



CITIZEN POTAWATOMI NATION



Strategic Transportation Safety Plan

Citizen Potawatomi Nation
STRATEGIC TRANSPORTATION SAFETY PLAN

April 2014

VISION STATEMENT: *The Strategic Transportation Safety Plan of the Citizen Potawatomi Nation should provide for the maximum safety of members, patrons, and citizens of the community through a coordinated effort of those within the Nation's tribal jurisdictional boundaries.*

Contents

Introduction.....	1
Crash Data Analysis.....	3
CPN Overview.....	3
Pottawatomie County.....	6
CPN Critical Safety Locations.....	7
Hardesty Road.....	7
Intersection of Hardesty and US 177.....	7
Hardesty Road and the Firelake Casino.....	8
Gordon Cooper Road.....	10
Gordon Cooper Road at the CPN Complex.....	11
Gordon Cooper Road at Firelake Discount Foods.....	11
Firelake Grand Casino.....	12
Emphasis Areas.....	13
Emphasis Area 1: Pedestrian Safety.....	13
Emphasis Area 2: Adequate Infrastructure to Support Traffic Flows and Expected Increases.....	14
Emphasis Area 3: Transit Growth and Development.....	15
Emphasis Area 4: Communication of Transportation Plans.....	15
Emphasis Area 5: Road Safety for Drivers and Non-Drivers.....	16
Emphasis Area 6: Accountability and Liability.....	16
Emphasis Area 7: CPN Emergency Notification and Response.....	17
Emphasis Area 8: Emergency Operations Plans.....	17
Summary.....	19
Conclusion.....	20
References.....	20
List of Preparers.....	20

Figures

Figure 1. CPN Tribal Jurisdictional Area.....	2
Figure 2. Tribal Complex Area.....	3
Figure 3. Collision Severity Map	4
Figure 4. CPN Collision Cluster – Outlier Analysis.....	5
Figure 5. Lighting Conditions of Collisions in Pottawatomie County.....	6
Figure 6. Hardesty Road from 13 th St. to Brangus Rd.....	7
Figure 7. Intersection of Hardesty Road and US 177 (facing west).....	8
Figure 8. Firelake casino (looking southeast)	9
Figure 9. Site of Future Industrial Park (Looking East).....	9
Figure 10. Intersection of Hardesty Rd. and Gordon Cooper Rd.....	10
Figure 11. Gordon Cooper Road from Benson Park to Ohio street.....	10
Figure 12. West Entrance to CPN Tribal Complex (Gordon Cooper Rd.)	11
Figure 13. Firelake Discount Foods (Looking south along Gordon Cooper Rd.).....	12
Figure 14. Firelake Grand Casino Area	13

Tables

Table 1. CPN STSP Summary.....	19
--------------------------------	----

Appendices

Appendix A	Safety Planning Meeting Documentation and Notes
Appendix B	ODOT SAFE-T Collision Analysis Reports
Appendix C	Transportation Safety Resources

ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
ATSSA	American Traffic Safety Services Association
BIA	Bureau of Indian Affairs
CPN	Citizen Potawatomi Nation
DOT	Department of Transportation
EMS	Emergency Medical Services
FHWA	Federal Highway Administration
Four (4) Es	Engineering, Enforcement, Education, Emergency Services
FTA	Federal Transit Administration
HSIP	Highway Safety Improvement Plan
LRSP	Local Road Safety Plan
LTAP	Local Technical Assistance Program
MUTCD	Manual on Uniform Traffic Control Devices
NACE	National Association of County Engineers
NHI	National Highway Institute
NHTSA	National Highway Traffic Safety Administration
ODOT	Oklahoma Department of Transportation
SAFE-T	Statewide Analysis for Engineering & Technology
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users
SHSP	Strategic Highway Safety Plan
STSP	Strategic Transportation Safety Plan
TTP	Tribal Transportation Program
TTPSF	Tribal Transportation Program Safety Funds

Introduction

The Federal Highway Administration (FHWA) Officer of Federal Lands has \$9 million from the Tribal Transportation Program (TTP) funds set aside to address safety issues for federally recognized tribes. These Tribal Transportation Program Safety Funds (TTPSF) have been provided to aid in the reduction of traffic fatalities and injuries that occur in Indian country. The development of Strategic Transportation Safety Plans (STSP) is encouraged as a means to address transportation safety needs in tribal communities. The FHWA has established funding goals in four categories under the TTPSF: safety planning, engineering improvements, enforcement/emergency medical services, and education.

In the state of Oklahoma, tribes have designated jurisdictional areas. The majority of roads within the jurisdictional area are state or county owned. The tribe will have a few tribally owned roads that are located on trust land. Although the tribal jurisdictional area covers nearly 563,000 acres over three counties (Pottawatomie, Cleveland, and Oklahoma), the safety concerns are tribal transit that covers their jurisdictional area and beyond, their large casino that is located along a major interstate, and their tribal complex where the majority of tribal businesses operate (see Figures 1 and 2).

The Citizen Potawatomi Nation (CPN) is committed to improving the overall safety of the transportation system. The purpose of this STSP is to develop and improve the transportation safety management efforts of the CPN. The CPN transportation department has commissioned the development of this plan. The plan will be built through the cooperative efforts of individuals from the Nation, federal and state governments, local governments, and other agencies with a vested interest in transportation safety on how to best address the issue through the four Es: Engineering, Enforcement, Education, and Emergency Medical Services. The plan will identify critical issues and develop action steps that can be implemented to improve transportation safety within the CPN's jurisdictional area.

The majority of tribal offices, facilities, and businesses are nestled between the cities of Shawnee and Tecumseh. The tribal headquarters are found near the intersection of Hardesty Road and Gordon Cooper Road. The area is developed with tribal enterprises and recreational facilities. The CPN continues to add roads, parking lots, and has plans for future developments. Pedestrians increasingly share the roadways and parking lots with vehicles, adding to the safety concerns of the tribe.

Several programs are already in place that promote safety awareness and practices within the Citizen Potawatomi Nation. The CPN police officers are cross deputized with the local municipalities and Pottawatomie County. The CPN has several crisis plans and weather protocols. Transit drivers and other employees who drive tribal vehicles have driving training courses regularly offered. A full list of existing programs is included within Appendix A.

This transportation safety plan begins with a collision analysis overview of the entire CPN area and then narrows its focus to key safety issues (emphasis areas) as identified by the transportation department personnel and the outcomes of the safety planning meeting.

