

BOOK REVIEW

**THE BEST (OR WORST) KEPT SECRET OF  
FAILED PUBLIC POLICY: ROAD SAFETY**

*Traffic Safety* by Dr. Leonard Evans. Bloomfield Hills, Michigan: Science Serving Society, 2004. Pp. 444. Hard Cover. \$99.50.

*Reviewed by Kevin M. McDonald\**

“Best safety lies in fear.”  
- Shakespeare, Hamlet (Act I, Scene 3)

Prior to the mid-1960s, the United States boasted the safest roads in the world.<sup>1</sup> As of 2002, it ranks *sixteenth*.<sup>2</sup> In 1966, Congress created the National Highway Traffic Safety Administration (“NHTSA”) to oversee the automotive industry.<sup>3</sup> The United States automotive market is now the most regulated in the world. So, has U.S. safety policy failed?

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1. LEONARD EVANS, *TRAFFIC SAFETY* xiii (2004).

2. *Id.*

3. The NHTSA is a federal agency housed within the Department of Transportation. It is responsible for overseeing large aspects of the automotive industry, including safety and fuel economy. The NHTSA frames its mission to “save lives, prevent injuries and reduce traffic-related health care and other economic costs.” Long Range Strategic Planning, 69 Fed. Reg. 39,542, 39,543 (June 30, 2004). For additional background on the NHTSA, see Kevin M. McDonald, *Judicial Review of NHTSA-Ordered Recalls*, 47 WAYNE L. REV. 1301, 1303-22 (2001).

In his recently published book, *Traffic Safety*, Dr. Leonard Evans unequivocally answers this question in the affirmative.<sup>4</sup> Dr. Evans, a physicist by trade and a prolific scholar on traffic safety,<sup>5</sup> posits a straightforward thesis: U.S. safety policy has failed because, unlike other, *safer*, countries, (1) safety policy in the United States is driven by dogmatic attorneys, rather than by technically trained scientists, and (2) policy measures in the United States focus too much on a vehicle's crashworthiness instead of crash prevention.<sup>6</sup>

To place Dr. Evans's thesis in context, one must first appreciate the impact of traffic crashes on society. Each year, crashes in the United States kill over 40,000 people and injure, cripple, or disable nearly 3,000,000.<sup>7</sup> Vehicle crashes are the leading cause of death for persons aged three through thirty-three.<sup>8</sup> They also cost the economy roughly \$230 billion annually, which equals approximately 2.3 percent of the entire U.S. gross domestic product, or \$820 per person.<sup>9</sup>

Dr. Evans constructs his case methodically, relying on a wealth of data gathered from the NHTSA and other safety agencies world wide. Using the year 1966 (when Congress created the NHTSA) as his baseline, Dr. Evans shows that the United States once had the safest roads in the world, whether measured by deaths per registered vehicle or deaths for the same unit of distance traveled.<sup>10</sup>

By 2002, however, as measured by deaths per registered

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4. EVANS, *supra* note 1.

5. Dr. Evans has published over 150 articles on traffic safety. *Id.* at 445. He currently serves as president of *Science Serving Society*, an organization he formed to continue research and other professional activities after having worked for thirty-three years at General Motors Corporation. *Id.*

6. *See id.* 408. *Crashworthiness*, or crash protection, "refers to engineering features aimed at reducing losses, given that a specific crash occurs," (e.g., airbags, safety belts, collapsible steering columns). *Id.* at 8. *Crash prevention* "refers to measures aimed at preventing the crash from occurring" at all (e.g., improved braking, better driver training, stricter traffic laws, etc.). *Id.*

7. *See* Press Release No. 35-04, National Highway Traffic Safety Administration, DOT Announces Historic Low Highway Fatality Rate in 2003 (Aug. 10, 2004), <http://www.nhtsa.dot.gov> (last visited Apr. 12, 2005).

