

# **Confederated Tribes of the Chehalis Reservation Strategic Transportation Safety Plan**



*Prepared with Assistance from:*

*Gibson Traffic Consultants, Inc.*

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## ATTACHMENTS

<b>COLLISION DATA .....</b>	<b>A</b>
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## ACRONYMS

ADT	Average Daily Trips
BIA	Bureau of Indian Affairs
HCM	Highway Capacity Manual
LOS	Level of Service
LRTP	The Long Range Transportation Plan
MEV	Million Entering Vehicles
MVM	Million Vehicle Miles
RRFB	Rapid Rectangular Flashing Beacons
V/C	Volume to Capacity ratio
WSDOT	Washington State Department of Transportation

## **1. INTRODUCTION**

It is the goal of the Chehalis Tribe to develop a Transportation Safety Plan which provides a strategy for making the transportation system within and around the Chehalis Reservation as safe as possible. The Chehalis Tribe wants to make SAFETY THE FIRST CONSIDERATION – SAVE A LIFE - SAVE A NATION.

## **2. PROCESS**

The scope of the Safety Plan was developed in conjunction with Chehalis Tribal Transportation Planning staff. The stakeholders identified below were contacted as part of the Safety Plan and were chosen to provide pertinent advice in acquiring and analyzing data, selecting emphasis areas, developing safety strategies and implementing the final plan. A community meeting was held on March 3, 2016 to allow individuals to express their concern, provide Law Enforcement the opportunity to give additional feedback on traffic and safety concerns, and to discuss options for road safety for tribal fisherman. This was in addition to a transportation survey completed by 50 Tribal members to identify areas of residential concerns.

### Stakeholders:

- Chehalis Tribal Planning Department
- Chehalis Tribal Police Department
- Chehalis Tribal Business Committee
- Chehalis Tribal members

The issues raised by the Stakeholders include:

- Sight distance issues at intersections
- Non-motorized (pedestrian, bicycle, etc.) facilities
- Intersection improvements
- Roadway and roadside improvements
- Visitors, especially those not familiar with the reservation
- Lack of roadway lighting
- Truck traffic
- Collision data records

## 2.1 DATA REVIEW

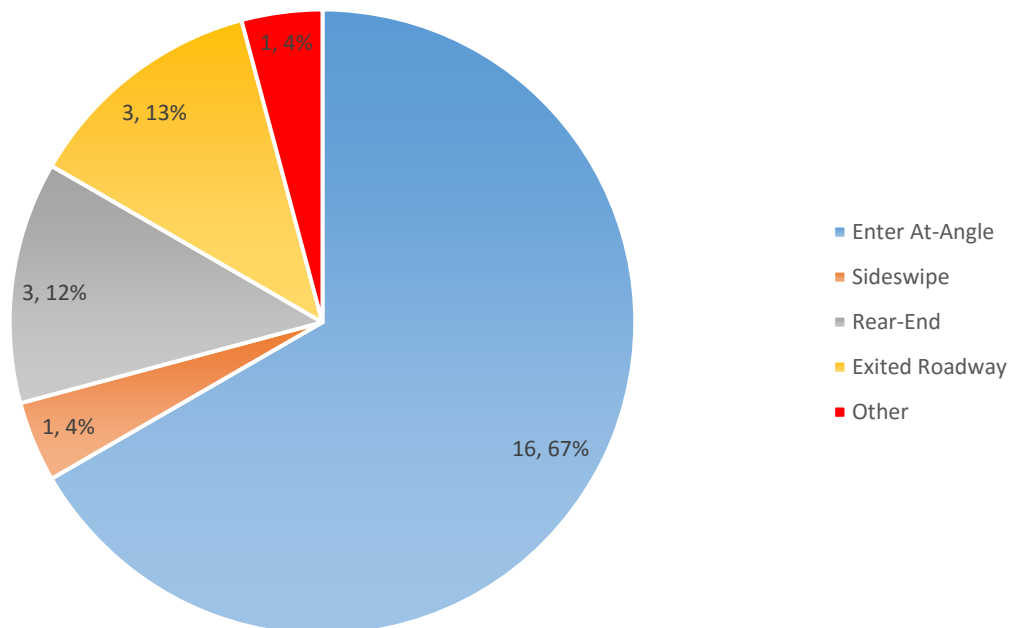
The data analyzed as part of the Safety Plan was obtained from WSDOT for the period from January 1, 2010 through approximately June 1, 2015 for collisions occurring on the Chehalis Reservation. Collision data was not analyzed along the major roadways leading to the Chehalis Reservation, primarily US-12, since the roadway was extensively analyzed recently by the Chehalis Tribal Planning Department. However, the data analyzed for this report does include intersections with US-12. A discussion of data collected from the Chehalis Tribe Police Department is included later in this report.

## 2.2 WSDOT COLLISION DATA

The WSDOT collision data was analyzed for overall general trends per FHWA recommendation and is presented in Figure 1 through Figure 4 for frequent collision types, major contributing factors, age of drivers, and restraint usage. These trends were compared to Washington State Target Zero and/or local Grays Harbor/Thurston County data. It is important to note that the WSDOT data only includes 24 collisions, which is a relatively small data set.

The frequent collisions from the WSDOT data were identified to determine which collision types were predominant and may require additional investigation to determine the cause. The collision types that constitute the majority of collisions are summarized in Figure 1.

