TENTH LEGISLATURE
OF THE
CHEYENNE AND ARAPAHO TRIBES
REGULAR SESSION
DECEMBER 13, 2025
LCR, CONCHO, OK

RESOLUTION: A Resolution to Approve the Adoption of the Cheyenne and Arapaho Tribes Fiscal Year 2025 Transportation Safety Plan (FY25 TSP) as per 25 CFR Part 170, §170.128(a)(1), and Pursuant to 23 USC 201(c) to the Federal Highway Administration (FHWA)

RESOLUTION NO: 10L-RS-2025-12-003
DATE INTRODUCED: November 3, 2025
SPONSOR:
CO-SPONSOR:

SUBJECT: A Resolution to Approve the Adoption of the Cheyenne and Arapaho Tribes Fiscal Year 2025 Transportation Safety Plan (FY25 TSP) as per 25 CFR Part 170, §170.128(a)(1), and Pursuant to 23 USC 201(c) to the Federal Highway Administration (FHWA)

WHEREAS: The Cheyenne and Arapaho Tribes are a federally recognized Indian Tribe organized under the Constitution of the Cheyenne and Arapaho Tribes approved by the Tribal membership on April 4, 2006 and accepted by the Secretary of Interior; and

WHEREAS: Article VI, Section 5(a) of the Constitution provides that the Legislative power shall be vested in the Legislature; and

WHEREAS: Article VI, Section 5(a) of the Constitution grants the Legislature the power to make laws and resolutions in accordance with the Constitution which are necessary and proper for the good of the Tribes; and

WHEREAS: The Cheyenne and Arapaho Department of Transportation as per Government-to-Government Agreement #A23AV00096, Article III, Section 4, is responsible to carry out transportation planning and inventory process on behalf of the Cheyenne and Arapaho Tribes; and,

WHEREAS: The Cheyenne and Arapaho Tribes are dedicated to providing safe, dependable, economical transportation services for the welfare of Tribal people; and

WHEREAS: The Cheyenne and Arapaho Tribes Department of Transportation, as a transportation-related responsibility, identifies the need for a Transportation Safety Plan as an essential component and effective planning tool for prioritizing and implementing safety solutions to transportation within the Tribes' service area; and

WHEREAS: The Cheyenne and Arapaho Tribes Department of Transportation hereby certifies that the required public involvement was conducted through a call for projects, community meetings, and a Stakeholders' Meeting held on July 22, 2025 per Tribal Transportation Program requirements as outline in §170.413 (a) and (b); and

NOW THEREFORE BE IT RESOLVED that the Tenth Legislature of the Cheyenne and Arapaho Tribes, pursuant to its Constitutional authority, hereby approves the Department of Transportation's FY2025 Transportation Safety Plan to implement transportation safety activities related to education, emergency response, enforcement, and engineering improvements.

BE IT FURTHER RESOLVED, that the Tenth Legislature of the Cheyenne and Arapaho Tribe, pursuant to its Constitutional authority, approves the adoption of the Cheyenne and Arapaho Tribes Fiscal Year 2025 Transportation Safety Plan (FY25 TSP) as per 25 CFR Part 170; and

NOW THEREFORE BE IT FINALLY RESOLVED, that the Tenth Legislature of the Cheyenne and Arapaho Tribes, authorizes the Governor to sign all related documents for the submission of the Cheyenne and Arapaho Tribes FY25 TSP pursuant to 23 USC 201(c) to the Federal Highway Administration (FHWA).

_____

Kendricks Sleeper
Speaker of the Tenth Legislature
Cheyenne and Arapaho Tribes

ATTEST:

I, Jodi White Buffalo, Legislative Clerk, hereby certify that the foregoing is a True and Accurate Copy of the Original Bill No. 10L-RS-2025-12-003 which was acted upon by the Legislature of the Cheyenne and Arapaho Tribes in the Tenth Legislature Regular Session, by a roll call vote on the 13th day of December 2025, by a vote.

VOTE RECORD:

DISTRICT	LEGISLATOR	YES	NO	ABSTAIN	ABSENT
A1	Diane Willis				
A2	Kendricks Sleeper				
A3	Travis Ruiz				
A4	Rector Candy				
C1	Bruce Whiteman, Jr.				
C2	George Woods				
C3	Thomas Trout				
C4	Byron Byrd				
	TOTAL				
Passes ( ) Fails ( ) Tabled ( ) Allowed to Die ( ) No Action ( )					

Jodi White Buffalo, Legislative Clerk
Tenth Legislature, Cheyenne and Arapaho Tribes

ATTEST:
Pursuant to Article VI, Section 7, subsection (a)(iv) of the Tribes Constitution reads in part: "All Bills passed by the Legislature shall be presented to the Governor for signature or veto. All laws shall take effect thirty days after signature by the Governor or veto override by the Legislature unless any Member of the Tribes submits to the Coordinator of the Office of Tribal Council a petition signed by at least one hundred fifty Members of the Tribal Council seeking to repeal the law or resolution at the next Tribal Council meeting. If the Tribal Council fails to repeal such law or resolution at the next Tribal Council where the matter has been properly placed on the agenda for the Tribal Council meeting, such law or resolution shall become effective immediately."

Pursuant to Article VII, Section 4, subsection (g) of the Tribes Constitution reads: "The Governor shall have the power to sign any enactment passed by the Legislature into law or to veto any enactment passed by the Legislature within ten days of passage with a written explanation of any objections; and if the Governor takes no action within ten days, then the enactment shall become law in accordance with this Constitution."

{ } APPROVED
{ } VETOED: Attachment ____; Governor's written explanation of any objections.

On the _____ day of _____, 2025.

_____
Reggie Wassana, Governor
Cheyenne and Arapaho Tribes

TRANSMITTAL OF DOCUMENTS:
From the Legislative Branch to the Office of Records Management

ATTEST:
Pursuant to Article VI, Section 7, subsection (a)(v), of the Tribes Constitution reads, "The Office of Records Management shall compile all Laws and Resolutions into a comprehensive Code in an orderly manner that shall be published annually."

Office of Records Management Staff, hereby certify that the foregoing is a True and Accurate Original Resolution No. 10L-RS-2025-12-003.
Space below is reserved for Stamp:
Received (Date) Office of Record Management

Signature: _____

Print Name: _____
Title: _____
Date: _____

Office of Records Management
Department of Administration, Executive Branch
Cheyenne and Arapaho Tribes

Cheyenne and Arapaho Tribes
Legislative Action Request

This Form will be used by the Governor of the Cheyenne and Arapaho Tribes on behalf of all Departments and programs when submitting all Bills and Resolutions to the Legislative Branch for Public Hearings and Regular/Special Sessions.

Name: Anita Pawnee
Title: HWY Safety Spec/Safety C
Contact Number: Ext. 27778
Work E-mail: apawnee@cheyenneandarapaho-nsn.gov
Department: Transportation
Program: Transportation Safety
Date of Submission: 11/3/25
Date Document is Needed 12/13/25
Regular/Special Session: Regular

What Type of Request: Bill, Resolution, Contract, and Supporting Documents are you submitting:
New Bill to be adopted: _____; Revised Act to be adopted: _____
New Resolution to be adopted: FY25 TSP; Revised Resolution to be adopted: _____
New Contract to be adopted: _____; Revised Contract to be adopted: _____
Supporting Document: Transportation Safety Plan; Supporting Document: _____

Please provide a detailed description of your request to include what type of action is required by the Legislature. Attach all supporting documentation to this form.

A resolution to approve the adoption of the Cheyenne and Arapaho FY2025 Transportation Safety Plan to implement transportation safety activities related to education, emergency response, enforcement, and engineering improvements.

Program Director Approval: _____ Date: 11/3/25
Department Executive Director Approval: _____ Date: 11/03/2025
Received and Reviewed by Legal Department, Executive Branch:
Tribal Attorney: _____ Date: 11/03/25
Received by Executive Office: _____ Date: 11/3/25
Governor Approval: _____ Date: 11-3-25

ACTION TAKEN BY LEGISLATIVE BRANCH:

Resolution /Bill # _____

ATTEST:
The Legislative Staff hereby certify that the foregoing (Bills, Resolutions, Contracts, and/or supporting documents) that were submitted by the Submitting Party are complete.
Legislative Staff: _____ Title: _____

Date of action: _____

A copy of the official document must be submitted to the Office of Records Management

CHEYENNE AND ARAPAHO TRIBES
2025 TRANSPORTATION SAFETY PLAN

October 2025
Developed in Partnership with:

RED PLAINS
PROFESSIONAL, INC.

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"Improving Safety, Every Tribal Member, Every Time"

INTRODUCTION

The Cheyenne and Arapaho Tribes are committed to reducing the risk of deaths and serious injuries that occur as a result of incidents within and adjacent to the Tribes' Reservation Boundary. The overall goal for Cheyenne and Arapaho Tribes is for all transportation users to arrive safely at their destinations. At the direction of the Transportation Safety Program, this high level plan was developed in conjunction with Red Plains Professional to identify concerns, opportunities, and activities that, when implemented, will improve transportation safety for the Tribe, its people, and the public.

The Transportation Safety Plan (TSP) for the Cheyenne and Arapaho Tribes shall identify the transportation safety needs and strategies to support the health and well-being of the Tribal communities within and adjacent to the Tribes' service area. One of the goals of the Transportation Safety Plan will be to raise awareness, promote education on safety laws, provide mitigation to safety concerns, and analyze crash data. Another goal will be to support prioritization of needed transportation safety improvements on the specific transportation network affecting safe ingress and egress to and from Tribal lands and facilities. The Cheyenne and Arapaho Tribe's transportation system consists of a mix of tribal, county, and state roads, which creates jurisdictional complexities with law enforcement, crash reporting, road maintenance, and capital safety projects. The TSP will be used as a communication tool, to not only apply for and justify future Tribal Transportation Plan Safety Funding (TTPSF) and other grant funding, but to identify the Tribes' safety emphasis areas and continuing safety improvement efforts. The TSP's development and future updates are the responsibility of the Tribe with input from various Safety partners or stakeholders.

The Cheyenne and Arapaho Tribe TSP includes tribal communities throughout ten counties in Oklahoma; Beckham, Blaine, Canadian, Custer, Dewey, Ellis, Kingfisher, Roger Mills, Washita, and Woodward County. The Cheyenne and Arapaho Tribal Lands consists of approximately 8,176 square miles. The Cheyenne and Arapaho Tribes' headquarters are located on the Concho Reserve, in Canadian County, four miles north of El Reno, on U.S. Highway 81. The closest metropolitan city is Oklahoma City, Oklahoma, which is 30 miles east of the Concho Reserve via Interstate Highway 40. The major portion of the Cheyenne and Arapaho Tribal service area can be described geographically as located in the northwest quadrant of the state of Oklahoma. Interstate Highway 40, which is essentially the southern boundary dissects the Cheyenne and Arapaho Tribal lands. There are only four cities and towns within the Cheyenne and Arapaho Tribal lands with populations at or above ten thousand (10,000) that include El Reno, Elk City, Weatherford, and Woodward. This indicates that most of the Cheyenne and Arapaho Tribal lands are rural communities and therefore area residents may travel more frequent and long distance for special services not available in smaller communities.

The U.S. Census Bureau 2019-2023 American Community Survey reports the Cheyenne and Arapaho Tribes Oklahoma Tribal Statistical Area (OTSA)[1] population statistics. The OTSA is shown as having as population of 192,150; 7,247 that are American Indian with a median age of 37.2. Of that, 52,350 were under 20 years of age, 37,990 were between the ages of 20 and 34, 49,052 were between the ages of 35 and 54, 40,999 were between the ages of 55 and 74, and 11,770 were over the age of 75.

[1] Census.gov Population Statistics https://www.census.gov/tribal/

PROCESS

PLAN DEVELOPMENT

Project Initiation

The Cheyenne and Arapaho Tribes received a FY2022 Transportation Safety Planning Grant award to contribute toward the completion of the Tribe's Safety Plan update. Through the Tribes' Procurement Office, an Invitation for Bids (IFB) was solicited to secure technical assistance from engineering firms in 2022. Red Plains Professional (RPP) was selected for the project. The Department of Transportation, through the FY2018 TSP, identified a host of emphasis areas in which to serve as safety concerns to initiate the TSP update. In addition, crash data was retained from Oklahoma Department of Transportation (ODOT) and analyzed to support areas of concern. Throughout the project lifespan, RPP met with the Cheyenne and Arapaho Transportation Safety Program to update the FY2018 TSP to include educational, enforcement, emergency response, and engineering concepts to identify capital safety projects.

Study Area

The study area was established to include the transportation network within Cheyenne and Arapaho Tribal Lands. The Cheyenne and Arapaho Tribe TSP includes tribal communities throughout ten counties in Oklahoma; Beckham, Blaine, Canadian, Custer, Dewey, Ellis, Kingfisher, Roger Mills, Washita, and Woodward. This study area includes approximately 1,130 miles of Tribal Transportation Program inventory facilities, including roads and transportation infrastructures, as well as a network of supporting roads.

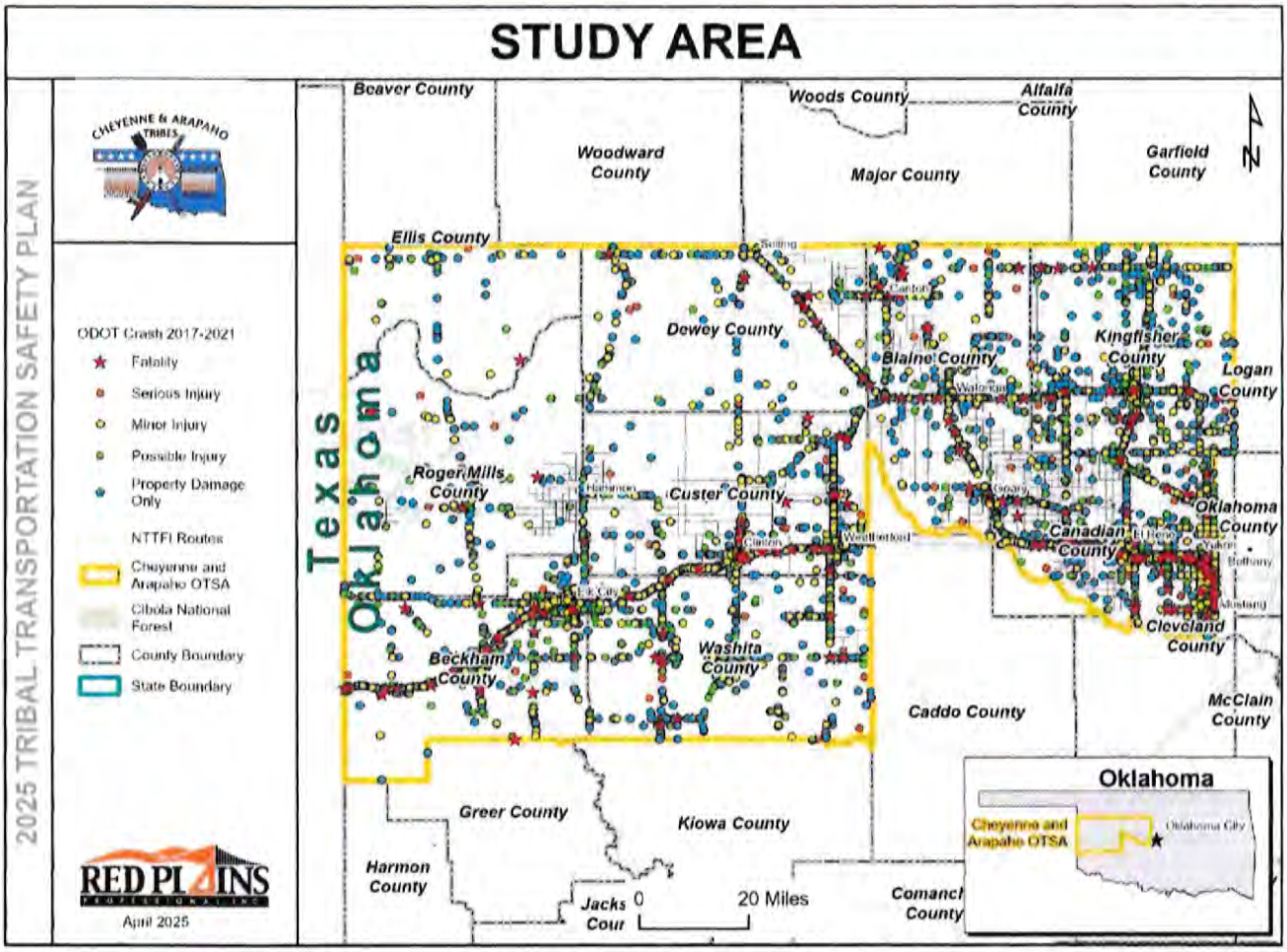

Figure 1 – Map of Study Area

Plan Development and Finalization

Through a call for projects in June of 2023, the Cheyenne and Arapaho Tribes Department of Transportation identified nine operating activities and thirty-nine capital projects as priority to the Tribes' within its FY2024 Long-Range Transportation Plan. As an update to the Tribes' LRTP, the Cheyenne and Arapaho Department of Transportation issued another call for projects in July of 2024 of which another ten capital projects were identified as priority to the Tribes. The ten projects added in 2024 have been submitted to the Tribes' BIA SPRO Regional Office as part of the FY2024 TTP-TIP update to the FY2023 LRTP. The Transportation Safety Plan was completed by RPP and presented to the Tribes in May 2025. The Cheyenne and Arapaho Department of Transportation revised the plan and presented a draft safety plan for public review in June 2025 and held a Stakeholder's meeting on July 22, 2025. The Cheyenne and Arapaho Department of Transportation allowed public review of the TSP which was then finalized through adoption by resolution through the December 2025 Legislative Regular Session.

Web Mapping Application

The Cheyenne and Arapaho Tribes 2025 Transportation Safety Plan was developed with a data driven approach using modern Geographic Information System mapping and visualization technologies. All project data is viewable with the following Web Mapping Application: https://red-plains.xyz/CheyenneArapaho

SAFETY PARTNERS

Safety Partners/Strategy Champions are agency departments and other entities that are directly involved in transportation safety through collaborative planning, maintenance, emergency response and actively implementing safety strategies. A detailed list of Transportation Safety Plan Stakeholders can be found as Appendix C to this document.

Cheyenne and Arapaho Tribes

- Tribal Council
- Office of the Governor
- Emergency Management Program
- Fire Management
- Planning and Development
- Operations and Maintenance
- Department of Transportation
- Department of Parks and Recreation
- Elder Services
- Department of Social Services
- Department of Labor
- Department of Administration
- Department of Justice
- Health Board
- Tribal Codes, Acts, and Ordinances
- Department of Education
- Department of Health
- Tribal Transit Program

Beckham County

- Emergency Management[2]

Custer County

- Emergency Management[3]
- Commissioners Anders, Walker, and Miller

Blaine County

- Commissioners Hicks, Schultz, and Matli
- Emergency Management[4]

Canadian County

- Commissioners Manske and Rider
- Safety Coordinator/Emergency Management[5]

Kingfisher County

- Emergency Management[6]
- County 911 Director[7]

Public Schools

- El Reno Public Schools Indian Education
- Hammon Public Schools JOM Parent Committee
- Watonga Public Schools Indian Education

State of Oklahoma

- Northern Oklahoma Regional Transportation Planning Organizations (NORTPO)
- Northern Oklahoma Development Authority (NODA)
- Southern Oklahoma Regional Transportation Planning Organization (SORPTO)/South Oklahoma Development Authority (SWODA)
- Oklahoma Department of Transportation (ODOT)
- Oklahoma Highway Safety Office (OHSO)

Federal

- USDI BIA OJS Concho Agency
- US Public Health Services
- USDOT NHTSA Region 6 Office
- Department of Transportation (BIA-DOT)
- Federal Highway Administration (FHWA) Office of Tribal Transportation – Tribal Transportation Program Safety Fund (TTPSF)
- USACE, Canton Lake, OK

[2] Beckham County Emergency Management https://beckham.okcounties.org/departments/emergency-management
[3] Custer County Emergency Management https://custer.okcounties.org/departments/emergency-management
[4] Blaine County Emergency Management https://blaine.okcounties.org/departments/emergency-management
[5] Canadian County Safety Coordinator/Emergency Management https://www.canadiancounty.org/886/Emergency-Management
[6] Kingfisher County Emergency Management https://kingfisher.okcounties.org/departments/emergency-management
[7] Kingfisher County 911 Director https://kingfisher.okcounties.org/departments/kingfisher-county-911

EXISTING EFFORTS

Existing efforts related to transportation safety are listed by entity or program below, as applicable.

