

### 2022-23 Target Zero Action Plan

Short Term Actions by WTSC Commission Agencies to Address Dramatic Rise in Traffic Fatalities in 2020 and 2021

Shelly Baldwin Director October 2022

### **Publication and Contact Information**

A PDF version of this plan is available for download on the Washington Traffic Safety Commission website at:

2022-23 Target Zero Action Plan - Washington Traffic Safety Commission (https://wtsc.wa.gov/tzap)

For people with disabilities and/or with a limited understanding of English, this material can be made available, free of charge, in an alternative format or translated into another language by calling 360-725-9860 or emailing <u>sysop@wtsc.wa.gov</u>. Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

### For questions/information, please contact:

Shelly Baldwin, Director Washington Traffic Safety Commission PO Box 40944 Olympia, WA 98504-0944 Phone: 360.725.9899 Email: <u>sbaldwin@wtsc.wa.gov</u>

### For policy-related questions/information, please contact:

Mark McKechnie External Relations Director Washington Traffic Safety Commission PO Box 40944 Olympia, WA 98504-0944 Phone: 360.725.9889 Email: <u>mmckechnie@wtsc.wa.gov</u>

Pam Pannkuk Deputy Director Washington Traffic Safety Commission PO Box 40944 Olympia, WA 98504-0944 Phone: 360.725.9884 Email: <u>ppannkuk@wtsc.wa.gov</u>

### Statement on Increase in Traffic Deaths

Zero is the only acceptable number of deaths on our highways, roads, and streets. Together we are committed to taking substantial, comprehensive action to significantly reduce serious and fatal injuries on Washington roadways. Reaching zero will require Washington Traffic Safety Commissioners and their agencies and organizations to work together with all traffic safety stakeholders and the people of Washington to achieve a significant cultural shift. To reach this goal, we must support the beliefs and attitudes among Washington road users that roadway deaths are unacceptable and preventable. This requires a commitment to safety first for our agencies, ourselves, and our communities.

This document outlines some of the urgent actions the Commission and its member agencies are taking to address and reverse the unprecedented increases in traffic deaths that Washington experienced in 2020 and 2021. This approach also marks a shift that will help us re-imagine and restructure the next Strategic Highway Safety Plan, which will guide the state's efforts to work toward Target Zero from 2024-2029.

## Introduction

The Washington Strategic Highway Safety Plan (SHSP) has set a bold vision: Target Zero, or zero deaths and serious injuries on Washington's roadways. Unfortunately, data trends during 2020–2022 are heading in the wrong direction. Traffic deaths are at a 24-year high. High-risk behaviors including speeding and driving while impaired have increased. Traffic deaths involving drivers and passengers who were not using seat belts are up more than 50 percent compared to 2019 – and at an all-time high. Traffic deaths involving people who were walking, biking, or riding motorcycles continue to climb upwards. Additionally, preliminary data for the first six months of 2022 show further deadly increases.

While research experts will be studying how the COVID pandemic and other societal changes are impacting these traffic deaths, this public health crisis demands that we all act now to reverse this trend and bring us closer to our Target Zero goal. To that end, the Washington Traffic Safety Commission (WTSC) Commissioners have tasked Commission agencies and organizations to discover actions we can take in 2022 and 2023 to address this trend.

We are calling this effort the WTSC Commissioners' Target Zero Action Plan. Many of these actions are already underway, and some are completed. Our approach to this plan is consistent with the U.S. Department of Transportation 2002 National Roadway Safety Strategy. U.S. DOT Secretary Pete Buttigieg stated:

This National Roadway Safety Strategy describes the major actions we will take to make a meaningful difference over the next few years. At the core of this strategy is a department-wide adoption of the Safe System Approach, which focuses on five key objectives: safer people, safer roads, safer vehicles, safer speeds, and post-crash care. We will launch new programs, coordinate, and improve existing programs, and adopt a foundational set of principles to guide this strategy.