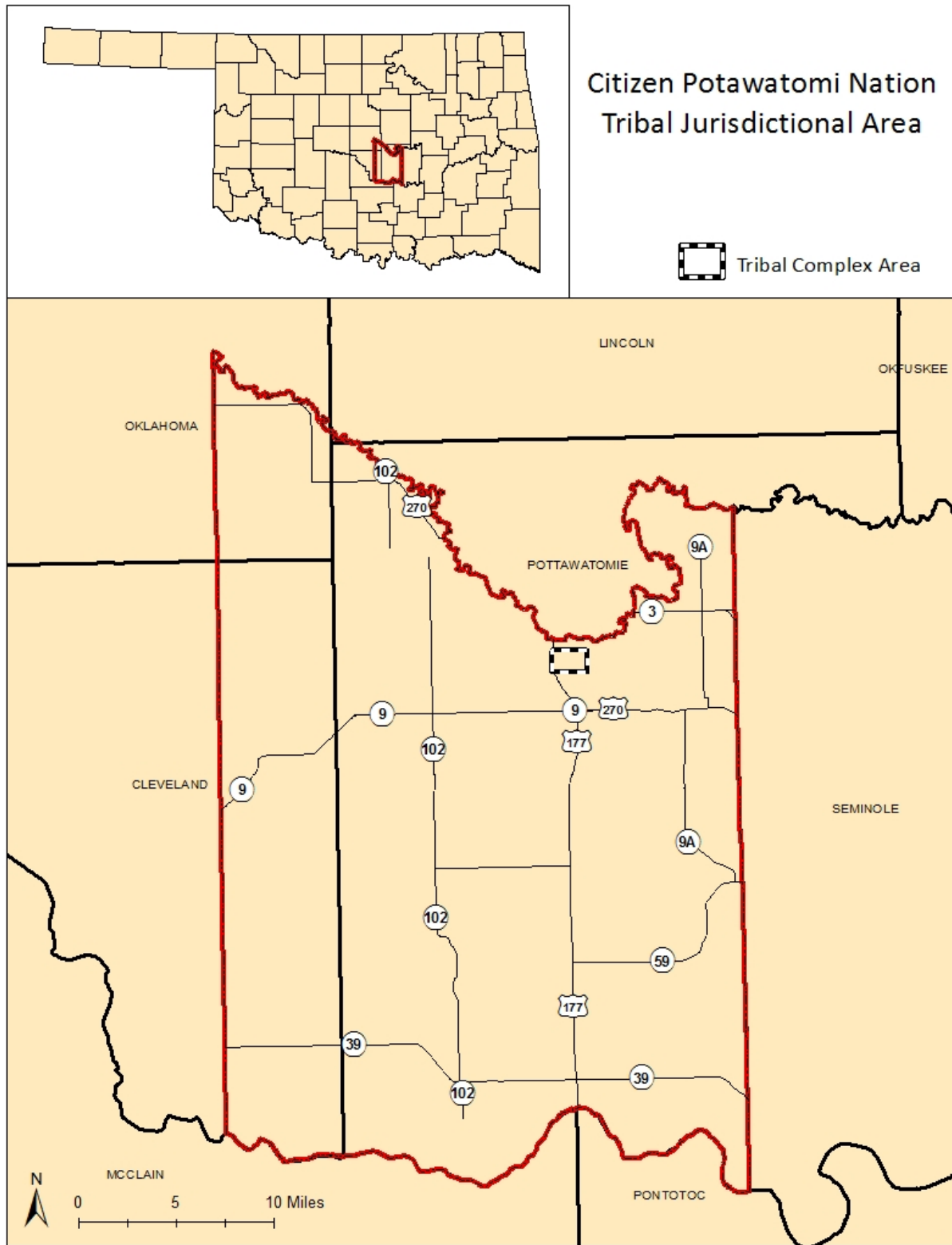


FIGURE 1. CPN TRIBAL JURISDICTIONAL AREA



FIGURE 2. TRIBAL COMPLEX AREA

Crash Data Analysis

CPN Overview

The Oklahoma Department of Transportation (ODOT) allows access to collision data throughout the state through their SAFE-T (Statewide Analysis for Engineering and Technology) program. Collision data can be accessed for counties, municipalities, and other geographic regions. Data can also be examined by specific streets or ranges of streets. For the purposes of the CPN study, collision data has been downloaded that covers a 5-year period (January 1, 2009 through December 31, 2013). At the time of this report, the 2013 data denoted that it may be an incomplete dataset.

The geographic region studied is the tribal jurisdictional boundaries of the Citizen Potawatomi Nation. This area includes most of Pottawatomie County, the eastern portion of Cleveland County, and the southeast corner of Oklahoma County. Data for these counties and for the city of Shawnee were queried and downloaded via ODOT's SAFE-T program. The result of the queries were a pdf document summarizes the collision data, shapefiles that were then mapped in a GIS, and text files with fields that listed contributing factors and other conditions of the incidences.

The map below shows collision points and the severity of each crash. The crashes are symbolized by Property Damage Only (PDO), Injury, and Fatality.

