Tribal Traffic Injury Prevention Planning

2023 Arizona Tribal Transportation Safety & Injury Prevention Summit

Elisabeth Whitlock, PE *President*



CIVIL ENGINEERING & CONSULTING

PO Box 97

St. George, UT 84771

Phone: 435.767.8481

highroadengineering.com

August 9, 2023 1:00–1:45 pm



INTRODUCTION

What is Tribal Traffic Injury Prevention Planning?

☐ It is the process of developing and implementing strategies to reduce the incidence of traffic-related injuries and fatalities within tribal communities.

TOPICS

IDENTIFY THE NEED

GATHER INFORMATION

CRASH DATA

SAFETY COUNTERMEASURES

TTP PROCESSES

PARTNERSHIPS AND FUNDING OPPORTUNITIES

EXAMPLE SUCCESSES FOR THE KAIBAB BAND OF PAIUTE INDIANS

CHALLENGES OF RURAL LOCAL TRIBAL GOVERNMENTS



NEED

Identify The Problem

Speeding and Reckless Driving: Address issues with speeding and reckless driving on tribal roads, reducing accident risks.

Drunk Driving and Substance Abuse: Implement strategies to curb drunk driving and substance abuse, major contributors to traffic injuries.

Seatbelt Usage: Promote seatbelt use to enhance safety and minimize injuries during accidents.

Pedestrian and Bicycle Safety: Improve safety for pedestrians and cyclists with safer paths and awareness campaigns.

Distracted Driving: Address distracted driving (e.g., texting) to prevent accidents.

Road Infrastructure: Identify and improve hazardous road conditions, striping, and signage to reduce accidents.

Emergency Response: Ensure effective and timely medical services for injured individuals.

Education and Awareness: Develop awareness programs about traffic safety and risks associated with certain behaviors.

Enforcement and Compliance: Strengthen law enforcement to improve compliance with traffic laws.

Cultural and Environmental Factors: Account for cultural norms and environmental factors in safety interventions.

KEY AREAS

Traffic Collision Data Analysis: Gather and analyze traffic collision data specific to the tribal community. This analysis can help identify common crash types, high-risk areas, contributing factors, and demographic groups most affected by traffic injuries.

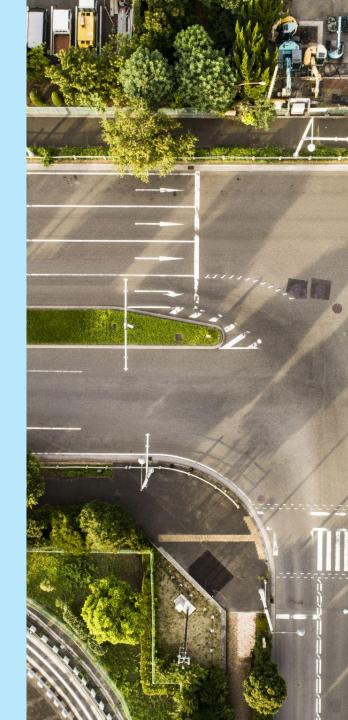
Infrastructure Assessment: Evaluate the condition of roads, intersections, walkways, school bus, and other pedestrian facilities within tribal lands. Identify areas that lack appropriate traffic control measures, signage, or safety features.

Community Engagement: Engage with the tribal community to understand their perspectives on traffic safety issues and concerns. Community members may provide valuable insights into specific problem areas and potential solutions.

Identification of High-Risk Groups: Identify vulnerable populations, such as children, elderly individuals, pedestrians, and bicyclists, who may be at a higher risk of traffic injuries within the tribal community.

Analysis of Behavioral Factors: Examine behaviors contributing to traffic injuries, such as impaired driving, speeding, distracted driving, and non-seatbelt use. This analysis can help tailor educational campaigns and interventions.

Emergency Response and Medical Services: Evaluate the effectiveness of existing emergency response and medical services in handling traffic injuries. Identify any gaps in services or opportunities for improvement.



KEY AREAS

Cultural and Environmental Factors: Consider how cultural norms, traditions, and the natural environment may influence traffic safety practices. Cultural awareness is essential in developing effective prevention strategies.

Enforcement and Law Enforcement Capacity: Assess the capacity and resources of law enforcement agencies within the tribal community to enforce traffic laws effectively.

Data Sharing and Collaboration: Address any challenges related to data sharing and collaboration among tribal, state, and federal agencies involved in traffic safety. Improved data sharing can enhance the understanding of traffic injury patterns.

Legislation and Policy: Review existing tribal laws and policies related to traffic safety. Identify areas where new or updated legislation may be needed to improve road safety.

Partnerships and Funding Opportunities: Explore partnerships with local, regional, and national organizations working on traffic safety initiatives. Seek potential funding sources to support injury prevention efforts.

Evaluation and Outcome Measurement: Plan for the evaluation of traffic injury prevention interventions to measure their effectiveness and make data-driven decisions for future planning.



GATHER INFORMATION

Plans And Documents

Background

To address the fatal crash and serious injury problems on Indian Lands, the Federal Highway Administration initiated efforts to improve safety.

- 2005 Strategic Highway Safety Plan for Indian Lands & Safety Management System
- 2011 Update: Safety Management System Implementation Plan
- ☐ 2013 Tribal Transportation Program Safety Fund under MAP-21
- ☐ 2016 TTP Safety Fund continues under FAST Act
- 2017 Tribal Transportation Strategic Safety Plan
- 2022 TTP Safety Fund grows under BIL Act (increased from 2% to 4%)

EXISTING DOCUMENTS







Purpose: Clearly define the purpose of gathering existing documents. Are you looking for specific information, historical data, or reference materials?

Understanding the purpose will help you determine what types of documents you need to collect.

Sources: Identify the sources where the relevant documents are likely to be found. These sources could include internal databases, online repositories, physical archives, websites, academic journals, government portals, and more.

