



# About Target Zero

## The Strategic Highway Safety Plan is our guide

Target Zero is a data-driven strategic plan used to identify priorities and solutions, help create common goals, and develop a language so we can work together across disciplines. Specifically, our partners use it to:

- Set statewide priorities for all traffic safety partners over the next three to four years.
- Provide a resource of various strategies to address each emphasis area and factor.
- Help guide federal and state project funding toward the highest priorities and most effective strategies.
- Monitor outcomes at a statewide level for each priority area.

From 2012 through 2014, the time period analyzed in this plan, 1,336 people lost their lives in motor vehicle crashes in Washington State. We have to ask ourselves: How many deaths and serious injuries are “acceptable” on Washington’s roadways? How many of your family members would it be “acceptable” to lose to traffic crashes each year? Ten? Five?

Of course, the answer is none. Zero. The goal of every Washington State citizen should be zero deaths and serious injuries on our roads and highways. The personal, financial, and societal loss for every person killed or injured in traffic crashes is enormous. The loss of even one family member, co-worker, or friend is unacceptable.

That’s why Washington State has adopted Target Zero — a goal to reduce traffic fatalities and serious injuries on Washington’s roadways to zero by the year 2030. Our goal is zero deaths and serious injuries, because every life counts.

## What is the Strategic Highway Safety Plan?

Each state must have a Strategic Highway Safety Plan (SHSP); Washington’s is called Target Zero. This plan is developed through a collaboration of traffic safety professionals and stakeholders from many different organizations and disciplines:

- Engineers from the Washington Department of Transportation (WSDOT) and local public works agencies.
- Training and licensing experts from the Department of Licensing (DOL).
- Tribal and city police, county sheriffs’ deputies, and troopers from the Washington State Patrol (WSP).
- Medical professionals and emergency medical services (EMS) personnel, working with hospitals and public health agencies.
- Educational and subject-matter experts from the Washington Traffic Safety Commission (WTSC).
- Data specialists from state agencies and the Governor’s Office.
- And many other traffic safety specialists and interested parties from every corner of the state, all dedicated to making our roads safer.

Target Zero is a practitioner's plan, uniting the contributing organizations toward a common goal. It is intended to complement and be incorporated into the plans and programs of key state traffic safety agencies, as well as Tribes, cities, counties, and private organizations. The plan helps partners coordinate traffic safety programs, better align priorities and strategies, and build a common language and approach to traffic safety efforts across Washington State.

A fundamental element of the plan is that it is data driven, identifying the critical factors that contribute to fatal and serious injury crashes on Washington's roads. The plan then uses those factors to identify proven, recommended strategies along with new ones for reducing traffic deaths and serious injuries in a number of common areas.

The Target Zero plan identifies highway safety strategies for the next three to four years. Target Zero partners develop and implement specific projects that use Target Zero strategies, and also create applicable success measures. The actions, strategies, and measures are documented in partners' plans throughout the state, wherever the strategies are being implemented.



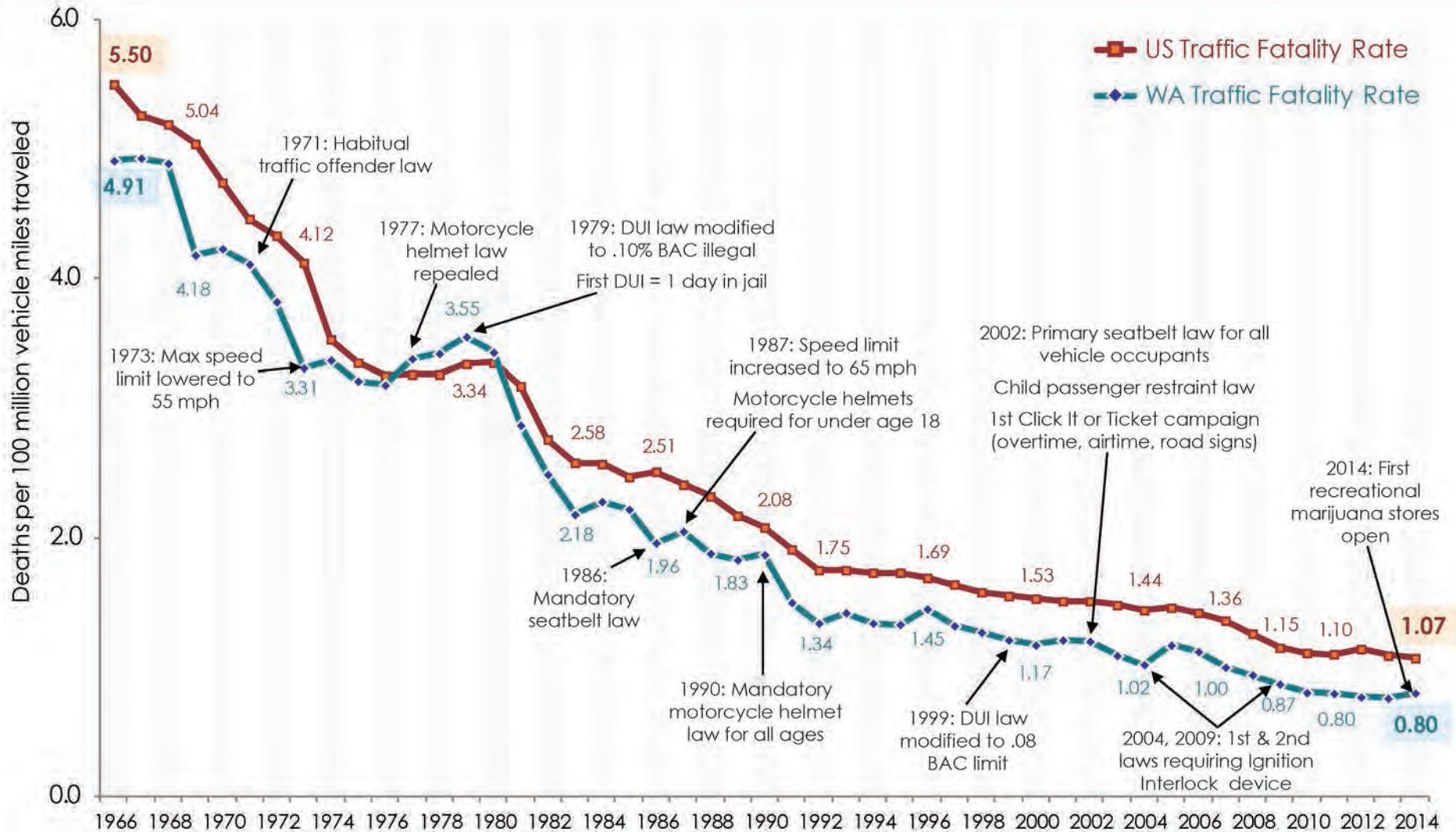
Law and policy changes have coincided with significant drops in deaths from traffic crashes in Washington State

## Target Zero complies with federal requirements

Federal law requires that our Strategic Highway Safety Plan be coordinated with the state's Highway Safety Plan, Commercial Vehicle Safety Plan, and the Highway Safety Improvement Program. This coordination includes harmonizing certain performance measures and targets. The role of our SHSP is to support the state's efforts to achieve these targets by establishing appropriate goals and objectives, outlining emphasis areas, and presenting effective strategies. To learn more about federal requirements, please see Appendix G.

# Traffic fatality rates US and Washington State 1966–2014

## By Year and Major Traffic Safety Laws



Source: FARS, WSP, WSDOT, and NHTSA

## Achieving zero deaths and serious injuries will not be easy

Washington State created the first Target Zero plan in 2000. The plan established an ambitious goal of zero traffic fatalities by the year 2030, and the state has made significant progress since then. Over the years, we have seen positive trends in almost every traffic area — improvements in Impaired Driving stemming from the strengthening of DUI laws and increased enforcement, significant roadway engineering improvements, and implementation of stronger anti-texting and phone use laws.

Additionally, in the last several decades the auto industry has given us life-saving air bags, more crash-resistant vehicles, and better roll-over protection technology. Meanwhile, organizations such as the National Comprehensive Highway Research Program (NCHRP), Mothers Against Drunk Driving (MADD), the United States Department of Transportation (USDOT), the Governor's Highway Safety Association (GHSA), the American Automobile Association (AAA), and the Insurance Institute for Highway Safety (IIHS) have provided many tools and programs that have made our roads safer.

However, if Washington is to actually reach Target Zero by the year 2030, it will take a continued concerted effort on many fronts. Reaching our Target Zero goal will only be accomplished through federal, state, and local partnerships leveraging innovation, research, and changes in the traffic safety culture of our state. Together we can realize zero traffic deaths and serious injuries by 2030.

## We've made great strides towards zero deaths and injuries – but haven't made it far enough yet

Each year from 2012 to 2014, more than 400 people died and another 2,000 were seriously injured on Washington's roadways. Looking further back, we find that from 2002 through 2011, Washington averaged 22 fewer traffic fatalities and 80 fewer serious injuries each year. While this is a great achievement, it is not enough to reach the goal of zero fatalities and serious injuries by 2030. Even one traffic fatality or serious injury is one too many. We must continue to do more.

## Zero traffic deaths in your family, zero traffic deaths in our state

To achieve Target Zero by 2030, Washington must average 28 fewer fatalities and 134 fewer serious injuries each year, starting right now. As time passes, it becomes harder to achieve our goal because partners have already accomplished the simpler efforts. The improvements we have to make now are harder and more transformative than the ones that have come before. Complicating this issue, we have seen an upswing in fatalities and serious injuries, and a slowdown in our continuing trend toward zero in recent years. With limited resources and personnel, every strategy — every effort — must count toward achieving our goal. This requires deliberate thought, meaningful analysis, careful planning, and strong commitment to a variety of effective traffic safety strategies. Let's reach our Target Zero goal together — zero traffic deaths in your family, zero traffic deaths in our state.