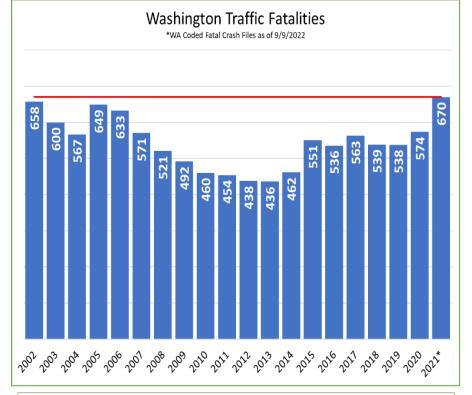
### Washington Traffic Safety Data

Traffic deaths in Washington increased dramatically over the past two years. In 2019, 538 people were killed in traffic crashes. In 2021, that number increased by 24 percent to 670. This marks the highest number of traffic deaths on Washington roadways since 1997.

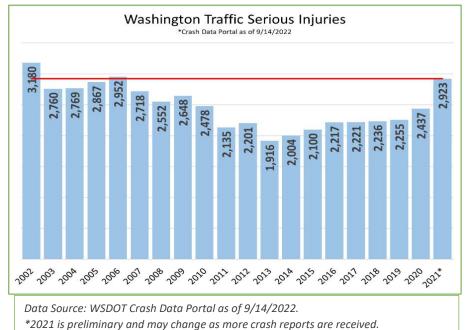
Roadway safety worsened nationwide during the COVID-19 pandemic. The National Highway Traffic Safety Administration reports that 36,355 people died in traffic crashes in 2019. In 2021 preliminary data estimates that 42,915 people died, marking an 18 percent increase.

The number of people experiencing serious injuries as a result of a traffic crash has also increased nearly 30 percent from 2,255 in 2019 to 2,923 in 2021.

Despite the statewide increase in traffic



Data Source: WTSC Coded Fatal Crash (CFC) Files. \*2021 is preliminary and may change as more Data Source: WTSC Coded Fatal Crash (CFC) Files \*2021 is preliminary and may change as more crash reports are received



fatalities in 2021, 17 Washington counties (out of 39) had fewer fatalities, no change, or no fatalities compared to 2020. When considering both numbers and percent change in 2021, traffic fatalities in Pierce County increased most rapidly. Two counties, Asotin and Wahkiakum, had zero traffic fatalities in 2019-2021.

Of the people killed in traffic crashes in 2021, 21 percent were between the ages of 21-30. Forty-six percent of those killed were the driver of a motor vehicle, and 23 percent were walking or biking when hit.



Walkers and rollers, also known as active transportation users, experience elevated risk while using roadways due to a combination of infrastructure (light timing, width of road, availability of walker refuge zones), driver behavior, and walker/roller behaviors.

For the last decade, active transportation user fatalities have increased at a much faster rate than

overall fatalities, mirroring a national trend. Walker deaths increased to the highest number ever in 2021. These deaths in 2019-2021 were 75 percent higher than the number of deaths 2011-2013.

Crash statistics for pedestrians show that risk is not evenly distributed. Crashes resulting in pedestrian fatalities and serious injuries disproportionately affect certain groups. According to analysis conducted by the Washington State Department of Transportation, from 2013–2017, 59 percent of pedestrian and bicyclist fatal and serious crashes occurred in communities with a rate of poverty higher than the state average, while these areas accounted for only 43 percent of the population. This means that people in low-income communities were over-represented in fatal and serious crashes by 37 percent.

The rate of traffic fatalities in Washington have increased as well from .86 per 100 million vehicle miles traveled in 2019 to 1.154 in 2021.

Traffic Fatality and Serious Injury Rates	2019	2021
Per Vehicle Miles Traveled (VMT)	1	
Fatality Rate per 100 million VMT	0.860	1.154
Serious Injury Rate per 100 million VMT	3.604	5.090
Per Population		
Fatality Rate per 100,000 population	7.1	8.5
Serious Injury Rate per 100,000 population	29.9	37.6

Lack of seatbelt use, driver impairment, and speeding are behaviors that contribute significantly to traffic deaths. These are not "accidents." They are preventable. Speeding as a behavioral factor in fatal crashes increased 35 percent from 152 in 2019 to 206 in 2021.

Washington has one of the highest seat belt use rates in the country at 94 percent, yet in 2021 an estimated 152 fatally injured persons were not restrained. This is a 41 percent increase over 2019 when 108 fatally injured persons were not restrained.