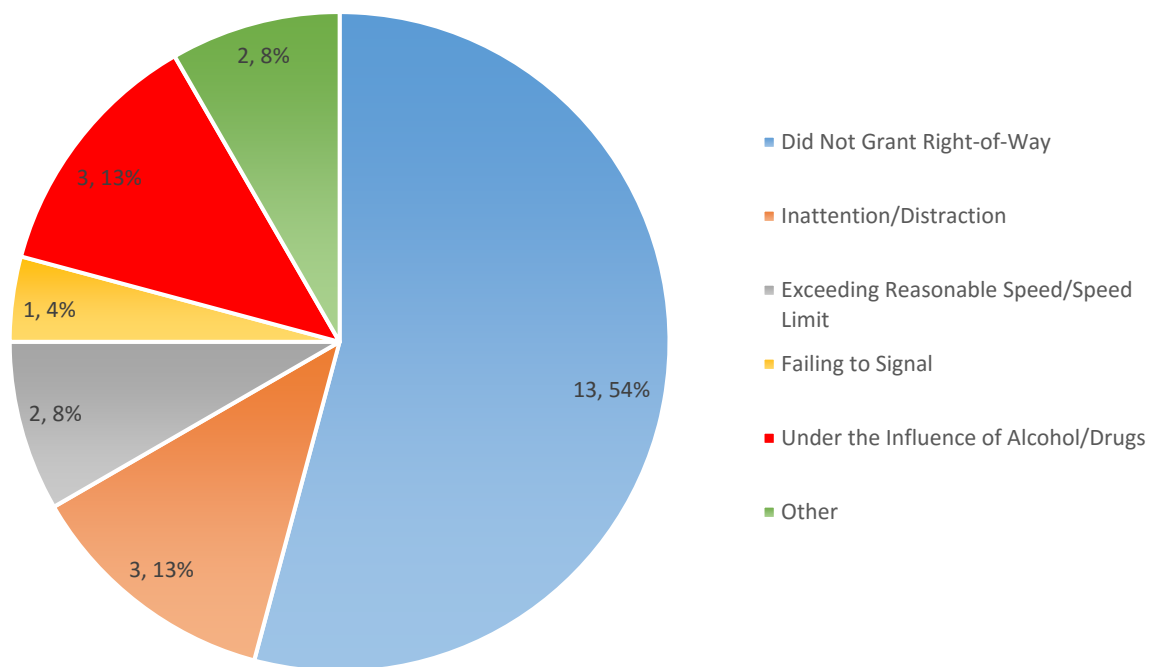
Figure 1: Frequent Collision Types



The summary of collision types shows that the most frequent collision type is at-angle collisions, which includes vehicles turning at intersections or driveways. These collisions accounted for 16 of the 24 collisions, which is 67%. At-angle collisions are typically associated with left turns at driveways and two-way stop-controlled intersections, a predominant intersection type in the area. These types of collisions often result in serious injuries, especially if high speeds are involved. Rear-end collisions and vehicles exiting the roadway were the second highest collision type and accounted for 25% of the collisions. Vehicles exiting the roadway are typically associated with drivers not paying attention or speeding while rear-end collisions typically occur in congested areas. The rural nature of the roadways, including narrow lanes and lack of shoulders, likely leads to vehicles running off the roadway. A detailed review of the main roadways, such as a safety road audit, would be necessary to fully understand why at-angle collisions are such a high percentage of the collisions on the reservation and to identify potential measures that can be enacted to prevent these collisions.

The major contributing factors have also been identified in Figure 2.

Figure 2: Major Contributing Factors

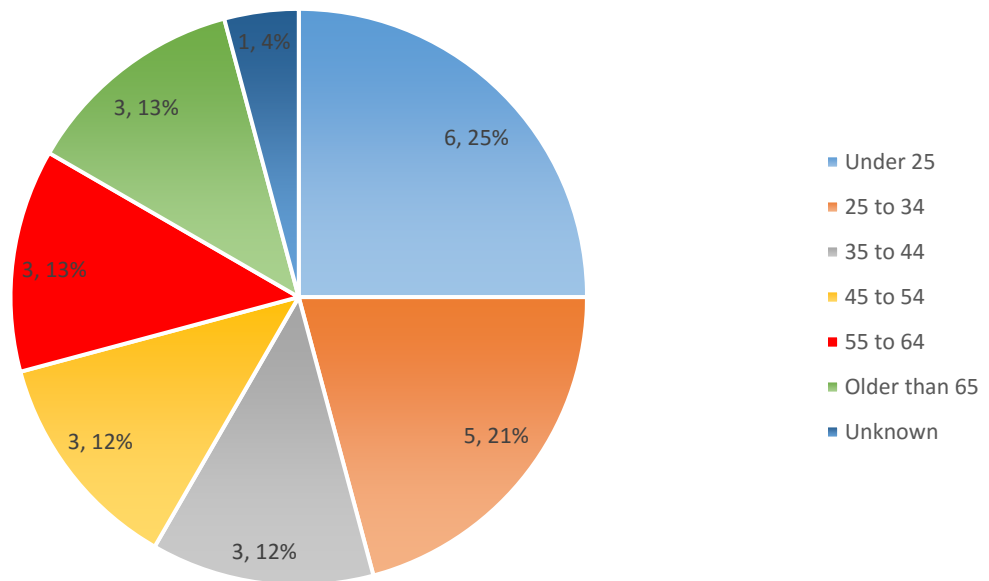


The major contributing factor, causing more than half of the collisions, is no granting right-of-way, which is consistent with causing at-angle collisions. Inattention/Distracted and under the influence of alcohol/drugs were the second-most prevalent collision types, accounting for 26% of the collisions. Both of these contributing factors can lead to at-angle collisions and vehicles exiting the roadway. Under the influence of alcohol/drugs was a contributing factor in 3 collisions; however, that accounted for 13% of the total collisions. This percentage is nearly 2.5-times greater

than the Washington State average. Therefore, continued emphasis to reduce alcohol and driving needs to be emphasized.

The driver age for the collisions is identified in Figure 3.

