



Also Good Enough to Dream: Thoughts on Automated Vehicles

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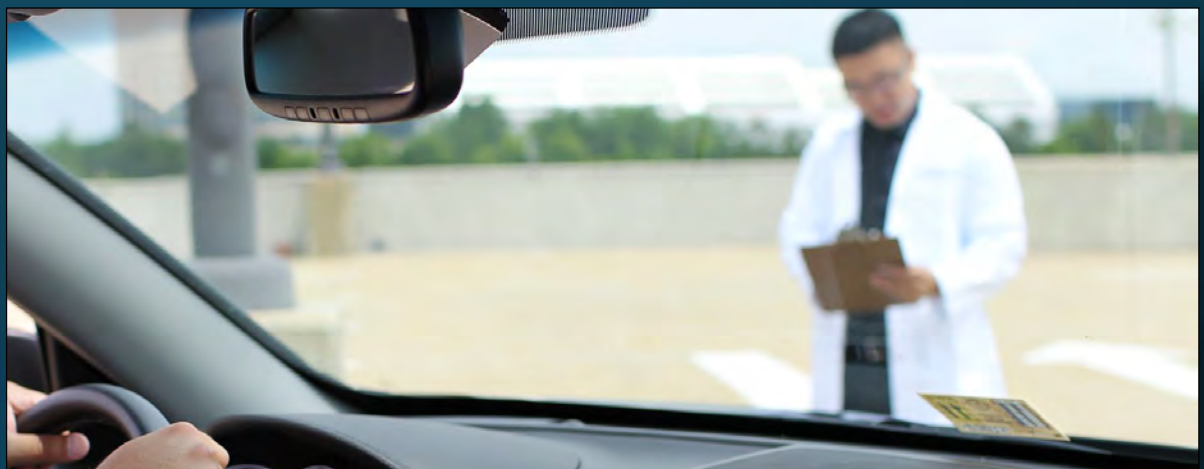


“Good Enough to Dream”

“Good Enough to Dream” is the title of a book on minor league baseball players. It was written by Roger Kahn, and first published in 1985. The premise of the book is that the players are good enough to reach the stage where it is realistic to think and even dream of making it to the big leagues. In the same way, automated vehicles have developed past the stage of future fantasy and it is possible to start talking about their realistic deployment and implications.



Open Invitation: Michigan's Legislation



SENATE BILL No. 995

ILL No. 995

May 25, 2016. Introduced by Senators KOWALL, JONES, STAMAS, BRANDENBURG, WARREN, HERTEL, COLBECK, SCHMIDT, MARLEAU, HORN and ANANICH and referred to the Committee on Economic Development and International Investment.

A bill to amend 1949 PA 160, entitled "Michigan vehicle code," by amending sections 2b, 602b, 643, 643a, and 645 (MCL 257.2b, 257.602b, 257.643, 257.643a, and 257.645), sections 2b and 645 as added and section 602b as amended by 2013 PA 231, and by adding sections 40c, 605b, and 645a, and to repeal acts and parts of acts.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1 Sec. 2b. (1) "AUTOMATED DRIVING SYSTEM" MEANS HARDWARE AND
2 SOFTWARE THAT ARE COLLECTIVELY CAPABLE OF PERFORMING ALL ASPECTS OF
3 THE DYNAMIC DRIVING TASK FOR A VEHICLE ON A PART-TIME OR FULL-TIME
4 BASIS WITHOUT ANY SUPERVISION BY A HUMAN OPERATOR. AS USED IN THIS
5 SUBSECTION, "DYNAMIC DRIVING TASK" MEANS ALL OF THE FOLLOWING, BUT
6 DOES NOT INCLUDE STRATEGIC ASPECTS OF A DRIVING TASK, INCLUDING,

SENATE BILL No. 996

ILL No. 996

May 25, 2016. Introduced by Senators KOWALL, JONES, STAMAS, BRANDENBURG, WARREN, HERTEL, COLBECK, SCHMIDT, MARLEAU, HORN and ANANICH and referred to the Committee on Economic Development and International Investment.

A bill to amend 1949 PA 160, entitled "Michigan vehicle code," (MCL 257.1 to 259.923) by adding section 645c.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1 SEC. 645c. (1) A MOTOR VEHICLE MANUFACTURER MAY PARTICIPATE IN
2 A SAVE PROJECT IF IT SELF-CERTIFIES TO ALL OF THE FOLLOWING:
3 (A) THAT IT IS A MOTOR VEHICLE MANUFACTURER. A PERSON THAT IS
4 NOT A MOTOR VEHICLE MANUFACTURER MAY NOT PARTICIPATE IN A SAVE
5 PROJECT.
6 (B) THAT EACH VEHICLE IN THE PARTICIPATING FLEET IS OWNED OR
7 CONTROLLED BY THE MOTOR VEHICLE MANUFACTURER AND IS EQUIPPED WITH
8 ALL OF THE FOLLOWING:
9 (i) AN AUTOMATED DRIVING SYSTEM.

