

# Sample RSA:

## Arizona Tribal Road Safety Assessments



### Tribal RSA Virtual Workshop

Kerry Wilcoxon and Jay Gomes – ADOT

Steven Johnson – GRIC

November 9, 2021

# Agenda

- RSA Process in Arizona
- Example Tribal RSAs
  - SR-87 at Gilbert Rd – Gila River Indian Community
  - SR-389 MP14-30 - Kaibab Band of Paiute Indians

# 2020 Traffic Fatalities\*

**↑ 1054 Deaths**

*8% Higher than 2019*

239 Pedestrian

653 Lane Departure

284 Intersection Fatalities

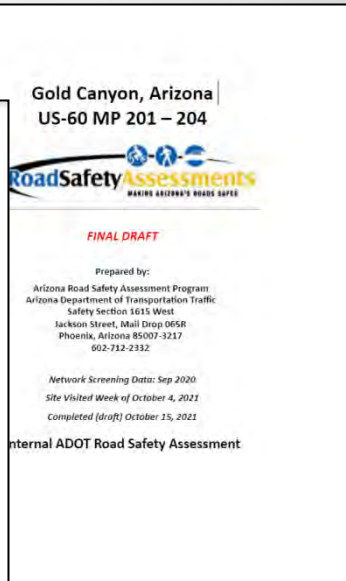
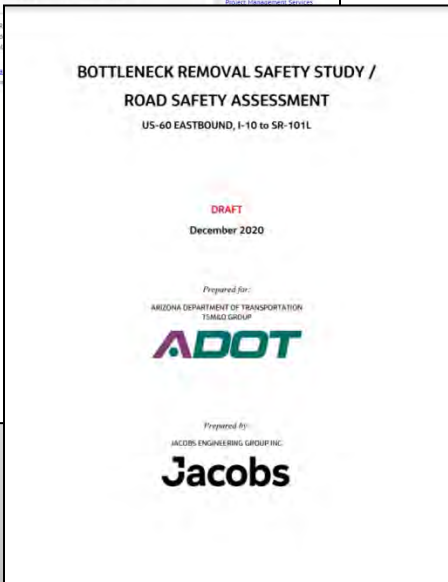
**3098 Serious Injuries**

\*as of 11/2/21



# Arizona RSA Requirements

- Selection
- Owner
- Data
- Solution Oriented







# Owner

- Agency contact for history and follow up
- Usually submits request
- Relays concerns
- Responds to RSA findings

**ADOT** **Road Safety Assessments**  
SAFER DRIVERS. SAFER LIVES.

**ROAD SAFETY ASSESSMENT APPLICATION**

- Name, Position/Title, Address of Contact Person:  
 Phone Number: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_
- Type of assessment requested (planning, design, construction, existing): \_\_\_\_\_
- Specific location of proposed RSA project (intersection, spot location, road segment or project, or new facility):  
 Road(s): \_\_\_\_\_ Segment: \_\_\_\_\_ Project: \_\_\_\_\_  
 From/To (if segment/project): \_\_\_\_\_ Segment Length: \_\_\_\_\_  
 City/County/Tribe: \_\_\_\_\_
- Describe any improvement plans, including stage (scoping, design, construction, etc.), for this location:  
 \_\_\_\_\_  
 \_\_\_\_\_
- Reasons for requesting RSA:  
 \_\_\_\_\_  
 \_\_\_\_\_
- What is the crash experience for the most recent 3-year period (total crashes, fatal crashes, injury crashes, crash rate, etc.)? (not applicable for new facility) \_\_\_\_\_
- Does your agency have a method to identify and prioritize road safety issues?  If yes, where does this location rank within your agency's problem locations? \_\_\_\_\_
- Average Daily Traffic (ADT) volume for road(s): \_\_\_\_\_

Location: \_\_\_\_\_  
 Date: \_\_\_\_\_



# Data

- Process is data-driven
- Must have some form of measurable safety condition
  - Crashes
  - Speeds or documented bad behavior
- Before and after results tracked

The image displays two screenshots of an Arizona Crash Report form. The top screenshot shows the header and identification fields, including report number 2011044335 and date 01/11/10. The bottom screenshot shows the 'CRASH DIAGRAM' section, which includes a diagram of the road layout with vehicle positions and a north arrow.

