Know Your Limit: How Legislatures Have Gone Overboard with Per Se Drunk Driving Laws and How Men Pay the Price

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INTRODUCTION

Many tasteless jokes center around the assertion that “women can’t drive.” While the belief that women are inferior drivers may have little basis in fact, with severe modification this notion can be morphed into a much more tenable claim. Were one to declare that “women, on average, can’t drive as well as men at similar blood alcohol concentrations,” one would have a claim strongly supported by scientific fact, if a less convenient punch line. Although the body of research on the subject could benefit from some expansion, those studies that do exist strongly indicate that, generally, the effects of alcohol on a woman at a given Blood Alcohol Concentration (BAC) serve to impair her ability to drive more than they would a man.

The problem of drunk driving in the United States is assuredly not an appropriate subject for jokes. In 2007, over 15,000 people died

2. This is also referred to as “blood alcohol content” or “blood alcohol level.”
3. See infra Part II (providing a detailed description of this evidence).
in alcohol-related car crashes. Although this statistic may overstate the problem to some degree, as these fatalities are not necessarily caused by drunk drivers, alcohol is still certainly responsible for a large amount of death and injury and is undoubtedly a serious danger. In 2007, police arrested more than 1.4 million people for driving under the influence of alcohol or other substances. While that may be a substantial number, it comprises less than one percent of the approximately 150 million self-reported adult drunk driving incidents in the United States each year.

Through the years, courts have become increasingly cognizant of the dangers drunk drivers pose. Legislators too have sought various means to prevent and punish drunk driving, one of the most recent being 0.08% per se drunk driving statutes. Conventional drunk driving statutes penalized driving while intoxicated, necessitating proof of actual impairment in order to sustain a conviction. Per se statutes, on the other hand, make driving at a given BAC a crime in itself, thus requiring no proof that an individual was actually impaired while driving.

5. Id. Crashes are said to be “alcohol related” if at least one driver or non-occupant is found to have a BAC of 0.01 or higher. Therefore, if an accident merely involved a driver or even a pedestrian that had consumed any alcohol, a fatality stemming from that crash would be considered alcohol related, regardless of causation. Id.
6. See id. (outlining statistics regarding alcohol-related motor vehicle fatalities).
9. See, e.g., Michigan Dep’t of State Police v. Sitz, 496 U.S. 444, 451 (1990) (“No one can seriously dispute the magnitude of the drunken driving problem or the States’ interest in eradicating it. Media reports of alcohol-related death and mutilation on the Nation’s roads are legion.”); Welsh v. Wisconsin, 466 U.S. 740, 755 (1984) (Blackmun, J., concurring) (urging acknowledgment of “the continuing slaughter upon our Nation’s highways, a good percentage of which is due to drivers who are drunk or semi-incapacitated because of alcohol or drug ingestion”); South Dakota v. Neville, 459 U.S. 553, 558 (1983) (detailing the “tragic frequency” of “[t]he carnage caused by drunk drivers”); Breithaupt v. Abram, 352 U.S. 432, 439 (1957) (“The increasing slaughter on our highways . . . now reaches the astounding figures only heard of on the battlefield.”) (citation omitted); McLean v. Moran, 963 P.2d 1306, 1307 (9th Cir. 1992) (“We recognize the tremendous toll of death, injury, and grief caused by those who, under the influence of alcohol or drugs, drive steel juggernauts capable of high speeds and devastating destruction.”).
13. Virginia’s drunk driving statute is a representative example:
   It shall be unlawful for any person to drive or operate any motor vehicle, engine or train (i) while such person has a blood alcohol concentration of
Per se statutes may have many positive effects, but in light of the scientific evidence indicating that women are generally more impaired than men at the same BAC,\(^{14}\) they also create the potential for discrimination against men. The use of the same standard for two physiologically different classes results in an uneven impact of the law. An average man and woman, both driving with the same BAC, are not likely to be equally dangerous, yet the law treats them as such. Per se statutes make actual impairment irrelevant with regard to criminal liability. As a result, men, as compared to women, may be paying a steep price.

That price might be acceptable if per se laws were sufficiently effective. Unfortunately, the extent to which per se laws accomplish their goal is less certain than some would have us believe.\(^{15}\) This raises the question as to whether per se drunk driving statutes benefit society, by saving lives, so as to justify their discriminatory impact on men. This Note argues that they do not.

Part I recounts the history of drunk driving statutes and looks specifically at how per se statutes have been dealt with in the courts. Part II explores the scientific evidence that women are more impaired, on average, at a given BAC than men, as suggested by both laboratory studies and real-world crash data. Part III lays out how these physiological differences result in discrimination and examines the effectiveness of per se statutes in order to weigh the costs of per se statutes against their purported benefits. Part IV proposes alternatives to per se laws that can be enacted today and planned for in the future.

I. HISTORY OF THE BAC AND THE LAW

A. What is BAC?

Blood Alcohol Concentration (BAC) is, as the name suggests, the amount of alcohol in the blood.\(^{16}\) It is measured as weight per unit

\(^{14}\) See infra Part II for an extensive survey of this evidence.


of volume and is most often converted to a percentage. For instance, if a person’s BAC was measured at 0.10%, this would indicate that one tenth of one percent of his blood consisted of alcohol.

After one ingests alcohol, “it first travels to the stomach, where a small amount might be absorbed through the stomach lining into the bloodstream. After a certain length of time, the alcohol passes into the small intestine from which it is rapidly absorbed into the blood and carried throughout the body.” It is when the alcohol arrives in the brain that it starts to have an effect, and signs associated with alcohol intoxication become observable. The more alcohol in the blood, the greater the effects, and in this way, an individual’s BAC can provide some indication as to how impaired that person may be.

B. Early Statutory History of BAC

For well over a century, those concerned with vehicular safety have recognized at least some degree of the danger associated with the operation of vehicles while drunk. As early as the nineteenth century, the railroad industry instituted sanctions for operating vehicles under the influence of alcohol. The first arrest for driving an automobile while drunk was of a London taxi driver in 1897. General societal concern over drunk drivers started becoming evident near the turn of the century. One editorialist stated in 1904, “[i]nebriates and moderate drinkers are the most incapable of all persons to drive motor wagons. The general palsy and diminished power of control of both the reason and the senses are certain to invite disaster in every attempt to guide such wagons.” In 1910, New York became the first state to adopt a drunk driving law. Other states followed suit thereafter.