SENATE BILL No. 997

ILL No. 997

May 25, 2016. Introduced by Senators WARREN, KOWALL, JONES, STAMAS, BRANDENBURG, HERTEL, COLBECK, SCHMIDT, MARLEAU, HORN and ANANICH and referred to the Committee on Economic Development and International Investment.

A bill to amend 1949 PA 160, entitled "Michigan vehicle code," by amending sections 2b and 601a (MCL 257.2b and 257.601a), section 2b as added by 2013 PA 231 and section 601a as amended by 2011 PA 118, and by adding section 645a.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1 Sec. 2b. (1) "AUTOMATED DRIVING SYSTEM" MEANS HARDWARE AND
2 SOFTWARE THAT ARE COLLECTIVELY CAPABLE OF PERFORMING ALL ASPECTS OF
3 THE DYNAMIC DRIVING TASK FOR A VEHICLE ON A PART-TIME OR FULL-TIME
4 BASIS WITHOUT ANY SUPERVISION BY A HUMAN OPERATOR. AS USED IN THIS
5 SUBSECTION, "DYNAMIC DRIVING TASK" MEANS ALL OF THE FOLLOWING, BUT
6 DOES NOT INCLUDE STRATEGIC ASPECTS OF A DRIVING TASK, INCLUDING,
7 BUT NOT LIMITED TO, DETERMINING DESTINATIONS OR WAYPOINTS:
8 (A) OPERATIONAL ASPECTS, INCLUDING, BUT NOT LIMITED TO,

SENATE BILL No. 998

ILL No. 998

May 25, 2016. Introduced by Senators HORN, KOWALL, JONES, STAMAS, BRANDENBURG, WARREN, HERTEL, SCHMIDT, MARLEAU and ANANICH and referred to the Committee on Economic Development and International Investment.

A bill to amend 1961 PA 236, entitled "Revised judiciary act of 1961," by amending section 2949b (MCL 600.2949b), as added by 2013 PA 285.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1 Sec. 2949b. (1) The manufacturer of a vehicle is not liable
2 and ~~shall~~**MUST** be dismissed from any action for alleged damages
3 resulting from any of the following unless the defect from which
4 the damages resulted was present in the vehicle when it was
5 manufactured:
6 (a) The conversion or attempted conversion of the vehicle into
7 an automated motor vehicle by another person.
8 (b) The installation of equipment in the vehicle by another

What does the law provide?

- Public Acts Nos. 332, 333, 334 and 335 passed the legislature very nearly unanimously in 2016. Only two “Nay” votes were registered by individual legislators during the entire process.
- The acts provide:
 - --The “test only” restriction has been amended to allow both testing and deployment on public roads.
 - --Vehicle platoons are allowed if a plan is submitted to MDOT and State Police and not rejected by either.
 - --On-demand automated vehicle fleets are permitted by manufacturers or other companies meeting certain criteria. (“Uber without a driver”).
 - --Revisions were made on liability to safeguard manufacturers from harm from unauthorized modifications, and to safeguard employees such as mechanics when following manufacturer instructions.
 - --Creation of the Council on Future Mobility to provide a public/private forum for thoughtful study and recommendations for future policy revisions.

What is not included?

- The Michigan laws do not include a) special driver licenses for automated vehicle operation b) special training protocols for law enforcement and c) disengagement reports requiring notification whenever an automated driving system is turned off during a test. Perhaps most significantly, the laws do not have geographic limits on where automated vehicles can be tested or deployed. MCL 257.665(4) says simply that such vehicles may be operated on public roads.

What observations arose since the acts took effect?

- The quick pace of technological innovation and collaboration challenges government policy makers.
- There is great interest in the goal of providing transportation as a service or subscription.
- There is a strong need for clarity in language and accuracy in describing the technology and its current capacity.
- There is a pronounced desire for testing and deployment by populations currently limited in mobility, and a strong desire to be included early in the design of this technology.
- There will be a need for public infrastructure to change to accommodate some benefits of the new technology.
- The innovations and their prospects do not diminish the ongoing responsibility for infrastructure maintenance, repair and rehabilitation in an era of scarce resources.

What comes next?

- Penalties for cyber security violations.
- Federal legislation including some preemption of state and local actions.
- State policy recommendations from the Council on Future Mobility.
- Resolution of the dispute over DSRC, 5G and the spectrum.
- Revisions as personal ownership of more highly automated vehicles gets closer.

Michigan Council on Future Mobility

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MICHIGAN COUNCIL on FUTURE MOBILITY

Adopted 02/16/18

https://www.michigan.gov/documents/snyder/MCF_Mobility_report_3_619285_7.pdf

