MICHIGAN COUNCIL ON FUTURE MOBILITY

Annual Report ADOPTED March 15, 2019



ANNUAL REPORT

"The council created under subsection (6) shall submit recommendations for statewide policy changes and updates no later than March 31, 2017 and shall continue to make recommendations annually thereafter, or more frequently in the council's discretion." Section 665(8) of Public Act No. 332 of 2016

CURRENT STATE LAW AND OUTLOOK

The current state law regarding highly automated vehicles remains a national example that comprehensively supports the tremendous benefits that autonomous vehicle technology bring, supports the safe and responsible testing and introduction of autonomous vehicle technology on public roads, and establishes Michigan as a state supporting advanced technology and open for innovation. The law not only enables safe deployment and use of autonomous vehicles on public roads, but also supports their use for vehicle platoons and for ondemand vehicle networks. It also addresses practical liability issues such with respect to parties who might make unauthorized modifications to autonomous vehicle systems and protecting mechanics who follow a manufacturer's instructions. Michigan's law establishes the groundwork allowing advancement of this important technology and will allow Michigan

VISION STATEMENT

The Michigan Council on Future Mobility has adopted the following vision statement:

The Michigan Council on Future Mobility is a publicprivate partnership that facilitates cooperation among influential leaders in government, transportation, education, commerce, and insurance and professional services. The Council shapes the future of mobility for people and products in Michigan through recommendations to the Governor, Legislature and state agencies. The Council ensures that Michigan is at the national forefront of mobility policymaking and thought leadership.



MISSION STATEMENT AND STRATEGIC GOALS AND OBJECTIVES

The work of the Michigan Council on Future Mobility continues to be guided by the following mission statement and strategic goals and objectives previously adopted:

Mission

The Michigan Council on Future Mobility fosters a cohesive and collaborative environment with recommendations to promote the development of technologies associated with autonomous, automated, and connected vehicles, and enhancing personal mobility transformation across all modes of transportation in the state.



Strategic Goals and Objectives

The Council seeks to realize its vision and fulfill its mission by embracing the following strategic goals and objectives:

- Educating itself and policymakers on future mobility, from needs to solutions for all modes of transportation;
- Connecting public and private sector entities that will foster innovation and practical advances in mobility;
- Creating an educational, professional and personal environment that attracts and retains desirable talent to serve and strengthen the transportation industry;
- Engaging local communities and partners to promote and advance personal mobility;
- Promoting equitable access to future mobility options, especially for those who are economically disadvantaged, persons with disabilities, and seniors;
- Identifying opportunities to develop and brand Michigan as the epicenter of mobility technology and policy development;
- Ensuring effective cybersecurity standards for safe and efficient transportation;
- Addressing and evaluating implications for risk management, insurance and product liability laws;
- Assessing the need for structural improvements to public and private infrastructure to facilitate deployment of new technologies that enhance personal mobility across all modes of transportation; and,
- Displaying national thought leadership by analyzing the impact of autonomous/highly automated vehicles and potential, required changes to the Michigan Vehicle and Insurance codes and the practical impact of such changes on law enforcement.

PRINCIPLES FOR RECOMMENDATIONS

"Planting the flag" for Michigan to be a national and global thought leader in mobility and transportation advances, especially in fora in which participants represent other states and countries such as the Uniform Law Commission. The Michigan Council on Future Mobility in its role of making policy recommendations has adopted the following key guiding principles:

- State policies should be focused on traditional roles for individual states regarding regulation of drivers and the use of vehicles but should not stray into areas preempted by the federal government.
- Michigan should adopt policies that promote the development of related technologies responsibly and display thought leadership and avoid policies that seek to address a parochial interest or need or have the effect of making this state a regulatory island.
- Michigan should actively advise the National Highway Traffic Safety Administration of the Michigan perspective on relevant national rulemaking and seek to bring the expertise and insights of state experts to that federal policy level.
- Policy recommendations should respect collaboration with local officials, agencies and units of government and support the vertical relationships among levels of government.

- Policy recommendations should always promote the goals of improving traffic safety, advancing vehicle connectivity, environmental sustainability, use of clean energy and enhancing personal mobility for all Michigan residents.
- Make Michigan the "hub" for autonomous/highly automated/connected vehicle cybersecurity research and development and leverage the use of the Michigan Cyber Range.
- Promote deployment of standards for local communities that create functional environments for autonomous, highly automated, and connected vehicles.
- Promote collaboration among public and private sector participants with respect to intellectual property protection for the product of research, especially of trade secrets.