17. Id.
18. Id.
20. Id. at 146 (citation omitted).
23. Id.
24. History Channel, This Day in History: First Drunk Driving Arrest, http://www.history.com/this-day-in-history.do?action=VideoArticle&id=52850 (last visited Jan. 6, 2010). The driver was fined twenty-five schillings. Id.
27. Id.
increasingly clear that legislation was necessary for a safe coexistence of alcohol and automobiles in society.\textsuperscript{28}

It was not until the early 1900s that the first scientific studies began to shed light on alcohol’s effects on human physiology.\textsuperscript{29} The earliest drunk driving statutes included no legal limit on BAC, only a prohibition on driving while impaired.\textsuperscript{30} As our understanding of alcohol’s interaction with blood and the body developed, states began to incorporate the BAC into statutes.\textsuperscript{31} Indiana was the first to do so in 1939.\textsuperscript{32} This first wave of legislation did not create \textit{per se} statutes, but rather allowed for the use of BAC as evidence of intoxication; subsequent laws created a presumption of intoxication at a given BAC.\textsuperscript{33}

\textbf{C. The Introduction of Per Se Laws}

Few, if any, scientific studies had as much impact on the development of drunk driving laws as the Grand Rapids Study conducted in 1964.\textsuperscript{34} The study surveyed more than 17,000 drivers at roadblocks and compiled data which was then compared to data from drivers who had been involved in crashes.\textsuperscript{35} The study was conclusive in determining that, generally speaking, as BAC increased, the chances of involvement in an accident increased as well.\textsuperscript{36} The Grand Rapids Study was also successful in legitimizing the Breathalyzer, an invention of the study’s conductor, Robert Borkenstein.\textsuperscript{37} A device for measuring BAC through one’s breath, the Breathalyzer provided the convenience and ease of use that blood tests could not.\textsuperscript{38} The Breathalyzer would be key to the enforcement of \textit{per se} drunk driving laws that followed as a result of the study.\textsuperscript{39}

\begin{itemize}
  \item 28. GIRARD, \textit{supra} note 22, at 311.
  \item 30. Nationmaster.com, \textit{supra} note 11.
  \item 31. GIRARD, \textit{supra} note 22, at 311.
  \item 32. \textit{Id}.
  \item 33. \textit{Id}.
  \item 34. \textit{See id.} (indicating the significance of the Grand Rapids Study and its lead author Robert F. Borkenstein, who also invented the Breathalyzer); \textit{see also} R.F. BORKENSTEIN \textit{ET AL., THE ROLE OF THE DRINKING DRIVER IN TRAFFIC ACCIDENTS} (Alan Dale ed., 1964) (presenting the findings of the Grand Rapids study).
  \item 35. GIRARD, \textit{supra} note 22, at 311.
  \item 36. \textit{Id}.
  \item 37. \textit{Id}.
  \item 38. \textit{Id}.
  \item 39. \textit{Id}.
\end{itemize}
In 1966, only two years after the study was published, the first per se drunk driving laws were adopted in the United States. Originally formulated in Sweden and Norway in the late 1930s and 1940s, these new laws shifted the means by which prosecutors needed to prove intoxication. Rather than require the prosecution to show actual impairment, these new statutes made having a certain BAC a crime. Thus, prosecutors were only required to prove that a certain ratio of alcohol to blood existed in the driver. Lauded, perhaps undeservedly, for its deterrent effects, this type of drunk driving law was dubbed the “Scandinavian Model” and drew the attention of Americans. In the wake of the Grand Rapids Study, and given the availability of the convenient Breathalyzer, the Scandinavian Model eventually made its way to the United States.

Anti-drunk driving organizations such as Mothers Against Drunk Driving (MADD) worked to make the prevention of drunk driving a national issue and led the push, beginning in the 1980s, to lower the per se drunk driving statutes’ legal BAC limit to 0.08%. Prior to this time, not all states had per se statutes, and those that did typically set the upper limit as high as 0.15%. Though technically each state has discretion with regard to the drunk driving laws it enacts, the anti-drunk-driving lobby was successful at convincing the federal government to require states to enact 0.08% BAC per se statutes in order to receive federal highway funding. By July of 2004, every

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41. *Id.*
42. *Id.*
43. *Id.*
44. H. Laurence Ross, The Scandinavian Myth: The Effectiveness of Drinking-and-Driving Legislation in Sweden and Norway, 4 J. LEGAL STUD. 285, 285 (1975). After visiting Norway and Sweden, the author published this study, stating, “The visit found that the widespread belief in the deterrent effect of the Swedish and Norwegian laws has little solid support.” *Id.*
46. GIRARD, supra note 22, at 311.
48. GIRARD, supra note 22, at 311-12. This goal has been decidedly accomplished. As one justice noted, “[u]ncompromising enforcement of laws designed to rid our highways of the scourge of the drunk driver ranks only slightly behind the veneration of motherhood and probably slightly ahead of a robust hankering after apple pie in the hierarchy of values firmly embedded in our culture.” State v. Tischio, 527 A.2d 388, 397 (N.J. 1987) (Clifford, J., dissenting).
49. GIRARD, supra note 22, at 312.
50. *Id.* at 311. Some statutes also included a lower limit under which there was a presumption of no impairment. Hoffman, *supra* note 40, at 349.
51. GIRARD, supra note 22, at 312. Other drinking-related legislative conditions were included as well, such as setting the legal drinking age at 21, a requisite with a more
state, the District of Columbia, and Puerto Rico had enacted 0.08% BAC per se drunk driving laws.\textsuperscript{52}

\textbf{D. Per Se Laws in the Courts}

Since these laws have been enacted, per se drunk driving statutes have been challenged on a variety of constitutional grounds and have been consistently upheld as constitutional.\textsuperscript{53}

\textit{1. Burg v. Municipal Court}

One representative example is the litigation that took place in California after that state adopted per se legislation in 1981.\textsuperscript{54} As with many states, California’s original per se statutes set the limit at 0.10% and lowered it some years later.\textsuperscript{55} Two years after the original legislation was passed, the state supreme court considered the constitutionality of California’s per se statute in \textit{Burg v. Municipal Court}.\textsuperscript{56}

The court first made clear its recognition of the severity of the issue, stating, “[t]he drunk driver cuts a wide swath of death, pain, grief, and untold physical and emotional injury across the roads of California and the nation.”\textsuperscript{57} The court then noted that it “[had] no difficulty concluding that the 0.10[%] figure . . . is rationally related to the exercise of the state’s legitimate police power.”\textsuperscript{58}

\textit{a. Due Process}

The court then considered a due process argument against the statute.\textsuperscript{59} The appellant argued that the court should find the statute tenuous connection to highways than the requirement of the 0.08% per se drunk driving statute. Although some argue that these conditions unjustifiably infringe on state sovereignty, they have been decisively ruled constitutional. South Dakota v. Dole, 483 U.S. 203, 206 (1987) (“Here, Congress has acted indirectly under its spending power to encourage uniformity in the States’ drinking ages. As we explain below, we find this legislative effort within constitutional bounds even if Congress may not regulate drinking ages directly.”).


