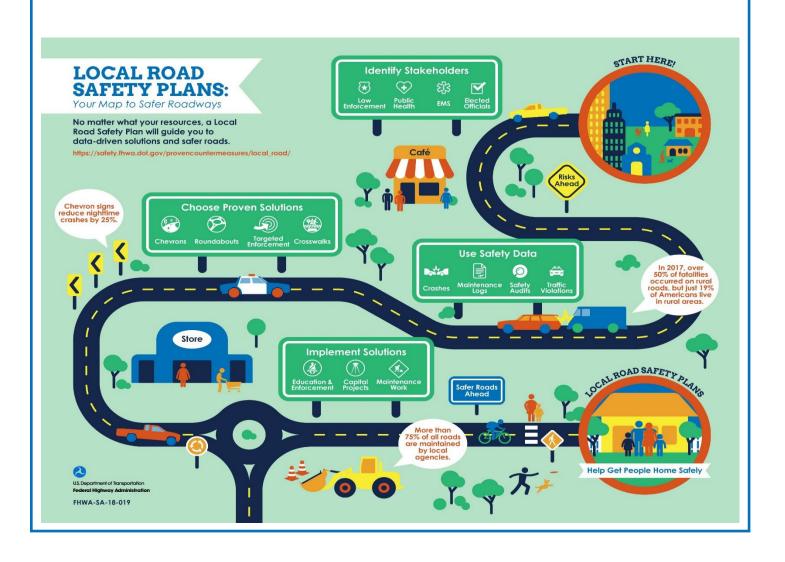
Transportation Safety Plan

Confederated Tribes of the Umatilla Indian Reservation

Adopted June, 2016

Amended March 3, 2025



Contents

INTRODUCTION	2
MISSION	2
VISION & GOALS	2
EFFORTS FROM 2016 to TODAY	3
SAFETY PARTNERS & STAKEHOLDERS	5
METHODOLOGY	5
DATA ANALYSIS and SUMMARY	6
EMPHASIS AREAS	11
Education and Outreach	13
Enforcement	13
Access	13
Traffic Control and Intersection Safety	13
Roadway Planning and Design	14
Pedestrian and Bicycle Safety	14
IMPLEMENTATION	14
Education and Outreach	17
Enforcement	18
Access	18
Traffic Control & Intersection Safety	18
Roadway Planning & Design	19
Pedestrian and Bicycle Safety	19
Implementation Timeline	20
EVALUATION AND UPDATING PROCESS	20
NEXT STEPS	21
REFERENCES	21
DOCIMENT HISTORY	21







CTUIR Transportation Safety Plan

INTRODUCTION

In the United States, from its peak of 27.7 in 1969 until reaching a low point of 11.1 in 2009, traffic fatalities per 100,000 people have been steadily dropping. But since 2009, the trend has reversed and fatality rates have been on the increase, with a modern high of 46,980 total traffic deaths in 2021 (National Safety Congress, 2024). Native American fatalities improved briefly in 2018, dipping below the rate of deaths per 100,000 people compared to the US's white population. Since 2018, fatalities and serious injuries have been rising again across the board, with Native American traffic fatalities rising faster than the general population. According to the Centers for Disease Control and Prevention, motor vehicle crashes are the leading cause of death for Native Americans and Alaska Natives. Since the adoption of the 2016 Plan, the death rate from vehicle crashes for Native Americans/Alaska Natives has decreased from 1.5 times higher than for whites and for blacks in 2016, to 1.2 times higher. The nationwide effort to reduce traffic deaths and serious injuries has had a meaningful impact on safety in Indian Country, but there is still work to do.

With the 2012 enactment of Moving Ahead for Progress in the 21st Century Act (MAP-21) and 2015 Fixing America's Surface Transportation Act (FAST Act), followed by the Infrastructure Investment and Jobs Act (IIJA) passed in 2021, it is evident that the Federal Government is placing a great deal of emphasis on becoming proactive in improving traffic safety and reducing fatalities on the nation's road system. Future funding is likely to center on traffic safety projects. As a result, the Federal Highway Administration promotes Local Road Safety Plans (LRSP) by state and local governments, including Indian Tribes.

To initiate a Local Road Safety Plan and traffic safety program, the Confederated Tribes of the Umatilla Indian Reservation received approximately \$12,000 in grant funding from the Bureau of Indian Affairs (BIA) in 2016. To update this plan, CTUIR received a further \$5,000. Because of limited funding, this planning effort is limited as well, but it will leverage efforts of many partners in public safety, health, and infrastructure maintenance to create as comprehensive a plan as possible. We will also leverage recently completed community outreach, and centralized crash data reporting, which were not available in 2016.

MISSION

The mission statement established by the Tribe and Working Group is:

Identify and prioritize safety concerns and develop strategies

to improve pedestrian, bicycle, and vehicular safety on the reservation.

VISION & GOALS

The overall goal of this planning effort is to implement a local road safety program for the CTUIR. These goals are divided into 3 categories:

Implement an ongoing safety education program, coordinating efforts across Planning, Public Works,







Tribal Police, and Education Departments, and the Yellowhawk Tribal Health Center to compliment rather than duplicate work;

- Establish a list of safety priority locations and types of road hazards to improve across all roads on the Umatilla Indian Reservation, in collaboration with the various road jurisdictions; and
- Apply education, enforcement, and infrastructure improvement best practices with a goal of achieving zero deaths or serious injuries across the Umatilla Indian Reservation by 2040.

EFFORTS FROM 2016 TO TODAY

Since the original Local Road Safety Plan was adopted in June of 2016, many of the proposed projects have been completed, others have not yet been completed, and yet others are no longer priorities. Here you will find a summary of projects which were identified in the 2016 Local Road Safety Plan to have been completed. All remaining projects which remain priorities will be found below in the plan section titled "Emphasis Areas", along with a new list of projects proposed as safety improvement priorities over the plan's effective duration.

Completed projects are listed below in Table 1.