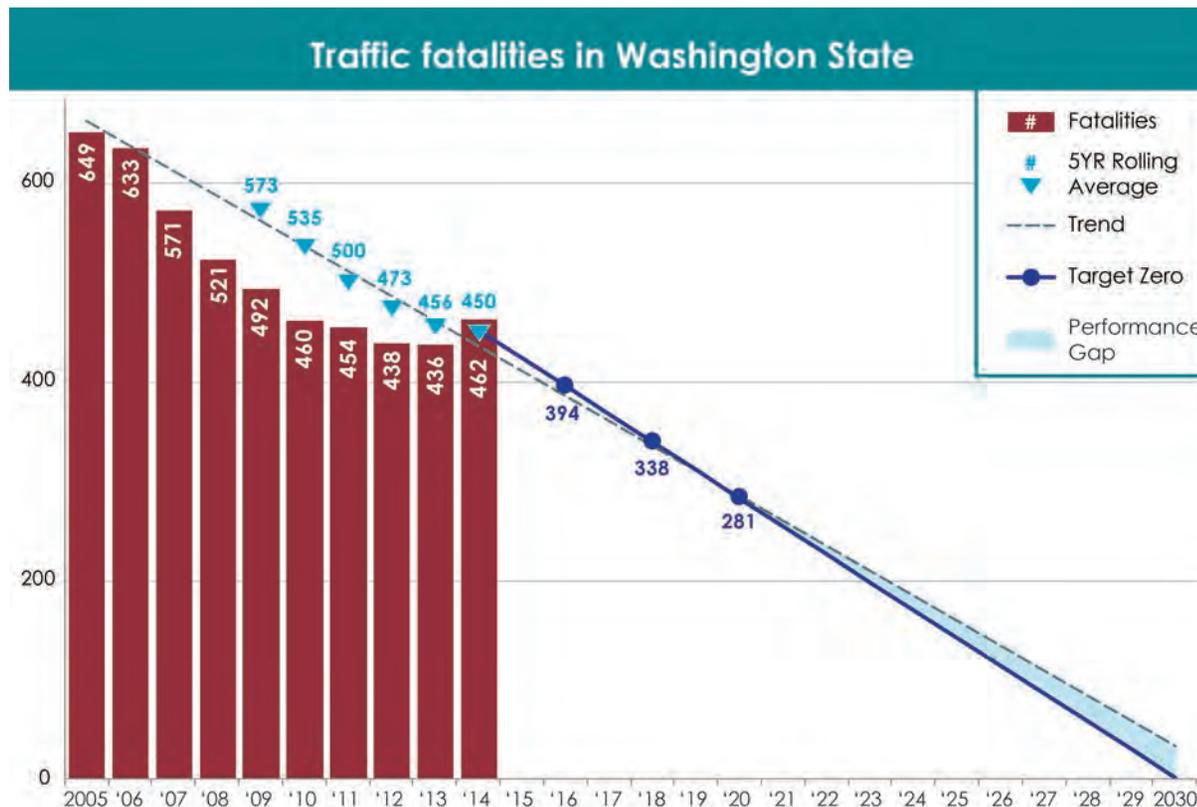
# Executive Summary

In the years 2012 through 2014, 1,336 people died on Washington State public roadways and 6,123 people were seriously injured. Each of these deaths and injuries is not just a number, but an actual person — one who lost his or her life, or suffered a severe trauma. And each of those deaths or injuries ripples out to dozens of family members, friends, and co-workers who suffer grief at a sudden death, or a loved one's injuries.

To combat these tragedies, Washington leaders continue to build partnerships among state agencies, all levels of Washington State governments, private citizens, safety advocates, and many other traffic safety partners.

The Washington Department of Transportation (WSDOT) and Washington Traffic Safety Commission (WTSC), along with dozens of partners, have joined together to create the Target Zero Strategic Highway Safety Plan (SHSP). Target Zero is a statewide, data-driven effort to reduce fatalities and serious injuries to zero by the year 2030. We will do this by developing strong leadership in organizations that directly impact highway safety, and using partnerships to develop and implement innovative, data-based solutions.

Our goal is zero deaths and serious injuries, because every life counts.

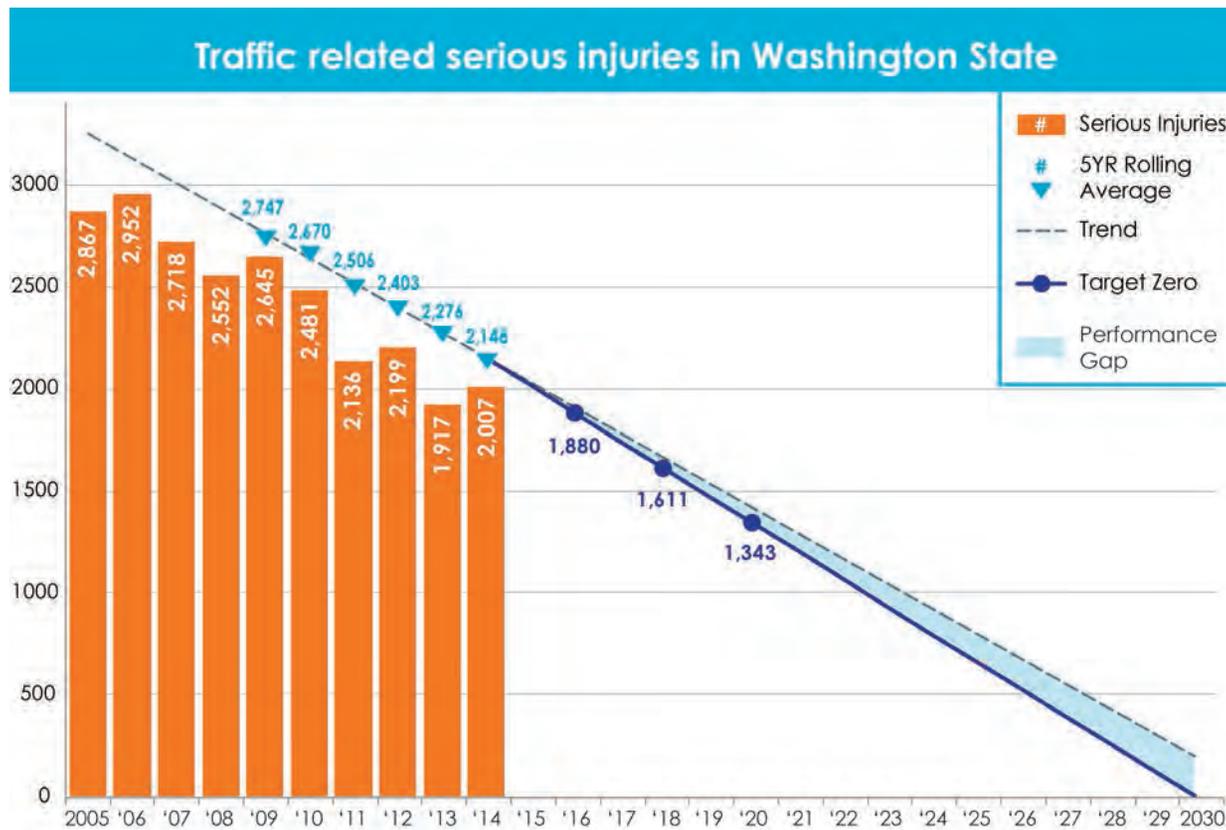


## We have made significant progress – but are not on track to achieve Target Zero

Since Washington State adopted the first Target Zero plan in 2000, the results have been impressive. The number of annual traffic fatalities in Washington has decreased by 27% from 2000–2014, even while the state's population has grown by 18%.

Over the years, we have experienced positive trends in almost every emphasis area. Through the power of our partnerships, we have strengthened our Driving Under the Influence (DUI) laws, increased enforcement of impaired driving, improved automotive safety equipment, evolved our roadway engineering standards, and passed anti-texting and phone use laws.

Despite these great achievements, however, we are not on track to reach zero fatalities and serious injuries by 2030.



## What's new in the 2016 plan

The 2016 plan includes new chapters:  
 Improving our Traffic Safety Culture;  
 New Technology and Traffic Safety;  
 Evaluation, Analysis, and Diagnosis; and  
 Legislation and Policy.

This version also features more graphics to better show traffic safety trends. This includes infographics, graphs, and tables, all downloadable at [targetzero.com](http://targetzero.com).

The Priority Table groups the priorities into emphasis areas based on similar factors and characteristics. Its organization is reflected in the order of the chapters in this version.

Run-off-the-road crash data has been combined with opposite direction crash data to create a new lane departure priority area.

Both the impairment and distraction involved priority areas now include pedestrians and bicyclists, in addition to the original drivers and motorcyclists.

The older driver age threshold has been lowered from 75 to 70 years old, because data shows that risk factors for older drivers have a statistically significant break point at age 70.

## About the Target Zero Plan

Each state is required to have a Strategic Highway Safety Plan. Washington's plan — called Target Zero — is developed through a collaboration of traffic safety professionals and stakeholders from many different organizations and disciplines, including the WTSC, WSDOT, local public works agencies, the Department of Licensing, Tribal and city police, county sheriffs' deputies, the Washington State Patrol, public health agencies, medical professionals, Emergency Medical Services personnel, and many other traffic safety specialists.

The 2016 Target Zero SHSP is a data-driven strategic plan used to identify traffic safety solutions, help create common goals, and develop a shared language so these many agencies and organizations can work together across disciplines. The plan focuses on specific emphasis areas and priorities to lay out systemic safety strategies. To develop the plan, traffic safety leaders convened a wide range of stakeholder groups who participated in a series of meetings to develop the final list of emphasis areas and priorities, review traffic safety strategies, and write the plan.

Coordination, collaboration, and communication among traffic safety partners are key to the implementation of the strategies. The efforts of traffic safety partners across the state are focused on implementing strategies that will help achieve the Target Zero goal.



## How to use Target Zero

Target Zero is a practitioner's plan, uniting its contributing organizations toward a common goal. It is intended to complement and be incorporated into the plans and programs of key state traffic safety agencies, as well as Tribes, cities, counties, and private organizations.

At the end of most chapters, you will find a list of strategies for achieving zero fatalities and serious injuries. Target Zero partners design and implement projects and programs based on those strategies. They document the recommended actions, strategies, and measures that can be used in local plans throughout the state, wherever traffic safety strategies are being implemented.

### To be most effective, Target Zero puts emphasis on the largest contributing factors

Target Zero sets statewide traffic safety priorities based upon the most frequently cited contributing factors. During the 2012 to 2014 period, the top three factors were:

- **Impairment** — contributed to 57% of all traffic fatalities.
- **Lane Departure** — contributed to 56% of all traffic fatalities.
- **Speeding** — contributed to 38% of all traffic fatalities.

Overall, 81% of traffic fatalities involved at least one of these top three traffic safety priorities, and 20% involved all three.

## Recent Target Zero Achievements

Our state is proud of the safety improvements made in areas where we have focused a great deal of time, attention, and funding:

**Young drivers aged 16–25.** Fatalities involving younger drivers aged 16-25 have seen significant reductions since 2007. Current projections based on the 10-year trend show zero fatalities being achieved in 2024 and zero serious injuries in 2026. This success reflects effectiveness of the implementation of intermediate driver licenses, high visibility enforcement campaigns, and programs such as the Party Intervention Patrols.