\textsuperscript{55} \textit{Id.} at 736; NAT’L CONF. OF STATE LEGISLATURES, \textit{supra} note 52.

\textsuperscript{56} Burg, 673 P.2d at 736.

\textsuperscript{57} \textit{Id.} at 734.

\textsuperscript{58} \textit{Id.} at 738-39.

\textsuperscript{59} \textit{Id.} at 739.
unconstitutional given an appropriate application of the “void-for-vagueness” doctrine. Although this argument had been made previously and was rejected by the courts of other states, the appellant argued that those prior decisions “fail[ed] to sufficiently analyze the issues and justify the results.” As the court explained, “[t]oday it is established that due process requires a statute to be definite enough to provide (1) a standard of conduct for those whose activities are proscribed and (2) a standard for police enforcement and for ascertaint-ment of guilt.” The appellant argued that the statute violated the first of these two prongs, the “fair notice” requirement, by setting an exact limit of 0.10%. As individuals do not typically know what their BAC is at any given time while drinking or when they begin to drive, the appellant argued, they never know when they may be committing a criminal act. The court rejected this argument as well, and noted that, generally, knowing that if you drink before driving you run the risk of breaking the law sufficiently satisfies the notice requirement as it has traditionally been interpreted.

2. Breathalyzer Reliability

The reliability of the Breathalyzer has historically served as further grounds to challenge per se laws. These challenges, however,

60. Id.
61. See, e.g., Van Brunt v. State, 646 P.2d 872, 873 (Alaska Ct. App. 1982) (“All that need be shown in order to secure a conviction for driving while intoxicated on an under the influence theory is that the defendant intentionally drank and intentionally drove; it need not be shown that the defendant knew that he was in fact under the influence of intoxicating liquor.”); Fuenning v. Super. Ct., 680 P.2d 121, 127-29 (Ariz. 1983) (“Where a statute gives fair notice of what is to be avoided or punished, it should not be declared void for vagueness simply because it may be difficult for the public to determine how far they can go before they are in actual violation.”); Roberts v. State, 329 So.2d 296, 297 (Fla. 1976) (rejecting a void-for-vagueness argument that claims “that consumers... are unable to determine how much alcohol they may consume before their alcohol blood level will make it unlawful for them to drive” as well as one that suggested that since the state statute failed “to state whether the prohibited percentage of alcohol in the driver’s bloodstream is by weight or by volume,” it is void); Greaves v. State, 528 P.2d 805, 807-08 (Utah 1974) (“We can see no reason why a person of ordinary intelligence would have any difficulty in understanding that if he has drunk anything containing alcohol, and particularly any substantial amount thereof, he should not attempt to drive or take control of a motor vehicle.”); State v. Franco, 639 P.2d 1320, 1324 (Wash. 1982) (basing its decision that the statute at hand was not void-for-vagueness because “it is reasonable to assume that the physical and mental condition of a driver with such a high level of alcohol is impaired”).
63. Id.
64. Id. at 740.
65. Id.
66. Id. at 741.
have time and again been rejected. For example, a series of three cases, State v. Johnson, State v. Lentini, and State v. Downie, effectively “[foreclosed] scientific attacks on the Breathalyzer” in New Jersey. This occurred despite recognition by the court in Downie “that 2.3% of the population could be wrongfully convicted of a per se [sic] violation” due to faulty assumptions used in the calibration of the Breathalyzer. These decisions solidified New Jersey’s legal acknowledgment of the Breathalyzer’s dependability, forcing lower New Jersey courts to take judicial notice and no longer accept scientific attacks on the test’s accuracy.

3. Blood Alcohol Content vs. Breath Alcohol Content

The distinction between blood alcohol content and breath alcohol content has also prompted litigation. Washington, for instance, amended its per se statute in 1986 to penalize having a breath alcohol content of 0.10% rather than a certain blood alcohol content. Prior to the change, breath alcohol content, as ascertained by a Breathalyzer test, was merely evidence of the blood alcohol level. Defendants would typically introduce evidence that attempted to show that their breath alcohol content was not an accurate indicator of their blood alcohol content. The amended law directly made having a 0.10% breath alcohol content illegal, eliminating the need for prosecutors to belie claims that a defendant’s blood alcohol content was not reflected by his breath alcohol content.

Two years after the amendment, the state supreme court considered constitutional challenges to the law in State v. Brayman. The appellant made claims of due process and equal rights violations, both of which the court found to be without merit. Additionally, the defendant presented evidence of questionable legislative intent. The evidence presented showed that “one senator, a representative from the [state name], voted for the passage of the legislation.”

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71. Id. at 447.
72. Id. at 448.
74. Id.
75. Id.
76. Id.
77. Id. at 296-97.
78. Id. at 297-99, 301-03.
79. Id. at 305-06.
Washington Association of Prosecuting Attorneys, and a Washington State Patrol sergeant . . . [made comments] to the effect that the Legislature meant to eliminate defense experts’ testimony about blood-breath ratios, confusing the jury, and dragging things out.” 80 This evidence, however, did not factor into the court’s decision. 81

4. An Exception

One exception to the continual affirmation of the constitutionality of these laws occurred in Virginia in 2005 when Judge Ian M. O’Flaherty of the Fairfax County District Court dismissed three drunk driving cases on the ground that the per se law was unconstitutional, as it violated “a defendant’s right to the presumption of innocence.” 82 Although Judge O’Flaherty’s ruling was made orally and thus his rationale was not preserved for posterity, it is possible that O’Flaherty, in making this decision, considered the reliability of the test as an indicator of impairment at the time the offense was committed. 83 O’Flaherty cited Francis v. Franklin, a United States Supreme Court case from the 1980s holding that each element of a crime must be proved beyond a reasonable doubt. 84 Yet the defense lawyer who argued the case before O’Flaherty contended that the per se law was problematic because it presumed intoxication at 0.08%. 85 Additionally, the law presumed that the results of a BAC test were indicative of BAC levels at the time of the accident, despite being taken hours later. 86 These factors have led some scholars to disagree with the holding of Francis. A.E. Dick Howard, Professor of Constitutional Law at the University of Virginia, stated, “I think the Francis case simply does not apply, not like this.” 87