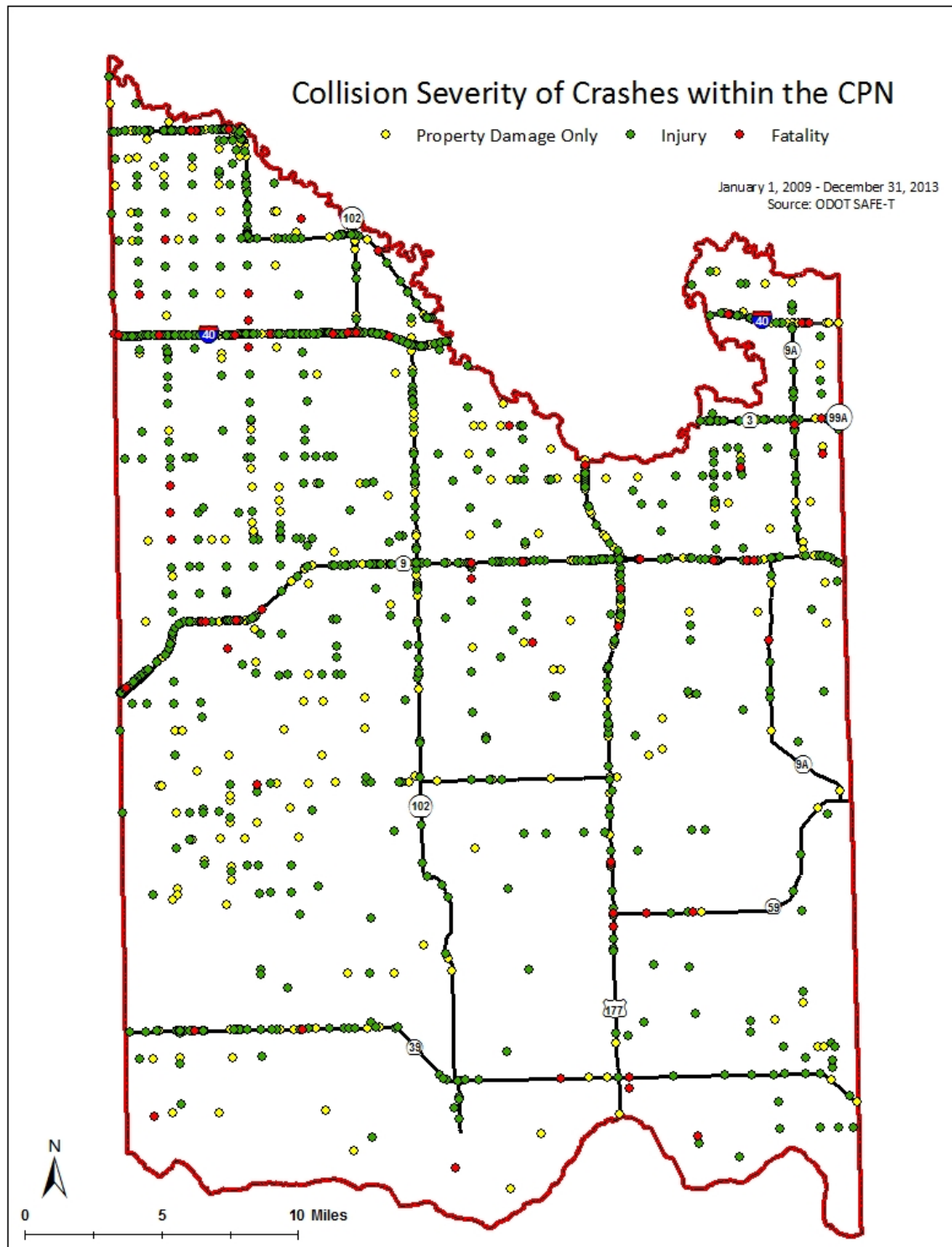


FIGURE 3. COLLISION SEVERITY MAP

Spatial statistics can reveal patterns that are hidden within raw data. To identify clusters of collisions by severity, a Cluster and Outlier Analysis was performed on collision data using weighted data. The severity types were assigned values of 1 for a PDO, 3 for an Injury, and 5 for a Fatality. The analysis performed identifies statistically significant hot spots, cold spots, and spatial outliers. The null hypothesis for a cluster analysis is that there is a random distribution of the data. The z-scores returned by the analysis determines whether the null hypothesis can be rejected or not. In the field of mathematical probability, z-scores are standard deviations that help measure the chance that the data is not random, that indeed, there is a pattern to the values.

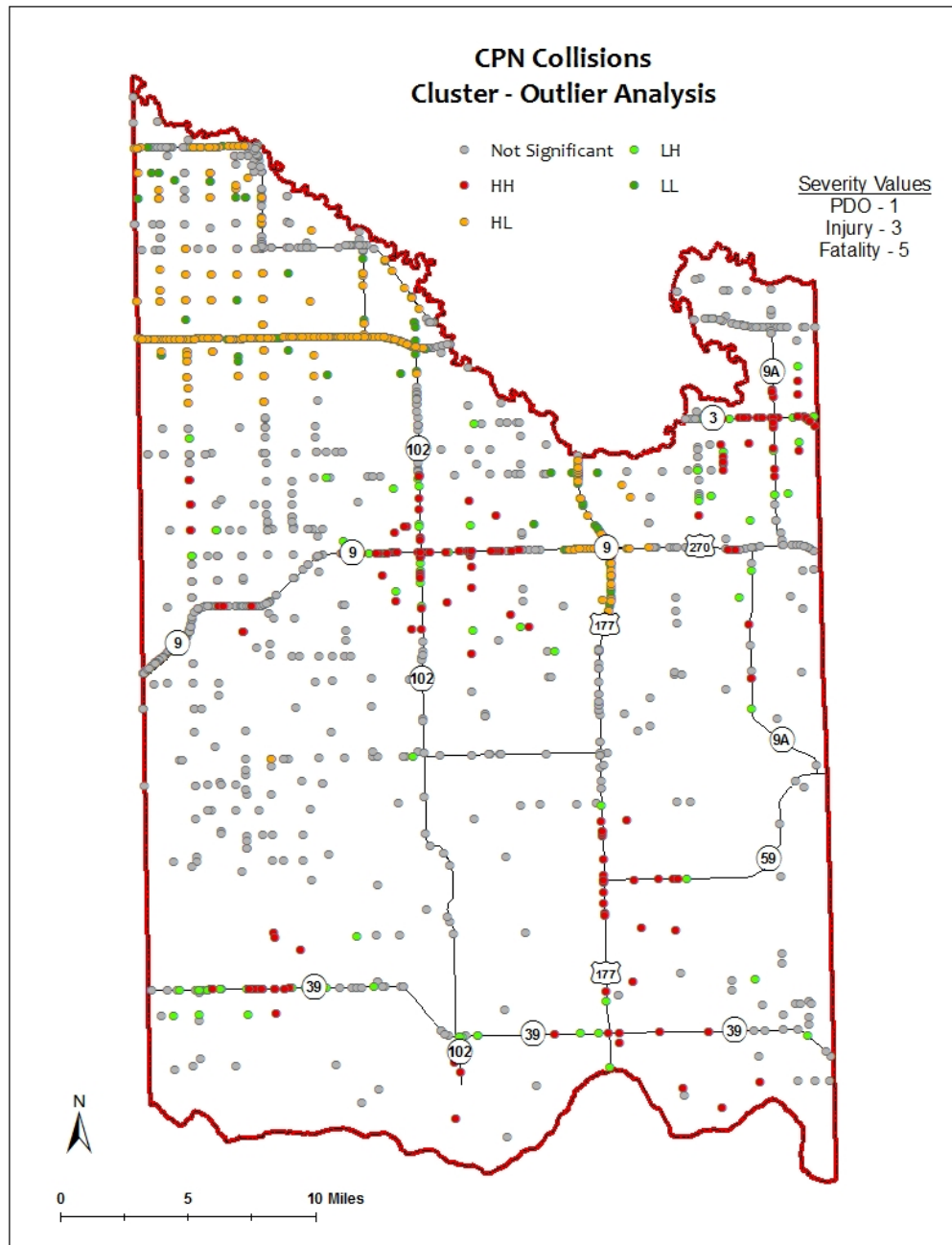


FIGURE 4. CPN COLLISION CLUSTER – OUTLIER ANALYSIS

High positive z-scores indicate that the features surrounding a certain data point have similar high or low values. For this particular cluster analysis, the High-High (HH) points indicate a cluster of high values while the Low-Low (LL) clusters indicate a cluster of low values. Collisions that present as HH clusters are the most critical because these are the injury – fatality areas. Collisions that present as LL clusters are of less concern because they are primarily areas where property damage occurs.