Figure 3: Age of Driver

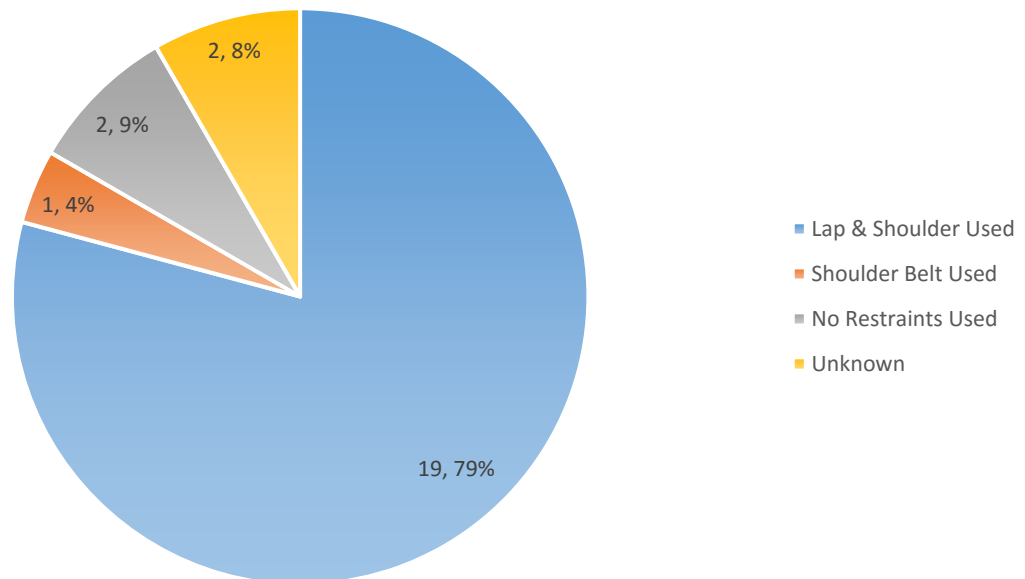


The age ranges are based on national data to have relatively equal percentages of drivers in each age range. Each age range is equivalent to approximately 15% of the national population. The data shows that drivers under the age of 25 are responsible for approximately 25% of the collisions and drivers age 25 to 34 are responsible for approximately 21% of the collisions, which are disproportionate to their percentage of the population. However, the percentage of collisions due to drivers under 25 and drivers 25 to 34 is consistent with Washington State collision data published by WSDOT for 2013, the latest period available.

Early education and additional training opportunities is vital. Formal education and parents/guardians is critical, but is it also important that parents/guardians set an example of good driving practices, such as not driving while distracted, under the influence of alcohol/drugs, and speeding. Some tribes are taking additional steps for training young drivers. In Washington State those drivers delaying obtaining their licenses until 18 do not need to undergo any driver training. A tribal policy or the availability of driver training is an option being looked at by other tribes, such as Nooksack.

The collisions data was also evaluated to determine if restraints were utilized. The utilization of restraints is summarized in Figure 4.

Figure 4: Restraint Usage



The data shows that 83% of drivers are confirmed using restraint system with 9% being confirmed as not using restraints. The restraint usage on Chehalis Reservation is as high as 91%, which is similar to what is identified in Washington State Target Zero.

### 2.3 CHEHALIS TRIBE COLLISION DATA

Collision data from the Chehalis Tribe Police Department was received for the period from January 1, 2011 through approximately September 31, 2015, approximately 4.75 years. The data provided by the tribe's Police Department was not as detailed as the WSDOT data and essentially only identified the date and general location of the collision and if there was a fatality. The tribe's data identified 139 total collisions with the vast majority of these collisions occurring at or around the Lucky Eagle Casino. These collisions accounted for nearly 75% of the total collisions received from the Chehalis Tribe Police Department. The collisions at the Lucky Eagle Casino appear to include collisions occurring within the parking lot and a differentiation between collisions within the parking lot and those with which access locations were not able to be made, nor the type or cause of collision. The only other location that had more than 5 collisions is Howanut Road at Niederman Road, which had 8 collisions. Again there was no cause or type of collision data therefore it was not possible to determine anything for a policy/safety plan.



## 2.4 STAKEHOLDER INPUT

Input was also received from stakeholders by way of a community meeting for comment, a transportation safety survey, and interviews with the individual tribal members regarding safety on the Chehalis Reservation. Issues raised by the stakeholders include:

- Pedestrian facilities
- Truck traffic, including interaction with other vehicles and pedestrians on narrow roads
- Roadside ditches, including depth and proximity to roadway
- Speeding
- Collisions caused by visitors to the reservation
- Lack of street lighting
- Blind curves

These concerns raised by the stakeholders could be the underlying cause of some of the collisions documented in this report. However, it is difficult to draw links between these stakeholders' concerns and the collision data. Despite this, these concerns have been factored into the recommendations discussed below.

### *Pedestrian Facilities*

Pedestrian facilities were a significant concern of the stakeholders during the survey. Walking or biking is a significant form of transportation for many members of the Chehalis Reservation. Of particular concern is Anderson Road, south of Howanut Road. In this section there is a combination of vehicles, truck traffic and pedestrians on a narrow roadway (see picture). Anderson Road south of Howanut Road consists of residential units near the intersection with Howanut Road, a commercial chicken farm and access to the Community and Youth Center via Secena Road. There are significant pedestrians along Anderson Road due to the residential units and Secena Road connection. Neither Anderson Road nor Secena Road have pedestrian facilities. There are also 5 school busses that carry students from the age of Head Start to twelfth grade, two times a day.



### ***Truck Traffic***

The Briarwood Chicken Farm is located along the east side of Anderson Road, south of Howanut Road and generates most of the truck traffic along Anderson Road since it is the only access. The Briarwood Chicken Farm adds an average of 50 cars and 14 semi-trucks daily to a major pedestrian traveled portion of Anderson Road. This truck traffic is forced to mix with vehicle traffic and pedestrians and a roadway that is approximately 20 feet wide and does not include shoulders, pedestrian facilities or striping to standards. Additionally, Anderson Road and Secena Road provide access to the Community and Youth Center and other facilities.