As this was a district court ruling establishing no formal precedent, the decision has yet to inspire similar decisions. Some believe this decision has, however, opened the door to the argument that the law could be found unconstitutional. As Steven Oberman, chairman of the DUI Defense Committee at the National Association of Criminal Defense Lawyers, stated, “[t]here will be similar motions everywhere,

80. Id. at 305.
81. Id. at 305-06.
83. Id.
84. Francis v. Franklin, 471 U.S. 307, 313 (1985); see also Stockwell & Nguyen, supra note 82, at B1 (restating the Francis ruling).
86. Id.
87. Id.
no doubt about that. . . . There are lawyers everywhere who are looking at this issue again in a different light.” 88 Howard, however, dismissed the decision as an “idiosyncratic ruling” and noted that if O’Flaherty’s view was adopted, it “could create massive upheaval and seismic shock in courtrooms across the country.” 89 All indications are that O’Flaherty’s decision will be perceived as nothing more than a misguided anomaly, and will not result in a shift away from viewing per se drunk driving laws as constitutional.90

Per se statutes have been challenged on a multitude of other grounds, including an equal protection91 argument and a suggestion that the statutes fail to require actual knowledge of the condition they proscribe. 92 Each of these arguments, however, has also ultimately failed.93 Despite O’Flaherty’s isolated ruling, the constitutionality of typical per se drunk driving statutes is no longer seriously in dispute.

II. DISCRIMINATION: SAME STANDARD, DIFFERENT PHYSIOLOGIES

Per se statutes are predicated on the assumption that everyone, upon reaching a certain BAC, is too impaired to drive.94 In reality, a multitude of factors determine not only what a person’s BAC will be after consuming a given amount of alcohol, but more importantly, how impaired that individual will be after attaining a given BAC. One of these factors is gender.95

Physiological responses to alcohol are complicated and it can be difficult to differentiate the effects of alcohol on each gender.96 While there is not an overwhelming number of scientific studies examining the effects on each gender at given BACs, the studies that have been completed and the data that is available all support the view that differences exist and are imminently observable.97 Studies have shown

88. Id.
89. Id.
90. Id.
91. E.g., State v. Watts, 601 S.W.2d 617, 618, 621 (Mo. 1980); State v. Gerdes 252 N.W.2d 335, 335-36 (S.D. 1977).
93. E.g., Van Brunt, 646 P.2d at 873; Burg, 673 P.2d at 740-42; Watts, 601 S.W.2d at 621; Gerdes, 252 N.W.2d at 336.
95. Many academics use the term “gender” to refer to social and cultural traits associated with each sex. Throughout this Note, however, the term “gender” is used to refer exclusively to biological sex, unless otherwise noted.
97. Id. at 113-14, 120.
that the physiological effects on women are different from those of men at moderate and high BACs, with women performing far worse at various laboratory tests evaluating motor skills and response to visual stimuli at elevated BACs.\(^{98}\) Multiple studies have also been conducted which show statistically significant differences in risk between men and women at certain BACs.\(^{99}\) Additionally, breath testing machines may report artificially high BACs in men based on faulty assumptions regarding levels of plasma in the blood.\(^{100}\) Taken together, this evidence strongly supports the contention that reliance solely on the current uniform BAC level of 0.08% is an unacceptably inaccurate means of determining driver impairment due to unaccounted for discrepancies arising from gender differences.

In the mid to late nineties, as many state legislatures were debating lowering the legal limit of their \textit{per se} drunk driving statutes to 0.08%,\(^{101}\) the National Institute on Alcohol Abuse and Alcoholism (NIAAA) reported several findings that should have given lawmakers pause.\(^{102}\) The NIAAA is part of the National Institutes of Health (NIH), an agency of the United States Department of Health and Human Services.\(^{103}\) The NIH bears the primary responsibility for facilitating, funding, and compiling biomedical and health-related research for the United States government.\(^{104}\) The NIAAA, the institute dedicated to the study of alcohol and its effects, funds a significant amount of research conducted on such topics in the United States.\(^{105}\)

A review of the studies conducted on the issue clearly indicates that, generally, women are more impaired than men at the same BAC.\(^{106}\) In the laboratory setting, when asked to respond to visual

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99. See Paul L. Zador, \textit{Alcohol-Related Relative Risk of Fatal Driver Injuries in Relation to Driver Age and Sex}, 52 \textit{J. Stud. on Alcohol} 302, 302, 308 (1991) (discussing gender-related alcohol studies); Waller & Blow, supra note 96, at 113-14 (same).


105. NIAAA, supra note 103.

106. Elliott et al., supra note 98, at 252.
stimuli, the performance of women lagged well behind that of men.\textsuperscript{107} An additional study indicated that alcohol has a more significant effect on the visual functioning of women than of men.\textsuperscript{108} This study employed simulated traffic signs shown to subjects on slides;\textsuperscript{109} women had more difficulty determining the presence or absence of a sign while under the influence of alcohol than did men.\textsuperscript{110} Women also performed poorly in comparison to men in tasks requiring dexterity.\textsuperscript{111} An additional study of performance on an electronic grid board manual assembly task by college students in their early twenties also showed women to be more affected by alcohol over a range of BACs.\textsuperscript{112} Another study had a doctor judge individuals' fitness to drive after consuming alcohol, and a substantially lower percentage of women than men were judged fit to drive at the same BAC.\textsuperscript{113}

Evidence of more severe impairment of women relative to men arises outside of the laboratory as well.\textsuperscript{114} None other than the watershed Grand Rapids study was the first to report that women had a greater risk of crashing at a given BAC.\textsuperscript{115} This initial study indicated that men's likelihood of involvement in a crash doubled at a BAC of 0.08\%, while women at the same BAC increased their risk by nine times.\textsuperscript{116} While at least some portion of this higher relative risk may be attributable to women being generally less experienced drivers at the time, the study having been conducted in 1964,\textsuperscript{117} studies conducted since then have consistently confirmed a higher crash risk for women at the same BAC as men.\textsuperscript{118}