CHEYENNE AND ARAPAHO TRIBES

The following planning documents and safety efforts identify and address a variety of safety concerns the Tribe has with their transportation system in and around the Tribal properties, facilities and roads accessing them. The Tribes have adopted high standards and expectations for all development projects, requiring consideration of transportation safety for both Tribal citizens and the traveling public. Below are some of the other existing efforts the Tribes are making to improve transportation safety:

- **Tribal Transportation Safety Plan (TTSP) (2018, 2025).** Transportation Safety Program (TSP) per §170.930 as an eligible activity in which to update the Tribes' Transportation Safety Plan and perform administrative management of the Transportation Safety Program. The Transportation Safety Plan shall utilize the collection of traffic crash and citation data within the Tribes' service area and then provide detailed analysis of data collected to identify baselines to determine areas of concern. The Transportation Safety Plan will consist of various findings and data to identify safety emphasis areas (or areas of concern) that align with the 4-E's (Engineering, Education, Enforcement, and Emergency Response) of FHWA's Transportation safety planning. The Transportation Safety Program realizes the need for training to perform necessary technical capacity to ensure the accuracy of all safety priority projects and activities are migrated into the Tribes GIS database and included within the LRTP and TTP-TIP. The Tribes' transportation safety planning and prioritization system also requires updating, training, and maintenance to ensure the system remains a functional tool for the Tribe. The Transportation Safety Program and safety planning process is a viable activity that requires TTP funding to support necessary training, maintenance, and updating on an annual basis.
- **Comprehensive Multimodal Pedestrian and Bicycle Plan:** The Cheyenne and Arapaho Department of Transportation, through the FY2023 Government-to-Government Tribal Transportation Program Agreement (TTPA) #A23AV00996, administers a Transportation Safety Program (TSP) per §170.930 as an eligible activity in which to manage transportation safety activities. Through a review of the Tribes' historical areas of concern as well as input from Tribal members, several comments were received in that connections between tribal communities and Tribal facilities situated on Tribal lands are accessed by foot or bicycle travel by a significant number of Tribal members. The Cheyenne and Arapaho Tribes identify five major State highways that run adjacent to routes that Tribal members walk or ride bikes to reach other Tribal facilities and/or destinations of Tribal significance. The five State highways include: State Highway 81 in Canadian County, Route 66 and State Highway in Custer County, and State Highway 281 and State Highway 58A in Blaine County. As the Tribes develop Tribal lands, an increase in pedestrian traffic and bicycle traffic has also increased. And in the past five (5) years, the Cheyenne and Arapaho Tribes have realized an increase in the number of near-miss incident reports between motorist and either pedestrians and/or bicycles adjacent to the five sites located near Concho, Oklahoma, Clinton, Oklahoma, Hammon, Oklahoma, Watonga, Oklahoma, and Canton, Oklahoma. A Comprehensive Multimodal Pedestrian and Bicycle Plan shall require significant planning, expansion, and coordination with various agencies. The pedestrian plan must focus on the condition of the existing trails and pathways utilized by the tribal citizens (youth to elders) and the general public to access services by foot or bike. Additional study and community involvement will be required to identify the desired connections that currently do not exist. Recreational trails will also be considered as a health benefit to Tribal and non-Tribal local communities and as potential enhancements to commercial and/or tourist

developments for the visiting public. Walking and hiking trails provide a great opportunity for Tribal community enhancement by incorporating cultural education and preservation through interpretive signage, bench seating with educational placards and interactive stations, the inclusion and display of traditional tribal art, environmental enhancements, and education of plant and animal species. For extended hours of operation and use, path lighting may be a consideration to ensure safe site distances and visibility. The project will consider the inclusion of emergency phones to serve as a form of communicating, reporting, or calling for assistance in the event of incidents along pedestrian and bike trails. The plan will also consider connectivity to other internal and external paths and trails. The Cheyenne and Arapaho Tribes identify the Comprehensive Multimodal Pedestrian and Bicycle Path project as a priority that is an eligible safety activity per (b)(14) and (b)(18) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.

- **Clinton I-40 Business Loop Pedestrian Safety Trail and Street Lighting Project (NI Route Proposed Pedestrian Pathway (1.2 Miles)):** The Cheyenne and Arapaho Tribes identify the need to provide a pedestrian safety trail and improve lighting along Gary Boulevard, also referred to as I-40 Business Loop, and extending 1.2 miles to Custer County Road N2270, also referred to Airport Road, located east of the City of Clinton in Custer County, Oklahoma. The scope of the Clinton I-40 Business Loop Pedestrian Safety trail and Light Project will be to construct an 8' wide pedestrian sidewalk, streetlights, safety barricades, and retroreflective delineators, and striping to separate motorist traffic from pedestrian traffic. The scope of work will be to improve safety to pedestrian and bicycle traffic, improve visibility, and improve sight distances. The Cheyenne and Arapaho Tribes identifies the need to coordinate and collaborate with Custer County and Oklahoma Department of Transportation due to the proximity of the projects activities to and including Custer County Road N2270 and I-40 Business Loop. The Cheyenne and Arapaho Tribes will strive to enter into any necessary Memorandum of Agreement (MOA) during the pre-planning phase to secure the required driveway permits, right-of-way easements, and/or relocate utilities to improve safety to motorist, pedestrians, and bicyclist along the route. The Cheyenne and Arapaho Tribes will apply for TTP Safety Funds (TTPSF) should the scope of the project align with the criteria and will allocate a portion of the Tribes' share of TTP funds to serve as a contribution or as matching funds to the grant. The Cheyenne and Arapaho Tribes identify the Clinton I-40 Business Loop Pedestrian Safety Trail and Light Project as a priority and is an eligible activity for planning, design, engineering, construction management, and construction per § 170.128 and (b) (1), (14), and (34) to (36) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.

- **Hammon Tribal Community Pedestrian Safety Trail Project (1.1 Miles):** The Cheyenne and Arapaho Tribes identify the need to construct an 8' concrete wide sidewalk pedestrian trail and install streetlights approximately 1.1 mile east along Oklahoma State Highway 33 (OK-33) located north of the Town of Hammon in Custer County, Oklahoma. The Hammon Tribal Community Pedestrian Safety Trail Project is to provide safe access to pedestrian and bicycle traffic from the Town of Hammon to the Tribes' lands referred to as the Redmoon Reserves. The Hammon Lucky Star Casino and Hammon Travel Center, economic development facilities, and the Hammon Emergency Response Center (ERC) Facility, are located on the Redmoon Reserve Tribal lands. The 15,386 SF Hammon Lucky Star Casino facility not only provides jobs to local residents from the Town of Hammon, but also provides entertainment to local patrons, and offers the sale of food and beverages through its restaurant. The Hammon Travel Center is a 3,585 SF facility that has two fuel stations to accommodate diesel trucks and also provides jobs to the local residents of the Town of Hammon, Oklahoma as well as serves as a convenient store through the sale of goods. The Hammon Emergency Response Center is to provide temporary and emergency shelter in the event a natural disaster is declared

within the surrounding communities. The Hammon ERC also serves as a multipurpose facility in which community meetings and traditional, cultural, and educational tribal events are held to provide direct services to Tribal members within the surrounding communities including Hammon and Elk City, Oklahoma.

The scope of the Hammon Tribal Community Pedestrian Safety Trail Project is to construct a pedestrian sidewalk to separate pedestrian traffic from motorists to improve safety. The scope of work will be to construct a pedestrian sidewalk adjacent and along Oklahoma State Highway 33 beginning at the intersection of State Highway 34 and extending 1.1 mile east to end at the west entrance to the Hammon Travel Center. The scope of the project will be to install ADA-compliant ramps and crosswalks at the intersection of Oklahoma State Highway 33 and State Highway 34, install traffic signs to decrease speeds, and retroreflective signs to improve visibility, and install light poles and fixtures to improve safety. The Cheyenne and Arapaho Tribes identifies the need to coordinate and collaborate with Custer County, Roger Mills County, and Oklahoma Department of Transportation to secure necessary easements and/or right of way (ROW), relocate utilities within the construction limits, and install rumble strips, and will strive to enter into an Memorandum of Agreement (MOA) during the pre-planning phase. The Cheyenne and Arapaho Tribes will apply for TTP Safety Funds (TTPSF) should the scope of the project align with the criteria and will allocate a portion of the Tribes' share of TTP funds to serve as a contribution or as matching funds to the grant. The Cheyenne and Arapaho Tribes identify the Hammon Tribal Community Pedestrian Safety Trail Project as a priority that is eligible for planning, design, engineering, construction management, and construction per §170.127 and (b)(2), (34), (35), and (36) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.

- **Canton Tribal Community Pedestrian and Bike Path Safety Project (TTP Route 1633, 1 Mile):** The Cheyenne and Arapaho Tribes identify the need to construct a 1-mile pedestrian and bike path to separate pedestrian and bike traffic from motorist along Tribal lands at the Cantonment Reserve and beginning NW of the Town of Canton in Blaine County, Oklahoma. The Canton Tribal Community Pedestrian and Bike Path Safety Project is to provide a pedestrian and bicycle safety sidewalk to the public that walks or rides bikes between the Tribes' lands and the Town of Canton, Oklahoma. The Canton Lucky Star Casino, a tribal economic facility, the Canton Head Start, an early education service facility, and the Canton Pow-wow Grounds are all located on the Cantonment Reserves. The Canton Lucky Star Casino and Canton Head Start facilities offer jobs to local residents of the Town of Canton while the Canton Pow-wow Grounds is designated to preserve the Tribes' culture through traditional and cultural events annually. The 26,418 SF Canton Lucky Star Casino facility not only provides jobs to local residents from the Town of Canton, but also provides entertainment and serves as a restaurant to local patrons. The Hammon Head Start Center is a 8,560 SF facility that has three (3) class rooms to accommodate children age 3-5 from surrounding communities including Canton, Seiling, and Watonga, Oklahoma.

  The scope of the Canton Tribal Community Pedestrian Safety Trail Project is to construct an 8' wide pedestrian sidewalk to separate pedestrian traffic from motorists to improve safety adjacent to and along State Highway 58A and West Pine Street in the Town of Canton, Oklahoma. The scope of project will begin at the south entrance to the Canton Lucky Star Casino and intersecting or lying adjacent to State Highway 58A, going south .62 miles to the intersection of State Highway 58A and Blaine County E. 660 Rd (Pine Street), and then extending east .38 mile to N. Armour Street in the Town of Canton, Oklahoma. The scope of the project will be to install ADA-compliant ramps and crosswalks at the intersection of Oklahoma State Highway 58A, install traffic signs to decrease speeds, and retroreflective signs to improve visibility, and install light poles and fixtures to improve safety. The Cheyenne and Arapaho Tribes identifies the need to coordinate and

collaborate with the Town of Canton, Blaine County Commissioners, and Oklahoma Department of Transportation to secure necessary easements and/or right of way (ROW), relocate utilities within the construction limits, and install rumble strips, and will strive to enter into an Memorandum of Agreement (MOA) during the pre-planning phase. The Cheyenne and Arapaho Tribes will apply for TTP Safety Funds (TTPSF) should the scope of the project align with the criteria and will allocate a portion of the Tribes' share of TTP funds to serve as a contribution or as matching funds to the grant. The Cheyenne and Arapaho Tribes identify the Canton Tribal Community Pedestrian Safety Trail Project as a priority that is eligible for planning, design, engineering, construction management, and construction per §170.127 and (b)(2), (34), (35), and (36) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.

- **Watonga Tribal Community Pedestrian and Bike Path Safety Project (TTP Route 1408, 1.98 Mile):** The Cheyenne and Arapaho Tribes identify the need to install street lights and improve the existing approximately concrete pathway, approximately 0.98 mile long ADA compliant pedestrian pathway along State Highway 270 located adjacent to the Franklin Reserve, SW of the City of Watonga in Blaine County, Oklahoma. The Watonga Tribal Community Pedestrian and Bike Path Safety Project is an existing concrete path that begin at the intersection of Russworm Drive and Clarence Nash Blvd in the city of Watonga and then extending south approximately 1 mile to end at the intersection of State Highway 270 and Blaine County E. 820 Rd. The concrete pedestrian path provides access to the Watonga Indian Health Services (IHS) facility, the Watonga Multi-Purpose Facility, the Food Distribution Center, the Watonga Lucky Star Hotel and Convention Center, and the Watonga Emergency Response Center located on the Franklin Reserve of the Tribes lands. The 8,352 SF Watonga Indian Health Facility offers dental and medical services to Tribal members, the 8,336 SF Food Distribution Facility provides foods as a commodity to Tribal members with low to no income, and the 6,660 SF Watonga Multi-purpose Facility is a designated site for multiple purposes including funeral services, community events, and cultural or educational events or activities. The 66,508 SF Watonga Lucky Star Hotel and Convention Center, a tribal economic facility, offers jobs to local residents of the City of Watonga, while the 13,820 SF Watonga Emergency Response Center (ERC) is to deploy emergency services to Tribal members in the event a natural disaster is declared. The Watonga ERC also serves as a multi-purpose facility and used to preserve the Tribes' culture through traditional and cultural events annually.

  The scope of the Watonga Tribal Community Pedestrian and Bike Path Safety Project is to construct an 8' wide sidewalk, with bollards, and streetlights, to provide safe access for pedestrian and bicycle traffic entering the various facilities located on the Franklin Reserve. The scope of the project will be to install ADA-compliant ramps and crosswalks at entry points to State Highway 270, install retroreflective traffic signs to improve visibility and decrease speeds, install bollards, and install light poles and fixtures to improve safety. The Cheyenne and Arapaho Tribes identifies the need to coordinate and collaborate with the City of Watonga, Blaine County and Oklahoma Department of Transportation due to the proximity of the projects activities to and including county roads and State Highway 270. The Cheyenne and Arapaho Tribes will strive to enter into any necessary Memorandum of Agreement (MOA) during the pre-planning phase to secure the required driveway permit and/or right-of-way easements. The Cheyenne and Arapaho Tribes will apply for TTP Safety Funds (TTPSF) should the scope of the project align with the criteria and will allocate a portion of the Tribes' share of TTP funds to serve as a contribution or as matching funds to the grant. The Cheyenne and Arapaho Tribes identify the Watonga Tribal Community Pedestrian and Bike Path Safety Project as a priority that is for planning, design, engineering, construction management, and construction per §170.127 and (b)(2), (34), (35), and (36) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.

- **El Reno/Concho Tribal Community (SH81) Pedestrian and Bike Path Safety Project (TTP Route 5559, 4.12 Miles):** The Cheyenne and Arapaho Tribes identify the need to improve safety through the construction of 4.12 miles of pedestrian sidewalk to accommodate pedestrian and bicycle traffic adjacent to State Highway 81 beginning at the Concho Reserve in Concho, Oklahoma and ending in the City of El Reno of Canadian County, Oklahoma. The scope of the El Reno/Concho Tribal Community (SH81) Pedestrian and Bike Path Safety Project is to construct 8' wide sidewalk/bike path beginning at Black Kettle Road at the entrance to the Concho Reserve, in Concho, Oklahoma, and ending at the intersection of Caddo Street and Choctaw Avenue in the City of El Reno, Oklahoma. The Concho Reserve lands serves as the Tribes' central hub under which several departments, programs, and services are situated. The various facilities housed on the Concho Reserve are the Concho Lucky Star Casino and the Concho Travel Center, a Planning and Development, Property & Supply, Food Pantry and Warehouse, Department of Labor, Indian Child Welfare, Head Start, Child Care, Diabetes Wellness Program, Tax Commission, Tribal Tag Office, Transit Program, Road Maintenance Program, Tribal gymnasium, and a post office. The Tribal Complex that includes a Personnel Office, Tribal Enrollment Office, Procurement, Grants & Contracts Office, Executive Office and an Office of Tribal Attorney are also located on the Concho Reserve. The El Reno/Concho Tribal Community (SH81) Pedestrian and Bike Path Safety Project is to provide safer access to the public that walks or rides bikes between the Tribes' lands and the City of El Reno, Oklahoma to access the many services and/or for jobs created through the various program, departments and/or tribal economic development facilities.

  The scope of the El Reno/Concho Tribal Community (SH81) Pedestrian and Bike Path Safety Project will be to construct an 8' wide concrete sidewalk, approximately 4.12 mile in length, including handicap accessibility to ensure ADA-compliance, and install light poles and fixtures to improve visibility at night. The scope of the project will be to install retroreflective traffic signs to improve sight distances, deter speeding, and improve visibility and install warning signals to improve safety to traveling public. The Cheyenne and Arapaho Tribes identifies the need to coordinate and collaborate with the City of El Reno, Canadian County Commissioners, and the Oklahoma Department of Transportation due to the proximity of the projects activities to and including City of El Reno streets, county roads and State Highway 81. The Cheyenne and Arapaho Tribes will strive to enter into any necessary Memorandum of Agreement (MOA) during the pre-planning phase to secure the required driveway permit and/or right-of-way easements. The Cheyenne and Arapaho Tribes will apply for TTP Safety Funds (TTPSF) should the scope of the project align with the criteria and will allocate a portion of the Tribes' share of TTP funds to serve as a contribution or as matching funds to the grant. The Cheyenne and Arapaho Tribes identify El Reno/Concho Tribal Community (SH81) Pedestrian and Bike Path Safety Project as a priority that is eligible for planning, design, engineering, construction management, and construction per §170.127 and (b)(2), (34), (35), and (36) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.

- **EMS Community Helipad Access Rd. Construction Project *(Various Locations, emphasis on Canton, Clinton, Colony, Concho, and Watonga Tribal Communities):*** The Cheyenne and Arapaho Tribes identify the need to provide safe access roads to helipad sites that provide clear landing zones for helicopters that serve as emergency medical flight to underserved tribal communities in the most rural locations of the Tribes service area. The Cheyenne and Arapaho Tribes' Emergency Medical Services (EMS) Program, under the Tribes' Department of Health, utilize helipads as a method in which to respond to emergency situations as a means to transport individuals timely and in an effort to save lives. The Cheyenne and Arapaho Tribes' EMS identified six (6) communities in which helipad sites are needed to provide transports of patients in an emergency. The six communities identified as emphasis areas for helipad access roads are: Canton, Oklahoma; Clinton, Oklahoma; Colony, Oklahoma; Concho, Oklahoma; Hammon, Oklahoma; and Watonga, Oklahoma. The EMS

Community Helipad Access Road Construction Project is to construct an access road with two (2) 12' wide lanes of high strength concrete to accommodate Emergency Medical Service (EMS) vehicles. The scope of the EMS Community Access Road Construction Project is to install curb and gutters and drain structures to improve drainage, traffic signs to control speeds, and striping to direct traffic safely. The scope of work is to install light poles and fixtures to improve sight distances and visibility at night to ensure access to motorists. The Cheyenne and Arapaho Tribes will apply for TTP Safety Funds (TTPSF) specifically for the construction of the access roads for each helipad site within the various Tribal communities should the scope of the project align with the TTPSF grant criteria and will allocate a portion of the Tribes' share of TTP funds to serve as a contribution or as matching funds to the grant.. The Cheyenne and Arapaho Tribes shall seek other grant funds and/or tribal funds specifically to construct the concrete pads that shall serve as part of the helipad features. The Cheyenne and Arapaho Tribe identifies the EMS Community Helipad Access Road Construction Project as a priority that is an eligible activity for planning, design, engineering, construction management, and construction per (b)(1) and (b)(2) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.

