



TRAFFIC SAFETY COMMISSION

Report to the Legislature

HB 1125 SEC. 201 (1) (2023)

Alcohol and Drug Impaired Driving

Research and Policy Recommendations

Shelly Baldwin
Director
December 2023

Publication and Contact Information

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

<https://wtsc.wa.gov/download/16165/>

For policy-related questions/information, please contact:

Mark McKechnie
External Relations Director (Legislative Liaison)
Washington Traffic Safety Commission
PO Box 40944
Olympia, WA 98504-0944
Phone: 360.725.9889
Email: mmckechnie@wtsc.wa.gov

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

For technical questions/information, please contact:

Staci Hoff, Ph.D.
Director, Research and Data Division
Washington Traffic Safety Commission
PO Box 40944
Olympia, WA 98504-0944
Phone: 360.725.9874
Email: shoff@wtsc.wa.gov

Edica Esqueda
Program Manager, Impaired Driving Program
Washington Traffic Safety Commission
PO Box 40944
Olympia, WA 98504-0944
Phone: 360.725.9874
Email: eesqueda@wtsc.wa.gov

Contents

Executive Summary.....	- 4 -
Introduction	- 7 -
Impaired Driving in Washington State Fatal Crashes.....	- 8 -
Strategies for Decreasing Alcohol/Drug Impaired Driving.....	- 12 -
Lower the Blood Alcohol Concentration (BAC) <i>per se</i> Limit to 0.05 Percent.....	- 12 -
Compliance with Ignition Interlock Device Requirements and Use	- 14 -
Mandatory Substance Use Assessments for DUI Offenders.....	- 17 -
Sobriety Checkpoints	- 19 -
Roadside Oral Fluid Testing Devices	- 20 -
Appendix A: References.....	- 23 -

Executive Summary

Drug and alcohol impaired driving has persistently been involved in at least half of fatal crashes for decades. Since 2012, poly-drug driving (driving under the influence of two or more substances) has been increasing and is currently the most common type of driver impairment involved in fatal crashes. The most common substance involved in impaired driving continues to be alcohol, whether alone or in combination with other drugs. Cannabis is the second most common drug identified in impaired drivers involved in fatal crashes in Washington.

This report provides a review of impaired driving involvement in fatal crashes, and an overview of five impaired driving prevention strategies recommended by national organizations. Each of the effective strategies highlighted in this report is reflected in the legislation/policy objectives of the Washington Impaired Driving Strategic Plan. Implementation of any one of these strategies will reduce impaired driving in Washington, and implementation of all five would result in a substantial reduction in traffic fatalities caused by impaired drivers.

The evidence-based strategies discussed in this report are:

- Lower the *per se* blood alcohol concentration (BAC) limit from 0.08 to 0.05 percent
- Expand the use and compliance with ignition interlock devices for individuals who have been found to drive under the influence
- Mandatory substance use assessment and treatment, when recommended, for DUI offenders
- Publicized sobriety checkpoints on Washington roadways
- Roadside oral fluid testing

Lower the Blood Alcohol Concentration (BAC) *per se* Limit to 0.05 Percent

Lowering the *per se* blood alcohol concentration (BAC) level to 0.05 BAC is a proven strategy supported by numerous studies that show 1) driving performance is impaired at a 0.05 BAC, and 2) lowering the BAC limit to 0.05 reduces drinking and driving and the injuries and fatalities that result. Over 100 countries worldwide, including most industrialized countries, have already lowered *per se* BAC levels to 0.05 or lower.

Recommendation: The legislature should seriously consider legislation to establish a BAC limit of 0.05 percent in Washington.

Impaired Driver Installation and Compliance with Ignition Interlock Device

Installation and compliance with Ignition Interlock Devices (IID), especially when combined with needed substance use treatment and interventions, are one of the most effective strategies for preventing impaired driving and DUI recidivism. Compliance checks and enforcement are key to maximizing the effectiveness of this strategy. Current installation compliance in Washington is estimated to be just 33 percent, with over 40,000 ignition interlock requirements issued that have not resulted in device

installation. Policy changes and increased funding could improve the effectiveness of this already effective approach.

Recommendations:

1. Close loopholes that allow self-employed offenders from exploiting the IID employer exemption.
2. Increase financial assistance for indigent offenders to cover the costs of IID participation and compliance.
3. The legislature could support efforts by the Washington State Patrol to improve recruitment and retention of IID compliance troopers.
4. Support efforts to modernize data systems and implement new systems for centralizing and streamlining ignition interlock program administration with funding to increase compliance activities.

Mandatory Substance Use Assessments for DUI Offenders

The Centers for Disease Control (CDC) points out that, ideally, people with substance use disorders (SUD) or problematic substance use would be identified and receive treatment or intervention before the impaired driving offense. Impaired driving is problematic substance use, even if the offender does not meet the criteria for an SUD. Therefore, all people apprehended for impaired driving should receive an assessment. Every DUI is an opportunity to assess substance use habits and refer offenders to brief interventions or specialized treatment. For repeat offenders, specialty DUI courts are an effective strategy for achieving long-term behavior change and lower rates of DUI recidivism.

Recommendations:

1. The legislature should consider requiring SUD and mental health assessments for all DUI offenders.
2. The legislature should also consider changes to the deferred prosecution law to encourage assessment and treatment if needed on the first DUI to help reduce repeat offenses.
3. The legislature may wish to consider policies and funding that will support the expansion of DUI courts in Washington.

Sobriety Checkpoints

Sobriety checkpoint programs involve identifying locations with high rates of impaired driving and setting up highly publicized checkpoints on advertised, predetermined dates and times. Law enforcement will stop vehicles at the checkpoint at random intervals to check for signs of driver impairment. The purpose of sobriety checkpoints is to deter impaired driving by increasing the perceived risk of arrest. In jurisdictions where statutes authorize sobriety checkpoints (e.g., Michigan), the law enacts limits on many aspects of the checkpoint. The legislative regulation approach taken by other states addresses many of the issues raised by the Washington Supreme Court in *City of Seattle v. Mesiani*, 1988. To implement sobriety checkpoints, the Washington legislature would need to pass legislation authorizing and regulating sobriety checkpoints, with agency rulemaking to implement it, and judicial oversight to regulate its proper administration.

Recommendation: The legislature should consider statutory authority for conducting sobriety checkpoints in Washington and consider legislation that authorizes and regulates sobriety checkpoints.

Roadside Oral Fluid Testing Devices

Oral fluid testing devices are a point-of-contact technology that provide rapid positive/negative drug panel results using a non-invasive procedure with minimal potential for sample adulteration. Most commonly, oral fluid programs involve collecting oral fluid samples at roadside and using an on-site screening device that gives rapid negative/positive results for a panel of drugs. Similar to a portable breath test (PBT) for alcohol, this approach uses oral fluid testing devices as part of the investigative process to confirm the presence of drugs while also observing other behavioral and physical impairment indicators. Each year, more states are using roadside oral fluid testing devices in impaired driving investigation, and the technology itself is also improving.

Recommendations:

1. Should a pilot program be considered in Washington, the legislature should consult with the Washington State Patrol and other law enforcement agencies in the state regarding the resources that would be required to research technology options, to choose a reliable testing device, to train officers on their use, manage and distribute those devices, and to develop and manage administrative procedures. In addition, the Department of Licensing should be consulted regarding administrative sanctions for oral fluid test refusals, if any, similar to sanctions for breath test refusals.
2. If the legislature were to adopt an oral fluid program in Washington, it should consider roadside oral fluid testing as part of building the overall DUI case for probable cause. To increase deterrence, the legislature could also consider applying the implied consent statute to roadside oral fluid testing.