Low negative z-scores indicate a statistically significant outlier. A High-Low (HL) feature has a high value and is surrounded by features of low values. A Low-High (LH) feature has a low value and is surrounded by features of high values. An HL outlier would be of less concern because it is a severe collision that is more of an anomaly than regular occurrence. A LH outlier would be considered a blessing in that it was less severe collision where many serious ones have occurred.

Interstate 40 and the northern section of US 177 (near the intersection of SH 9) have several HL outliers which indicates occasional severe collisions and many less severe collisions.

Several HH clusters appear within the CPN boundaries. These areas are of grave concern because they indicate clusters of injuries and fatalities. The four main intersections where HH clusters appear are SH 3 & SH 9A, SH 102 & SH 9, SH 59 & US 177, and SH 39 & US 177. State Highway 39 also has a stretch of roadway that is susceptible to injury and fatality collisions.

Road safety audits and traffic studies should be conducted in these areas to aid in the reduction of the number of serious accidents.

Pottawatomie County

For the generated analysis period, Pottawatomie County experienced 5,204 recorded crashes. Of these, only 4.41% involved drugs or alcohol. No restraint was used in 504 (9.68%) of the crashes. The chart below shows the breakdown of lighting conditions (Figure 5). A full collision report for Pottawatomie County is included as Appendix B.

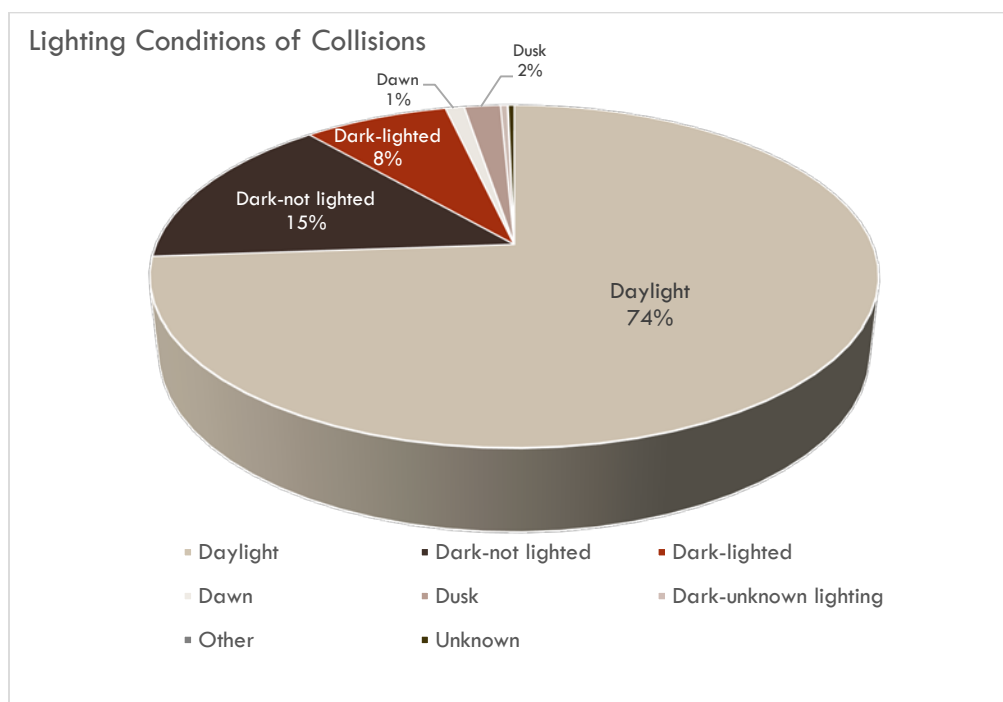


FIGURE 5. LIGHTING CONDITIONS OF COLLISIONS IN POTTAWATOMIE COUNTY

This general overview of the available crash data shows that the majority of the severe collisions occur along the state highways (SH 9, SH 59), the US highways (US 270, US 177), and Interstate 40. While the CPN police serve as first responders, many safety improvements along these major roadways are beyond the scope of its purview and resources. The critical safety concerns of the CPN are focused on safe passage for its tribal members, employees, and patrons. Therefore, the following sections explore the roads and intersections that are of primary interest to the CPN: Hardesty Road (east-west), Gordon Cooper Road (north-south), the intersection of US 177 and Hardesty Road, and the Firelake Grand Casino along I-40.

CPN Critical Safety Locations

Hardesty Road

Through ODOT's SAFE-T, collision data was examined for the city of Shawnee. ODOT does not provide shapefile data for the city streets. Hardesty Road is classified as a city street and provides access to the CPN complex from US 177. A road collision analysis was performed for the segment of Hardesty Road from 13th Street to Brangus Road (see Figure 5). The information for the five-year study period is limited – only 27 collisions are listed. Of these, twelve were listed as angle-collisions; ten were identified as rear-end collisions. The collision report is included within Appendix B.

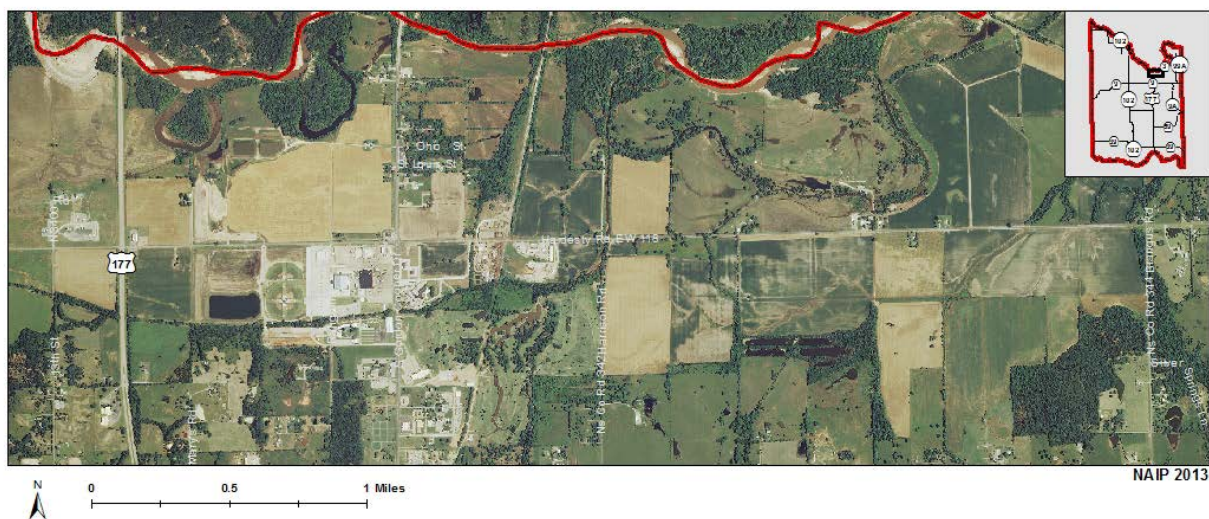


FIGURE 6. HARDESTY ROAD FROM 13TH ST. TO BRANGUS RD.