TRAFFIC UNITS #1 AND #2 WERE BOTH TRAVELING EASTBOUND ON SR 260 NEAR MILEPOST 262.5. A PARTIAL ROLL OF WIRE FENCING FELL FROM THE BED OF TRAFFIC UNIT #1 INTO THE ROADWAY. TRAFFIC UNIT #2 WAS TRAVELING BEHIND UNIT #1 AND STRUCK THE WIRE FENCING; RESULTING IN MINOR CONTACT DAMAGE TO THE PAINTED FRONT BUMPER. BOTH DRIVERS DENIED SUSTAINING ANY INJURES. BOTH VEHICLES WERE DRIVABLE.

# Solution Oriented

- RSAs performed to:
  - Investigate problem
  - Develop solutions
  - Recommend countermeasures
  - Reduce crashes and Save lives
- RSAs are not intended to address feelings
  - Road “feels” unsafe







# Scheduling an RSA in Arizona

Contact:

Arizona Department of Transportation RSA Program

Web page:

<https://azdot.gov/business/transportation-systems-management-and-operations/operational-and-traffic-safety/road-safety>

Email:

[AZRSA@azdot.gov](mailto:AZRSA@azdot.gov)

Phone: RSA Program Manager: 602-712-2332

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### Road Safety Assessments

Road Safety Assessments Crash Modification Factors Clearinghouse

Stewardship and Oversight Agreement for Arizona Arizona Highway Safety Improvement Program

Arizona Strategic Traffic Safety Plan AZ Step Guide Related Links

Arizona Crash Report Forms, Resources and Training Events Smart Work Zone (SWZ)

Work Zone Safety and Mobility

The Road Safety Assessments (RSA) program conducts RSA on tribal road facilities. An RSA is defined as a formal examination of roadway by an independent multidisciplinary audit team members.

[Road Safety Assessment Application](#)<sup>®</sup>  
(download then complete the form, save a copy for your records per [AZRSA@azdot.gov](mailto:AZRSA@azdot.gov))

**Business**

- ADOT Business Coach On Demand
- Business Engagement and Compliance
- Engineering and Construction
- Contracts and Specifications
- Project Management Services
- Highway Maintenance

**ADOT** Road Safety Assessments

### ROAD SAFETY ASSESSMENT APPLICATION

- Name, Position/Title, Address of Contact Person: \_\_\_\_\_ Phone Number: \_\_\_\_\_  
 \_\_\_\_\_ Fax: \_\_\_\_\_  
 \_\_\_\_\_ Email: \_\_\_\_\_
- Type of assessment requested (planning, design, construction, existing): \_\_\_\_\_
- Specific location of proposed RSA project (intersection, spot location, road segment or project, or new facility):  
 Route(s): \_\_\_\_\_ Segment: \_\_\_\_\_ Project: \_\_\_\_\_  
 From/To (if segment/project): \_\_\_\_\_ Segment Length: \_\_\_\_\_  
 City/County/Tribe: \_\_\_\_\_
- Describe any improvement plans, including stage (scoping, design, construction, etc.), for this location:  
 \_\_\_\_\_
- Reasons for requesting RSA:  
 \_\_\_\_\_
- What is the crash experience for the most recent 3-year period (total crashes, fatal crashes, injury crashes, crash rate, etc.)? (not applicable for new facility) \_\_\_\_\_
- Does your agency have a method to identify and prioritize road safety issues? . If yes, where does this location rank within your agency's problem locations? \_\_\_\_\_
- Average Daily Traffic (ADT) volume for road(s): \_\_\_\_\_
- Please list month and/or days of week when safety issues are most prevalent, if applicable: \_\_\_\_\_
- Describe any future development planned for this area:  
 \_\_\_\_\_
- Please include any additional road owners, photos and/or other information that highlight the location:  
 \_\_\_\_\_
- Signature (and printed name) of Person with Authority to Respond To/Implement the RSA Findings: \_\_\_\_\_  
 Date: \_\_\_\_\_

**Submit Application to:** Bahram Dariush, P.E. Phone: 602-712-2332  
 STSP/RSA Engineer Fax: 602-712-3488  
 1615 West Jackson St., Mail Drop  
 065R Phoenix, AZ 85007-3217 Email: AZRSA@azdot.gov

