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FILED
COURT OF APPEALS
DIVISION ONE

JUN 29 2016

No. 73929-8

IN THE COURT OF APPEALS, DIVISION ONE
STATE OF WASHINGTON

CITY OF KENT,
Respondent/Plaintiff

v.

COREY COBB,
Appellant/Defendant

BRIEF OF AMICUS CURIAE

WASHINGTON ASSOCIATION
OF CRIMINAL DEFENSE LAWYERS

WASHINGTON FOUNDATION FOR CRIMINAL JUSTICE

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I. IDENTITY AND INTERESTS OF AMICUS

The Washington Foundation for Criminal Justice (“WFCJ”) is a non-profit organization dedicated to educating criminal defense attorneys who represent citizens accused of impaired driving crimes. Since 1983, the WFCJ has held an annual seminar to educate lawyers on pertinent issues related to the defense of citizens accused of DUI in Washington.

The Washington Association of Criminal Defense Lawyers (“WACDL”) is a non-profit organization formed in 1987 and is dedicated to improve the quality and administration of justice. WACDL has over 900 members consisting of private criminal defense lawyers, public defenders, and related professionals committed to preserving fairness and promoting a rational and humane criminal justice system. WACDL holds many seminars throughout the year to educate lawyers on pertinent issues related to the defense of citizens accused of all crimes, including DUI, in Washington.

Both the WFCJ and WACDL have an interest in protecting the right of citizens accused of DUI and DUI related crimes to receive a fair trial. Both the WFCJ and WACDL have previously been granted amicus status in Washington appellate cases. Both organizations contend that

Washington's 5 ng/ml¹ "per se" marijuana DUI law violates due process and should be ruled unconstitutional under the void for vagueness doctrine. The present law fails to provide lawful marijuana users notice how to avoid criminal liability, and fails to provide ascertainable standards to prevent arbitrary roadside arrests.

The WFCJ and WACDL are committed to advocating for the proper assessment of scientific standards in the development of a rational "per se" marijuana DUI law. Science, and not political expediency, should guide this development.

II. STATEMENT OF THE CASE

Corey Cobb was arrested by City of Kent Officer Dexheimer on November 4, 2013.

In 2013 law enforcement officers throughout this state submitted 5,468 blood samples to the Washington State Toxicology Laboratory for analysis to determine if they contained THC as a result of law enforcement's concern that they were under the influence of marijuana. These requests by law enforcement were made after these individuals had been arrested for DUI or other crimes involving the use of a motor vehicle.

¹ Test results are represented as ng/ml of whole blood. RCW 46.61.506.

Of those samples, it was determined that 60% (3281) did not have any amount of active THC, delta-9 tetrahydrocannabinol, or even the inactive metabolite, THC-COOH, also known as carboxy-THC. Of these samples, 15.1% (825) only contained the inactive metabolite, carboxy-THC, and only 13.2% (720) had active THC, delta-9 tetrahydrocannabinol, at or above the legal threshold of 5ng/ml.²

In 2013 the protocol for confirmation of cannabinoids by the instrument that is used in Washington to measure the amount of THC in a blood sample only required that the quantitative results for THC be within +/- 20% of their target value with both the calibrators [§ 27.10.1.3] and the controls [§ 27.10.2.2(c)]. The same is true today, in 2016.³

On January 6, 2016 the Washington State Patrol Toxicology Laboratory Division mandated that measurement uncertainty be reported for all quantitative THC results [§ 6.4.2].⁴

On April 7, 2016 the Washington State Patrol Toxicology Laboratory Division finally published the measurement uncertainty

² Statistics previously published by Dr. Fiona Couper, Washington State Toxicologist, personally provided to Amicus by Dr. Fiona Couper and confirmed to Amicus by Dr. Fiona Couper. Statistics for the years 2014 and 2015 are included in APPENDIX 1

³ Confirmation of Cannabinoids by Liquid Chromatography-Tandem Mass Spectrometry http://www.wsp.wa.gov/forensics/docs/toxicology/sop_manuals/sop_thc.pdf (last visited June 22, 2016)

⁴ Estimation and Reporting of Measurement Uncertainty http://www.wsp.wa.gov/forensics/docs/toxicology/measurement_uncertainty/measurement_uncertainty_procedure.pdf (last visited June 22, 2016)

associated with their analysis of blood samples for active THC. The measurement uncertainty for active THC, delta-9 tetrahydrocannabinol, was determined to be +/-26% of the result obtained by that instrument⁵

Corey Cobb was charged and convicted following a jury trial only for having an active THC⁶ concentration of 5.99 ng/ml within two hours of driving.⁷ According to trial testimony Cobb smoked a half gram of marijuana approximately five or six hours prior to the blood test.⁸ The City's experts both said it was not possible to determine an active THC blood level based on the ingestion of a known quantity of marijuana.⁹

Initiative 502 (2012) legalized marijuana possession, and criminalized driving with 5 ng/ml of active THC in blood within two hours of driving regardless of whether the driver manifested any signs of impairment. Drafters of the initiative advocated for this "per se" law contending scientific studies established significant impairment of driving

⁵Measurement Uncertainty Drug List - WSP Toxicology Laboratory Division
http://www.wsp.wa.gov/forensics/docs/toxicology/measurement_uncertainty/drug_list_uncertainty_values.pdf
(last visited June 22, 2016)

⁶ For purposes of this brief we will use the term "active THC" as a reference to nanograms of delta-9 tetrahydrocannabinol and "metabolite" as a reference to the inactive non-impairing THC-COOH, also known as carboxy-THC. RCW 46.04.586. It is only the "active THC" at 5ng/ml or more by which an individual may be convicted of DUI, in Washington, under RCW 46.61.502(1)(b).

⁷ RCW 46.61.502(1)(b)

⁸ The City contested this fact, and its experts testified that active THC dissipates in blood to below 5 ng approximately four hours after ingestion of marijuana. This testimony itself will be challenged in the following amicus brief.

⁹ RP Vol. II 82; 84; 113; 140

ability at 5 ng/ml and at this level there was an increased risk for causing traffic accidents. But leading supporters of the initiative publicly recognized a different rationale behind the “per se” law; politics. Seattle City Attorney Pete Holmes conceded the law was “at least, in part, a political calculation.”¹⁰ An NPR story called the law a “deal-sweetener for hesitant voters.”¹¹

The marijuana “per se” law¹² is modeled after the alcohol “per se” DUI law¹³. The alcohol “per se” law is based on the premise that impairment of driving ability can be recognized at a certain blood and breath alcohol levels (.08) and scientific studies link alcohol impairment to the ability to drive and dangerous driving. In addition, alcohol has certain qualities that allow people to quantify and predict blood and breath alcohol levels, such as relatively uniform absorption and elimination rates in the human body. Science has established, and case law has recognized, that the average person can recognize both impairment and blood alcohol levels to avoid violating the alcohol DUI laws.

¹⁰ Roth, A., *The Uneasy Case for Marijuana as Chemical Impairment Under a Science-Based Jurisprudence of Dangerousness*, 103 CAL. L. REV. 841, 894 (2015).

¹¹ Roth, *Id.* at 894.

¹² RCW 46.61.502(1)(b)

¹³ RCW 46.61.502(1)(a)

Current scientific studies recognize that the 5 ng/ml active THC standard fails this DUI model. Extensive research establishes that marijuana blood levels cannot be predicted based on the quantity of marijuana ingested. Studies no longer support a conclusion of impairment of driving ability at 5 ng/ml of active THC, or that driving is statistically more dangerous at this level. And studies further show that active THC remains in the human body for hours - if not days - after ingestion at levels of 5 ng/ml or higher and long after any potential effects of marijuana have dissipated. This leads to the inescapable conclusion that lawful marijuana users have no way of knowing how or when an active THC level may cross the 5 ng/ml threshold.

As one legal scholar writes, enforcing a marijuana “per se” law without a direct scientific link to impairment comparable to the alcohol DUI model, borders on being unjust.¹⁴ Washington’s present marijuana “per se” DUI law represents a political compromise setting an arbitrary “per se” marijuana level in order to pass a larger law. To protect Washington drivers and lawful marijuana users, this “per se” law must be ruled unconstitutional.

¹⁴ Roth, *Id.* at 912.

III. ISSUES PRESENTED ON AMICUS

1. The 5 ng/ml per se standard fails to comport with the alcohol DUI model for a “per se” crime.
2. The 5 ng/ml per se standard fails to provide notice that enables ordinary people to understand what conduct is prohibited and how to avoid conduct that violates the law.
3. Scientific studies establish marijuana users cannot determine THC levels in blood, there is no direct link between the 5 ng/ml standard and observable impairment, and THC can exist in blood at the 5 ng level days after usage and after the effects of marijuana have dissipated.

