. For both routes, tri-axial geogrid will be installed between base course layers and topped with new asphalt pavement. The Project will construct the asphalt pavement structure and widen the roadway to incorporate at least 2-foot asphalt shoulders to improve safety of the traveling public, maintain usability, and to keep pavement from further deterioration. The existing asphalt will be milled, recycled, and reused in new asphalt concrete pavement. The new pavement structure will consist of geotextile separator fabric between the subgrade and base course and tri-axial geogrid between layers of base course.

Route	Location	Length	Improvements
BIA 25	Frm BIA 2 to 5 miles north	5 miles	Repair geotextile separator fabric, add base course with tri-axial geogrid between layers, asphalt pavement surface, 4-foot shoulders, rumble strips, and pavement striping
BIA 41	Frm south Reservation line to 7 miles north	7 miles	Remove asphalt chunks, reshape and recompact subgrade, geotextile separator fabric under base course with tri-axial geogrid between layers, asphalt pavement surface, 2-foot shoulders, rumble strips, and pavement striping

Pavement Crack and Chip Sealing (2, 14, 27, 33, 41)

Asphalt pavement crack and chip sealing and pavement striping will be completed along BIA 2, from Kyle to BIA 27, totaling 14.7 miles, BIA 14 (4.9 miles) between BIA 27 and BIA 33, BIA 27 (22.7 miles) from the north Reservation line to Sharps Corner, and BIA 33 from BIA 14 south to Manderson community (6 miles). Where High Friction Surface Treatment is installed, the road will be crack sealed and chip seal will skip over that area. Existing rumble strips are deep enough to receive the chip seal and will be as effective after the sealing is completed.



Safety Improvements - Shoulder Widening, Guardrails, and High Friction Surface Treatment

Shoulders will be widened 2-feet on BIA 41's 6.5-mile segment and by 4-feet on BIA 41's curve in the 0.7-mile segment. All other routes will maintain the current shoulder width.

Guardrail will be added to BIA 2 along the outside edge of a sharp curve with steep embankment approximately 5.2 miles west of Kyle. Guardrail will also be installed along both sides of BIA 27 2 miles south of Sharps Corner where there is a steep embankment.



High Friction Surface Treatment will be installed on five sharp curves on BIA 2, one sharp reverse curve at the White River bridge on BIA 27, and the curve in the 0.7-mile pavement reconstruction area on BIA 41.

Project History

In recent years, the OST has invested available Tribal Transportation Program funds to repair its Reservation roadways following storm damage (approximately $1,000,000 per year). This has left no TTP funding for construction or improvements. The Tribe has invested $120,000 in pre-construction activities. The Project is shovel-ready, with 95% design completed and NEPA Categorical Exclusion Checklist having been submitted for review. Plans and cost estimates can be found at https://inputcentral.com/ost-rural-grant.

A Nationally Significant Federal Lands and Tribal Projects grant application was submitted for BIA 41 adjacent to the Badlands National Park South Unit. USDOT reached out to OSTDOT asking if the NSFLTP requested amount could be reduced. OSTDOT proposed removing the northernmost 6.5 miles if USDOT would award a lower grant amount. This Project overlaps the NSFLTP application for the BIA 41 6.5-mile segment. Should the NSFLTP grant be fully awarded, the funding for this section could be transferred to another 6.5 miles of similar route, BIA 4.

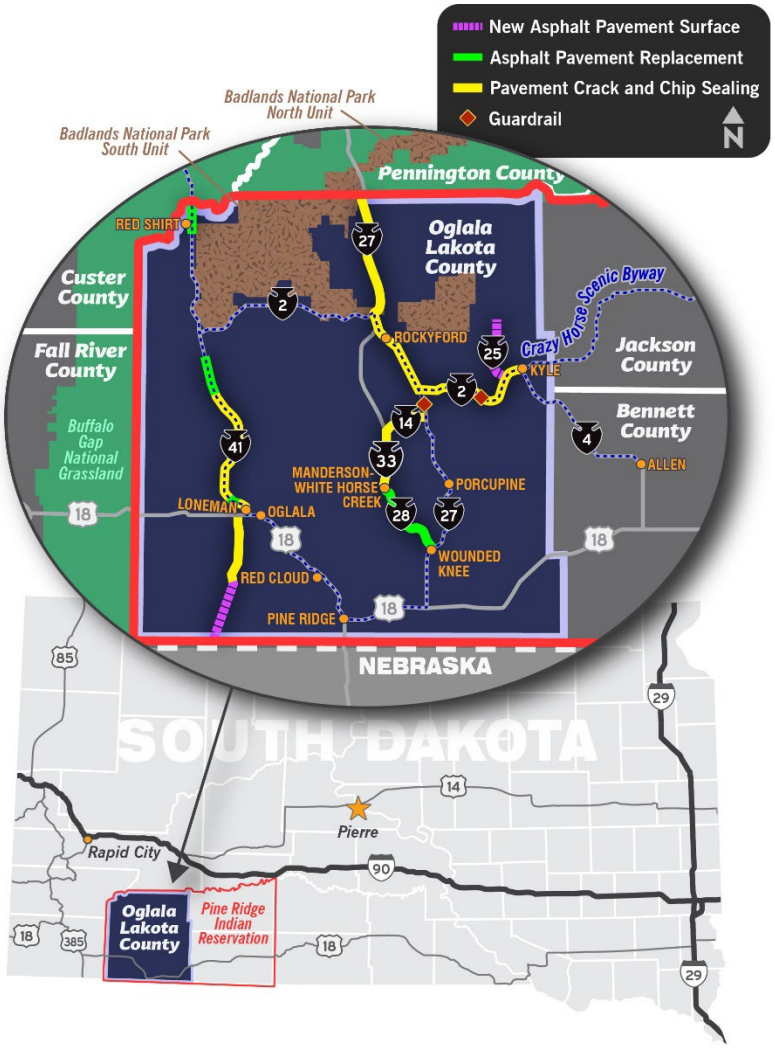
Current Design Status

Project planning is 95 percent complete with engineering design of road reconstruction complete. No right-of-way acquisition will be required for the Project. Environmental impacts are considered minimal, and the Project meets requirements for a Categorical Exclusion (CatEx) and documents were submitted for approval.

Geographic Description

The Project is located on the Pine Ridge Indian Reservation in rural southwestern South Dakota in Oglala Lakota County. The Reservation encompasses over 2 million acres (a landmass larger than Delaware and Rhode Island combined) in Oglala Lakota County, the southern half of Jackson County, and Bennett County. Oglala Lakota County[1] has a population of 13,672 with 50.5 percent of that population living in poverty. Oglala Lakota County, census tracts 9410, 9411, 9412, tribal tract T001, T002, T004, T005, is identified as an Area of Persistent Poverty, Historically Disadvantaged, and Transportation Disadvantaged Community.

The Reservation is home to many individuals and families in financially sensitive situations. Access to reliable and safe transportation is critical to living sustainably in this impoverished rural area. Pine Ridge Indian Reservation[2] is one of poorest communities in the nation with 48.2 percent of people living in poverty and a 12.3 percent unemployment rate compared to the national average of 3.6 percent. Oglala Lakota County, where the project is centrally located, is a regional hub providing access to goods and services, health care, education centers, employment, childcare, recreation, and other essential tribal services.



[1] Oglala Lakota County, South Dakota - Census Bureau Profile
[2] https://data.census.gov/profile/Pine_Ridge_Reservation,_SD--NE?g=2500000US2810