



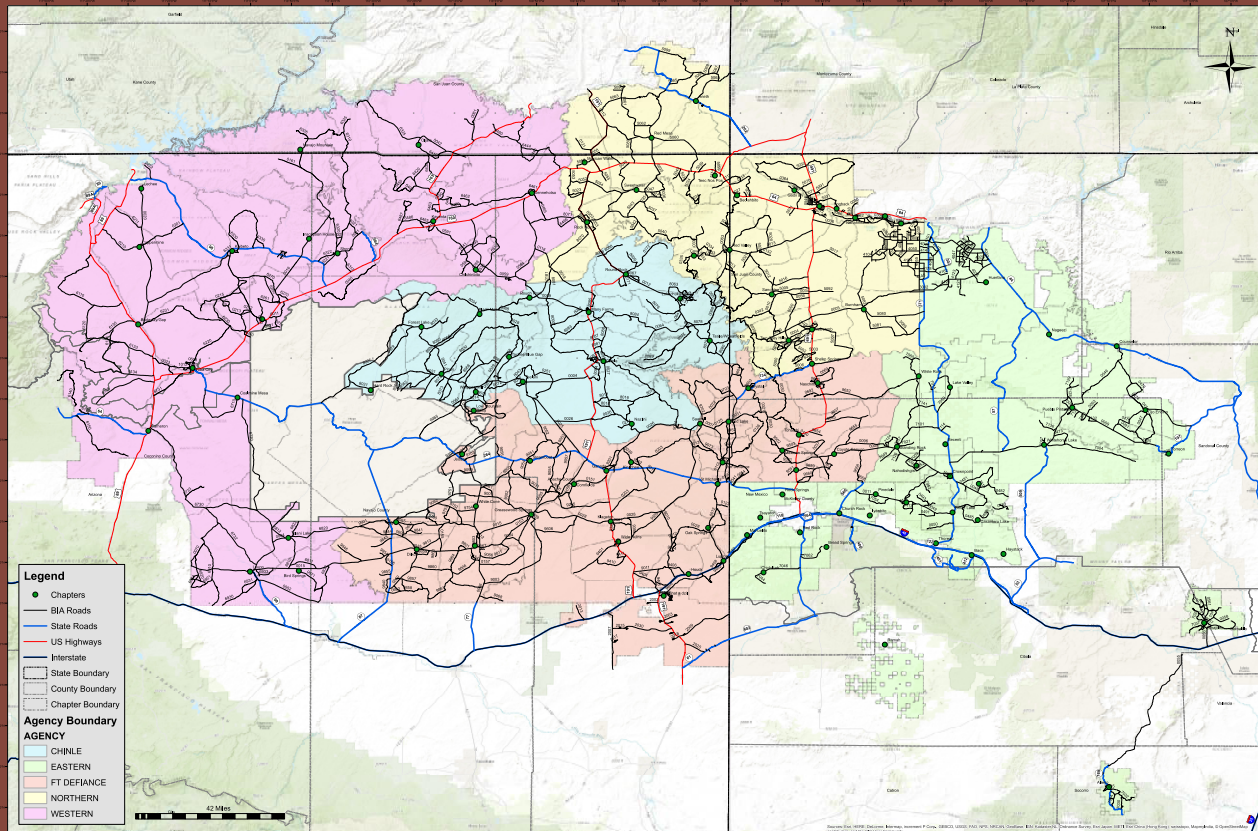
Transportation Infrastructure Revenue Subcommittee (TIRS)

New Mexico Highways on the Navajo Nation and Rural Road Needs

Presented by Garret Silversmith, Navajo DOT, Division Director

August 31, 2021

The Navajo Nation has 14,733 miles of roadway



Navajo DOT's Mission:

- Plan, implement, improve and maintain a safe transportation infrastructure for the Navajo Nation through innovation and partnership