# Tribal RSAs Examples

**SR-389 MP 14-30**

Kaibab Band of Paiute Indians

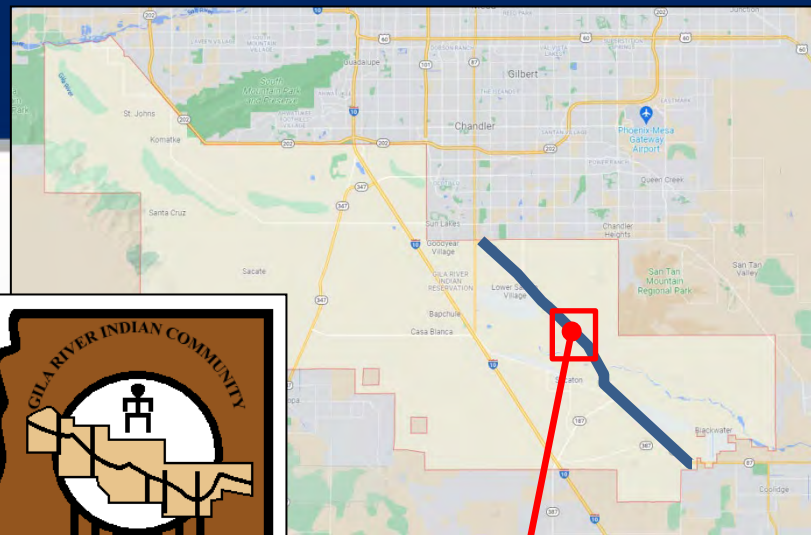
**SR-87 and Gilbert Rd**

Gila River Indian Community



# SR-87 and Gilbert Rd

- Un-signalized intersection
- SR-87 bi-pass for I-10
  - Rural two lane state route
  - Speed Limit 65 MPH
- Gilbert Rd
  - Rural two lane tribal route
  - Speed limit 55 MPH





# SR-87 and Gilbert Rd

- Primary Crash/Violations:
  - Angle and left turn
  - Failure-to-Yield
  
- Community Concerns:
  - Overall safety, limited visibility for Gilbert Road traffic
  - Location ranked first on statewide network screening

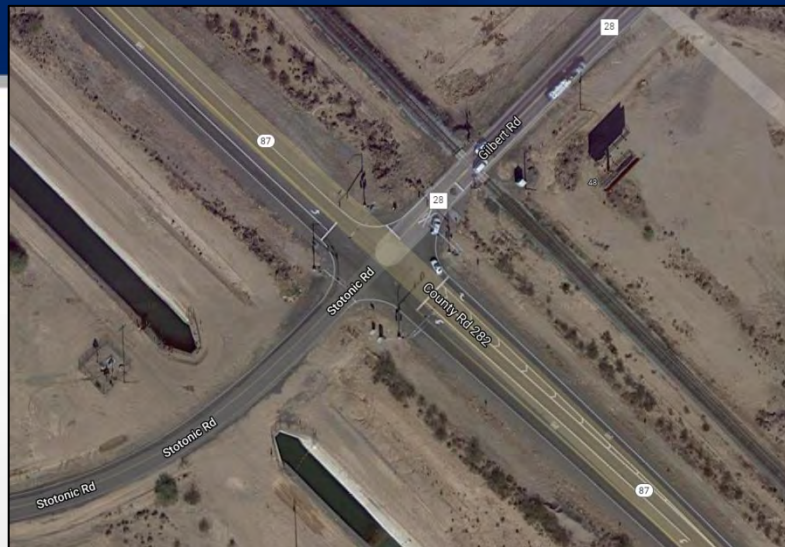




# SR-87 and Gilbert Rd

## Results of Site Visit

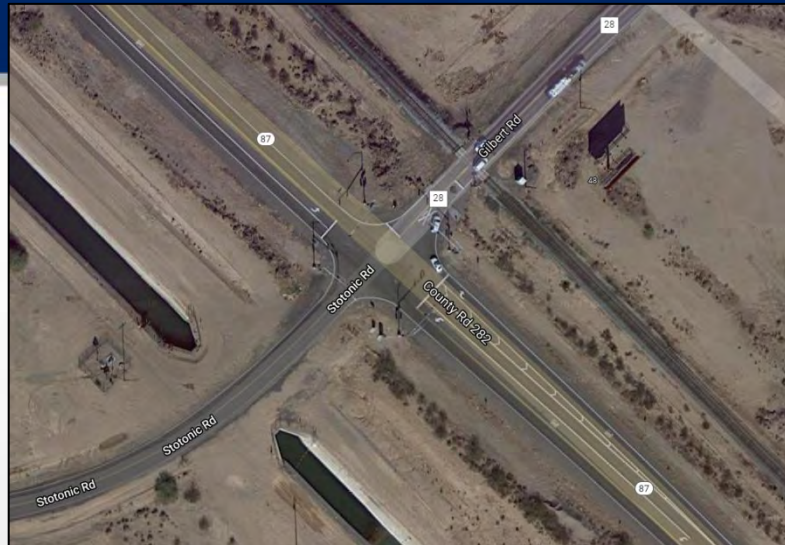
- Previous Safety Projects
- GRIC turn lane installation
- Increase in Commuter traffic
- Decrease in gaps, high speeds
- Increased need for lighting in the area