Pedestrian facilities along Anderson Road north of Howanut Road were also mentioned by stakeholders. This section of Anderson Road provides wide shoulders on each side, but still results in pedestrians and vehicles being in close proximity. The Chehalis Reservation is currently reviewing potential improvements along Anderson Road north of Howanut Road to improve the safety of pedestrians. Road safety audits along Anderson Road, north and south of Howanut Road, would help identify the issues facing pedestrians and options for addressing these issues.

### ***Roadside Ditches***

There are a number of locations within the Chehalis Reservation where steep slopes, typically sloping down from the roadway, are present. The steep slopes are of particular concern on narrow roadways that lack shoulders, which characterizes the majority of roadways in the Chehalis Reservation. These slopes can cause significant safety issues for vehicles if they were to leave the roadway. Additionally, a number of slopes identified along Howanut Road lead to bodies of water. This could lead to vehicles being submerged in water if they were to leave the roadway. Due to the rural nature of many of these roadway there is not lighting along the roadways and there is a general lack of warning signs.



### ***Speeding***

Several stakeholders identified that speeding is a concern. Data was collected at various locations within the Chehalis Reservation to identify if there are speeding issues. A speeding issue was identified as a location where the 85<sup>th</sup> Percentile speed (the speed at which 85% of the vehicles are at or below) was more than 20% of the posted speed limit. There were several locations that were identified that meet this criteria:

- South Bank Road, west of Cemetery Road
- Howanut Road, west of Niederman Road
- Moon Road, south of US-12

Speed data is identified in Figure 5.

### ***Street Lighting***

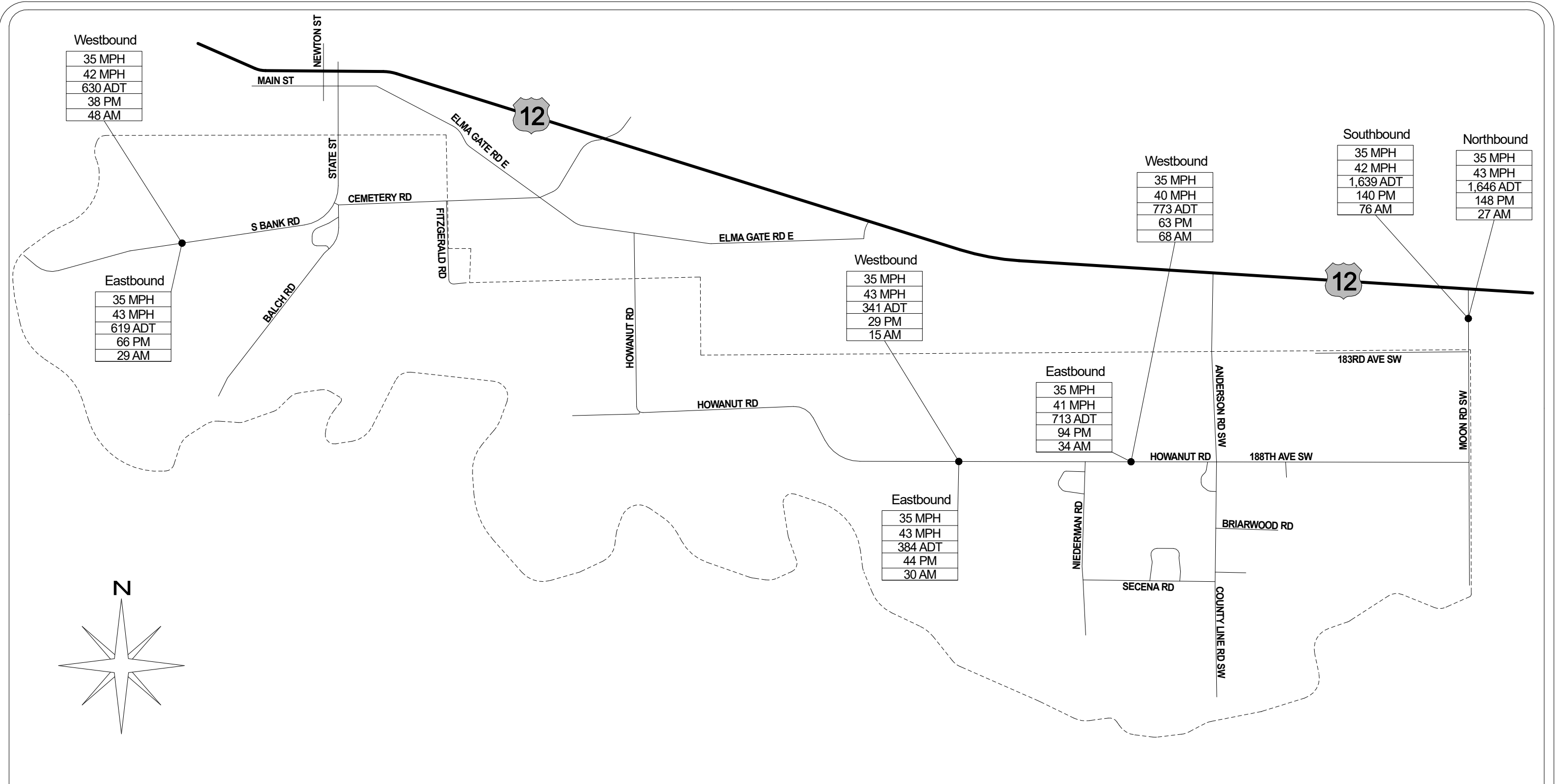
Pedestrian and bicycle usage on the Chehalis Reservation is prevalent. However, the majority of roadways do not have street lighting. Although there are isolated areas that have separated sidewalks, as shown to the right, street lighting is still critical since the majority of roadways do not have separated, or even dedicated, pedestrian and bicycle facilities. Street lighting will help improve the visibility of pedestrians and bicycle riders, especially when significant users of the roadway are visitors.