Several facilities and businesses of tribal importance are located along this roadway. These include the sports complex, the Firelake Casino (and associated businesses), tribal offices and headquarters, and the future industrial park. Site-visits were conducted at these key locations to examine the traffic patterns and roadway conditions.

Intersection of Hardesty and US 177

The intersection of Hardesty Road and US 177 is a highly traveled area. On US 177 there is a left turn lane at the light and the traffic flows fairly well north and south through the light. Hardesty Road is a two-lane road on both sides of the intersection with US 177. Turning left off of Hardesty Road onto US 177 can be hazardous and is prone to angle-turning and rear-end collisions. Hardesty Road should be widened and a designated turn lane installed to help alleviate the congestion and turning hazards at the intersection. When

the left turn lane is installed on Hardesty Road a new traffic light will be required at the intersection to accommodate the turning traffic.



FIGURE 7. INTERSECTION OF HARDESTY ROAD AND US 177 (FACING WEST)

At the Sonic location on north side of Hardesty Road near the intersection of US 177 there is a lot of traffic turning in and out of the Sonic parking lot. Adjacent to the Sonic there is a gravel parking area for large trucks. Both the cars and large trucks that turn in and out of this area create a dangerous situation on Hardesty Road due to its proximity to the intersection with US 177. The CPN has plans to develop businesses and other tribal facilities along Hardesty Road. To accommodate increases in traffic, the roadway should be widened to either a four lane road or a two lane road with a continuous left turn lane. Until the roadway can be widened, additional signage should be placed in this area to warn drivers of the turning traffic and congestion in the area. Due to the potential for increased pedestrian traffic, crosswalks should also be installed as part of the new traffic signal installation.

Hardesty Road and the Firelake Casino

The Firelake Casino lies on the south side of Hardesty Road. Next to the casino, the tribe has added a bowling alley and restaurants. To accommodate the need for more parking, the CPN is building an employee parking lot on the north side of Hardesty Road, opposite of the casino. The traffic on Hardesty Road is generally heavy and will create a hazard for employees crossing the road to reach the Casino. A pedestrian crossing will need to be installed at this location. The crossing should include a painted crosswalk and a button actuated traffic signal that is controlled by the pedestrians crossing the road. This crossing should also include advance warning signs. Further engineering and traffic studies should be conducted at this site to determine the best design to ensure pedestrian safety.



FIGURE 8. FIRELAKE CASINO (LOOKING SOUTHEAST)

Further east along Hardesty Road, the CPN is in the process of constructing an Industrial Park on the north side of Hardesty Road just west of Brangus Road. It is anticipated that the majority of the heavy truck traffic entering the Industrial Park will come from the west and turn left across Hardesty Road. Hardesty Road is a two-lane road in this area and the existing infrastructure cannot support the traffic of heavy trucks. A left turn lane should be constructed to allow for trucks turning left into the Industrial Park. A right turn lane and acceleration lane should also be constructed on the north side of Hardesty Road to alleviate congestion that will be caused by trucks turning out of the Industrial Park heading west on Hardesty Road.



FIGURE 9. SITE OF FUTURE INDUSTRIAL PARK (LOOKING EAST)

Gordon Cooper Road

Gordon Cooper Road, classified as a city street, provides access to the CPN complex from Shawnee to the north and Tecumseh to the south. A road collision analysis was performed for the segment of Gordon Cooper Road from Benson Park Road to Ohio Street (see Figure 11). The information for the five-year study period is limited – only 26 collisions are listed. Of these, nine were listed as angle-collisions; eleven were identified as rear-end collisions. The collision report is included within Appendix B.



Along Gordon Cooper Road lies the Citizen Potawatomi Nation tribal complex, Firelake Discount Foods, and a newly built tribal housing complex.

The intersection of Gordon Cooper Road and Hardesty Road is the most critical juncture of the CPN area (see Figure 10). Gordon Cooper Road was recently widened and a left turn lane was added at the intersection with Hardesty Road. The construction of this turn lane and the installation of a traffic signal at this intersection has helped relieve the congestion and turning hazards. However, Hardesty Road remains a two lane road with no turn lanes at this intersection. Hardesty Road should be widened and a left turn lane installed at this intersection.



FIGURE 10. INTERSECTION OF HARDESTY RD. AND GORDON COOPER RD.

FIGURE 11. GORDON COOPER ROAD FROM BENSON PARK TO OHIO STREET

Gordon Cooper Road at the CPN Complex

The CPN Complex is located on the east side of Gordon Cooper Road across from the Firelake Discount Foods grocery store. Along the east side of Gordon Cooper Road, in front of the Complex, there are no sidewalks for the pedestrian traffic. Over the past several years there has been an increase in pedestrian traffic from the Complex area going to the Firelake grocery store. Sidewalks should be installed along the east side of Gordon Cooper Road that start from the entrance to the CPN Administration building and travel north to the traffic signal at the intersection of Hardesty Road and Gordon Cooper Road.



FIGURE 12. WEST ENTRANCE TO CPN TRIBAL COMPLEX (GORDON COOPER RD.)

Gordon Cooper Road at Firelake Discount Foods

On the west side of Gordon Cooper Road, just south of Hardesty Road, an ever increasing amount of pedestrian traffic is the result of the growth of the Firelake Discount Foods grocery store, the recreational/camping areas to the immediate south and west, the casino, and the bowling alley. As the CPN facilities develop, the pedestrian traffic will continue to increase. Currently, there are no sidewalks and the pedestrian zones are confusing and not clearly defined. Pedestrians either walk along the edge of Gordon Cooper Road or in the grocery store parking lot. Designated walking pathways with appropriate signage are needed to protect the pedestrian traffic. A safe, all-weather sidewalk would require the conversion of the current drainage system along Gordon Cooper Road to an underground storm sewer system.