8. *See* National Highway Traffic Safety Administration Leading Causes of Death 2002 Web page, at <http://nhtsa.gov/people/Crash/LCOD/index.htm> (last visited on Apr. 12, 2005).

9. *See* Press Release NHTSA-04, National Highway Traffic Safety Administration, DOT Releases Preliminary Estimates of 2003 Highway Fatalities (Apr. 28, 2004), <http://www.nhtsa.dot.gov> (last visited Apr. 12, 2005).

10. EVANS, *supra* note 1, at 381.

vehicle, the United States had dropped from first place into *sixteenth* place.<sup>11</sup> Measured by deaths for the same distance of travel, the United States had dropped from first place into *tenth* place.<sup>12</sup>

Using either measure, the drop in the safety ranking is significant. Had the United States mirrored the safety improvements achieved in Canada, Great Britain, and Australia from 1979-2002, Dr. Evans estimates that it would have had a little over 26,000 deaths in 2002 instead of 42,815 deaths.<sup>13</sup> Put differently, starting in 1979, if the U.S. fatality rate had declined each year by the same percentage as the fatality rate drop in Great Britain, an estimated 177,593 fewer Americans would have died in that 23-year period.<sup>14</sup>

So, what happened? In line with Shakespeare's plea to "first, kill all the lawyers,"<sup>15</sup> Dr. Evans blames the disproportionate amount of influence attorneys in the United States (and within the NHTSA) exercised over safety policy: "US policy was defined and led by ideologically driven lawyers lacking knowledge or interest in technical matters."<sup>16</sup> Without technical expertise, attorneys distorted priorities to be "perfectly opposite to where technical knowledge shows benefits are greatest."<sup>17</sup> Such influence and distortion of priorities are "without parallel in any other country."<sup>18</sup>

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11. *Id.* The United States lagged behind Australia, Austria, Canada, Denmark, Finland, Germany, Great Britain, Iceland, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Sweden, and Switzerland. *Id.*

12. *Id.* at 385.

13. *Id.* at 387.

14. *Id.* Had the United States matched Australia's decline in fatality rate between 1979-2002, nearly 208,000 fewer U.S. fatalities would have occurred. *Id.*

15. WILLIAM SHAKESPEARE, THE SECOND PART OF KING HENRY THE SIXTH act 4., sc. 2. In a morbid sense, Shakespeare's plea has been heard, at least on the roads. According to the results of a recent study conducted by the Quality Planning Corporation, a California-based company that helps insurance companies rate driver risk, lawyers rate in the top five most crash-prone professions. See Tom Greenwood, *Students, Doctors Rate as the Most Crash-Prone*, DETROIT NEWS, Feb. 17, 2005, at 8B. The study lasted eighteen months and covered forty professions. *Id.* It found that fifteen percent of students studied were involved in crashes, eleven percent of doctors, 10.6 percent of lawyers, 10.5 percent of architects, and 10.2 percent of real estate agents. *Id.* Perhaps there is indeed a kernel of truth to the maxim that lawyers are always first at the scene of a crash.

16. EVANS, *supra* note 1, at 389.

17. *Id.*

18. *Id.*

For example, Dr. Evans claims the airbag<sup>19</sup> mandate pushed aggressively by the NHTSA was not grounded in sound technical evidence.<sup>20</sup> According to Dr. Evans, NHTSA administrator Joan Claybrook (an attorney and Ralph Nader protégé), *denied* the effectiveness of safety belts in order to justify the airbag mandate.<sup>21</sup> One of Ms. Claybrook's justifications for airbag mandates was that their installation cost would be partially offset by cost savings from removing safety belts, even though the technical literature documented that airbags could not come close to the effectiveness of safety belts; safety belts reduce driver fatality risk by forty-two percent, and airbags only reduce driver fatality risk by eight percent.<sup>22</sup>