Table 1: Projects Completed under the 2016 Local Road Safety Plan

	Completed under the 2016 Local R	-
2016 Emphasis Area	2016 Strategy	Description of Completed Efforts
Education and Enforcement	Undertake a safety education program in coordination with ODOT including visual and print media campaigns	Bike safety training and education at CTUIR community events; bike and pedestrian safety yard signs; Yellowhawk-led fitness events
	Continue current best practice enforcement and education programs (e.g. signage, Click It or Ticket)	Regular patrols and visibility in the area by local law enforcement, including use of radar and lidar; DUI diversion program currently offered for first offenses, per CTUIR-adopted Oregon traffic statutes
	Continue best practices in crash reporting and use of timely and accurate reporting (e.g. GPS devices in patrol cars, use of RIMS system for coding)	Crashes investigated by Umatilla Tribal Police are now reported to ODOT, providing a single source for crash data
Access	Implement snow removal program	Snow removal program in place to clear driveways for CTUIR Tribal Member elders; installed snow gate for routes that are unsafe to use as detours during I-84 winter weather closures
	Undertake a joint Tribal/State Access Management Plan	Highway 331 Access Management Plan was completed in 2006 but was not incorporated into the 2016 plan. The LRSP will be updated with this input; additional I-84 Exit-216 Access Management planning is scheduled to be completed in 2025.







	Conduct road safety andit	Transportation Impact Analyses were correlated
	Conduct road safety audit targeting high crash locations,	Transportation Impact Analyses were completed in 2019 and 2021 as a requirement of the
	e.g. casino access, to determine the contributing crash factors and	Wildhorse Resort & Casino Expansion, and the Nixyáawii Neighborhood Subdivision
	identify effective countermeasures	development permits. An additional Traffic Study of Highway 331 was completed in 2021 as part of the Transportation System Plan update. These data remain informative for approximately 5 years after completion; another traffic study will be recommended in approximately 2026.
	Coordinate/support local governments in prioritizing safety work	Updated 20-year Transportation System Plan in collaboration with other agencies and the UIR community; collaboration with ODOT on I-84 winter weather closures and related truck traffic management coordination
Intersection	Reduce number of conflict points	Highway 331 Turn Lane; speed bump installation at Confederated Way, Whirlwind Drive; moved Lucky Seven mailboxes to reduce pedestrian street crossings
	Provide better guidance for motorists at intersections, i.e. improved lighting, signage	Lighting and signage improvements along Timine Way and Mission Road
Pedestrian Safety	Add sidewalks and/or pedestrian bike paths in high hazard locations	Highway 331 Safe Routes to School and Community Paths trail projects, completed 2024; new Nixyaawii Neighborhood and Timine Way North apartments developed with continuous sidewalks, including alley-loaded lots without sidewalk/driveway interruptions
	Conduct periodic roadway safety assessments of locations with growing traffic and pedestrian volumes and locations at greatest risk for pedestrian fatalities and injuries	ADA sidewalk and lighting improvements around Housing/Senior Center

As seen in Table 2 above, progress has been made in the areas of Education and Enforcement, Access, Intersection Safety, and Pedestrian Safety. The only area that was not specifically identified by the Working Group as having seen improvement since 2016 is Traffic Control. Although Traffic Control is not directly addressed, some of the completed projects in other categories have had positive impact on that goal, including the installation of the Highway 331 turn lane; the installation of a sidewalk along Highway 331 to separate the travel modes; and sign installation on Timíne Way to increase pedestrian visibility.







SAFETY PARTNERS & STAKEHOLDERS

The initial step in developing the CTUIR LRSP was identification of plan leadership and establishment of a Working Group to guide the plan and bring together the right agencies and individuals to implement the plan and to monitor and update the plan in the long term. The project team first identified potential stakeholders (federal, state, and local agencies), who were contacted and invited to participate in the planning effort. From this list the Working Group was established. Table 2 lists stakeholders and the Working Group.

Table 2: Local Road Safety Plan Stakeholders

Stakeholders	Working Group
Confederated Tribes of the Umatilla Indian	CTUIR
Reservation (CTUIR)	B. Danielle Schulte, Transportation Planner
Yellowhawk Tribal Health Center	Justin Northern, Public Works Director
Bureau of Indian Affairs	Alaina Mildenberger, Public Works Office Manager
Federal Highway Administration	Sandra Alexander, Roads Manager
Umatilla County Public Works Department	Bob Fossek, Public Safety Director
Local Law Enforcement Agencies	Timothy Addelman, Umatilla Tribal Police Chief
National Forest Service	Eric Smith, Kayak Public Transit, Interim General
Pendleton School District	Manager
Nixyaawii Community School	Julie Taylor, Department of Child & Family Services
Local Businesses	Bill Tovey, Director, Economic and Community
	Development
	Jamie Crane, Education Department
	Katie Morioka, Yellowhawk Public Health Program Manager
	Michael Johnson, Yellowhawk Senior Services Program
	Manager
	Al Tovey, Wildhorse Resort & Casino, General Manager
	Teresa Penninger, ODOT, Transportation Planner
	Tom Fellows, Director of Public Works, Umatilla County
	Michael Jackson, BIA, Superintendent

METHODOLOGY

The CTUIR LRSP was developed based on the FHWA guide. In its publication *Developing Safety Plans, A Manual for Local Rural Road Owners* (March 2012), the FHWA sets out a six-step process for developing and maintaining Safety Plans. These steps include:

Step 1: Establish Leadership

Step 2: Analyze Safety Data

Step 3: Determine Emphasis Areas

Step 4: Identify Strategies

Step 5: Prioritize and Incorporate Strategies

Step 6: Evaluate and Update the LRSP

The initial step in the development process was to establish leadership and convene a working group responsible for







developing the LRSP. During April 2015, the consultant team spent several days on the Reservation looking at road and safety condition of roads serving the Reservation. During this period, meetings were held with the Tribe, followed by a meeting and presentation to the Working Group. Other State and Federal stakeholders were also contacted by phone or email.

Due to the low budget of the grant to perform the update, this scope was reduced during the 2024 update process, and only included convening the Working Group; analysis of existing Transportation studies conducted in the past 5 years; and a community survey to identify safety concerns which may not have been addressed by the Transportation studies. No road survey was conducted in 2024. The Working Group met 3 times, and reviewed the existing plan's mission, vision, goals, and emphasis areas at the first meeting. At the second meeting, the Working Group reviewed the existing project list to determine which projects can be removed as "completed", and reviewed the crash map to suggest new projects in high-crash locations. Finally, the Working Group reviewed the community input received and a draft plan at the third meeting and made suggestions that were incorporated for a final draft of the plan in December, 2024.