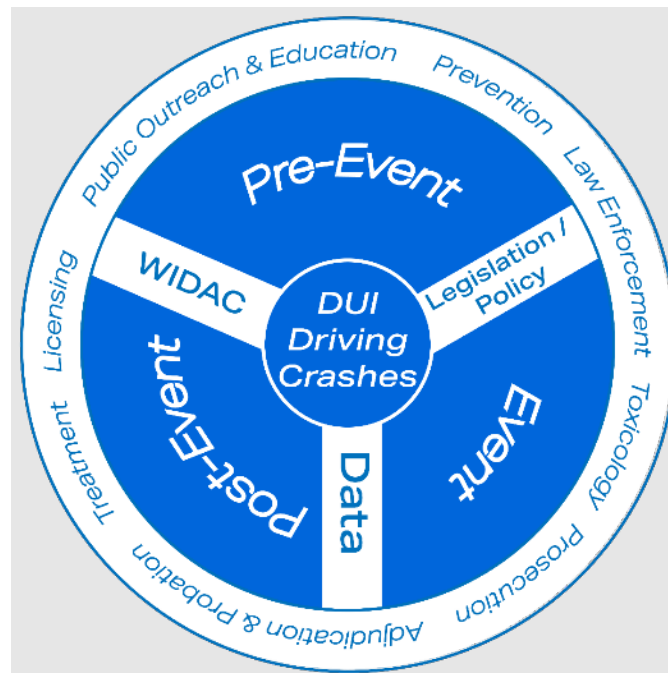
Introduction

In the Washington 2023 legislative session, the Transportation Appropriations Bill (HB 1125) directed the Washington Traffic Safety Commission (WTSC) to:

Within existing resources, the commission must examine national safety reports and recommendations on alcohol and drug impaired driving and report to the transportation committees of the legislature, by December 15, 2023, any recommendations for legislative or policy changes to improve traffic safety in Washington state.

The Washington Impaired Driving Advisory Council (WIDAC) is a diverse group of stakeholders, practitioners, and advocates working together to reduce impaired driving. Members represent all areas of the Washington Impaired Driving Strategic Framework (Figure 1). The WIDAC manages the Washington Impaired Driving Strategic Plan within a framework that includes three areas of support (WIDAC, data, and legislation/policy) and eight areas of concentration; public outreach and education, prevention, enforcement, toxicology, prosecution, adjudication and probation, treatment, and licensing.

Figure 1: Washington Impaired Driving Strategic Framework: “The Steering Wheel”



The Washington Impaired Driving Strategic Plan focuses on three objectives under the legislation and policy area of support. These objectives are:

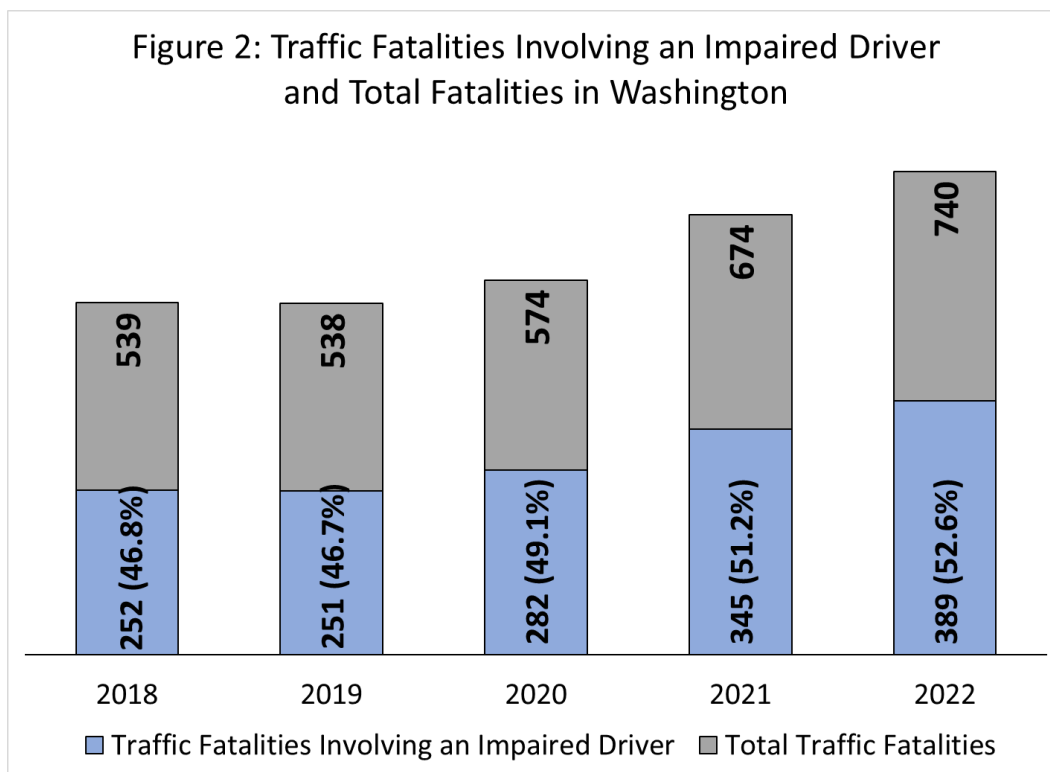
- Implement policies and legislation that creates specific (individual) and general (population) deterrence of impaired driving.
- Implement policies and legislation that provide uniform assessments of DUI offenders to identify treatment needs and co-occurring disorders.
- Implement policies and legislation that expands DUI offender monitoring and access to treatment.

This report provides a review of impaired driving involvement in fatal crashes, and an overview of five impaired driving prevention strategies recommended by national organizations. Each of the effective strategies highlighted in this report is reflected in the legislation/policy objectives of the Washington Impaired Driving Strategic plan. Implementation of any one of these strategies will reduce impaired driving in Washington, and implementation of all five would result in a substantial reduction in traffic fatalities caused by impaired drivers.

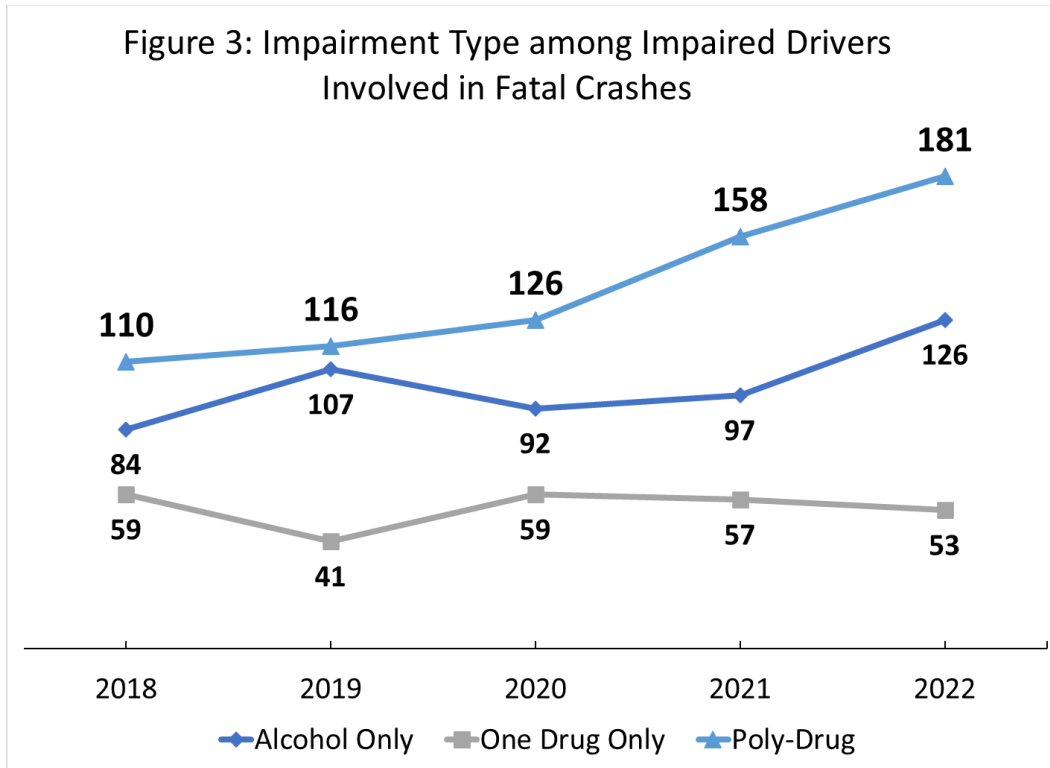
Impaired Driving in Washington State Fatal Crashes

Impaired driving has persistently been involved in approximately half of fatal crashes¹ for decades and has been increasing in recent years (Figure 2). Incidences of impaired driving are under-reported. The law only requires testing of the driver if they are deceased. Otherwise, toxicology tests are done pursuant to a warrant to compel a blood test based upon reasonable suspicion. Over the last 10 years, 47 percent of drivers involved in fatal crashes were *not* tested for drugs and alcohol.