IV. ARGUMENT

1. A Valid and Lawful “per se” 5 ng/ml of active THC DUI law must rest on the ability of the law to convey a standard of conduct such that drivers who ingest marijuana can avoid criminal liability.

A statute may be deemed “void for vagueness” where it fails to provide fair notice, measured by common practice and understanding, of that conduct which is prohibited, so that persons of reasonable understanding are required to guess at the meaning of the enactment, and further fails to contain ascertainable standards for adjudication so that police, judges, and juries are left to decide what is prohibited and what is

not, depending on the facts in each particular case.¹⁵ A statute is not unconstitutionally vague merely because a person cannot predict with complete certainty the exact point at which his actions would be classified as prohibited conduct.¹⁶ Instead, the issue is whether a statute fails to provide *any* standard of conduct at all.¹⁷

The Washington alcohol “per se” DUI statute has withstood a void for vagueness challenge. In *State v. Franco*¹⁸, the Court looked at three factors establishing sufficient notice to drivers how to conform to the alcohol “per se” law. First, the Court recognized there was an abundance of scientific support linking a .10 BAC level to significant impairment in all persons, and at such a level most persons would experience substantially diminished driving ability and impaired physical performance. Second, the Court recognized that a person must consume a considerable amount of alcohol to obtain a .10 BAC. Third, the Court recognized that external sources were available to advise persons how much alcohol can be consumed prior to reaching a prohibited BAC level.

¹⁵ *State v. Brayman*, 110 Wn.2d 183, 196, 751 P.2d 294 (1988); citing *State v. Carter*, 89 Wn.2d 236, 239-40, 570 P.2d 1218 (1977).

¹⁶ *Seattle v. Eze*, 111 Wn.2d 22, 27, 759 P.2d 366 (1988).

¹⁷ *Holland v. Tacoma*, 90 Wn. App. 533, 544, 954 P.2d 290 (1998); citing *Coates v. City of Cincinnati*, 402 U.S. 611, 614, 91 S.Ct. 1686, 1688, 29 L.Ed.2d 214 (1971) (Emphasis added).

¹⁸ *State v. Franco*, 96 Wn.2d 816, 639 P.2d 1320 (1982)

Therefore, drivers received fair notice of the conduct that would violate the per se law: excessive alcohol consumption leading to observable signs of impairment linked to a specific blood and breath level.

The emergence of legalized marijuana in states like Washington has created a need for DUI laws to address drug impaired drivers. Zero tolerance laws are impracticable because marijuana usage, like alcohol usage, is legal. Therefore, law enforcement as well as legalization advocacy groups in Washington proposed the adoption of the alcohol “per se” law as an attempt at an analog. This means, however, that while driving above a “per se” level is illegal, driving below the level is not.

The validity of using the alcohol “per se” law as an analog rests on the ability of the law to convey a standard of conduct such that drivers who ingest marijuana can avoid criminal liability. Yet, it is here that the Washington marijuana “per se” law fails to uphold the DUI model.

The City of Kent contends that the plain language of the Washington marijuana “per se” DUI law does not require a relationship with a driver’s ability to drive.¹⁹ What the City has forgotten is that our Supreme Court has previously ruled that where the “per se” level is scientifically and unequivocally associated with impaired driving, that it

¹⁹ Brief of Respondent, page 2

must relate to the operation of a motor vehicle, even when the two hour parameter of obtaining the reading to actual driving was added in 1994.

It is equally clear to us, however, that the Legislature did not intend, by enacting this statute, to punish persons for the consumption of alcohol that was not associated with the operation of a motor vehicle. We say this despite the fact that a literal reading of [the statute] could lead a person to conclude otherwise.²⁰

In sum, because it is beyond debate that the Legislature may legitimately adopt statutes that penalize drivers for using the public's highway and roads when they are impaired by the consumption of alcohol, we are satisfied that it did not exceed its authority under the police power of the State in making it an offense for a driver to have an amount of alcohol in his or her system while driving that registers as 0.10 percent of breath or blood within two hours after driving.²¹

The city of Kent also refers to a case from Wisconsin,²² one case from Nevada,²³ one case from Georgia,²⁴ a case from Illinois,²⁵ and one case from Arizona²⁶ in an attempt to support their position that the Washington 5 ng/ml "per se" level is legal because it discourages the consumption of marijuana and driving. In Wisconsin, the recreational use of marijuana is illegal so their "zero tolerance (excluding metabolites)"

²⁰ *State v. Crediford*, 130 Wn.2d 747, 755, 927 P.2d 1129 (1996)

²¹ *State v. Crediford*, *Id.* at 755

²² Brief of Respondent, pages 15, 16

²³ Brief of Respondent, pages 16, 17, 46, 48

²⁴ Brief of Respondent, pages 17, 18, 19, 25

²⁵ Brief of Respondent, pages 19, 20

²⁶ Brief of Respondent, pages 20, 21

DUI law²⁷ does not need to relate to the ability to drive, because the recreational use of marijuana is illegal. In Nevada the recreational use of marijuana is illegal so their active marijuana of 10 urine nanograms per milliliter or 2 blood nanograms per milliliter and marijuana metabolite of 15 urine nanograms per milliliter or 5 blood nanograms per milliliter DUI law²⁸ does not have to relate to the ability to drive, because the recreational use of marijuana is illegal. In Georgia,²⁹ Illinois³⁰ and Arizona³¹ the recreational use of marijuana is illegal so their “zero tolerance (includes metabolites)” marijuana DUI law does not have to relate to the ability to drive, because the recreational use of marijuana is illegal. Thus none of the above states’ marijuana DUI laws are even comparable to the marijuana DUI law in the state of Washington³² for this court to consider in this appeal, as the City of Kent suggests. Ironically, the City of Kent mentions

²⁷ §346.63(1)(am) Wisconsin, § 346.63(1)(d) Wisconsin, *Cannabis & Cars*, 50 States Categorized (within “Items of Interest”), <http://tinyurl.com/zfze6zk>, (last visited June 22, 2016).

²⁸ 484C.110(3)(g) Nevada, 484C110(3)(h) Nevada, *Cannabis & Cars*, 50 States Categorized (within “Items of Interest”), <http://tinyurl.com/zfze6zk>, (last visited June 22, 2016).

²⁹ 40-6-391(a)(6) Georgia, *Cannabis & Cars*, 50 States Categorized (within “Items of Interest”), <http://tinyurl.com/zfze6zk>, (last visited June 22, 2016).

³⁰ §625 ILCS 5/11-501(a)(6) Illinois, *Cannabis & Cars*, 50 States Categorized (within “Items of Interest”), <http://tinyurl.com/zfze6zk>, (last visited June 22, 2016).

³¹ §28-1381(A)(3) Arizona, *Cannabis & Cars*, 50 States Categorized (within “Items of Interest”), <http://tinyurl.com/zfze6zk>, (last visited June 22, 2016).

³² *State v. Arndt*, 179 Wn.App. 373, 320 P.3d 104 (2014)

some quotes from the Georgia case of *Love v. State*,³³ but does not discuss the end result of that appeal.²⁴ In Georgia, the state allows for the lawful use of marijuana by medical marijuana patients, and such medical marijuana patients cannot be prosecuted for the “zero tolerance (includes metabolites)” DUI law but can be prosecuted if it is established that he/she was “rendered incapable of driving safely.” With that in mind the Georgia Supreme Court ultimately ruled as follows in relation to their “zero tolerance (includes metabolites)” marijuana DUI law:

In light of the rational relationship between the statute and the legitimate state purpose of public safety, and the fact that the effects of legally-used marijuana are indistinguishable from the effects of illegally-used marijuana, we are unable to hold that the legislative distinction between users of legal and illegal marijuana is directly related to the public safety purpose of the legislation on which we expounded in Division 2. Accordingly, we conclude that the distinction is arbitrarily drawn, and the statute is an unconstitutional denial of equal protection.³⁴ (Internal citation omitted)

Similarly, with the state of Arizona, the City of Kent mentions in their briefing some quotes from a 1994 case but forgets to tell this court about a subsequent 2014 Arizona case of *State ex rel Montgomery v. Harris*³⁵ and

³³ *Love v. State*, 517 S.E.2d 52, 271 Ga. 398 (1999)

³⁴ *Love v. State*, *Id.* at 402

³⁵ *State ex rel. Montgomery v. Harris*, 342 Ariz. 343, 332 P.3d 160 (2014)

its ruling as it relates to their “zero tolerance (includes metabolites)”

marijuana DUI law:

Because the legislature intended to prevent impaired driving, we hold that the “metabolite” reference in § 28–1381(A)(3) is limited to any of a proscribed substance’s metabolites that are capable of causing impairment. Accordingly, marijuana users violate § 28–1381(A)(1) if they drive while “impaired to the slightest degree,” and, regardless of impairment, violate (A)(3) if they are discovered with any amount of THC or an impairing metabolite in their body. Drivers cannot be convicted of the (A)(3) offense based merely on the presence of a non-impairing metabolite that may reflect the prior usage of marijuana. The record establishes that Carboxy-THC, the only metabolite found in Shilgevorkyan’s blood, does not cause impairment. Accordingly, we vacate the court of appeals’ opinion and affirm the trial court’s dismissal of the (A)(3) charge. (Note: The Real Party in Interest did not have a medical marijuana card in this case).³⁶

The City of Kent also writes in their brief that Colorado has a 5 ng/ml marijuana DUI law insinuating their law is a “presumption”³⁷ that the person is affected and under the influence to “the slightest degree”³⁸ at 5 ng/ml of active THC, which has been upheld by a magistrate. The Colorado marijuana DUI law³⁹ actually has two offenses, DUI (driving under the influence) and DWAI (Driving while ability impaired). DWAI

³⁶ *State ex rel. Montgomery v. Harris, Id.* at 164-165

³⁷ Brief of Respondent at page 31

³⁸ Brief of Respondent at page 30

³⁹ C.R.S. §42-4-1301, Colorado

is a lesser included offense of DUI. With a DUI (driving under the influence), the 5 ng/ml or more of active THC gives rise to a *permissible inference* that a person has consumed alcohol or one or more drugs, or a combination of alcohol and one or more drugs, that affects the person to a degree that the person is substantially incapable, either mentally or physically, or both mentally and physically, to exercise clear judgment, sufficient physical control, or due care in the safe operation of a vehicle.⁴⁰

A *permissible inference* is the same as a rebuttable presumption. Courts have previously ruled that conclusive or irrebuttable presumptions are unconstitutional and that rebuttable presumptions are constitutional.⁴¹

With the lesser included offense of DWAI (Driving while ability impaired), the 5 ng/ml of active THC *is not a permissible inference* that a person has consumed alcohol or one or more drugs, or a combination of both alcohol and one or more drugs, that affects the person to *the slightest degree* so that the person is less able than the person ordinarily would have been, either mentally or physically, or both mentally and physically, to exercise clear judgment, sufficient physical control, or due care in the

⁴⁰ C.R.S. §42-4-1301(6)(a)(IV), Colorado, C.R.S. §42-4-1301(1)(f), Colorado

⁴¹ *Sandstrom v. Montana*, 442 U.S. 510, 99 S.Ct. 2450 (1979), *County Court of Ulster County v. Allen*, 442 U.S. 140, 99 S. Ct. 2213 (1979)

safe operation of a vehicle.⁴² Once again, Colorado's "per se" marijuana DUI law is not even comparable to the marijuana DUI law in the state of Washington³² for this court to consider in this appeal, as the City of Kent suggests.

When considering the constitutionality of the "per se" 5 ng/ml of active THC with RCW 46.61.502(1)(b), it is important for this court to understand that Washington is in a small minority of states,⁴³ for comparability purposes,⁴⁴ as it relates to the definition of driving under the influence needing to be directly associated with the actual ability to drive. The language used for the definition from each state varies significantly.⁴⁵ The remaining majority of states are only concerned with the hypothetical impact that the alcohol and/or drug(s) might potentially have on an individual's ability to drive. Once again, the language used for the definition from each state varies significantly.⁴⁶

When considering the constitutionality of the "per se" 5 ng/ml of active THC with RCW 46.61.502(1)(b), it is important for this court to

⁴² C.R.S. §42-4-1301(1)(g), Colorado

⁴³ At the time this brief was written, the authors were only able to verify the status of forty-five states. States not included in this current analysis are Delaware, Iowa, Maryland, Oklahoma, and Pennsylvania.

⁴⁴ *State v. Arndt*, 179 Wn.App. 373, 320 P.3d 104 (2014)

⁴⁵ APPENDIX 2

⁴⁶ APPENDIX 2

also understand that Washington is the only state to have such a “per se” statute that also allows for the legal recreational use of marijuana. The other two states,⁴⁷ besides Colorado as discussed earlier, that allow for the legal recreational use of marijuana do not have any type of “per se” marijuana DUI law and base their conviction for a marijuana DUI solely upon whether the person is under the influence.⁴⁸ The laws of Oregon and Alaska would also seem to not be comparable to the DUI law in the state of Washington for this court to consider in this appeal.

The state with the closest “per se” 5 ng/ml of active THC law to Washington could possibly be Montana, but again there are significant differences. This Montana statute⁴⁹ was enacted in 2013, after Washington, and to date has no case law interpreting the same. While this statute’s “per se” aspect reads almost identically to Washington, an important distinction is that Montana does not allow for the legal recreational use of marijuana. This Montana statute also only deals with “per se” 5 ng/ml of active THC, does not deal with the ability to drive nor

⁴⁷ Oregon and Alaska

⁴⁸ Oregon’s definition of driving under the influence is only concerned with the hypothetical impact that the alcohol and/or drug(s) might potentially have on an individual’s ability to drive while Alaska’s definition of driving under the influence needs to be directly associated with the actual ability to drive, consistent with Washington.

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⁴⁹ 61-8-411(1)(a) Montana

reference the same, and is not even in the same statute as their ability to drive law.⁵⁰ Further, these two statutes do not even reference each other, anywhere. Due to the fact that the recreational use of marijuana is illegal and the fact that their “per se” 5 ng/ml of active THC law does not deal with one’s ability to drive, it could potentially fit the City of Kent’s ill-advised theory with Washington that the law was enacted to discourage the consumption of marijuana and driving because the law does not have to relate to the ability to drive.

As should now seem obvious, there is truly no comparable “per se” 5 ng/ml of active THC law anywhere in the United States to that of Washington.

2. The Flawed Case Made for Initiative 502’s “per se” Limit of 5 ng/ml for Active THC

The 5 ng/ml “per se” limit for active THC was advertised as operating similar to the .08 blood alcohol concentration (BAC) limit, meaning that proof of the number by itself in a DUI trial is sufficient to sustain a finding of guilt. However, contrary to some understanding, 5 ng/ml of active THC does not equate, from an impaired driving

⁵⁰ 61-8-401 Montana

standpoint, to the .08 blood alcohol standard. The studies relied upon by backers of the current “per se” law actually suggested that 6 to 8 ng/ml active THC in whole blood was the equivalent of an .05 BAC.⁵¹ It is important to note at the outset that the relationship between the 5 ng/ml “per se” active THC limit and the concept of actual driving impairment is tenuous at best. As will be seen, the self-serving conclusions gleaned from the studies relied upon by the backers of the “per se” law are flawed and misleading. At best, the data justifying the “per se” law was premature, contradictory, and in a state of flux. Current studies paint a more complete picture and necessitate a revisiting of the issue.

The current “per se” law was fueled in large part by the conclusion that accident risk increases at the 5 ng/ml active THC concentration level. This conclusion is simply not supported by any intellectually honest assessment of the data relied upon by per se backers. Of the eight studies relied upon, seven were epidemiological in nature. One such paper criticized epidemiological based studies for having shown inconsistent effects; some finding decreased or no risk, others finding increased risk on

⁵¹ Grotenhermen, F., Leson, G., Berghaus, G., Drummer, O. H., Krüger, H. P., Longo, M., Moskowitz, H., Perrine, B., Ramaekers, J. G., Smiley, A., and Tunbridge, R. (2007). *Developing limits for driving under cannabis*. *Addiction*, Dec; 102(12):1910-1917, at 1912

a dose dependent basis. Most studies were found to be fraught with methodological problems. Similarly, culpability studies suffered from contradictory results. Bottom line, epidemiological studies have been inconclusive with respect to whether cannabis use causes an increase in accidents. The issue of culpability when cannabis use related accidents do occur is equally murky.⁵² This court is to be reminded that with alcohol, after the first epidemiological study found that alcohol increased the risk of a crash in 1962 by Robert F. Borkenstein,⁵³ that the results have been repeated many more times using similar epidemiological approaches.⁵⁴ The same cannot be said to be true with cannabis.