Impaired drivers continue to be the largest behavioral factor in traffic fatalities. Poly-drug use – combining two or more drugs, or one or more drugs mixed with alcohol – is still prevalent in fatal crashes. The most common poly-drug in fatal crashes is alcohol combined with cannabis. The number of alcohol or drug positive drivers involved in fatal crashes increased from 247 in 2019 to 312 in 2021 – a 26 percent increase.

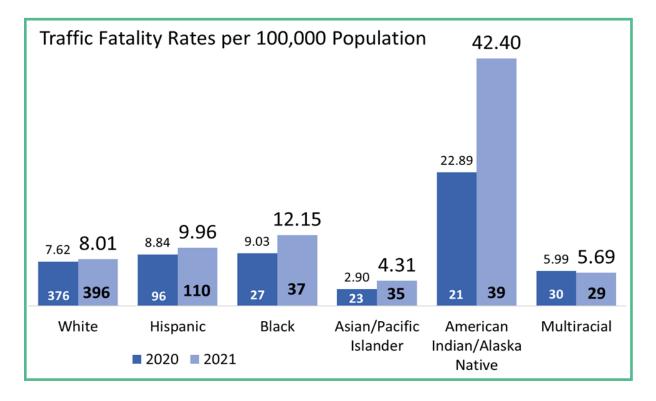
## **Pro-Equity Anti-Racism**

In March 2022, Governor Inslee directed all state agencies to adopt a Pro-Equity Anti-Racism Plan in Executive Order 22-04. The order established transportation and mobility as one of the 15 determinants of equity.

In addition to the fatality increases discussed in the previous section, we must all be aware that these increases have also exacerbated inequities among racial and ethnic groups.

Traffic fatalities have increased across virtually all race/ethnicity categories, but some groups have experienced much larger increases.

Native Americans and Alaska Natives (AI/AN) have the highest traffic fatality rate per 100,000 population, and it nearly doubled in 2021 from 23 in 2019 to 42 in 2022.

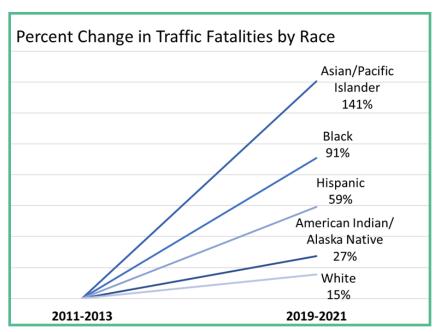


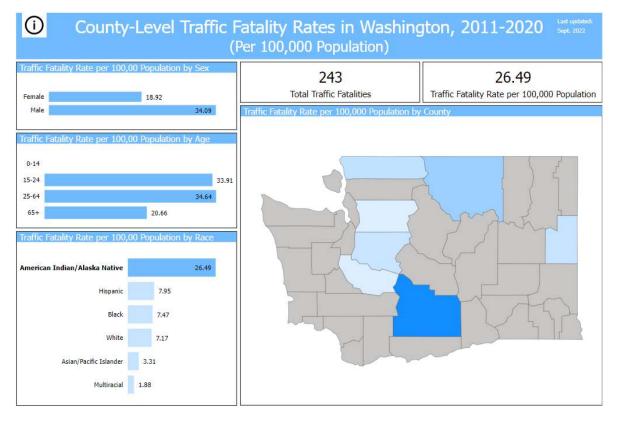
The percent change in traffic fatalities over the previous 10 years has increased most rapidly among Asian/Pacific Islanders and Blacks (141 percent and 91 percent, respectively).

These disparities are not consistent from county-to-county. To make this data more accessible, WTSC has created a dashboard to view fatality rates disaggregated by race and by county during 2011-2020. During that period, 31 percent of all fatalities involving AI/AN occurred in Yakima County. The fatality rate for AI/AN in Yakima County during that period was 84.96 per

100,000, compared to a rate of 26.49 for AI/AN statewide. There were 76 AI/AN traffic fatalities in Yakima County, compared to 28 fatalities in King County.

This view of the dashboard shows that there were seven counties that accounted for 71.6 percent of AI/AN fatalities in 2011-2020.





Three counties – King, Pierce, and Snohomish – account for 74 percent of Black traffic fatalities.

As we engage in this work to reverse the trend of fatal crashes, we realize our efforts must be targeted, in some instances, in communities overrepresented in fatal crashes. Different aspects of the Safe System Approach may need to be emphasized more than others for some communities based upon the needs and specific risk factors present.