\textsuperscript{107} C.W. Erwin et al., \textit{Alcohol-Induced Drowsiness and Vigilance Performance}, 39 J. STUD. ON ALCOHOL 505, 509, 512 (1978).
\textsuperscript{109} \textit{Id.} at 286-87.
\textsuperscript{110} \textit{Id.} at 287-88.
\textsuperscript{111} D.L. Price et al., \textit{Gender, Alcohol, Pacing, and Incentive Effects on an Electronics Assembly Task}, 29 ERGONOMICS 393, 397-403 (1986).
\textsuperscript{112} \textit{Id.}
\textsuperscript{113} Waller & Blow, \textit{supra} note 96, at 113.
\textsuperscript{114} See, e.g., Zador, \textit{supra} note 99 (reporting one study and discussing additional studies on real-life alcohol and gender crash risk statistics); \textit{Are Women More Vulnerable to Alcohol's Effects?}, \textit{supra} note 102 ("Although women are less likely than men to drive after drinking and to be involved in fatal alcohol-related crashes, women have a higher relative risk of driver fatality than men at similar blood alcohol concentrations.") (citations omitted). While studies indicating a higher risk of crashing as a result of the same BAC are not always necessarily evidence of increased impairment, in this case they are useful if considered as corroborating evidence for laboratory studies that show differing levels of impairment at similar BACs.
\textsuperscript{115} BORKENSTEIN ET AL., \textit{supra} note 34; see also Waller & Blow, \textit{supra} note 96, at 113 (noting the novelty of the Grand Rapids Study).
\textsuperscript{116} BORKENSTEIN ET AL., \textit{supra} note 34, at 229.
\textsuperscript{117} Waller & Blow, \textit{supra} note 96, at 113.
\textsuperscript{118} \textit{Are Women More Vulnerable to Alcohol’s Effects?}, \textit{supra} note 102.
In 1972, one study found that women with BACs over 0.05% were twice as likely as men at the same BAC to be involved in a crash.119 In 1999, the NIAAA, in a report concerning the increased vulnerability of women to alcohol’s effects in relation to men, reported that with regard to drunk driving, “women have a higher relative risk of driver fatality than men at similar blood alcohol concentrations,” citing studies based on the analysis of actual crash data.120 The cited report, published in 1991, relied on results of a study conducted by the Insurance Institute for Highway Safety, which concluded that women have a higher relative risk of being involved in a fatal crash than men at BACs ranging from 0.05% to 0.09%.121 This study was updated using more data in 2000, and conductors concluded that, “[w]hen comparable, results largely confirmed existing prior estimates.”122

International studies align with these findings as well. One study of French drivers found that women have a much higher crash risk than men when drinking and driving at night.123 Additionally, a Swedish study found that of drunk driving arrests, women had a higher likelihood of being caught due to a crash.124

Not only do men tend to be less impaired than women at a given BAC, but issues with the measurement of BACs by breath test are also affected by gender.125 Hematocrit is the percentage by volume of solid particles in the blood.126 BAC breath-testing machines are typically calibrated assuming a hematocrit of approximately 0.45%.127 Men typically have a higher hematocrit level, ranging from 0.42% to 0.53%, than women, whose hematocrit levels range from 0.37% to 0.47%.128 Those with higher hematocrit levels test higher on BAC breath-testing machines;129 therefore, as men have higher hematocrit

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120. Are Women More Vulnerable to Alcohol’s Effects?, supra note 102.
122. Paul L. Zador et al., 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, 61 J. STUD. ON ALCOHOL 387, 387 (2000). This updated study did find, however, that women aged sixteen to twenty had a lower fatality risk than men with the same BAC. Id. at 392.
125. TAYLOR, supra note 100, §6.3.2.
126. Id.
127. Id.
128. Id.
129. Id.
levels than women on average, and higher hematocrit levels than assumed by breath BAC measurement machines, test results will generally indicate higher BACs for men than women, even if they actually have the same BAC.\textsuperscript{130} Thus, not only is a man likely to be less impaired at a given BAC than a woman, but he is also likely to measure a higher BAC on a Breathalyzer than a woman with the same BAC, in effect compounding the problem.

Unfortunately, there is not a sufficient amount of accumulated research on the subject to draw an ironclad conclusion as to how much more affected women are, compared to men, at various BACs, especially with regard to driving. The existing studies indicate a diminished capacity for driving-essential skills due to alcohol consumption and, as such, these studies should be a good predictor of driving ability when the driver is intoxicated. It would be useful to have studies that test driving impairment itself. The empirical data on crash risk corroborating these studies suggests that the impairment of skills indicated by the studies can rightly be considered indicators of driving impairment as well.

Additional studies on what exactly causes women’s increased sensitivity to the effects of alcohol would also be useful. Certainly men drink more than women on average and are much more likely to have an alcohol abuse problem than women,\textsuperscript{131} which would make men more likely to have developed a higher tolerance to alcohol’s effects.\textsuperscript{132} Beyond mere behavioral habits, however, physiological differences also account for the variance in effects.\textsuperscript{133} Still, complete explanations for the test results showing women to be more affected at a given BAC are not yet available. Further research in this area

\textsuperscript{130.} Id. Even Dr. Robert Borkenstein, inventor of the Breathalyzer and conductor of the Grand Rapids study, testified in \textit{Downie} that the Breathalyzer was too unreliable to use in a \textit{per se} jurisdiction and that “it places too much stress on the machine which was never intended by the scientists in the field.” \textit{Wherry, supra} note 70, at 447-48 (quoting Transcript of Record at 184-89, \textit{State v. Downie}, 569 A.2d 242 (N.J. 1990) (No. A-33) (remand hearing)).

\textsuperscript{131.} \textsc{Substance Abuse and Mental Health Serv. Admin., U.S. Dept of Health and Human Serv.}, \textsc{NSDUH Report: Gender Differences in Alcohol Use and Alcohol Dependence or Abuse: 2004 and 2005} (2007), http://www.oas.samhsa.gov/2k7/AIcGender/AIcGender.htm.


\textsuperscript{133.} Be Responsible About Drinking (BRAD), Women and Alcohol, \textit{http://www.brad21.org/alcohol_and_women.html} (last visited Jan. 6, 2010) (warning that “[f]luctuating hormone levels in women means that the intoxicating effects of alcohol will set in faster when their estrogen levels are higher, premenstrually. Also, alcohol increases the estrogen levels — birth control pills or other medications with estrogen will cause the intoxicating effects to set in at lower levels of BAC.”).
could help provide a better understanding of the way each gender’s physiology responds to alcohol.