DATA ANALYSIS AND SUMMARY

In Oregon for the 5-year period 2017 to 2021, an average of 508 people were killed in crashes and 1,161 were seriously injured annually. This represents almost double the fatality rate seen in the years reported during the 2016 period, although serious injuries have gone down by about a quarter of the 2016-reported numbers. Rural Oregon roads are not experiencing the rise in serious injury/fatality crashes as quickly as Urban areas of Oregon. While the 2016 plan reflected that rural Oregon had more than half of such crashes, today only 44% of fatality and serious injury crashes occur in rural areas. Rural collector and local roads accounted for 16% of all fatalities and serious injuries.

Safety data collected included traffic volumes and crash rates on state highway, fatality and serious injury crash rates for the state and for Native Americans, and crash data recorded by CTUIR police over the period 2006-2014. Data is summarized in Tables 3, 4, 5 and 6.

The 2021 Transportation Safety Action Plan (ODOT) reports that less than 15% of all fatal and serious injury crashes involve young drivers, 25 years and younger, which represents a percentage reduction by half compared to the 2016 plan, and 21.9% involve elderly drivers, 65 years and older — a small increase. Oregon has an aging population, so while older drivers represent a slightly higher rate than previously reported, they also represent a higher share of the state's total population. American Indians and Alaskan Natives experienced nearly twice the traffic fatality rate of white people in Oregon. Based on the current risks, the State of Oregon has chosen to prioritize Risky Behaviors such as impaired driving and speeding; and Multimodal Infrastructure to better serve vulnerable road users (Oregon Department of Transportation, October 2021).



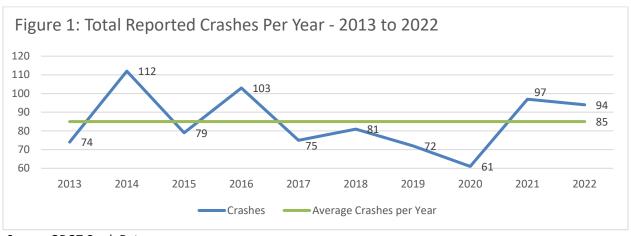




Table 3: 2021 Crash Rates (per 1 Million Vehicle Mile)

Location	2021					
	ADT	2022	2021	2020	2019	2018
Oregon: State Rural Areas		0.70	0.73	0.69	0.69	0.68
Interstate		0.42	0.44	0.38	0.47	0.46
All Other Roads		1.27	1.36	1.27	1.40	1.43
Other Principal Arterials		1.25	1.35	1.27	1.40	1.43
Minor Arterials		1.30	1.30	1.26	1.41	1.40
Rural Major Collectors		1.44	1.69	1.27	1.27	1.59
Rural Minor Collectors		2.29	3.30	2.98	2.78	0.84
Rural Roads		0.00	5.62	0.00	0.00	0.00
SR11 (State Hwy 8)						
City Limits to Reservation	4,123	0.99	0.98	3.14	2.03	0.97
Reservation to Hwy 331	3,721	1.29	0.00	0.23	0.22	0.86
Hwy 331 to Hwy 335	6,110	0.00	0.30	0.32	0.00	0.88
Hwy 335 to WCL Adams	5,742	0.26	0.86	0.68	0.11	0.42
Adams to Hwy 334	5,141	0.41	0.25	0.79	0.38	0.92
Hwy 334 to Weston Hwy	5,877	0.15	1.13	1.19	0.70	0.64
SR 331 (State Hwy 331)						
SR11 to Mission Rd	1,713	1.27	1.94	0.68	0.00	0.62
Mission Rd. to I-84	4,803	0.98	1.76	1.16	0.91	1.47
I-84 (State Hwy 6)						
E. Pendleton Int to SR 331	14,074	0.48	0.23	0.38	0.88	0.18
SR 331 to Deadmans Pass	11,875	0.82	0.93	0.38	0.88	0.18
Int.						

^{*}Crash Rate Formula: (crashes*1,000,000)/VMT; Source: Oregon Department of Transportation Crash Rate Data Tables, 2021



Source: ODOT Crash Data







Table 4: Crashes Characteristics on the UIR, January 2013 – December 2022

	Fatalities	Major	Minor Injury	No Injury	Total
Injuries		Injury			
	10	31	284	442	767
Cause	Driver Error	Animal	Weather	Other	Total
Cause	644	68	19	36	767
	Intersection	Street	Driveway, Alley or	Unknown	Total
Location			Turnout		
	59	679	15	14	767
Lighting	Day	Dark	All Other Light Conditions	Unknown	Total
Ligiting	443	261	62	1	767
Road	Freeway or	Highway	Local Road or Collector	N/A or	Total
	Ramp			Unknown	
Туре	512	21	177	57	767
Weather	Clear	Rain	Snow	Other	Total
weather	366	62	140	199	767
	Alcohol	Drugs	Unrestrained Occupant	Safety Belt	Total
Flags	Involved	Involved		Unknown	
	51	8	121	308	

Source: ODOT Crash Data

The great majority (83%) of crashes on the UIR are primarily caused by driver error. Within that driver error category, 48% (311 crashes) listed the primary cause as either driving above the speed limit, or driving too fast for the road conditions. 68 crashes were attributed to animals in the roadway. Among the "other" causes that were not attributed to driver error, tree branches, rocks, and other debris made up a majority of the causes.

Overall, based on the Police Records made available via ODOT's crash reporting database, most crashes happen on streets and highways, during the daytime, in clear weather, and are the result of driver error. Approximately 35% involve some type of injury, and 2% involve a fatality, or approximately one fatal crash per year on average.

When evaluating specific locations, approximately 64% of all crashes (489 crashes) on the UIR occurred on I-84, with an additional 7% occurring on Highway 331 (53 crashes). Less than 1/3 of all crashes occurred on all other roads on the Reservation, 225 crashes. When viewed in a heat map, the largest hot spots occurred around the I-84 Exit 216 interchange, and the Cabbage Hill curves on I-84. Since January 2013, there have been 68 crashes caused by animals in the roadway – primarily deer and elk, with a small number of cattle-related incidents. These crashes are highlighted on the map in Figure 2, as these locations represent an opportunity for a low-cost sign installation as one potential solution.