- **Black Kettle Blvd./Hwy 81 Safety Corridor Project (Route 5559, Section 010; Route 3817, Section 010; and Route 3818 Section 010:** The Cheyenne and Arapaho Tribes identify the need to improve safety to motorist and pedestrians at the intersection of Black Kettle Boulevard and State Highway 81, the main entrance to the Concho Reserve, located at Concho in Canadian County, Oklahoma. The Black Kettle Boulevard/State Highway 81 Safety Corridor Project scope shall be to realign various intersections to decrease bottlenecking, implement safety edges, and resurface roadways and parking areas to accommodate the traveling public. In addition, the project shall include the construction of a rest area with recreational trails and sanitary facilities to accommodate a buffalo lookout as part of the Tribes' recreation, tourism, and trails program. The Black Kettle Boulevard/State Highway 81 Safety Corridor Project scope shall be to implement roadway safety improvements as specifically recommended through a 2015 Roadway Safety Audit (RSA). Other improvements shall include extending merging lanes on State Highway 81 to accommodate traffic demands, installing rumble strips on State Highway 81, and installing light poles and lights along Black Kettle Boulevard to improve visibility and sight distances. The Cheyenne and Arapaho Tribes identifies the need to coordinate and collaborate with Canadian County and Oklahoma Department of Transportation due to the proximity of the projects activities to and including county roads and State Highway 81. The Cheyenne and Arapaho Tribes will strive to enter into any necessary Memorandum of Agreement (MOA) during the pre-planning phase to secure the required driveway permit, right-of-way easements, and/or relocate utilities. The Cheyenne and Arapaho Tribes will apply for TTP Safety Funds (TTPSF) should the scope of the project align with the TTPSF grant criteria and will allocate a portion of the Tribes' share of TTP funds to serve as a contribution or as matching funds to the grant. The Cheyenne and Arapaho Tribes identify the Black Kettle Boulevard/State Highway 81 Safety Corridor Project as a priority that is an eligible activity for planning, design, engineering, construction management, and construction per (b)(1) and (b)(18), (32), (34), and (41) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.
- **Carlton South Rd. Reconstruction Project (Route 1700 Section 010 (4.9 Miles)):** The Cheyenne and Arapaho Tribes identify the need to program funding to replace existing signs with retroreflective type and install chevrons to Blaine County N 2520 Rd that is a direct access to the Carlton community located SW of the Town of Canton in Blaine County, Oklahoma. The Carlton South Road consist of 3 miles of Blaine County N 2520 Road beginning at the intersection of Blaine County E 690 Road and going South to Blaine County E 720 Road and then extending East 2 miles to end at the intersection of State Highway 51A. The scope of the Carlton South Road Reconstruction Project is to ensure safe access to motorist through the application of retro-

reflective speed, stop, and chevron signs at the radius of the primary roadway curve and to decrease speeds and striping to improve safety to the traveling public. The Cheyenne and Arapaho Tribes identifies the need to enter into a Memorandum of Agreement (MOA) during the pre-planning phase with the Blaine County Commissioners. In addition, since the route is adjacent to State Highway 51A, the Roads Construction Program shall coordinate with Oklahoma Department of Transportation to secure any applicable permits. The Cheyenne and Arapaho Tribes will apply for TTP Safety Funds (TTPS) should the scope of the project align with the TTPSF grant criteria and will allocate a portion of the Tribes' share of TTP funds to serve as a contribution or as matching funds to the grant. The Cheyenne and Arapaho Tribes identify the Carlton South Road Safety Improvement Project as a priority that is eligible for planning, design, engineering, construction management, and construction per (b) (1), (7), (36), and (41) of Appendix A to Subpart B – Allowable Uses of TTP Funds of the Tribal Transportation Program Requirements.

STATE OF OKLAHOMA

Statewide Transportation Improvement Projects (STIP)[8] [9]

The Statewide Transportation Improvement Program (STIP) is the ODOT's four-year transportation preservation and capital improvement program which identifies multi-modal transportation projects that use Federal, State Bond, State priority, State Capital Outlay and local government transportation funds. It includes projects of regional significance (projects with high public interest or air quality impacts) and projects in the National Parks, National Forests and Native American Reservations. STIP determines which projects should be funded, when the work should be done, and what state or Federal funding sources or program(s) should be used to pay for them. ODOT coordinates with Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) to establish agency procedures for identifying investment priorities; and seeks agreement from Federal and state government agencies, MPOs, transportation interest groups, and other affected local jurisdictions about which projects have the highest priority in the upcoming four-year period. Projects are approved and scheduled according to their priority, available funding, and readiness to proceed.

The 2024-2027 ODOT STIP has various roadway improvements planned within the Tribal Lands, including various safety improvement projects and shoulder widening projects. The Cheyenne and Arapaho Department of Transportation shall strive to identify relevant projects from the STIP to incorporate into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

Strategic Highway Safety Plan (SHSP)[10]

Updated in 2023, the Oklahoma Department of Transportation's Strategic Highway Safety Plan (SHSP) is meant to be a guiding document for all of the state's transportation safety partners. The SHSP was developed using public road crash data and input from stakeholders throughout the state. The document's goal is to provide a safe roadway transportation system and push Oklahoma towards a Vision Zero goal of no deaths or serious injury to any travelers. The Cheyenne and Arapaho Department of Transportation shall strive to identify relevant projects from the SHSP to incorporate into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

[8] ODOT STIP https://oklahoma.gov/odot/programs-and-projects/programs/transportation-programs/stip.html
[9] ODOT STIP Map https://experience.arcgis.com/experience/ODOT-STIP
[10] ODOT SHSP https://oklahoma.gov/odot/programs-and-projects/programs/transportation-programs/shsp.html

Active Transportation Plan (ATP)[11]

Oklahoma's first Active Transportation Plan (ATP) was published in 2023. The plan is a tool to be used for Oklahoma communities to develop cohesive polices, programs and designs for the development and promotion of pedestrian and pedalcycle facilities. The Cheyenne and Arapaho Department of Transportation shall strive to identify relevant projects to the Tribes from the ATP to incorporate into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

Oklahoma Challenge[12]

Oklahoma Challenge is a safety advocacy program aimed at teen drivers. The program holds educational events at schools and introduced an app based rewards program to teen drivers to encourage safe driving habits. The CADOT's Transportation Safety Program shall strive to incorporate the Oklahoma Challenge objectives within its on-going safe driving activities and campaigns.

Oklahoma 2050 Long Range Transportation Plan[13]

The Long-Range Statewide Transportation Plan (LRSTP) serves as the primary framework for guiding decisions at all levels within the ODOT. The LRST Plan outlines the 25-year transportation vision for Oklahoma and provides ODOT with information, guidance, and direction to support strategic decision-making. The Cheyenne and Arapaho Department of Transportation shall strive to identify relevant projects to the Tribes from the Oklahoma 2050 LRSTP to incorporate into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

Forward 45[14]

The Southwest Oklahoma Regional Transportation Planning Organization's (SORPTO)[15] Forward 45 plan is a planning document being developed to guide transportation development in the southwest region over the next twenty years. The plan is developed with all modes of transportation in mind and a primary focus is on improving the safety of the region's transportation system. The Cheyenne and Arapaho Department of Transportation shall strive to identify relevant projects from the SORTPO's Forward 45 plan to incorporate into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

Oklahoma Highway Safety Office's (OHSO) Triennial Highway Safety Plan[16]

The OHSO is reasonable for managing safety programs designed to address traffic related fatalities and serious injury. With the input of the NHTSA, the FHWA, and various other stakeholders, OHSO develops and publishes a strategic Highway Safety Plan with the goal of reducing fatalities and serious injury on public roads. The Cheyenne and Arapaho Department of Transportation shall strive to identify areas of safety concern from OHSO's Triennial Highway Safety Plan to incorporate into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

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[11] ODOT ATP https://oklahoma.gov/odot/programs-and-projects/programs/transportation-programs/atp.html
[12] Oklahoma Challenge https://www.oklahomachallenge.org/
[13] ODOT LRTP https://www.oklongrangeplan.org/
[14] SORTPO Forward 45 https://sortpopublicinvolvement-poe.hub.arcgis.com/
[15] SORTPO https://sortpo.org
[16] OHSO Triennial Highway Safety Plan https://oklahoma.gov/highwaysafety/the-work-we-do/highway-safety-plan.html

Northern Oklahoma Regional Transportation Planning Organization (NORTPO)[17]

The NORTPO serves 16 counties in the Northwestern region of Oklahoma. The organization assists ODOT in meeting the Statewide Planning Process requirement and helps develop and publish regional LRTPs and help facilitate application to the TAP program. The Cheyenne and Arapaho Department of Transportation shall strive to collaborate with NORTPO to identify relevant safety projects to be incorporated into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

CANADIAN COUNTY

Hazard Mitigation Plan[18]

The Multi-Hazard Mitigation Plan identifies natural and man-made hazards most likely to occur in Canadian County and proposes appropriate mitigation measures and action plans in the event such hazards may occur. The primary goal of the Hazard Mitigation Plan is to protect public health and safety while providing pre and post disaster guidance. The Cheyenne and Arapaho Department of Transportation shall strive to identify relevant hazards from the Hazard Mitigation Plan for Canadian County to incorporate into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

BECKHAM COUNTY

Emergency Operations Plan[19]

The Beckham County Emergency Operations Plan was developed to provide an emergency management program for the county in the event of natural or man-made disaster. The document presents action plans for pre-disaster and post-disaster operations and any recovery measure to be taken to preserve life and minimize damage. The Cheyenne and Arapaho Department of Transportation shall strive to identify relevant hazards from the Beckham County Emergency Operations Plan to incorporate into the Tribes' LRTP and if applicable, to the Tribes' Transportation Safety Plan.

[17] NORTPO https://nortpo.org/
[18] Canadian County Hazard Mitigation Plan https://www.canadiancounty.org/889/Hazard-Mitigation-Plan
[19] Beckham County Emergency Operations Plan https://beckham.okcounties.org/departments/emergency-management

MOTOR VEHICLE CRASH DATA REVIEW AND ANALYSIS

OVERVIEW AND STUDY AREA MAP

The data sources for the following analysis was crash data received from Oklahoma Department of Transportation (ODOT) for the time frame of January 2017 to December 2021. The statistics below tell the story of ODOT crashes that occurred within the study area.

All project data is viewable with the following Web Mapping Application:

https://red-plains.xyz/CheyenneArapaho

The study area was established to include the transportation network within Cheyenne and Arapaho Tribal Lands. The Cheyenne and Arapaho Tribe TSP includes tribal communities throughout ten counties in Oklahoma; Beckham, Blaine, Canadian, Custer, Dewey, Ellis, Kingfisher, Roger Mills, Washita, and Woodward. The study area includes approximately 1,130 miles of Tribal Transportation Program inventory facilities, including roads and transportation infrastructures, as well as a network of supporting roads.

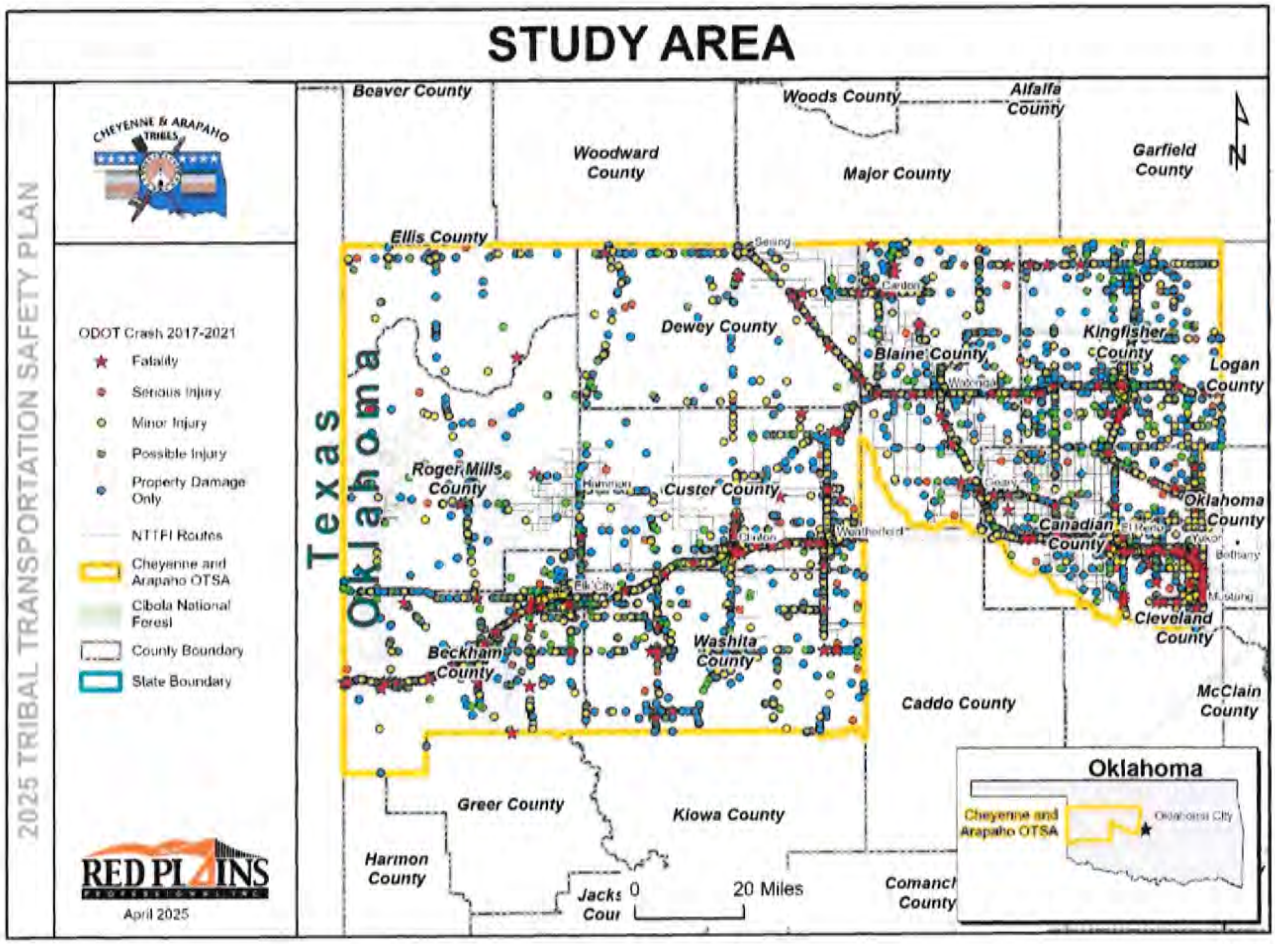


Figure 2 – Map of Study Area

CRASH TYPE AND INVOLVEMENT

Severity

- 2% (191 of 11010) of crashes resulted in Fatality. 4% (474) of crashes resulted in Serious Injury and 30% (3,264) resulting in Minor or Possible Injuries

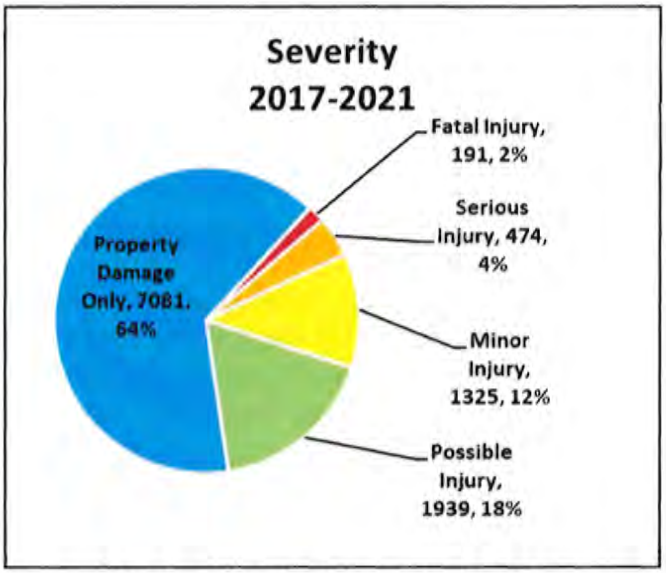


Figure 3 – Severity, totals and percentiles.

Year

- 2017 reported the highest number of crashes with 2696. 2020 reported the lowest with 1664 crashes.
- Decreasing crash trend.

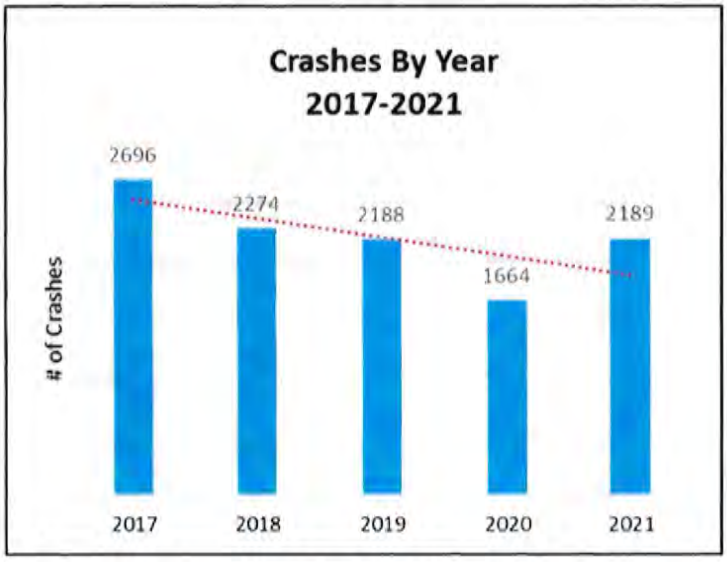


Figure 4 – Year Totals.

Mix

- 58% (6424 of 11010) of crashes involved two vehicles or parties, and 37% (4023) involved one vehicle or party.

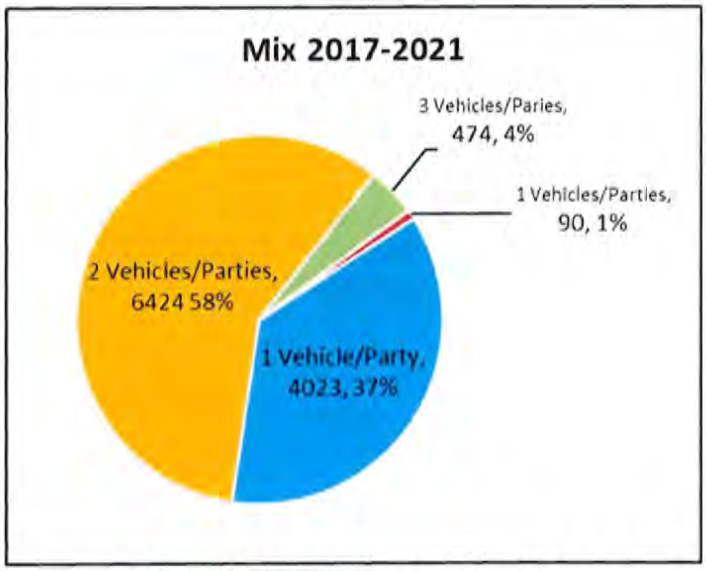


Figure 5 – Mix, totals and percentiles.

Crash Type

- Collisions with other Motor Vehicle reported the highest rate of occurrence with 58% (6357 of 11011).
- 18% (1968 of 11011) of crashes involved Fixed Object or Other Non-Fixed Object.
- 4% (410 of 11011) of crashes involved an Animal.
- 102 of crashes involved a Pedestrian or Pedalcycle

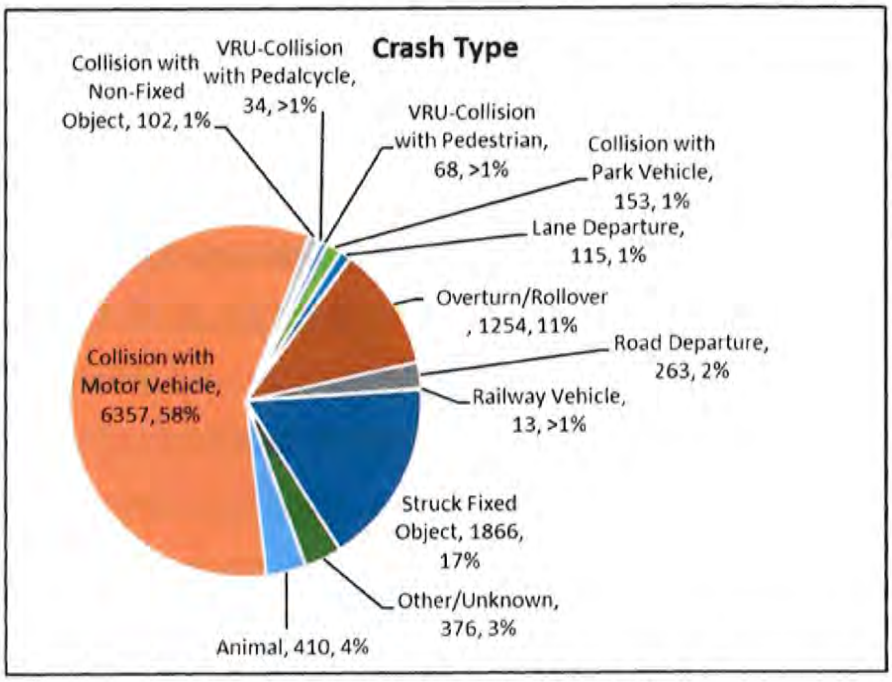


Figure 6 – Crash Type, totals and percentiles.

Light Conditions

- 33% (3,634 of 11,011) of crashes occurred in Dark or Low Light Conditions (Dusk/Dawn).
- Dark-Not Lighted reported the highest Fatality rate with 3%, and Suspected Serious Injury rate with 6%.