In 2012 the poly-drug impaired driver (a driver under the influence of two or more substances) became the most common type of impaired driver involved in fatal crashes (surpassing alcohol-only and one-drug only impaired drivers). Since that time, the number of poly-drug drivers in fatal crashes has increased nearly every year and has been increasing at an accelerated rate in recent years (Figure 3).



¹ The fatal crash data source used in this report is the WTSC Coded Fatal Crash (CFC) files. Data for 2022 is preliminary and current as of November 2023.



Drivers ages 21-30 make up one-third of impaired drivers in fatal crashes and another 21 percent are ages 31-40; combined, these age groups (21-40) are more than half of impaired drivers involved in fatal crashes. Four in five impaired drivers in fatal crashes are male. Poly-drug impaired drivers are more prevalent than alcohol-only or one-drug-only impaired drivers in fatal crashes across all age groups (Figure 4) and for male and female impaired drivers. Among single-drug impaired drivers involved in fatal crashes, alcohol is the most common drug involved for drivers except for the youngest (ages 16-17) and the oldest drivers (ages 66+).

Approximately half of impaired driver-involved fatal crashes are single vehicle crashes and half are multiple vehicle crashes. One-third of these fatal crashes occur on Friday and Saturday (Figure 5). More than half of impaired driver-involved fatal crashes occur between the hours of 6:00 p.m. and 3:00 a.m. (Figure 6). One-third of these fatal crashes occur during the months of June, July, and August (Figure 7). Half of impaired driver-involved fatal crashes occur on state roads (state and U.S. routes and interstates) and half occur on city streets and county roads.

Figure 4: Number of Impaired Drivers Involved in Fatal Crashes by Impairment Type and Age Group, 2018-2022*

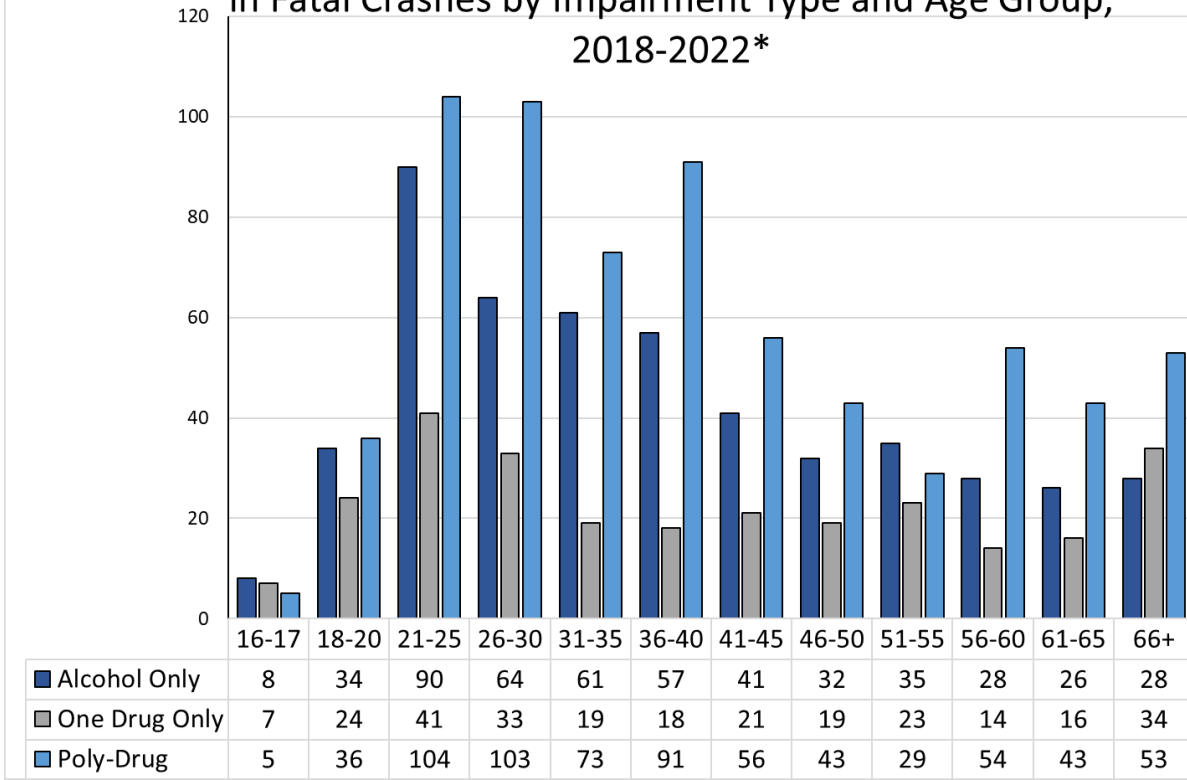


Figure 5: Traffic Fatalities Involving an Impaired Driver by Day of Week, 2018-2022*

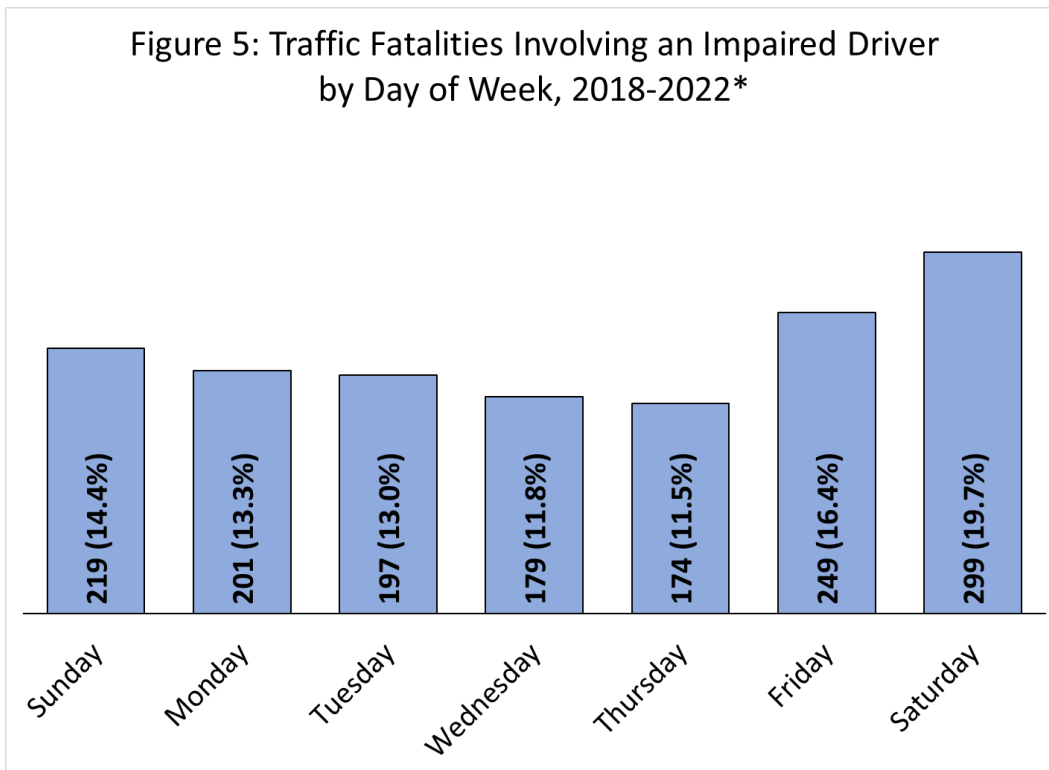


Figure 6: Traffic Fatalities Involving an Impaired Driver by Time of Day, 2018-2022*

