

Unsettled Legal Issues Facing Automated Vehicles

Ian R. Williams

Currently in preview, click buy full version

Unsettled Legal Issues Facing Automated Vehicles

Ian R. Williams
University of Michigan Law School

EDGE DEVELOPMENT TEAM

Bryan Casey,
*Center for Automotive Research at Stanford
University*

Daniel Crane,
University of Michigan Law School

James H. Barker,
Latham & Watkins LLP

Emily Frascaroli, *Product Litigation Group,
Ford Motor Company*

Ellen Partridge, *Shared-Use Mobility Center*

Bryce Pilz, *University of Michigan Tech
Transfer*

Gregory Shill, *University of Iowa College of
Law*





About the Publisher

SAE International® is a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive, and commercial vehicle industries. Our core competencies are lifelong learning and voluntary consensus standards development. Visit sae.org

SAE EDGE™ Research Report Disclaimer

SAE EDGE™ Research Reports focus on topics that are dynamic, in which knowledge is incomplete, and which have yet to be standardized. They represent the collective wisdom of a group of experts and serve as a practical guide to the reader in understanding unsettled subject matter. They are not meant to provide a recommended practice or protocol. The experts have assembled as a community of practitioners to contribute and collectivize their thoughts and points of view; these are not the positions of the institutions or businesses with which they are affiliated, nor is one contributor's perspective advanced over other contributors. SAE EDGE™ Research Reports are the property of SAE International, and SAE alone is responsible for their content.

About This Publication

SAE EDGE™ Research Reports provide state-of-the-art and state-of-industry examinations of the most significant topics in mobility engineering. SAE EDGE™ contributors are experts from research, academia, and industry, who have come together to explore and define the most critical advancements, challenges, and future direction in areas such as vehicle automation, unmanned aircraft, cyber security, advanced propulsion, advanced manufacturing, Internet of Things, and connectivity.

Related Resources

SAE MOBILUS® Automated & Connected Knowledge Hub
<https://saemobilus.sae.org/automated-connected>

SAE Team

Frank Menchaca, Chief Product Officer
Michael Thompson, Director, Standards, Information and Research Publications
Monica Loguira, Acquisitions Director
Beth Ellen Libeler, Product Manager
William Jancinski, Managing Technical Editor

Copyright © 2020 SAE International. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, distributed, or transmitted, in any form or by any means without the prior written permission of SAE International. For permission and licensing requests, contact SAE Permissions, 400 Commonwealth Drive, Warrendale, PA 15096-0001 USA; e-mail: copyright@sae.org; phone: +1-724-772-4028; fax: +1-724-772-9765.

Printed in USA

Information contained in this work has been obtained by SAE International from sources believed to be reliable. However, neither SAE International nor its authors guarantee the accuracy or completeness of any information published herein and neither SAE International nor its authors shall be responsible for any errors, omissions, or damages arising out of use of this information. This work is published with the understanding that SAE International and its authors are supplying information but are not attempting to render engineering or other professional services. If such services are required, the assistance of an appropriate professional should be sought.

ISSN 2640-3536

e-ISSN 2640-3544

ISBN 978-1-4606-0111-9

To purchase bulk quantities, please contact: SAE Customer Service

E-mail: CustomerService@sae.org

Phone: 877-606-7323 (inside USA and Canada)

+1-724-776-4970 (outside USA)

Fax: +1-724-776-0790

<https://www.sae.org/publications/edge-research-reports>

About the Editor



Ian R. Williams is the inaugural fellow for the Law and Mobility Project at the University of Michigan Law School, and serves as the managing editor of the *Journal of Law and Mobility*. His current work deals with the relationship between the law and emerging mobility and transportation technologies, with a special focus on connected and automated vehicles. Ian's other areas of interest include privacy, civil liberties, and civil rights. He is most interested in the way emerging technology affects existing legal, political, and social structures, and the effect governmental use of such technology can have on the rights of individuals and communities. Ian was named a 2019 Internet Law & Policy Foundry Fellow and is a member of the Board of the Michigan Lawyer Chapter of the American Constitution Society.