III. ARGUMENT FOR A POLICY SHIFT

A. Why the Law Should be Changed

The previous Part detailed the extent to which science confirms that, on average, men are less impaired than women at many BACs, including 0.08%, the current legal limit. The section also detailed how women have a higher risk of being involved in a crash than men at or near 0.08%. This presents a problem when considered in the context of *per se* drunk driving statutes. These statutes set the legal BAC limit at the same level for two groups that are generally at different levels of impairment at that specified BAC. Considering that *per se* statutes criminalize driving with a certain BAC, rather than criminalizing a certain level of impairment, this results in de facto discrimination.

Ideally, laws should not be more permissive of women committing the same dangerous act than men. Yet that is the exact result of the *per se* drunk driving statute. By holding men and women to the same standard, the law operates under the fallacy that each gender reacts to alcohol in the same way. In reality, every person reacts to alcohol differently, as does each gender.

By defining the crime in terms of having a requisite BAC rather than a requisite level of impairment, the door is opened to punishing those who are not a danger at all. Generally, though certainly not always, some measurable impairment occurs in many people at BACs below 0.08%. Given women’s higher relative susceptibility to alcohol’s effects, it is much more likely that a man will be punished when he is not in fact a danger than it is that the same would happen to a woman. Therefore women, on average, are permitted to drive at higher levels of impairment than men. Furthermore, this law makes it probable that men are convicted and sentenced for driving at the same or lower levels of impairment as women who go unpunished.

The intent of such a law, presumably, is to protect citizens from those who choose to get behind the wheel when their ability to drive is so impaired that they are a danger. The goal of the state in limiting

135. For instance, were a woman to have a 0.078% BAC and a man to have a 0.08% BAC, the man would be subject to prosecution under a *per se* statute while the woman would not, despite the likelihood that the man would be less impaired. See discussion *infra* Part III.
the dangers posed by drunk driving is certainly one that must be pursued. The mistake here is allowing zealous action intended to protect citizens to lead to an oversimplification in the law that does not allow for physiological differences in gender. While certainly the 0.08% per se standard streamlines the enforcement process, toleration of discrimination is a steep price to pay for simplicity.

Assuming there is a level of impairment that should be tolerable by law, punishment of those persons exceeding this level should be consistent across genders. The NIAAA, the government’s primary institute for studies on alcohol, confirms that women are generally more impaired than men at a given BAC. Therefore, setting the BAC limit at the same level for men and women cannot allow for a consistent level of tolerable impairment. Along the borderline — men who are just over the limit and women who are just under — the law necessarily applies unevenly.

One might argue that the state is justified in setting a BAC limit at any level it deems appropriate, or even in enacting a “zero-tolerance policy” and banning drinking and driving altogether. Indeed, it may be constitutionally “justified” in doing this, for as the California Supreme Court once noted, “the wisdom of the legislation is not at issue in analyzing its constitutionality, and neither the availability of less drastic remedial alternatives nor the legislative failure to solve all related ills at once will invalidate a statute.” Though constitutional, legislatures would do well to carefully consider where to set BAC limits.

An example of a BAC limitation that may have gone overboard arose in Washington, D.C., which had a zero tolerance policy on the books only a few years ago. While it was not a per se law, it did grant the police authority to arrest anyone with a BAC over 0.01%. This law was on the books until the Washington Post featured a story on a woman arrested after having one glass of wine. Just

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137. Are Women More Vulnerable to Alcohol’s Effects?, supra note 102.
138. Brigid Schulte, Single Glass of Wine Immerses D.C. Driver in Legal Battle, WASH. POST, Oct. 12, 2005, at A1. The term “zero-tolerance policy” is typically given to statutes designed to eliminate all drinking and driving, or other types of behavior, with penalties for what could be considered insignificant infringement. Id.
141. Id.
142. Schulte, supra note 138, at A1. Debra Bolton, an energy lawyer in Washington, D.C., was pulled over for driving without headlights just after leaving a restaurant where she had one glass of wine with dinner. After explaining that the parking lot attendant must have disabled her auto-light feature, she Breathalyzed, blew a 0.03% BAC, and was
a week later, the Post ran another article, this time regarding the city council’s vote to change the law for fear of the policy becoming a “national joke.”\textsuperscript{143} Clearly the public does not support such a policy, presumably because it believes that a drunk driving law should target those that are a danger to others, which this type of law does not. While setting a \textit{per se} limit at 0.08\% will certainly catch a higher proportion of dangerous drivers than a limit set at 0.01\%, it is still likely that those who are not a significant danger will be punished. Society should tolerate a level of impairment greater than zero. To understand why, one must look only to sober drivers, where less than optimal drivers are tolerated in abundance. The majority of the adult population drives, and presumably the drivers on the road encompass a wide range of ability levels. The streets are packed with unskilled sober drivers, as evidenced by the fact that the majority of traffic fatalities are caused by sober drivers.\textsuperscript{144} Yet the best drivers on the road typically do not clamor for lesser skilled drivers to be excluded in the interest of safety, nor do legislatures. This is presumably due to an implicit acknowledgment that sub-optimal drivers are allowed on the road because their mobility is a net benefit to society. Similarly, the majority of people at BACs below 0.08\%, while potentially slightly impaired according to laboratory tests,\textsuperscript{145} are still allowed to drive because society recognizes the net positive utility in allowing them mobility, just as less skilled sober drivers are allowed on the roads.

It is only beneficial to bar a person from driving when he adequately displays that he is a danger not worth tolerating, drunk or sober. No law forces the elderly, for instance, to turn over their driver’s licenses at a certain age, but rather they do so voluntarily or are forced to after manifesting a sufficient loss of ability, whether when renewing their licenses or after a vehicular accident.\textsuperscript{146} In the same way, we should not penalize drivers merely for reaching a certain BAC, but rather penalize them only when they manifest an intolerable level of impairment. A driver who has been drinking may not drive as well as he would sober, but may very well retain enough

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\textsuperscript{143} Weiss, supra note 140, at A1.
\textsuperscript{144} Alcohol Alert, supra note 4.
\textsuperscript{145} Blood Alcohol Concentration, supra note 16.
\textsuperscript{146} Robert Davis & Anthony DeBarros, Stopping Older, Dangerous Drivers a Growing Problem, USA TODAY, May 2, 2007, at 1A.
\end{flushright}
ability even as his BAC increases to justify allowing him to drive, just as an aging driver is still allowed to drive for some time even though his ability may have declined from his prime.\textsuperscript{147}