Table 5: All Fatalities on the UIR, Causes and Conditions 2013 – 2022

Year	Season	Road	Crash Description	Fatalities (S. Injuries)
2022	Summer	I-84	Head-on Collision; Daylight, dry, straight roadway, wrong-way on a one-way road, alcohol involved	1
2021	Summer	Hwy 331/ Exit 216	Roadway Departure/Overturn; dark, dry, intersection, alcohol involved, no seat belts	1
2021	Summer	I-84	Rear-ended parked vehicle; daylight, dry, straight roadway, no seat belt	1 (4)
2021	Spring	I-84	Fixed object (rock wall); dawn, dry, curved road, drowsy, no seat belt	1 (1)
2018	Spring	Hwy 331	Rear-ended cyclist; daylight, dry, grade/hill, drugs involved, swerving	1
2018	Winter	I-84	Rear-ended; dark, ice, grade/hill, curved road, too fast for conditions	1 (12)
2016	Spring	I-84	Fixed Object (guard rail); daylight, dry, curved road, improper driving	1
2016	Spring	I-84	Head-on Collision; dark, dry, straight roadway, alcohol involved	2 (1)
2016	Fall	Mission Rd.	Roadway Departure/Overturn; dark, dry, curved road, alcohol involved	1
2016	Fall	River Rd.	Angle/Train; daylight, dry, intersection, driver disregarded signs	1
2014	Fall	I-84	Roadway Departure; dark, dry, curved road, improper driving; no seat belt; alcohol involved	1
2014	Winter	I-84	Fixed Object (guard rail); dark, fog, icy, grade/hill, driving too fast for conditions; speed involved	2(3)

Source: ODOT Crash Data

One common theme arose when analyzing all fatal crashes on the UIR: occupants killed in those crashes were not wearing seat belts. In some cases the "unrestrained occupant" flag was used, and in other cases the "unknown safety restraint" flag was used, so it is not absolutely certain that all fatalities were not wearing safety belts – but it is clear that no fatalities were absolutely certain to be wearing safety belts. This indicates that additional community education is needed on the topic of safety belts.







3 5 Ada is Reservation Mountain Gibbon Mission Rd S Cayuse Dark Red animal crashes occurred more recently (2020-22), while Umatilla lighter red animal crashes occurred Reservation earlier (2013-15). All crashes occurred between 2013 and 2022. Jn atilla Mission Area Spring Hollow Mission Rd Rd R. R. 84 (331) Resort Golf Course NASA, NGA. USGS, FEMA, Oregon State Parks, State of Oregon GEO, WA State Parks GIS, Esri, m, Garmin, SafeGraph, GeoTechnologies, Inc. IASA, USGS. Bureau of Land Management, EPA, NPS, USDA, USFWS 00.10325 0.5 0.75 Miles of Land Management, EPA, NPS, USDA, USFWS

Figure 2: Heat Map of Crashes on the UIR 2013-2022 and individual Animal Crash Incidents







EMPHASIS AREAS

The identification of key emphasis areas for the 2016 CTUIR LRSP is focused primarily on addressing safety issues and concerns identified by the Working Group, other various stakeholders, and the community. Emphasis areas have been updated based on Working Group feedback, community survey responses, and review of projects completed since 2016. The updated plan Emphasis Areas are summarized in Table 5 along with potential strategies and described below.

Emphasis Areas were adjusted slightly to reflect the categories of grants the Tribal Transportation Safety Program Fund (TTPSF) will fund, to simplify grant applications. One new category was added to this list: Roadway Planning & Design - to separate out the measures which are related to plans, studies, and audits, but which may not result in built infrastructure. One category was separated into two – Education and Enforcement – to more easily identify each. Finally, two strategies were combined – Traffic Control and Intersection Safety, as these two areas are closely interrelated.

Table 6: Emphasis Areas, Related Measures, and Strategies

Emphasis Area	Measure(s)	Potential Strategies
Education and Outreach	 Reduce number of alcohol-related accidents, on and off reservation Reduce number of pedestrian/bike related injuries/fatalities Reduce number of injury/fatality crashes related to lack of seat belts/child restraints 	 Conduct targeted outreach campaigns during winter months to alert drivers to hazardous winter road conditions Undertake a safety education program in coordination with ODOT including visual and print media campaigns Conduct public information/education campaigns focused on seatbelts/child restraint, speeding, driving under the influence, distracted driving, and pedestrian/bicyclist awareness Explore funding opportunities to establish local driver education programming (e.g. Driver's Ed for youth; CDL and related endorsements) Employ a Safe Routes to School Coordinator to increase biking and walking safety education opportunities for local youth Increase the availability of employer-provided road safety training for employees who drive institutional vehicles on the Reservation
Enforcement	 Reduce number of injury/fatality crashes related to speeding Reduce number of injury/fatality crashes related to lack of seat belts/child restraints 	 Offer periodic car seat installation safety checks and education opportunities Conduct sustained high-visibility enforcement initiatives (e.g. targeted enforcement at high-hazard locations) Install digital radar feedback signs to encourage self-enforcement of speed limit in high-traffic areas Continue current best practice enforcement programs (e.g. signage, Click it or Ticket, traffic patrols) Continue best practices in crash reporting and use of timely and accurate reporting (e.g. GPS devices in patrol cars, use of RIMS)

_		system for coding)
	 Provide year-round emergency access 	 Provide crash gates or removable bollards for emergency access to roads/streets
	- Improve access management	 Coordinate/support local governments in prioritizing safety work alongside other transportation projects
		- Engage with ODOT on the Exit 216 Interchange Access Management Plan, which is scheduled to begin in 2025
Traffic Control and	- Reduce number of annual intersection-related	- Address intersection alignment problems
Intersection		- Reduce number of conflict points
Safety	injuries/fatality crashes	 Provide better guidance for motorists at intersections, i.e. improved lighting, signage
	- Reduce the number of traffic crashes	 Complete high reflective sign replacement on BIA and tribal roads
	annually	 Install wildlife warning signs and coordinate with ODOT on wildlife crossings near locations with high animal-caused crash occurrence
		 Integrate traffic calming devices into new development and retrofit existing streets
Roadway Planning and Design - Pedestrian and Bicycle Safety	- Transportation- related plans are updated and reviewed on schedule to enable access to	- Review the Transportation System Plan in 2028 (5-year review; 20-year update)
		- Review and Update the Tribal Transportation Improvement Plan in 2024/25
	formula and grant	- Assess rock slide sites for debris removal hazard mitigation
	funds for newly identified problems	- Assess locations with horizontal curves for adequacy of guard rail, curve warnings, and speed reduction treatment
	designed with safety standards relevant to the type and volume of traffic expected	 Develop a road classification system that identifies road safety improvements that should be implemented upon major repair or new development, as recommended in the 2023 Transportation System Plan
		- Review new road-adjacent developments for the appropriateness of installing bus pull-outs
		 Add sidewalks, crosswalks, and/or separated pedestrian & bike paths in high hazard locations, especially throughout the CTUIR Water Sewer Service Area which functions as a proxy for an urbanized area boundary
		 Install flashing pedestrian beacons at strategic crossing locations throughout the Mission Community to increase pedestrian visibility