Data Integrity: Ensure the documents you gather are up to date, authentic, reliable, and accurate. Verify the sources and cross-check information to maintain data integrity.





Digital vs. Physical Documents:

Decide whether you'll be gathering digital documents, physical copies, or both. Depending on your needs, you may need to digitize physical documents for better accessibility and organization.

Collaboration and

Sharing: If you're working with different Departments, establish a collaborative approach to document gathering. Share information about the documents found and ensure everyone is on the same page.

What is a Tribal Transportation Safety Plan?

The purpose of a Tribal Transportation Safety Plan (TTSP) is to identify key safety needs and guide investment decisions to achieve **reductions in fatalities and serious injuries** on local public roadways.

A Tribal Transportation Safety Plan is

- Not an Emergency Management Plan
- Not a Worker Safety Plan
- Not exactly a Safe Routes to School Plan

It is your Tribal Government's strategic prioritization of transportation safety issues and multi-disciplinary strategies that, if implemented, will result in a reduction of fatal and serious injury crashes.

Keep in mind – Plans can also be called "Tribal Safety Plan" or "Traffic Safety Plan" or just "Safety Plan"

- but they are all the same documents / plans.



Benefits







Fewer Fatalities and Serious Injuries

Safer Roadways

More Competitive for Safety Funding



400



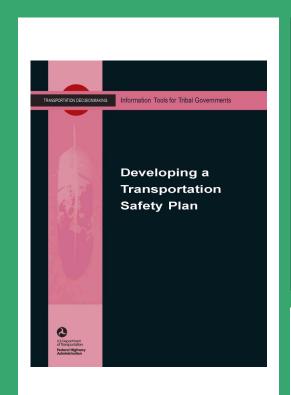
Proactive Approach

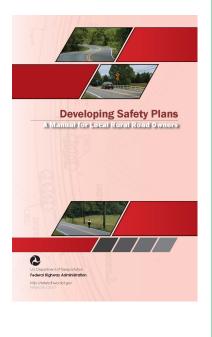
Develop Partnerships

Leverage Resources

Very Good Guides Federal Highway Administration website

Office of Tribal
Transportation
FHWA (dot.gov)





CRASH DATA

Tribal, ADOT & Federal Data

Safety Statistics in Indian Country

- Five-year (2017-2021) total of 1,483 Native American roadway fatalities (FARS) minimum (420 in AZ)
- From 2009 to 2018, 4,645 passenger vehicle occupants have been killed in Arizona
- From 1975 to 2002, Native American and Alaska Native fatal crash rates increased 53%

In 2020 statistics show:

- Motor vehicle traffic crashes ranked as the #1 cause of death for Native
 Americans aged 1 to 54
- The risk of dying in a motor vehicle traffic crash is the **highest** for Native Americans
- Almost 7% of all Native American deaths were attributable to motor vehicle traffic crashes

Data Collection

Available Sources

- State Crash Data
- Fatality Analysis Reporting System (FARS) Data (includes Native American data)
- National Highway Traffic Safety Administration (NHTSA) USDOT

Potential Sources

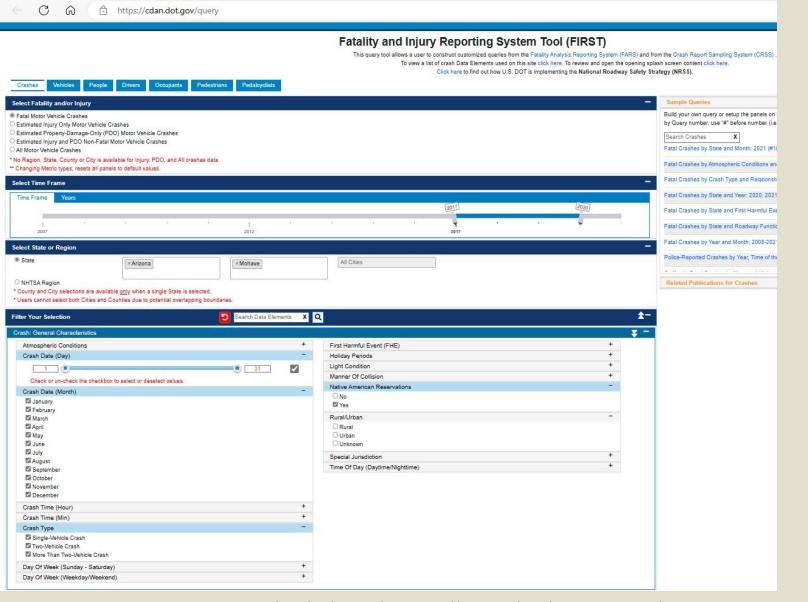
- Police Reports / Citations (speeding, etc.)
- Community Survey
- Other Agency Safety Programs
- Traffic Court Statistics

RESOURCES

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

- The National Highway Traffic Safety Administration (NHTSA) is an agency within the U.S. Department of Transportation NCSA | Tools, Publications, and Data (dot.gov). NHTSA's crash data collection program gives access to the following resources:
- NHTSA Crash Viewer NHTSA Crash Viewer (dot.gov)
- Crash Investigation Sampling System (CISS), Special Crash Investigations (SCI), Non-Traffic Surveillance (NTS), and the Crash Injury Research & Engineering Network (CIREN)
- ☐ Crash Report Sampling System (CRSS) <u>Crash Report</u> Sampling System | NHTSA
- Fatality Analysis Reporting System (FARS) <u>FARS</u>
 <u>Encyclopedia: States Fatalities and Fatality Rates</u>
 (dot.gov)
- Fatality and Injury Reporting System Tool (FIRST) This query tool allows a user to construct customized queries from the Fatality Analysis Reporting System (FARS) and from the Crash Report Sampling System (CRSS). NCSA—FIRST Query (dot.gov) https://cdan.dot.gov/query





Enter your criteria into the Fatality and Injury Reporting System Tool (FIRST) and click the submit button. The tool will generate a table containing the relevant data.