The utility in allowing drivers with some level of impairment to legally drive stems from various sources. There is significant value in the freedom and mobility that goes along with driving. Many people drink alcohol and many live in places where mass transit or other means of transportation are inadequate. Perhaps most importantly, eliminating \textit{per se} laws protects those who are not, in fact, a significant danger on the road from unjust harassment and arrest by the police, as well as from undue expense and loss of productivity due to prosecution. For reasons such as these, lawmakers should focus on keeping only those drivers who pose a significant threat off the street, while aiming to avoid, as much as possible, enacting a law that is over-inclusive. Given that the majority of alcohol-related traffic deaths occur at or above BACs of 0.15\%,\textsuperscript{148} setting a \textit{per se} BAC limit of 0.08\% effectively ensures over-inclusion. Due to the relative resistance of men to alcohol's effects as compared to women, men are much more likely to bear the brunt of any over-inclusion that occurs. Similarly, women as a group are much more likely to “benefit” as a result of any under-inclusion that stems from \textit{per se} laws. Society is then left with a law perpetuating very predictable discriminatory effects.

Although 0.08\% BAC \textit{per se} drunk driving statutes certainly have their downside, not the least of which is effective discrimination against men, they may still be justified as a public policy if they are sufficiently successful at accomplishing the primary goal of saving lives. From the beginning, politicians championed \textit{per se} laws as if they were a “magic bullet,” as evidenced, for instance, by President Bill Clinton’s claim that enacting the laws would “result in 600 fewer alcohol-related deaths each year.”\textsuperscript{149} Deeper digging into the public debate, however, reveals that not everyone agrees.\textsuperscript{150} \textit{Per se} laws have met some resistance and skepticism, particularly as various states engaged in internal debate prior to enactment.\textsuperscript{151} Some of the fiercest debates arose when states considered lowering their BAC

\textsuperscript{147} Id.
\textsuperscript{149} HIGHWAY SAFETY, supra note 15, at 14.
\textsuperscript{150} Id.
\textsuperscript{151} Id. at 13-22.
limits to 0.08% from 0.10%.

These discussions were particularly telling, as opposed to initial debates regarding per se laws, because data and studies then existed for many states with 0.10% per se limits and from states that had already adopted 0.08% limits. During discussions before legislatures, opponents of per se laws were so effective at discrediting claims such as Clinton’s that proponents of per se laws at times abandoned arguments based on statistics in favor of focusing “on the human and emotional aspects of the debate.”

While certainly not a “magic bullet” by any means, 0.08% per se laws can have positive effects if enacted in conjunction with education programs. Because of the multitude of variables involved, however, determining the exact efficacy of per se laws is difficult.

The GAO’s report examining the effectiveness of 0.08% drunk driving statutes states:

While indications are that .08 BAC laws in combination with other drunk driving laws as well as sustained public education and information efforts and strong enforcement can be effective, the evidence does not conclusively establish that .08 BAC laws by themselves result in reductions in the number and severity of crashes involving alcohol. Until recently, limited published evidence existed on the effectiveness of .08 BAC laws, and NHTSA’s position — that this evidence was conclusive — was overstated.

In 1999, more comprehensive studies have been published that

153. Id.
154. Id. The report stated in detail:

Legislators seemed to rely heavily on the testimony of supporters and opponents as to the findings and the methodology of studies concerning the effectiveness of .08 per se. Besides discrediting the existing reports as being flawed and inconclusive, opponents of .08 per se often presented legislators with statistics of their own. For example, in some instances statistics were used to show that, when compared to states that had enacted the .08 BAC limit, the state considering the law had fewer alcohol-related fatalities per capita, despite the higher BAC limit. Such statistical data was often easier for legislators to comprehend than the more complex statistical reports mentioned above. It was a bigger challenge for supporters of .08 per se to explain in a concise and clear manner the findings and the methodology of the research. Some of our contacts warned that this “numbers game” is difficult to win, and it is best for advocates of .08 per se to avoid debates that focus on figures and statistics. Instead, they argued, the movement should focus on the human and emotional aspects of the debate.

Id.
155. Id.
156. HIGHWAY SAFETY, supra note 15, at 2.
show many positive results, and NHTSA’s characterization of the results has been more balanced. Nevertheless, these studies fall short of providing conclusive evidence that .08 BAC laws by themselves have been responsible for reductions in fatal crashes.157

Despite stating that 0.08% laws can have some effect when implemented in concert with other laws, the report also notes that the individual effectiveness of per se statutes is in question.158 This is contrary to claims made by the National Highway Traffic Safety Association (NHTSA) in an effort to garner support for the laws.159 The adoption of these laws by all states was predicated on the NHTSA’s estimates of life-saving potential.160 The study President Clinton relied on in making his claim of “600 fewer alcohol-related deaths each year” was particularly critical in garnering support for the law.161 That study showed “a [sixteen] percent greater decline in the proportion of alcohol-related fatalities among drivers” for states electing to follow the 0.08% BAC per se standard than in states retaining the 0.10% BAC level.162 The methodologies of this study, however, were roundly criticized.163 Instead, the GAO found that accurate estimations could not be made with any certainty, stating, “[b]ecause a state enacting a .08 BAC law may or may not see a decline in alcohol-related fatalities, it is difficult to accurately predict how many lives would be saved if all states passed .08 BAC laws.”164

Considering the conclusions of the GAO’s comprehensive report, the best that can accurately be said regarding the ability of 0.08% per se laws to save lives is that they can have some indefinite level of effectiveness if enacted as part of a more comprehensive program.165 Even then, a state enacting such a statute is certainly not guaranteeing saved lives.166 Considering the discriminatory effect of per se laws, the price of injustice is especially high given how little conclusive evidence exists governing the effectiveness of the per se standard in consistently preventing drunk driving deaths.167

157. Id. at 22-23 (emphasis added).
158. Id.
159. Id. at 10.
160. Id. at 9-10.
161. Id. at 14. “These study results were endorsed by NHTSA and often cited in the agency’s literature and public statements. President Clinton cited the study in a March 1998 statement and said ‘. . . if all states lower their BAC to .08, it will result in 600 fewer alcohol-related deaths each year.’” Id.
162. Id.
163. Id.
164. Id. at 23.
165. Id.
166. Id.
167. Id. at 22-23.
Supposing for the sake of argument that per se laws do consistently reduce the number of deaths resulting from drunk driving, and imagining for a moment that these laws are the only means of achieving such a reduction, there is still not ample justification for keeping these laws in effect. The lifesaving effect of a law is hardly the only factor that should be considered when evaluating the net value or detriment of that law to society. Vastly more lives could be saved if, for instance, laws were enacted prohibiting men from driving altogether than by merely prohibiting them from driving with BACs above 0.08%. Yet this law would not, and should not, be implemented as its costs to society obviously outweigh the benefits.