⁵² Logan, B., Kacinko, S., Beirness, D., (May 2016). *An evaluation of Data from Drivers Arrested for Driving Under the Influence in Relation to Per Se Limits for Cannabis*. AAA Foundation for Traffic Safety, at page 6, referencing footnote 9 and Asbridge, M., (2014). *Driving after marijuana use: the changing face of 'impaired driving.'* JAMA Pediatr., vol. 168, no. 7, pp. 602-604, Jul. 2014

<https://www.aaafoundation.org/sites/default/files/EvaluationOfDriversInRelationToPerSeReport.pdf> (Last visited June 22, 2016)

⁵³ Borkenstein, R.F., Trubitt, H.J., Lease, R.J. (1962). *Alcohol and Road Traffic: Problems of Enforcement and Prosecution*, Department of Police Administration, Indiana University

⁵⁴ E.g. Borkenstein, R.F., et al. (1974). *The role of the drinking driver in traffic accidents (The Grand Rapids Study)*, Blutalkohol, 11 (Suppl):1-131.; Mounce & Pendleton, (1992). *The relationship between blood alcohol concentration and crash responsibility for fatally injured drivers*. Accid Anal Prev. Apr;24(2):210-10; Krueger et al. (1994) *Grand Rapids Effects Revisited: Accidents, Alcohol and Risk*. Center for Traffic Sciences, University of Wuerzburg, Röntgenring 11, D-97070 Würzburg.; Zador et al. (2000) *Alcohol-related relative risk of driver fatalities and driver involvement in fatal crashes in relation to driver age and gender: an update using 1996 data*. Journal of Studies on Alcohol, 61(3), 387-395; as well as many others.

While many drugs detected in crash victims are liable to impair driving skills, there is still uncertainty as to whether this translates to an increased crash risk.⁵⁵ Experimental studies have thus far failed to predict the effects of drugs under actual driving conditions. The association of drugs with crashes has been extensively investigated in epidemiological studies, but with mixed results. Moreover, while providing evidence of an association, such study methods cannot unequivocally establish that drug use causes adverse driving events.⁵⁶ It should be noted that supporters of the “per se” active THC law relied upon the Drummer paper for the proposition that drivers with active THC concentrations of 5 ng/ml or higher were at a statistically significant higher odd rate of being involved in an injury accident. This claim is a misrepresentation of the actual findings. First, the median active THC concentration for drivers in the study was 12 ng/ml. Secondly, although a small percentage of drivers who tested positive for active THC were culpable for crashes, the study indicated the results were not statistically significant.⁵⁷ Moreover, the

⁵⁵ Drummer, O. H., Gerostamoulos, J., Batziris, H., Chu, M., Caplehorn, J., Robertson, M. D., & Swann, P. (2004). *The involvement of drugs in drivers killed in Australian road traffic crashes*. *Accident, Analysis and Prevention*, 36(2):239-248, 239

⁵⁶ Drummer, *Id.* at 240

⁵⁷ Drummer, *Id.* at 241

study indicated that the findings should be used with caution⁵⁸ and that neither the size nor statistical significance of the associations observed can be used directly to infer causality.⁵⁹

The Grotenhermen⁶⁰ paper, also relied upon by “per se” active THC supporters, was highly critical of the findings, qualified as they were, reached by Drummer.⁵⁵ Grotenhermen pointed out that the Drummer study was based on just 58 cases and failed to yield a statistically acceptable basis for an enforceable per se limit. Data from a far larger number of cases would be required.⁶¹ Further studies have shown only a small increase of accident risk in active THC drivers, and the risk is only slightly higher for blood concentrations above 5 ng/ml of active THC.⁶² “Per se” backers apparently did not bother reading the Grotenhermen⁶⁰ paper before citing it. Not only did it criticize the Drummer⁵⁵ paper, but it made clear that overall current epidemiological evidence on the effects of cannabis and accident risk must be considered insufficient for deriving a

⁵⁸ Drummer, *Id.* at 244

⁵⁹ Drummer, *Id.* at 245

⁶⁰ Grotenhermen, F., Leson, G., Berghaus, G., Drummer, O. H., Krüger, H. P., Longo, M., Moskowitz, H., Perrine, B., Ramaekers, J. G., Smiley, A., and Tunbridge, R. (2007). *Developing limits for driving under cannabis*. *Addiction*, 102(12): 1910-1917.

⁶¹ Grotenhermen, *Id.* at 1912

⁶² Grotenhermen, *Id.* at 1913

science based legal limit of active THC in blood. Of course sufficiency for a politically based legal limit operates on a different analysis altogether.

The Grotenhermen⁶⁰ paper also discussed simulator and on-road studies, which attempted to examine the impact of active THC on driving. The findings merely indicated that cannabis *may* impair *some* driving skills at active THC levels as low as 6.25 ng/ml, but some skills were not impaired at levels as high as 18 ng/ml.⁶³ Further, one study discussed involved driving instructors providing blind ratings of drivers who may or may not have ingested marijuana. Instructors routinely rated drivers at 7 ng/ml of active THC as unimpaired.⁶⁴

The “per se” law backers reliance on the 2009 Ramaekers⁶⁵ paper is particularly troubling. This paper was relied upon for the conclusion that crash risk is significantly increased at 2-5 ng/ml active THC levels. Initially, it must be noted that 50 percent of the resources this paper relied upon were not peer reviewed. According to the National Academy of Sciences, the practice of using non peer reviewed studies has been

⁶³ Grotenhermen, *Id.* at 1913

⁶⁴ Grotenhermen, *Id.* at 1913

⁶⁵ Ramaekers, J. G., Berghaus, G., van Laar, M. W., Drummer, O. H. (2009). *Dose related risk of motor vehicle crashes after cannabis use: an update*. Drugs, Driving, and Traffic Safety, Birkhauser Basel pp. 477-499

condemned by the scientific community.⁶⁶ Secondly, and perhaps most importantly, the conclusions reached regarding dose related risk of motor vehicle crashes after cannabis use were deemed not acceptable as alcohol was also found in up to 80 percent of the subjects used in the study. The role of active THC alone was not determined.⁶⁷ However, the paper made clear that most culpability studies seem to indicate that cannabis alone does not increase crash culpability.⁶⁸ In fact, culpability analysis of all cases did not reveal a significant rise in crash risk for cannabis users.⁶⁹ Actual on-road driving studies produced reportable results only at the highest THC dosing levels used.⁷⁰ One has to wonder whether the “per se” law supporters bothered to read this paper before citing it as authority.

⁶⁶ *Strengthening Forensic Science in the United States: A Path Forward*, National Academy of Sciences and The National Institute of Justice (2009) <https://www.ncjrs.gov/pdffiles1/nij/grants/228091.pdf> (Last visited June 22, 2016). The need for peer-reviewed research to substantiate opinions was mentioned on many occasions throughout this report. *Id.* at pages 19, 23, 71, 81, 91, 106, 114, 124, 125, 190, 281. The authors even expressed concerns that, in the past, the assumption in court has been that whenever an expert testifies as to his/her conclusions that it is assumed his/her work (or worked relied upon) was vigorously peer reviewed. *Id.* at page 106. Ultimately the authors stated at page 23, “The research by which reliability and accuracy are determined should be peer reviewed and published in respected scientific journals.”

⁶⁷ 2009 Ramaekers, *Id.* at 479

⁶⁸ 2009 Ramaekers, *Id.* at 479

⁶⁹ 2009 Ramaekers, *Id.* at 484

⁷⁰ 2009 Ramaekers, *Id.* at 488

Backers of the per se law relied upon the Kuypers⁷¹ paper to establish that 2 ng/ml THC concentration as the breaking point at which accident risk significantly increases. What was apparently ignored was the fact that the findings admitted that absolute risk levels are likely to be affected by the low number of cases considered in the study. This was also indicated by the wide confidence intervals associated with risk assessment. In this context, the finding that crash risk increased in a concentration dependent manner was said to be more relevant in the present study than the absolute magnitude of the risk. This is just a deceptive way of saying the findings do not translate to the real world. Accordingly, they are worthless.

The 2006 Ramaekers⁷² paper was the lone non epidemiological study noted by the “per se” law backers. The study involved the dosing of 20 recreational cannabis users. Still, the findings noted that from a legal point of view, there is a great challenge of measurability and accuracy of interpretation because the association between levels of active THC and

⁷¹ Kuypers, K. P. C., Legrand, S., Ramaekers, J. G., Verstraete, A. G. (2012). *A case-control study estimating accident risk for alcohol, medicines and illegal drugs*. PLoS ONE, 7(8): e43496.