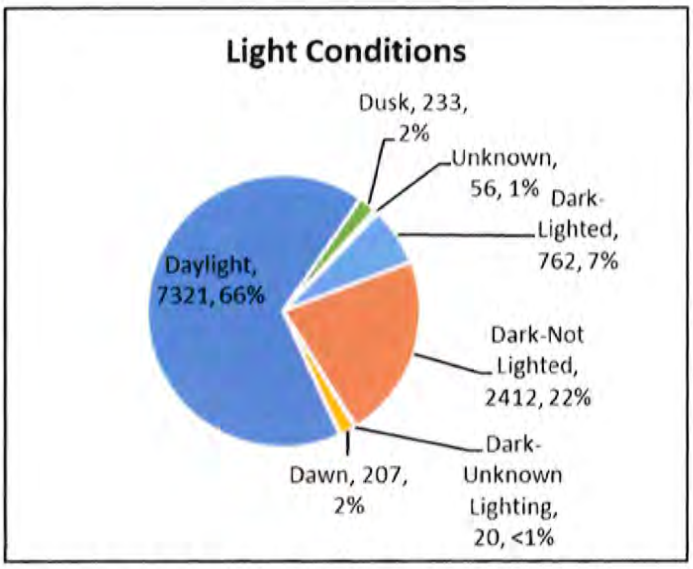


Figure 7 – Light Conditions, totals and percentiles.

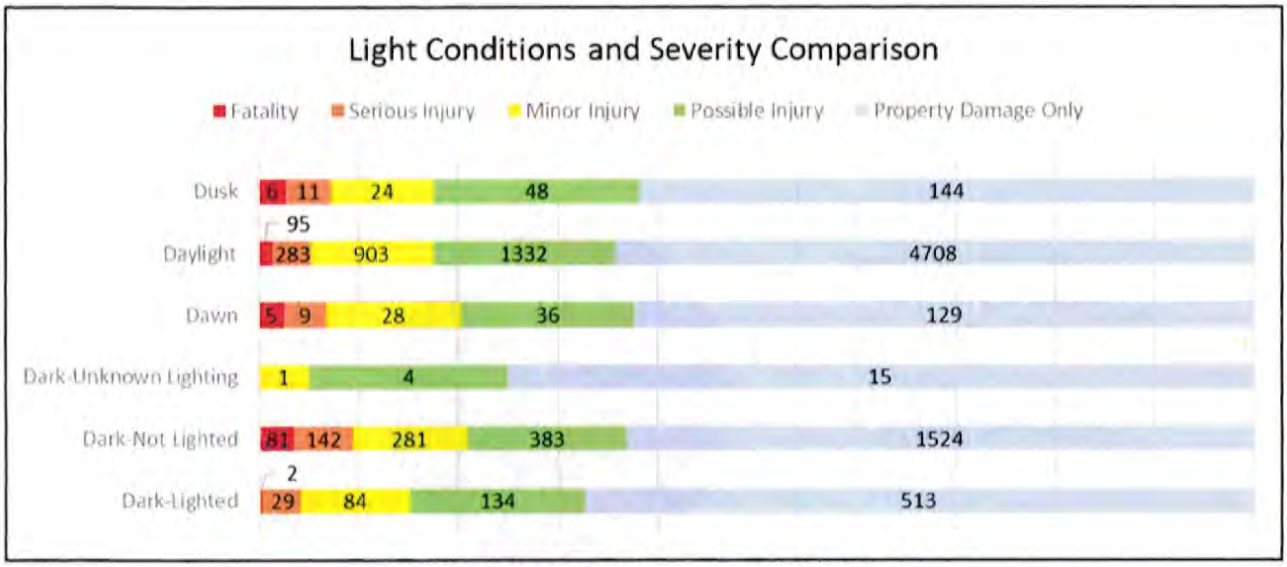


Figure 8 – Light Conditions and Severity, totals

Time of Day

- Morning reported the highest crash rate with 31% (3433 of 11011).
- Night reported the highest Fatality rates with 18% or Serious Injury rates with 40%.
- 93% (13 of 14) of Fatality, 70% of Suspected Serious Injury, and 83% of Animal involved crashes occurred in Evening or Night.

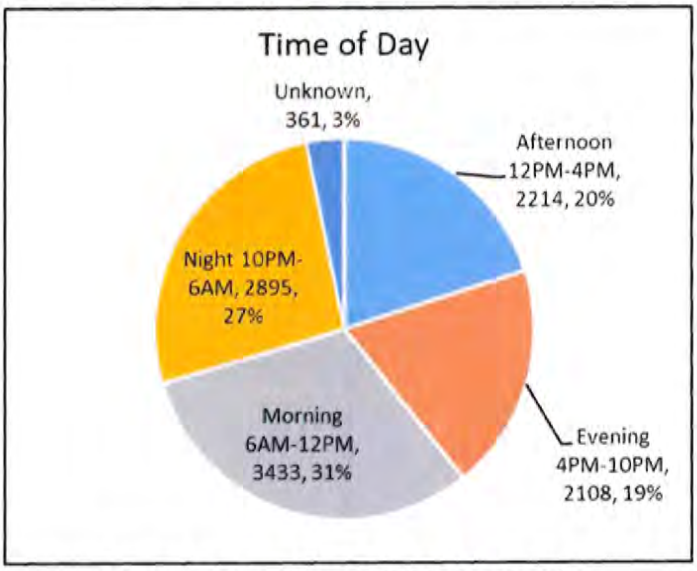


Figure 9 – Time of Day, totals and percentiles.

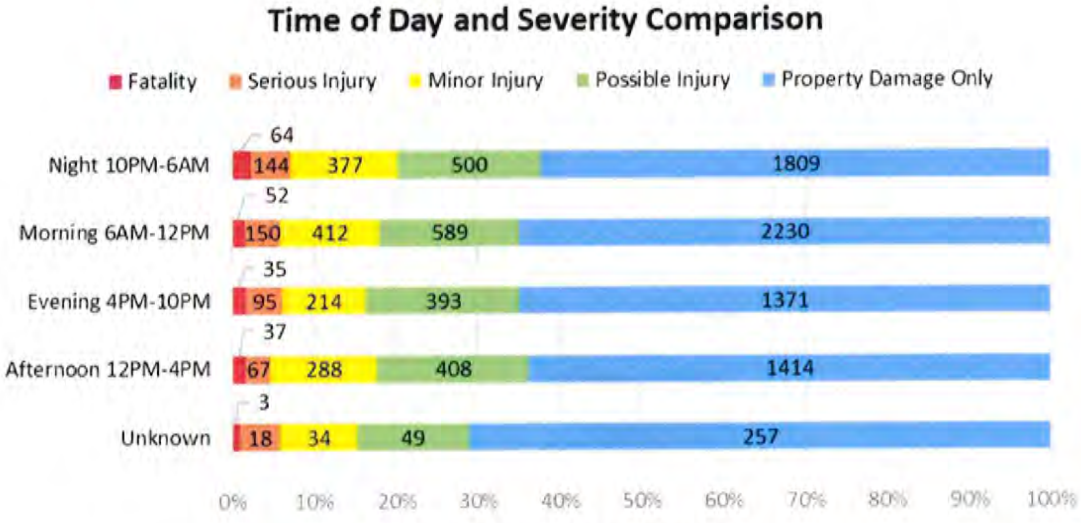


Figure 10 – Time of Day and Severity.

Road Surface Conditions, Location, Roadway Geometry

- 11% (1,143 of 11,011) of crashes occurred on in wet conditions.
- 5% (533 of 11,011) of crashes occurred in ice, snow, slush conditions

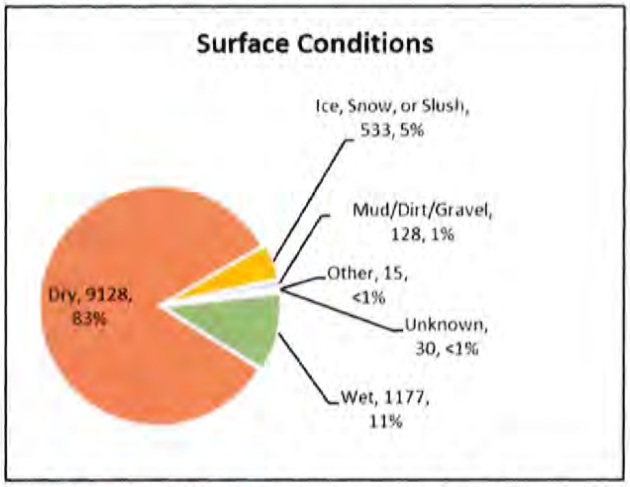


Figure 11 – Road Surface Conditions, totals and percentiles.

- 29% (3,197 of 11,011) of crashes were reported within or related to an Intersection or Junction

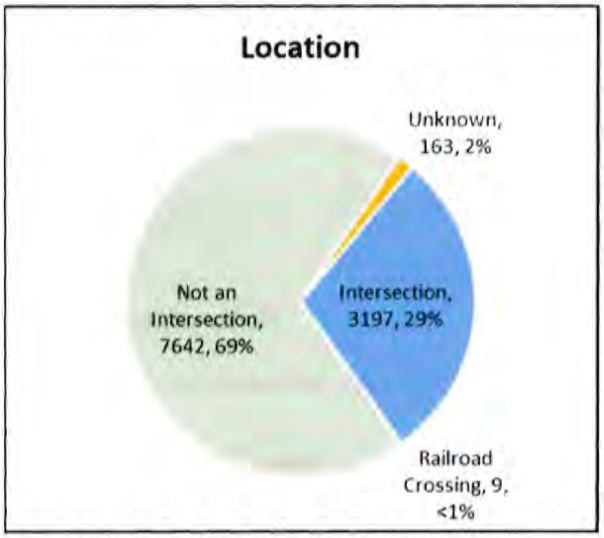


Figure 12 – Location, totals and percentiles.

Roadway Geometry		
Crash Location	**#**	**%**
Curve-Level	650	6%
Curve-Downhill	175	2%
Curve-Uphill	169	2%
Curve-Hillcrest	33	<1%
Curve-Sag (Bottom)	10	<1%
Total Crashes Occurring on Curves	***1037***	***10%***
Straight-Level	8314	76%
Straight-Downhill	776	7%
Straight-Uphill	587	5%
Straight-Hillcrest	186	2%
Straight-Sag (Bottom)	93	1%
Total Crashes Occurring on Straights	***9956***	***90%***
Unknown	18	<1%

Table 1 – Roadway Geometry, totals and percentiles

RISKY DRIVING BEHAVIORS

Primary human factors preceding the crash are the human action or behavior error that were reported as the primary cause of the crash. National Highway Safety Transportation Administration (NHTSA) defines Risky Driving Behaviors (RDB) as: Impaired (under influence of alcohol or drug, ill or drowsy), Distracted Driving/Innatention, Not Using Safety Equipment (seatbelts, helmet, etc), and Speeding (includes aggressive, careless or reckless driving). RDBs are behaviors of high-risk that need to be addressed to decrease the occurance of fatal and injury crashes. For this study, in addition to the NHTSA RDBs, Roadway (or Lane) Departure is also a RDB.

All primary human factors and crash severity are shown in the tables below. The RDBs for this study are:

- **RDB-Impaired** – Alcohol, Drug, Fatigued or Asleep, Other Physical Impairment, Eyesight Impaired, Illness
- **RDB-Inattention** – Disregarded Traffic Signal, Cell Phone Inattention, Fail to Yield, Following Too Closely, Passed Stop Sign
- **RDB-Roadway or Lane Departure** – From Opposite/Head-On-Collision, Improper Lane Change, Improper Turning, Drove Left of Center, Improper Overtaking, From Opposite Direction/Both Going Straight, From Opposite Direction/One Vehicle Spun On Roadway Before Being Hit, Immersion, Wrong Way
- **RDB-Safety Equipment (SE) Not Used** – Restraints Installed But Not Used, Restraints Not Installed, Helmet Not Used, Ejected From Vehicle
- **RDB-Speeding** – Speeding, Aggressive Driving, High Speed Pursuit

Risky Driving Behavior (RDB) and Severity

	# of Crashes					
	Fatal Crash	Serious Injury	Minor Injury	Possible Injury	Property Damage Only	Total
RDB-Impaired	8	14	26	36	109	193
RDB-Impaired, Avoiding Other Vehicle	1					1
RDB-Impaired, Failed to Stop	3	1	1	1	5	11
RDB-Impaired, Failed to Yield	1	7	1	3	8	20
RDB-Impaired, Followed Too Closely	1			3	4	8
RDB-Impaired, Improper Overtaking		1				1
RDB-Impaired, Improper Turn	2			2	2	6
RDB-Impaired, Pedestrian Action	1					1
RDB-Impaired, RDB-Inattention	1	3	4	6	17	31
RDB-Impaired, RDB-Inattention, Followed Too Closely				1		1
RDB-Impaired, RDB-Inattention, RDB-Roadway or Lane Departure		2	3	2	21	28
RDB-Impaired, RDB-Inattention, RDB-Roadway or Lane Departure, Avoiding Other Vehicle					1	1
RDB-Impaired, RDB-Inattention, RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used		3	2	4	5	14
RDB-Impaired, RDB-Inattention, RDB-Safety Equipment (SE) Not Used	2		1	1	1	5
RDB-Impaired, RDB-Roadway or Lane Departure	3	14	40	36	126	219
RDB-Impaired, RDB-Roadway or Lane Departure, Followed Too Closely					1	1
RDB-Impaired, RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used	13	14	16	17	21	81
RDB-Impaired, RDB-Roadway or Lane Departure, Unsafe Vehicle				1		1
RDB-Impaired, RDB-Safety Equipment (SE) Not Used	2	2	10	5	11	30
RDB-Impaired, RDB-Safety Equipment (SE) Not Used, Improper Turn			1			1
RDB-Impaired, RDB-Unsafe Speed	1		1	3	4	9
RDB-Impaired, RDB-Unsafe Speed, RDB-Safety Equipment (SE) Not Used	1					1
RDB-Impaired, Stopped in Traffic Lane					1	1
RDB-Impaired, Unsafe Vehicle					1	1
RDB-Impaired, Pedestrian Action	1					1
RDB-Inattention	3	24	100	208	612	947

Risky Driving Behavior (RDB) and Severity	# of Crashes					
	Fatal Crash	Serious Injury	Minor Injury	Possible Injury	Property Damage Only	Total
RDB-Inattention, Animal in Roadway					2	2
RDB-Inattention, Avoiding Other Vehicle				1		1
RDB-Inattention, Failed to Stop		1	6	9	18	34
RDB-Inattention, Failed to Yield	1	4	12	25	45	87
RDB-Inattention, Followed Too Closely			6	5	27	38
RDB-Inattention, Improper Overtaking		1	1		2	4
RDB-Inattention, Improper Parking					1	1
RDB-Inattention, Improper Turn		1	1	2	15	19
RDB-Inattention, Object/Debris in Roadway			1		2	3
RDB-Inattention, RDB-Roadway or Lane Departure	4	34	82	95	375	590
RDB-Inattention, RDB-Roadway or Lane Departure, Animal in Roadway					1	1
RDB-Inattention, RDB-Roadway or Lane Departure, Animal in Roadway, Animal in Roadway					1	1
RDB-Inattention, RDB-Roadway or Lane Departure, Avoiding Other Vehicle					2	2
RDB-Inattention, RDB-Roadway or Lane Departure, Failed to Yield			1		3	4
RDB-Inattention, RDB-Roadway or Lane Departure, Improper Turn				1	2	3
RDB-Inattention, RDB-Roadway or Lane Departure, Object/Debris in Roadway				1	3	4
RDB-Inattention, RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used	4	13	27	26	23	93
RDB-Inattention, RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used, Animal in Roadway			1			1
RDB-Inattention, RDB-Roadway or Lane Departure, Unsafe Vehicle			1	1	1	3
RDB-Inattention, RDB-Safety Equipment (SE) Not Used	2	7	10	11	12	42
RDB-Inattention, RDB-Safety Equipment (SE) Not Used, Failed to Stop				2	2	4
RDB-Inattention, RDB-Safety Equipment (SE) Not Used, Failed to Yield		1	2	1	1	5
RDB-Inattention, RDB-Safety Equipment (SE) Not Used, Followed Too Closely			1		1	2
RDB-Inattention, RDB-Safety Equipment (SE) Not Used, Improper Turn					1	1
RDB-Inattention, RDB-Unsafe Speed			2	5	4	11
RDB-Inattention, RDB-Unsafe Speed, RDB-Safety Equipment (SE) Not Used				2		2
RDB-Inattention, Unsafe Vehicle					1	1
RDB-Roadway or Lane Departure	33	37	92	136	777	1076
RDB-Roadway or Lane Departure, Abnormal Traffic Control					1	1
RDB-Roadway or Lane Departure, Animal in Roadway		1		2		3
RDB-Roadway or Lane Departure, Avoiding Other Vehicle		1	3	5	32	41
RDB-Roadway or Lane Departure, Failed to Stop				1	2	3
RDB-Roadway or Lane Departure, Failed to Yield		2	3	1	14	20
RDB-Roadway or Lane Departure, Followed Too Closely			2	3	11	16
RDB-Roadway or Lane Departure, Improper Overtaking				1	10	11
RDB-Roadway or Lane Departure, Improper Start		1				1
RDB-Roadway or Lane Departure, Improper Turn		1	1	2	27	31
RDB-Roadway or Lane Departure, Object/Debris in Roadway				2	9	11
RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used	21	17	13	17	18	86
RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used, Avoiding Other Vehicle				1	3	4
RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used, Failed to Yield				1		1
RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used, Followed Too Closely		1	2	1		4
RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used, Improper Overtaking			1			1
RDB-Roadway or Lane Departure, RDB-Safety Equipment (SE) Not Used, Unsafe Vehicle	1	4	2	4	4	15
RDB-Roadway or Lane Departure, RDB-Unsafe Speed	5	35	102	137	672	951
RDB-Roadway or Lane Departure, RDB-Unsafe Speed, RDB-Safety Equipment (SE) Not Used	5	24	23	16	29	97
RDB-Roadway or Lane Departure, Unsafe Vehicle	2	6	10	19	121	158
RDB-Unsafe Speed	8	16	53	68	240	385
RDB-Unsafe Speed, RDB-Safety Equipment (SE) Not Used	2	7	18	6	10	43
Grand Total	132	300	685	939	3475	5532

Table 2 – RDB and Severity

Many crashes in the study area reported multiple RDBs. The following analysis of each RDB is mutually exclusive; therefore, a crash with multiple RDBs reported will be included in the statistical analysis for each RDB.

- 50% of crashes reported RDB involvement. 37% of RDB involved crashed versus 34% of No RDB involved crashes resulted in Fatality or Injury.
- RDB-Impaired crashes reported at a rate of 6% of all crashes
    - Fatality or Injury rate of 50%
    - Fatality rate of 6%.

- RDB-Inattention crashes reported at a rate of 18% of all crashes
  - Fatality or Injury rate of 50%
  - Fatality rate with 1%.
- RDB-Safety Equipment Not Used reported a rate of 7% of all crashes
  - Fatality or Injury rate of 70%
  - Fatality rate of 9%.
- RDB-Roadway or Lane Departure reported at a rate of 32%
  - Fatality or Injury rate of 35%
  - Fatality rate of 2%.
- RDB-Speeding crashes reported rate of 14%
  - Fatality or Injury rate of 36%
  - Fatality rate of 1%

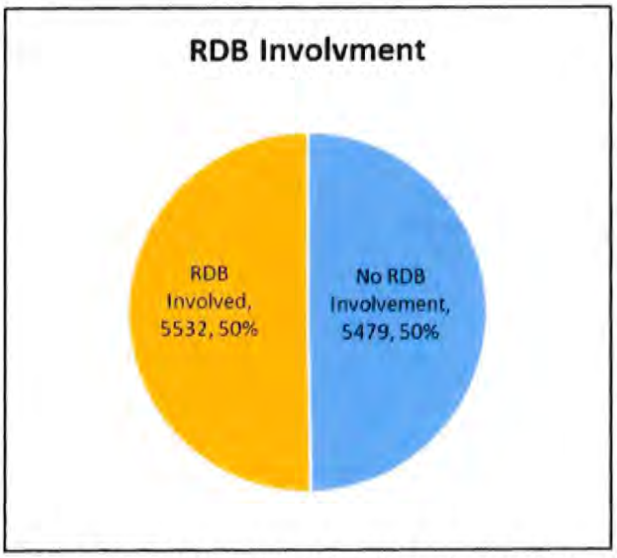


Figure 13 – RDB Involvement, totals and percentiles.