**Unrestrained vehicle occupants.** Fatalities among vehicle passengers not wearing appropriate safety restraints have dropped more quickly than in other areas. Currently, projections based on the 10-year trend show zero fatalities in 2021 and zero serious injuries in 2026. This success reflects the effectiveness of the Click It or Ticket campaign's combination of education and enforcement, as well as several other innovative efforts to encourage greater and appropriate use of restraints for adults and children.

**Lane departure crashes.** Lane departure crashes resulting in fatalities and serious injuries have also seen dramatic reductions. Current ten-year trends project zero lane departure fatalities by 2027, and zero head-on serious injuries by 2028. This success is a reflection of various safety efforts on behalf of many Target Zero partners in reducing head-on and run-off-the-road events.

## Current Target Zero Areas for Improvement

There are other areas where we are unfortunately not seeing such improved trends. In some areas, we need much higher declines in order to achieve Target Zero.

**Pedestrians.** Current trends for pedestrian fatalities and serious injuries are flat and may be on the rise. It may also be that more people are walking and increasing exposure, but state specific walking rates are not available. WSDOT, the state lead on pedestrian safety, has recently revised the *WSDOT Design Manual* as part of a formal design change intended to improve roadway safety for all users by considering modal needs and roadway context.

**Motorcyclists.** The ten-year trend in motorcyclist fatalities is flat, not increasing, but not decreasing. Looking at these fatalities in a rate per 100,000 motorcycle registrations, the outcome shows a slight decline in fatalities relative to number of registered riders, which is a promising sign. Declines among seriously injured motorcyclists are also promising; however, they are not quite on track to reach zero in 2030. Training and education for motorcycle riders and other drivers is crucial. Consistent helmet use is also critical to progress. Despite Washington's primary law requiring all motorcyclists to wear helmets, nearly 8% of fatally injured motorcycle riders were not wearing helmets.

## Next Steps for the 2016 Target Zero Plan

Target Zero lays the foundation for achieving the vision of zero fatalities and serious injuries in the future. However, this vision will only become a reality if intentional steps are taken to implement and evaluate the plan on an ongoing basis. Partners at the federal, state, local, and Tribal levels must be able to implement the strategies listed in this plan in order to actually achieve zero deaths and injuries on Washington State's roads.

# Target Zero Priorities

## We base traffic safety priorities on the latest data

To focus efforts on eliminating deaths and serious injuries on our state's roadways, partners analyzed the data from 2012–2014 to determine the highest priorities for immediate efforts. The team grouped the primary factors found in fatal and serious traffic crashes into priority levels one, two, and three. The levels are based on the percentage of traffic fatalities and serious injuries associated with each factor.

**Priority level one** includes the factors associated with the largest number of fatalities and serious injuries in the state. Each of these factors was involved in at least 30% of the traffic fatalities or serious injuries between 2012 and 2014.

**Priority level two** factors, while frequent, are not as common as priority level one factors. Level two factors were seen in at least 10% of traffic fatalities or serious injuries, but fewer than 30%.

**Priority level three** factors are associated with less than 10% of fatalities and serious injuries.

In this edition of Target Zero, we have changed several priority areas to reflect the more sophisticated data and better understanding that we now have regarding these factors. For example, run-off-the-road crash data have been combined with opposite direction crash data to create a new lane departure priority area. Also, both the impairment and distraction involved priority areas now include impaired non-drivers (pedestrians and cyclists), as well as the traditional impaired drivers and motorcyclists. In addition, the older driver age threshold has been lowered from 75+ to 70+, because analysis shows that risk factors for older drivers have a statistically significant break point at age 70.

Additionally, Traffic Data Systems, Emergency Medical Services (EMS) and Trauma Response, and Evaluation and Diagnostics are included as priority level one factors because of their significance in reducing death and serious injuries. Better data systems significantly improve our analysis of traffic fatalities and serious injuries, and effective EMS response has a significant effect on preserving life and minimizing injury. Meanwhile, a focus on improving how we analyze and evaluate our strategic plans has the potential to reduce traffic deaths and injuries alongside strategies designed to impact the other priority level one factors.

## Fatality and Serious Injury Data Drive the Target Zero Priorities

The strategies laid out in this plan were identified through data evaluation and analysis and are targeted to address the top safety priorities in Washington. They include both broad-ranging as well as specific strategies for reducing traffic fatalities and serious injuries. These strategies were developed using national-level research, existing pilot programs, and input from many statewide stakeholders.

## Decision and Performance Improvement

1	Traffic Data Systems	<i>Decision Improvement</i>
1	EMS and Trauma Response	<i>Performance Improvement</i>
1	Evaluation, Analysis, and Diagnosis	<i>Decision and Performance Improvement</i>

Washington State 2012-2014	Fatalities		Serious Injuries	
	Number	% Total	Number	% Total
	1,336	100%	6,123	100%

### High Risk Behavior

1	Impairment Involved	756	56.6%	1,366	22.3%
1	Speeding Involved	508	38.0%	1,622	26.5%
2	Distraction Involved	395	29.6%	1,403	22.9%
2	Unrestrained Occupants	296	22.2%	627	10.2%
2	Unlicensed Driver Involved	248	18.6%	**	**
3	Drowsy Driver Involved	39	2.9%	194	3.2%

### Crash Type

1	Lane Departure	750	56.1%	2,357	38.5%
1	Intersection Related	276	20.7%	2,129	34.8%

### Road Users

1	Young Drivers 16–25 Involved	423	31.7%	2,057	33.6%
2	Motorcyclists	224	16.8%	1,110	18.1%
2	Pedestrians	204	15.3%	906	14.8%
2	Older Drivers 70+ Involved	162	12.1%	524	8.6%
3	Heavy Truck Involved	122	9.1%	318	5.2%
3	Bicyclists	29	2.2%	294	4.8%

### Other Monitored Emphasis Areas

	Wildlife	7	0.5%	49	0.8%
	Work Zone	3	0.2%	96	1.6%
	Vehicle-Train	2	0.2%	5	0.1%
	School Bus-Involved	0	0.0%	15	0.2%

## Priority level one

Emphasis areas include:

- Factors occurring in at least 30% of total fatalities or serious injuries.
- Decision and Performance Improvement.

## Priority level two

Emphasis areas are factors occurring in at least 10% of total fatalities or serious injuries.

## Priority level three

Emphasis areas are factors occurring in less than 10% of total fatalities or serious injuries.

\*\*Serious injury data for unlicensed drivers are unavailable

Each of the strategies in Target Zero has been given one of the following effectiveness ratings, indicated by the initial P, R, or U at the end of each strategy:

- **(P) Proven** effective through professional evaluation in Washington or in other states or countries.
- **(R) Recommended** based on documented best practices or federal recommendations.
- **(U) Unknown** strategies that are new or with limited evaluations.

The most established strategies are proven or recommended. However, Target Zero partners believe it is also important to include unknown strategies in the overall plan to promote innovative approaches. For the projects using unknown strategies, it will be critical to have a properly designed evaluation component included as part of the project.

When determining effectiveness of the strategies in this document, we used three main sources:

- *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices* (8th Edition, 2016), which focuses on behavior.
- *Crash Modification Factors Clearinghouse*, which focuses on engineering.
- *The National Cooperative Highway Research Program Report 500 Series*, which focuses on both engineering and behavior.

More information on determining the effectiveness of strategies is available in Appendix F.

In addition, we are continuously evaluating our programs and strategies to ensure that we are being effective. See the Evaluation, Analysis, and Diagnostics chapter for more information.

## The strategies call for five types of approaches

The strategies presented in this plan vary in their timeframe for implementation, their long-term effectiveness, and their responsible parties. The Target Zero strategies focus on the Five Es, with the addition of Leadership and Policy strategies. To make it easy for readers to find the kind of strategies they are looking for, we have indicated which area the strategies fall into:

- **Education.** Give road-users the information to make good choices, such as driving unimpaired, wearing a seatbelt, and avoiding distractions.
- **Enforcement.** Use data-driven analysis to help law enforcement officers pinpoint and address locations with a high number of behavior-driven fatal and serious-injury crashes, such as speeding and impairment.
- **Engineering.** Design roads and roadsides using practical solutions to reduce crashes, or to reduce the severity of crashes if they do occur.
- **Emergency Medical Services (EMS).** Provide high-quality and rapid medical response to injury crashes.
- **Leadership/Policy.** Change laws, agency rules, or policies to support safer roads and driving. In this version of the Target Zero plan, we have included these strategies in a separate chapter for easy reference by policy-makers, legislators, and legislative staff.

**Evaluation, Analysis, and Diagnosis** helps us to determine how we are doing in meeting our goals, to understand what is contributing to crash occurrences, and to select appropriate countermeasures to reduce those crashes using the approaches listed above.

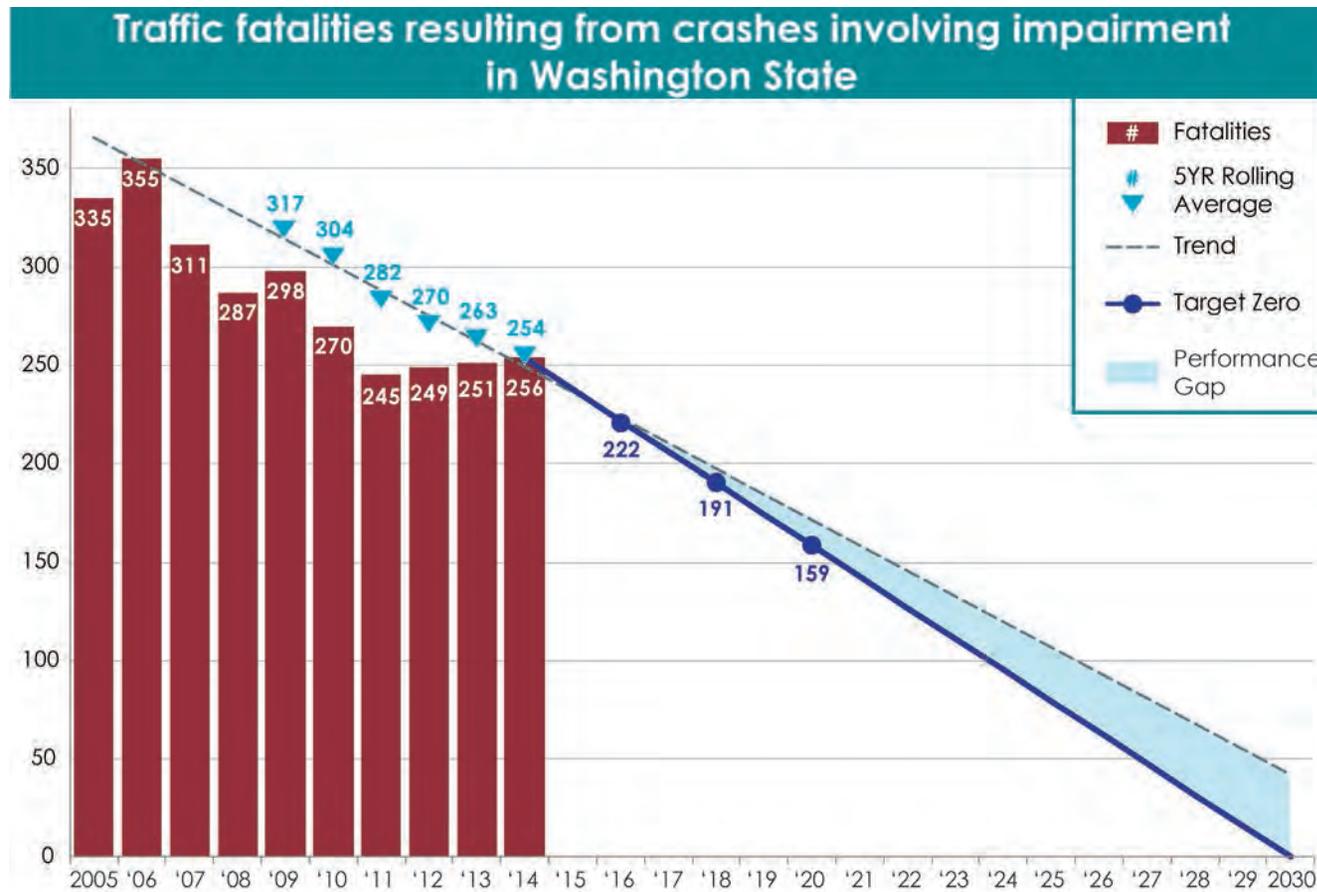
## Where does our crash data come from?