In the case of per se drunk driving laws, the number of lives saved may not be worth tolerating the prosecution of defendants who are not actually dangerous and the gender-based discrimination this entails. This is especially true considering that a large percentage of the lives that advocates claim they are trying to save are those of the drunk drivers or their passengers, adults who knowingly made the choice to put themselves in danger and are aware of the potential consequences. Although over 16,000 people may die in alcohol-related crashes each year, by some estimates only 3,000 people other than drunk drivers and their passengers die in these accidents. While 3,000 is certainly a disconcerting number, per se statutes cannot possibly prevent all of these deaths. The number of lives at issue, therefore, is the difference between the number of deaths under per se statutes and the number of deaths that would occur under the next best alternative. Proponents of paternalistic laws may disagree, but in the face of discrimination, states may have more pressing concerns than protecting those who accept the risks associated with their own behavior.

The primary concerns of any drunk driving policy should be the balancing of justice, societal utility, and the protection of citizens,


169. Steven D. Levitt & Jack Porter, How Dangerous Are Drinking Drivers?, 109(6) J. POL. ECON. 1198, 1201 (2001) (“The great majority of alcohol-related driving fatalities occur to the drinking drivers themselves and their passengers. Since these individuals are likely to have willingly accepted the risks associated with their actions, the role for public policy in preventing these deaths is unclear.”). The lives of drunk drivers are not necessarily worth less than the those of innocent victims, but perhaps the loss of those who choose to risk their own lives should be weighed less when considering the value of a law than the loss of those that die from the recklessness of others.

170. HIGHWAY SAFETY, supra note 15, at 5.

171. Levitt & Porter, supra note 169, at 1201.
most importantly the 3,000 yearly innocent victims of drunk-driving accidents. *Per se* statutes discriminate against men. By adopting *per se* laws, lawmakers have neglected considerations of justice in favor of lifesaving potential. Further, this lifesaving potential is disputed, and alternative policies may offer a similarly effective outcome.

**IV. ALTERNATIVES**

Perhaps the most compelling reason to move away from *per se* drunk driving laws is the potential to enact laws that are just as effective but have far fewer unintended and negative consequences.172 In the short run, a return to the status quo that existed prior to the widespread adoption of *per se* laws may be the best option. In the long term, however, continued research may lead to the development of even more effective alternatives.

Prior to the adoption of *per se* laws, if a prosecutor could show that a defendant had a certain BAC at the time of driving, such as 0.08%, this was not an offense in itself.173 Rather, this created a rebuttable presumption that the driver was sufficiently impaired to be found convicted under the traditional driving-while-intoxicated language.174 The court in *Burg* made reference to this previous standard:

> Even these laws, which considerably assisted the prosecution of “driving under the influence” cases, proved inadequate in many respects. Under them, the ultimate question was defined in terms of the defendant’s subjective behavior and condition: “Was the defendant under the influence at the time he drove?” Celerity and certainty of punishment were frustrated by the ambiguity of the legal criteria; no matter what his blood-alcohol level, a defendant could escape conviction merely by raising a doubt as to his intoxication.175

The court speaks as if the opportunity and ability of a defendant to raise doubt as to his innocence is an unjustifiable burden on the prosecution. To the contrary, the opportunity to show that one was not a danger, despite one’s BAC, is precisely the right a drunk driving statute based on BAC should preserve. In this way, those who are impaired to a dangerous degree will be punished, and discrimination will be averted, because men will have the opportunity to show that they were not impaired. Although this does place an additional burden

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174. *Id.*
175. *Id.*
on the prosecution, this burden is not undue, as ease of prosecution should defer to the pursuit of rightful convictions when possible.

Although the use of BAC to create a rebuttable presumption is a satisfactory solution, the future may hold alternative possibilities. During his time as Director of the NIAAA, Dr. Enoch Gordis recognized the potential advantages of rejecting the per se standard and proposed a more sensible and effective alternative:

By understanding how alcohol impairs complex mental functions, we can develop ways to prevent many alcohol-related injuries by negating alcohol’s ability to interfere with cognitive and motor function. As neuroscience research matures, this may become possible. We also can prevent alcohol-related injuries by developing easily deployed devices to measure impairment. Setting a legal threshold for determining impairment by BAC (per se laws) has disadvantages that might be avoided by use of an inexpensive, convenient field device for determining impairment directly. Such a device would have the advantage of identifying persons who are unfit to drive or engage in other potentially dangerous activity for any reason, such as extreme fatigue, illness, infirmity, emotional states, or the use of alcohol and other drugs and medications. Whether the public would endorse the use of such devices rather than the current widely accepted and supported per se laws is certain to be a matter of significant public policy debate.  

Legislatures should allocate funding to research Dr. Gordis’s vision. Perhaps, in the future, life on the roadways would be safer and more just.

CONCLUSION

In an effort to save lives and ease burdens on prosecutors, all states have adopted per se drunk driving statutes that make driving with a BAC of 0.08% a crime, regardless of actual impairment. Proponents of 0.08% per se statutes place too much emphasis on the life-saving potential and facilitation of expeditious prosecution the laws offer, to the detriment of other valid concerns. Given the strong scientific evidence that men are less impaired than women at a given BAC, lawmakers should recognize that a “one size fits all” approach results in discrimination and, consequently, may not be appropriate. Although per se laws certainly show some positive effects, the exact magnitude and consistency of these effects are difficult to determine

176. Alcohol-Related Impairment, supra note 168 (emphasis added).
and still in question. Given this nebulous level of effectiveness, law-
makers should not consider the discriminatory effect of 0.08% *per se* drunk driving laws justifiable as a matter of public policy.

Currently the best alternative to *per se* laws is a reversion to laws that create a rebuttable presumption of intoxication at 0.08%. Drunk driving laws formulated in this way target those drivers who are actually a danger to others. Further, under these laws, men will not be discriminated against, because they will be free to prove that they are not intoxicated at 0.08%, eliminating a potential discrimi-
natory effect.

In the long run, research should focus on the development of a roadside device that can detect impairment directly. The proper implementation of such a device could potentially allow for policies that properly balance safety with other considerations.

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