The Move Ahead Washington Act [HB 5974 (2022)] provides resources and guidance to focus traffic safety efforts on Complete Streets for non-motorized users and other strategies using an equity focus. Several sections of the bill prioritize improvements in communities impacted by environmental harms and health impacts; vulnerable populations impacted by unemployment and high housing and transportation costs; communities with incomes at or below 200 percent of the federal poverty level; people with disabilities; communities experiencing environmental health disparities; location on or adjacent to tribal lands; and locations with higher crash experiences involving pedestrian and bicyclists.

One example is the expansion opportunities for local communities to implement automated speed enforcement (ASE) in locations where vulnerable walkers and rollers are most likely to be at risk. WTSC created the <u>Automated Speed Enforcement Readiness Guide</u> to assist communities to implement ASE effectively as part of a Safe System Approach, taking into account community input and equity considerations.

# Introduction to Traffic Safety Culture and the Safe System Approach

### Proactive Traffic Safety Culture

Culture is the shared values and beliefs of a group of people that influence behaviors. Traffic safety culture is a subset of culture that refers to how shared values and beliefs of a group of people affects their traffic safety decisions. The graphic below shows the impact attitudes, beliefs, willingness, and intentions has on behavior.



We have evidence that the majority of people in Washington exhibit driving behaviors that show a Proactive Traffic Safety Culture exists:

- Most people (94%) wear their seat belts.
- Most people (91%) drive with their focus on the road.
- Most people (78%) do not drive after drinking.
- Most people (64%) intervene to prevent impaired driving, when in such a situation.

Building a Proactive Traffic Safety Culture also requires organizations involved in traffic safety to self-assess their internal traffic safety culture including policies, procedures, and the beliefs and behaviors of staff.

Organizations also need to assess the traffic safety culture of the community they serve with their programs. According to the National Road Safety Strategy, "The traveling public also has a role to play. Each of us uses our roads almost every day, whether as a motorist, a passenger, or someone walking, biking, or rolling. Our actions should prioritize safety first. Always."

Proactive Traffic Safety Culture provides a framework to guide all who share the responsibility of creating a safety road system – governmental agencies and the traveling public— to take

proactive actions to build a culture that moves beyond simply complying with rules, following traffic laws, or doing what has always been done. A culture can achieve a higher level of safety when individuals go beyond compliance to a commitment to safety for themselves and others. Proactive traffic safety means committing to avoiding risk as well as committing to take actions to support the safety of all road users.

### Safe System

U.S. DOT recently adopted a Safe System Approach as the guiding paradigm to address roadway safety. The Safe System Approach has been embraced by the transportation community as an effective way to address and mitigate the risks inherent in our enormous and complex transportation system. It works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur. It is a holistic and comprehensive approach that provides a guiding framework to make places safer for people. This is a shift from a conventional safety approach because it focuses on both preventing crashes and reducing crash forces when they occur, and designs a system with redundancies in place to protect everyone.

Washington's adoption of the Safe System Approach recognizes that all layers of the Safe System Approach are critical, including behavioral interventions, roadway countermeasures, laws, policies, enforcement, and emergency medical care. The safety of our roadway system also resides within and interacts with broad social and physical determinants of health from social norms and attitudes to substance use disorders and from city planning to transportation options.



Roadway safety is a foundational element in our state's ability to address equity and climate. Governor Inslee's Executive Order 22-04, Implementing the Washington State Pro-Equity Anti-Racism (PEAR) Plan and Playbook recognizes that transportation and mobility "fortifies and distributes opportunities throughout support systems, families, and communities." Currently, transportation is the largest source of greenhouse gas emissions in Washington and accounts for 45 percent of statewide emissions. The ability to increasing active transportation and other transportation options that reduce greenhouse gases is heavily impacted by people's perceptions of the safety of those options.

Implementation of the National Roadside Safety Strategy and Washington's approach will be arranged around five complementary elements corresponding to the Safe System Approach elements:

- <u>Safer Roads</u>: Design roadway environments to mitigate human mistakes and account for crash angles and forces, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.
- <u>Safer People</u>: Encourage safe, responsible behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.
- <u>Safer Speeds</u>: Promote safer speeds in all roadway environments through a combination of thoughtful, context-appropriate roadway design, targeted education and outreach campaigns, and enforcement.
- <u>Safer Vehicles</u>: Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.
- <u>Post-Crash Care</u>: Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.