⁷² Ramaekers, J. G., Moeller, M. R., van Ruitenbeek, P., Theunissen, E. L., Schneider, E., Kauert, G. (2006). *Cognition and motor control as a function of Delta-9-THC concentration in serum and oral fluid: Limits of impairment*. Drug and Alcohol Dependence, 85(2): 114-122.

crash risk is not fully understood. A bodily fluid sample in a collision involved driver that was positive for active THC merely indicated the driver is a cannabis user. How varying levels in plasma relate to driver behavior was determined to be presently unknown. The implication of this study was that magnitude of performance impairment was not a suitable parameter for defining threshold levels of active THC in blood. Ultimately, only considering the presence of impairment or no impairment was adopted as analyzing degrees of impairment over a broad spectrum was not found to be feasible. This 2006 Ramaekers⁷² study, while helpful from a zero tolerance standpoint, offered very little support at the “per se” level.

The studies relied upon by “per se” law backers state in sum that although cognitive studies suggest that cannabis use *may* lead to unsafe driving, experimental studies have suggested the opposite effect. Epidemiological studies have themselves been inconsistent and have not come close to resolving the question. According to the Sewell⁷³ paper, future research should concentrate on resolving contradictions posed by previous studies by more tightly controlling for methodological problems.

⁷³ Sewell, R. A., Poling, J., & Sofuoglu, M. (2009). *The effect of cannabis compared with alcohol on driving*. *Am J Addict.*, 18(3): 185-193.

Experimental studies should concentrate on creating a better dose-impairment curve for active THC.

In addition to concerns over accident risk, backers of the “per se” law relied on other studies to quell fears that regular users would be subjected to unjust prosecution based on residual levels of active THC remaining in the body long after ingestion. The backers stated that even heavy users should have their active THC levels drop below 5 ng/ml if they wait a few hours before driving. While this claim seems reassuring, a closer look reveals it to be a bit of a canard. The backer’s reliance on the Karschner⁷⁴ paper is curious. This study found that active THC concentrations persist multiple days after drug discontinuation in regular users. The study involved 25 subjects, some which displayed substantial whole blood active THC concentrations after seven days of abstinence—just a bit longer than a few hours. Overall active THC concentrations were highly variable among the participants. The Grotenhermen⁶⁰ paper cited to studies finding that even in moderate users, active THC levels were recorded as high as 6.4 ng/ml 2 days after ingestion.⁷⁵ Blood samples

⁷⁴ Karschner, E. L., Schwilke, E. W., Lowe, R. H., Darwin, W. D., Pope, H. G., Herning, R., Cadet, J. L., & Huestis, M. A. (2009). *Do Δ^9 -tetrahydrocannabinol concentrations indicate recent use in chronic cannabis users?* *Addiction*, Dec. 104(12):2041-2048.

⁷⁵ Grotenhermen, *Id.* at 1911

taken from moderate users still tested positive for active THC even when long waiting periods between use and driving were observed, and most notably, after impairment of one's driving capabilities had long dissipated.

The "per se" law backer's claim that one need only wait a few hours after ingestion before driving is not only inaccurate but dangerous. Nearly every aspect of THC ingestion, impairment, and dissipation is entirely subject and dose dependent. Despite this fact, in virtually all western countries the policy regarding cannabis DUI is, in whole or in part, based on the detection of any amount of THC, whether active or metabolite. This is the case even with little scientific evidence to show that detection of active THC in bodily fluids can be taken as proof of impaired driving in any circumstance.⁷⁶

The one accurate statement made by the "per se" backers was the recognition that scientists should continue to study the relationship between marijuana use and driving impairment. This acknowledgement of the lack of evidence supporting the "per se" law can be found in section 28 of Initiative 502 and supposedly earmarks funds for further studies. Further studies are needed. So is an honest assessment of such study.

⁷⁶ 2006 Ramaekers, *Id.* at 114

3. The current science cannot establish that the 5 ng/ml “per se” limit for active THC is linked to driving impairment, a person has no meaningful way of knowing their THC concentration and a person can remain at or above the 5 ng/ml “per se” limit for days after consumption has ceased.

On July 31, 2014 Dr, Jeffrey Michael, Associate Administrator for Research and Program Development at NHTSA provided testimony before the United States House of Representatives, Committee on Oversight and Government Reform, Subcommittee on Government Operations.⁷⁷ Below is part of the discussions between former Ranking Member, Congressman Gerald Connelly, and Dr. Michael.

Connelly: We have an alcohol standard, that blood alcohol above a certain standard you are in legal jeopardy. Would you remind us what that standard is?

Dr. Michael: .08

Connelly: And that’s a national standard?

Dr. Michael: Yes it is.

Connelly: And accepted by virtually all states?

Dr. Michael: Yes

Connelly: Do we have a comparable standard for THC?

Dr. Michael: No we don’t sir. The available evidence does not support the development of an impairment threshold for THC (in blood) which would be analogous to that (of) alcohol.

⁷⁷ Committee on Oversight and Government Reform, Subcommittee on Government Operations (July 31,2014) <https://oversight.house.gov/hearing/planes-trains-automobiles-operating-stoned/> (Last visited June 22, 2016)

Connelly: And why is that Dr. Michael?

Dr. Michael: The available evidence indicates that the response of individuals to increasing amounts of THC is much more variable than it is for alcohol. So with alcohol we have a considerable body of evidence that can place risk odds at increasing levels of blood alcohol content. For example, a .08 blood alcohol content is associated with about four times the crash risk of a sober person. The average arrest is at .15 BAC; that is associated with about 15 times the crash risk. Beyond a . . . some broad confirmation that higher levels of THC are generally associated with higher levels of impairment, the . . . a more precise association of various THC levels and degrees of impairment are not yet available.

Connelly: That's really interesting. So, we don't have a uniform standard. The variability is much greater than that with other controlled substances, such as alcohol, . . . we actually can't scientifically pinpoint levels of impairment with any accuracy, . . . we would all concede that some impairment, . . . that some period of time, . . . but it's very variable, and we're not quite sure yet . . . and certainly not sure yet to adopt a uniform standard as to where is the maximum level to beyond which we know there's serious impairment.

Dr. Michael: That's fair to say, sir.

Connelly: Wow. And that's a substance one controlled substance. Well I think it underscores, . . . your testimony underscores, Dr. Michael, why we need much more science here and I think your testimony underscores, . . . it underscores your testimony that we need more science here . . . 22 states and the District of Columbia, have decided to legalize marijuana in some fashion, some of them for medical purposes, but some of them even for recreational legal purposes, and meanwhile at least on a national level we're not, on a scientific level, --- in terms of the impact of THC on operating a vehicle of any kind. Fair statement?

Dr. Michael: Yes, and of course we are pursuing that science.

Connelly: I understand. So we are pursuing it, . . . is there a goal, or an end date where we want to achieve, so by a certain date we hope to have some preliminary, . . . well, we hope to have the basis, for which to examine or adopt a preliminary standards comparable to other substances.

Dr. Michael: We have sponsored some work with standards development with regards to the measurement techniques and specific drugs to be measured in, . . . among traffic risk, and drivers involved in traffic crashes and also minimum cutoff levels that represent the analytical capabilities of existing technology. Those recommendations have been established. What we lack are thresholds of impairment that are analogous to .08 BAC. One step, that is currently ongoing, that will take us well into that direction is the crash risk study that I mentioned in my opening statement. This is the same sort of study that was done for alcohol a number of years ago which established those risk levels that I told you about. So this involves a very careful look at two groups of subjects, one group who has been involved in a crash and the other group has not, and looking for relative concentration levels, of factors that might have caused the crash, such as THC use. Those kinds of studies can develop the risk odds that could potentially be used to develop a threshold in the future.

Connelly: I'll just thank you, and I wish you luck in your research. I just think that it is amazing that with some of the hyperventilated rhetoric about marijuana that use of THC, . . . fifty years after, . . . I guess it's fifty years we've declared it a class one substance we still don't have enough data to know just how dangerous it is in operating a vehicle. . . .

A valid crash risk study as it relates to marijuana and driving impairment, as deemed necessary by the Associate Administrator for Research and Program Development at NHTSA, still does not currently exist, even as of today's date.

“Scientific conclusions are subject to perpetual revision. Law, on the other hand, must resolve disputes finally and quickly.” But because accused parties in criminal cases are convicted on the basis of testimony from forensic science experts, much depends upon whether the evidence offered is reliable. Furthermore, in addition to protecting innocent persons from being convicted of crimes that they did not commit, we are also seeking to protect society from persons who have committed criminal acts. Law enforcement

officials and the members of society they serve need to be assured that forensic techniques are *reliable*. Therefore, we must limit the risk of having the reliability of certain forensic science methodologies condoned by the courts before the techniques have been properly studied and their accuracy verified. “[T]here is no evident reason why [‘rigorous, systematic’] research would be infeasible.” However, some courts appear to be loath to insist on such research as a condition of admitting forensic science evidence in criminal cases, perhaps because to do so would likely “demand more by way of validation than the disciplines can presently offer.” [Internal citations and footnotes omitted]⁷⁸

As it relates to 5 ng/ml of active THC and driving impairment, no reliable forensic science research currently exists for this court to be able to uphold Washington’s “per se” 5 ng/ml of active THC DUI law.