# SR-87 and Gilbert Rd

## Recommendations

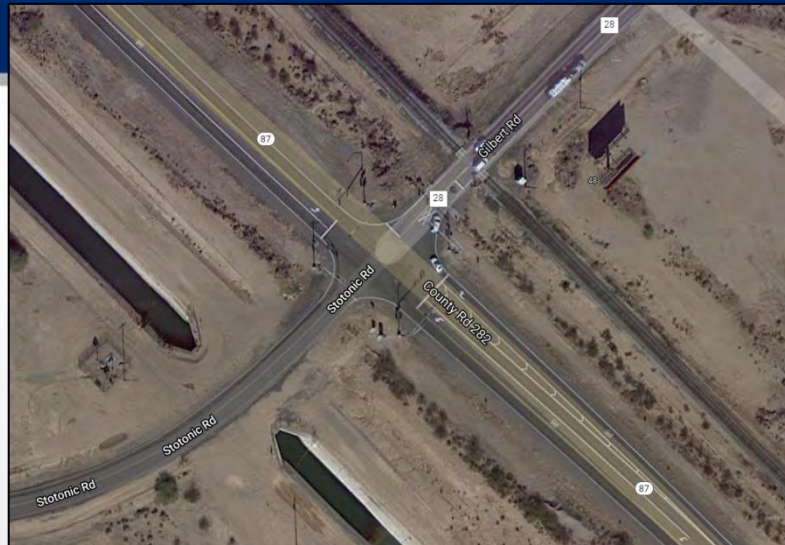
- Perform Traffic Signal Analysis
- Provide Intersection Lighting
- Provide Community awareness



# SR-87 and Gilbert Rd

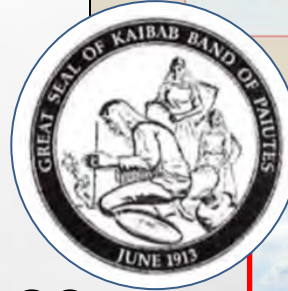
## Outcome

- Signal warrants met
- State applied for safety funding through Highway Safety Improvement Program (HSIP)
- Signal installed 2019



# SR-389 MP 14-30

- Rural two lane state route
- Speed limit: 65 MPH
- Volume: 1900-2300 ADT
- No or inadequate turn lanes
- Concerns for turning traffic safety
- Especially at Pipe Spring Nat. Mon. Rd



**ARIZONA  
ROAD SAFETY ASSESSMENT APPLICATION**

- Name, Position/Title, Address of Contact Person:  
 Laura Savala, Council Member  
 HC 65 Box 2, Fredonia, Az. 86022  
 Phone Number: 928 643 7944  
 Fax: 888 929 7777  
 Email: lsavala@kaibabpauite-nsn.gov  
 msavala@kaibabpauite-nsn.gov  
 Manuel M. Savala, Chairperson  
 HCES Box 2, Fredonia, Az. 86022
- Type of assessment requested (planning, design, construction, existing): Existing
- Specific location of proposed RSA project (intersection, spot location, road segment or project, or new facility):  
 Route(s): SR389 Segment: On Kaibab Reserwat Project: 16 miles KSA  
 From/To (if segment/project): mile Post 14 to 30 Segment Length: 16 Miles  
 City/County/Tribe: Hohavva County, Kaibab Paiute Indian Reservation
- Describe any improvement plans, including stage (striping, design, construction, etc.), for this location:  
None - all existing conditions
- Reasons for requesting RSA:  
None identified in turn lane improvements at CR240 County Road intersection.  
Other safety concerns/locations were identified in ADOT RSA by Mike Blankenship in 2009, site visit.
- What is the crash experience for the most recent 3-year period (total crashes, fatal crashes, injury crashes, crash rate, etc.?) (not applicable for new facility) All data will be from ADOT's records.
- Does your agency have a method to identify and prioritize road safety issues? NO. If yes, where does this location rank within your agency's problem locations?
- Average Daily Traffic (ADT) volume for road(s):  
 2008 data ADT mp 4.78 to mp 19.19 1960 ADT  
 ADOT Counter ID# 101654 mp 19.19 to mp 30.40 2300 ADT
- Please list month and/or days of week when safety issues are most prevalent, if applicable:  
Monday to Friday 8 am - 5 pm
- Describe any future development planned for this area:  
Res. Subway Restaurant at SR389 & CR 240 (Pipe Spring Rd.), and renovation of RV Campground.
- Please include any additional road owners, photos and/or other information that highlight the location:  
Truck movements are difficult to create problems with sight distance. State Route 389, within the Kaibab Indian Reservation; Mike Blankenship did RSA at RIA Rt. 50
- Signature (and printed name) of Person with Authority to Respond To/Implement the RSA Findings: In 2009, Manuel M. Savala, Chairperson Date: 23 October 2014