National Highway Traffic Safety Administration (NHTSA) Motor Vehicle Crash Data Querying and Reporting

Fatal Motor Vehicle Crashes

Filter Selected: Crash Type: Single-Vehicle Crash; or Two-Vehicle Crash; or More Than Two-Vehicle Crash; Roadway Function Class: Interstate, principal arterial; or Freeway and expressway,

principal arterial; or Principal arterial, other; or Minor arterial; 1 <= Crash Date (Day) <= 31; Native American Reservations (see documentation)⁴: Yes; Crash Date (Month): January; or February; or March; or April; or May; or June; or July; or August; or September; or October; or November

State: *Arizona* and County: *Mohave* Years: 2017-2020

Fatal Motor Vehicle Crashes¹

Note: Click the link within a table cell to view those records on a web map

Crash Date (Year)	Crash Date (Month)		
	July	October	Total
2019	0	2	2
2020	1	A	1
Total	1	2	3

Download Report: pdf -- rtf -- Excel (Important: Excel is in the HTML format and therefore needs to be saved as an xls/xlsx file once opened in Excel)

Data Sources:

¹Fatality Analysis Reporting System (FARS): 2017-2020 Final File

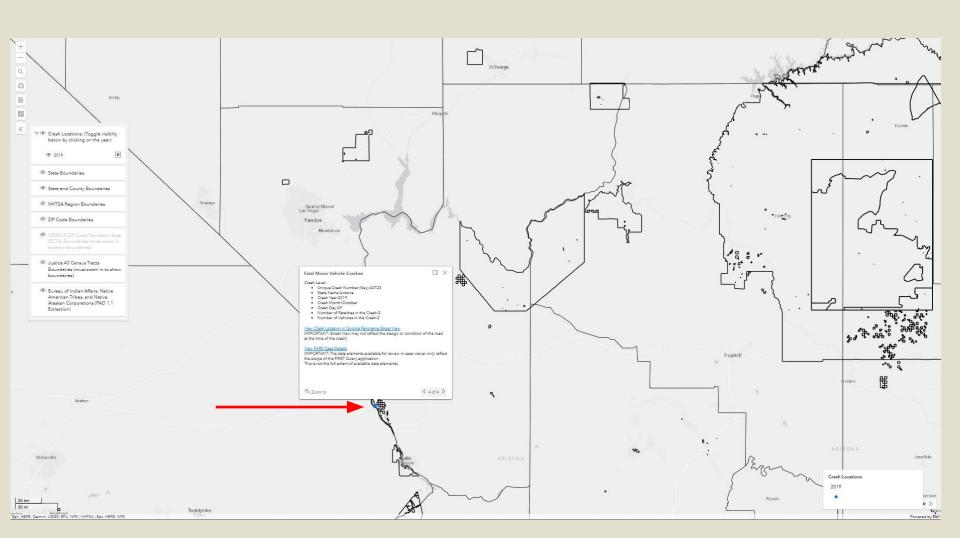
⁴Methodology on Identifying Fatal Motor Vehicle Traffic Crashes That Occurred on Native American Reservations In the United States

Report Generated: Saturday, August 5, 2023 (3:13:40 PM)

VERSION 5.61, RELEASED AUG 02, 2023

Click on a blue underlined number in the table.

The link (October, 2019 #2) takes you to an interactive map. Customize your view by selecting desired layers, and the crash data points will appear in blue. For more details on specific incidents, simply click on the points. You can print, download, save, or record the data for future reference.



ADOT Crash Data

ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT)

ADOT's Crash Data Query and Analysis Tools are known as the Arizona Crash Information System (ACIS) & the Accident Location Identification Surveillance System (ALISS).

- You need a login to access the Crash Data tools. Fill out the simple form/s and email them along with the requested information to azcrashfacts@azdot.govh3, which can be found at the bottom of this link Operational Traffic & Safety | Department of Transportation (azdot.gov).
- ☐ The process of retrieving crash data is similar to the Fatality and Injury Reporting System Tool (FIRST). Once you gain access to ADOT's Data Query and Analysis Tool/s input your search parameters and inspect the data to get your preferred data set.
- Reminder about free RSA Assistance (download and complete the form, save a copy for your records prior to sending, email completed form to AZRSA@azdot.gov) Road Safety Assessment Application | (azdot.gov).



HOME

PROJECTS

BUSINESS

PLANNING

CONTACT US

Traffic Conditions

AZ Crash Data Access Request

ADOT Employee



Non-ADOT Agency User

Please Email below listed information along with the completed signed agreements to azcrashfacts@azdot.govh3

- . What access do you want? (select all that apply)
- · Arizona Crash Information System (ACIS) AZ Crash Data Query and Analysis Tool
- · ALISS and On-Base AZ Crash Report Download and Review
- · Provide the following information for the User.
 - · Person's Name

AZ Crash Data Access Request

Operational Traffic & Safety

Department of Transportation

is at the bottom of this link

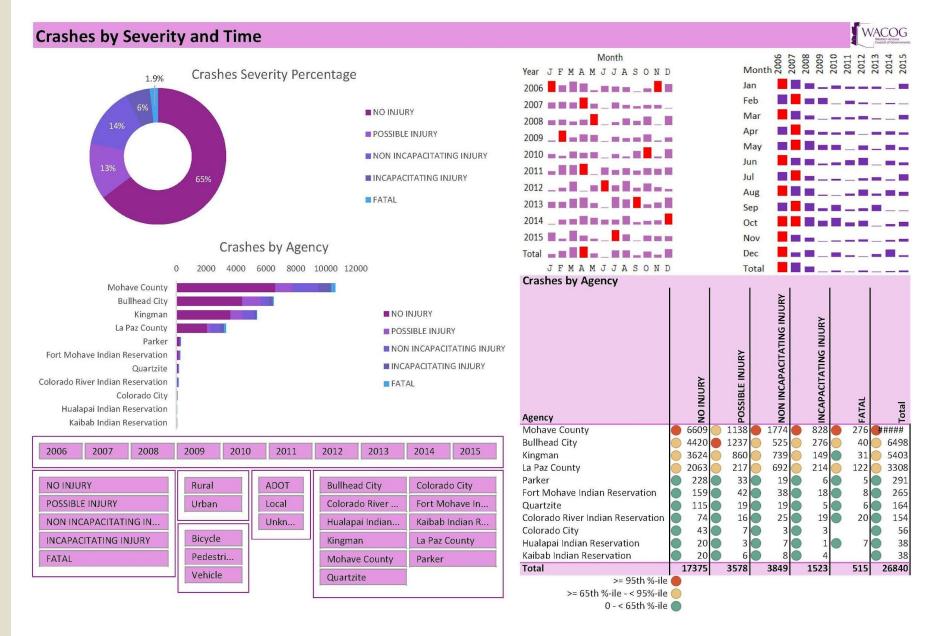
(azdot.gov).