Science moves inexorably forward and hypotheses or methodologies once considered sacrosanct are modified or discarded. The judicial system, with its search for the closest approximation to the truth, must accommodate this ever-changing scientific landscape.⁷⁹

This call to action is both fitting and sorely needed in the context of the issue now before this court.

Dr. Marilyn Huestis, then Chief of Chemistry and Drug Metabolism at the Intramural Research Program at the National Institute on Drug Abuse, conducted experiments with the use of marijuana and

⁷⁸ *Strengthening Forensic Science in the United States: A Path Forward*, National Academy of Sciences and The National Institute of Justice (2009), *Id.* at Page 12

⁷⁹ *State v. Behn*, 375 N.J.Super 409, 429, 868 A.2d 329 (2005).

driving simulators. The entire experiment took three years to design and administer with the Scientists studying 250 variables. They evaluated standard deviations of lateral position (lane weave, SDLP) and steering angle, lane departures/min, and maximum lateral acceleration with the National Advanced Driving Simulator. The results were finally published in September of 2015.⁸⁰ They found that cannabis did not affect the standard deviation of steering angle and lane departures but ultimately determined that 13.1 ng/ml of active THC⁸¹ approximated a 0.08⁸² g/210L of breath alcohol⁸³ concentrations and that ≥ 8.2 ng/ml of active THC was equal to a 0.05 g/210L of breath alcohol concentration.

In May of 2016 the AAA Foundation for Traffic Safety published *An evaluation of Data from Drivers Arrested for Driving Under the Influence in Relation to Per Se Limits for Cannabis*.⁸⁴ In this publication,

⁸⁰ Hartman, R. L., Brown, T.L., Milavatz, G., Spurgin, A., Pierce, R. S., Gorelick, D.A., Gaffney, G., Huestis, M. A. (2015). *Cannabis effects on driving lateral control with and without alcohol*, DRUG AND ALCOHOL DEPENDENCE, 2015 Sep 1; 154:25-37

⁸¹ While this report used $\mu\text{g/L}$ in reporting THC levels, this is the same as nanograms per milliliter (ng/ml) of whole blood, when referencing THC. RCW 46.61.506(2)(b)

⁸² The Washington level for "per se" alcohol conviction. RCW 46.61.502(1)(a)

⁸³ The Washington standard for reporting under (RCW 46.61.506(2)(a)

⁸⁴ Logan, B., Kacinko, S., Beirness, D., (May 2016). *An evaluation of Data from Drivers Arrested for Driving Under the Influence in Relation to Per Se Limits for Cannabis*. AAA Foundation for Traffic Safety, <https://www.aaafoundation.org/sites/default/files/EvaluationOfDriversInRelationToPerSeReport.pdf> (Last visited June 22, 2016)

under the heading of “*Can a science-based blood THC concentration per se threshold be established?*” the authors wrote the following:

A key issue in this study is the utility and validity of establishing a threshold concentration that could be used to establish evidence of driver impairment. In particular, because Washington, Montana and Colorado have established 5 ng/mL THC in blood as a *per se* or presumptive limit for cannabis in drivers, attention has focused on this value. A variety of measures from the DEC program evaluations were examined to determine if there were differences in the rates of occurrence of indicators of drug influence and/or impairment between drivers with blood THC concentrations above and below 5 ng/mL.

The evidence was very clear that 5 ng/mL was not a good discriminator of impairment.⁸⁵

The current scientific research does not support Washington’s “*per se*” 5 ng/ml of active THC DUI law.

The authors went on further to discuss how unfair a “*per se*” standard is for the general public:

An additional consideration that undermines the effectiveness and fairness of a *per se* standard for THC is that the cannabis user has no meaningful way of knowing what their blood THC concentration is either at the time of a driving event, such as an offense or crash, or predicting what it might be at the time of sampling, so can’t make an informed and responsible decision about whether to drive based on their concentration.⁸⁶

⁸⁵ *Supra*, at page 25

⁸⁶ *Supra*, at page 26

The unfairness and lack of any meaningful way of knowing one's THC concentration is also evident in Morris Odell's 2015 study entitled *Residual cannabis levels in blood, urine and oral fluid following heavy cannabis use*.⁸⁷ Twenty one individuals spent seven to ten days at two different 12-bed adult residential drug treatment facilities. All twenty one had active THC at the time of their first sample and fourteen were above 5 ng/ml when the first sample was taken,⁸⁸ one as soon as 1.2 hours after last reported use (subject #17) and another was above 5 ng/ml when the first sample was taken 21 hours after last reported use (subject #10). In all, fourteen individuals were at or above the "per se" 5 ng/ml of active THC at the time of their first sample. One remained at the "per se" 5 ng/ml of active THC after 129 hours (subject #7), another remained at the "per se" 5 ng/ml of active THC after 127 hours (subject #1) and another at 100 hours (subject #20). Subjects #1 and #7 spiked up in their THC level at 127 hours and 129 hours, respectively, and subjects #12 and #13 both spiked up in their THC level after seventy two hours. Subject #15 spiked up at 93 hours and then again, later on at 140 hours. Subject #13 also had a

⁸⁷ Odell, M., Frei, M., Gerostamoulos, D., Chu, M., Lubman, D. (2015). *Residual cannabis levels in blood, urine and oral fluid following heavy cannabis use*. Forensic Science International, Apr; 249:173-180, Table 3 at pages 177- 178

⁸⁸ For the convenience of the Court, we have included a chart of all the sample results and when each sample was provided for the 14 individuals that were at or above the Washington 5 ng/ml active THC "per se" level in APPENDIX 3.

“double hump” spike up in THC level at 52 hours and then again at 72 hours. What is of further interest are the varying ways that all twenty one subjects had in their elimination rates. These results are consistent with other studies as well as the information provided by the AAA Foundation for Traffic Safety this last May of 2016. If active THC remains in ones system for as long as this study suggests, what happens to the person who blindly follows the City’s experts advice and waits only four hours to be under the Washington 5 ng/ml of active THC “per se” standard? They will be innocently convicted, just as 12 of the 14 individuals referenced in the Odell⁸⁵ study above.

The current scientific research does not support that an individual has any meaningful way of knowing what their blood THC concentration would be or how long it would take to ultimately be below Washington’s “per se” 5 ng/ml of active THC DUI law.

V. CONCLUSION

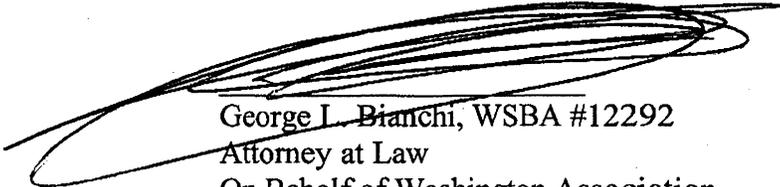
Washington is the only state to have legal recreational use of marijuana and a “per se” 5 ng/ml of active THC that must be premised upon the analog that this “per se” level must also rest on the ability of the law to convey a standard of conduct such that drivers who ingest

marijuana can avoid criminal liability, which it does not.

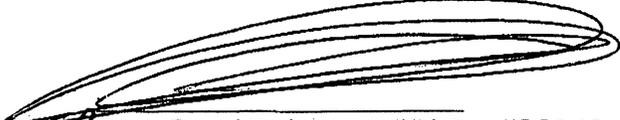
The 5 ng/ml of active THC level is not associated with when a person's ability to drive a motor vehicle is lessened in any appreciable degree⁸⁹ and the person has no way of knowing how, when or how long it might take to arrive or remain at this "per se" level of active THC.

This court must find that the "per se" 5 ng/ml of active THC level under RCW 46.61.502(1)(b) is unconstitutional.

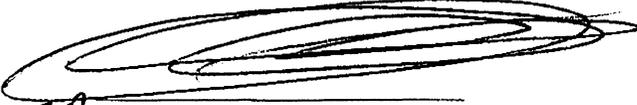
Respectfully submitted the 29 day of June, 2016.