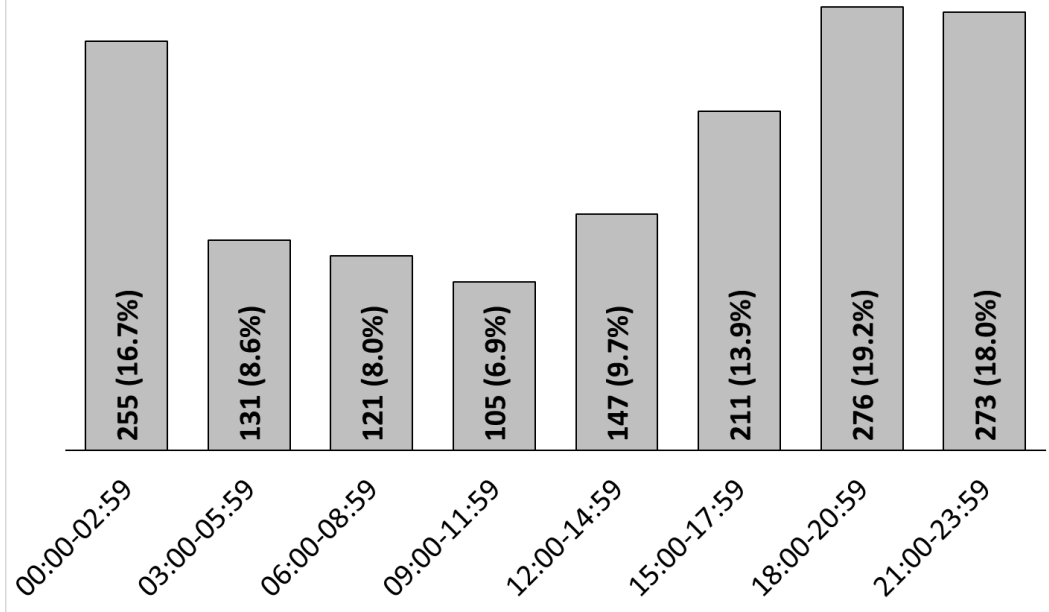
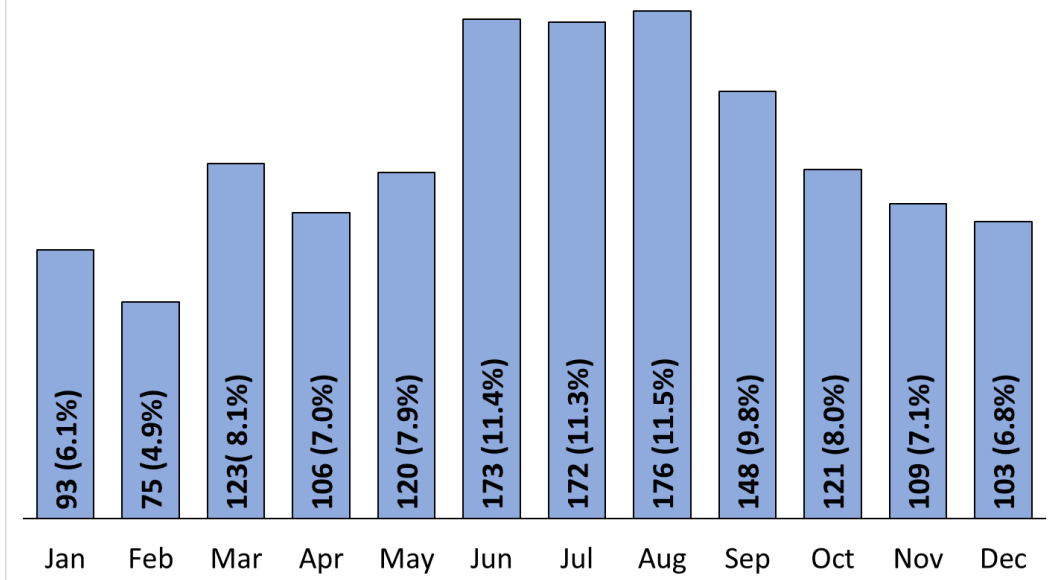


Figure 7: Traffic Fatalities Involving an Impaired Driver by Month, 2018-2022*



Strategies for Decreasing Alcohol/Drug Impaired Driving

The strategies highlighted in this report were identified by the Washington Impaired Driving Advisory Council (WIDAC) Executive Board as priority strategies to immediately impact alcohol and drug impaired driving in Washington. The WIDAC is a large group of stakeholders concerned with preventing and reducing impaired driving. It is comprised of agency representatives from state and local government, state and local law enforcement, survivors and victim advocates impacted by crashes caused by impaired drivers, treatment providers, prosecutors, advocacy groups, toxicologists, researchers, and interested private sector representatives. The WIDAC meets quarterly to help determine program and funding priorities and facilitates cross-section collaboration and coordination of agencies involved in preventing or intervening in impaired driving.

The strategies presented are recommended by national organizations, and each has a substantial body of evidence showing the effectiveness for reducing impaired driving and preventing impaired driving traffic fatalities and serious injuries.

Lower the Blood Alcohol Concentration (BAC) *per se* Limit to 0.05 Percent

Lowering the *per se* blood alcohol concentration (BAC) level to 0.05 percent BAC is a proven strategy supported by numerous studies that show 1) driving performance is impaired at a 0.05 BAC, and 2) lowering the BAC limit to 0.05 reduces drinking and driving and the related injuries and fatalities. Over 100 countries worldwide, including most industrialized countries, have already lowered their *per se* BAC limits to 0.05 percent or lower. In addition to Washington, other states have also introduced 0.05 BAC legislation in the last few years, including Connecticut, North Carolina, Oregon, California, Hawaii, Michigan, and New York, but none of these measures have passed as of this writing. The following summary was provided by James C. Fell, Principal Research Scientist at the National Opinion Research Center (NORC) at the University of Chicago and a nationally recognized traffic safety researcher, particularly in the area of impaired driving.

Why should the Washington State Legislature lower the BAC limit for driving from 0.08 to 0.05?

Lowering the BAC from 0.08 to 0.05 is a general deterrent to impaired driving and affects all would-be-drinking drivers. Research is clear that lowering the BAC limit from 0.08 to 0.05 is a deterrent to all people those who drink and drive because it sends a message that the government is getting tougher on impaired driving, and society will not tolerate impaired drivers (Fell & Voas, 2014). Such legislation reduces the number of drinking drivers involved in fatal crashes at all BAC levels (Thomas et al., 2022; Wagenaar et al., 2007; Voas et al., 2000).

Lowering the legal *per se* limit to 0.05 BAC is a proven effective countermeasure that has reduced alcohol-related traffic fatalities in several countries. A meta-analysis of international studies on lowering the BAC limit, in general, found an 11.1 percent decline in fatal alcohol-related crashes from lowering the BAC to 0.05 or lower and estimated that 1,790 lives would be saved each year if all states in the United States adopted a 0.05 BAC limit (Fell & Scherer, 2017).

Virtually every person's driving performance is impaired at 0.05 BAC. Laboratory and test track research show that the vast majority of drivers, even experienced drinkers who typically reach BACs of 0.15 or greater, are impaired at 0.05 BAC and higher concerning critical driving tasks (e.g., Ferrara et al., 1994; Howat et al., 1991; Moskowitz et al., 2000; Moskowitz & Fiorentino, 2000).

The risk of being involved in a crash increases significantly at 0.05 BAC. The risk of being involved in a crash increases at each positive BAC level. The risk rises more rapidly after a driver reaches or exceeds 0.05 BAC compared to drivers with no alcohol in their blood systems (Compton & Berning, 2015, February). Studies indicate that the relative risk of being killed in a single-vehicle crash for drivers with BACs of 0.05 to 0.079 is at least seven times that of drivers at .00 BAC (Voas et al., 2012).

The success of Utah's 0.05 BAC limit. Utah's fatal crash rate declined by 19.8 percent in 2019, the first year under the 0.05 BAC limit, compared to the rest of the United States, which had a 5.6 percent fatal crash reduction in 2019. More than 22 percent of Utah drivers who drank alcohol reported changing their drinking and driving behavior once the 0.05 law went into effect. The study also showed that there were no economic declines in alcohol consumption, tourism, and revenues at restaurants and bars in the state, i.e., no economic declines with the change from 0.08 to 0.05 BAC (Berning, 2022; Thomas et al., 2022). While the Nation experienced an increase in the percent of traffic fatalities involving a driver with a BAC > 0.15 between 2018 (19 percent) and 2021 (21percent), Utah showed a decrease in that percent from 2018 (17percent) to 2021 (16 percent).

A 0.05 BAC is a reasonable standard to set. A 0.05 BAC is not typically reached with a couple of beers after work, a glass of wine, or two with dinner. It takes at least four drinks for the average 170 lb. male to exceed 0.05 BAC in two hours on an empty stomach (3 drinks for the 137 lb. female) (NHTSA, 1994). Surveys show that the public believes one should not drive after having 2 or 3 drinks within 2 hours (Royal, 2000). That is lower than a 0.05 BAC for most people.