FIGURE 13. FIRELAKE DISCOUNT FOODS (LOOKING SOUTH ALONG GORDON COOPER RD.)

Firelake Grand Casino

The Firelake Grand Casino is a growing enterprise along I-40. In July 2013, the Grand Hotel was opened and the casino is evolving into a resort with additional restaurants, golf course, swimming pool, and events center. As the CPN increases the size and capacity of the casino, the traffic in the area is expected to increase. The number of pedestrians will also increase.

This stretch of I-40 is troublesome area riddled mostly by property damage and injury collisions (see Figure 14). The on and off ramps of I-40 have been extended and designed to handle the increase in traffic that has taken place over the last few years. Heavy trucks and recreational vehicles have also increased in this area. Further development plans are being discussed for the Firelake Grand Casino which will result in heavier traffic flows from the north and along I-40. To the northeast of the casino is the intersection of Westech Road and US 270. This curve is susceptible to injury accidents.

The consumption of alcohol and late night activities lend themselves to a greater likelihood of drivers under the influence. Casino security officers are trained to spot inebriate patrons and have protocols for dealing with potentially dangerous situations. Casino security works directly with CPN police, the county sheriffs, and highway patrol to keep all roadways safe.

Additional traffic studies and collaboration between the state, county, and tribe are recommended to ensure the safety of all motorists near the Firelake Grand Casino.

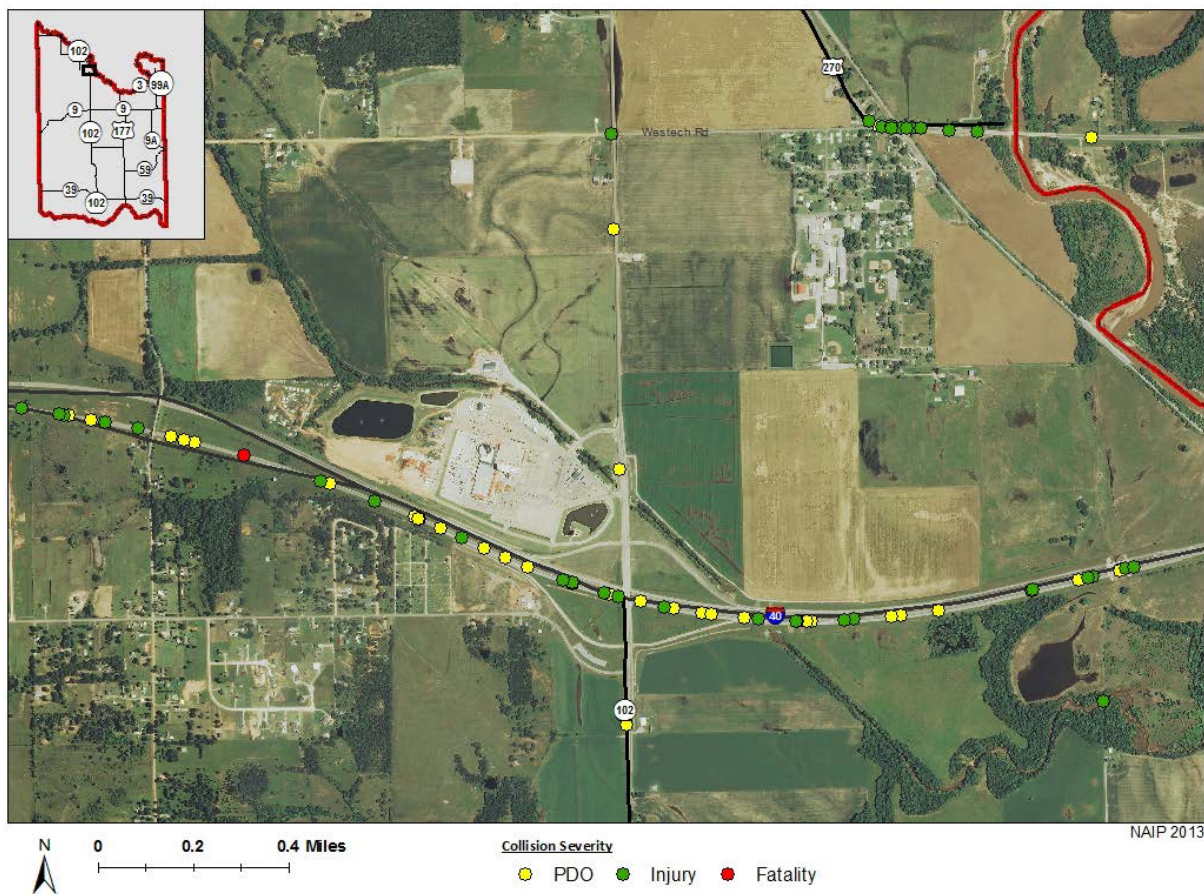


FIGURE 14. FIRELAKE GRAND CASINO AREA

Emphasis Areas

The transportation department of the Citizen Potawatomi Nation is the champion for this safety management plan. An initial meeting with the transportation and transit departments was held on November 21, 2013. At this meeting, transportation priorities were discussed and plans were made to hold a larger safety planning meeting in which CPN transportation stakeholders were invited. The tribal safety meeting was held at a CPN facility on January 14, 2014. The four Es (Engineering, Enforcement, Education, and Emergency Medical Services) served as the structure for discussion. The following section is the result of the discussions held at this meeting. Documentation and notes of the meeting are included as Appendix A.

Emphasis Area 1: Pedestrian Safety

The Citizen Potawatomi Nation complex is growing into a livable community as defined by the US Department of Transportation. Livable communities provide safe and convenient transportation options (walking, cycling, transit, or driving) to all citizens (http://safety.fhwa.dot.gov/ped_bike/). According to the National Highway Traffic Safety Administration (NHTSA), pedestrian fatalities comprised about 13% of all traffic fatalities in 2010 (a total of 4,280). An estimated 70,000 were injured in roadway crashes that year. In Oklahoma, the number of pedestrian fatalities in 2010 was 62 (9.3% of all traffic fatalities). The rate of pedestrian fatalities per 100,000 is 1.65 – higher than the national rate. In 2010, Pottawatomie

County experienced one pedestrian fatality and three pedestrian injuries (ODOT SAFE-T). Over the course of the 5-year study period, Pottawatomie County experienced three pedestrian fatalities and thirteen pedestrian injuries.