Throughout the Target Zero plan, traffic fatality and serious injury data (if available) are presented for each priority emphasis area. Fatality data is from the Fatality Analysis Reporting System (FARS), and serious injury data is from WSDOT’s Crash Location and Analysis System (CLAS). Fatalities are represented with the color red, and serious injuries with orange.

The fatality and serious injury graphs throughout Target Zero display a performance trend line based on six five-year rolling averages derived from the most recent ten years of data, along with the Target Zero line.

The Target Zero line is where we need to be to achieve our vision of zero deaths by 2030. Many of the trends show an impressive decline for 2012–2014. However, most trends also show that we must continue to push harder in order to reach zero fatalities and serious injuries by 2030. The area between the five-year rolling average performance trend and the Target Zero line is our performance gap (shaded in light blue) and shows the improvement needed to achieve Target Zero.

For more information on the methodologies and data sources used to calculate these numbers, please see Appendix C and Appendix D.



# Legislation and Policy

## Key Facts

According to the Center for Disease Control (CDC), allowing sobriety checkpoints in Washington would save about 15 lives, prevent about 1,350 injuries, and save \$52 million in avoided crashes each year.

Similarly, allowing wider use of speed cameras in Washington would save about 21 lives, prevent about 1,700 injuries, and save nearly \$68 million in avoided crashes each year.

See the [CDC Crash Calculator](#) for more information.

Washington has been a legislative leader in highway safety. We have an intermediate license law for young drivers, and a nationally recognized DUI offender ignition interlock program. However, our state has yet to adopt a few critical evidence-based interventions that are proven to reduce deaths and injuries. In addition, some of our current laws could be updated to be more effective, based on recent data. This section outlines the additional remaining legislative strategies that will help us achieve Target Zero: no more traffic deaths or serious injuries on Washington State's roads.

## Overview

Washington's Legislature has already adopted most of the top-identified life-saving traffic safety laws. In some cases, however, our laws could be updated to include new, researched-based best practices. There are also some remaining legislative strategies that have been proven effective at saving lives, but that Washington has yet to adopt, such as sobriety checkpoints. In addition, the Legislature has passed laws to allow proven traffic safety programs, but many local governments have not yet prioritized and funded them.

This chapter provides an overview of some of Washington's important traffic safety laws; it also suggests both new laws, as well as improvements to existing laws. Additionally, it outlines how local governments could implement existing laws to reduce fatalities and serious injuries.

# What's New

## New Legislation with Traffic Safety Implications, 2012 to 2014

**12-Hour impound hold.** Mandates a 12-hour impound hold on motor vehicles used by persons arrested for DUI.

**24/7 sobriety programs.** Establishes a statewide 24/7 Sobriety Program Pilot Program, an alternative to incarceration for repeat impaired driving offenders. This program ensures that participants are monitored and tested for drug and alcohol use so that they remain sober and are following court-directed activity.

**Conditions of pre-trial release.** Repeat DUI arrestees in Washington are now required to be held until they see a judge. As a condition of pre-trial release, the judge must require the repeat DUI arrestees to only drive a vehicle with ignition interlock device installed, attend a 24/7 sobriety program, or both.

**Marijuana.** Washington voters legalized recreational marijuana through a 2012 initiative process. The initiative set a 5 ng of THC per se limit. The first recreational marijuana stores in the state opened in the summer of 2014. While it is too soon to tell if this new legislation will affect traffic deaths and serious injuries, a preliminary report by the Washington Traffic Safety Commission showed an initial increase in the number of drivers involved in deadly traffic crashes with THC in their blood.<sup>1</sup>

**Open Container Marijuana Law.** It is illegal for drivers or passengers to keep or consume marijuana in a motor vehicle when the vehicle is upon a highway, unless the marijuana is in an unopened, sealed container, or in a spot not immediately accessible by passengers or drivers.

**Automated school bus safety cameras.** Authorizes school districts to install automated safety cameras on school buses to detect vehicles that fail to stop for a bus. All revenue collected is used for school zone safety projects.



## Legislation and policy for impaired driving

Washington has enacted laws designed to deter driving while impaired by alcohol or positive for marijuana or any other drug. The foundational law defines driving while under the influence (DUI) four ways:

1. Driving with a blood alcohol concentration (BAC) of .08 or higher.
2. Driving with a THC (delta-9 tetrahydrocannabinol, the psychoactive component of marijuana), concentration of 5.0 nanograms or higher.
3. Driving while under the influence of, or affected by: intoxicating liquor, marijuana, or any drug.
4. Driving while under the combined influence of, or affected by: alcohol, marijuana, or any drug.

### DUI Courts

General deterrence methods and traditional sanctions often do not impact DUI offenders with an alcohol or drug dependence or abuse diagnosis.

DUI courts are criminal justice programs that combine drug and alcohol treatment with intensive court supervision to reduce DUI recidivism. DUI courts follow ten guiding principles as established by the National Center for DWI Courts.<sup>2</sup> Judges, case managers, substance abuse treatment providers, prosecutors, defense attorneys, law enforcement officers, and parole officers work together to oversee and manage participants' progress. These programs emphasize accountability and long-term treatment.

DUI courts are the most effective way to reduce recidivism in hard-core DUI offenders.<sup>3</sup> Studies show DUI courts to be effective at reducing recidivism of both DUIs and other crimes. The studies also show the model is effective at reducing taxpayer costs due to positive outcomes for DUI offenders including fewer rearrests, less time in jail, and less time in prison.<sup>4</sup>

#### Discussion

Washington allows DUI courts, but their use is limited to a few counties. While many DUI courts are optional for a DUI offender, the Spokane District DUI Court is mandatory. In partnership with

Washington State University (WSU), the WTSC is conducting an outcomes evaluation of the mandatory DUI court model to determine its effectiveness at reducing DUI recidivism.

#### Recommendation for Local Jurisdictions

Develop a DUI court program. Give judges the ability to order offenders to attend DUI court.

## Sobriety Checkpoints

Sobriety checkpoints are traffic stops, or checkpoints, where officers are set up on a roadway to stop vehicles to check for impaired drivers. Law enforcement officers operate sobriety checkpoints at times and places where data show impaired driving is common, such as cities and towns after bars and restaurants close, or heavily traveled holiday weekend routes. These checkpoints are publicized in advance to give drivers who might be at risk of driving impaired a chance to plan ahead to find safe ways to travel. Target Zero considers sobriety checkpoints a proven strategy, based on *Countermeasures That Work*.

### Discussion

Sobriety checkpoints are one of the most effective countermeasures to combat impaired driving, and the sole remaining proven impaired driving measure not currently deployed in Washington.<sup>5</sup> Allowing sobriety checkpoints in Washington would save about 15 lives, prevent 1,350 injuries, and reduce taxpayer crash costs by about \$47 million each year.<sup>6</sup>

In 1988, the Washington State Supreme Court heard the case of the City of Seattle v. Mesiani.<sup>7</sup> The Court held that the checkpoints conducted without authority of law were unconstitutional. However, some opinions suggested that sobriety checkpoints could be executed constitutionally in Washington when conducted under “authority of law” and appropriately structured conditions.

In Michigan Department of State Police v. Sitz in 1990, the US Supreme Court found sobriety checkpoints to be constitutionally permissible under the “special needs” exception, in which law enforcement officers may directly conduct searches and seizures without individualized suspicion for the purpose of minimizing risk of harm to the public. The Court held that the removal of impaired drivers pursuant to a sobriety checkpoint program did not violate the Fourth Amendment.

In 2008 and 2011, Washington legislators introduced bills that would provide necessary “authority of law” to conduct sobriety checkpoints.

No committee action was taken on either bill.

Washington’s constitutional privacy protections may call for additional sobriety checkpoint protocols in order to operate within Washington State’s legal framework. In addition to the NHTSA recommendations, strict protocol for Washington could consist of checkpoints complying with the following:

- Conduct checkpoints only in areas where data show high incidence of impaired-driving-related crashes, DUI arrests, or citizen complaints.
- Obtain a warrant that clearly describes the how, what, where, and why of the checkpoint activity.
- Only ask drivers for identification, insurance, and vehicle registration when an officer has reasonable suspicion that a crime has occurred.

A well-crafted statute authorizing sobriety checkpoints using the above procedures may provide the “authority of law” required to meet the Washington State Constitutional standard set forth in Article 1, Section 7. Once the authority has been established, it will be the work of the Washington Supreme Court to determine the constitutionality of sobriety checkpoints conducted in accordance with the provisions outlined here.

### Recommendation

Pass legislation allowing sobriety checkpoints in Washington State.