### ***Blind Curves***

There were several locations identified during visits to the Chehalis Reservation that have blind or potentially blind curves. Many of these locations are located along Howanut Road and Elma Gate Road in the western section of the reservation. These blind curves are also located in areas where there are other contributing circumstances, including, higher speeds, limited clear zone and lack of lighting. These blind curves can lead to conflicts on the roadway, including interaction between vehicles and pedestrians/bicycle riders, vehicles entering/exiting access points/driveways and obstacles in the roadway. The severity of these interactions can be reduced if there is clear sight distance through curves.





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TRAFFIC IMPACT STUDY  
GTC #15-066

CHEHALIS SAFETY PLAN

**LEGEND**

Posted Speed
85% Speed
ADT
PM Peak
AM Peak

FIGURE 5

SPEED SUMMARY

CHEHALIS RESERVATION



## ***Existing Conditions***

Generally, most of the roads on the Chehalis Reservation are 2-lane roadways with minimal or no shoulders and no pedestrian facilities, except where recently reconstructed by the tribe or along the frontage of newer development. There is little to no illumination or channelization, except at the major intersections and along the frontage of new development. Many of the roadways have deep ditches or follow watercourses, but lack clear zone or guardrail and do not meet AASHTO or county standards.

The primary access to and from the Chehalis Reservation is US-12. US-12 is primarily a 2-lane roadway with shoulders and channelization and posted 55 mph outside of Oakville and Rochester, where it decreases to 30 mph. There are 3 to 6-foot shoulders along most of its length except at narrow bridge crossings. There is channelization and illumination at most major intersections. The collision history at the main access points to the reservation (Moon Road, Anderson Road and Blockhouse Road) have been documented in the attachments. Anderson Road recorded 8 collisions related to turns to and from Chehalis Reservation onto /from US-12 while only 5 were recorded at Moon Road and only 1 at Blockhouse Road. Nearly all the collisions were left-turn related where the recorded contributing factor was recorded as “did not grant right of way.” This means most drivers appear to misjudge the gap available (i.e. the speed of the other vehicles). The US-12 safety study and National Cooperative Highway Research Program (NCHRP) Report 613 have several recommendations for speed reduction, such as speed feedback signs and dynamic warning signs. Additional improvements identified in the *US Highway 12 Chehalis Safety Study* for intersections along US-12 are identified later in this study.

Moon Road is a 2-lane roadway that is a back-road access to the Lucky Eagle Casino and to residential areas on 183<sup>rd</sup> Avenue SW. The roadway has minimal shoulders and is posted 35 mph but has an 85<sup>th</sup> percentile speed of 42 to 43 mph. The roadway carries approximately 3,400 daily trips and the only recorded collision was at 183<sup>rd</sup> Avenue SW, which was a left-turn entering at-angle collision.

The main east-west roadway through the Chehalis Reservation is Howanut Road/188<sup>th</sup> Avenue. The Lucky Eagle Casino and the tribal administration facilities are located along Howanut Road/188<sup>th</sup> Avenue. Major intersections include Anderson Road and Niederman Road. The roadway is posted 35 mph, but there is a temporary 25 mph speed limit near the Lucky Eagle Casino due to construction. There were a number of collisions reported at or near the Lucky Eagle Casino driveways. There are approximately 1,500 daily trips and an 85<sup>th</sup> percentile speed of 40 to 41 mph west of Anderson Road. Further west shoulders vary from 0 to 4 feet and there are several curves without guardrail and inadequate warning signs. As Howanut Road progresses west of Niederman Road the daily volumes drop to approximately 750 ADT, but the speeds increase to 43 mph even though the posted speed remains 35 mph.

South Bank Road is on the west side of the reservation and carries approximately 1,250 daily trips with an 85<sup>th</sup> percentile speed of 42 to 43 mph, even though the posted speed is 35 mph. This road is in need of a sidewalk and lighting for pedestrian traffic. This road is utilized by a high number of logging trucks as well as trucks going to the Willis Chip Mill.

Anderson Road is the main access to the Lucky Eagle Casino and the tribal administration facilities from US-12. It has approximately 40 feet of pavement north of Howanut Road/188<sup>th</sup> Street. It is striped for 2 lanes and wide shoulders with a posted speed limit of 35 mph. There is a permanent counter and speed feedback sign; however, the software and battery need updating to process volume and speed data. This section is currently being studied to provide improved pedestrian facilities. Anderson Road becomes a narrow 2-lane facility with no shoulders or pedestrian facilities south of Howanut Road/188<sup>th</sup> Street (see picture under the pedestrian facility section above). This section of Anderson Road provides access to the Briarwood Chicken Farm and the community center and routinely sees a mix of vehicles, trucks and pedestrians.

### **3. RESULTS AND RECOMMENDATIONS**

The general policies to address the Chehalis Tribe collision history, including collision type and contributing factor, are shown below and are consistent with Washington States Target Zero.

- Education – Give drivers the information to make good choices, such as not driving while impaired, wearing a seatbelt, and not driving while too tired.
- Enforcement/Emergency Response – Use data-driven analysis to help law-enforcement officers pinpoint locations with a high number of fatal and serious-injury collisions related to driver behaviors, such as speeding and impairment.
- Engineering – Design roads and roadsides using practical, near term solutions to reduce collisions, or severity of collisions such as rumble strips and wider edge striping

Based on the WSDOT and Chehalis Tribe collision data and information from the stakeholders, the following policies are proposed.

#### **3.1 COLLISION TYPE**

The main collision type within Chehalis Tribe from WSDOT data is at-angle collisions. The major contributing factors are not granting right-of-way, inattention/distraction and under the influence of alcohol/drugs. The ways to address these collision characteristics are:

##### ***Education***

The education is likely to occur at the Community Center and therefore the Community Center staff will spearhead the education component.