### Safer Roads

Safe roads help to decrease or mitigate the physical forces related to a crash, including force based upon the vehicle mass and speed, the angle of collision, and the likelihood of collisions between motor vehicles and nonmotorists.



Strategy	Lead Agency	Status
Assess <b>pavement marking</b> for compatibility with Lane Keeping Assist and related Advanced Driver Assistance Systems (ADAS)	WA State Department of Transportation (WSDOT)	Field analysis planned with funding from WSDOT
Enhancing work zone awareness by investing in <b>smart work zone devices</b> to provide real- time communication to road users about work zones and traffic incidents	WSDOT	Some existing projects have funding for smart work zone apps and some planned projects have costs already budgeted
Analyses have identified near-term and low- cost strategies to <b>prevent run-off crashes</b>	Snohomish DOT	Plan to implement in future projects over time
Analysis has identified near-term and low- cost strategies to <b>prevent collision hazards</b>	Snohomish DOT	Short-term improvements funded by a Highway Safety Improvement Program (HSIP) grant

Note: Examples used from Snohomish County Department of Transportation are used here as examples of strategies local authorities are using or can use to make roads safer and reduce risks for some of the most common crash types.

### Safer People

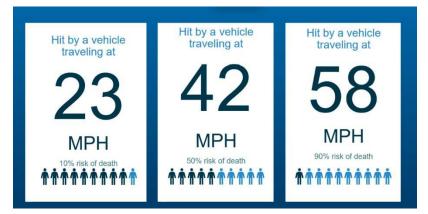


The Safe System includes education and enforcement for all road users to comply with rules based upon road design parameters. Proactive Traffic Safety Culture encourages road users to drive unimpaired and distraction free and to encourage friends, family, and co-workers to discourage high-risk behaviors among road users.

Strategy	Lead Agency	Status
Evaluate and measure the effectiveness of the current <b>on- road driver skills tests</b> and test scoring methods and develop future guidance/methods for on-road driver skills test administration and scoring such that it predicts high safety risk.	Department of Licensing	\$649,959 awarded to Johns Hopkins University (BTSCRP)
Develop <b>Target Zero Implementation</b> position at the Department of Licensing (DOL)	DOL	Cost TBD – WTSC grant funded FFY 2023
Expand El Protector Program Statewide	Washington State Patrol	WTSC has submitted FFY 2023 grant amendment request to NHTSA
Partner to expand Community Prevention Services to include <b>traffic safety outreach</b> in 100 high-need communities.	Health Care Authority and WTSC	In discussion
"Together We Get There" summer campaign, including bike/pedestrian safety, distracted and impaired driving <b>Public Service Announcements</b> on broadcast, cable, and streaming television, digital media, and radio (including spots in up to nine languages)	WTSC	Additional \$1M media buy Completed: May – Sept. 2022

Strategy	Lead Agency	Status
New "Together We Get There" <b>impaired driving campaign</b> for Labor Day 2022: " <u>Friends Like You</u> ." Focus is on bystander intervention, such as providing a sober ride.	WTSC	Aired before and during Labor Day weekend 2022. Will repeat during December 2022.
New "Together We Get There" <b>seat belt campaigns</b> : " <u>However You Say It</u> " campaign in English; " <u>Loteria</u> " campaign in Spanish	WTSC	Spots completed in September 2022, will be aired to target groups/regions with lower seat belt use in November 2022.
Local media budget for Target Zero Managers (TZMs) to implement <b>local safety messages</b> and advertise local HVE campaigns	WTSC	\$200,000 in dedicated funding for FFY 2023
Increases in support to local law enforcement for <b>High</b> <b>Visibility Enforcement (HVE)</b> campaigns, including speeding, impairment, and seat belts	WTSC	38% increase to \$1.5M
Increases in support for the Child Passenger Safety Program	WTSC	\$100,000 in increased support FFY 2023
Increased support for " <b>Teens in the Drivers' Seat</b> " program to cover additional time to support more schools	WTSC	Increased support from \$75,000 in FFY 2022 to \$150,000 in FFY 2023
Funding a new program, " <b>Teen Target Zero</b> " in 2023 designed to replace "Every 15 Minute" programs and similar mock-crash interventions used at high schools	WTSC	\$60,000 for FFY 2023