While other countries during the 1970s and 1980s were following the lead of Canada and Australia by passing mandatory safety belt laws, thus reducing fatality rates, the United States focused its priorities on mandating airbags. Australian safety policy, which even today does *not* mandate airbags,<sup>23</sup> proudly boasts a ninety-five percent belt usage rate, which is the highest in the world, along with some of the lowest fatality rates.<sup>24</sup> In contrast, U.S. safety policy long ignored safety belt usage, because “[a]irbag-mandate enthusiasts saw belt laws as a threat to their airbag campaign.”<sup>25</sup> By focusing disproportionate time and effort on forcing an airbag mandate, the NHTSA consciously ignored the far more important message of encouraging safety belt usage. At the time, in a television interview Ms. Claybrook claimed that airbags were “much better than seat belts,”<sup>26</sup> an assertion never supported by the data.

As a result of this type of mistaken priority, the United States has lagged behind other countries in reducing fatality rates. Dr. Evans blames this lag in part on the United States

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19. “Treating *airbag* as one word [as opposed to two words] is a clear choice—it shortens, simplifies, and avoids ambiguities.” *Id.* at 7.

20. *Id.* at 392-97.

21. *Id.* at 396-97.

22. See EVANS, *supra* note 1, at 392-94.

23. For additional information on Australia's position on airbags, see the Australian Department of Transport and Regional Services website, [http://www.dotars.gov.au/transreg/str\\_airbag.htm](http://www.dotars.gov.au/transreg/str_airbag.htm) (last visited Apr. 12, 2005).

24. *Id.*

25. EVANS, *supra* note 1, at 396.

26. *Id.*

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having reacted later than other countries in passing safety belt laws. For example, the first safety belt law in the United States was enacted in New York in 1984, whereas Canada's first province to mandate safety belt usage was Ontario in 1976.<sup>27</sup> This lag has forced the United States to play "catch up"; the U.S. safety belt usage rate is only now approaching seventy to eighty percent.<sup>28</sup>

Aside from dogmatic attorneys bent on mandating airbags, Dr. Evans argues that the NHTSA follows a fundamentally flawed regulatory policy, and that its focus should be on *crash prevention* instead of *crashworthiness*.<sup>29</sup> From 1979 to 2002, over 200,000 more Americans were killed in traffic than would have been killed if the United States had focused on crash prevention measures found in countries with lower fatality rates, such as Canada, Australia, or Great Britain.<sup>30</sup> The effective crash prevention techniques employed by the "safer" countries include: (1) strict safety belt usage laws; (2) strict laws against driving while intoxicated (including the use of random sobriety check lanes); (3) helmet laws for motorcyclists; (4) speed limits based on scientific data, not political opportunity; and, (5) banning radar detectors, whose sole *raison d'être* is to violate traffic law.<sup>31</sup>

Not surprisingly, Dr. Evans has provoked a range of critics. Drs. Jon Vernick and Stephen Teret, both of the Johns Hopkins Bloomberg School of Public Health, take issue with blaming attorneys for failed safety policy. According to them, "it is well documented [that the influence of attorneys] against motor vehicle . . . manufacturers has made important contributions to public health, providing necessary incentives to make products safer."<sup>32</sup> Drs. Vernick and Teret also question Dr. Evans's criticism of the airbag mandate: "We doubt that the families of people killed in vehicles without safety devices such as air bags [sic]—especially during the period when General Motors and other car manufacturers fought the

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27. *Id.* at 404.

28. *See id.* at 405. *See also* Press Release 46-04, National Highway Traffic Safety Administration, New Data Show Rising Safety Belt Use Rates in Most States (Nov. 23, 2004), <http://www.nhtsa.dot.gov> (last visited Apr. 12, 2005).

29. *See supra* note 6 and accompanying text.

30. EVANS, *supra* note 1, at xiii.

31. *See id.* at 302, 406-7.

32. *See* Jon S. Vernick & Stephen P. Teret, *Making Vehicles Safer*, 94 AM. J. PUB. HEALTH 170 (Feb. 2004).