Increasing numbers of pedestrians share the roadway with vehicles around the tribal complex area. As the number of offices grow, the grocery store and the Firelake Casino are expanded, and the recreational complex is developed, more and more pedestrians are making their way to work, to shop, or for entertainment. Many of these pedestrians are children. The existing roadways do not account for pedestrian use, and many of the current developments do not account for pedestrians crossing busy roadways.

Better signage and roadway markings are required for pedestrian safety. In addition to planning and building designated pedestrian walkways, pedestrian walkways should be incorporated into future road design plans, especially in and around the tribal complex. The FHWA has provided the resource *How to Develop a Pedestrian Safety Action Plan* (see Appendix C). This document has been written for planning and designing for pedestrian safety. The design and policy elements considered are street design, street connectivity, site design, land use, and access management. Pedestrian behavior and motorist behavior should also be taken into consideration.

CPN Contact Personnel

- Art Muller, CPN Transportation Department (for federally funded projects)
- Bill Smith, CPN Commercial Construction (for tribally funded projects)

Emphasis Area 2: Adequate Infrastructure to Support Traffic Flows and Expected Increases

The two main roads providing access to CPN facilities are Hardesty Road and Gordon Cooper. Busy intersections and vehicles turning in and out of parking lots onto the main roads raise safety concerns because of the number of collisions and unsafe driving practices. The intersection of Hardesty Road and US 177 is dangerous because of the higher speeds along US 177, the location of Sonic at the northeast corner, and the lack of adequate turning lanes along Hardesty Road. The intersection of Hardesty Road and Gordon Cooper is problematic because traffic backs up along Hardesty because it is only two lanes. Now that traffic lights have been installed, the number of collisions has decreased, but the intersection is still very busy and prone to incidences.

Proper turning lanes in and out of the recreational areas, the grocery store, the casino, and tribal offices along Hardesty Road and Gordon Cooper have not been constructed. With the increasing traffic congestion, these outlets are prime for vehicle collisions. Also of concern is the increase of traffic, especially heavy truck traffic, along Hardesty Road. A few miles east of the tribal complex area is the site of the future Iron Horse Industrial Park. The existing roadway infrastructure cannot support the current traffic flows much less the increase that is expected over the next few years.

The CPN hopes to improve communication within and between construction departments. Better signage, lighting, and road improvements such as widening the road and adding turning lanes will decrease the likelihood for collisions. With a review of the long range transportation plan, the transportation department would like to conduct traffic studies of its high traffic intersections. Eventually, the transportation plans would be incorporated into a tribal wide master plan.

CPN Contact Personnel

- Art Muller, CPN Transportation Department

Emphasis Area 3: Transit Growth and Development

Transit operations for the Citizen Potawatomi Nation is a well-developed and thriving service offered to tribal members, senior citizens, and the general public. Because transit drivers spend much of their time alone on the open road, they are especially liable and susceptible to dangerous or compromising situations. Therefore, the transit department has taken measures to implement a tracking system that is constantly monitored and installed video cameras inside and outside of transit vehicles.

The CPN would like to increase its ridership and expand its transit services. In preparation for this growth, the transit has vested interest in the safety of the road network and the safety of its riders and drivers. Continued driver training is essential for the existing and future transit drivers. Drivers need to know how to handle all-weather road conditions, be trained in basic medical emergency response (e.g. proper CPR), and how to handle disgruntled passengers. Awareness of criminal activities is also critical. Human trafficking and drug trafficking are growing concerns within Oklahoma, and drivers need to be educated on how to prevent, identify, and report these illegal activities.

The CPN Transit department will continue to offer defensive driver training while it looks to add additional training courses such as road handling, CPR / basic EMS, conflict management, and identification of potential criminal activities. The transit department is also interested in conducting studies to identify locations and routes for expansion services. Currently, the transit department uses a computerized transit management system. This system has been serving them well and they would like to continue its maintenance and upgrades as the transit network expands.

CPN Contact Personnel

- Denise Smith, Transit Director

Emphasis Area 4: Communication of Transportation Plans

Communication is critical for building and maintaining a sustainable Safety Management System. Meeting participants felt that they could better plan and lead their departments if they were more aware of transportation plans. The suggested implementation steps for better communication were relatively simple: memos from the Chairman, CPN public postings, coordination of department heads, and the formation of a safety committee. Through the interaction at the safety planning meeting, it was learned that regular director meetings are held but not all departments have been made aware of these meetings. The team of directors could form a safety committee to identify transportation safety issues and assess the transportation safety efforts of the CPN.

Communication is also critical for the master plans of the CPN community. Master planning would include working with the county and local communities. The end goal would be to integrating CPN pathways with larger trail networks that are being developed in the metropolitan areas and beyond.

CPN Contact Personnel

- Jim Collard, Economic Development and Planning
- Tim Zientek, Safety Director

Emphasis Area 5: Road Safety for Drivers and Non-Drivers

This action issue considers tribal employees, drivers in general, cyclists, and pedestrians. Safe driving practices should extend to the general public as well as the education of non-drivers. Given the increasing numbers of pedestrians, it was expressed that non-drivers should be aware of ways that they can increase their safety.

Many of the CPN employees drive tribal vehicles, including transit drivers. Defensive driving classes are regularly offered to employees, but employees would also be served well by being offered sessions of safe driving practices as refresher training. Due to the large number of CPN insured drivers, liability and protection are high priorities through awareness and enforcement. Drivers should be aware of tribal driving policies and department directors should be made aware of their responsibilities as overseers of drivers.

Ways to increase awareness would be to make more announcement of defensive and safe driving classes. The attendees believed that more people would attend sessions if they were aware of them. It was also suggested that CPN employee education courses be developed for safe driving practices and tribal driving policies. In line with that thought, it was felt that directors should be better educated in what is expected of the employees under their management.

Regular safety education notices for drivers and non-drivers could be published through CPN youth programs and the CPN media. These notices would be aimed at making drivers more pedestrian aware and to teach pedestrians, especially children and teens, how to protect themselves against dangers that pedestrians face.

CPN Contact Personnel

- Tim Zientek, Safety Director
- Frank Schmidkofer, Safety
- Richard Driskell, Grocery

Emphasis Area 6: Accountability and Liability

The purpose of this action issue is to establish clearly defined responsibilities of law enforcement, Firelake security, CPN employees, and individuals. Traffic safety enforcement around the tribal complex area is primarily the responsibility of the CPN police. The CPN police are cross-deputized and their jurisdiction covers trust land, the municipalities of Shawnee and Tecumseh, and Pottawatomie County. While the role of law enforcement is more understood, the responsibilities of CPN security, employees, and individuals are not as clear. Employees and tribal members are subject to the CPN tribal policies and court system. The individuals who live, work, or frequent tribal businesses and facilities should be made more aware of their role as safety proponents of the CPN.