## Ignition Interlock Devices

All DUI offenders are subject to a driver's license restriction to use ignition interlock devices on all vehicles that they drive for a set period of time. The restricted period is one year for a first restriction, two years for a second restriction, and ten years for third and subsequent restrictions. Offenders also must have no interlock violations — such as blowing into the device with a BAC level above .02 — for the last four months of their restriction in order for the restriction to be removed. The Legislature has enacted many improvements to Washington's interlock laws, including requirements that interlocks have cameras and GPS functions.

Washington allows a person who has been arrested for DUI to install the ignition interlock device any time after arrest. During their license suspension, DUI offenders can get an ignition interlock driver's license which allows them to keep driving as long as they only drive vehicles with ignition interlock devices. All of the time spent between arrest and relicensing with an ignition interlock device installed counts toward DUI offenders' time fulfilling the interlock restriction to be eligible for a restricted license. Washington has also established an ignition interlock indigent account, which helps to support the cost of interlocks for very low income offenders.



### Discussion

Ignition interlocks are a proven effective strategy for reducing impaired driving (NCHRP). They are most effective at decreasing DUI recidivism when their use is broadly implemented and closely monitored. Washington's Ignition Interlock Driver's License provides an incentive for offenders to install the interlock, maintaining their

legal driving privileges and by extension ability to keep their jobs. Washington's interlock use is increasing, to over 18,000 in 2014, and our state ranks third among US states for the number of interlocks, based on a 2014 study. ([rothinterlock.org](http://rothinterlock.org))

### Recommendation for Local Jurisdictions

While existing policy is strong, implementation at the local level is the key to success. Strong local probation departments that can monitor DUI offender ignition interlock reports will increase the effectiveness of ignition interlock's impaired driving reductions.

## 24/7 Sobriety Programs

Local jurisdictions are authorized to establish 24/7 sobriety programs for DUI offenders. This program requires DUI offenders to submit to testing, often twice a day, for alcohol or any drug. A study found a 12% reduction in DUI recidivism in counties that adopted the program in South Dakota. Additionally, a RAND Corporation study suggests that providing a 24/7 sobriety monitoring option for DUI offenders and offenders of other substance abuse related crimes has a positive public health effect on traffic fatality rates.

### Recommendation for Local Jurisdictions

Establish 24/7 sobriety programs for DUI offenders

## Other possible impaired driving laws

Many other potential laws could change the landscape of traffic safety in Washington State. Although Target Zero partners are not currently proposing the legal interventions listed below, we are tracking these programs in other states and countries to see if they eventually might be transferable to our state.

**Sanctions.** The first four times within 10 years that a person is convicted of a DUI in Washington, it is a gross misdemeanor punishable by up to a year in jail and up to a \$5,000 fine. On fifth and subsequent convictions within ten years, a DUI is a class C felony. For the past few years, Washington's Legislature has considered bills that would make a person's fourth and subsequent DUI convictions felonies. At the time of this writing, these bills have not progressed through the process to be enacted. The expense of adding people to the state's prison system is often cited as one of the reasons this bill has not passed.

**Deferred prosecution for DUI.** Washington offers a formal deferred prosecution in statute, but limits it to once per lifetime. Requirements for this formal deferred prosecution include treatment, ignition interlock provisions, and other conditions as ordered by the court.<sup>8</sup> Washington's formal deferred prosecution has been proven effective at reducing DUI recidivism.<sup>9</sup> A study showed that deferred prosecution participants had an overall recidivism rate of 35.5%, compared to a comparison group's recidivism rate of 52%. However, a formal deferred prosecution is tracked as a prior offense if the offender commits a later offense.

It is a common practice for prosecutors in Washington to negotiate a plea agreement resulting in reduced penalties. If an original DUI is plead to a lesser offense, such as reckless or negligent driving, that lesser-offense conviction would end up being counted as a prior DUI if the person were to incur a subsequent DUI. Since Washington limited deferred prosecutions to one per lifetime, many DUI defense attorneys now advise their clients against taking a deferred prosecution on their first DUI. Allowing more than one deferred prosecution may encourage treatment for first-time offenders earlier, when it is more likely to be effective.

**Per se levels.** All 50 states have set an illegal per se limit of .08 BAC for drivers over 21, and a .02 or less for drivers under 21. No states, but many countries, have stricter BAC per se limits, from .02 to .05.

## Legislation and policy for speeding

Washington’s laws prohibit drivers from exceeding maximum speed limits, as well as exceeding a safe and prudent speed given road hazards and conditions. The fine for speeding increases as the driver’s speed over the limit increases. Increasing speed limits over the past two decades have caused additional deaths, estimated at 33,000 nationwide, according to an Insurance Institute for Highway Safety (IIHS) report.<sup>10</sup> In fact, the study found that every 5 mph increase in maximum speed limit is associated with an 8% increase in fatality rates on interstates and freeways.

### Automated speed enforcement

Law enforcement officers are not able to enforce speed limits on all roads and all times. At times, road conditions, such as no shoulder, can make officer speed enforcement dangerous or difficult. Speed cameras can provide speeding enforcement in these difficult-to-patrol locations, and also increase the public perception that drivers will receive a ticket if they speed. Speed cameras also send a strong traffic safety culture message to counter the perception that speeding is an acceptable or even admirable behavior.

Automated speed enforcement devices use a speed measuring tool and a camera to identify drivers who are exceeding the speed limit. The devices could potentially be used in areas where speeding-related crashes occur frequently, in areas that are difficult or dangerous to enforce, work zones, and in areas with a high volume of pedestrians.

However, in Washington the law only allows for automated enforcement in work zones, school zones, and at signalized intersections. There is one exception: the City of Tacoma is authorized by statute to use a single automated speed camera.

#### Discussion

The use of automated speed cameras has been shown to reduce crashes 20–25% if placed at conspicuous, fixed locations.<sup>11</sup> Legislation in Washington could expand the use of automated speed cameras. However, public acceptance is key to successful implementation. State legislation could ensure these devices were used on roadways with speeding problems, or areas where traditional law enforcement is difficult or dangerous. Legislation could build public support by

requiring that funds generated by fines are put into projects to improve traffic safety, in order to avoid the perception that the automated speed device is used solely to generate revenue.

Allowing wider use of speed cameras in Washington would save about 21 lives, prevent 1,700 injuries, and reduce taxpayer crash costs by almost \$50 million each year.

#### Recommendation

Expand the use of automated speed enforcement to difficult-to-enforce locations, areas where speeding-related crashes occur frequently, work zones, and areas with a high volume of pedestrians.

## Legislation and policy for young drivers

In Washington, teens 16–17 years old move through two restricted phases of licensing before being granted an unrestricted driver’s license: first the instruction permit, then intermediate driver’s license. The Legislature established the intermediate driver’s license a decade ago. It has been credited with reducing the number of fatality crashes involving 16 and 17 year olds. Many other states also established intermediate driver’s licensing at that time. As researchers have studied the effects of these laws, traffic safety experts have developed a model graduated licensing system.

### Requirements to receive an instruction permit

Component	Current Washington State law	Recommendation
Minimum age for instruction permit	<ul style="list-style-type: none"> <li>If enrolled in a driver training course, age 15</li> <li>If not enrolled in a driver training course, age 15 ½ if you pass a knowledge test</li> </ul>	Age 16 FAST Act: requires vision and knowledge assessment prior to receiving learner’s permit
Minimum months in instruction permit phase	6 months	12 months

### Requirements to receive an Intermediate Driver’s License

Component	Current Washington State law	Recommendation
Minimum age for intermediate license	Age 16	Age 17
Minimum months in intermediate license phase	No minimum requirement. Restrictions apply until driver is 18	12 months
Supervised hours of driving experience	50 hours	80–120 hours
Nighttime restriction	1 am to 5 am	9 pm to 5 am. Restriction should last one year
Teenage passengers	No passengers under 20 for the first six months (except for immediate family members) No more than 3 passengers under 20 (except for immediate family members) for the next six months	The “no teen passenger limit” should last one year
New driver decal requirement	No requirement	Help law enforcement identify Intermediate drivers license holders through a license plate tag

# Legislation and policy for distracted drivers

## Cell phone law

Washington led the nation in recognizing the distinct distraction posed by phones and other handheld personal wireless electronic devices. In 2007, the Legislature passed a law that bans texting while driving, as well as a law that bans holding a phone to your ear while driving. The law was updated in 2010 to make a violation a primary offense. It currently prevents tickets from being reported to insurance agencies, or to employers who check employees' driving records.

### Discussion

Washington's phone law has failed to bring about the desired behavior change. Observational surveys estimate one in ten Washington drivers are holding and interacting with their phone at any given time.<sup>12</sup> The model that is most effective at driver behavior change uses good policy, backed up by education and enforcement.

It is difficult for law enforcement officers to enforce Washington's law. It's hard to tell if drivers are holding the phone to their ear or a few inches away from their ear. Further, many courts have determined that the law only covers texting, and does not cover other forms

of entering or reading data, making it difficult for law enforcement officers to know if a driver is texting or posting to social media.

Additionally, new research from the Automobile Association of America (AAA) shows that it takes nearly 30 seconds after ending a call or text for the driver's mind to return to the task of driving.<sup>13</sup> Given that one in five of all traffic fatalities happen at intersections, this research points to the danger of allowing phone use at stop lights.

### Recommendations for state legislation

Prohibit drivers from using handheld personal electronic devices at all times while the car is on the road. Apply the prohibition even while a driver is temporarily stopped because of traffic or at a stoplight. Ensure violations are reportable to insurance and employers.

### Recommendations for local jurisdictions

Enact ordinances that allow officers to cite drivers for distracted driving for using handheld personal electronic devices. Apply the prohibition even while a driver is temporarily stopped because of traffic or at a stoplight.

## Notes:

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11. Countermeasures That Work, p 3-21
12. Washington Distracted Driving Report Cards, 2014. Statewide Collaboration: Harborview Injury Prevention and Research Center, UW Medicine, Public Health-Seattle & King County, King County Prosecuting Attorney’s Office. <http://depts.washington.edu/hiprc/collaborate/%20outreach/distracted-driving/>
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Please see Appendix I: Additional Resources for a complete list of references.

