Border Wait Times

February 8, 2017 planetm CMDOT







TWO
COUNTRIES:
FROM MI TO
CANADA



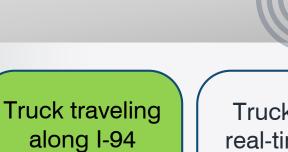


BORDER WAIT TIME

- Reduce Congestion
- Maximize Inspection Efficiency
- Enhance Safety
- Improved Business Productivity

V2I Applications

Border Wait Time



toward

border

Truck receives real-time border crossing data U.S.A./Canada over cellular network

Current wait time: Ontario via Blue Water Bridge 5 minutes

Driver Vehicle Interface (DVI) example

Allowing carrier to make a data driven decision to continue to border due to short crossing time

ON THE HORIZON

GRANT FOCUS AREAS

- Improve Environmental Features
- Enhanced Personal Benefits
- Predictive Data









TECHNOLOGY

- Connectivity
- Data
- Integration







Direction	Last Hour	Last 2 Hours	Last 4 Hours	Last 8 Hours	Last 12 Hours	Last 24 Hours	Last 48 Hours	Last 7 days	Last 30 days
Detroit to Windsor	20	23	27	24	22	15	15	11	12
Windsor to Detroit		17	12	13	12	15	15	13	14



STAKEHOLDERS + PARTNERS

- Michigan Department of Transportation, MDOT
- Michigan Department of Technology, Management and Budget, DTMB
- City of Windsor
- Detroit- Windsor Tunnel

- Ministry of Transportation, Ontario, MTO
- Border Authorities/Owners
- FHWA













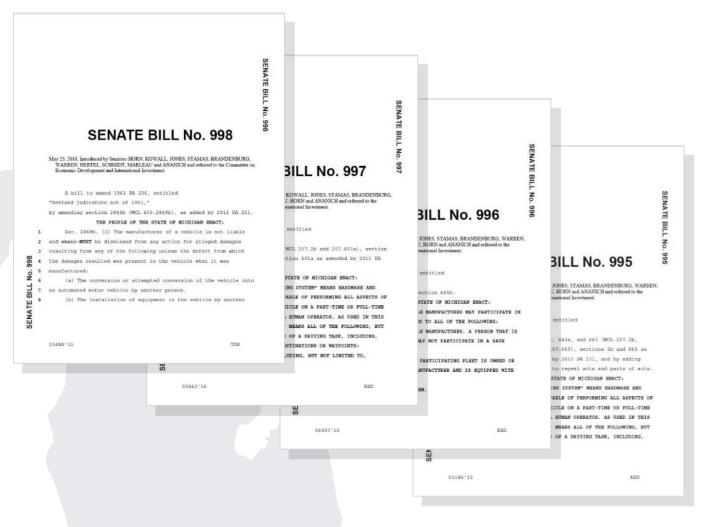
AV Legislative Actions: MI Senate Bills

Legislation Introduced by Senators

- Mike Kowall (R-White Lake)
- Rebekah Warren (D-Ann Arbor)
- Ken Horn (R-Frankenmuth)

Signed into Law by Governor Snyder

Led the way to opening Michigan up for the business of automated vehicles



OPTWARD THAT ARE COLLECTIVELY CARABLE OF REPROSETED ALL ASSECTS OF



Mike Kowall (R-White Lake), Primary Sponsor



Putting AV's on the Road

Eliminates "test only" restriction

Allows driverless operation on public roads at any time



May 25, 2016, Introduced by Senaturi KOWALL, JONES, STAMAS, BRANDENBURG, WARREN, HERTEL, COLBECK, SCHMIDT, MARLEAU, HORN and AVANICH and referred to the Committee on Economic Powelopment and International Inventment.

A bill to smend 1949 PA 300, entitled

by smending sections 2D, 602b, 643, 643a, and 665 (MCL 257.7b, 157.602b, 257.643, 257.643a, and 257.665), sections 2b and 668 as added and section 602b as amended by 2013 DM 231, and by adding sections 400. 606b, and 665a; and to reveal acts and parts of acts

THE PROPLE OF THE STATE OF MICHIGAN ENACT:

Sec. 2b. (1) "AUTOMATED DRIVING SYSTEM" MEANS HARDWARE AND SOFTMARE THAT ARE COLLECTIVELY CAPABLE OF PERFORMING ALL ASPECTS OF THE DYNAMIC DRIVING TASK FOR A VEHICLE ON A PART-TIME OR FULL-TIME

SUBSECTION, "DYNAMIC DRIVING TASK" MEANS ALL OF THE POLLOWING, BE DORS NOT INCLUDE STRATEGIC ASSECTS OF A DELVING TASK. INCLUDING

03186115

A.D.