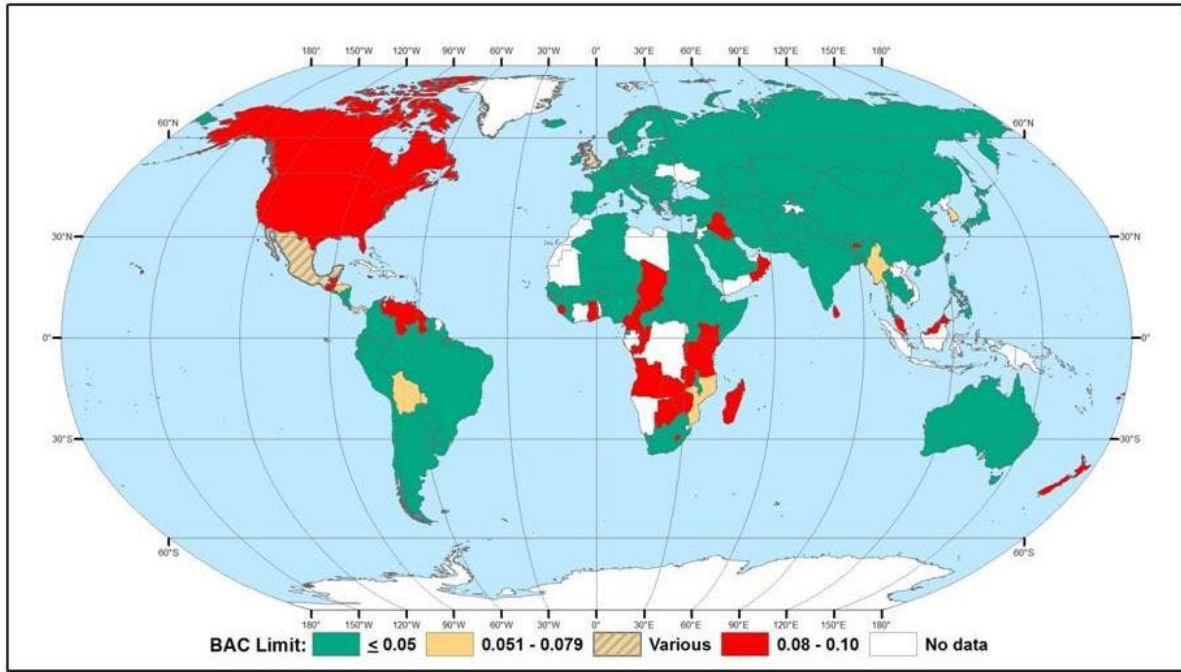
A 0.05 BAC limit will significantly reduce the number of non-fatal crashes and related consequences. Alcohol-related traffic incidents do not always result in fatalities. However, they create numerous other significant consequences and harm affecting drivers, passengers, motorcyclists, pedestrians, cyclists, and others sharing the roadways. Non-fatal injuries can require significant medical treatment and hospitalization, temporary and permanent disabilities, loss of work and income to individuals and families, and trauma and mental health problems for crash victims and their families. A meta-analysis of prior studies of the effects of lowering the BAC limit indicated that non-fatal alcohol-related crashes were reduced by 5 percent, which was significant (Fell & Scherer, 2017).

A 0.05 BAC limit would reduce the economic burden of alcohol-impaired driving to the state, including first responders. A 0.05 BAC would reduce alcohol-impaired driving and crash rates, resulting in lower economic costs for the state. Economic costs include first responder and hospital ER resources to respond to the incidents, associated medical costs, court costs, damages and repairs to roadways, and the loss of work production.

Most industrialized nations have set BAC limits at 0.05 BAC or lower. All states in Australia have had a 0.05 BAC limit for over 30 years. France, Austria, Italy, Spain, and Germany lowered their limit to 0.05

BAC, while Sweden, Norway, Japan, and Russia have set their limit at .02 BAC (WHO, 2013). Nearly 85 percent of the world’s population lives in countries with a BAC limit of 0.05 or lower (Thurston, 2023).

Figure 8: BAC Limits Worldwide



Source: <https://www.normthurston.com/dui/>

The following National and International Organizations recommend a BAC limit of 0.05: World Medical Association; American Medical Association (AMA); British Medical Association; European Commission; European Transport Safety Council; World Health Organization (WHO); Canadian Medical Association; Centre for Addiction and Mental Health; Centers for Disease Control and Prevention (CDC); National Transportation Safety Board (NTSB); National Academies of Science, Engineering and Medicine (NASEM); Association for the Advancement of Automotive Medicine; AB-InBev Foundation; Mothers Against Drunk Driving (MADD); Governor’s Highway Safety Association (GHSA); Society for Advancement of Violence and Injury Research; Advocates for Highway and Auto Safety; 0.05 Saves Lives; and the National Safety Council (NSC).

The legislature should consider adopting a .05 per se BAC level.

Compliance with Ignition Interlock Device Requirements and Use

Ensuring installation and compliance with Ignition Interlock Devices (IID) (Figure 9) has the highest effectiveness rating of five stars in Countermeasures That Work (Venkatraman, et. al., 2020), meaning there is substantial evidence that IIDs reduce recidivism and prevent impaired driving. The CDC (2022) points out that all people convicted of impaired driving, including first-time offenders, can have IIDs

installed. The CDC reports that incorporating substance use assessments and treatment (discussed later in this report) with IID programs shows reductions in recidivism even after the IID is removed.

Washington’s “compliance-based removal” (CBR) ignition interlock law was recently recognized as effective in reducing recidivism among drivers who are subject to the program (GHSA, 2023). CBR laws require a history of compliance with the IID program as a condition of completing the program, regardless of the standard period the IID is required. Specifically, Washington law requires that the person required to have an installed IID must have no violations, such as a BAC result of 0.04 percent or higher, for 180 days prior to the removal of the requirement (RCW 46.20.720). The study found that “CBR states – Tennessee and Washington – had lower rates of recidivism at 1.7 percent and 3.7 percent, respectively, compared to Arkansas at 5.6 percent and Iowa at 6.0 percent,” which are states with no compliance-based removal requirements. (GHSA, 2023, p. 3)

Figure 9: Example of an Ignition Interlock Device



(Source: <https://www.wsp.wa.gov/driver/duiimpaired-driving/>)

The Washington State Patrol (WSP) ignition interlock program performs two primary functions. One is managing the regulatory compliance and certification requirements for ignition interlock providers including devices (laboratory and field testing), service centers (inspections and audits), and technicians (training, testing, and oversight). Many of the reports related to device tampering, circumvention, or early removal come from the IID service providers. Investments to improve and streamline the regulatory function of the program would free up more staff time for compliance checks. For example, better data systems with remote field access for tracking inspections, technician training, and

examinations would improve program data management and administrative efficiency. Additional administrative support for managing this data would also free up some capacity of the field troopers.

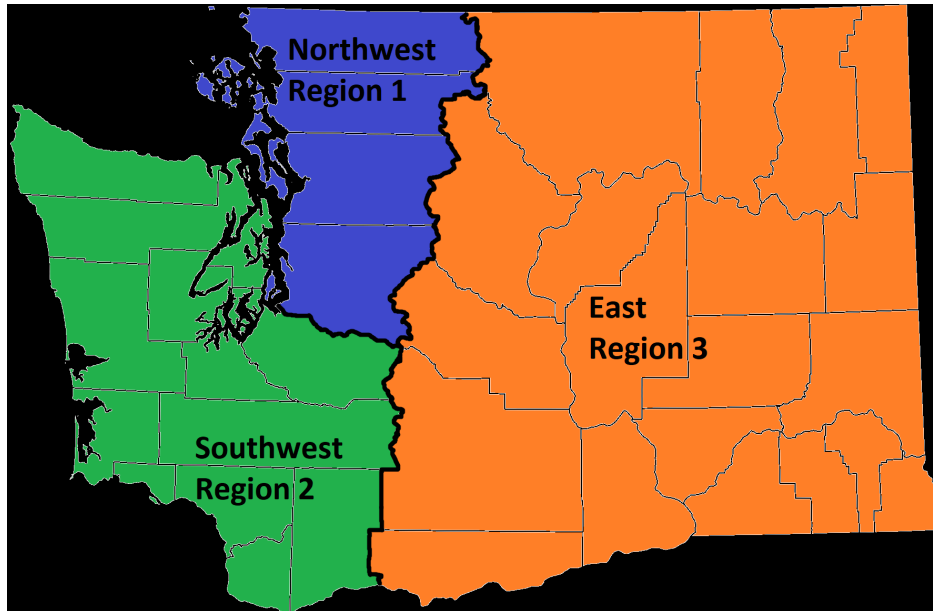
The WSP ignition interlock program staff are also responsible for conducting criminal interlock investigations including tampering/circumvention, driving without a required ignition interlock device, and other offenses. The WSP ignition interlock program manager estimates the current ignition interlock installation compliance rate is only 33 percent. That 33 percent installation compliance represents 22,000 current ignition interlock installations on file. A challenge identified for installation compliance is related to Washington's employer exemption.