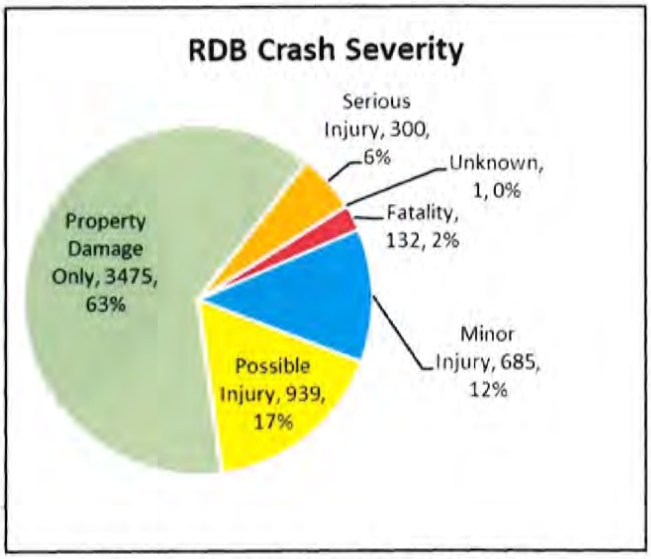


Figure 14 – RDB Involved Severity, totals, and percentiles.

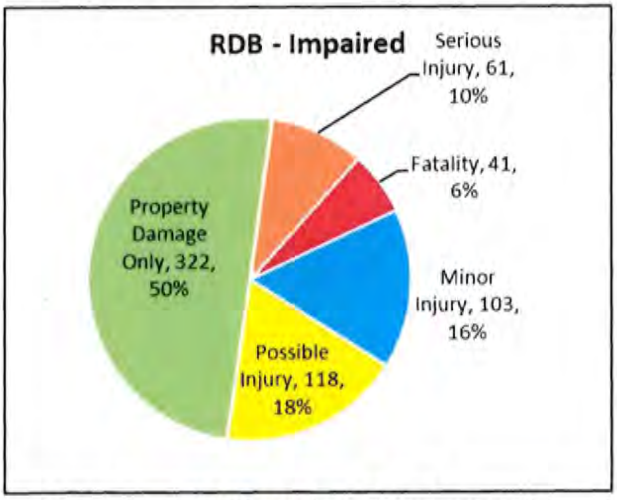


Figure 15 – RDB Impaired, totals and percentiles..

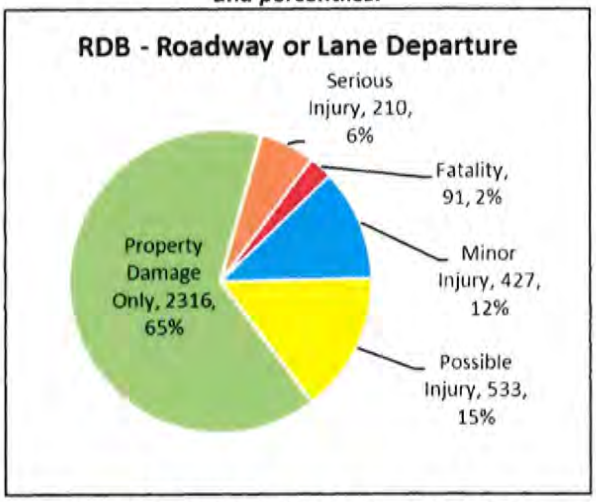


Figure 16 – RDB Roadway or Lane Departure, totals and percentiles.

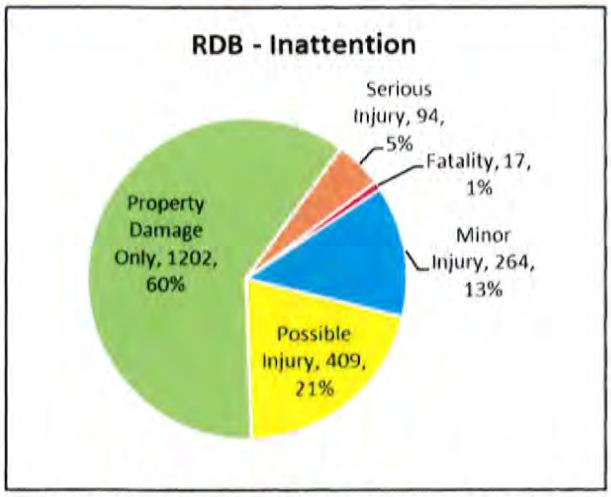


Figure 17 – RDB Inattention, totals and percentiles

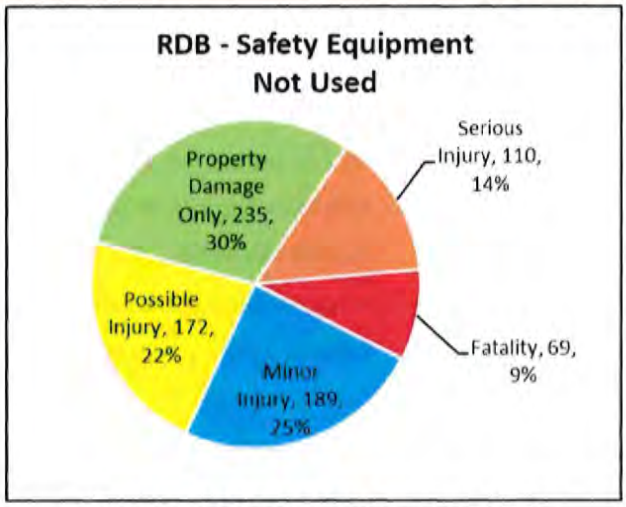


Figure 18 – RDB Safety Equipment Not Used, totals and percentiles.

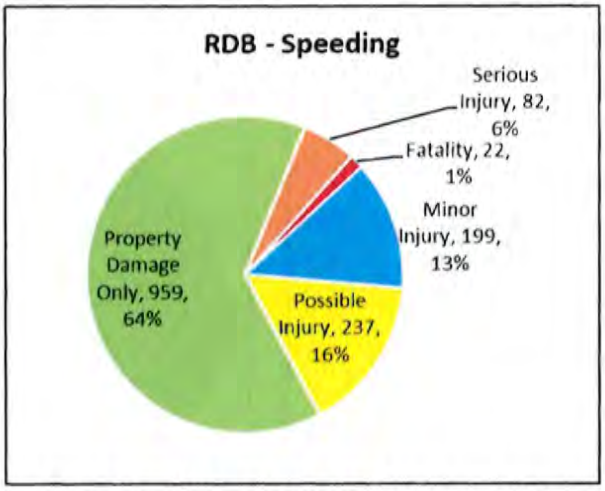


Figure 19 – RDB Speeding, totals and percentiles.

VULNERABLE ROAD USERS

Vulnerable Road Users (VRUs) include Pedestrian, Pedalcyclist, Motorcycle, Motor Scooter/Moped, and ATV. VRUs are more exposed than drivers operating vehicles, making them more susceptible to injury in the event of a crash.

- 2% of crashes involved VRU.
- VRU-Motorcycle reported the highest VRU rate from with 51%. Pedestrians were involved in 28% of PDU-reported crashes and 13% were Pedalcycle.

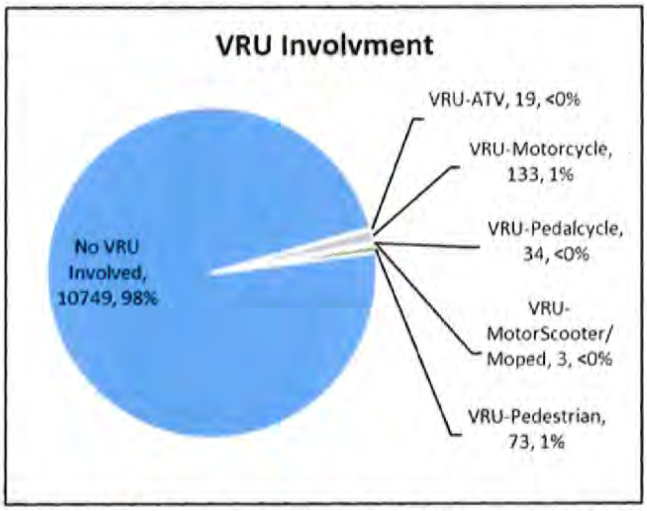


Figure 20 – VRU Involvement, totals and percentiles.

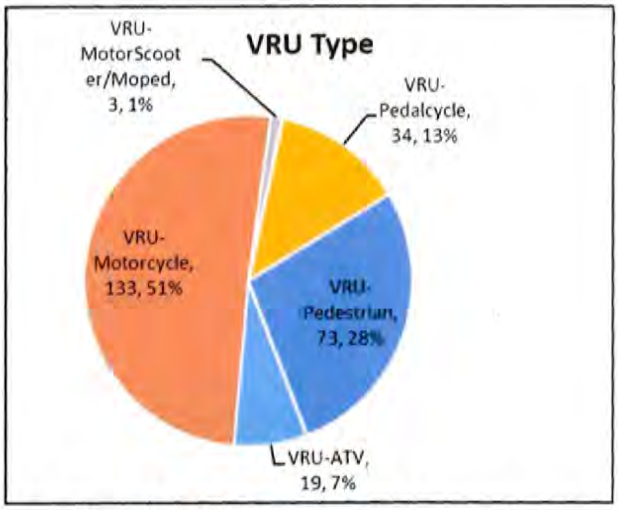


Figure 21 – VRU Type, totals and percentiles.

- 43% of VRU involved versus 2% of No VRU involved crashes resulted in Fatality or Injury.
- 16% of VRU-Pedestrian involved crashes resulted in Fatality, with 95% resulting in Fatality or Injury.
- 90% of VRU-Motorcycle involved crashes reported Injury, 8% being fatal.
- 85% of VRU-Pedalcycle involved crashes reported Injury or Fatality.

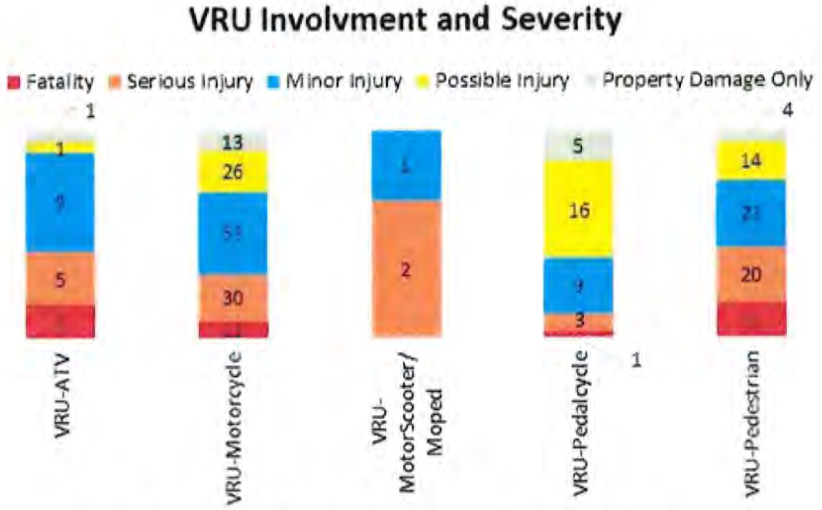


Figure 22 – VRU Involvement and Severity, totals.

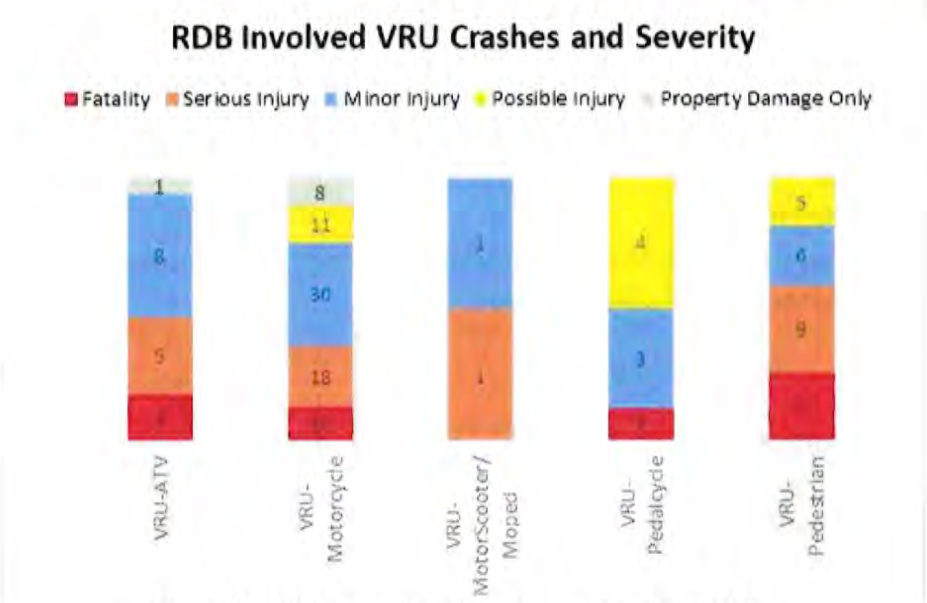


Figure 23 – RDB Involved VRU Crashes and Severity, totals.

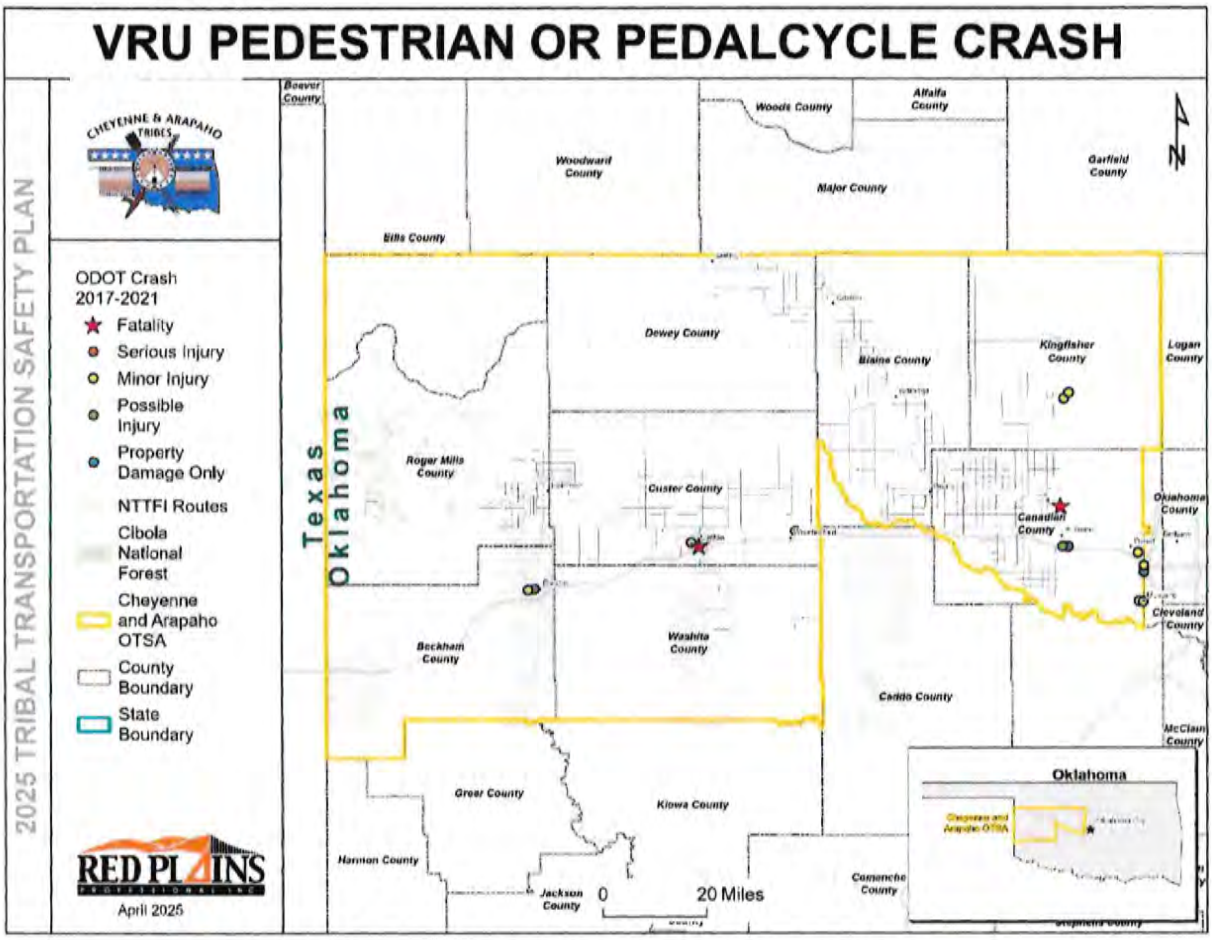


Figure 24 – Map of VRU Pedestrian or Pedalcyclist Crashes in Study Area.

EMPHASIS AREAS

After reviewing the available data, five emphasis areas are selected for added attention in the transportation safety efforts of Cheyenne and Arapaho Tribes. These emphasis areas represent the most significant opportunities to accomplish the Tribe's vision:

Emphasis Area 1 – Transportation Data Management

Emphasis Area 2 – Roadway Safety Audit

Emphasis Area 3 – Infrastructure Improvements

Emphasis Area 4 – Vulnerable Road User Improvements

Emphasis Area 5 – Reducing Risky Driving Behavior Crashes

Each emphasis area is described below and accompanied by a list of strategies that, if implemented, are expected to reduce the associated crashes and enhance safety. Each strategy is assigned to a champion that is responsible for implementation and evaluation.

EMPHASIS AREA 1 – TRANSPORTATION DATA MANAGEMENT

DESCRIPTION

The Cheyenne and Arapaho Department of Transportation realizes the need to maintain data specific to crashes within the Tribes service area and specifically using geographical information systems. To ensure data is managed and updated periodically to capture current trends that impact the Tribes' transportation planning process, including transportation safety, the Cheyenne and Arapaho Department of Transportation identifies the need to provide funding toward training that supports courses in knowledge based technology in GIS database management, analysis, conversion, and geospatial review in order to provide crash data in visual formats that support decision-making.

GOALS

The Cheyenne and Arapaho Tribes Department of Transportation goal is to ensure the GIS database specific to transportation infrastructure is readily available and updated at least every two-years for planning needs. To ensure transparency, accountability and inclusiveness, the Department of Transportation's goal is to provide viewer access and an interactive based GIS toolkit to allow Tribal members to submit safety concerns utilizing a GIS map system through the Tribes' website.

DATA MANAGEMENT STRATEGIES

DATA MANAGEMENT STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Create, recruit and train for a GIS Manager position. This position will be responsible for managing the Tribes' GIS toolkit and updating crash data at minimum of two years. The position will be required to complete annual GIS training and Road Inventory Field Data System training applicable to transportation planning. The position shall also be required to ensure access to the BIA Geospatial Group through annual Information Management and Technology (IMT) Awareness training.	• System Wide Planning • Risk and Existing Conditions Monitoring • GIS • Data Analysis	Cheyenne and Arapaho Tribes
Develop and maintain a robust GIS system with polices for data collection, storage, development, production, and publishing. Develop a WebMap for the viewing of critical data for transportation planning purposes.	• System Wide Planning • Risk and Existing Conditions Monitoring • GIS • Data Analysis • Data Visualization • Data Collection	Cheyenne and Arapaho Tribes

Table 3 – Transportation Data Management Strategies

EMPHASIS AREA 2 – ROADWAY SAFETY AUDIT

DESCRIPTION

A Road Safety Audit (RSA) is the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users.

Multidisciplinary RSAs identify well-supported required traffic control revisions and infrastructure improvements in areas reporting high crash occurrences or identified risk. The RSAs will utilize FHWA's Proven Safety Countermeasures initiative (PSC)[20] when developing recommendations. The RSAs should include a significant traffic analysis defining the roadway and intersection level of service during peak hours, traffic volumes, traffic speeds, and general modeled traffic patterns. Four RSA Studies are recommended: Seiling RSA, Hammon RSA, HWY 54 Weatherford to Colony RSA, and HWY 3 Kingfisher to Watonga RSA.