- Review high-traffic areas, such as Mission Road and Highway 331, for reduced speeds and traffic calming treatments to reduce vehicle/pedestrian conflicts
- Widen and pave shoulders for pedestrian and bicycle use
- Conduct periodic roadway safety assessments of locations with growing traffic and pedestrian volumes and locations at greatest risk for pedestrian fatalities and injuries

Education and Outreach

The consensus of Working Group was to focus on education and enforcement as the most cost-effective measures to implement, particularly considering the limited funding currently available for major construction improvements. Identified issues to be address through driver education and enforcement were: speeding, distracted driving, use of seatbelts and child restraints, driving under the influence, and winter weather road hazards.

Potential strategies to address these issues include: creating media campaigns and developing an outreach program, in coordination with ODOT and Yellowhawk Tribal Health Center, on safe driving behaviors related to for winter weather safety, speeding, and driving while unwell or intoxicated.

Enforcement

Identified issues to be address through driver education and enforcement were: speeding, use of seatbelts and child restraints, driving under the influence, and high hazard locations. Proposed solutions include: install speed feedback signs at high priority locations to encourage self-enforcement; continue to implement industry best practices on speed and driver safety enforcement; and increase community access to child safety harness installation education and assessment. The Tribal Employment Rights Office has agreed to keep on the lookout for safe driver training educational programming, and funding opportunities to incorporate safe driving into their offerings, including youth-oriented Drivers Education, and CDL with related commercial endorsements.

Access

Several access-related life safety issues were identified, including blocked roads which impede emergency access, the lack of snow removal which impacts access to homes, insufficient space for school bus turnarounds, and the need for better access management on SR 331 from Mission Road to I-84.

As SR 331 is under the jurisdiction of the State, CTUIR has committed to engaging extensively with the scheduled I-84 Exit 216 Interchange Access Management Plan process to address safety concerns around the interchange area, which is experiencing commercial growth.

Another emergency access issue was identified concerning roads/streets that have been blocked off on one end for various reasons. The concern was the ability of emergency vehicles to access a site from two different directions as well as the ability to evacuate people in case of an emergency, such as fire or flooding. Facilitating school bus turnarounds on dead end roads can also be a problem.

Traffic Control and Intersection Safety

As would be expected along a high volume road, crashes along Highway 331 at the major intersections are a problem as the number of crash points significantly increase at intersections. Besides the major intersections at the Tribal Center, Industrial Park, Travel Plaza and Casino/Resort, the Intersection at Kash Kash Road was identified as a potential







problem because of its proximity to the I-84 interchange ramps. Commercial growth in this area exacerbates that problem. Relocation of Kash Kash Road to intersect with Spilyay Road and Arrowhead Road to the north of Arrowhead Travel Plaza is proposed in the 2023 Transportation System Plan, and is recommended here under the umbrella of "Address Intersection Alignment Problems" in order to reduce the potential for high-speed crashes along this growing commercial corridor.

North of the Casino/Resort, besides some crashes occurring at the Timine Way and Mission Road intersections, a surprising number also occurred in the northern curves of Highway 331. The intersection of Highway 331 and Highway 11 was also cited as a problem because of its configuration as a five-legged intersection.

Two traffic control issues were identified: the need to improve traffic control signage and pavement markings on BIA and tribal roads, and the need for traffic calming measures for better speed control, particularly in residential areas. Potential strategies to improve traffic control on reservation roads include completing the sign replacement program utilizing the new signs with high retroreflectivity, and integrating traffic calming devices, such as speed tables, speed humps, and roundabouts that are designed for emergency vehicle passage, into new development, as well as retrofitting existing streets.

Animal-caused crashes were also flagged as a frequent cause of crashes on the UIR. Signing frequent animal crash sites is a low-cost solution which could be readily implemented by all 3 road owners on the Reservation during road maintenance projects where appropriate.

Roadway Planning and Design

This new section focuses on the update and management of administrative tools, such as this plan; the Transportation System Plan; and the Tribal Transportation Improvement Plan. Updating these plans on-schedule with the most current data about crashes on the Umatilla Indian Reservation, and the most current best practices of transportation safety measures, enables interested parties to use these plans as the basis for pursuing and winning competitive grant awards to do education and construction projects.

Pedestrian and Bicycle Safety

The lack of sidewalks, pedestrian paths, and bike lanes as well as narrow shoulders create safety issues on several roads, notably the north side of Confederated Way, Mission Road, Emigrant Hill Road, Short Mile Road, Cedar Street, and Highway 331. Adding sidewalks and/or pedestrian/bike paths on roads and closing gaps in the pedestrian network would increase safety. Another potential strategy is to conduct periodic roadway safety assessments of locations with growing traffic and pedestrian volumes and locations at greatest risk for pedestrian fatalities and injuries to identify countermeasures.

IMPLEMENTATION

The 2016 approach was to focus on four main components on which to build a Local Road Safety Plan. These include Engineering, Enforcement, Education, and Emergency Medical Services. These are sometimes referred to as the four E's of safety.

- Engineering: Although most crashes are the result of human error, some can be prevented through good roadway and intersection design. Appropriate signing, striping and pavement markings, rumble strips, lighting, etc. have all proven to be effective low-cost measures that will reduce crashes.
- Education: Education training for drivers, pedestrians, and bicyclists is also an effective means of reducing crashes







and potential fatalities. Understanding roadway engineering and traffic laws and regulations from the standpoint of different user groups can go a long way in reducing crashes and fatalities.

- Enforcement: Enforcement of traffic laws is a critical element in any traffic safety program. Without enforcement, the effectiveness of traffic laws and regulations is greatly diminished. Increased patrolling of roads is the most effective short-term way to reduce traffic crashes.
- Emergency Medical Response: Another element in preventing fatalities is rapid emergency medical response. The sooner medical responders can reach a crash scene, the better the chances of preventing fatalities resulting from serious injuries. Well engineered roads and good driving behavior on the part of the public are important if emergency responders are to minimize response times to crash scenes.