Submit Application to: Mike Blankenship, P.E.  
 Road Safety Assessment Program Manager  
 1615 West Jackson St., Mail Dmp 065R  
 Phoenix, AZ 85007-3217  
 Phone: 602-712-7601  
 Fax: 602-712-3243  
 Email: mblankenship@azdot.gov



# SR-389 MP 14-30

- Crash History:

- 31 crashes 2004-13

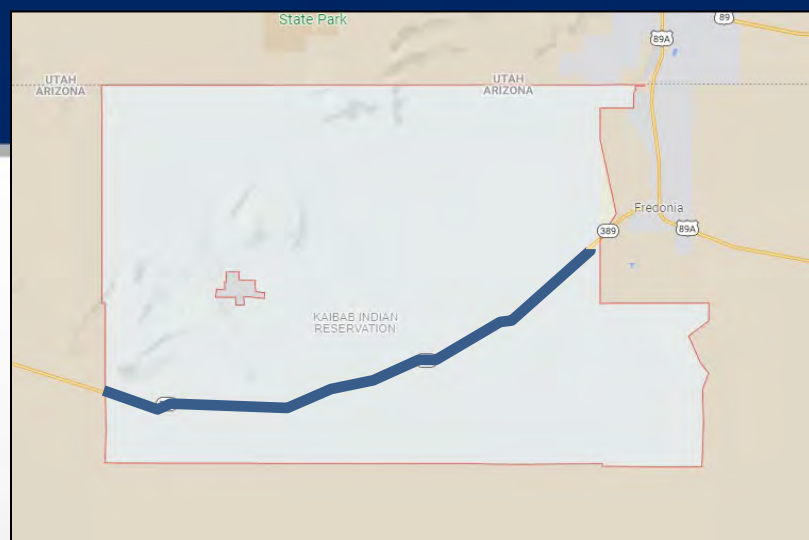
- Severity:

- 1 Serious Injury, 7 Non-serious injury, 4 possible injury

- 19 property damage only

- Primary Crash Type: **Rear-End and Rollover**

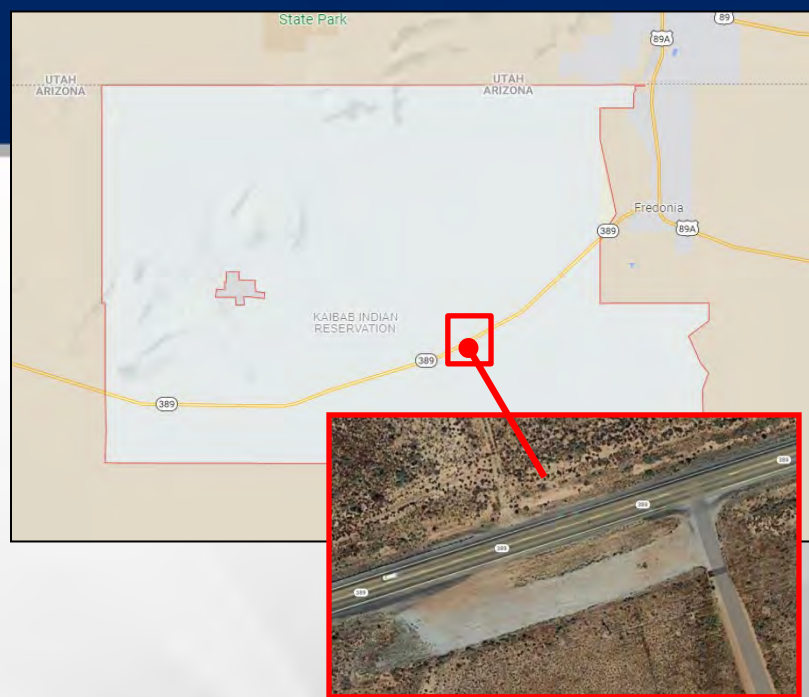
- Primary Driver Violation: **Speed-to-Fast**



