

MOUNTAIN-PLAINS CONSORTIUM

RESEARCH BRIEF | MPC 20-420 (project 556) | September 2020

Forging a Path to Vision Zero in the US: A Critical Analysis of Road Safety in Australia



the **ISSUE**

Despite similarities to the United States in terms of transportation, land use, and culture, there are 5.3 deaths per 100,000 in population on Australian roads each year, as compared with the U.S. rate of 12.4. Similar trends hold when accounting for exposure. This project sought to understand what is behind these road safety disparities.

the **RESEARCH**

In 1970, Australia's road fatality rate greatly exceeded that of the United States. By 1980, the two countries were dead even. Since then, Australia has seen remarkable safety gains, far exceeding those of the United States. Having adopted its version of Vision Zero in 2003 and cutting its road fatality rate by more than one-third since then, Australia may have important lessons to teach the United States with regard to road safety. In this project, researchers worked to identify those lessons.

After a brief background section comparing the various historical road fatality rates back to 1925, this report systematically analyzes reasons why Australia's roads might be safer, and it uses data in attempting to substantiate or refute each supposition. Researchers examined engineering, enforcement, education, and exposure. More specifically, this comparison includes differences in vehicles with respect to issues such as seat belt legislation; roadway designs in terms of built environments, intersections, and street designs; and road users in terms of differences in travel behaviors, licensure, enforcement, and impaired driving. The research then considers differences between the overarching road safety policies in Australia and the United States. The research also examines some of the structural differences in governance to determine where Australia is finding its road safety gains.



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Colorado State University
North Dakota State University
South Dakota State University

University of Colorado Denver
University of Denver
University of Utah

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University of Wyoming



Lead Investigator(s)

Wesley E. Marshall

University of Colorado Denver
wesley.marshall@ucdenver.edu

Research Assistant(s)

Molly North, GRA, MENG

Project Title

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the FINDINGS

Results suggest that a number of interrelated factors seem to play a role in the higher level of road safety in Australia as compared with the United States. These factors include Australian strategies related to seat belt usage and impaired driving as well as efforts to curb vehicle speeds. Design-related differences include a much greater reliance on roundabouts and narrower street cross-sections as well as guidelines that encourage self-enforcing roads. Policy-related differences include stronger and more extensive enforcement programs, restrictive licensing programs, and higher driving costs. Combined with a more urban population and multimodal infrastructure, Australia tends to discourage driving mileage and exposure while encouraging safer modes of transportation, such as transit, at least more so than in most of the United States.

the IMPACT

The reality is that many U.S. engineers, planners, and policymakers look at some of the interventions coming out of the safest countries in the world, such as Sweden and the Netherlands, and are often unwilling to make similar changes, even when there is an expected safety benefit. Australia, however, is more similar to the United States than most European countries in terms of transportation, land use, and culture. While transportation planners and engineers have control over some – but certainly not all – of these differences, the results suggest that adopting many of Australia's road safety lessons would help save lives on U.S. roads.

For more information on this project, download the entire report at <https://www.ugpti.org/resources/reports/details.php?id=995>

For more information or additional copies, visit the Web site at www.mountain-plains.org, call (701) 231-7767 or write to Mountain-Plains Consortium, Upper Great Plains Transportation Institute, North Dakota State University, Dept. 2880, PO Box 6050, Fargo, ND 58108-6050.



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