- Provide enhanced driver education – Supplement existing training requirements for drivers under 18 to complete additional hours of driver education and training. This can be coordinated with the local school district. Additionally, provide supplemented driver education for youth ages 18 to 20 who are not required to complete driver training under Washington State law.
- Education regarding hazards of inattention/distracted driving (phone, texting, etc.) and driving under the influence of alcohol/drugs. School projects to provide displays at tribal events of the seriousness of such drivers distraction/inattention

- Driver education with an emphasis on the “Rules of the Roadway.”

### ***Enforcement***

- Speed enforcement should occur to ensure motorists are obeying the speed limit, which will help reduce the likelihood of collisions occurring. Speed enforcement will also reduce the risk of serious injuries and fatalities occurring due to at-angle collisions.
- Show of police and road speed feedback presence along roadways so that drivers are aware that police are patrolling and enforcing. This should include adding signage along Anderson Road, Howanut Road, Secena Road, South Bank Road and along 188<sup>th</sup> Avenue SW. Several of the roadways had 85<sup>th</sup> percentile speeds that were about 20% higher than the posted speed limit. Within Washington State the issue of speed cameras has been deemed non-constitutional outside of school or work zones. However, with tribal sovereignty, the option of speed cameras could be investigated.
- Enforcement of under the influence driving in Washington State is the uncertainty of alcohol check points in Washington State’s constitution. The issue of the Chehalis Tribe Police Department being allowed to do spot checks should be investigated. Additionally, the resources for a dedicated traffic officer, if one is not currently employed, should be considered.

### ***Engineering***

- Perform road safety audits along roadways to understand what the roadway characteristics are and how improvements can be made to reduce the hazards. The process should include data collection, including volumes, speeds, etc.
- Warning signs to identify where driveways/intersections are located and turning movements are occurring. Road Safety Light Audit *or engineering* inventory study to determine best locations.
- Intended improvements are:
  - Sight lines at major intersections
  - Slopes and clear zones
  - Lack of signing
  - Lack of lighting
  - Lack of pedestrian facilities
- The following areas were identified during the process of establishing this Safety Plan as potential locations for an RSA; however, other locations should also be considered:
  - South Bank Road
  - Anderson Road, north and south of Howanut Road
  - Howanut Road, entire length

- Potential improvements to address the issues that have been identified include, but are not limited to:
  - Rumble strips (painted or grooved)
  - Wider edge lines
  - Guardrail
  - Reflective edge markers
  - Curve signage (chevrons, warning signs, etc.)
- Maintenance schedule- The permanent counter and speed feedback signs need annual maintenance as they are presently not providing data. Additionally, several locations have striping and signing that is worn.

## **3.2 DATA COLLECTION**

The Chehalis Tribe Police Department has collision data, but the data does not have the same level of detail as the WSDOT data. Ways to improve the collection of collision data are:

### ***Enforcement***

- Training for officers to understand what data needs to be collected utilizing the WSDOT system so that data is at least collected, regardless of whether it is shared with WSDOT or other outside entities.
- Establishing a tribal collision database so the data can be compiled and analyzed or provide all collision reports to WSDOT for entry into their system.

## **3.3 PEDESTRIAN/BICYCLE FACILITIES**

The stakeholders identified that the pedestrian and bicycle facilities need to be provided or improved. A coordinated non-motorized plan is needed with priorities to fill missing links.

### ***Education***

- Educate users, including drivers, of how the roadways are to be used:
  - Hold classes or conferences on driver/pedestrian safety.
  - Initiate a “Share the Road” program. Get community involvement in teaching to youth the proper ways to use the road as a pedestrian or cyclist.

### ***Enforcement***

- Increase visibility in locations where pedestrian/bicycle and vehicle interaction are an issue.



## ***Engineering***

- Require all new construction to provide adequate pedestrian and bicycle facilities along frontage and consistent with a non-motorized transportation plan.
- Develop a plan to connect existing pedestrian and bicycle facilities. This will include Anderson Road, Howanut Road, Secena Road and South Bank Road. The Chehalis Tribal Planning department will work to ensure that all roads on the reservation are equipped to handle pedestrian traffic in all future projects.
- Identify locations as part of the Road Safety Audit process where improvements are necessary and what those improvements should consist of.
- Development of Safe Routes to School Bus Stops.
  - The Chehalis reservation has many school bus stops currently in operation. However, bus stops are a priority with the growing housing and demand for additional safe bus routes, as needed.

### **3.4 UNFORGIVING ROADWAYS**

Stakeholders identified that many roadways have narrow lanes, narrow shoulders and lack of pedestrian/bicycle facilities.

## ***Education***

- Provide information to drivers as to the dangers of not obeying the rules of the road (speed limit, warning signs, etc.). This can be done through the newspaper, reader boards, organizations (schools, Elders, Youth Center, etc.).

## ***Enforcement***

- Use of speed feedback signs.
- Identify through the Road Safety Audit process where roadside improvements are necessary and what improvements should be considered.
- Targeted speed enforcement and traffic calming

## ***Engineering***

- Perform road safety audits along roadways to understand what the roadway characteristics are and what improvements can be made.
  - Road ditches along Howanut Road
  - Generating sidewalk along community tribal roads
  - Improve river access for vehicles
  - Street lighting

- Collect speed data to determine where speeding is an issue.
- Traffic calming measures, including:
  - Bike lanes
  - Center islands
  - Forced turn lanes
  - Median barriers
  - Roundabouts
  - Curb bulb-outs
  - Rumble strips
  - Speed bumps

### **3.5 US HIGHWAY 12 CHEHALIS SAFETY STUDY**

The *US Highway 12 Chehalis Safety Study* identified several improvements to intersections along US-12. The report identified near-term and long-term improvements, which are summarized below. More detail, including preliminary designs, is included in the *US Highway 12 Chehalis Safety Study*. Additionally, recommendations from the study are cited below.