# SR-389 MP 14-30

## Community Concerns: Intersection

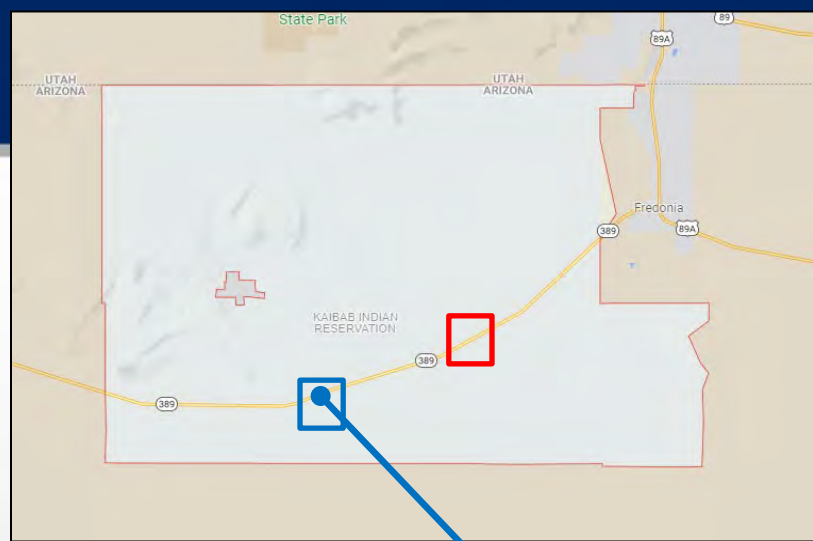
- South Antelope Valley Rd
  - Lack of advanced signage
  - Mining Trucks
  - Drivers directly accessing SR-389 from shoulder



# SR-389 MP 14-30

## Community Concerns: Intersection

- Pipe Spring National Monument Rd
  - Lack of turn lane storage space
  - Trucks parking on shoulder
  - Intersection not lighted
  - Shoulder drop off

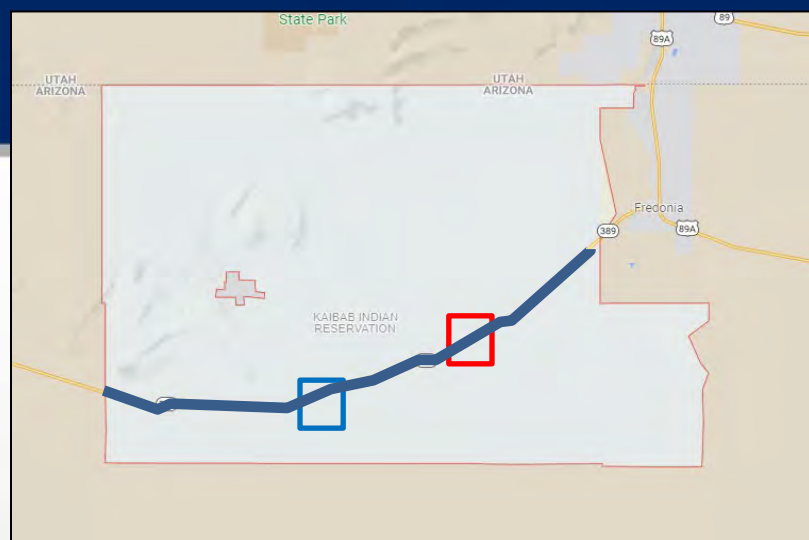


# SR-389 MP 14-30

Community Concerns:

Entire Route

- Signing understandable to international visitors
- Delayed emergency response times