The intent of Washington's employer exemption was to allow a DUI offender who must drive for their profession to keep their job and put the liability on the employer to screen for substance use when working. Under the employer exemption, driving without an IID should only occur when performing company business, in a vehicle registered to the company, and during business hours. Any driving for purposes outside the employer parameters requires a vehicle with an IID installed. The exemption can be renewed annually. The employer exemption has been subject to abuse partly because self-employed business owners may be able to sign their own exemption, and some employers may claim that all driving is for business purposes. To combat abuse, compliance checks on submitted employer exemptions should increase. Compliance checks and enforcement are keys to maximum program effectiveness of any ignition interlock program.

As of August 2023, the Department of Licensing shows an additional 46,832 individuals who have ignition interlock requirements who do not have records of installation. While some may be avoiding driving by working from home, walking, bicycling, or using transit, many of those with IID requirements who do not have them installed are likely in violation. However, current WSP staffing levels are already strained, and the ignition interlock program is not able to meet desired benchmarks for compliance checks on the existing 22,000 installations. For comparison, the Oregon State Police has identical ignition interlock program staffing levels to WSP (1 sergeant/program manager, 3 compliance troopers, and 1 administrative assistant) to manage only one-third the installations the WSP program manages.

With current staffing levels, combined with a high number of reported violations, the WSP ignition interlock program staff must triage violations and investigations among only three compliance troopers covering the entire state (Figure 10). Current compliance troopers are stationed in Seattle, Bremerton, and Moses Lake, which means that substantial travel time is required to investigate noncompliance statewide. When the ignition interlock program was first established, the program needs assessment was eight troopers for compliance, one in each of the existing WSP regions. In lieu of additional troopers at the present, the program would benefit from additional support staff positions to free up trooper time for more compliance-based tasks.

Figure 10: WSP Ignition Interlock Program Regional Coverage Among Three Compliance Troopers



Another challenge is inconsistent reporting from IID devices and providers. Some of these inconsistencies lead to delays in compliance investigations, with some providers only sending compliance information from the IID every 65 days when the device is serviced. The compliance information is accessed directly from the device, rather than real-time submission to the IID provider. The legislature may consider policies and technology solutions to achieve more central and real-time reporting and access to IID failures, tampering, and circumvention attempts. The WSP ignition interlock program is one of several WSP programs with limited ability to fully execute program needs due to understaffing.

The legislature can provide funding and update policies to address resource gaps in the IID program.

Mandatory Substance Use Assessments for DUI Offenders

Substance use assessments and treatment have the highest effectiveness rating of five stars in the National Highway Traffic Safety Administration’s (NHTSA) Countermeasures That Work (Venkatraman, et. al., 2020), meaning there is substantial evidence that assessments and treatment reduce recidivism and impaired driving. Substance use brief interventions also have the highest effectiveness rating of five stars. Brief interventions involve assessing readiness, motivators, and barriers to behavior change, is delivered in-person or remotely (such as through cell phone apps) and may occur in a variety of settings, such as medical, student, and religious settings. DUI offenders with substance use disorders (SUDs) benefit from long-term, tailored, and specialized treatment programs (CDC, 2022). Both specialized treatment programs and brief interventions begin with an assessment, which is necessary to help determine the type and intensity of intervention that is appropriate for each person. DUI offenders

receiving treatment, whether it be specialized treatment programs or brief interventions, should also be reassessed as treatment progresses.

In addition to Countermeasures That Work, the CDC (2022) also identifies assessment, treatment, and brief interventions as proven effective countermeasures for reducing impaired driving. The CDC states that people with SUDs or problematic substance use should be identified and receive treatment or intervention before the impaired driving offense. Impaired driving itself constitutes problematic substance use, even if the offender does not meet the diagnostic criteria for an SUD. Thus, it is critical for all people apprehended for impaired driving to receive an assessment. Every DUI incident is an opportunity to assess substance use habits and refer offenders to brief interventions or specialized treatment. Current Washington law ([RCW 46.61.5055](#)) does not require assessments for alcohol and drug offenders with no prior offenses in seven years, which means that important opportunities for early intervention are routinely missed. This can be exacerbated by Washington's current law regarding deferred prosecution. Because individuals are eligible only once in their lifetimes for deferred prosecution, which requires individuals to be assessed and to participate in recommended services, defense attorneys regularly counsel first-time offenders to "save" their deferred prosecution for a second or third offense, when the sanctions become more severe. The legislature has recently considered changes to the deferred prosecution law to address this unintended consequence.

Assessments should include identification of both SUDs and mental health disorders. A literature review (WTSC, 2018) revealed people diagnosed with SUDs have a higher incidence of mental health disorders than those without SUDs. People with untreated mental health disorders also have higher rates of SUDs. Further, studies have shown that repeat DUI offenders have much higher rates of mental health disorders compared to national rates. DUI offenders with undiagnosed mental health disorders, even after completing treatment, are more likely to continue using substances as a method of coping or self-medication. SUD treatment may be less effective due to the underlying psychiatric symptoms impairing the participants ability to use the informational and behavioral strategies provided during treatment. If an assessment reveals co-occurring SUD and mental health disorder, treatment should be coordinated and tailored for both conditions to increase likelihood of long-term behavior change.

For DUI repeat offenders, DUI specialty court programs have a four-star effectiveness rating in Countermeasures That Work and are considered proven for reducing recidivism. A DUI specialty court involves a systematic and coordinated approach to prosecuting, sentencing, monitoring, and treatment for DUI offenders that involves intensive supervision. The underlying goal is to change offender behavior by identifying and treating substance use problems and by holding offenders accountable (Venkatraman, et. al., 2020). A 2012 meta-analysis suggests DUI courts can reduce recidivism by 50 percent (Mitchell, et. al. 2012) although results vary depending on the court model and more rigorous evaluations are still needed. Currently, there are eight DUI specialty courts in Washington: Clark County, Des Moines Municipal, Kent DUI Court, Okanogan County, Spokane Municipal, Spokane County, Thurston County, and Yakima County (WTSC, 2023).

DUI specialty courts are evidence-based, and they require additional resources. Because of the additional costs, they are under-utilized in the state compared to the need. For example, they do not serve seven of the 12 largest cities in the state. By reducing the incidence of impaired driving, an

expansion of DUI specialty courts is likely to achieve savings to Washington families, businesses, and governments that is greater than the costs.

The legislature should consider requiring SUD and mental health assessments for all DUI offenders. The legislature should also consider changes to the deferred prosecution law to encourage assessment and treatment if needed on the first DUI.

The legislature may wish to consider policies and funding that will support the expansion of DUI courts in Washington.

Sobriety Checkpoints

Publicized sobriety checkpoints have the highest effectiveness rating of five stars in Countermeasures That Work (Venkatraman, et. al., 2020), meaning there is substantial evidence that publicized sobriety checkpoints reduce impaired driving crashes. Sobriety checkpoint programs involve identifying locations with high rates of impaired driving and setting up highly publicized checkpoints on predetermined dates and times. Law enforcement will stop vehicles at the checkpoint (either every vehicle or some random interval, such as every third vehicle) to check for signs of driver impairment. The purpose of sobriety checkpoints is to deter impaired driving by increasing the perceived risk of arrest.

The CDC Motor Vehicle Prioritizing Interventions and Cost Calculator for States (MV PICCS, <https://wisqars.cdc.gov/mvpiccs/>) estimates that the cost to implement publicized sobriety checkpoints in Washington is \$6.2 million, and would result annually in 12 lives saved and 418 injuries prevented, equating to a monetary benefit of \$31.46 million, or a return-on-investment of \$5.06 for every \$1.00 spent. As of November 2018, 37 states and the District of Columbia authorized sobriety checkpoints, and 16 states conducted sobriety checkpoints somewhere in the state on a weekly basis (Venkatraman, et. al., 2020). Like other types of traffic safety enforcement, personnel shortages have led to declines in the frequency of checkpoint use in many states.