Legislative and policy strategies for reducing fatalities and serious injuries		
OBJECTIVE	STRATEGIES	IMPLEMENTATION AREAS
IMP.1. Prevent excessive drinking, underage drinking, and impaired driving	IMP.1.1 Increase the state excise tax on beer. (R, NCHRP)	Leadership/Policy
	IMP.1.2 Continue mandatory alcohol server training and explore expanding responsible beverage service policies for alcohol retailers. (U)	Education, Leadership/Policy
	IMP.1.6 Support alternative transportation services such as transit (especially at night), designated driver programs, and other alternative ride programs to help eliminate need for impaired individuals to drive. (U)	Leadership/Policy
IMP.2. Enforce and publicize DUI laws	IMP.2.9 Discourage expansion of access to alcohol, marijuana, and other drugs. (U)	Leadership/Policy
IMP.3. Prosecute, sanction, and treat DUI offenders	IMP.3.1 Expand use of ignition interlocks. (P, CTW)	Leadership/Policy
	IMP.3.2 Suspend driver license administratively upon arrest. (P, CTW)	Leadership/Policy
	IMP.3.4 Conduct alcohol/drug assessments on all DUI offenders and enhance treatment and probation when warranted. (P, CTW)	Leadership/Policy
	IMP.3.5 Match treatment and rehabilitation to the diagnosis. (P, NIH)	Leadership/Policy
	IMP.3.6 Require stronger penalties for BAC test refusal than test failure. (R, CTW)	Leadership/Policy
	IMP.3.7 Encourage attendance at DUI Victim's Panels. (U)	Leadership/Policy
	IMP.3.8 Place limits on plea agreements. (R, CTW)	Leadership/Policy
	IMP.3.9 Establish 24/7 sobriety program. (R, CTW)	Leadership/Policy
IMP.4. Control high-BAC and repeat DUI offenders	IMP.4.1 Monitor DUI offenders closely. (P, CTW)	Leadership/Policy
	IMP.4.2 Require ignition interlock as a condition for license reinstatement. (P, NCHRP)	Leadership/Policy
	IMP.4.3 Incarcerate offenders who fail to comply with court-ordered alternative sanctions (P, NCHRP)	Leadership/Policy
	IMP.4.4 Support and establish DUI Courts. (P, CTW)	Leadership/Policy
P: Proven R: Recommended U: Unknown		

Legislative and policy strategies for reducing fatalities and serious injuries		
OBJECTIVE	STRATEGIES	IMPLEMENTATION AREAS
IMP.5. Foster leadership to facilitate impaired driving system improvements	IMP.5.1 Continue to build partnerships designed to reduce impaired driving. (P, NCHRP)	Leadership/Policy
	IMP.5.2 Encourage laws that will allow the state to utilize sobriety checkpoints. (P, CTW)	Leadership/Policy
	IMP.5.3 Implement the corridor safety model in high-crash locations where data suggest a high rate of impaired driving. (P, NCHRP)	Leadership/Policy
	IMP.5.4 Encourage laws that use any money collected from DUI fines in excess of \$101 to support impaired driving reduction efforts. (R, GHSA)	Leadership/Policy
	IMP.5.5 Lower the per se BAC limit from .08 to .05 (P, META)	Leadership/Policy
	IMP.5.6 Establish and support the Judicial Outreach Liaison program. (R, NHTSA)	Leadership/Policy
	IMP.5.7 Monitor ignition interlock manufacturers and installers to ensure a continued viability and validity of program. (P, CTW)	Leadership/Policy
	IMP.5.8 Monitor reports from ignition interlock manufacturers on alcohol failures on ignition interlocks and conduct compliance checks. (P, CTW)	Leadership/Policy
	IMP.5.9 Investigate ignition interlock circumvention attempts. (P, CTW)	Leadership/Policy
SPE.1. Reduce speeding through enforcement activities	SPE.1.3 Increase penalties for repeat and excessive speeding offenders. (R, CTW)	Leadership/Policy
	SPE.1.4 Equip law enforcement officers with appropriate equipment for speeding enforcement. (R, WSP )	Enforcement, Leadership/Policy
SPE.3. Build partnerships to increase support for speed reducing measures	SPE.3.1 Use the corridor safety model in high-crash locations where data suggests a high rate of speeding-related fatal or serious injury crashes. (P, CTW)	Leadership/Policy, Education, Engineering, Enforcement
	SPE.3.3 Increase data sharing between local officers, Tribal police, and engineering agencies to identify and develop solutions for areas where speeding is a problem. (R, DDACTS)	Leadership/Policy
	SPE.3.5 Work with Washington Trucking Association and WSP's Commercial Vehicle Enforcement Division to encourage company policies which, when backed with speed monitors or speed regulators, can reduce speeding in commercial vehicles. (R, WSP)	Leadership/Policy
	SPE.3.9 Collaborate with BIA, Indian Health Services, and NATEO to support Tribal Nations who seek to reduce speeding-related crashes on Tribal lands. (U)	Leadership/Policy
DIS.2. Increase/strengthen fines and assist in improved adjudication of distracted driving citations	DIS.2.1 Visibly enforce existing statutes to deter distracted driving. (U)	Enforcement, Leadership/Policy

P: Proven R: Recommended U: Unknown

Legislative and policy strategies for reducing fatalities and serious injuries		
OBJECTIVE	STRATEGIES	IMPLEMENTATION AREAS
DIS.3. Strengthen distracted driving laws/ordinances	DIS.3.1 Pass a state law that would prohibit drivers from using handheld personal electronic devices at all times while the car is on the road. Apply the prohibition even while a driver is temporarily stopped because of traffic or at a stoplight. Ensure violations are reportable to insurance and employers.	Leadership/Policy
	DIS.3.2 Enact local ordinances that allow officers to cite drivers for distracted driving for using handheld personal electronic devices, including smart phones. Apply the prohibition even while a driver is temporarily stopped because of traffic or at a stoplight.	Leadership/Policy
UVO.1. Strengthen efforts to increase compliance, enforcement, and adjudication of the seatbelt and child restraint laws	UVO.1.5 Encourage law enforcement and other emergency responders to adopt seatbelt use policies for their employees. (R, NHTSA)	Education, Leadership/Policy, EMS
UVO.2. Promote legislative and policy efforts to promote restraint use	UVO.2.1 Undertake policy change to require car seat awareness education for proper child restraint use by people who transport foster children and Medicaid participants. (R, ABACCL)	Leadership/Policy
	UVO.2.2 Enact law to make it illegal to transport unrestrained humans in the back of pickup trucks. (R, IIHS)	Leadership/Policy
	UVO.2.4 Strengthen child passenger safety laws with a legislative change to add \$25 administrative fee for violators to fund child passenger safety efforts, or allow local governments to initiate the change. (U)	Leadership/Policy
	UVO.2.5 Strengthen child passenger safety laws with a legislative change to require toddlers to remain rear-facing until the age of two or until they reach the maximum height and weight for their seat. Also require children to remain in a booster seat until a height of 4'9" and remove the 8 year old reference. (R, NHTSA)	Leadership/Policy
UVO.3. Maintain and support the statewide network of child passenger safety technicians	UVO.3.1 Explore options for gaining a measure of statewide child restraint use, such as expanding the annual seatbelt observation survey to include observations of child restraint use. (R, DDACTS)	Leadership/Policy
	UVO.3.3 Convene a group of CPS stakeholders from different disciplines and areas of the state, including existing network of Washington's Target Zero managers, SafeKids Coalitions, and other local child passenger safety teams, to participate in product review, media efforts, trainings, and local project implementation. (U)	Leadership/Policy
UNL.2. Educate public through public awareness initiatives	UNL.2.1 Provide alternative transportation and encourage reduced fares for persons without driving privileges. (P, NCHRP)	Leadership/Policy

P: Proven R: Recommended U: Unknown

Legislative and policy strategies for reducing fatalities and serious injuries		
OBJECTIVE	STRATEGIES	IMPLEMENTATION AREAS
UNL.3. Enhance enforcement	UNL.3.4 Evaluate the impact of the removal of suspension for failure to appear on non-moving citations. (U)	Leadership/Policy
UNL.4. Enhancement of data gathering and reporting ability	UNL.4.1 Make system changes necessary at WSDOT and DOL to enable analysts to identify unlicensed drivers involved in serious injury crashes. (R, DDACTS)	Leadership/Policy
	UNL.4.2 Ensure routine linkage of citations to driver records so appropriate citations may be added to the crash being investigated. (R, NCHRP)	Leadership/Policy
LDX.3. Minimize the consequences of leaving the roadway	LDX.3.7 Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-the-road crashes. (R, WSDOT)	Leadership/Policy
INT.1. Reduce motor vehicle crashes at intersections	INT.1.10 Restrict or eliminate turning maneuvers at intersections. (R, NCHRP)	Engineering, Leadership/Policy
INT.2. Improve driver compliance at intersections	INT.2.1 Implement automated enforcement (photo red-light cameras) of red-light running at locations with angle crashes. (P, NCHRP)	Enforcement, Engineering, Leadership/Policy
	INT.2.4 Implement automated enforcement (cameras) of approach speeds. (R, NCHRP)	Enforcement, Engineering, Leadership/Policy
YDI.1. Foster compliance with the State's IDL laws	YDI.1.1 Encourage Tribes to pass IDL laws. (P, CTW)	Leadership/Policy
	YDI.1.2 Provide resources to Young Driver Action Council to improve awareness — especially for parents and teens — and compliance with the IDL law. Highlight high-risk situations where clear parental limit-setting will be most effective. (R, CTW)	Leadership/Policy
	YDI.1.3 Promote increased enforcement of IDL by passing legislation requiring a sticker program to identify vehicles used by IDL license holders. (R, LIT)	Leadership/Policy
	YDI.1.4 Provide local Target Zero Task Forces with information and materials about IDL for teens, parents, law enforcement, and driver education programs. (R, WTSC)	Education Leadership/Policy
YDI.2. Strengthen Intermediate Driver License restrictions	YDI.2.1 Adjust curfew to include 9 p.m. – 5 a.m., the hours when young driver serious injury and fatality crashes are highest. (P, CTW)	Leadership/Policy
	YDI.2.2 Lengthen permit holding period beyond six months. (R, CTW)	Leadership/Policy
	YDI.2.3 Extend passenger restriction to one full year after licensed. (R, NCHRP)	Leadership/Policy
	YDI.2.4 Strengthen requirements for parents around the documentation and certification of the 50-hour behind-the-wheel time young drivers are to complete before licensure. (U)	Leadership/Policy
	YDI.2.5 Strengthen restrictions so penalties kick in with the first ticket IDL driver gets. (U)	Leadership/Policy