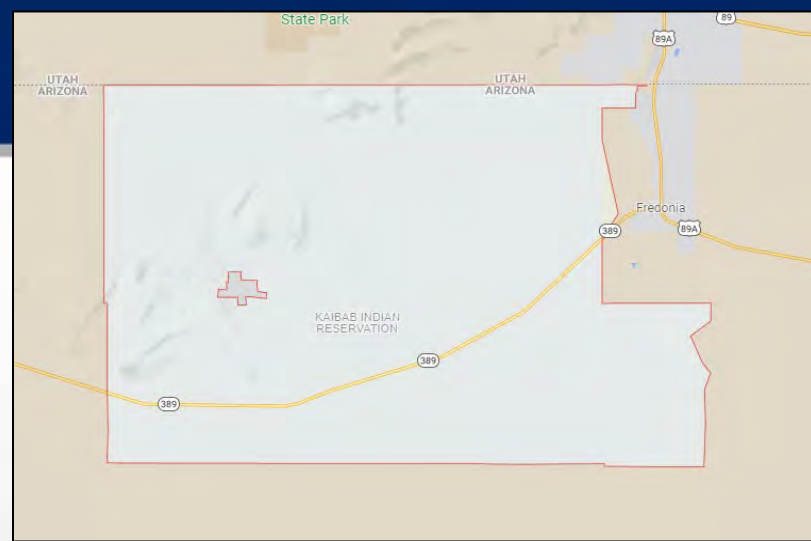




# SR-389 MP 14-30

## RSA Field Observations

- Generally well maintained
- Adequate sight distance and shoulders
- Most of the community concerns validated incl.:
  - Turn lane length, parking and shoulder access
  - Some sign clutter



# SR-389 MP 14-30

## RSA Recommendations

Inter: Pipe Spring National Monument Rd

- Lengthen right and left turn bay storage



# SR-389 MP 14-30

## Outcome

- RSA Report Published
- Tribal Transportation Program Safety Funds (TTPSF) applied for
- Pipe Springs turn bay extension project approved for funding 2017
- Funding amount: \$369,000
- Installed March 2020

SR 389 MP 14 to MP 30  
Road Safety Assessment  
Arizona



Prepared for:  
State of Pinalte Indians

Prepared by:



Assessment Program  
by Assessment Program  
Department Traffic Safety Section  
3000 N. 30th Street, Mesa Drop 060R  
Mesa, AZ 85007-3217  
712-4382  
March 2014

From: [TTP@DOT.GOV](#)  
To: [TTP@DOT.GOV](#)  
Subject: [Request for Proposal - Tribal Road Safety Assessment for TTP Safety Funds](#)  
Date: Monday, December 11, 2017 11:01 AM

**DO NOT REPLY TO THIS EMAIL ADDRESS.**

This mailbox is not monitored.  
Please advise that any correspondence is sent to [TTP@DOT.GOV](mailto:TTP@DOT.GOV) and references Application ID: 438-17-000017.

This message was sent to: [evliskick@highwayengineering.com](mailto:evliskick@highwayengineering.com); [evliskick@tribaltransportation.gov](mailto:evliskick@tribaltransportation.gov); and, [TTPSF@DOT.GOV](mailto:TTPSF@DOT.GOV)

**Thank you for completing an application to the Tribal Transportation Program (TTP) Safety Fund.**

If you provided a Project Narrative then your application is complete. If not, please finish the application by forwarding this email with your project narrative attached to: [TTPSF@DOT.GOV](mailto:TTPSF@DOT.GOV).

**Application for Federal Assistance (SF-424) for TTP Safety Fund**

**Grant Info**

Name of Federal Agency	Federal Highway Administration
Catalog of Federal Domestic Assistance (CFDA) Number	20.205
CFDA Title	Highway Planning and Construction
Funding Opportunity Title	Tribal Transportation Program Safety Fund
Type of Application	Indian Title

# RSA Overview

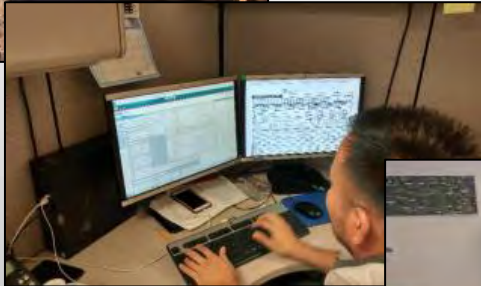
Roadway problem or concern reported

Crash and roadway data reviewed

RSA conducted

Recommendations should address:

- Patterns? – Yes or No
- Solutions? – Yes or No
- Actionable? – Yes or No





Questions?