Navajo Nation's Long Range Transportation Plan goals

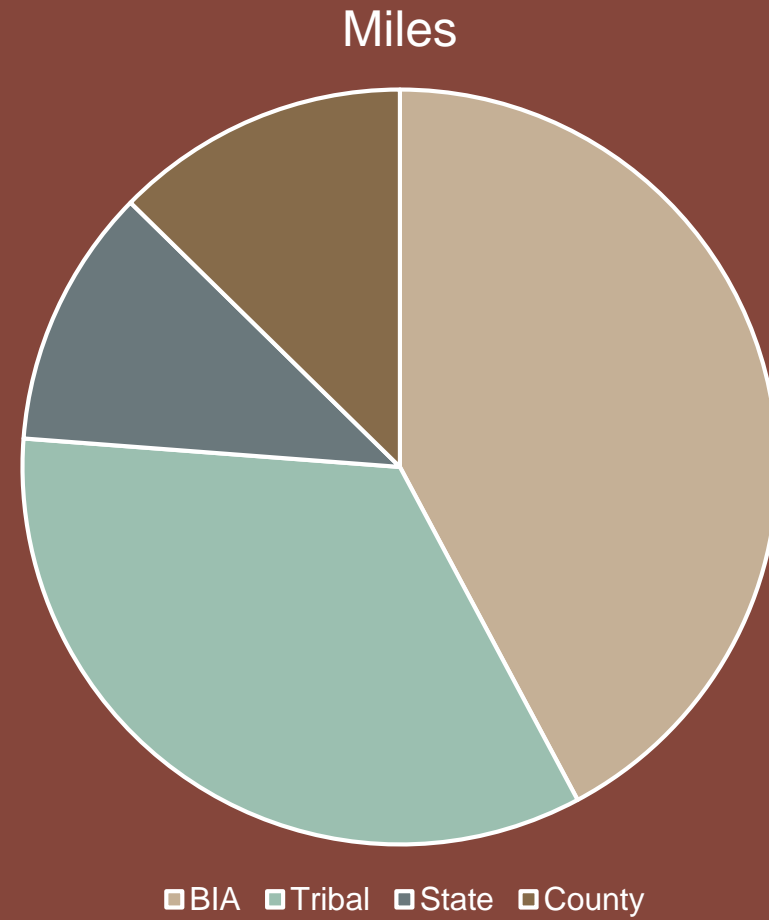
Navajo Nation Long Range Transportation Plan

- Take care of the system
- Enhance existing partnerships and create new partnerships
- Maximize transportation investment effectiveness
- Enhance safety
- Create connections
- Provide options
- Promote economic development



Roadway Ownership

- 6,217 miles of BIA Roads
- 5,010 miles of Tribal Roads
- 1,642 miles of State Routes
- 1,864 miles of County Roads



August 31, 2021

Roadway Surface

- 86% (12,760 miles) of the Navajo Nation roads are earthen dirt



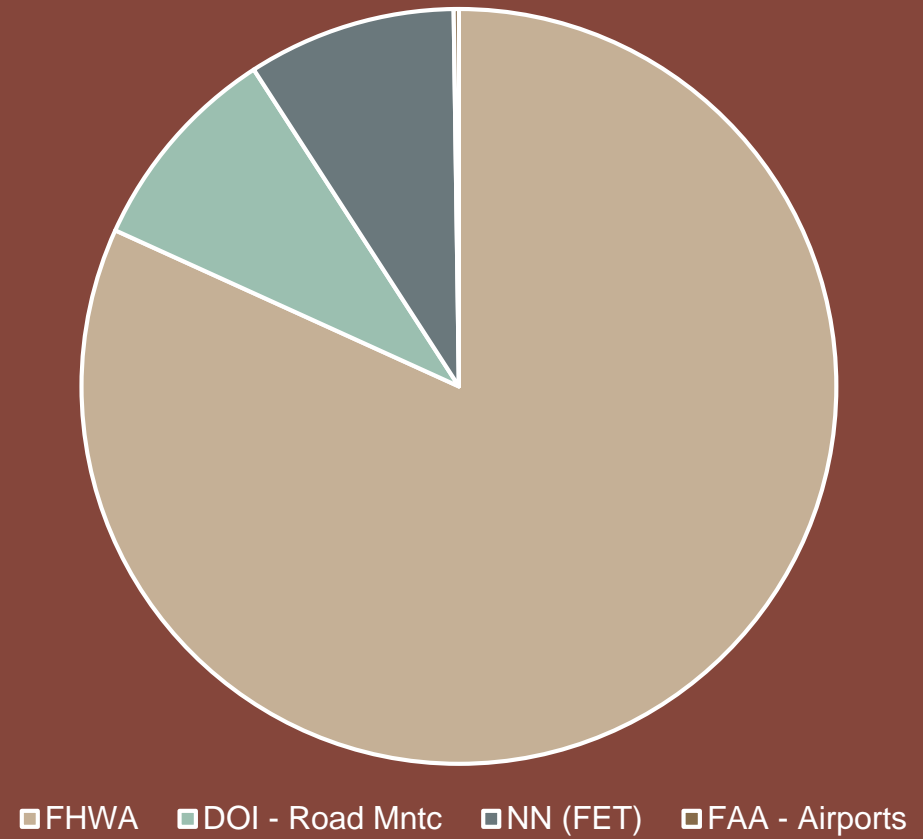
N11 in Mariano Lake Chapter



Transportation Funding

- NDOT and BIA receive \$65M annually for transportation funding
 - \$55 million from Federal Highway Administration (TTIP)
 - \$8 million from DOI for BIA Road Maintenance Program
 - \$7 million from Navajo Nation Fuel Excise Tax (FET)
 - \$150,000 from FAA for six airports