Public Act No. 332

Mike Kowall (R-White Lake), Primary Sponsor





Open for Transport

Platooning of commercial vehicles

Supporting the military, large shipping or logistics companies

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

A bill to smend 1949 PA 300, entitled

by smending sections 2D, 602b, 643, 643a, and 665 (MCE 257.2D, 257.602b, 257.642, 257.643a, and 257.665), sections 2b and 665 as added and section 602b as mended by 2031 NA 211, and by adding sections 400. 606b. and 665a; and to reveal acts and parts of acts

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Sec. 2b. (1) "AUTOMATED DRIVING SYSTEM" MEANS HARDWARE AND SOPTHARE THAT ARE COLLECTIVELY CAPABLE OF PERFORMING ALL ASPECTS OF THE DYNAMIC DRIVING TASK FOR A VEHICLE ON A FART-TIME OR FULL-TIME

4 BASIS MITROUT ANY SUPERVISION BY A NUMAN OPERATOR. AS USED IN THIS 5 SUBSECTION, "DYNAMIC DRIVING TASK" MEANS ALL OF THE FOLLOWING, BUT

*15



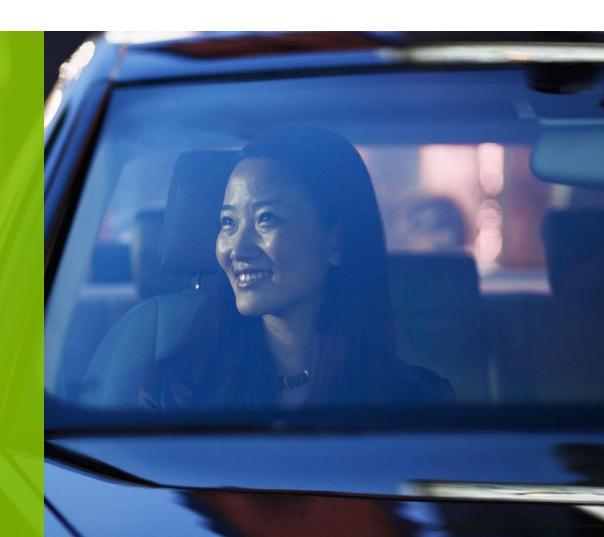
Mike Kowall (R-White Lake), Primary Sponsor



A New Way to Ride

Automated vehicle networks connected to consumers

Creates array of travel options for consumers



May 25, 2016, Introduced by Senature KOWALL, JONES, STAMAS, BRANDENBURG, WARREN HERTEL, COLBECK, SCHMIDT, MARLEAU, HORN and ANANICH and ordered to the

A bill to smend 1949 FA 300, entitled

by smending sections 2b, 602b, 643, 643a, and 665 (MCL 257.2b, 257.602b, 257.663, 257.643a, and 157.665), sections 2b and 665 as added and section 602b as amended by 2013 MA 211, and by adding sections 456.65b, and 655a, and to recommend acts of acts

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Mike Kowall (R-White Lake), Primary Sponsor





State of Michigan Support

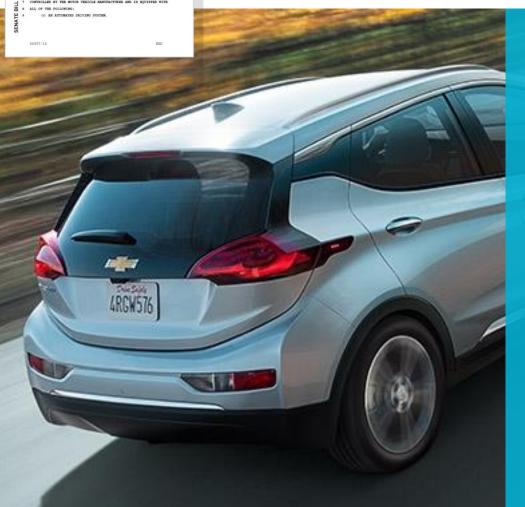
Council on Future Mobility reports to the legislature annually; recommends new laws or revisions are needed

What new policies would help enhance safety, mobility and the state's economy through this technology



Mike Kowall (R-White Lake), Primary Sponsor





Supports Manufacturers

Provides specific standards for SAVE projects

Vehicle networks started and controlled by vehicle manufacturers



Rebekah Warren (D-Ann Arbor), Primary Sponsor



World Class Destination

Creates the American Center for Mobility (ACM)

The mission of the ACM is still evolving and will include vehicle testing in real world conditions



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

A bill to smend 1961 TA 236, entitled

y amending section 2949b (MCL 600.2949b), as added by 2013 DA 251.

THE PROPLE OF THE STATE OF MICHIGAN ENACT: Sec. 2949b. (1) The manufacturer of a vehicle is not liable

and shall-MUST be dismissed from any action for alleged damages

4 the damages resulted was present in the vehicle when it was
5 manufactured.

(a) The conversion or attempted conversion of the vehicle in



Ken Horn (R-Frankenmuth), Primary Sponsor





Protection for Mechanics

Ensures that a mechanic, acting in compliance, will not be exposed to liability when working on autonomous technology.