CONTINUING COUNCIL ACTIONS AND AREAS OF INTEREST

Creation of a High-Definition/Hyper-Accurate Map of Michigan's Roadways

- Because virtually all vehicle manufacturers and component part suppliers believe that autonomous and highly automated vehicles will require hyperaccurate/high-definition maps of roadways and road feature sets to operate safely, the Council has arranged a private-public collaboration to accomplish this for a significant area in southeastern Michigan. Public vehicles equipped with sensors provided by the private sector are now compiling road data during routine operations for the creation of a map database open for the use of public or private entities engaged in research and development of autonomous/highly automated vehicle technologies.
- The various entities involved concluded a collaboration agreement to create this map database with the State of Michigan retaining a non-exclusive, limited license to receive select data for non-commercial purposes with a limited right to grant access to select partners, as agreed to by Continental Automotive Systems and the State of Michigan, for performing research and development of highly automated vehicles in the state. When completed, Michigan will have the only publicly available, map database for this purpose in the United States, and it will provide a unique asset to developers.

The Michigan Journal of Law and Mobility

- With full support of the Council, the University of Michigan Law School has established a Journal of Law and Mobility.
- The journal is entirely digital (https://futurist. law.umich.edu/) and welcomes articles from a wide range of international contributors, including lawyers, technology practitioners, and representatives from governments around the world. It is a resource for scholarship, analysis, and information concerning law and the evolution of connected and automated vehicles and broader mobility concepts. It is yet another unique asset of the State of Michigan.

Michigan Mobility Challenge

• The Council strongly supports the Michigan Department of Transportation's administration of the Michigan Mobility Challenge. The challenge was funded with \$8 million and provides grants to innovators who are working to enhance mobility for some of our most vulnerable travelers: the elderly and disabled, especially those who are also veterans who have served our country honorably.

Initiated Discussion of Standards for Functional Community Environments

 The Council continues to review how connected and autonomous vehicles (CAVs) could affect the built environment. The review includes potential land use implications, how placemaking and CAVs could coexist, how communities are beginning to prepare for CAV deployment and what guidance would be valuable to them.





SPECIFIC ACTION ITEMS FOR 2019

The Michigan Council on Future Mobility will apply the principles and be informed by the actions noted above as it examines the following topics with a view toward specific, future recommendations.

Mobility on Demand

- Explore how technology can improve access to reliable, cost-effective, personal transportation for the disabled, elderly, socioeconomically disadvantaged, and children and can improve personal safety and security for all travelers.
- Explore how technology and new modes of delivery can enable access to goods and services for people who are mobility-challenged or completely immobile.
- Explore how Michigan can support entrepreneurs developing and deploying mobility technologies.
- Consider urban, suburban, and rural transportation ecosystems, especially where transportation modes cross jurisdictional lines.
- Explore alternative funding mechanisms, including public-private-partnerships for public transit as well as other forms of shared-ride mobility.

Electric Vehicle Charging Infrastructure Development

- Identify stakeholders including public utilities, automotive industry participants, the driving public, and electric utility ratepayers.
- Investigate what a "foundational deployment" of electric vehicle charging infrastructure would look like in Michigan in collaboration with the state's energy agency.
- Examine technologies that provide alternative forms of power generation, such as solar and use of batteries no longer suitable for electric vehicle operation.
- Explore alternative funding mechanisms, including public-private-partnerships.

Automobile Insurance

- Investigate how mobility as a service ("MaaS")
 would change the automobile insurance market,
 and how current law might be a barrier to the
 development of MaaS.
- Investigate how no-fault automobile insurance law might impact the operation of autonomous vehicles.

Transportation Infrastructure Funding

- Investigate technology-driven options for road user charging and consider the implication of privacy concerns for all transportation modes including scooters and bicycles as well as "last mile" options.
- Identify funding alternatives for policymakers with reference to the 21st Century Infrastructure Commission report recommendations.
- Identify standards for deployment of public infrastructure in support of connected and autonomous vehicle operation.