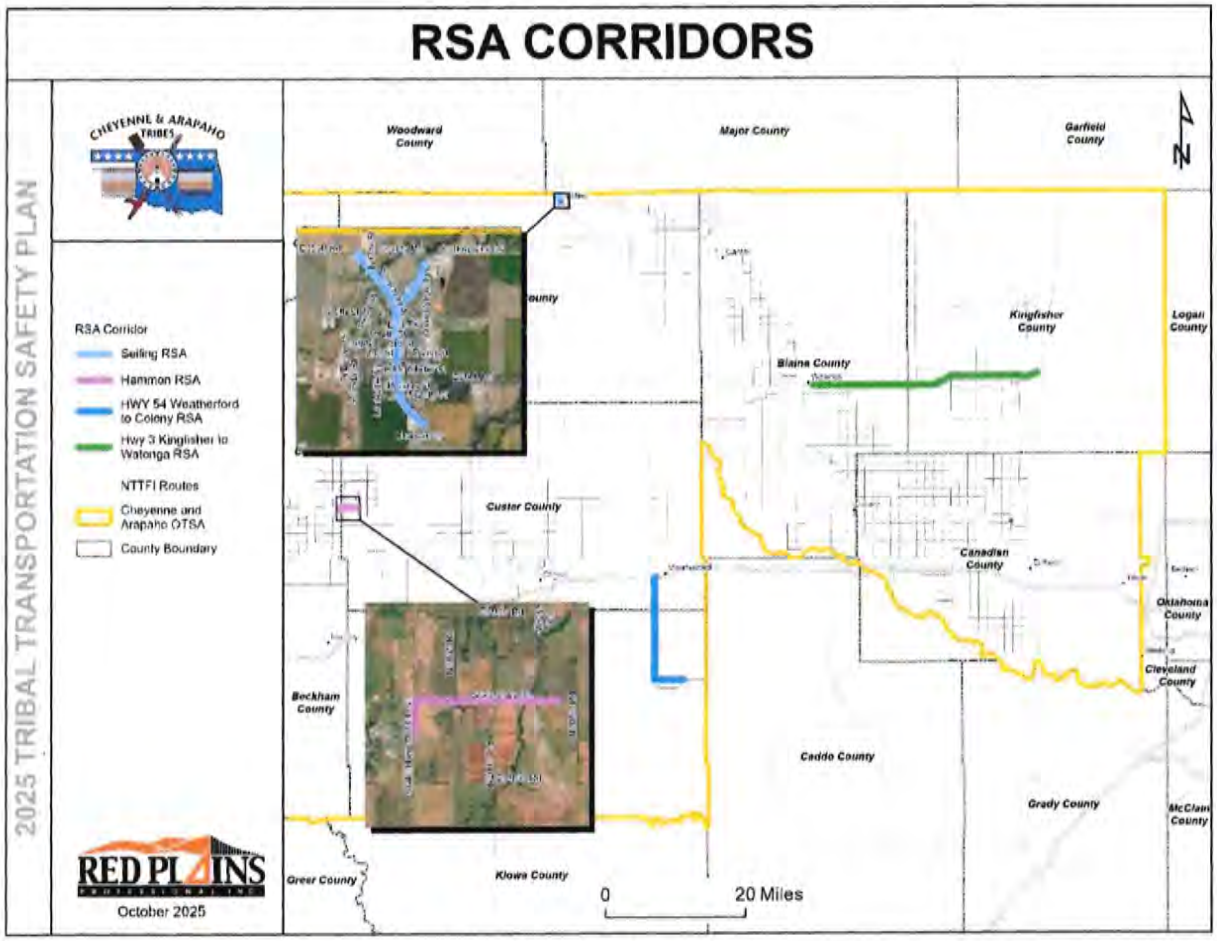


Figure 25 – Map RSA Corridors.

[20] U.S Department of Transportation FHWA – Proven Safety Countermeasures initiative (PSC) https://highways.dot.gov/safety/proven-safety-countermeasures

Seiling RSA

The Seiling RSA corridor includes the section of Highways 281 and 270 that run through the center of the town of Seiling. The transportation network addressed with the RSA includes roadways, intersections, and facilities. State Highways 281 and 270 go directly through Seiling, bringing vehicular and heavy truck traffic moving at highway speeds through the highly populated area. There are many intersections with short distances between them, no signalized intersections or pedestrian crossings, high vehicular, pedestrian, and bicycle volume, and congestion. Safety improvements are needed for all roadway users to increase traffic flow and intersection functionality, enhance and improve pedestrian and bike connectivity, and reduce risk of vehicular/pedestrian/bicycle conflict. This RSA corridor is approximately two miles including the following:

- US Highway 281
- US Highway 270
- RSA Focus Areas:
  - Traffic Flow, Traffic Calming and Speed Mitigation
  - Pedestrian and Bicycle Facilities
  - RDB-Inattention, RDB-Roadway or Lane Departure, and RDB-Speeding Prevention
  - Transportation safety related projects and concerns within RSA Corridor area identified in previous and recent planning efforts

From January 2017 to December 2021, within the two mile RSA corridor, there were 15 reported crashes. There were 3 Suspected Minor Injury crashes, 1 Possible Injury crashes, and 11 Property Damage Only crashes.

Significant RSA corridor crash statistics:

- 60% (9 of 15) were reported within or related to an Intersection or Junction
- 33% (5 of 15) resulted in injury
- 20% (3 of 15) crashes reported either Roadway or Lane Departure Involved or Likely Involved
- 46% (7 of 15) reported Risky Driving Behaviors (RDB), with 20% (3) Roadway or Lane Departure, 20% (3) Inattention, and 7% (1) No Safety Equipment Used

Hammon RSA

The Hammon RSA corridor includes the section of Highways 33 and 34 that approach and enter the town of Hammon. The transportation network addressed with the RSA includes roadways, intersections, and facilities. State Highways 33 and 34 intersect north of Hammon with Highway 34 running south into the center of Hammon bringing vehicular and heavy truck traffic moving at highway speeds through the populated area. There are many intersections with short distances between them, no signalized intersections, and no pedestrian or bicycle facilities. This route is a school bus route for the Hammon Head Start facility. Safety improvements are needed for all roadway users to increase traffic flow and intersection functionality, enhance and improve pedestrian and bike connectivity, and reduce risk of vehicular/pedestrian/bicycle conflict. This RSA corridor is approximately two miles including the following:

- US Highway 33
- US Highway 34 (TTP Route 5555)
- RSA Focus Areas:
  - Traffic Flow, Traffic Calming and Speed Mitigation
  - Pedestrian and Bicycle Facilities
  - RDB-Inattention, RDB-Roadway or Lane Departure, and RDB-Speeding Prevention
  - Transportation safety related projects and concerns within RSA Corridor area identified in previous and recent planning efforts

From January 2017 to December 2021, within the two mile RSA corridor, there were 5 reported crashes. There was 1 Serious Injury crash, 2 Suspected Minor Injury crashes, 1 Possible Injury crashes, and 11 Property Damage Only crashes.

Significant RSA corridor crash statistics:

- 80% (4 of 5) resulted in injury
- 40% (2 of 5) crashes reported either Roadway or Lane Departure Involved or Likely Involved
- 60% (3 of 5) reported Risky Driving Behaviors (RDB), with 40% (2) Roadway or Lane Departure, 40% (2) Inattention

Highway 3 Kingfisher to Watonga RSA

The Highway 3 Kingfisher to Watonga RSA corridor connected the rural communities of Kingfisher and Watonga. The transportation network addressed with the RSA includes roadways, intersections, and facilities. This is the primary connecting network between tribal members living in these rural towns. There are many driveways and intersections joining low speed traffic through and into high speed traffic with little to no signalized intersections. While this approximately 26 mile transportation corridor is long, it is believed a closer look at sections along the highway will present similar systemic issues that can be addressed with similar safety countermeasures enacted throughout the length of the highway. The spread of crashes along this stretch of Highway 3 is consistent throughout with little concentration in specific areas. This RSA corridor includes the following:

- Highway 3
- RSA Focus Areas:
  - Traffic Flow and Speed Mitigation
  - RDB-Impaired, RDB-Inattention, RDB-Roadway or Lane Departure, and RDB-Speeding Prevention
  - Transportation safety related projects and concerns within RSA Corridor area identified in previous and recent planning efforts

From January 2017 to December 2021, within the 26 mile RSA corridor, there were 251 reported crashes. There were 6 Fatal Crashes, 12 Serious Injury Crashes, 25 Suspected Minor Injury crashes, 29 Possible Injury crashes, and 179 Property Damage Only crashes.

Significant RSA corridor crash statistics:

- 29% (72 of 251) resulted in injury
- 27% (67 of 251) crashes reported either Roadway or Lane Departure Involved or Likely Involved
- 43% (107 of 251) reported Risky Driving Behaviors (RDB), with 27% (67) Roadway or Lane Departure, 4% (11) Impaired, 11% (37) Inattention, 8% (20) Speeding, and 9% (22) No Safety Equipment Used

Highway 54 Weatherford to Colony RSA

The Highway 54 Weatherford to Colony RSA corridor connected the rural communities of Weatherford and Colony. The transportation network addressed with the RSA includes roadways, intersections, and facilities. This is the primary connecting network between tribal members living in these rural towns. There are many parking lots, driveways and intersections joining low speed traffic through and into high speed traffic with no signalized intersections. This RSA corridor is approximately 15 miles including the following:

- Highway 54
- Highway 54B (TTP Route 9508)
- RSA Focus Areas:
  - Traffic Flow and Speed Mitigation
  - RDB-Impaired, RDB-Inattention, RDB-Roadway or Lane Departure, and RDB-Speeding Prevention
  - Transportation safety related projects and concerns within RSA Corridor area identified in previous and recent planning efforts

From January 2017 to December 2021, within the 15 mile RSA corridor, there were 53 reported crashes. There were 2 Fatal Crashes, 4 Serious Injury Crashes, 8 Suspected Minor Injury crashes, 9 Possible Injury crashes, and 30 Property Damage Only crashes.

Significant RSA corridor crash statistics:

- 43% (23 of 53) resulted in injury
- 64% (34 of 53) crashes reported either Roadway or Lane Departure Involved or Likely Involved
- 79% (42 of 53) reported Risky Driving Behaviors (RDB), with 64% (34) Roadway or Lane Departure, 4% (2) Impaired, 36% (19) Inattention, 13% (7) Speeding, and 13% (7) No Safety Equipment Used

GOALS

Complete RSA by 2028.

RSA STRATEGIES

RSA STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Apply for a Federal Highway Tribal Transportation Safety Grant (TTPSF) to secure RSA funding.	• TTPSF Grant	CADOT
Conduct multidisciplinary RSA • Seiling RSA • Hammon RSA • HWY 3 Kingfisher to Watonga RSA • HWY 54 Weatherford to Colony RSA	• RSA • System Wide Planning • Risk Mitigation	CADOT, Law Enforcement, Fire and EMS, School Districts, ODOT, BIA
Design and construct RSA infrastructure safety recommendations and improvements.	• Risk Mitigation • Roadway • Intersection • Ped/Bike Facilities	CADOT, BIA, ODOT

Table 4 – RSA Strategies.

EMPHASIS AREA 3 – INFRASTRUCTURE IMPROVEMENTS

DESCRIPTION

Transportation asset maintenance, retrofitting new construction or reconstruction can reduce fatal or serious injury crashes, improve traffic flow, and increase safety for all roadway users. Emergency response and access improvements can result in lives saved and resources protected more effectively by facilitating quick response, transport, and evacuation. Improvements in this emphasis area focus on equipment, facilities, and transportation accessibility. The Cheyenne and Arapaho Tribes has thoroughly identified safety concerns for their transportation network during the planning process for this plan, as well as earlier planning efforts.

Improving communitywide transportation safety requires both location specific and systemic approaches, which the Cheyenne and Arapaho Tribes are accomplishing with existing, current, and future planning, maintenance and improvement efforts. Completing and implementing these projects will require collaborative planning, expansion, and coordination with facility owners.

Strategies that involve Vulnerable Road User (VRU) including VRU-Pedestrian or VRU-Pedalcyclist are highlighted in orange. VRUs are more exposed than drivers operating vehicles, making them more susceptible to injury in the event of an incident.

The following strategies section summarizes safety concerns by location and type. All infrastructure improvements are considered 'Engineering' safety improvements.

GOALS

Improve safety throughout Cheyenne and Arapaho Tribes facilities and transportation system by 2028 through physical roadway improvements.

SYSTEM WIDE INFRASTRUCTURE STRATEGIES

Develop and complete strategies utilizing applicable recommendations of the RSA(s), Comprehensive Multimodal Pedestrian and Bicycle Plan, Master Wayfinding and Striping Plan, and Illumination Safety Study. When applying strategies listed below, consider and utilize recommendations of the Oklahoma Strategic Highway Safety Plan, Active Transportation Plan, and OHSO's Highway Safety Plan.

SYSTEM WIDE INFRASTRUCTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Develop Comprehensive Multimodal Pedestrian and Bicycle Plan to connect tribal community members to local goods and services as supported by foot or bicycle travel. This plan requires collaborative planning, expansion, and coordination. The plan must focus on the condition of the existing trails and pathways utilized by the tribal citizens (youth to elders) to access services by foot. Additional study and community involvement will be required to identify connections that currently do not exist. In this plan, recreational trails should be considered not only for the health and benefit of the Tribal and non-Tribal local communities but, also for potential enhancement of commercial developments for the visiting public by incorporating cultural education and preservation through interpretive signage, planned bench seating location with educational placards and interactive stations, the display of traditional tribal art, and environmental enhancement and education of plant and animal species. For increased safety and extended hours of use, path lighting should be considered. The plan should consider connectivity to other internal and external paths and trails. Develop with recommendations of the RSA and LRTP.	• System Wide Planning • Ped/Bike Facilities • ADA Facilities • Connectivity • Lighting • Recreation • Education	Cheyenne and Arapaho Tribes
Complete Illumination Safety Study to assess, recommend and prioritize lighting improvements at major intersections and high pedestrian traffic areas. Recommendations will consider energy efficiency and cost to maintain. Develop with recommendations of the RSA, and simultaneously with the Comprehensive Multimodal Bike and Pedestrian Plan.	• System Wide Planning • Illumination • Lighting • Major Intersections • Ped/Bike Facilities	Cheyenne and Arapaho Tribes
Develop Master Sign and Wayfinding Plan. Signs are essential transportation infrastructure. This plan will address three sign types: safety, wayfinding and business. Use MUTCD standards for safety signs. Develop Cheyenne and Arapaho Tribes sign standards and policies for wayfinding and business signs. Installation and maintenance is as a low cost way to significantly improve and maintain transportation safety, providing guidance, wayfinding and warning to all roadway users. Conduct a systemic audit of the existing sign inventory within TTP/NTTFI roads and facilities for compliance, need, location, and retro reflectivity. Identify signs to be removed or added. Include areas of high-risk: intersections, pedestrian crossing, drainage crossings, congested areas, narrow shoulder, horizontal and vertical curves. Consider developing plan in phases of current need and future needs for projected development, trails, etc. Develop with recommendations of the RSA, and simultaneously with the	• System Wide Planning • Signage • Roadway Delineation	Cheyenne and Arapaho Tribes

SYSTEM WIDE INFRASTRUCTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Comprehensive Multimodal Bike and Pedestrian Plan. Collaborate with all roadway owners as applicable. Develop and install proper Pedestrian and Bicycle safety striping and signing.		
Develop Road Maintenance Plan to comprehensively address and prioritize maintenance needs on Tribal and community roads. Continued maintenance planning will be needed to ensure that a uniform, accurate, and systematic approach is implemented, resulting in the efficient use of limited maintenance funding. The Road Maintenance Plan should be developed with recommendations of the RSA, Drainage Study, Master Sign, Wayfinding and Striping Plan, and Pedestrian and Bicycle Master Plan.	• System Wide Planning • Road Maintenance • Ped/Bike Facilities	Cheyenne and Arapaho Tribes
Complete comprehensive, multidisciplinary corridor studies and road safety audits. Multidisciplinary RSAs identify well-supported required traffic control revisions and infrastructure improvements in areas reporting high crash occurrences or identified risk. • Seiling RSA • Hammon RSA • HWY 54 Weatherford to Colony RSA • HWY 3 Kingfisher to Watonga RSA	• RSA • System Wide Planning • Risk Mitigation • Intersections • Ped/Bike Facilities	CADOT, Law Enforcement, Fire and EMS, BIA, ODOT

Table 5 – System Wide Infrastructure Strategies

INFRASTRUCTURE STRATEGIES

Develop and complete strategies utilizing applicable recommendations of the RSA(s), Comprehensive Multimodal Pedestrian and Bicycle Plan, Master Wayfinding and Striping Plan, and Illumination Safety Study. When applying strategies listed below, consider and utilize recommendations of the Oklahoma Strategic Highway Safety Plan, Active Transportation Plan, and OHSO's Highway Safety Plan.

INFRASTRUCTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Clinton I-40 Business Loop Pedestrian Safety Trail and Street Lighting Project Design and construction of a pedestrian path adjacent to E Gary Blvd/Route 66 N, and install adequate lighting to improve visibility. This project will involve constructing a paved 8' wide, 1.2 mile long ADA compliant pedestrian pathway along E Gary Blvd/Route 66 N from the east end of the Route 66 N bridge over the Washita River to the route's intersection with the N 2274 Rd (TTP Route 4804 Section 010). Installation of adequate lighting to improve both driver and pedestrian visibility along this section of roadway is also a part of this project.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT, ODOT
Hammon Tribal Community Pedestrian Safety Trail Project Design and construction of an 8' concrete wide sidewalk pedestrian trail and install streetlights approximately 1.1 mile east along Oklahoma State Highway 33 (OK-33) located north of the Town of Hammon in Custer County, Oklahoma.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT
Canton Tribal Community Pedestrian and Bike Path Safety Project Design and construction of a 1-mile pedestrian and bike path to separate pedestrian and bike traffic from motorist along Tribal lands at the Cantonment Reserve and beginning NW of the Town of Canton in Blaine County, Oklahoma.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT
Watonga Tribal Community Pedestrian and Bike Path Safety Project Installation of street lights and improvements to the existing concrete pathway, approximately 0.98 mile long ADA compliant pedestrian pathway along State Highway 270 located adjacent to the Franklin Reserve, SW of the City of Watonga in Blaine County, Oklahoma. The Watonga Tribal Community Pedestrian and Bike Path Safety Project is an existing concrete path that begin at the intersection of Russworm Drive and Clarence Nash Blvd in the city of Watonga and then extending south approximately 1 mile to end at the intersection of State Highway 270 and Blaine County E. 820 Rd. The concrete pedestrian path provides access to the Watonga Indian Health Services (IHS) facility, the Watonga Multi-Purpose Facility, the Food Distribution Center, the Watonga Lucky Star Hotel and Convention Center, and the Watonga Emergency Response Center located on the Franklin Reserve of the Tribes lands.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT

INFRASTRUCTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
El Reno/Concho Tribal Community (SH81) Pedestrian and Bike Path Safety Project Design and construct a sidewalk/bike path beginning at Black Kettle Road at the entrance to the Concho Reserve, in Concho, Oklahoma, and ending at the intersection of Caddo Street and Choctaw Avenue in the City of El Reno, Oklahoma.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT, ODOT
Black Kettle Blvd./Hwy 81 Safety Corridor Project Design, construct, and implement safety recommendations and improvements identified in 2015 Roadway Safety Audit.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage • Resurfacing • Roadway • Striping • Traffic Calming	CADOT, ODOT
EMS Community Helipad Access Rd. Construction Project Construction of new and upgrade to existing Helipad access roads. The project will include the construction of concrete access roads with 11' lane widths and 2' shoulders with curb and gutters for drainage, the installation of traffic signs, and striping.	• Resurfacing • Roadway • Drainage • Striping • Signage • EMS Services	CADOT
Blaine County E0820/Franklin Reserve Rd. Upgrade Project Upgrade the current gravel roadway surface to concrete, widening the roadway to include 12' lanes and a 2'concrete shoulder, installing adequate drainage structures, improve all Tribal property access points along roadway, install sidewalks, lighting, signage, and striping.	• Roadway • Resurfacing • Drainage • Ped/Bike and ADA Facilities • Lighting • Signage • Striping • Egress/Ingress	CADOT
Carlton South Rd. Reconstruction Project Reconstruct and resurface the roadway, improve existing drainage structures and install new structures as needed for adequate drainage, increase the radius of the primary roadway curve and install rumble strips at the intersection with SH 51A to improve traffic safety, install of adequate lighting, roadway signage, and surface striping.	• Roadway • Resurfacing • Drainage • Lighting • Signage • Striping	CADOT

Table 6 – Infrastructure Strategies

EMPHASIS AREA 4 – VULNERABLE ROAD USER IMPROVEMENTS

DESCRIPTION

Transportation asset maintenance, retrofitting, new construction or reconstruction can reduce pedestrian, bicycle involved fatal, or serious injury crashes, improve connectivity, and increase safety for all roadway users. Emergency response and access improvements can result in lives saved and resources protected more effectively by facilitating quick response, transport, and evacuation. Improvements in this emphasis area focus on equipment, facilities, and transportation accessibility. The Cheyenne and Arapaho Tribes have thoroughly identified safety concerns for their transportation network during the planning process for this plan, as well as earlier and planning efforts.