Education and Enforcement were identified by the Working Group as being the lowest cost actions that could be effective in the initial stages of implementing the LRSP. Futher, because of limited funding currently available for major construction improvements, it is recommended that the CTUIR focus initially on implementing relatively low-cost strategies for the highest-priority emphasis areas. Higher cost safety projects, such as road widening, need to be coordinated with the Long-Range Transportation Plan as they will need to be prioritized with other tribal transportation needs for funding and implementation. The following are recommended actions that could be implemented in the near term

During the 2024 revision, it was noted that ongoing engagement by all Working Group members was difficult to maintain due to staff turnover and busy schedules, however many of the tasks were completed by the stakeholders independently or in smaller groups. The 2024 revision recommends a lead agency for each strategy listed in Table 8 to formalize this approach. Under this approach, progress can be made on a project-by-project basis without meetings which request attendance by all Working Group members, where some strategies may not involve all Working Group members. The 2024 revision proposes that the Working Group only needs to reconvene during Plan Update periods.







Table 7: Lead and Support Entities for each Strategy identified as a priority for this Plan

Emphasis Area	Strategy	Lead Entity (Supporting Entities)
Education & Outreach	Conduct targeted outreach campaigns during winter months to alert drivers to hazardous winter road conditions	ODOT (Planning)
outreden.	Undertake a safety education program in coordination with ODOT including visual and print media campaigns	Yellowhawk Public Health (Umatilla Tribal Police, Education, Planning, Kayak)
	Conduct public information/education campaigns focused on seatbelts/child restraint, speeding, driving under the influence, distracted driving, and pedestrian/bicyclist awareness	ODOT (Planning, Kayak)
	Explore funding opportunities to establish local driver education programming (e.g. Driver's Ed for youth; CDL and related endorsements)	TERO (Planning, Public Works)
	Employ a Safe Routes to School Coordinator to increase biking and walking safety education opportunities for local youth	Public Works (Planning)
	Increase the availability of employer-provided road safety training for employees who drive institutional vehicles on the Reservation	CTUIR HR (Planning)
Enforcement	Offer periodic car seat installation safety checks and education opportunities	Tribal Police (Yellowhawk Public Health, Education)
	Conduct sustained high-visibility enforcement initiatives (e.g. targeted enforcement at high-hazard locations)	Tribal Police
	Install digital radar feedback signs to encourage self- enforcement of speed limit in high-traffic areas	Public Works (Tribal Police)
	Continue current best practice enforcement programs (e.g. signage, Click it or Ticket, traffic patrols)	Tribal Police (Tribal Police, ODOT, Umatilla County)
	Continue best practices in crash reporting and use of timely and accurate reporting (e.g. GPS devices in patrol cars, use of RIMS system for coding)	Umatilla Tribal Police
Access	Provide crash gates or removable bollards for emergency access to roads/streets	Public Works
	Coordinate/support local governments in prioritizing safety work alongside other transportation projects	Planning (Public Works)
	Engage with ODOT on the Exit 216 Interchange Access Management Plan, which is scheduled to begin in 2025	ODOT (Public Works, Planning)
Traffic Control &	Address intersection alignment problems	Public Works (ODOT, Umatilla County)
Intersection Safety	Reduce number of conflict points	Public Works (ODOT, Umatilla County)







Provide better guidance for motorists at intersections, i.e. improved lighting, signage	Public Works (ODOT, Umatilla County)
Complete high reflective sign replacement on BIA and tribal roads	Public Works
Install wildlife warning signs near locations with high animal-caused crash occurrence	Public Works (ODOT, Umatilla County)
Integrate traffic calming devices into new development and retrofit existing streets	Planning (Public Works, DECD)
Review the Transportation System Plan in 2028 (5-year review; 20-year update)	Planning (Public Works)
Review and Update the Tribal Transportation Improvement Plan in 2024/25	Planning (Public Works)
Assess rock slide sites for debris removal hazards	Public Works
Assess locations with horizontal curves for adequacy of guard rail, curve warnings, and speed reduction treatment	Public Works (ODOT, Umatilla County)
Develop a road classification system that identifies road safety improvements that should be implemented upon major repair or new development, as recommended in the 2023 Transportation System Plan	Planning (Public Works)
Review new road-adjacent developments for the appropriateness of installing bus pull-outs	Public Works (Planning, Kayak)
Add sidewalks, crosswalks, and/or separated pedestrian & bike paths in high hazard locations, especially throughout the CTUIR Water Sewer Service Area which functions as a proxy for an urbanized area boundary	Planning (Public Works, ODOT, Umatilla County)
Install flashing pedestrian beacons at strategic crossing locations throughout the Mission Community to increase pedestrian visibility	Planning (Public Works, ODOT, Umatilla County)
Review high-traffic areas, such as Mission Road and Highway 331, for reduced speeds and traffic calming treatments to reduce vehicle/pedestrian conflicts	Planning (Public Works)
Widen and pave shoulders for pedestrian and bicycle use	Public Works (ODOT, Umatilla County)
Conduct periodic roadway safety assessments of locations with growing traffic and pedestrian volumes and locations at greatest	Public Works (Planning, ODOT, Umatilla County)

Education and Outreach

Roadway Planning & Design

Pedestrian and Bicycle

Safety

The Tribe should initiate public outreach and education campaigns targeting high-frequency crash causes and locations, including winter weather safety; speeding; driving while intoxicated, unwell, and otherwise distracted; and seat belt safety as a life-saving tool.

CTUIR successfully obtained a grant to employ a part-time Safe Routes to School Coordinator in 2024, and is currently launching that program. This plan reflects that new resource under the Public Works Department, and when



risk for pedestrian fatalities and injuries





onboarded, this employee shall serve as a point of contact for educational and outreach activities.