Funding (Millions)





Improvement Strategies for Navajo DOT

| Average Daily Traffic | Strategy |
|-----------------------|-------------------------------|
| Greater than 1,000 | Asphalt pavement |
| 500 to 999 | Double chip seal with gravel |
| 250 to 499 | Gravel and soil stabilization |
| 100 to 249 | Stabilized soil |
| Less than 100 | Bladed dirt road |



Costs to improve roadways:

- \$700/mile to blade an existing dirt roadway
- \$400,000/mile to grade, drain and apply soil stabilization to an existing dirt roadway
- \$3.3M/mile to complete full reconstruction
- Material & labor costs are inflated due to a lack of sources and long hauling distances
- 539 miles of highest travelled dirt routes (ADT > 1000 vehicles), the Nation would need approximately \$1.6 billion

Bridges

- 66 (37%) of 179 bridges in the Navajo Nation need repairs or replacement
- New bridges cost \$2 - \$5 million



N108 bridge in Tohatchi Chapter

Preserving the System

- 31% of the Nation's paved roadway system is classified as Good, Satisfactory or Fair in the BIA's inventory
- BIA's \$8M/yr. maintenance program funding is not sufficient to meet the needs of the system
 - Approximately \$1 to \$1.7 million annually is spent on the paved roadway system
 - The remaining funds are allocated to emergency erosion/culvert repairs, snow removal and blading of the dirt roadway system
- The BIA's Deferred Maintenance Assessment of Roads (DMR) has an approximate shortage of \$14 to \$16 million annually



Preserving the System - Comparison

- BIA maintains approximately 6,000 centerline miles of roadway
- Using \$8M/year budget, this equates to \$1,333/mile annually
- New Mexico DOT maintains approximately 12,272** centerline miles of roadway
- Using \$130** M/year budget, this equates to \$10,593 /mile annually



** = values taken from *2019 NMDOT Transportation Asset Management Plan (TAMP)* - https://www.dot.state.nm.us/content/dam/nmdot/planning/NMDOT_TAMP.pdf



N5113
Beclabito



N7113 Mariano Lake



C9 Rock
Springs



N12 Tsaile to
Wheatfields



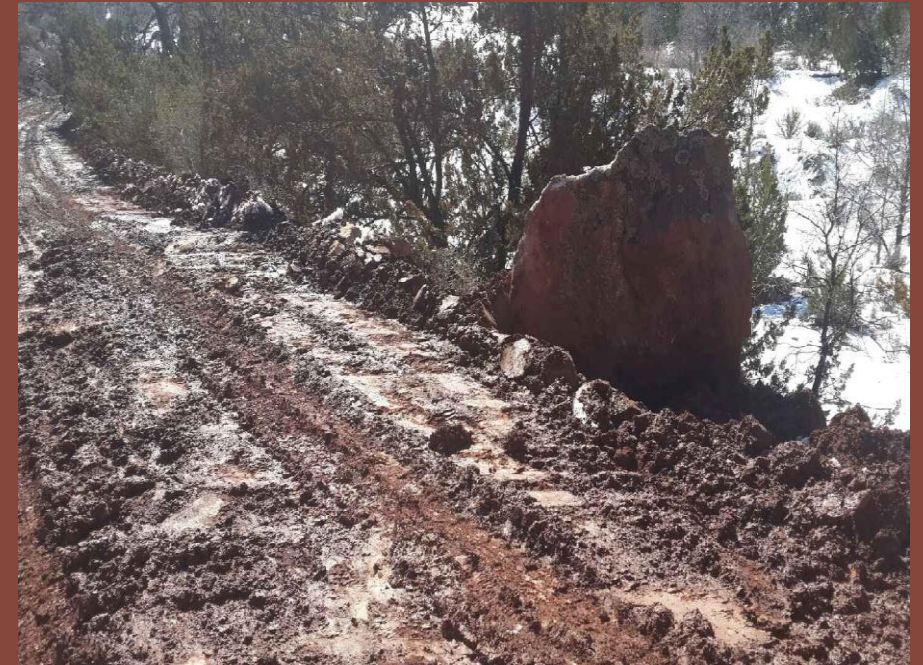
N27 Nazlini
to Chinle



N9402 Lupton

In Summary

- The Navajo Nation has a vast/large roadway system (>14,000 miles)
- The Navajo DOT's mission is to improve and maintain that system
- Navajo DOT and the BIA have been historically underfunded in regard to **new construction** and **maintenance** funding programs
- Navajo DOT appreciates the State of New Mexico's Funding opportunities as they help reduce the gap in funding





Questions???