Improving communitywide pedestrian and bicycle transportation safety requires both location specific and systemic approaches, which the Cheyenne and Arapaho Tribes are accomplishing with its existing, current, and future planning, maintenance and improvement efforts. Completing and implementing these projects will require collaborative planning, expansion, and coordination.

Improving walkability and connectivity throughout tribal facilities and transportation system is a top priority. Currently, there are limited designated pedestrian facilities and those facilities are not connected. Pedestrian facilities are needed throughout the community including crossings, sidewalks and trails.

The development of multiple system wide plans are needed to guide multimodal projects. The existing LRTP and planned Comprehensive Pedestrian and Bicycle Plan will guide the development of multimodal facilities and connectivity needed the roadways within tribal lands. This plan should be completed in coordination with other system wide plans listed below.

The following strategies section summarizes safety concerns by location and type. This Emphasis Area provides the 'big picture' for all infrastructure improvement projects, all are considered 'Engineering' safety improvements.

Note: Strategies listed in this emphasis area are specific to VRU only, and are also included in previous Emphasis Area 2 Infrastructure Improvements, which includes all infrastructure strategies.

GOALS

Improve VRU Pedestrian and Pedalcyclist safety throughout Cheyenne and Arapaho Tribal facilities and transportation system by 2028 through physical roadway improvements.

VRU SYSTEM WIDE INFRASTRUCTURE STRATEGIES

Develop and complete strategies utilizing applicable recommendations of the RSA(s), Comprehensive Multimodal Pedestrian and Bicycle Plan, Master Wayfinding and Striping Plan, and Illumination Safety Study. When applying strategies listed below, consider and utilize recommendations of the Oklahoma Strategic Highway Safety Plan, Active Transportation Plan, and OHSO's Highway Safety Plan.

VRU SYSTEM WIDE INFRASTRUCTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Develop Comprehensive Multimodal Pedestrian and Bicycle Plan to connect tribal community members to local goods and services as supported by foot or bicycle travel. This plan requires collaborative planning, expansion, and coordination. The plan must focus on the condition of the existing trails and pathways utilized by the tribal citizens (youth to elders) to access services by foot. Additional study and community involvement will be required to identify connections that currently do not exist. In this plan, recreational trails should be considered not only for the health and benefit of the Tribal and non-Tribal local communities but, also for potential enhancement of commercial developments for the visiting public by incorporating cultural education and preservation through interpretive signage, planned bench seating location with educational placards and interactive stations, the display of traditional tribal art, and environmental enhancement and education of plant and animal species. For increased safety and extended hours of use, path lighting should be considered. The plan should consider connectivity to other internal and external paths and trails. Develop with recommendations of the RSA and LRTP.	• System Wide Planning • Ped/Bike Facilities • ADA Facilities • Connectivity • Lighting • Recreation • Education	Cheyenne and Arapaho Tribes
Complete Illumination Safety Study to assess, recommend and prioritize lighting improvements at major intersections and high pedestrian traffic areas. Recommendations will consider energy efficiency and cost to maintain. Develop with recommendations of the RSA, and simultaneously with the Comprehensive Multimodal Bike and Pedestrian Plan.	• System Wide Planning • Illumination • Lighting • Major Intersections • Ped/Bike Facilities	Cheyenne and Arapaho Tribes
Develop Master Sign and Wayfinding Plan. Signs are essential transportation infrastructure. This plan will address three sign types: safety, wayfinding and business. Use MUTCD standards for safety signs. Develop Cheyenne and Arapaho Tribes sign standards and policies for wayfinding and business signs. Installation and maintenance is as a low cost way to significantly improve and maintain transportation safety, providing guidance, wayfinding and warning to all roadway users. Conduct a systemic audit of the existing sign inventory within TTP/NTTFI roads and facilities for compliance, need, location, and retro reflectivity. Identify signs to be removed or added. Include areas of high-risk: intersections, pedestrian crossing, drainage crossings, congested areas, narrow shoulder, horizontal and vertical curves. Consider developing plan in phases of current need and future needs for projected development, trails, etc. Develop with	• System Wide Planning • Signage • Roadway Delineation	Cheyenne and Arapaho Tribes

VRU SYSTEM WIDE INFRASTRUCTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
recommendations of the RSA, and simultaneously with the Comprehensive Multimodal Bike and Pedestrian Plan. Collaborate with all roadway owners as applicable. Develop and install proper Pedestrian and Bicycle safety striping and signing.		
Develop Road Maintenance Plan to comprehensively address and prioritize maintenance needs on Tribal and community roads. Continued maintenance planning will be needed to ensure that a uniform, accurate, and systematic approach is implemented, resulting in the efficient use of limited maintenance funding. The Road Maintenance Plan should be developed with recommendations of the RSA, Drainage Study, Master Sign, Wayfinding and Striping Plan, and Pedestrian and Bicycle Master Plan.	• System Wide Planning • Road Maintenance • Ped/Bike Facilities	Cheyenne and Arapaho Tribes

Table 7 – VRU System Wide Infrastructure Strategies

VRU INFRASTRUCTURE STRATEGIES

Develop and complete strategies utilizing applicable recommendations of the RSA(s), Comprehensive Multimodal Pedestrian and Bicycle Plan, Master Wayfinding and Striping Plan, and Illumination Safety Study. When applying strategies listed below, consider and utilize recommendations of the Oklahoma Strategic Highway Safety Plan, Active Transportation Plan, and OHSO's Highway Safety Plan.

INFRASTRUCTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Clinton I-40 Business Loop Pedestrian Safety Trail and Street Lighting Project Design and construction of a pedestrian path adjacent to E Gary Blvd/Route 66 N, and install adequate lighting to improve visibility. This project will involve constructing a paved 8' wide, 1.2 mile long ADA compliant pedestrian pathway along E Gary Blvd/Route 66 N from the east end of the Route 66 N bridge over the Washita River to the route's intersection with the N 2274 Rd (TTP Route 4804 Section 010). Installation of adequate lighting to improve both driver and pedestrian visibility along this section of roadway is also a part of this project.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT, ODOT
Hammon Tribal Community Pedestrian Safety Trail Project Design and construction of an 8' concrete wide sidewalk pedestrian trail and install streetlights approximately 1.1 mile east along Oklahoma State Highway 33 (OK-33) located north of the Town of Hammon in Custer County, Oklahoma.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT
Canton Tribal Community Pedestrian and Bike Path Safety Project Design and construction of a 1-mile pedestrian and bike path to separate pedestrian and bike traffic from motorist along Tribal lands at the Cantonment Reserve and beginning NW of the Town of Canton in Blaine County, Oklahoma.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT

INFRASTRUCTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Watonga Tribal Community Pedestrian and Bike Path Safety Project Installation of street lights and improvements to the existing concrete pathway, approximately 0.98 mile long ADA compliant pedestrian pathway along State Highway 270 located adjacent to the Franklin Reserve, SW of the City of Watonga in Blaine County, Oklahoma. The Watonga Tribal Community Pedestrian and Bike Path Safety Project is an existing concrete path that begin at the intersection of Russworm Drive and Clarence Nash Blvd in the city of Watonga and then extending south approximately 1 mile to end at the intersection of State Highway 270 and Blaine County E. 820 Rd. The concrete pedestrian path provides access to the Watonga Indian Health Services (IHS) facility, the Watonga Multi-Purpose Facility, the Food Distribution Center, the Watonga Lucky Star Hotel and Convention Center, and the Watonga Emergency Response Center located on the Franklin Reserve of the Tribes lands.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT
El Reno/Concho Tribal Community (SH81) Pedestrian and Bike Path Safety Project Design and construct a sidewalk/bike path beginning at Black Kettle Road at the entrance to the Concho Reserve, in Concho, Oklahoma, and ending at the intersection of Caddo Street and Choctaw Avenue in the City of El Reno, Oklahoma.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage	CADOT, ODOT
Black Kettle Blvd./Hwy 81 Safety Corridor Project Design, construct, and implement safety recommendations and improvements identified in 2015 Roadway Safety Audit.	• Ped/Bike and ADA Facilities • Connectivity • Lighting • Signage • Resurfacing • Roadway • Striping • Traffic Calming	CADOT, ODOT

Table 8 – VRU Infrastructure Strategies

DESCRIPTION

Primary human factors preceding crash are the human action or behavior error that were reported as the primary cause of the crash. National Highway Safety Transportation Administration (NHTSA) defines Risky Driving Behaviors (RDB) as: Impaired (under influence of alcohol or drug, ill or drowsy), Distracted Driving/Innatention, Not Using Safety Equipment (seatbelts, helmet, etc), and Speeding (includes aggressive, careless or reckless driving). RDBs are behaviors of high-risk that need to be addressed to decrease the occurance of fatal and injury crashes.[21] For this study, in addition to the NHTSA RDBs, Roadway (or Lane) Departure is also a RDB.

The RDBs for this study are:

- **RDB-Impaired** – Alcohol, Drug, Fatigued or Asleep, Other Physical Impairment, Eyesight Impaired, Illness
- **RDB-Inattention** – Disregarded Traffic Signal, Cell Phone Inattention, Fail to Yield, Following Too Closely, Passed Stop Sign
- **RDB-Roadway or Lane Departure** – From Opposite/Head-On-Collision, Improper Lane Change, Improper Turning, Drove Left of Center, Improper Overtaking, From Opposite Direction/Both Going Straight, From Opposite Direction/One Vehicle Spun On Roadway Before Being Hit, Immersion, Wrong Way
- **RDB-Safety Equipment (SE) Not Used** – Restraints Installed But Not Used, Restraints Not Installed, Helmet Not Used, Ejected From Vehicle
- **RDB-Speeding** – Speeding, Aggressive Driving, High Speed Pursuit

Many crashes in the study area reported multiple RDBs. The following analysis of each RDB is mutually exclusive; therefore, a crash with multiple RDBs reported will be included in the statistical analysis for each RDB.

- 50% of crashes reported RDB involvement. 37% of RDB involved crashed versus 34% of No RDB involved crashes resulted in Fatality or Injury.
- RDB-Impaired crashes reported at a rate of 6% with a Fatality or Injury rate of 50%, and a Fatality rate of 6%.
- RDB-Inattention crashes reported at a rate of 18% of all crashed with a Fatality or Injury rate of 50%, with a Fatality rate with 1%.
- RDB-Safety Equipment Not Used reported a rate of 7% total crashes with the highest Fatality or Injury rate of 70%, and the highest Fatality rate of 9%.
- RDB-Roadway or Lane Departure reported at a rate of 32%, Fatality or Injury rate of 35%, and a Fatality rate of 2%.
- RDB-Speeding crashes reported rate of 14%, and Fatality or Injury rate of 36% with a Fatality rate of 1%

[21] National Highway Traffic Administration. https://www.nhtsa.gov/risky-driving

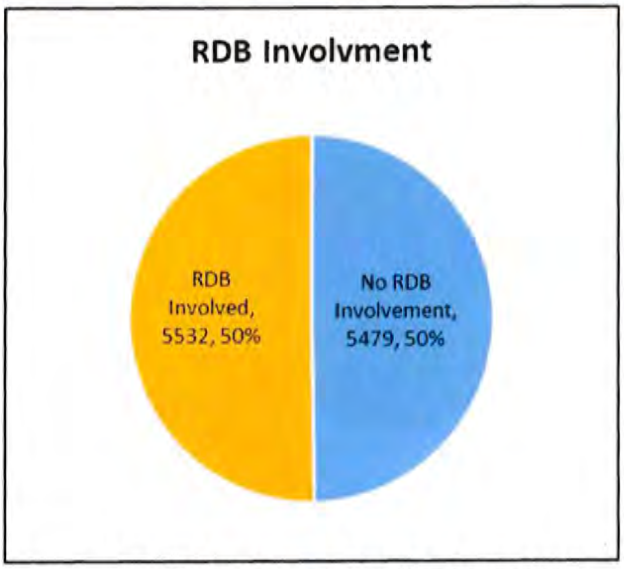


Figure 26 – RDB Involvement, totals and percentiles.

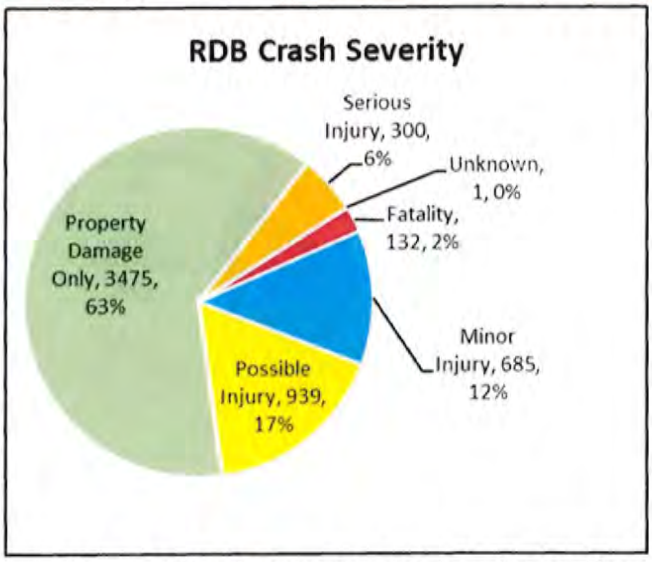


Figure 27 – RDB Involvement Type, totals, and percentiles.

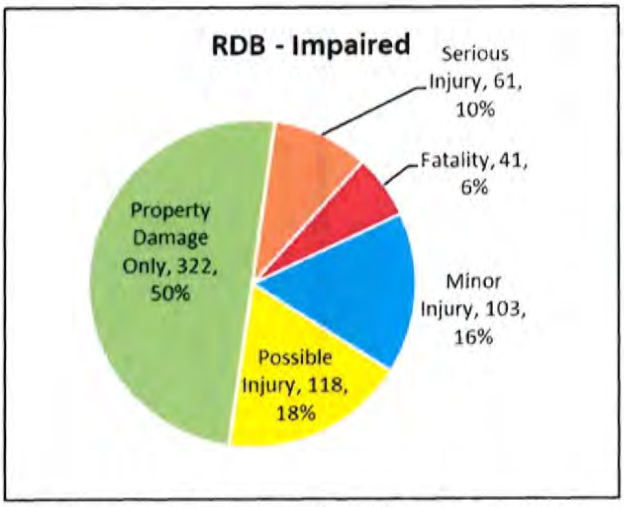


Figure 28 – RDB Impaired, totals and percentiles.

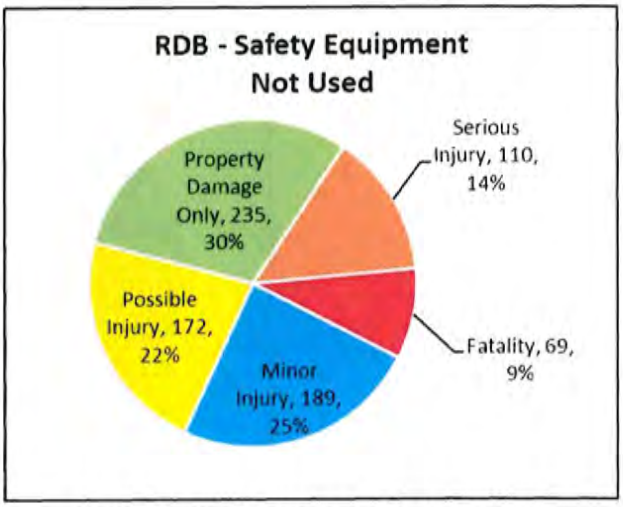


Figure 29 – RDB Safety Equipment Not Used, totals and percentiles.

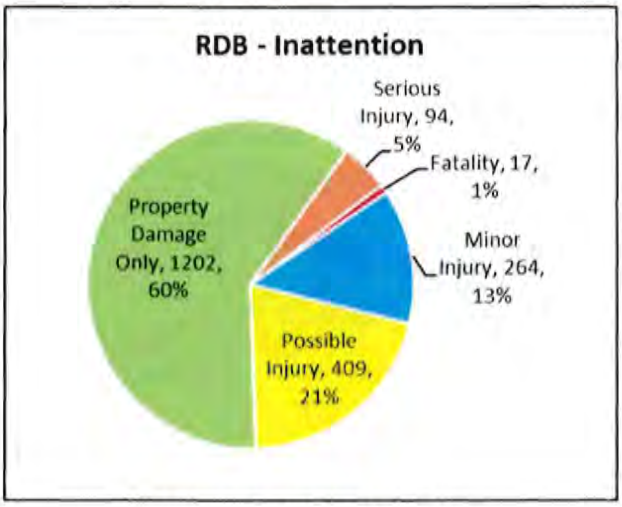


Figure 30 – RDB Inattention, totals and percentiles.

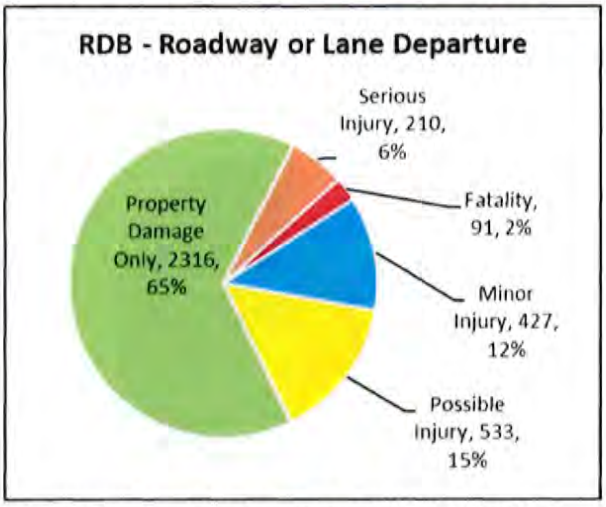


Figure 31 – RDB Roadway or Lane Departure, totals and percentiles.

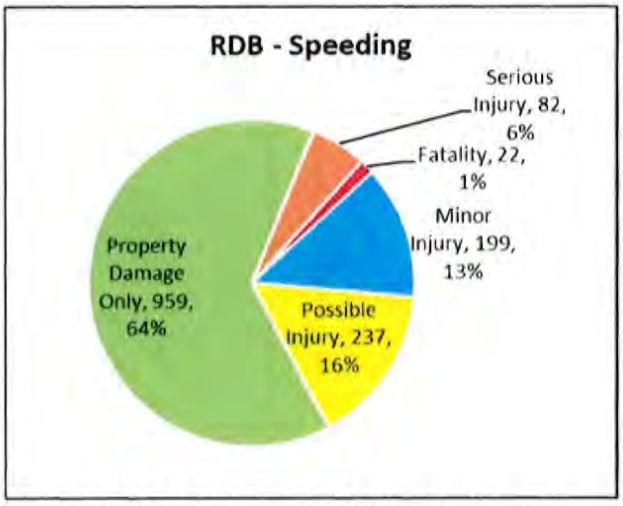


Figure 32 – RDB Speeding, totals and percentiles.

GOALS

Reduce Fatalities and Serious Injuries involving RDBs and Roadway Departure by at least 25% by 2028.

SYSTEM WIDE ROADWAY OR LANE DEPARTURE AND RDB STRATEGIES

Develop and complete strategies utilizing applicable recommendations of the RSA(s), Comprehensive Multimodal Pedestrian and Bicycle Plan, Master Wayfinding and Striping Plan, and Illumination Safety Study. When applying strategies listed below, consider and utilize recommendations of the Oklahoma Strategic Highway Safety Plan, Active Transportation Plan, and OHSO's Highway Safety Plan.