Public safety tips could be posted at public facilities such as the casinos, grocery, and recreational facilities. An organization chart designed for outlining the safety responsibilities of law enforcement, CPN security, CPN employees, and individuals was proposed so that individuals would have a clear understanding of his or her role in providing for and protecting the safety of the CPN community. Within public facilities, an official notice of CPN public safety guidelines and penalties would aid law enforcement and security personnel by placing more accountability on the individual. The organization chart and guidelines could be made available the general public and employees through a smart phone application.

CPN Contact Personnel

- Jennifer Bull, Public Information
- CPN Police Department
- CPN Legal Department / Court System

Emphasis Area 7: CPN Emergency Notification and Response

With their status as first responders and assistance providers, the CPN police have the most crucial role as the enforcement part of the safety management system. Not only do the CPN police enforce traffic laws, but they also provide medical assistance as needed within the CPN tribal jurisdictional area. The CPN health clinic has a direct link to the CPN police station through the use of panic buttons. However, the police headquarters is currently in a location that is surrounded by pedestrian zones and a parking lot. The police feel that as first responders, their mission is to get to the scene of an incident as quickly as possible without delays, such as worrying about hitting a pedestrian. The CPN police department would like to have a more suitable location for its headquarters or a modification of the existing location. The location would need to have a surrounding alert system that allows for the quick departure of response vehicles. Response vehicles also need to be reliable and regularly maintained.

The CPN police department has been approved for expansion through the addition of officers. As their law enforcement presence strengthens, the CPN would like to put a short-cut number (such as 911 or *55) that reaches dispatch for the CPN. This would reduce the response time especially in the CPN complex area. Research on how to place and operate a short-cut number would need to be conducted.

CPN Contact Personnel

- CPN Police Department
- Brad Peltier, Chief Operations Officer
- CPN Vehicle Maintenance
- Tim Zientek, Safety Director
- Dennis Dyer, CPN Networking

Emphasis Area 8: Emergency Operations Plans

The CPN already has a Hazard Mitigation Plan in place that is updated every five years. In recent years, the threat and presence of tornadoes have grown in the CPN area and seismic activity continues to increase in Oklahoma. Unfortunately, in our present times, the need to be prepared for every kind of threat is also essential for public safety. The CPN has developed several emergency response plans, but these plans are only worthwhile if people are educated about how to use them – where are the safe locations and how to get to them. Greater education and awareness of these plans should be available to tribal members, employees, and department directors.

Education programs should be developed to cover emergency response plans and these should be made available to CPN employees, especially directors. Safe locations need to be identified, mapped, and published for the public. Safe routes within the CPN road network should also be identified, mapped, and published. Emergency response plans should be shared with department directors and occasional drills conducted.

CPN Contact Personnel

- CPN Administration
- CPN Safety
- CPN Emergency Operations
- CPN Police Department

Summary

The table below has been prepared to summarize the CPN Strategic Transportation Safety Plan. Included are the Emphasis Areas, Strategies, and the 4 Es under which each emphasis area falls. Within the strategies column, several resources are cited that are available for further research and application. Additional documentation and website references are included in Appendix C.

TABLE 1. CPN STSP SUMMARY

Emphasis Area	Strategies	4 Es
Reduction in number of injury / fatality collisions	<ul style="list-style-type: none"> • FHWA Proven Countermeasures • ATSSA Low Cost Local Road Safety Solutions • Road Safety Audits • Maintenance/addition of signs and sign supports • Additional or improved lighting 	<ul style="list-style-type: none"> • Engineering • Enforcement • Education • EMS
Pedestrian Safety	<ul style="list-style-type: none"> • Construction of sidewalks • Construction of crosswalks/beacons • ATSSA Low Cost Local Road Safety Solutions • FHWA How to Develop a Pedestrian Safety Action Plan 	<ul style="list-style-type: none"> • Engineering • Education
Adequate Infrastructure to Support Traffic Flows and Expected Increases	<ul style="list-style-type: none"> • Traffic Studies • Road Safety Audits • FHWA Proven Countermeasures • CPN interdepartmental communication 	<ul style="list-style-type: none"> • Engineering
Transit Growth and Development	<ul style="list-style-type: none"> • Transit Expansion Studies • Professional Development • Federal Transit Administration Tribal Transportation Program • APTA Safety & Security Resources 	<ul style="list-style-type: none"> • Education • EMS
Communication of Transportation Plans	<ul style="list-style-type: none"> • Communication from the top down (Chairman to Directors to Employees) • Directors' meetings • Formation of safety committee • Use of existing CPN media outlets 	<ul style="list-style-type: none"> • Education
Road Safety for Drivers and Non-Drivers	<ul style="list-style-type: none"> • National Highway Traffic Safety Administration - Pedestrians • Safe Routes to Schools • Defensive Driving courses • Use of existing CPN media outlets 	<ul style="list-style-type: none"> • Enforcement • Education
Accountability and Liability	<ul style="list-style-type: none"> • Clearly defined responsibilities • Develop organization chart • Publication of safety roles and responsibilities 	<ul style="list-style-type: none"> • Enforcement • Education
CPN Emergency Notification and Response	<ul style="list-style-type: none"> • More suitable location for police headquarters • Expansion of force, vehicles, and equipment • CPN Police short-cut number 	<ul style="list-style-type: none"> • Engineering • Enforcement • EMS
Emergency Operations Plans	<ul style="list-style-type: none"> • Development of emergency response plans • Publication of emergency response plans • Mapping of safe locations and safe routes 	<ul style="list-style-type: none"> • Engineering • Education • EMS

Conclusion

The CPN Strategic Transportation Safety Plan is intended to be a dynamic document that can and will adapt to roadway improvements, legislation changes, and technological advances. The transportation department, safety meeting participants, and other relevant personnel should review the safety management plan, incorporate it into the CPN master plan, evaluate its effectiveness at set intervals of time, and modify as necessary.

References

Federal Highway Administration. Developing Safety Plans: A Manual for Local Rural Road Owners. US Department of Transportation. <http://safety.fhwa.dot.gov>.

Oklahoma Department of Transportation. Statewide Analysis for Engineering & Technology (SAFE-T). <http://www.oksafe-t.org>.

List of Preparers

This document has been developed and prepared by

Pamela D. Jurney, GISP
Project Development Director, Cross Timbers Consulting, LLC
pamela.jurney@crosstimbersconsulting.com

and

Tom Edwards
President, Cross Timbers Consulting, LLC
tom.edwards@crosstimbersconsulting.com