- · Company Name
- · Office address (including city, state, and zip code)
- · Office phone number
- · Email address
- . Last 4 digits of SSN (used to verify your identity when you call the help desk to receive your password.)
- NCIC codes (<u>List of NCIC codesh3</u>)
- Download the forms below per your access request. Attach the completed signed forms before you click submit. *NOTE: electronic signatures are not allowed.
 - ACIS access Acceptable User Agreement (AUA) and Non-Disclosure Agreement (NDA)h3
 - ALISS/OnBASE AUA, NDAh3 and Crash Records Confidentiality Agreement (CRCA)h3

Contractor/Consultant

Please Email below listed information along with the completed signed agreements to azcrashfacts@azdot.govh3

- Are you working on an ADOT project? Y/N
- · Project Name
- · Project PM (Name, Dept/Agency, Phone # and email id)
- · Project Start Date and End Date
- . What access do you want? (select all that apply)
 - Arizona Crash Information System (ACIS) AZ Crash Data Query and Analysis Tool
 - · ALISS and On-Base AZ Crash Report Download and Review
- · Provide the following information for the User.
 - · Person's Name
 - Company Name



WACOG has a crash data spreadsheet that is available – uses ALISS data.

SAFETY COUNTERMEASURES

Effective Strategies For Reducing Roadway Fatalities And Serious Injuries



Speed Management







Pedestrian/Bicyclist



















Roadway Departure



Enhanced Delineation











Intersections















Crosscutting









TTP PROCESSES

Planning / Design / Construction

Tribal Transportation Program Planning Pathway

- Arizona Tribal Transportation Website
- Tribal Transportation Planning Workshop Package
- Training | Arizona Tribal Transportation (aztribaltransportation.org)
- <u>www.highroadengineering.com/resources-links/</u> (you can access these files from our website too)

ARIZONA DEPARTMENT OF TRANSPORTATION

Tribal Liaison Office

Home / Training

Upon completion of a course, please notify us by email including your name, agency, contact information and course taken. We would also appreciate comments about the training!

ADOT Integrating Statewide and Tribal Transportation Planning Workshop Curriculum

Since 1997, ADOT has collaborated with tribes in Arizona to complete numerous multimodal planning studies through the ADOT Planning Assistance for Rural Areas Program. To supplement these studies, ADOT developed this interactive training workshop specifically to provide tribal personnel and lead decision-makers with easy-to-understand procedures to implement projects recommended in the planning studies. The workshop is a computer-based, interactive training program that guides users through the transportation improvement project phases of planning, funding, programming, development and maintenance.

Additional Resources

- >> LTAP Training
- Native American Sacred Sites
 Training
- » NHI Training





About

Training

Tribes in Arizona V

Resources >

Contact Us

0

database of funding sources that the Tribe may pursue to support the construction and on-going maintenance of a transportation system is also included. The database includes information on project eligibility, application due dates, program contacts, and website links for more detail.

Tribal Transportation Planning Workshop Package

Reference Materials

Download reference materials for the Integrating Statewide and Tribal Transportation Planning Workshop. Once downloaded, unzip the file and save the folder to your computer. The folder will contain the following items:

- >> Tribal Transportation Planning Pathway Package This is a PDF file containing the interactive training pathway that walks users through the transportation improvement project process.
- Tribal Funding Database This is an MS Access file containing the database of potential transportation funding sources that is referenced in the interactive training pathway and can also be used as a standalone resource tool. When saved to your computer you can also modify the file to insert your own program updates or to add new program information.





TRIBAL TRANSPORTATION PLANNING PATHWAY



Welcome to the Planning Pathway

The Planning Pathway is an interactive guide to help navigate the process of taking a project from idea to construction.

Click on the interactive elements

to walk through the Planning
Pathway.