Funding and material sources that may be leveraged for implementation of the Transportation Safety Plan are listed below in Table 9:

Table 8: Resources for Implementation

Source	Туре	Link
Bureau of Indian Affairs	Child Passenger	https://www.transportation.gov/rural/grant-
	Seat Grants	toolkit/indian-highway-safety-occupant-protection-grant
Federal Highway	Ped Safety Training	https://highways.dot.gov/safety/pedestrian-
Administration	Events	bicyclist/fas/trainings
National Highway Traffic	Road Safety Grants	https://www.nhtsa.gov/highway-safety-grants-program
Safety Administration	List	
National Center for	Educational	https://www.pedbikeinfo.org/resources/pbic_resources.
Bicycling and Walking	Materials Catalog	cfm
Oregon Department of	Educational	https://www.oregonsaferoutes.org/resources/materials/
Transportation Safe	Publications for	
Routes to School Program	Order	
Portland State University	Local Research,	https://trec.pdx.edu/
Transportation Research	Collaboration,	
and Education Center	Trainings and Events	
University of North	Effective Strategies	https://www.hsrc.unc.edu/
Carolina – Highway Safety	Research Info	
Research Center		

Enforcement

Enforcement is also a critical element of the LRTP. Enforcement should target high crash locations, known speeding problem areas, problem intersections, and times when there are more pedestrians and bicycles on the roadways. Additional patrolling is a cost issue, and it is recommended that the various law enforcement agencies coordinate efforts and also that the Tribe seek additional funding sources to support these efforts.

An additional element in enforcement is continued high-quality recordkeeping of crash locations and crash characteristics. The available data has improved markedly since 2014, and all data is now available in a central location from all local reporting agencies in the ODOT Crash Database. Continuing to GPS tag all reported crash locations and thorough reporting of crash characteristics is essential to the ongoing success of this plan, and the ability of the Tribal Planning Office to report on the measures indicated above.

Access

Access for elder Tribal Members was improved notably by the implementation of Public Works's elder driveway snow removal program. Ongoing access projects include improving safety along Highway 331, including the upcoming Exit 216 Interchange Access Management Plan.

Traffic Control & Intersection Safety

Several traffic control actions can be taken in the short term. These include:







- Signing: Complete the program underway to replace signage on BIA and tribal roads with the new retroreflective signs within the next two fiscal years.
- Striping and Pavement Markings: Restripe and repaint pavement markings on a regular basis depending on wear, particularly on roads that are regularly sanded during the snow season.
- Traffic Calming Devices: Require that speed humps, crosswalk tables, and other traffic calming devices be incorporated as appropriate in the construction of new residential and commercial streets or the reconstruction of existing streets. Note: the traditional "speed bump" does not meet AASHTO nor BIA design standards, and they should not be used. They are also very dangerous for motorcyclists and are thus a liability problem, particularly to the BIA which can be sued as a result of damage or injury.)

Traffic Impact Analyses conducted as a requirement of recent large-scale development have helped to determine highest priority locations for improvement. The Tribal Planning Office will continue to require TIA's for new large-scale developments, and require improvements when safety concerns are directly attributed to new developments. The current model has the drawback that the individual development which trips a traffic safety requirement is fully responsible for that road safety improvement at the time of development. A future possible restructuring of that permitting process might more equitably distribute the cost of transportation impacts, such as System Development Charges which are assessed at a percentage of each development's permit fees, and can be used to fund transportation safety improvements in the area related to growth.

Roadway Planning & Design

The 2023 Transportation System Plan recommends implementation of roadway design standards, and this plan concurs with that recommendation. Implementation is proposed. Additional assessments are needed to address specific road hazards, including rock slide risks on Mission Road and other locations throughout the Reservation; and vertical and horizontal curves where visibility is impaired and additional road safety features are recommended. For the purposes of reducing the risk of roadway departures, the Tribal Transportation Safety Program Fund grants prioritize the addition of:

- 1. "Curve" warning signs, with or without speed reduction as recommended in MUTCD Table 2C-5
- 2. Curve delineators, or Chevrons, in curves, as described in Chapter 3F of the MUTCD
- 3. First installation of center lines or edge lines on and around horizontal curves
- 4. Edge line rumble strips approaching and through horizontal curves, and
- 5. Center line rumble strips approaching and through horizontal curves.

Additional road safety treatments can be found in the FHWA Tribal Safety Plan Toolkit, or in TTPSF Notices of Funding Opportunities during grant cycles.

CTUIR considers the Water Sewer Service Area to be the reservation's urbanized area, where increased consideration of non-vehicle modes is recommended – including review of new developments to determine whether sidewalks, bike lanes, and bus pull-outs is warranted on streets where traffic is projected to increase due to the development. The Tribal Planning Office will coordinate with ODOT and Umatilla County to determine whether this boundary may function as an alternative to "city limits" for the purposes of meeting thresholds where urbanized area road treatments are warranted.

Pedestrian and Bicycle Safety

Based on feedback from the Working Group, the 2024 Community Survey, and input collected in 2022 and 2023 for the Transportation System Plan Update, the priority for improving pedestrian and bicycle facilities is within the CTUIR Water Sewer Service Area boundary, especially along Highway 331 and Mission Road. Sidewalks and bike lanes do







existing in this area, however they are fragmented and large gaps between facilities leave walking and bicycling road users vulnerable to high-speed vehicle traffic. These are high-cost improvements, however the number and size of grants available to complete this work has increased over the years.

In addition to specific grant-funded road improvement projects, it is recommended that as new streets and roads are developed they have either adequate shoulders for pedestrian and bicycle usage, or that they have curbs and sidewalks, particularly in residential and commercial developments. These facilities provide good safety benefits as statistics show that a pedestrian is 60% safer walking on a road with 6-foot or wider shoulders and a person is 80% safer walking on a sidewalk adjacent to a street.

Implementation Timeline

The Working Group assembled a list of projects, below, which are proposed as the highest priority that will be implemented, or begun, within the 2024 – 2025 calendar years. The proposed high-priority projects are:

Table 9: High Priority Implementation Schedule

Lead	Project Control of the Control of th	Implementation Year
Public Works	Employ a Safe Routes to School Coordinator to increase biking and walking safety education opportunities for local youth	2025
Human Resources	Increase the availability of employer-provided road safety training for employees who drive institutional vehicles on the Reservation	2025
Planning	Coordinate/support local governments in prioritizing safety work alongside other transportation projects	2025
Tribal Police	Offer periodic car seat installation safety checks and education opportunities	2025
Public Works	Install digital radar feedback signs to encourage self-enforcement of speed limit in high-traffic areas	2025
Public Works	Provide crash gates or removable bollards for emergency access to roads/streets	2025
Public Works	Complete high reflective sign replacement on BIA and tribal roads	2025-26
Planning	Review high-traffic areas, such as Mission Road and Highway 331, for reduced speeds and traffic calming treatments to reduce vehicle/pedestrian conflicts	2026
Planning		

EVALUATION AND UPDATING PROCESS

It is recommended that the Working Group meet again in 2027 or 2028 to review progress made toward the goals stated in this plan, and determine whether this plan should be updated prior to the 2029 default update schedule.