Ian received his J.D. from the University of Michigan Law School, where he also received the Irving Stenn, Jr. Award for his leadership and contribution to the law school through extracurricular activities. While at Michigan, he served as the editor-in-chief of the *Michigan Telecommunications and Technology Law Review* (now the *Michigan Technology Law Review*), and was a proud member of *The Headnotes*, *Michigan Law's* premier (and only) cappella group. As a law student he worked at the Center for Democracy & Technology and later the Lawyers'

Committee for Civil Rights, both in Washington, DC. A native of the Chicago suburbs, Ian received his B.A. in political science with Highest Distinction from the University of Illinois at Urbana-Champaign. Prior to law school, Ian worked in political media strategy and technology policy.

contents

About the Editor

Unsettled Legal Issues Facing Automated Vehicles 3

Introduction	4
<i>State of the Industry</i>	4
Does the Law Need to Change to Accommodate AVs?	4
The “Driver” and the Law	4
<i>Unsettled Domains Concerning AVs and the Law</i>	5

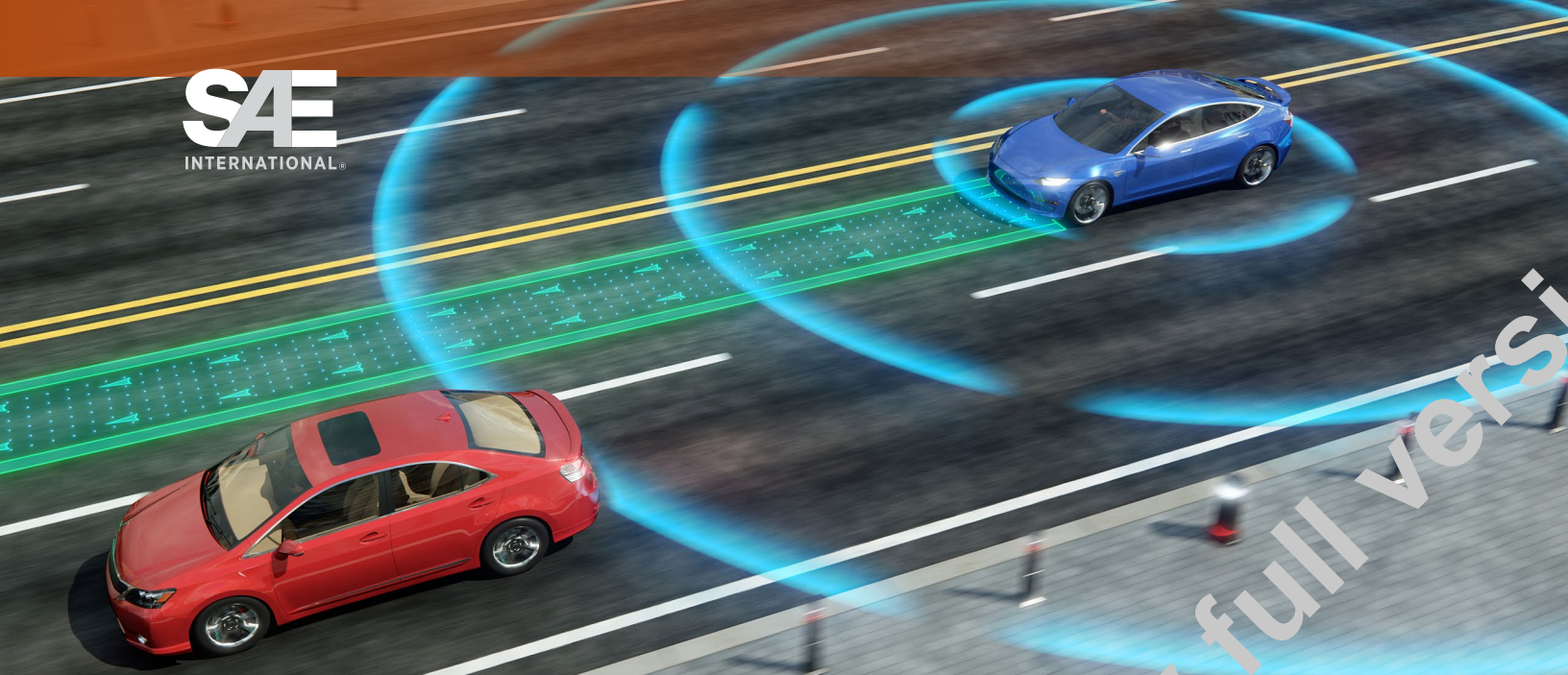
The Current State of AV Law in the United States	5
<i>Federal Law</i>	5
<i>State Laws</i>	6
Nevada	7
California	9
Michigan	10
Arizona	11
<i>Proposed Federal Laws</i>	13
SELF DRIVE Act	13
AV START Act	14
<i>Recommendations</i>	15