Help

Legend



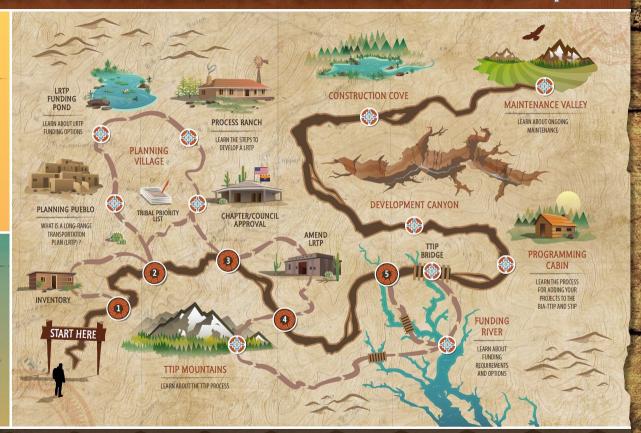








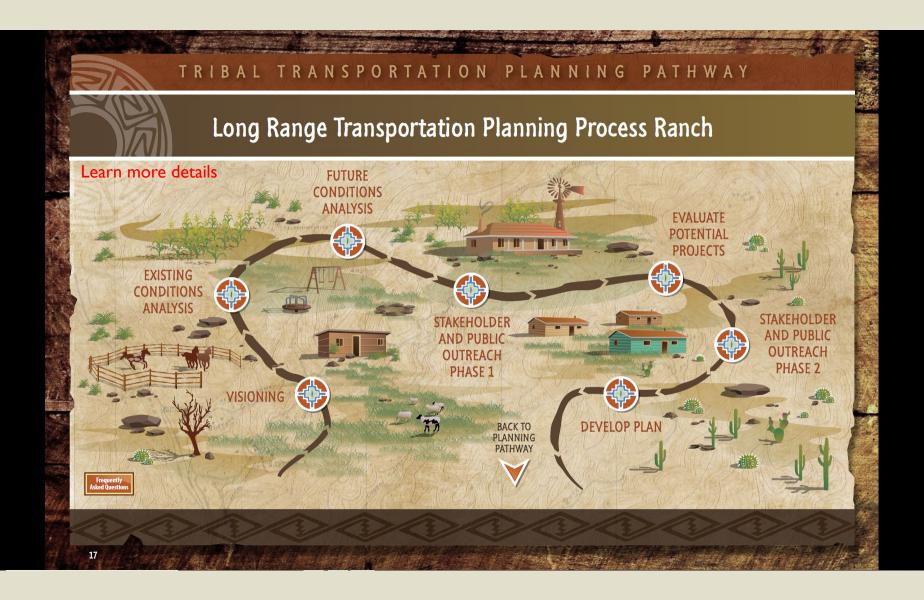


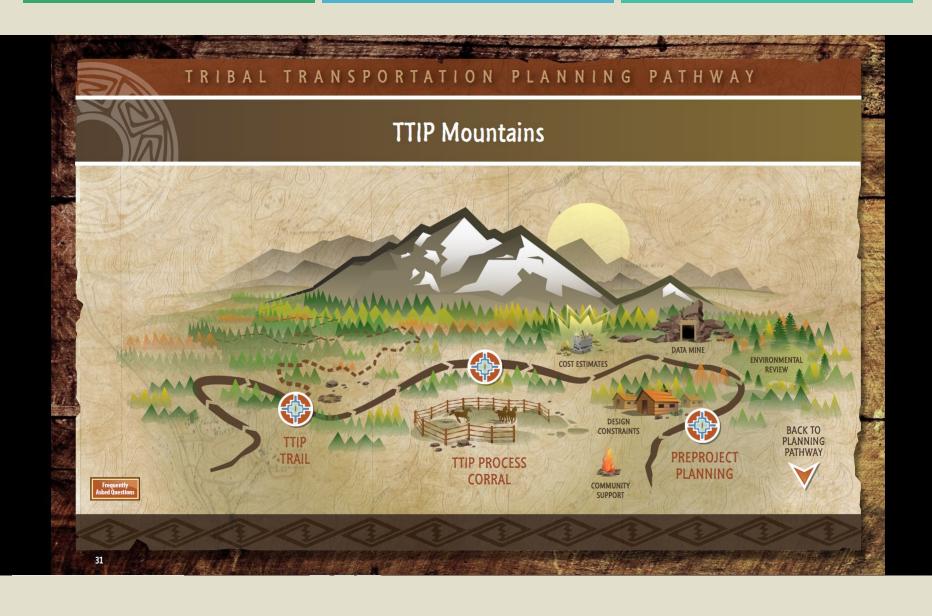


Integrating Statewide & Tribal Transportation Planning

TRIBAL TRANSPORTATION PLANNING PATHWAY **LRTP Funding Pond** ADOT Go through PARA the map to learn all elements of the TTP **Process** BIA TTP TRIBAL FUNDING GENERAL BACK TO PLANNING PATHWAY FUNDS

13





TRIBAL TRANSPORTATION PLANNING PATHWAY **Funding River** See Tribal Funding Sources database file for funding BACK TO PLANNING PATHWAY sources FUNDING OPTIONS TTIP State Funds PARTNERSHIPS Ped/Bike Funds PROJECT CHAMPION SUCCESS 47

Tribal Transportation Program Delivery Guide

Revised 03-17-2023

A Guide for Tribes

Tribal Transportation Program Delivery Guide

A Guide for Tribes with an FHWA Tribal Transportation Program Agreement









March 17, 2023

Detailed Guidance for Design and Construction Phases

FHVVA / BIA
TRIBAL TRANSPORTATION PROGRAM DELIVERY
GUIDE | FHWA (DOT.GOV)

PLANS, SPECIFICATIONS & ESTIMATES (PS&E)

Complete Project Package

- I. Approved PS & E
- Assurance that the construction will meet or exceed applicable health
 & safety standards
- 3. Tribal Resolution or other authorizing document to support the project
 - (BIA uses the Resolution provided with the TTIP)
- 4. Required environmental, archaeological, biological, and cultural clearances
- 5. Any FHWA-approved Design Exceptions (if used)









Tribes must certify by a licensed civil engineer (in State) – engineer signs and seals plans, specs, & estimate – and provides a certification letter that the construction meets standards.

ENVIRONMENTAL CLEARANCES

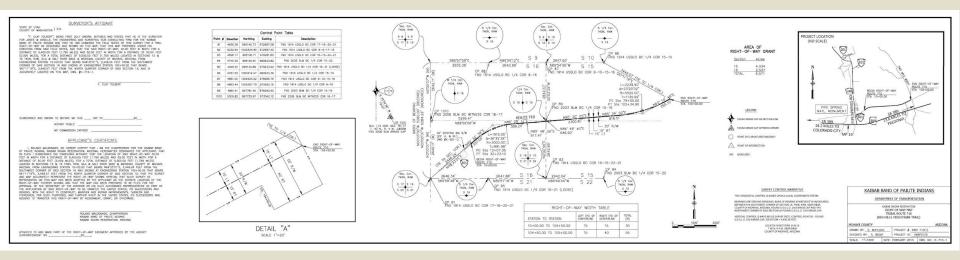
National Environmental Protection Act (NEPA)