P: Proven R: Recommended U: Unknown

Legislative and policy strategies for reducing fatalities and serious injuries		
OBJECTIVE	STRATEGIES	IMPLEMENTATION AREAS
YDI.3. Improve young driver education and intervention	YDI.3.1 Review and revise the Driver Guide, testing process, curriculum guidelines, and training standards to construct an overall driver training package focused more on hazard identification and less on skill training. (R, CTW)	Leadership/Policy
	YDI.3.2 Conduct a recidivism study to assess the impact of the DOL early warning letter program for 18- to 21-year-olds. (U)	Leadership/Policy
	YDI.3.3 Consider expanding driver restrictions and driver education requirements to new drivers of all ages. (U)	Leadership/Policy
	YDI.3.4 Update model traffic safety education curriculum to match NHTSA standards. (U)	Leadership/Policy
	YDI.3.5 Consider implementation of licensing standards used in countries with superior driving statistics such as the United Kingdom. (U)	Leadership/Policy
MCX.1. Reduce numbers of unendorsed and untrained riders	MCX.1.6 Place emphasis on impoundment policy and education; change RCW 46.55.113 (2) from “officer <u>may</u> ” to “officer <u>will</u> ” impound. (U)	Education, Leadership/Policy
MCX.2. Reduce numbers of impaired, unskilled, and unsafe riders	MCX.2.1 Lower the per se BAC limit for motorcycle riders from .08 to .05. (P, META)	Leadership/Policy
	MCX.2.2 Increase motorcyclist awareness of the risks of impaired motorcycle operation. Promote self-policing within the motorcycle community by expanding existing prevention programs, including at specific motorcycle events. (R, NCHRP)	Education, Leadership/Policy
	MCX.2.3 Re-establish a tiered endorsement program with specific endorsements based on motorcycle engine size. (U)	Leadership/Policy
	MCX.2.4 Implement re-testing for endorsement every five years. (U)	Enforcement, Leadership/Policy
	MCX.2.5 Require novice rider training (including knowledge and skills testing) to obtain permit. (U)	Leadership/Policy
	MCX.2.6 Implement mandatory on-street training and testing. (U)	Leadership/Policy
MCX.5. Engage stakeholders in improving motorcycle safety	MCX.5.1 Promote public forums to share/receive feedback concerning safety strategies and/or needs. (U)	Education, Leadership/Policy
	MCX.5.2 Form a new working group similar to the Washington Impaired Driving Advisory Council (WIDAC) to include members from DOL, DOT, WTSC, WSP, Motorcycle Dealers association, motorcycle safety school contractors, members of the riding community. (U)	Education, Leadership/Policy
P: Proven R: Recommended U: Unknown		

Legislative and policy strategies for reducing fatalities and serious injuries		
OBJECTIVE	STRATEGIES	IMPLEMENTATION AREAS
MCX.6. Strengthen and improve motorcycle laws to increase motorcycle safety	MCX.6.1 Promote the option for motorcyclists to take a safety class in lieu of a traffic ticket being added to his/her driving record. Currently some county courts offer drivers of other vehicles the option of traffic school to dismiss certain driving violations from their record and insurance. (U)	Education, Leadership/Policy
	MCX.6.2 Require mandatory motorcycle insurance coverage—minimum of liability just as automobiles require. (U)	Leadership/Policy
PED.1. Reduce vehicle operating speeds where the land use context indicates that pedestrians will/may be present.	PED.1.1 Revise design practices to emphasize context and target speed to reflect the needs of all road users. (R) (P, AASHTO)	Engineering/Policy
PED.4. Expand and improve pedestrian facilities	PED.4.5 Implement Complete Streets policies to provide for all modes of transportation. (R, NCSC)	Leadership/Policy, Engineering
PED.6. Improve data and performance measures	PED.6.1 Collect miles walked data (similar to collecting VMT); continue to track pedestrian counts through Washington’s Pedestrian and Bicycle Documentation Project. (R, DDACTS)	Leadership/Policy
ODI.1. Identify old drivers at an elevated crash risk	ODI.1.1 Implement Model Driver Screening and Evaluation Program Guidelines for Motor Vehicle Administrators for screening and evaluating older drivers’ physical and cognitive abilities and skills. (P, CTW)	Leadership/Policy, Education
	ODI.1.2 Provide training to law enforcement, medical professionals, licensing representatives, and community members for recognizing physical and cognitive deficiencies affecting safe driving in older drivers, including submitting reevaluation referrals to DOL. (P, CTW)	Enforcement, Leadership/Policy, Education
	ODI.1.3 Continue to restrict driver license online eligibility and renewals for drivers age 70+. (U)	Leadership/Policy
ODI.3. Reduce risk of serious injury and fatalities	ODI.3.1 Provide incentives for older drivers who use alternative modes of transportation. (R, FTA)	Education, Leadership/Policy
BIC.1. Improve bicyclist and driver safety awareness and behavior	BIC.1.2 Increase the number of people bicycling to achieve safety in numbers. (R, LIT)	Leadership/Policy, Education
BIC.2. Enact policies/laws to improve bicycle safety	BIC.2.1 Encourage bicycle helmet use for children and adults. (U)	Leadership/Policy, Education
BIC.3. Improve bicyclist facilities	BIC.3.6 Implement Complete Streets policies to provide for all modes of transportation. (R, NCSC)	Leadership/Policy, Engineering

P: Proven R: Recommended U: Unknown

Legislative and policy strategies for reducing fatalities and serious injuries		
OBJECTIVE	STRATEGIES	IMPLEMENTATION AREAS
BIC.5. Improve data and performance measures	BIC.5.1 Collect Bicycle Miles Traveled (similar to collecting Vehicle Miles Traveled); continue to track bicycle counts through Washington's Pedestrian and Bicycle Documentation Project. (R, DDACTS)	Leadership/Policy
TDS.1. Provide quality data, analysis, and tools to customers	TDS.1.1 Develop new features in SECTOR to address user needs, including additional ticketing options and report types. Expand SECTOR software edit checks to enhance reporting accuracy and consistency. (R, eTRIP GT)	Leadership/Policy, Enforcement
	TDS.1.2 Expand prosecutors' use of SECTOR statewide to create, review, amend, and electronically file criminal cases with the courts. (R, TRC)	Leadership/Policy, Enforcement
	TDS.1.3 Increase the number of electronic tickets and collision reports through expanded adoption and agency-wide implementation of SECTOR. (R, TRC)	Leadership/Policy, Enforcement
	TDS.1.4 Incorporate a GPS-type location component into SECTOR to enhance accurate reporting and integration of location data. (R, TRC)	Leadership/Policy, Enforcement, Engineering
	TDS.1.5 Provide officers with roadside access to driver and vehicle history information through SECTOR. (R, TRC)	Leadership/Policy, Enforcement
	TDS.1.6 Enhance SECTOR functionality to allow violations bureaus (not part of the state JIS system) to electronically process tickets from SECTOR to DOL. (R, TRC)	Leadership/Policy
	TDS.1.7 Make system changes necessary at WSDOT and DOL to enable analysts to identify unlicensed drivers involved in serious injury crashes. (R, DDACTS)	Leadership/Policy
	TDS.1.8 Develop a linear referencing system (LRS) for all public roadways without a LRS to enhance safety analysis. (P, 23 U.S.C. Section 148)	Leadership/Policy
	TDS.1.9 Revise the Police Traffic Collision Report, including both SECTOR and paper reports, to improve nomenclature and ensure business needs are met with stakeholder involvement. (R, TRC)	Leadership/Policy, Enforcement
TDS.2. Remove barriers to data sharing and integration	TDS.2.1 Derive a more accurate classification of injury severity based on clinical assessments from medical records to augment the investigating officer's assessment of traffic crash injury severity. (P, CODES)	Leadership/Policy, EMS
	TDS.2.2 Enhance the use of the ESSENCE system for using Emergency Department Data to enhance Injury Surveillance capabilities. Increase provider reporting to ESSENCE. (P, CODES)	Leadership/Policy, EMS
	TDS.2.3 Create a central repository for integrated, linked data records including crash records, health (EMS, Trauma, CHARS) records, court records, licensing records, and state toxicology records. (P, CODES)	Leadership/Policy, EMS

P: Proven R: Recommended U: Unknown

Legislative and policy strategies for reducing fatalities and serious injuries		
OBJECTIVE	STRATEGIES	IMPLEMENTATION AREAS
TDS.2. Remove barriers to data sharing and integration (continued)	TDS.2.4 Increase EMS reporting by first responders throughout the state to the Washington Emergency Medical Services Information System (WEMSIS). (R, DOH)	Leadership/Policy, EMS Leadership/Policy,
	TDS.2.6 Educate data reporting agencies about state/federal fatal crash timeliness reporting statutes and increase enforcement of these statutes. (P, WTSC)	Leadership/Policy, Education
	TDS.2.7 Create connections for systems with similar or duplicate data to eliminate duplicate entry. (R, TRC)	Leadership/Policy
TDS.3. Sustain high levels of collaboration and acquired knowledge within the TRC	TDS.3.1 Provide more frequent and enhanced traffic safety trend reporting. Present data/trends in a manner that is easy to understand and is actionable. (R, DDACTS)	Leadership/Policy, Education
	TDS.3.2 Maintain a meaningful and valid set of traffic records performance measures to gauge the quality of traffic safety data. Ensure measures are accessible and periodically reviewed. (R, DDACTS)	Leadership/Policy
	TDS.3.3 Support training opportunities to enhance traffic safety data analysis and research skills. (U)	Leadership/Policy
TDS.4. Identify and secure targeted investments to sustain TRC initiatives	TDS.4.1 Create a maintenance and support model for SECTOR that further that improves operations, speeds change request implementation, and enhances user support. (R, eTRIP GT)	Leadership/Policy
EMS.1. Reduce injury deaths and hospitalizations through EMS response and access to trauma care	EMS.1.3 Identify funding strategies that assist air medical services in filling gaps in coverage for emergency air medical response as identified in the state EMS and Trauma System Plan. (R, DOH)	Leadership/Policy, EMS
	EMS.1.6 Ensure adequate and efficient distribution of pre-hospital EMS resources at all levels (aid and ambulance) according to the EMS and Trauma State and Regional Plans. (R, DOH)	Leadership/Policy, EMS
EMS.2. Increase communication and data capacity	EMS.2.1 Enable seamless communications capabilities among EMS, law enforcement, and fire services agencies through interoperability. (R, NCHRP)	EMS, Enforcement, Leadership/Policy
	EMS.2.2 Ensure that the Washington State EMS and Trauma Care System (WEMSIS) has a statewide comprehensive, robust pre-hospital data system utilizing a data set with standard definitions. (R, NCHRP)	Leadership/Policy, EMS
	EMS.2.3 Increase the number of EMS agencies reporting to WEMSIS. (R, NCHRP)	Leadership/Policy, EMS
	EMS.2.4 Provide WEMSIS data for linking to collision records. (R, DOH)	Leadership/Policy, EMS
P: Proven R: Recommended U: Unknown		

# Improving our Traffic Safety Culture

In the late 1950s, at the height of America's cigarette culture, the prevalence of smoking among US adults was estimated at nearly 45%. But now, after several decades of coordinated effort, America has experienced a dramatic shift in culture, with recent estimates from the Centers for Disease Control placing the adult smoking rate at 17% nationwide.