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⁸⁹ WPIC 92.10, Washington

No. 73929-8

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BRIEF OF AMICUS CURIAE

WASHINGTON ASSOCIATION
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WASHINGTON FOUNDATION FOR CRIMINAL JUSTICE

APPENDIX 1

2013–2015 Data Analysis, Washington State Toxicology Laboratory

Analysis of suspected impaired driving cases (DUI & DRE) received at the Washington State Toxicology Laboratory (statewide data from blood results)

2013 was the first full year of marijuana reform legalizing personal possession of less than 40 grams and implementation of 5 ng/ml of Δ -9 THC as a DUI per se criminal offense.

	Total # of Impaired Driving Cases Received For Testing	Total #/% of Cases NOT Testing Positive for Marijuana (Not Even Carboxy)	Total #/% of Cases Testing Positive for Only Carboxy	Total #/% of Cases Where delta-9 THC Concentration is 5 ng/ml or HIGHER
Year				
2013	5,468	3281 (60.0%)	825 (15.1%)	720 (13.2%)
2014	6,270	3,991* (63.7%*)	520* (8.3%)	703 (11.2%*)
2015	7,044	4353* (61.8%*)	380* (5.4%)	922 (13.1%*)

*Numbers or statistics derived from numbers or statistics provided to Amicus from Dr. Fiona Couper of the Washington State Toxicology Laboratory.

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APPENDIX 2

Other state definitions for “under the influence”

States where the definition of driving under the influence needs to be directly associated with the actual ability to drive.

ALASKA: Alaska Pattern Criminal Jury Instruction 28.35.030(a) #4: A person is “under the influence” of a controlled substance [or a combination of these substances] when as a result of [its] [their] use the person's physical or mental abilities are impaired to the extent that the person no longer has the ability to [drive] [operate] a vehicle with the caution characteristic of a person of ordinary prudence who is not under the influence.

An alternative instruction, based on the language in *Gundersen v. Municipality of Anchorage*, 762 P.2d 104 (1988) has also been recognized: A person is “under the influence” of a controlled substance [or a combination of these substances] when as a result of [its] [their] use the person's physical or mental abilities are so impaired that the person no longer has the ability to drive or operate a vehicle with the caution characteristic of a person of ordinary prudence who is not under the influence.

CALIFORNIA: Pattern Jury Instruction, CALCRIM No. 2110: A person is *under the influence* if, as a result of (drinking [or consuming] an alcoholic beverage/ [and/or] taking a drug), his or her mental or physical abilities are so impaired that he or she is no longer able to drive a vehicle with the caution of a sober person, using ordinary care, under similar circumstances. The manner in which a person drives is not enough by itself to establish whether the person is or is not under the influence of (an alcoholic beverage/ [or] a drug) [or under the combined influence of an alcoholic beverage and a drug]. However, it is a factor to be considered, in light of all the surrounding circumstances, in deciding whether the person was under the influence.

GEORGIA: 40-6-391(A)(2): Under the influence of any drug to the extent that it is less safe for the person to drive.

IDAHO: *State v. Oliver*, 170 P.3d 387, 144 Idaho 722 (2007) To be under the influence, a person need only have consumed sufficient alcohol and drugs or other intoxicating substances to such extent as to influence or affect his driving of a motor vehicle.

KANSAS: Kansas Pattern Jury Instruction, PIK 4th 66.010: The defendant, while (driving)(attempting to drive), was under the influence of (alcohol)(a drug)(a combination of drugs)(a combination of alcohol and any drug[s]) to a degree that rendered (him)(her) incapable of safely driving a vehicle.

MICHIGAN: *People v. Lambert*, 395 Mich. 296, 305, 235 N.W.2d 338 (1975) Concluding that an acceptable jury instruction for “driving under the influence of intoxicating liquor” included requiring proof that the person's ability to drive was “substantially and materially affected.” vehicle.

NEVADA: *Cotter v. State*, 103 Nev. 303, 738 P.2d 506 (1987) The plain reading and logical application of the statute suggests that one must be under the influence of the controlled substance “to a degree which renders him incapable of driving safely or exercising actual physical control of the vehicle.” [Upheld in *Clark County v. Burcham*, 124 Nev. Adv. Rep. 101, 198 P.3d 326 (2008).]

NEW HAMPSHIRE: 265-A:2(I)(a) While such person is under the influence of intoxicating liquor or any controlled drug, prescription drug, over-the-counter drug, or any other chemical substance, natural or synthetic, which impairs a person's ability to drive or any combination of intoxicating liquor and controlled drugs, prescription drugs, over-the-counter drugs, or any other chemical substances, natural or synthetic, which impair a person's ability to drive.

NEW MEXICO: Uniform Jury Instructions (UJI) 14-4501 sets forth the requirements for a conviction based on driving under the influence of liquor via impairment and reads as follows: “[A]t the time, the defendant was under the influence of intoxicating liquor, that is, as a result of drinking liquor, the defendant was less able to the slightest degree, either mentally or physically, or both, to exercise the clear judgment and steady hand necessary to handle a vehicle with safety to the person and the public.” This theory of DWI is commonly referred to “slightest extent” standard. Uniform Jury Instructions (UJI) 14-4502 sets forth the essential elements required for a conviction of Driving While Under the Influence of Drugs. This instruction reads as follows: “[A]t the time, the defendant

was under the influence of drugs to such a degree that the defendant was incapable of safely driving a vehicle.”

UTAH: 41-6a-502(1)(b) A person may not operate or be in actual physical control of a vehicle within this state if the person is under the influence of alcohol, any drug, or the combined influence of alcohol and any drug to a degree that renders the person incapable of safely operating a vehicle.

WASHINGTON: WPIC 92.10 A person is under the influence of or affected by the use of *[intoxicating liquor]* *[or]* *[drugs]* if the person's ability to drive a motor vehicle is lessened in any appreciable degree. [It is not unlawful for a person to consume *[intoxicating liquor]* *[or]* *[drugs]* and drive a motor vehicle. The law recognizes that a person may have consumed *[intoxicating liquor]* *[or]* *[drugs]* and yet not be under the influence of it.]

WISCONSIN: § 346.63(1)(a) Under the influence of an intoxicant, a controlled substance, a controlled substance analog or any combination of an intoxicant, a controlled substance and a controlled substance analog, under the influence of any other drug to a degree which renders him or her incapable of safely driving, or under the combined influence of an intoxicant and any other drug to a degree which renders him or her incapable of safely driving.

States that are only concerned with the hypothetical impact that the alcohol and/or drug(s) might potentially have on an individual's ability to drive.

ARIZONA: [The legislature] has not chosen to require any finding that the person's physical ability to drive was impaired. *State v. Miller*, 226 Ariz. 190, 192, 245 P.3d 454, 456 (Ct. App. 2011).

ARKANSAS: The observations of police officers with regard to the smell of alcohol and actions consistent with intoxication can constitute competent evidence to support a DWI charge. *Blair v. State*, 288 S.W.3d 713, 103 Ark. App. 322 (2008).

CONNECTICUT: The person's physical or mental capabilities must have been impaired to such a degree that (he/she) no longer has the ability to drive a vehicle with the caution characteristic of a sober person of ordinary prudence, under the same or similar circumstances. ... Evidence of the manner in which a vehicle was operated is not determinative of whether the defendant was operating the vehicle under the influence of (an intoxicating beverage/a drug/or both). Connecticut Model Jury Instruction 8.3-1.

FLORIDA: The person is under the influence of alcoholic beverages, any chemical substance set forth in s. 877.111, or any substance controlled under chapter 893, when affected to the extent that the person's normal faculties are impaired. 316.193(1)(a).

ILLINOIS: A defendant is under the influence when, as a result of consuming alcohol or any other intoxicating substance, "his mental or physical faculties are so impaired as to reduce his ability to think and act with ordinary care." *People v. Gordon*, 378 Ill.App.3d 626, 631 (2007).

KENTUCKY: The statute means to prevent the evil effects of substandard driving resulting from the operation of motor vehicles by persons under the influence of alcohol. We take as legislative facts that: 1) alcohol (or other substances) *may* impair driving ability; and 2) a driver actually *under the influence* of such substances is impaired as a driver, conclusively, and presents a danger to the public. Proof that a driver was "under the influence" is proof of impaired driving ability. *Bridges v. Com.*, 845 S.W.2d 541, 542 (1993).

MISSISSIPPI: [C]ourts have recognized for over half a century that driving “under the influence” is commonly understood to mean driving in a state of intoxication that lessens a person's normal ability for clarity and control. *Leuer v. City of Flowood*, 744 So.2d 266, 269 (1999).

MISSOURI: DWI is defined as the operation of a motor vehicle “while in an intoxicated or drugged condition.” *State v. Honsinger*, 386 S.W.3d 827, 829-830 (Mo.App. S.D. 2012).