## Safer Speeds



There is a direct relationship between the speed at which a vehicle is traveling, and the survival of a pedestrian being hit. A person struck by a vehicle traveling between 20-25 mph has a roughly 90 percent chance of survival. That chance decreases to 50 percent when hit by a vehicle traveling 42 mph and just 10 percent when

the vehicle is traveling 58 mph. While vehicle occupants enjoy significant protection from seat belts, air bags, crumple zones, and other vehicle safety features, the risk of death for vehicle occupants also increases in proportion to the speed at which their vehicle strikes an object or is struck by another vehicle.

Strategy	Lead Agency	Status
Support the use of <b>speed cameras</b> by local jurisdictions (authorized under SB 5974, 2022) through a <b>best practices guide</b>	WTSC	Complete: <u>Automated Speed</u> <u>Enforcement Readiness</u> <u>Guide</u> .
Develop <b>speed program</b> focused on behavioral change	WTSC	WTSC Program Manager hired. Consulting with Governors Highway Safety Association and using their speed program checklist to establish a speed program. This may include the creation of a new advisory committee, as well.

## Safer Vehicles

Newer vehicle safety technology is reducing crashes today, including automated emergency braking, front crash prevention, lane departure warning, lane departure prevention, blind spot warnings, rear automatic emergency breaking, and rear cross traffic warnings. An Insurance Institute for Highway Safety (IIHS) study found that "automatic braking systems that recognize pedestrians cut pedestrian crashes by 27 percent."

Washington could play a role in promoting the use of proven, effective safety technology. Ensuring that state vehicles are equipped with proven safety features can reduce crashes. Washington can also consider participating in pilot testing in fleet vehicles of technology that detects driver alcohol use and prevents a vehicle from starting.

The City of New York provides an example of another way for a government to create safer vehicles. As part of its Vision Zero Plan, the city is installing Speed Assistance technology on 50 city-owned vehicles, including EV, hybrid, and gasoline vehicles. Using speed governors and telematics, the technology restricts a vehicle's maximum speed, preventing it from exceeding local speed limits. It dynamically adjusts to changing speed limits.

Strategy	Lead Agency	Status
<ul> <li>Propose Executive Order that future state vehicle purchases include safety technology, including:</li> <li>automatic emergency braking</li> <li>lane departure warning</li> <li>blind spot warning or intervention</li> </ul>	WTSC	Under discussion
<ul><li>rear automatic emergency braking</li><li>rear cross traffic warning</li></ul>		
Consider participation in a pilot study of the <b>Driver</b> <b>Alcohol Detection System for Safety</b> (DADSS) program by installing in selected state vehicles	WTSC	Under discussion
Consider participation in a pilot study of <b>intelligent</b> <b>speed control systems</b> by installing in selected state vehicles.	WTSC	Under discussion

## Post-Event Care (and Response)

Access to emergency and trauma care is critical to the survivability of crashes. Nationally, two out of five people who die due to a traffic crash were alive when first responders arrived. In rural areas of Washington, distance can make it difficult to locate a crash, arrive on scene, and transport injured people to the appropriate level of trauma care.

Transportation incidents, which include crashes as well as flat tires and other issues, are the second most common cause of death among both police officers and firefighters, and the leading cause of death among tow truck operators. A Safe System Approach is concerned with the safety of first responders as they are working along the side of the road. Educating drivers about the state's move over or slow down laws improve safety at crash scenes.

Traffic safety benefits can also come from caring for people with Post-Ticket Care programs such as re-licensing education, re-examination of drivers involved in serious crashes by Department of Licensing, or Post-Arrest Care for DUI drivers such as Screening, Brief Intervention, and Referral to Treatment (S-BIRT).

Strategy	Lead Agency	Status
Establish a <b>rural road safety program</b> at the WTSC	WTSC	WTSC Program Manager hired. Advisory team is being established.
Move Over or Slow Down public education campaign development and outreach	WTSC	\$535,000 in SFY 2022- 23 for PSA development and distribution. Campaign expected to run in February 2023.