#### ***Near-Term Improvements***

- Adding shoulder rumble strips along the corridor.
- Implement FHWA’s Lane Narrowing Concept and Minor Road Splitter Island Concept at the US 12/Anderson Road, US 12/Moon Road, and US 12/Forstrom Road intersection.

#### ***Long-Term Improvements***

- Adding left-turn lanes at the US 12/Blockhouse Road and US 12/Forstrom Road intersections.
- Changing the access configuration at the US 12/Moon Road intersection.
- Constructing a single-lane roundabout at the US 12/Anderson Road intersection.

#### ***Suggestions***

- Increase enforcement along this corridor during the summer months (May through August) and on weekends (Friday through Sunday).
- Develop and distribute flyers, brochures and other materials to inform drivers to use Anderson Road to access the Chehalis Reservation. These can be distributed at the Lucky Eagle Casino, Chehalis Tribal community and other locations that attract visitors.
- Continue to fund and implement educational campaigns for school-age children and look for opportunities to expand those campaigns to reach adults in the broader community

- Contact national route mapping service providers (i.e. MapQuest, GoogleEarth, etc.) to determine if the Moon Road route could be manipulated to prioritize access to tribal land and the casino via Anderson Road.

### **3.6 RECOMMENDATIONS**

1. Investigate the options to provide sufficient lighting and pedestrian walkways/sidewalks to all reservation roadways. Research new safe routes for all pedestrians and bicyclists on high traffic areas of the reservation.
2. Identify road standards and policies that require all new, reconstructed and re-paved roadways to have the following elements or identify why the features are not feasible:
  - Rumble strips on both sides and center line
  - 8-inch edge lines
  - Reflective edge markers
  - Thermoplastic rumble strips on roadways with limited shoulders and posted under 40 mph
3. Develop a coordinated non-motorized plan with priorities to fill missing links.
4. Provide information to drivers as to the dangers of not obeying the rules of the road (right of way, speed limit, etc.). This can be done through the newspaper, reader boards, organizations (schools, Elders, Boys and Girls Club, etc.).
5. Provide feedback to drivers, pedestrians and bicyclists as to how long it has been since a collision, similar to the number of days on a job site with an accident. A feedback sign as you enter the reservation from US-12 could be potential location.
6. Require all new construction to provide adequate pedestrian and bicycle facilities along frontage and consistent with a non-motorized transportation plan.
7. Hire a dedicated traffic safety officer who could also be cross-deputized and lead safety education and enforcement/emphasis initiatives.
8. Develop a plan to work with local businesses, such as the casino, to have information on variable message signs to get out the message of distracted driving, driving under the influence and vehicles exiting the roadway.
9. Work with schools, community organization (Elders, Youth Center, etc.) and tribal employers to get out the message about intoxicated, distracted driving and vehicles exiting the roadway. Have displays at tribal events
10. Show of police and road speed feedback presence along roadways so that drivers are aware that police are patrolling and enforcing. Within Washington State the issue of speed cameras has been deemed non-constitutional outside of school or work zones. However, with tribal sovereignty, the option of speed cameras could be investigated and again be a decision for Council. The tribal legal department would champion this action.

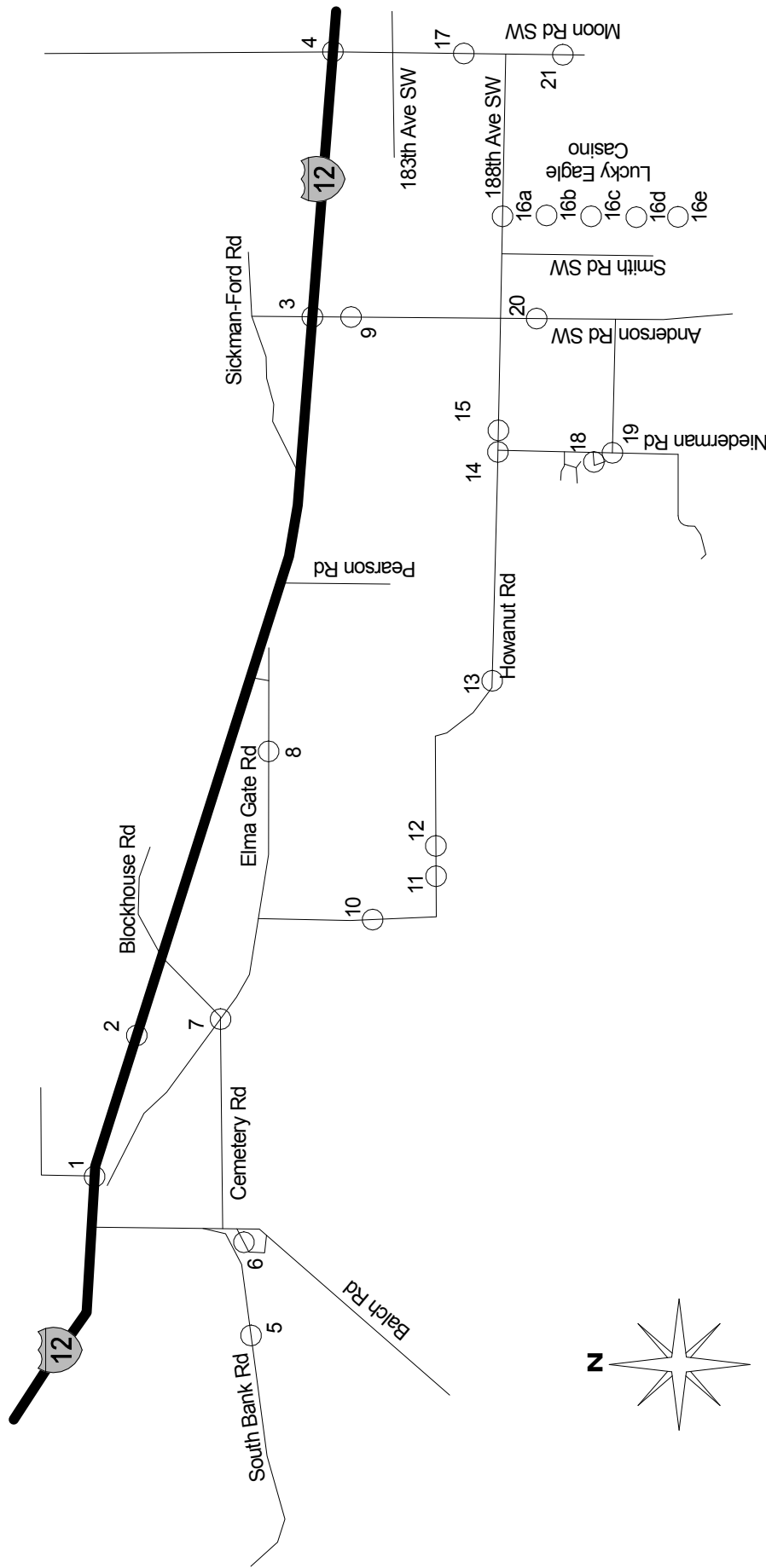
11. Develop a collision data base that includes cause type location age etc.
12. Investigate the options to provide enhanced driver education – Supplement existing training requirements for drivers under 18 to complete additional hours of driver education and training. This can be coordinated with the local school district. Potentially, provide supplemented driver education for drivers 18 to 20 who are not required to complete driver training under Washington state law.
13. Consider the special needs of Motorcycles- consider the safety of motorcycles, bicyclists and pedestrians in all road maintenance functions by providing educational opportunities to agency staff and partners for the special safety of these users.
14. Vegetation management techniques- Vegetation techniques can improve safety by helping to accomplish a reduction of ice on the roadway, increase visibility in deer crossing areas, eliminate "tunnel like" corridors and provide variation along roadway edges to keep drivers alert. By removing clear zone hazards and hazardous trees we can improve visibility of signs/ roadway markings, improve sight distances at intersections and reduce the presence of wildlife near the roadway.
15. Proper use of child safety seats- Continue public education efforts aimed at increasing proper use of safety belts and child restraint systems.
16. Child Safety systems for low income families- Seek and develop additional sources of funding to subsidize provision of child safety system for low income families.
17. Address Distracted Driving- Use nationally available materials and information on the problem of distracted driving by providing information and education about distractions and their relationship to crashes, paying special attention to distractions identified as significant crash causes.