Washington has not conducted any sobriety checkpoints since the 1980s, when the case *Seattle v. Mesiani* (1988) concluded that the checkpoint program implemented by the City of Seattle violated both the Washington State Constitution and the 4th Amendment of the U.S. Constitution. In a 1990 U.S. Supreme Court case, *Michigan Department of State Police v. Sitz*, the U.S. Supreme Court ruled that sobriety checkpoints did not violate the 4th amendment of the U.S. Constitution. In the *Mesiani* case, the court identified significant shortcomings of the City of Seattle checkpoints, including no authorizing statutory authority, no guidance documents, and no effective oversight. In short, the Seattle Police Department could and did stop anyone they desired and used whatever technique the individual officer elected. Since that time, NHTSA (2002) has developed specific sobriety checkpoint procedures for states to consider in keeping within federal and state legal decisions that address the shortcomings identified in the *Mesiani* decision.

In jurisdictions where statutes authorize sobriety checkpoints (e.g., Michigan), the law enacts limits on many aspects of the checkpoint. These limitations include the requirement for data to support a checkpoint, notice to the public in advance, procedures for investigation including randomness to prevent bias, and the requirement of judicial oversight to affirm the requirements are met by issuance of a warrant authorizing the reasonable detention of drivers passing through these checkpoints. The

legislative approach taken by other states addresses many of the issues raised by the court in *Mesiani*. To implement this middle spectrum, the Washington legislature would need to pass legislation authorizing and regulating sobriety checkpoints, with agency rulemaking to implement it, and judicial oversight to regulate its proper administration.

The Washington legislature may wish to consider legislation that authorizes and regulates sobriety checkpoints.

Roadside Oral Fluid Testing Devices

Oral fluid testing devices are point-of-contact technology that provide rapid drug panel results, limited to positive or negative indicators for specified substances, using a non-invasive procedure with minimal potential for sample adulteration. While portable breath tests assess a blood alcohol concentration only, oral fluid tests can detect the presence of drugs such as cocaine, methamphetamine, opiates, cannabis, amphetamine, and benzodiazepines.

A NHTSA (2021) evaluation of five such devices showed that the performance of different oral fluid testing devices available on the market varies in different ways. For example, one device included in the evaluation had few false negatives and slightly more false positives than false negatives (although both numbers were low), while another device demonstrated no false positives but had a higher frequency of false negatives. Drawing upon work evaluating roadside oral fluid devices conducted by NHTSA and other states, careful consideration and review of available technology offerings should be performed prior to the implementation of any oral fluid testing device pilot program.

Oral fluid programs in other states have focused on two models (NTSB, 2022). First and most commonly, oral fluid may be collected at roadside and used with an on-site screening device that gives rapid presumptive negative/positive results for a panel of drugs. Like a preliminary breath test for alcohol, this approach uses oral fluid testing devices as part of the investigative process to confirm the presence of drugs while also gathering other impairment indicators. This information would assist the officer in making an arrest decision and could lead to the collection of an evidentiary test, most commonly blood. The second model of oral fluid programs includes the collection and analysis of oral fluid as an evidentiary sample. For example, Vermont amended its implied consent law in 2020 to include oral fluid specimens for evidentiary purposes, dictating that oral fluid samples cannot be taken roadside and must be analyzed by a laboratory (Bloch, 2021).

In 2022, the NTSB published the report *Alcohol, Other Drug, and Multiple Drug Use Among Drivers* and issued new recommendations to states. Washington, along with 27 other states and the District of Columbia, were issued a recommendation to modify impaired driving laws to allow for oral fluid collection, screening, and testing for the detection of drug use by drivers. The NTSB has urged the WTSC to advocate for legislation needed to explicitly permit the collection and testing of oral fluid. The recommendation does not include implementation of a full oral fluid testing program but rather just explicit legal authorization for the use of oral fluid specimens in drug testing.

According to the National Conference of State Legislatures, 24 states have statutes authorizing some form of oral fluid specimen use (Bloch, 2021). According to NTSB (2022), 15 states implied consent laws allowed for the collection of oral fluid, and in 6 states oral fluid is authorized by an impaired driving statute but not mentioned in the implied consent laws. In one state, Alabama, oral fluid is authorized in both the impaired driving and implied consent laws.

The NTSB recommendation seems to target the use of oral fluid for evidentiary purposes. That will take considerably more time and resources than deploying roadside oral fluid testing devices with rapid screening results for investigation (model 1). Other states have authorized the use of roadside oral fluid testing devices in a pilot capacity while not modifying evidentiary statutes. Pilot programs in Michigan and Indiana are highlighted below.

Michigan was one of the first states in the nation to implement the use of roadside oral fluid rapid testing devices. In 2016, Michigan passed two public acts, known as the Barbara J. and Thomas J. Swift Law. Public Act 243 authorized the Michigan State Police to establish the oral fluid pilot in five counties and stipulated that only Drug Recognition Experts (DREs) may perform the test as part of the full DRE evaluation to establish impairment. Oral fluid testing device results are subject to false positives and false negatives and do not prove impairment by drugs, only presence of drugs. The DRE evaluation is needed for establishing impairment. Michigan State Police was tasked with developing the written policies for the pilot program and to undertake administrative rulemaking as necessary. Public Act 242 states that a DRE must administer the test and may arrest a person based in whole or in part on the results of the roadside oral fluid rapid test result. In addition, a commercial motor vehicle operator that refuses the oral fluid test may be issued a civil infraction resulting in a 24-hour out-of-service order. (Michigan State Police, 2019)

In 2018, Michigan expanded program participation to all DREs in the state. In addition, the Michigan legislature provided the ongoing funding needed to expand and sustain the program, starting with an appropriation of \$626,000. DREs outside of the Michigan State Patrol could participate with a signed Memorandum of Agreement to ensure adherence to program policies and procedures. At the end of 2020, there were 131 DREs participating in the program from 65 different law enforcement agencies. The Michigan State Patrol continues to be responsible for all functions of the program including policies and procedures, equipment, and supplies management, analyzing data from the pilot program, and program training for DREs. (Michigan State Police, 2021)

In Indiana, roadside oral fluid testing devices are deployed to all officers, not restricted to DREs like the Michigan pilot. Beginning in 2020, the Indiana Criminal Justice Institute (CJI) implemented an oral fluid program to deploy roadside oral fluid rapid testing devices. The project cost per device was \$4,500 (ICJI, 2023). The ICJI reports that it takes up to 60 seconds to obtain the oral fluid sample and five minutes or less to receive rapid results for cocaine, methamphetamine, opiates, cannabis, amphetamine, and benzodiazepines. Officers who receive the oral fluid testing devices must complete specific training, and trainers must be Standard Field Sobriety Test (SFST) instructors and have completed either Advanced Roadside Impaired Driving Enforcement (ARIDE) or DRE training (Penrod, 2021).

The Indiana CJI program distributes devices to multiple law enforcement agencies, targeting larger communities without adequate Drug Recognition Experts (DREs) and agencies serving more rural areas

where there are no DREs available (Penrod, 2021). At the end of 2021, over 200 devices had been distributed throughout the state. Officers must have a reason to stop a motorist (speeding, driving erratically) and suspect impairment prior to administration of the oral fluid test. During the stop, officers use standard impairment detection techniques such as SFST, portable breathalyzers, and suspect interviews. If drug-impaired driving is suspected, the officer can then issue the roadside oral fluid rapid test. The purpose of the oral fluid test in Indiana is to further establish probable cause, and results may not be used as evidence in court, and like the PBT, the test may be refused by the driver. (ICJI, 2023)

Each year, more states are using roadside oral fluid testing devices in impaired driving investigation, and the technology itself is also improving. Michigan and Indiana, in addition to many other states not highlighted in this report, attest to the effectiveness of this tool in combating drug-impaired driving. Transportation safety agencies in Washington continue to monitor progress made in other states with this developing countermeasure.

Prior to considering a pilot program in Washington, the legislature should consult with the Washington State Patrol and other law enforcement agencies in the state regarding the resources that would be required to research technology options, to choose a reliable testing device, to manage and distribute those devices, and to develop administrative procedures. In addition, the Department of Licensing should be consulted regarding administrative sanctions for oral fluid test refusals, similar to sanctions for breath test refusals.

If the legislature were to adopt an oral fluid program in Washington, it should consider roadside oral fluid testing as part of building the overall DUI case for probable cause. To increase deterrence, the legislature could also consider applying the implied consent statute to roadside oral fluid testing.