So what happened that transformed the US from a culture that unapologetically endorsed cigarette smoking to a culture of intolerance for it? What lessons from this experience can be applied to the world of traffic safety?

In 1964, US Surgeon General Luther Terry stirred America by proclaiming in a special report that cigarette smoking unequivocally causes cancer. The report built on similar publications released earlier in Europe and leveraged emerging research to help make the case. The Surgeon General's announcement came amid cigarettes' pinnacle of popularity. Fueled by decades of appealing advertising and clever placement in entertainment and pop culture, the cigarette had taken its seat alongside the automobile and the television as a staple of American society.

The Surgeon General's proclamation ignited a firestorm of concern around tobacco among policymakers and the public at large. Following the announcement, the prevalence of smoking began a precipitous decline. Anti-smoking forces gained initial traction and built momentum over time. This work involved establishing scientifically sound public policy and a variety of environmental and social interventions. For instance, the disappearance of ashtrays from public and private spaces strengthened the message new laws and policies sent on smoking restrictions. Likewise, mass educational campaigns consisting of creative counter-advertising repeatedly reinforced a new paradigm, transforming our society's view of tobacco use in America.

The monumental shift in the collective mindset around smoking among Americans is nothing short of a cultural revolution. It is also a cultural revolution that can be replicated. The striking reduction in tobacco use over the last 40 years stands as a great beacon of hope to the millions of Americans deeply affected each year by traffic crashes, including serious injuries or loss of life for themselves or a loved one.

Consider this: Over half of traffic deaths involved an impaired driver; two in five involved a speeding driver; one in three involved a distracted driver or pedestrian. In fact, in nine out of ten traffic fatalities, human behavior contributes to the crash. Often we term these events "accidents," when, in fact, they result from our behavior, including negligence, willful recklessness, and blatant disregard for our laws.

Why then do some of us drive like this? Presumably, it's not because our intent is to cause harm to others or ourselves. Yet when we don't buckle up, or we deliberately speed, or we pay closer attention to our phone than to the road — we are behaving in ways that reveal our indifference, whether we like what that says about us or not.

While a variety of individual factors contribute to our driving behaviors, we are often unaware of the profound impact our perceptions of what is considered normal has on our behaviors. As social beings, we behave in ways we think are normal so we feel accepted by people and groups that matter to us. For example, if we think everyone else speeds, we are more likely to speed ourselves because we think speeding is normal — even expected — in our community culture. In this way, those who choose unsafe driving behaviors today are no different from those in the 1950s who saw the prevailing culture around smoking and then lit up their first cigarette.

So what do we think is normal for Washington drivers? Do we all see traffic safety as an important issue to most people in our communities? Do we all believe it is possible to prevent fatal and serious injury crashes? Do we all believe seatbelts are effective in saving lives? Do we all think most people obey the speed limit? Do we all have the attitude that police enforcement of traffic laws is beneficial? And finally, do we admire those people we know who are safe drivers?

We need to collectively make safe driving not just normal, but admirable. Our culture should motivate us to aspire to become safe road users, in the same way that we now value smoke-free environments. We need our culture to embrace, celebrate, and promote the responsibility each of us has to be a safe road user. When we reach this place, being a safe driver will not only be important for our own self-esteem and sense of belonging, but it will also be the foundation to ensure the safety of our family, friends, neighbors, and colleagues.

Target Zero is a call to action. It shakes the roots of our belief that “accidents happen” and that the loss of life and health are acceptable outcomes of driving. As partners in the pursuit of Target Zero, we strive for a culture of safe driving in Washington. We reject prevailing cultural norms around driving behaviors such as speeding, distraction, and impaired driving in favor of absolute intolerance for these behaviors. Such sweeping changes in normative driving behavior are critical to reaching the vision of zero traffic deaths and serious injuries by 2030.

**We invite Washingtonians to challenge the prevailing belief that fatality and serious injury crashes are inevitable prices to pay for mobility. Together we can improve safe driving beliefs and behaviors until we reduce the risk of death and serious injury to zero — because every life counts.**

## **Taking action to change traffic safety culture**

Starting in 2016, WTSC will fund a project to establish a better understanding of our current traffic safety culture. Partners will analyze this data to determine which values and beliefs are the most influential on Washington drivers' behavior. The data will provide direction in the development of a systematic and coordinated approach to traffic safety marketing across sub-cultures within our state. The study will also give partners a baseline to test against, to see if newly developed messages and their delivery are improving our state's traffic safety culture as intended. The next version of Target Zero will include updates on this work.

# New Technology and Traffic Safety

At one time, the primary safety features of the roadway consisted of guardrails, rumble strips, and lane striping. Today, technological advancements are providing new roadway vehicle safety mechanisms once thought impossible.

## Many vehicle crash avoidance systems are already in newer cars

Technology already exists in newer vehicles that will alert drivers, or actually perform automatically to ensure safe operations. Examples include:

- **Frontal crash avoidance systems (FCAS)** that warn drivers when they are too close to an object in front of the car. The system will even automatically apply the brakes to avoid a crash, if the driver does not do so first.
- **Adaptive headlights** that shift the headlights in the direction the driver steers.
- **Lane departure alert systems** that sound an alarm or flash to alert the driver that he is leaving the lane of travel without a signal.
- **Lane change/merge warning systems** that warn the driver if there is car in her blind spot when attempting to change lanes or merge. In some systems, the car will resist the driver's attempt to change lanes in the presence of a conflict.
- **Backup camera and conflict warning systems** provide the driver with a wide angle camera view looking behind the vehicle when backing. They also warn of any obstructions or conflicts they can identify.

## Connected vehicles will use communications to prevent crashes

Connected vehicles are those with the ability to communicate wirelessly with other connected vehicles and roadway equipment in order to reduce crashes or other dangers. These Intelligent Transportation Systems (ITS), commonly known as vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications, are based on mobile data technologies. This technology is just beginning to make its way into the marketplace, including in light, heavy, and transit vehicles.

Connected vehicle technology is designed to alert drivers — based on signals received from other vehicles and roadside infrastructure — when there is a risk of crashing. Warnings could be for potential danger, such as:

- Changing lanes.
- Approaching an intersection.
- Approaching a stationary or parked vehicle.
- Another driver loses control.
- Traffic patterns are changing.

There are other uses as well. Devices may send warning messages to a driver and other nearby vehicles when detecting pedestrians or bicyclists. Drivers might even be able to avoid head-on crashes if vehicles approaching from opposite directions were communicating with each other, and their drivers warned.

Newer-model cars are not the only place that these technologies may be found. The concept may also be applied to aftermarket devices for older vehicles. Drivers might bring mobile devices with these capabilities into their vehicles.

These mobile devices may also be carried by vulnerable users like pedestrians, motorcyclists, bicyclists, and transit users, making them more visible to surrounding traffic.

## Autonomous vehicles will likely be on our roads soon

Autonomous connected vehicles — also known as automated or self-driving vehicles — use advanced control systems to sense and react to their environment through various technology systems. The vehicles can operate with little or no driver input. The anticipated benefits of these vehicles include decreased crashes, increased mobility, and an increase in fuel efficiency.

Car manufacturers currently envision that autonomous connected vehicles will be equipped with an override switch, which would allow a human driver, sitting in the driver's seat, to take control when needed. Vehicles with significant autonomous operations capability will likely be available for use by the general public by 2020 with significant new capabilities being added each model year between now and then.

## Cars will soon be able to prevent alcohol-impaired people from driving

The Driver Alcohol Detection System for Safety (DADSS) program was launched to research, develop, and demonstrate non-invasive in-vehicle alcohol detection technologies. These technologies can quickly and accurately measure a driver's blood alcohol concentration (BAC), by testing for alcohol in a potential driver's breath or touch. These advanced technologies offer the potential for a system that will prevent a vehicle from being driven when the driver's BAC exceeds the US legal limit of 0.08.

## Road-side drug testing is also on the horizon

In the not-too-distant future, law enforcement could have handheld devices to check for drug use in drivers. Currently, in Washington, this work must be done by a certified Drug-Recognition Expert (DRE). These devices would allow officers to test for drug positivity on the side of the road, much in the same manner that an officer can currently use a portable breath-testing device to detect alcohol and get a preliminary BAC reading. The handheld devices may use saliva, breath, or perspiration to test for the presence of cocaine, heroin, cannabis, amphetamines, methamphetamine, and possibly other impairing drugs.

## Over the horizon...

What these advancements may mean related to new safety strategies and approaches will take shape nationally over the next several years. The enduring question for the traffic safety community, regardless of the innovation, will be how or if it should be applied to enhance the safety of the traveling public. Washington State agencies are tracking progress in this area, engaging in national dialogue, and considering opportunities to demonstrate and apply new safety solutions as they develop.

# High Risk Rural Roads in Washington State

The Fixing America's Surface Transportation Act (FAST Act), signed into federal law in 2015, requires each state to include its definition for High Risk Rural Roads (HRRR) in the Strategic Highway Safety Plan. This continues a Special Rule from MAP-21, per the US Congress, for improvements in safety for HRRR.

Eligible roadways for the HRRR Special Rule include smaller rural roads, which consist of the following functional classifications:

- Rural Major Collector
- Rural Minor Collector
- Rural Local Access

The Washington State Strategic Highway Safety Plan defines High Risk Rural Roads at the county level. Counties are defined as HRRR counties if their smaller rural roads (listed above) rank in the top 10 counties statewide, based on either of the following:

- Fatal and serious injury crash rate per mile of road
- Fatal and serious injury crash rate per million vehicle miles traveled (VMT)

Based on federal criteria, the HRRR Special Rule applies to a state if "the fatality rate on [all] rural roads in a state increases over the most recent two-year period for which data are available." FHWA calculates this rate using fatalities and VMT for all eligible roadways in the state.

Each year, this rate is calculated by dividing the number of fatalities by the number of million vehicle miles traveled. Analysts compare five-year averages, separated by a two-year period, in order to determine if a state qualifies for the HRRR Special Rule. If this number increases by at least one-tenth in that comparison, the state is required to implement the special rule in order to increase resources for rural roads.

For any years that Washington State is obligated to implement the HRRR Special Rule, the state is required to put up funding to match 200% of the federal monies that our state received (based on the amount received in 2009). For Washington State, that funding level would be \$3,144,572. Washington did not have to implement the HRRR Special Rule during 2012–2014, but it will for 2016. In that year, the HRRR funds will be spent on projects affecting eligible roadways within our state's HRRR counties.