### **3.7 LOCATION RECOMMENDATIONS**

1. Widening of Anderson Road- On Anderson Road, south of Howanut Road the need for repair is of the highest importance. The current state of the road does not allow for adequate travel based on Semi-truck and School bus traffic. The increased use of this road based on the construction of the Chehalis Tribal Community Center has created a need for sidewalks and other pedestrian walkway additions. Bringing Anderson Road south up to the WADOT standard will allow for increased use and lifespan of the roadway.

2. Sidewalk on Secena Road- To assist with the pedestrian traffic along Anderson Road South, the need to construct sidewalks along Secena Road is necessary. This is the path for many tribal members from both east and west to access the community center located in the center of Secena Road. Many gatherings and meetings are held at this location. This has increased vehicle traffic and the safety needs of pedestrians and bicyclists must be reevaluated
3. Sidewalks on Anderson Road- With the closure of EOT 1 and the increased use of the Chehalis RV Park, the necessity for connecting sidewalks along Anderson Road between US 12 and Howanut Rd/ 188th Ave SW, have increased. The community has shown higher foot traffic to EOT2 and patrons of the RV Park are using Anderson Rd to travel to the Lucky Eagle Casino by foot. this route has a need for a crosswalk and additional lit traffic signals that are required for safe passage on roadways.
4. Sidewalk on State Street/ Oak Street- The Chehalis tribe, in collaboration with RCO, are constructing a 10 foot side Multi-use path that will extend from Sickman Loop and the Vosper Community (Tribal Hosing) to the city limit to assist with School age children to commute by foot to the Oakville school district. To continue this path, a sidewalk will need to connect along 3 streets in Oakville city limits. By connecting the Multi-Use path on state street to Oak Street and again on School street, this will allow for safe passage to the school for not only the students from the tribal community but also those who live in Oakville city limits.
5. Guardrails on Howanut- along sections of Howanut Road, there are slopes that follow a creek that are steep and require guardrailing additions to provide safe raodways for its users. a specific section is near an overflow bridge which flows into the Black River.

# Collision Data



**GIBSON TRAFFIC CONSULTANTS**

**TRAFFIC IMPACT STUDY**  
GTC #15-066

**CHEHALIS SAFETY PLAN**

**LEGEND**

##  
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COLLISION LOCATION

SEE TABLE 1 FOR COLLISION FREQUENCY

**FIGURE 1**

**TRIBAL POLICE DATA  
COLLISION LOCATIONS**

Collision Frequency by Location		
Location #	Address	Frequency
1	Murry at SR 12	1
2	Mp 36 at SR 12	1
3	SR 12 at Anderson Rd	4
4	Sr 12 at Moon Rd	2
5	2300 South Bank Rd	3
6	4 Sickman Lp	2
7	100 Bloc Cemtery Rd	2
8	250 Elma Gate E	1
9	18000 Anderson Rd	3
10	100 Howanut Rd	1
11	154 Howanut Rd	1
12	170 Howanut Rd	1
13	300 Howanut Rd	1
14	400 Howanut Rd	1
15	420 Howanut RD	7
16a	12888 188th Ave SW	83
16b	12500 188th Ave SW	7
16c	12840 188th Ave SW	11
16d	12000 188th Ave SW	1
16e	12700 188th Ave SW	1
17	18600 Moon Rd SW	1
18	35 Fern DR	1
19	21 Niederman Rd	1
20	19000 Anderson Rd	1
21	19000 Moon Rd SW	1