- Archaeological Survey for cultural and historical sites
- Biological Survey for threatened and endangered species
- Environmental Assessment
- Public Involvement Public Comments
- Consultation with other Tribes or State and Federal Agencies
- Environmental Impact Statement if necessary

Are you lucky? Might be under a Categorical Exclusion

RIGHT-OF-WAY & UTILITIES

- I. Plat (Strip Map)
- 2. Legal Description
- 3. Ownership
- 4. Appraisals
- 5. Payments



CONSTRUCTION

Bid Package

PS&E

Instruction to Bidders

Unit Price Schedule

Bid Bonds

Federal Clauses

Davis Bacon Wage Rates

Pre-Bid Meeting

Public Bid Notice / Advertise

Bid Opening

Tribal Council Approval (by Resolution)

Follow Tribal Procurement Process

Could require legal review

Could require finance review (funds available)



CONSTRUCTION

- I. Pre-Construction Meeting
- Daily Oversight / Construction Management
- 3. Photos throughout project
- 4. Testing / Quality Control
- 5. Certified Payroll
- 6. Cost Controls
- 7. Traffic & Safety
- 8. Schedule

- 9. Construction Water
- 10. Sanitation Facilities
- 11. Change Orders
- 12. Material Approvals / Various Required Submittal Approvals
- 13. Final Inspection
- 14. As-Built Drawings
- 15. Final Cost for project all tribal expenditures
- 16. Letter of Certification by the Engineer of Record

PARTNERSHIPS AND FUNDING OPPORTUNITIES

Maximizing Your Program

Current Highway Bill

BIL Act (highway bill) provides a 4% Set Aside for Tribal Safety Funding (~\$24 million/year). Funding limited to two categories:

- Transportation Safety Planning
 - Safety Plans & Data Assessment, Improvement, and Analysis Activities
- Other Eligible Activities as listed in 23 USC 148(a)(4)
 - Engineering Projects
 - Road Safety Audits
 - Pedestrian, Bicycle, and ADA improvements
 - Systemic safety improvements
 - Correct or improve a hazardous location or feature
 - Address a highway safety problem
 - Consistent with a State strategic highway safety plan

Tribes may apply for safety funding **each year**, and they can apply for **more than one project** each year. The intent for the first year of funding is for every Tribe to have a Safety Plan. Then, based upon the completion of your Safety Plan, projects are ranked for funding to implement solutions or strategies to improve safety in your communities.

PARTNERSHIPS AND PLANNING — VERY VALUABLE TOOLS

- I. Most Tribes have a State or County road accessing or traversing their lands
- 2. In the West, even Federal roads exist in many Tribal areas
- 3. Relationships with the road owners is vital to maintain and improve the roads
- 4. Tribes are eligible for State transportation funding just like other local governments
- 5. Tribes are eligible for Federal transportation funding just like other federal land managers (BLM, Forest Service)

Participate in Regional Planning

Council of Governments

Inter-Tribal Council of Arizona (Or "Insert State")

Metropolitan Planning Organization / Regional Planning Organization

State Department of Transportation Tribal Liaison Office

State Department of Transportation District Office

City or County Planning Office

Forest Service / National Park Superintendents

County Public Works Department - think of road maintenance too

All Tribes need to establish relationships with the surrounding road owners and area planners so when needs are identified, you have a place to start. Do not just show up when there is a problem – participate in the planning process regularly.



FUNDING OPPORTUNITY HELPFUL HINTS

Mark your calendars

Get on notice lists

match

Stay in contact with BIA Region

Customize and update database

Search for opportunities – grants.gov

Do planning for needs and costs

Talk to other Tribes

Be registered now

Be prepared to cost

FUNDING OPPORTUNITIES

https://www.tribalsafety.org/funding

https://highways.dot.gov/federal-lands/programs-tribal/fu nding-opportunities

Also see ADOT *Tribal Funding Sources* Access Database File for detailed opportunities.

- **Arizona Tribal Transportation Website**
- **Tribal Transportation Planning Workshop Package**
- http://www.aztribaltransportation.org/training.asp





Updated: June 1, 2023

HOME COMMUNITY ~

NEWS/EVENTS ~

FATALITY DATA

Transportation Safety for Tribes

FUNDING

Funding	
Safety Planning	~
Safety Data 🗸	

Seat Belts & Child Seats

Transportation Safety Funding for Tribes

A webinar reviewing many sources of transportation safety funding available to Tribes through programs managed by state and federal agencies is available here.

In addition to the information on this page, the Transportation Funding Opportunities for Tribal Nations guide provides an overview of many USDOT grant programs.

Tribal Transportation Program Safety Funds (TTPSF)

ITCA Recommendations for Tribes

Policy:

- ✓ Strengthen Tribal traffic codes pertaining to commercial traffic on Tribal lands
- ✓ Participate in Arizona Strategic Highway Safety Plan implementation for heavy vehicles

Education:

✓ Conduct "Share the Road" training for Tribal members to heighten awareness of driving strategies near commercial vehicles

Enforcement:

- Conduct traffic stops of commercial vehicles
- ✓ Invest in Tribal police training to become certified commercial vehicle inspectors
- ✓ Conduct commercial vehicle inspections regularly

Engineering:

- Complete analyses of MVC involving commercial traffic
- ✓ Utilize Road Safety Assessments
- ✓ Utilize traffic calming strategies on state routes through Tribal communities
- ✓ Place rumble strips to minimize lane departures

Inter Tribal Council of Arizona

<u>Transportation Links &</u>
<u>Resources | Inter Tribal</u>
<u>Council of Arizona</u>
(itcaonline.com)