NEW JERSEY: The language ‘under the influence’ used in the statute has been interpreted many times. Generally speaking, it means a substantial deterioration or diminution of the mental faculties or physical capabilities of a person whether it be due to intoxicating liquor, narcotic, hallucinogenic or habit-producing drugs. *State v. Tamburro*, 68 N.J. 414, 420-422, 346 A.2d 401 (1975).

NEW YORK: [A] greater degree of impairment which is reached when the driver has voluntarily consumed alcohol to the extent that he is incapable of employing the physical and mental abilities which he is expected to possess in order to operate a vehicle as a reasonable and prudent driver. *People v. Cruz*, 48 N.Y.2d 419, 427, 423 N.Y.S.2d 625, 628 (1979).

NORTH CAROLINA: Jury Instruction G.S. 20-138.1: [Was under the influence of an impairing substance. (*Name substance involved*) is an impairing substance. The defendant is under the influence of an impairing substance when the defendant has taken (or consumed) a sufficient quantity of that impairing substance to cause the defendant to lose the normal control of the defendant's bodily or mental faculties, or both, to such an extent that there is an appreciable impairment of either or both of these faculties.]

NORTH DAKOTA: “The expression ‘under the influence of intoxicating liquor’ simply means having drunk enough to disturb the action of the physical or mental faculties so that they are no longer in their natural or normal condition...” *State v. Hanson*, 73 N.W.2d 135, 139 (1955).

OHIO: "Under the influence" means that the accused consumed some alcohol, drug of abuse, or combination of alcohol and a drug of abuse, whether mild or potent, in such a quantity, whether small or great, that it adversely affected and noticeably impaired the accused's actions, reaction, or mental processes under the circumstances then existing and deprived

the accused of that clearness of intellect and control of herself which she would otherwise have possessed. Ohio Jury Instruction, Section 545.25.

OREGON: "Under the influence of intoxicants" means that [defendant's name]'s physical or mental faculties were adversely affected by the use of intoxicants to a noticeable or perceptible degree. Oregon Pattern Jury Instruction UCrJI 2705.

RHODE ISLAND: Further, in *State v. Sahady*, 694 A.2d 707, 709 (R.I.1997), we held that the terms "intoxicated" and "under the influence," as used in G.L.1956 § 11-47-52, were not unconstitutionally vague. After observing that "the term 'intoxication' has long been defined by this court in the criminal context," 694 A.2d at 709, we noted, "'Intoxication comprehends a situation where, by reason of drinking intoxicants an individual does not have the normal use of his physical or mental faculties, thus rendering him incapable of acting in a manner in which an ordinarily prudent and cautious man, in full possession of his faculties, using reasonable care, would act under like conditions.'" *State v. DiCicco*, 707 A.2d 251 (R.I. 1998).

SOUTH DAKOTA: It is not essential to the existence of the offense that the driver of the vehicle should be so intoxicated that the vehicle cannot be safely driven. The expression "under the influence of an alcoholic beverage" covers not only all well-known and easily recognized conditions and degrees of intoxication, but any abnormal mental or physical condition which is the result of indulging in any degree in an alcoholic beverage and which tends to deprive the driver of that clearness of intellect and control of oneself which the driver would otherwise possess. *State v. Masteller*, 86 S.D. 514, 198 N.W.2d 503 (S.D. 1972); *State v. Dale*, 66 S.D. 418, 284 N.W. 770 (1939).

TENNESSEE: §55-10-401(1) Under the influence of any intoxicant, marijuana, controlled substance, controlled substance analogue, drug, substance affecting the central nervous system or combination thereof that impairs the driver's ability to safely operate a motor vehicle by depriving the driver of the clearness of mind and control of himself which he would otherwise possess.

TEXAS: A person commits an offense if the person is intoxicated while operating a motor vehicle in a public place. Sec. 49.04(a). "Intoxicated" means: not having the normal use of mental or physical faculties by reason of the introduction of alcohol, a controlled substance, a drug, a dangerous

drug, a combination of two or more of those substances, or any other substance into the body.” Sec. 49.01(2)(A).

VIRGINIA: Virginia courts have defined impaired as “when that person has consumed enough alcoholic beverages to so affect his manner, disposition, speech, muscular movement, general appearance or behavior, as to be apparent to observation.” *Gardner v. Com.*, 195 Va. 945, 954, 81 S.E.2d 614, 619 (1954).

WEST VIRGINIA: Where there is evidence reflecting that a driver was operating a motor vehicle upon a public street or highway, exhibited symptoms of intoxication, and had consumed alcoholic beverages, this is sufficient proof. *Cf. Montgomery v. State*, 215 W.Va. 511, 600 S.E.2d 223 (2004).

WYOMING: In *Goich v. State*, 80 Wyo. 179, 339 P.2d 119 (Wyo.1959), the Court held that the phrase “under the influence of intoxicating liquor” means that “a person has taken into his stomach a sufficient quantity of intoxicating liquor so as to deprive him of the normal control of his bodily or mental faculties.”

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WASHINGTON ASSOCIATION
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WASHINGTON FOUNDATION FOR CRIMINAL JUSTICE

APPENDIX 3

Summary of Table 13
Odell et al. (2015)

*Residual cannabis levels in blood, urine and oral fluid
following heavy cannabis use.*

Odell, M., Frei, M., Gerostamoulos, D., Chu, M., Lubman, D. (2015). *Residual cannabis levels in blood, urine and oral fluid following heavy cannabis use*. *Froensic Science International* 249: pages 173-180, from Table 3 on pages 177- 178

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7
#1	3.5 hours 15 ng	30 hours 6 ng	54 hours 7 ng	78 hours 6 ng	103 hours 4 ng	127 hours 5 ng	150 hours 4 ng
#3	12 hours 6 ng	38 hours 6 ng	62 hours 6 ng	83 hours 4 ng			
#4	4.5 hours 5 ng	26 hours 2 ng	55 hours 2 ng	76 hours 1 ng	98 hours 1 ng	122 hours 1 ng	145 hours 1 ng
#6	43 hours 10 ng	25 hours 6 ng	49 hours 4 ng	72 hours 2 ng	97 hours 2 ng	119 hours 2 ng	144 hours 2 ng
#7	3.1 hours 14 ng	28 hours 5 ng	51 hours 4 ng	74 hours 4 ng	96 hours 3 ng	129 hours 5 ng	145 hours 4 ng
#8	12 hours 13 ng	33 hours 6 ng	60 hours 6 ng	81 hours 4 ng	106 hours 3 ng	130 hours 3 ng	155 hours 3 ng
#9	5.2 hours 6 ng	26 hours 2 ng	49 hours 2 ng	74 hours 2 ng	96 hours 2 ng	125 hours 2 ng	
#10	21 hours 6 ng	59 hours 6 ng					
#12	12 hours 11 ng	61 hours 7 ng	83 hours 9 ng				
#13	2.5 hours 15 ng	21 hours 2 ng	52 hours 4 ng	72 hours 11 ng	95 hours 2 ng	115 hours 2 ng	141 hours 2 ng

Odell, M., Frei, M., Gerostamoulos, D., Chu, M., Lubman, D. (2015). *Residual cannabis levels in blood, urine and oral fluid following heavy cannabis use*. *Froensic Science International* 249: pages 173-180, from Table 3 on pages 177- 178 (continued)

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7
#15	2.2 hours 9 ng	19 hours 4 ng	45 hours 2 ng	74 hours 1 ng	95 hours 3 ng	115 hours 2 ng	140 hours 3 ng
#17	1.2 hours 7 ng	26 hours 2 ng	53 hours 2 ng	76 hours 1 ng	105 hours 2 ng	124 hours 2 ng	
#18	8.5 hours 14 ng	31 hours 13 ng					
#20	3.5 hours 7 ng	28 hours 7 ng	51 hours 7 ng	74 hours 6 ng	100 hours 5 ng		

IN THE COURT OF APPEALS, DIVISION ONE
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CITY OF KENT,)
Respondent/Plaintiff)
v.) DECLARATION OF
COREY COBB,) SERVICE
Appellant/Defendant)

I declare under penalty of perjury under the laws of the State of Washington that on 29th day of June, 2016 that I sent the following two documents(s) through ABC Legal Messenger for service upon Counsel for Appellant and Counsel for Respondent to the address below:

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- (1) Brief of Amicus Curiae, Washington Association of Criminal Defense Lawyers and Washington Foundation for Criminal Justice with APPENDIX 1, APPENDIX 2 and APPENDIX 3.
- (4) Motion to File Over-length Brief

SIGNED AT BELLEVUE, WASHINGTON this 29 day of June, 2016.



Patti Willkens, Legal Assistant
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