Talent Attraction, Retention, and Education

- Continue collaborative public and private efforts to promote Michigan as a great place to live, learn, and work.
- Investigate ways Michigan can develop K-12 and higher education initiatives to address the future need for residents who are skilled at working on technologies associated with highly automated and connected vehicles in cooperation with the American Center for Mobility.
- Consider extant projects that could be expanded in terms of geography and curricula.
- Explore ways Michigan's educational institutions can collaborate with the private sector in setting standards for desired skill sets and in connecting education with employment to create effective outcomes by means of internships and other forms of cooperative learning.

Public Acceptance of Highly Automated Vehicles

- Consider sponsorship of a public ride and drive of autonomous vehicles at the American Center for Mobility.
- Investigate potential membership in the Partners for Automated Vehicle Education ("PAVE").

State Law Revision

- Continue discussion of the Michigan State
 University College of Law white papers on
 potential revisions to the Michigan Compiled
 Laws ("MCL") to account for the deployment of
 highly automated vehicles within the Council's
 Legal Task Group.
- Decide whether to recommend specific modifications to the MCL, pass along the white papers without comment to the Governor and Legislature, or take no further action.

Cross-Border Mobility

- Invite participation from stakeholders on both sides of the U.S.-Canadian border on enhancing mobility for people and commerce between Michigan and Ontario.
- Explore technology solutions for current congestion issues at border crossings across all modes of transportation.
- Investigate the U.S. Department of Transportation grant program on cross-border mobility to determine if the Michigan Department of Transportation and the Council should apply with public and private sector partners.



THE COUNCIL ON FUTURE MOBILITY



Stephen Buckley
Senior Technical
Fellow/Senior Manager,
Electrical Engineering,
FCA US LLC



David BulkowskiExecutive Director,
Disability Advocates of
Kent County



Mark DavidoffMichigan Managing
Partner, Deloitte, LLP



Eric DeLongDeputy City Manager,
City of Grand Rapids



Ryan Eustice
Senior Vice President,
Autonomous Driving,
Toyota Research
Institute; Professor,
University of Michigan



Emily Frascaroli
Chief Product Litigation
Counsel, Ford Motor
Co.; Lecturer, University
of Michigan Law School



Amy Mass
Vice President and
Counsel, The Hanover
Insurance Group/
Citizens Insurance



Jeremy McClain
Director, Chassis
and Safety,
Continental Automotive
Systems, Inc.



John Peracchio
Council Chair and
General Manager,
Mobility Solutions and
Strategy, Conduent
Transportation, LLC



Gary Smyth
Former Executive
Director, Global R&D
Laboratories for
General Motors Co.,
Global Research
and Development



Brandon Tucker
Dean of Advanced
Technologies and
Public Service
Careers, Washtenaw
Community College



Satish UdpaInterim President,
Michigan State
University

Other Voting Members:



Paul Ajegba
Director,
Michigan Department
of Transportation



Jocelyn BensonSecretary, Michigan
Department of State



Tricia Foster
Director, Michigan
Department of
Technology,
Management
and Budget



Anita Fox
Director, Michigan
Department of
Insurance and
Financial Services

Prior Members:

Steve Arwood
Michigan Economic
evelopment Corporation

David BehenMichigan Department of
Technology, Management and Budget

David DeVriesMichigan Department of
Technology, Management and Budget

Kristie EtueMichigan State Police

Kevin Hertel Michigan House of Representatives

Michele HoitengaMichigan House of Representatives

John JamesRenaissance Global Logistics and James Group International

Mike Kowall

Michigan State Senate

Pat McPharlinMichigan Department of
Insurance and Financial Services

Michael SenykoMichigan Department of State

Kirk SteudleMichigan Department of Transportation

Mark Van Port FleetMichigan Department of Transportation



Colonel
Joseph Gasper
Director, Michigan
State Police



Lieutenant Colonel Richard Arnold Designee of Director of the Michigan State Police



James Fackler
Designee of Michigan
Secretary of State
Jocelyn Benson

Other Ex-Officio, Non-Voting Members:



Representative Rebekah Warren Appointed by the Michigan Speaker of the House



Representative Julie Calley Appointed by the Michigan Speaker of the House



Senator Adam HollierAppointed by the Michigan Senate Majority Leader



Senator Kim LaSata Appointed by the Michigan Senate Majority Leader

Notes		