Appendix A: References

- Arnold, LS and Tefft, BC (2016). *Driving Under the Influence of Alcohol and Marijuana: Beliefs and Behaviors, United States, 2013-2015*. AAA Foundation for Traffic Safety, Washington, DC, May 2016, 1-19.
- Berning, A. (2022, February). Evaluation of Utah's .05 BAC per se law. Traffic Tech Technology Transfer Series, DOT HS 813 234, National Highway Traffic Safety Administration.
- Bloch, S. (2021). States Explore Oral Fluid Testing to Combat Impaired Driving. National Conference of State Legislatures Brief.
- Centers for Disease Control and Prevention (CDC). 2022. What Works: Strategies to Reduce or Prevent Alcohol-Impaired Driving. https://www.cdc.gov/transportationsafety/impaired_driving/strategies.html. Accessed October 2023.
- Compton, R. P. & Berning, A. (2015, February). Drug and alcohol crash risk. (Traffic Safety Facts Research Note, Report No. DOT HS 812 117). Washington, DC: National Highway Traffic Safety Administration.
- Dang, Jennifer N. (2008). Statistical analysis of alcohol-related driving trends, 1982-2005. (DOT HS 810 942). Washington, DC: National Highway Traffic Safety Administration. Retrieved from <http://www-nrd.nhtsa.dot.gov/Pubs/810942.pdf>.
- Fell, J. C., & Voas, Robert B (2014). The effectiveness of a 0.05 blood alcohol concentration (BAC) limit for driving in the United States. *Addiction*, 109; 869-874.
- Fell, J. C., Beirness, D. J., Voas, R. B., Smith, G. S., Jonah, B., Maxwell, J. C., Price, J., Hedlund, J. (2016). Can Progress in Reducing Alcohol-Impaired Driving Fatalities be Resumed? Results of a Workshop sponsored by the Transportation Research Board, Alcohol, Other Drugs, and Transportation Committee (ANB50). *Traffic Injury Prevention*, 17(8), 771–781. <http://dx.doi.org/10.1080/15389588.2016.1157592>
- Fell, James C., Scherer, Michael (2017). Estimation of the Potential Effectiveness of Lowering the Blood Alcohol Concentration (BAC) Limit for Driving from 0.08 to 0.05 grams per Deciliter in the United States. *Alcoholism: Clinical and Experimental Research*, 41 (12), 2128-2139.
- Ferrara, S.D., Zancaner, S., and Georgetti, R. (1994). Low blood alcohol levels and driving impairment. A review of experimental studies and international legislation. *International Journal of Legal Medicine*, 106(4), 169-177.
- Governors Highway Safety Association. (2023). Impact of compliance-based removal laws on alcohol-impaired driving recidivism. <https://www.ghsa.org/sites/default/files/2023-07/IID%20CBR%20Report-July%202023%20with%20cover.pdf>. Accessed October 2023.
- Hingson, R., Heeren, T., and Winter, M. (1996). Lowering state legal blood alcohol limits to 0.08 percent: The effect on fatal motor vehicle crashes. *American Journal of Public Health*, 86(9), 1297-1299.
- Howat, P., Sleet, D., & Smith, I. (1991). Alcohol and driving: Is the 0.05% blood alcohol concentration limit justified? *Drug and Alcohol Review*, pp. 10, 151–166.

Indiana Criminal Justice Institute (ICJI). 2023. Roadside Oral Fluid Program. <https://www.in.gov/cji/traffic-safety/impaired-driving/roadside-oral-fluid-program/>. Accessed October 2023.

Michigan State Police. 2019. Oral Fluid Roadside Analysis Pilot Program. https://www.michigan.gov/-/media/Project/Websites/msp/reports/Oral_Fluid_Report.pdf?rev=f3f046036bc34e87b8113bcd08ea484.

Michigan State Police. 2021. Oral Fluid Roadside Analysis: Pilot Program – Phase II. https://www.michigan.gov/-/media/Project/Websites/msp/reports/phase_ii_oral_fluid_report.pdf?rev=911dc2c7042d444eb8918395a2211915

Mitchell, O., Wilson, D., Eggers, A., & MacKenzie, D. 2012. Assessing the Effectiveness of Drug Courts on Recidivism: A Meta-analytic Review of Traditional and Non-traditional Drug Courts. *Journal of Criminal Justice*. 40, 60-71.

Moskowitz, H., Burns, M., Fiorentino, D., Smiley, A., and Zador, P. (2000). Driver characteristics and impairment at various BACs. (DOT HS 809 075). Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration.

Moskowitz, H., and Fiorentino, D. (2000). A review of the literature on the effects of low doses of alcohol on driving-related skills. (DOT HS 809 028). Washington, DC: US Department of Transportation, National Highway Traffic Safety Administration.

Mothers Against Drunk Driving (MADD). 2022. Ignition Interlock Report: Putting an End to Drinking and Driving Attempts. <https://madd.org/wp-content/uploads/2023/01/2021-Ignition-Interlock-Report-FINAL-COPY.pdf>

National Center for Statistics and Analysis. (2022, May). State alcohol-impaired-driving estimates: 2020 data (Traffic Safety Facts. Report No. DOT HS 813 301). National Highway Traffic Safety Administration.

National Highway Traffic Safety Administration. (1994). Computing a BAC Estimate. US Department of Transportation, Washington, DC.

National Highway Traffic Safety Administration. (2001). Evaluation of On-Site Oral Fluid Drug Screening Technology. Report No. DOT HS 812 854. Washington, D.C.

National Highway Traffic Safety Administration. (2002). Saturation Patrols and Sobriety Checkpoints Guide: A How-to Guide for Planning and Publicizing Impaired Driving Enforcement Efforts. Report No. DOT HS 809 063. Washington, DC.

National Transportation Safety Board. 2022. Alcohol, Other Drug, and Multiple Drug Use Among Drivers. SRR-22-02. <https://www.nts.gov/safety/safety-studies/Documents/SRR2202.pdf>

Penrod, E. (2021). The Future is Now: Roadside Drug Tests in Indiana. *Indiana Court Times*. <https://times.courts.in.gov/2021/01/11/roadside-drug-testing/>. Accessed October 2023.

Royal, D. (2000). A national survey of drinking and driving: Attitudes and behavior: 1999 (DOT HS 809 190 – Vol. I: Findings). Washington, DC: National Highway Traffic Safety Administration.

Thomas, F. D., Blomberg, R., Darrah, J., Graham, L., Southcott, T., Dennert, R., Taylor, E., Treffers, R., Tippetts, S., McKnight, S., & Berning, A. (2022, February). Evaluation of Utah's .05 BAC per se law (Report No. (DOT HS 813 233). National Highway Traffic Safety Administration.

Thurston, Norm. 2023 Utah House District 62. Lowering BAC Limits Saves Lives. <https://www.normthurston.com/dui/>. Accessed October 2023.

Venkatraman, V., Richard, C., Magee, K., & Johnson, K. Countermeasures that Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices, 10th Edition. Report No. DOT HS 813 097. National Highway Traffic Safety Administration.

Voas, R.B., Tippetts, A.S., and Fell, JC (2000). The relationship of alcohol safety laws to drinking drivers in fatal crashes. *Accident Analysis and Prevention*, 32(4), 483-492.

Voas, R. B., Torres, P., Romano, E., & Lacey, John H. (2012). Alcohol-related risk of driver fatalities: An update using 2007 data. *Journal of Studies on Alcohol and Drugs*, 73(3), 341–350.

World Health Organization (2013). List of countries' BAC limits for driving: World Health Organization; 2013. Available online: http://apps.who.int/gho/athena/data/GHO/SA_0000001520.html?profile=ztable&filter=COUNTRY:*;BACGROUP:*.

Wagenaar, A., Maldonado-Molina, M., Ma, L., Tobler, A., and Komro, K. (2007). Effects of legal BAC limits on fatal crash involvement: Analyses of 28 states from 1976 through 2002. *Journal of Safety Research*, 38, 493-499.

Washington State Association of Drug Court Professionals and Washington Association of Drug Courts (WSADCP/WADC). 2022. Washington Therapeutic Courts 2022. <https://www.wsadcp.org/therapeutic-courts-washington-state/>. Accessed October 2023.

Washington Traffic Safety Commission (WTSC). 2018. Research Summary: Mental Health and Substance Use Dual Diagnosis in Impaired Drivers.