What Do We Really Want from Federal and State Legislation?	16
<i>Unsettled Topics on Preemption, Interoperability, and Regulatory Clarity</i>	16

Federal Next Steps	16
What Should the State Role Be?	16
<i>Recommendations</i>	17

What Other Changes to the Law Are Needed?	17
<i>Unsettled Topics Concerning Liability</i>	17
<i>Unsettled Issues Concerning Parking and Zoning</i>	18
<i>Unsettled Topics Concerning Privacy and Data Ownership</i>	19
<i>Unsettled Topics Concerning Cybersecurity</i>	19
<i>Unsettled Topics Concerning Radio Spectrum and Vehicle Communication</i>	20
<i>Unsettled Topics Concerning Traffic Laws and Enforcement</i>	20
<i>Unsettled Topics Concerning Law Enforcement and AVs</i>	20
<i>Recommendations</i>	21

Summary	21
<i>SAE EDGE™ Research Reports</i>	22
<i>Next Steps for AVs and the Law</i>	22
<i>Recommendations</i>	23
<i>Definitions</i>	23
<i>Acknowledgments</i>	23
<i>References</i>	24
<i>Contact Information</i>	27



Unsettled Legal Issues Facing Automated Vehicles

Abstract

This SAE EDGE Research Report explores the many legal issues raised by the advent of automated vehicles. While promised to bring major changes to our lives, there are significant legal challenges that have to be overcome before they can see widespread use. A century's worth of law and regulation were written with only human drivers in mind, meaning they have to be amended before machines can take the wheel. Everything from key federal safety regulations down to local parking laws will have to shift in the face of AVs. This report undertakes an examination of the AV laws of Nevada, California, Michigan, and Arizona, along with two failed federal AV bills, to better understand how lawmakers have approached the technology. States have traditionally regulated a great deal of what happens on the road, but does that still make sense in a world with AVs? Would the nascent AV industry be able to survive in a world with fifty potential sets of rules? Given the current lack of a federal AV law, state-level legislation can have a great deal of influence over the industry. Beyond government regulation, what other areas of our legal system will have to adapt to AVs? How do we assign liability for an accident in which the only actors were machines? How do you give someone a ticket? The questions are numerous and have already captured the imagination of lawyers and lawmakers. This report will explore a number of potential challenges facing the legal system, the unsettled aspects that derive from this new world, and the proposed solutions that have been raised.

NOTE: SAE EDGE™ Research Reports are intended to identify and illuminate key issues in emerging, but still unsettled, technologies of interest to the mobility industry. The goal of SAE EDGE™ Research Reports is to stimulate discussion and work in the hope of promoting and speeding resolution of identified issues. SAE EDGE™ Research Reports are not intended to resolve the challenges they identify or close any topic to further scrutiny.

IAN R. WILLIAMS

University of Michigan Law School

Edge Development Team

Bryan Casey, *Center for Automotive Research at Stanford University*

Daniel Crane, *University of Michigan Law School*

James H. Barker, *Latham & Watkins LLP*

Emily Frascaroli, *Product Litigation Group, Ford Motor Company*

Ellen Partridge, *Shared-Use Mobility Center*
Bryce Pilz, *University of Michigan Tech Transfer*

Gregory Shill, *University of Iowa College of Law*

ISSN 2640-3536