EXAMPLE SUCCESSES FOR THE KAIBAB BAND OF PAIUTE **INDIANS**

Transportation and Beyond

ACCOMPLISHMENTS

- Increased seat belt & child restraint usage within the 8-year grant period
- Completed 2 Road Safety Assessments through ADOT:
 - 2010 M.P. 30-31
 - 2014 M.P. 14-31
- Improved HWY 389 intersection, M.P. 30-31, with eastbound and westbound turn lanes
- Installed 5 dual language Buckle-up signs in 5 villages
- Designed & installed dual language billboard south of HWY 389
- Completed Tribal Transportation Safety Plan
- Completed Pipe Springs Road Shared Use Trail
- Received TTP Safety Funds for HWY 389 and Pipe Springs Intersection

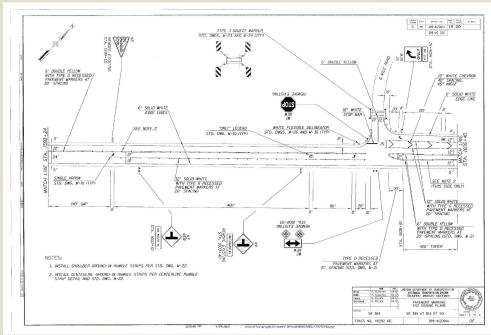
SUCCESSFUL ROAD PROJECT

Partnerships / Planning / Collaboration / Cooperation



- ADOT Design
- State Highway Safety Improvement Program Funding
- Construction completed in 2012

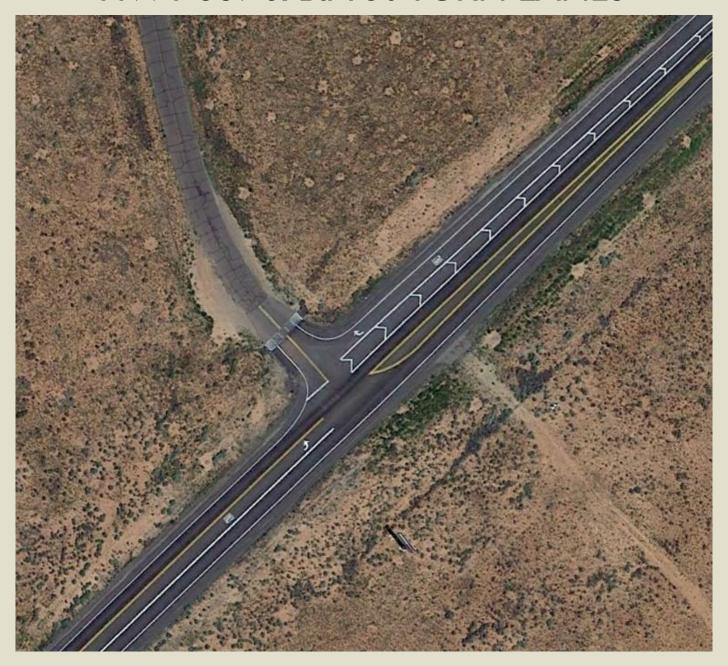
HWY 389 & BIA 50 TURN LANES



SUCCESSFUL ROAD PROJECT

Partnerships / Planning / Collaboration / Cooperation

HWY 389 & BIA 50 TURN LANES





During

KBIR CR240 Safety No. 1 Pipe Springs Road Shared-Use Trail

Funded by a Federal Lands Highway Grant for FY 2011 and the Tribal Transportation Program

Total Cost: \$427,000 for grading and base

Phase 1 Construction Completed in April 2014

Sidewalk Design funded by TTPSF in 2023









DUAL LANGUAGE BUCKLE UP SIGNS IN ALL VILLAGES

SR 389 & PIPE SPRINGS RD INTERSECTION

- TRIBE COUNCIL & DEPARTMENTS
- ITCA TMVIPP
- ADOT ROAD SAFETY ASSESSMENT
- MOHAVE COUNTY PUBLIC WORKS
- WESTERN AZ COUNCIL OF GOVMTS
- BIA WESTERN REGION
- ADOT FLAGSTAFF DISTRICT
- FHWA

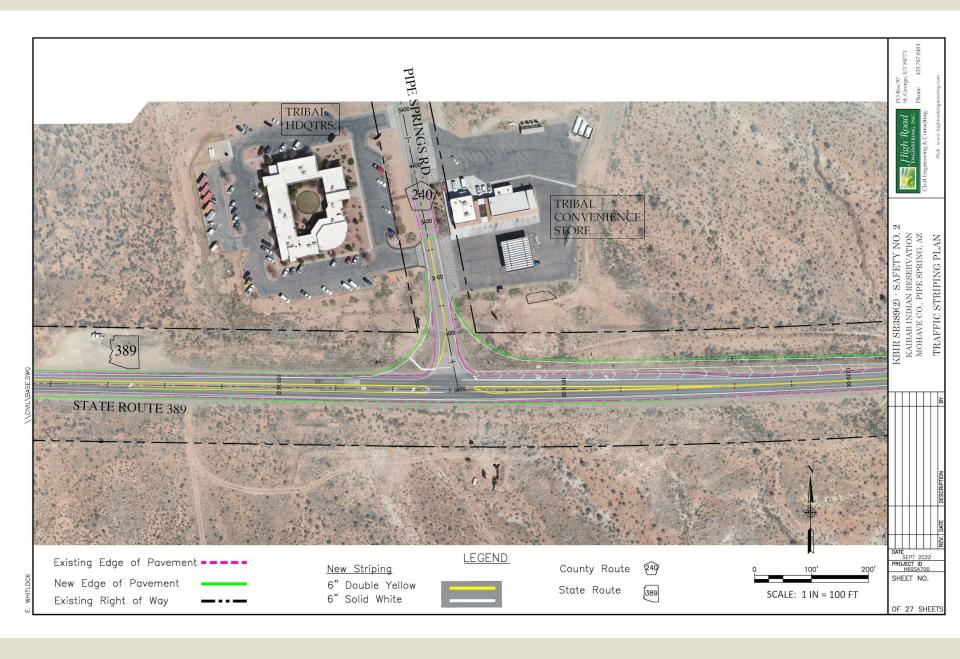


- ✓ State Route intersecting a County Route on Reservation
- ✓ Serves a National Monument
- ✓ Serves three Tribal Enterprises and main community
- ✔ Received \$ 864,000 in federal funding for improvements
- ✓ Tribe contributing \$166,000+ of TTP funds
- ✓ ADOT provided a letter of support