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imposition of the federal standard requiring them—would agree [with Dr. Evans].”<sup>33</sup>

Although attorneys and the NHTSA bear part of the blame, Dr. Evans points out that individual responsibility (or lack thereof) bears a part, as well. He convincingly dissuades readers of the notion that crashes are inevitable aspects of modern society. Dr. Evans demonstrates, through data, that most crashes could be avoided if drivers simply made more responsible choices, such as wearing their safety belts, following the speed limit or not driving drunk.

Turning to the format of *Traffic Safety*, readers will find this book easy to reference. The well-defined sixteen chapters are neatly organized, and each can be read on its own. Three chapters are of particular interest to attorneys and policy-makers: Chapter 13 (“Measures to improve traffic safety”);<sup>34</sup> chapter 15 (“The dramatic failure of US safety policy”);<sup>35</sup> and chapter 16 (“Vision for a safer tomorrow”).<sup>36</sup> The book makes extensive use of graphical and tabular presentations, which assist the reader in assimilating the substantial amount of data. However, readers unaccustomed to sifting through graphs and tables may at first find this book difficult to read.

Dr. Evans’s style is unique and often light-hearted. Far from offering dry analysis, he writes clearly and concisely, often offering bits of his British humor.<sup>37</sup> On parlance, he instructs the reader to refer to a vehicle “striking anything” as a “crash” and shuns the term “accident,” chastising it for “convey[ing] a sense that the losses are due exclusively to fate [and] also for convey[ing] a sense that losses are devoid of predictability.”<sup>38</sup>

In conclusion, Dr. Evans proves that he can argue and present a case just as compellingly as a polished trial lawyer. *Traffic Safety* is a useful book for anyone interested in road safety. Readers can easily reference the book for an overview

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33. *Id.*

34. EVANS, *supra* note 1, at 332.

35. *Id.* at 381.

36. *Id.* at 412.

37. In warning against drawing conclusions from averages, Dr. Evans advises: “Averages should be interpreted with a caution well captured in the quip: An average is like a bikini swimsuit – what it reveals is interesting, but what it conceals is crucial. It has been remarked that the average human has approximately one breast and one testicle.” *Id.* at 60.

38. *Id.* at 6.

of narrower issues, such as airbag benefits and costs, driver behavior, the effect of alcohol on safety, and NHTSA policy. Far from serving as “just” a treatise, however, the book provides critical analyses of each topic addressed. For this reason, policymakers (including agency officials and congressional staff) in particular may find *Traffic Safety* helpful. Hopefully, the book will enjoy a wide audience and dissuade Dr. Evans of his notion that “[o]ne of the most remarkable features of the extraordinary failure of US policy is that it is one of the nation’s best-kept secrets.”<sup>39</sup>

*Postscript: Since acceptance of this book review for publication, the NHTSA has announced a policy change. In a speech to the Automotive News World Congress in January 2005, Dr. Jeffrey Runge, Administrator of the NHTSA, declared: “We are reaching the point of diminishing returns from efforts on crashworthiness, . . . [w]e can make big gains by focusing on crash avoidance.”<sup>40</sup> Without wanting to commit the “post hoc” fallacy of false cause, is it possible to infer the influence of Dr. Evans from this announced policy shift? After all, this shift seems to square with the shift advocated by Dr. Evans. However, the NHTSA appears to differ with Dr. Evans on the definition of crash avoidance (or crash prevention), because it considers crash avoidance measures to include mandating even more buzzers and warnings, like lane departure warnings, to the continued exclusion of behavior-based crash prevention measures highlighted by Dr. Evans. For this reason, it is highly doubtful that NHTSA’s policy “shift” would enjoy Dr. Evans’s approbation, at least not yet.*

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39. EVANS, *supra* note 1, at 389.

40. See Dale Jewett, *NHTSA Shifting Focus to Active Safety, Runge Says*, AUTOMOTIVE NEWS, Jan. 24, 2005, at 102.