It will be the responsibility of the CTUIR Transportation Planner to coordinate and communicate among the Working Group members to apprise them of progress and problems as well as seeking guidance and support as appropriate. Lead Entities identified in the Implementation section shall be responsible for coordinating with Supporting Entities on their respective strategies, and may coordinate with the Transportation Planner as needed to secure additional help from other Working Group members.







NEXT STEPS

Essentially, the next steps should be undertaken within the next six months and are the responsibility of the lead entities listed in Table 7 above. The Tribal Planning Office will take lead on the following plan adoption items:

- 1. Adoption of this Local Road Safety Plan by the Board of Trustees.
- 2. Amend the CTUIR Long Range Transportation Plan and update the Transportation Improvement Program (TTIP) to include identified safety projects, so FHWA funds can be used.
- 3. Coordinate on high priority strategies for implementation within the next 1-2 years

REFERENCES

A Primer on Safety Performance Measures for the Transportation Planning Process, U.S. Department of Transportation, Federal Highway Administration with support from Transportation Safety Planning, Transportation Safety Planning Working Group

Centers for Disease Control and Prevention, Native American Road Safety data

Developing Safety Plans, A Manual for Local Rural Road Owners, U.S. Department of Transportation, Federal Highway Administration

National Safety Congress. (2024). *Historical Fatality Trends*. Retrieved from Injury Facts: https://injuryfacts.nsc.org/motor-vehicle/historical-fatality-trends/deaths-and-rates/

Oregon Department of Transportation. (October 2021). Oregon Transportation Safety Action Plan. Salem, OR.

Oregon Department of Transportation. Crash data, traffic volumes, and various traffic safety publications, including the 2011 Transportation Safety Action Plan and 2016 Draft Transportation Safety Action Plan

DOCUMENT HISTORY

Date	Action	Description of Change
6/4/2016	Adoption	Original Local Road Safety Plan adopted by the CTUIR Board of Trustees under Resolution 18-040
03/03/2025	Amendment	Update of crash data to the most recent 5-year period available; record projects completed and new priorities since 2016; reconvene the Working Group and publish a community survey to assess new safety needs; update implementation process to more accurately reflect implementation since 2016; updates to formatting and design. Update adopted under Resolution 25-024.







RESOLUTION NO. 25-024

TOPIC: Local Road Safety Plan Update Department: Planning/Public Works

Exhibits: 1 Page 1 of 2

CERTIFICATE

The undersigned, Gary I. Burke and Roberta J. Wilson, hereby certify that they are the Chairman and Secretary, respectively, of the Board of Trustees of the Confederated Tribes of the Umatilla Indian Reservation, and at a regular meeting of said Board of Trustees at the Board Chambers of the Nixyáawii Governance Center, Mission, Oregon, on the 3rd day of March, 2025, a quorum of said Board was present and the following Resolution was regularly moved, seconded, and adopted by a vote of 8 for, 0 against, and 0 abstaining.

RESOLUTION

- WHEREAS, the Board of Trustees is the governing body of the Confederated Tribes of the Umatilla Indian Reservation (Confederated Tribes) by the authority of Article VI, Section 1 of the Constitution and Bylaws of the Confederated Tribes, adopted on November 4, 1949 and approved on December 7, 1949, as amended; AND
- WHEREAS, pursuant to Article VI, Section 1(d) of the Constitution and Bylaws, the powers of the Board of Trustees include the authority "to promulgate and enforce statutes governing the conduct of all persons and activities within the boundaries of the Umatilla Indian Reservation, providing for the procedure of the Board of Trustees, and carrying out any powers herein conferred upon the Board of Trustees"; AND
- WHEREAS, an update to the Local Road Safety Plan is required for eligibility to pursue competitive safety project funds under the Tribal Transportation Program Safety Fund, and that plan must be updated at least every 5 years to remain eligible for those funds; AND
- WHEREAS, a Working Group was convened on May 29th, July 22nd, and November 14th of 2024 to review and propose updates to the Local Road Safety Plan (Exhibit 1), including updates to the mission, vision, and goals; crash data analysis; completed and proposed priority projects; implementation process; and changing the name of that plan to the Transportation Safety Plan; AND
- WHEREAS, a community survey was published from August to September, 2024 via CTUIR Social Media channels and directly to the Tribal Youth Council, which received 6 responses which were incorporated into the plan, along with recommendations made by the CTUIR community throughout the process to update the long range Transportation System Plan, completed in 2023; AND
- WHEREAS, on November 14th, 2024, the Working Group unanimously agreed to submit the updated Plan to the Board of Trustees, recommending that the Board adopt the plan as amended; **AND**

- WHEREAS, the Land Protection Planning Commission received a presentation on the plan update on November 26th, 2024, and the Law and Order Committee received that presentation on December 3rd, 2024, and both unanimously voted to recommend that the Board of Trustees adopt the plan as amended; **AND**
- WHEREAS, the Board of Trustees held a Work Session on Thursday, February 27th, 2025 to review the proposed plan updates; NOW, THEREFORE, BE IT
- **RESOLVED,** the Board of Trustees adopts the Local Road Safety Plan, now titled the Transportation Safety Plan; **AND BE IT FURTHER**
- **RESOLVED,** the Board of Trustees authorizes the Tribal Planning Office to update the 2023 Transportation System Plan to cross-reference the newly re-named Transportation Safety Plan; **AND BE IT FINALLY**
- **RESOLVED**, the Board of Trustees authorizes the transmission of that updated plan to the Tribal Transportation Program for approval by the Bureau of Indian Affairs and Federal Highway Administration;

AND, that said Resolution has not been modified amended or repealed and is still in full force and effect.

DATED this 3rd day of March, 2025.

Gary I. Burke, Chairman

Board of Trustees

ATTEST:

Roberta J. Wilson, Secretary

Board of Trustees

Exhibit 1: Draft 2025 Transportation Safety Plan

NAME	YES	NO	ABSTAIN	LEAVE
Gary I. Burke, BOT Chairman				
Aaron Ashley, BOT Vice-Chairman	X			
Raymond Huesties, BOT Treasurer	X			
Roberta J. Wilson, BOT Secretary	X			
Corinne Sams, BOT Member	X			
Toby Patrick, BOT Member	X			
Lisa Ganuelas, BOT Member	X			
Steven Hart, BOT Member	X			
Alan J. Crawford, General Council Chairman	X			