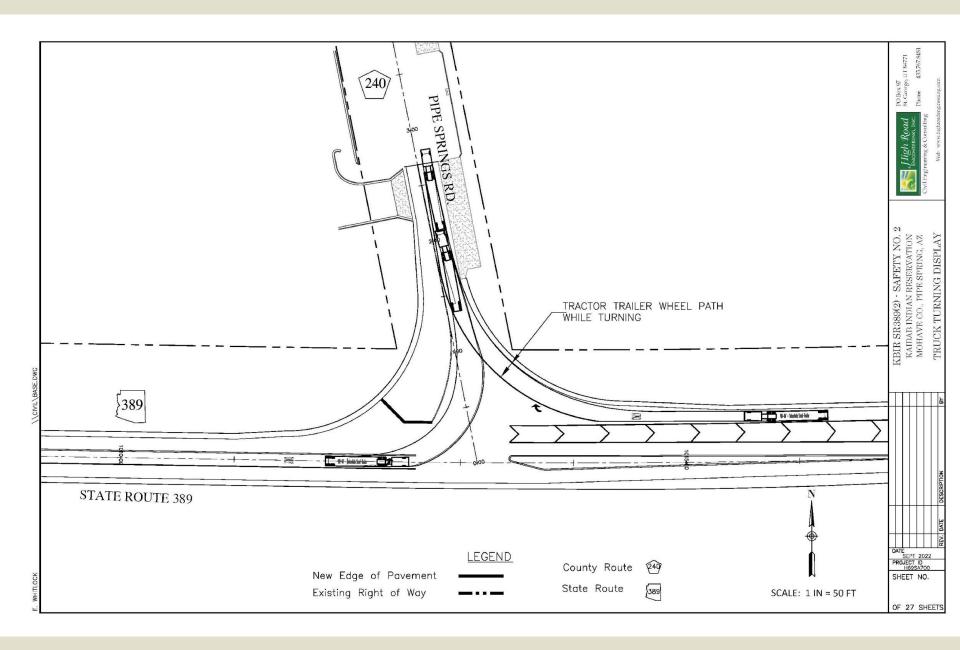
SUCCESSFUL ROAD PROJECT

Partnerships / Planning / Collaboration / Cooperation

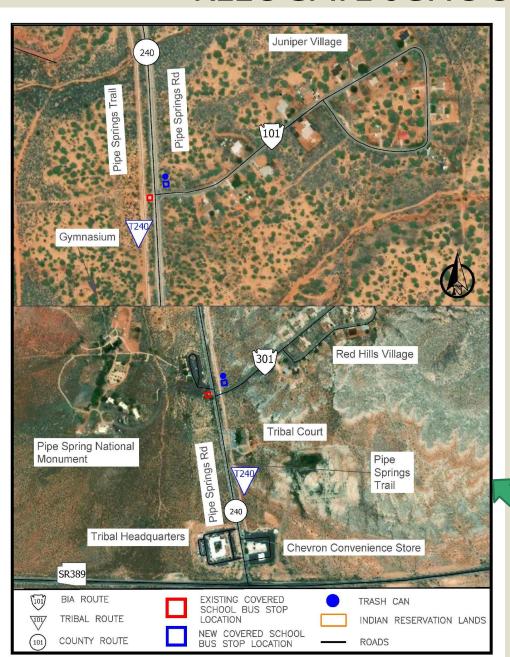
HWY 389 & CR 240 TURN LANES



HWY 389 & CR 240 TURN LANES



RELOCATE SCHOOL BUS SHELTERS





Safety Funds Awarded to replace four (4) bus stop shelters

Proposed Locations

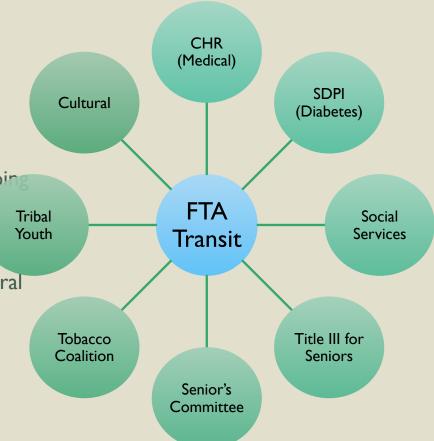
CHALLENGES OF RURAL LOCAL TRIBAL GOVERNMENTS

Transportation and Beyond

Staffing
Governmental support structure to administer federal contracts
Changes in Tribal Leadership
Keeping them informed
Processing funding
Procurement / Finance office
Resources – lack of equipment, lack of workforce, lack of wage to attract and retain
Funding is limited for expensive construction costs
Consultants in proximity to rural areas
Consultants who understand Tribal Transportation Program

EXAMPLE - TRANSIT

- Multiple programs providing services
- Hard to manage & centralize
- No overall transit manager
- Long distances to medical care and general shopping
- Operations and maintenance costs
- Keeping drivers, training, consistency
- Developing policies and procedures to meet federal regulations
- Tracking mileage, trips, rides
- Understanding the strings attached to funds



EXAMPLE – ROAD MAINTENANCE

- Several funding sources
- Several contracts to administer
- Lack of funds for large equipment purchases
- Shared equipment
- Which roads get priority when not enough funds
- BIA Agencies are not performing maintenance like they use to
- Responding to emergencies / natural disasters (floods, fires, erosion, dust)



QUESTIONS?

Elisabeth Whitlock, PE

High Road Engineering, Inc. Phone: 435.767.8481

ewhitlock@highroadengineering.com



highroadengineering.com

For All Resource Files and Links to TTP Resources

Remember: perseverance