SYSTEM WIDE ROADWAY OR LANE DEPARTURE AND RDB STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
Develop and conduct an educational outreach that targets drivers 34 years of age or under. These would be the initial target audiences for a safety campaigns marketed to the community in an attempt to raise awareness that RDB behaviors are unacceptable. • Drivers 24 years of age or under were reported in 27% of all and 29% of RDB involved crashes. Drivers 24 years of age or under reported the second highest crash rates involving RDB-Impaired 24% and highest crash rates involving RDB-Inattention 32%, RDB-Roadway or Lane Departure 26%, RDB-Safety Equipment Not Used 33%, and RDB-Speeding 33%. • Drivers 25-34 were reported in 22% of all and 23% of RDB involved crashes. Drivers 25-34 reported the highest crash rates involving RDB-Impaired 32%, and second highest crash rates involving RDB-Inattention 23%, RDB-Roadway or Lane Departure 23%, RDB-Safety Equipment Not Used 23%, and RDB-Speeding 23%.	• System Wide Planning • Educational Outreach • RDB-Impaired Driving: Drivers 34 or under • RDB-Inattention: Drivers 34 or under • RDB-Roadway or Lane Departure: Drivers 34 or under • RDB-SE Not Used: Drivers 44 or under • RDB-Speeding: Drivers 35 or under	Cheyenne and Arapaho Tribes, Law Enforcement, ODOT
The Cheyenne and Arapaho Tribes will endeavor to evaluate roadway infrastructure and reduce Roadway Departure crashes in the study area communities concerning risk factors for crashes involving Lane Departure. • 32% of all crashes reported either RDB-Roadway or Lane Departure Involved, or Likely Involved. • RDB-Roadway or Lane Departure reported Fatality or Injury rate of 12%, and the highest Fatality rate of 3% (91 total Fatal crashes). • 51% of traffic involved fatalities from 2014-2018 in the United States resulted from Roadway Departure.	• System Wide Planning • Reduce Roadway Departure Crashes	Cheyenne and Arapaho Tribes, Law Enforcement, ODOT
Create a task force to evaluate, refine, and improve laws and policies for traffic enforcement in the community concerning the following RDBs: RDB-Impaired, RDB-Inattention, RDB-Roadway or Lane Departure, RDB-Safety Equipment Not Used, and RDB-Speeding. • 50% of crashes reported RDB Involvement. 37% of RDB involved crashes resulted in Fatality or Injury. • RDB-Impaired crashes reported rate of 6%, Fatality or Injury rate of 50%, and Fatality rate of 6%. • RDB-Inattention crashes reported the highest rate of occurrence 38%, and Fatality or Injury rate of 29%, Fatality rate of 3%. • RDB-Roadway or Lane Departure crashes reported rate of 18%, and Fatality or Injury rate of 50%, and highest Fatality rate of 1%. • RDB-SE Not Used crashes reported the lowest rate of occurrence with 7%, the highest Fatality or Injury rate of 70% and Fatality rate of 9%. • RDB-Speeding crashes reported rate of 14%, and Fatality or Injury rate of 36%, Fatality rate of 1%.	• System Wide Planning • Reduce crashes involving RDBs of Impaired, Inattention, Roadway or Lane Departure, SE Not Used, and Speeding	Cheyenne and Arapaho Tribes, Law Enforcement, ODOT

Table 9 – System Wide Roadway Departure and RDB Strategies.

ROADWAY OR LANE DEPARTURE STRATEGIES

Lane and roadway departure countermeasures must be designed to keep the motorists in lanes and on the roads, enable the drivers to recover and safely return errant vehicles to the roadway, and keep vehicle occupants from greater harm if a vehicle does leave the roadway.

Develop and complete strategies utilizing applicable recommendations of the RSA(s), Comprehensive Multimodal Pedestrian and Bicycle Plan, Master Wayfinding and Striping Plan, and Illumination Safety Study. When applying strategies listed below, consider and utilize recommendations of the Oklahoma Strategic Highway Safety Plan, Active Transportation Plan, and OHSO's Highway Safety Plan.

ROADWAY OR LANE DEPARTURE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION

Implement infrastructure recommendations of Roadway Departure Task Force and FHWA Roadway Departure Proven Countermeasures[22].
• Keep vehicles in their lane
  ▪ Improve curve delineation
  ▪ Friction treatments in curves and other spot locations
  ▪ Edge line, shoulder and center line rumble strips
• Reduce potential for crashes
  ▪ SafetyEdge
  ▪ Maintained clear zones
  ▪ Traversable roadside slopes
• Minimize crash severity
  ▪ Breakaway features: signs and luminaire supports, utility poles
  ▪ Barriers to shield obstacles: trees and shrubbery, other fixed objects, slopes
	• Rural Roadway or Lane Departure Prevention	Cheyenne and Arapaho Tribes, Cities, Counties, ODOT

Promote Culture of Safety in community. • Develop and conduct an educational outreach that targets drivers 34 years of age or under. The data in this plan identifies that drivers 34 years of age or under years of age were reported in 49% of all, and 50% of RDB-Roadway or Lane Departure involved crashes. • Develop a strategy for publicizing high risk locations through media such as news stories and/or paid media. • Implement an education program for the community that involves safety signage. • Develop media messages that use or honor Tribal/local language, symbols, or culture (for example, Public Service Announcements, billboards, posters, electronic marquees). • Create 'Did You Know' media messages to increase awareness of existing or new preventions.	• Outreach • Drivers 34 years of age or under target audience for reducing RDB-Roadway or Lane Departure.	Cheyenne and Arapaho Tribes, Law Enforcement, ODOT

Table 10 – Roadway or Lane Departure Strategies.

[22] Federal Highway Administration Roadway Departure Safety https://safety.fhwa.dot.gov/roadway_dept/

IMPAIRED STRATEGIES

IMPAIRED STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
High Visibility Police Enforcement presence at high-risk locations and events identified by task force.	• Enforcement • High-Risk Locations • Impaired Driving Reduction	Law Enforcement
Implement School-Based Instructional Programs • Provide school outreach programs such as DARE to address impaired driving and safety equipment use. • Develop campaigns for children (take home assignments from school that can include their families), elders, and high-risk population (young males). • Make Driver's Education accessible, affordable, at convenient locations, and promote youth participation.	• Outreach • Education	School Districts, Cheyenne and Arapaho Tribes
Utilize multiple approaches (interventions) at the same time to compound effectiveness and prevent impaired driving. Example: simultaneously implement sobriety checkpoints, training in responsible beverage service, education and awareness-raising efforts, and limiting access to alcohol.	• Enforcement • Education • Limit Access	All
Promote Culture of Safety in community. • Develop and conduct an educational outreach that targets drivers 34 years of age or under. The data in this plan identifies that drivers 34 years of age or under were reported in 49% of all, and 56% of RDB-Impaired involved crashes. • Develop a strategy for publicizing checkpoints through media such as news stories and/or paid media. • Implement an education program for the community that involves safety signage and a mock crash similar to the "Every 15-Minutes" program. • Develop media messages about enforcement events that use or honor Tribal/local language, symbols, or culture (for example, Public Service Announcements, billboards, posters, electronic marquees). • Create 'Did You Know' media messages to increase awareness of existing or new preventions, laws, and enforcement efforts conducted by police, including checkpoints. • Support and encourage treatment programs.	• Outreach • Drivers 34 years of age or under target audience for reducing RDB-Impaired.	Cheyenne and Arapaho Tribes, Law Enforcement, School Districts, ODOT

Table 11 – Impaired Strategies.

INATTENTION STRATEGIES

INATTENTION STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
• Enforce cell phone use and texting while driving.	• Enforcement	Law Enforcement
Implement School-Based Instructional Programs • Develop campaigns for children (take home assignments from school that can include their families), elders, high-risk population (young males). • Implement based peer-to-peer programs such as Teens in the Driver Seat from the Youth Transportation Safety Program. • Make Driver's Education accessible, affordable, at convenient locations, and promote youth participation.	• Outreach • Education	School Districts, Cheyenne and Arapaho Tribes
Promote Culture of Safety in community. • Develop and conduct an educational outreach that targets drivers 34 years of age or under. The data in this plan identifies that drivers 34 years of age or under were reported in 49% of all, and 55.5% of all RDB-Inattention involved crashes. • Develop a strategy for publicizing checkpoints through media such as news stories and/or paid media. • Implement an education program for the community that involves safety signage and a mock crash similar to the "Every 15-Minutes" program. • Encourage the use of app based safe driving rewards programs such as the Safe Roads Challenge program. • Develop media messages about enforcement events that use or honor Tribal/local language, symbols, or culture (for example, Public Service Announcements, billboards, posters, electronic marquees). • Create 'Did You Know' media messages to increase awareness of existing or new preventions, laws, and enforcement efforts conducted by police, including checkpoints.	• Outreach • Drivers 34 years of age or younger target audience for reducing RDB-Inattention	Cheyenne and Arapaho Tribes, Law Enforcement, School Districts, ODOT

Table 12 – Inattention Strategies.

SAFETY EQUIPMENT USE STRATEGIES

SAFETY EQUIPMENT USE STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
High Visibility Police Enforcement presence at high-risk locations and events identified by task force.	• Enforcement • High-Risk Locations • Events	Law Enforcement
Develop a Buckle-Up Program to encourage seat belt use and provide child safety seats. Program likely to include car seat installation and fitting, car seat and seat belt observations, training such as SNAP courses or NHTSA Courses, and hosted coalition meetings.	• Child Passenger Safety • Outreach	School Districts, Law Enforcement, Cheyenne and Arapaho Tribes
Implement School-Based Instructional Programs • Annual Bike Rodeo Program, children and families learn bike safety and handling skills, including bike and helmet fitting and safety check. • Develop campaigns for children (take home assignments from school that can include their families), elders, high-risk population (young males). • Make Driver's Education accessible, affordable, at convenient locations, and promote youth participation.	• Outreach • Education	School Districts, Law Enforcement, Cheyenne and Arapaho Tribes
Incentive Programs to encourage safe behavior. • Programs that offer parents, caregivers, and/or children rewards for properly using child safety seats, and education that varies in content, duration, intensity & delivery methods.	• Outreach	School Districts, Law Enforcement, Cheyenne and Arapaho Tribes
Promote Culture of Safety in community. • Develop and conduct an educational outreach that targets drivers 25-34 years of age. The data in this plan identifies that drivers 25-34 were reported in 49% of all, and 57% of RBD-SE Not Used involved crashes. • Implement an education program for the community that involves safety signage and a mock crash similar to the "Every 15-Minutes" program. • Develop media messages about enforcement events that use or honor Tribal/local language, symbols, or culture (for example, Public Service Announcements, billboards, posters, electronic marquees). • Create 'Did You Know' media messages to increase awareness of existing or new preventions, laws, and enforcement efforts conducted by police, including checkpoints.	• Outreach • Drivers 25-34 years of age target audience for promoting Safety Equipment Use	Cheyenne and Arapaho Tribes, Law Enforcement, ODOT

Table 13 – Safety Equipment Use Strategies.

SPEEDING STRATEGIES

SPEEDING STRATEGIES	TARGET AREA OR AUDIENCE	STRATEGY CHAMPION
High Visibility Police Enforcement presence at high-risk locations and events identified by task force • Increase enforcement of speeding. • School zones and connecting roadways.	• Enforcement • High-Risk Locations • Events	Law Enforcement
Increase fines for speed violations.	• Enforcement • Policy	State Legislature
Install speed feedback signs at strategic locations to make drivers more aware of their speed in relation to the posted speed limits. Implement recommendations of RDB task force in planning traffic calming improvement project locations.	• RSA locations, TBD (to be determined)	Law Enforcement
Implement School-Based Instructional Programs • Develop campaigns for children (take home assignments from school that can include their families), elders, high-risk population (young males). • Implement based peer-to-peer programs such as Teens in the Driver Seat from the Youth Transportation Safety Program. • Make Driver's Education accessible, affordable, at convenient locations, and promote youth participation.	• Outreach • Education	School Districts, Cheyenne and Arapaho Tribes
Utilize multiple approaches (interventions) at the same time to compound effectiveness and prevent speeding. Example: simultaneously implement speed checkpoints, speed feedback signs, and education and awareness-raising efforts.	• Enforcement • Education	All
Promote Culture of Safety in community. • Develop and conduct an educational outreach that targets drivers 34 years of age or under. The data in this plan identifies that drivers 34 years of age or under were reported in 49% of all, and 56% of all RDB-Speeding involved crashes. • Implement an education program for the community that involves safety signage and a mock crash similar to the "Every 15-Minutes" program. • Encourage the use of app based safe driving rewards programs such as the Safe Roads Challenge program. • Develop media messages about enforcement events that use or honor Tribal/local language, symbols, or culture (for example, Public Service Announcements, billboards, posters, electronic marquees). • Create 'Did You Know' media messages to increase awareness of existing or new preventions, laws, and enforcement efforts conducted by police, including checkpoints.	• Outreach • Drivers 34 years of age or under target audience for Reducing RDB-Speeding	Cheyenne and Arapaho Tribes, Law Enforcement, ODOT

Table 14 – Speeding Strategies.

IMPLEMENTATION AND EVALUATION

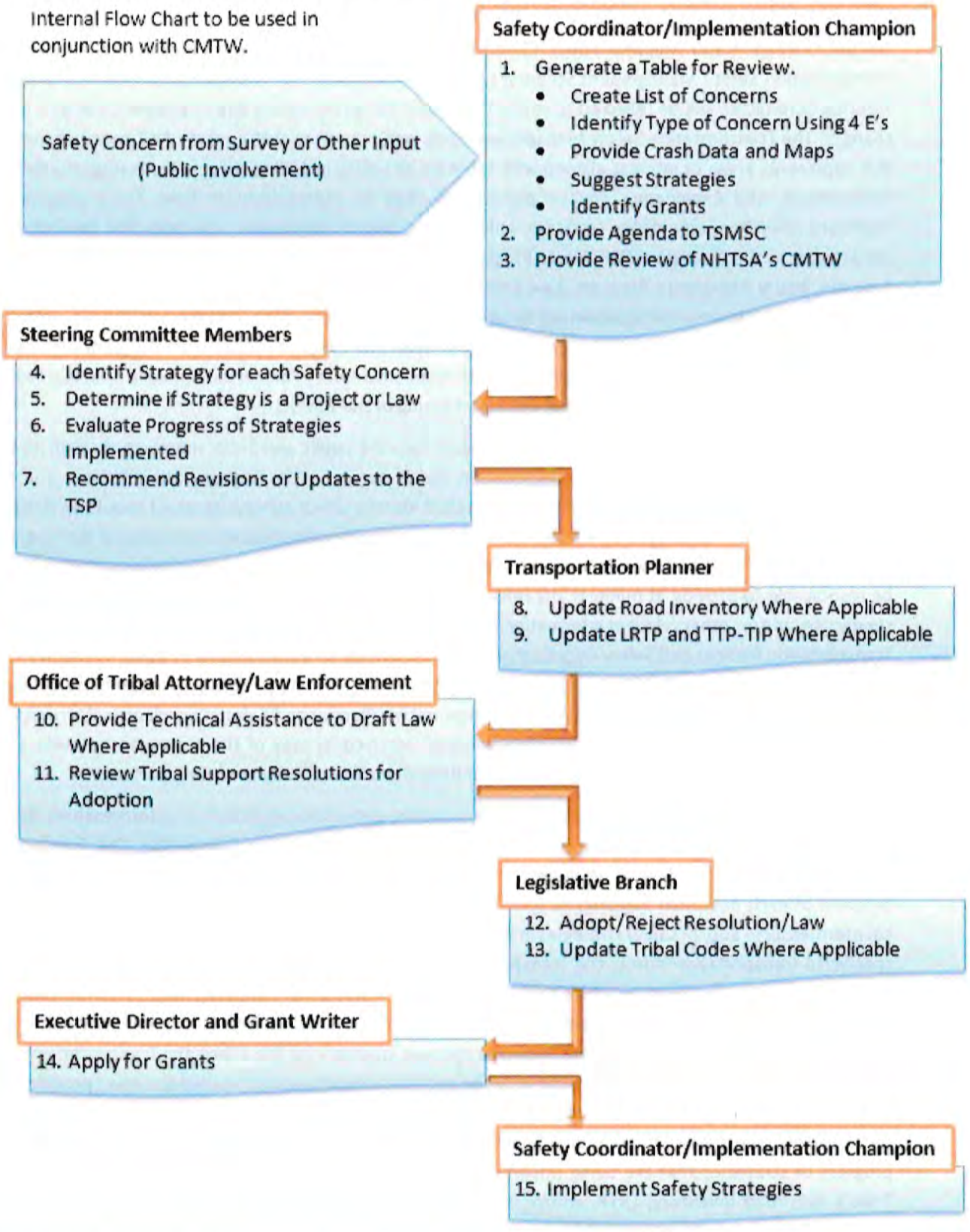
TRANSPORTATION SAFETY MANAGEMENT STEERING COMMITTEE

For the Cheyenne and Arapaho Tribes TSP to be successful it will be implemented and monitored by a Transportation Safety Management Steering Committee (TSMSC). The Transportation Safety Management Steering Committee will be relied on to revise the Tribes' TSP as necessary due to progress, success, or other changes. The Transportation Safety Management Steering Committee shall consist of a 7-member committee that represents areas of interest aligned with the 4-E's of Safety including, Education, Emergency Response, Enforcement, and Engineering. Invited participants shall be representatives from Tribal programs that represent education, emergency response, enforcement, and/or engineering concepts that can include, but not limited, to the Transportation Safety Program, Roads Program, EMS Program, Emergency Management Program, Injury Prevention Program, Law Enforcement Program, Planning & Development Office, and the Office of Tribal Attorney. Participation will be by invitation and confirmation will be established in written form from each respective Tribal program or department head (i.e. Executive Director or Program Director). The TSMSC will be requested to meet at minimum with respective Safety Partners bi-annually or at least every six months. A calendar will be established at the first meeting of the TSMSC.

The Department of Transportation shall collect input from the public and Tribal members through its annual or bi-annual call for projects and transportation needs surveys. The Transportation Planner and Safety Coordinator of the Department of Transportation shall identify which surveys received should be directed to the TSMSC and then shall develop a list of 'safety concerns' to be presented at the bi-annual meeting among the TSMSC. The Transportation Planner and Safety Coordinator of the Department of Transportation shall also be responsible to provide at minimal any relevant crash data for past 5 years to a survey site, a map of the survey site, and/or other relevant information regarding safety issues specific to the survey site or project. The Transportation Planner and Safety Coordinator will also provide a thorough review of National Highway Traffic Safety Administration's (NHTSA) *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*, or CMTW. The Transportation Planner and Safety Coordinator shall prepare for each meeting a table to review each 'safety concern' received by way of the survey and provide a list of countermeasures as strategies to suggest and to initiate discussion among the safety partners.

The TSMSC will be relied on to assess each safety concern, determine applicable countermeasures, and then identify strategies that can then be incorporated into the Transportation Safety Plan. The Transportation Planner and Safety Coordinator, shall be relied on to present information to the TSMSC, ensure effective progress of each bi-annual meeting, as well as provide grant information that may be applicable to safety countermeasures and/or safety strategies in transportation. Once the TSMSC has reviewed all surveys received specific to transportation safety, the Transportation Planner and Safety Coordinator shall work together to identify where a project must be added to the Transportation Safety Plan, the Long Range Transportation Plan, and the Tribal Transportation Program-Transportation Improvement Plan (TTP-TIP). Should any of the Tribes' Transportation Plans require an update, including the road inventory for the Tribes, the Transportation Planner and Safety Coordinator will be responsible to revise each plan respectively as needed and must provide a Tribal Support Resolution to adopt each plan's updates accordingly to the Tribal Transportation Program (TTP) requirements. The TSMSC, through bi-annual meetings, will evaluate progress toward each goal, discuss the progress of strategies that are being implemented, and consider any needed revisions or updates to the Tribe's TSP, road inventory, LRTP, and/or TTP-TIP. A diagram that identifies the Cheyenne and Arapaho Transportation Safety Management Steering Committee's internal flow chart is included below.

CHEYENNE AND ARAPAHO TRIBES DEPARTMENT OF TRANSPORTATION
TRANSPORTATION SAFETY MANAGEMENT STEERING COMMITTEE (TSMSC) FLOW CHART



STRATEGY IMPLEMENTATION CHAMPIONS

The Safety Coordinator of the Cheyenne and Arapaho Tribes Department of Transportation is designated to implement each strategy listed within the Transportation Safety Plan. The Safety Coordinator, along with the Transportation Planner of the Tribes' Department of Transportation, will be relied on to develop an action plan for each strategy that outlines the implementation, schedule, target audience, and needed resources. The Safety Coordinator will provide a progress report to the Transportation Planner, Executive Director, and TSMSC on the status of each strategy when updates are available or as requested. Should the Cheyenne and Arapaho Tribes Department of Transportation apply for a grant to mitigate a safety concern, implement countermeasures to improve safety, including the adoption of laws or regulations specific to Tribal reserve lands, the Safety Coordinator will be responsible to provide progress reports to the Executive Director of Transportation and the TSMSC.

APPENDICES (DIGITAL ONLY)

APPENDIX A –PLANS

RSA for Southern Cheyenne and Arapaho Tribes (2015)

Cheyenne and Arapaho Tribes Transportation Safety Plan (2017)

APPENDIX B – DATA

ODOT 2017-2021 Crash Data Table

APPENDIX C – REFERENCE

Transportation Safety Plan Stakeholders