

**Testimony of
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**Michigan Senate Committee on Economic Development and International Investment
Hearing on
Senate Bills 995, 996, 997, and 998**

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Chairman Horn, Minority Vice Chair Warren, and distinguished members of the Committee, thank you for inviting me to share Ford Motor Company's views on the autonomous vehicle legislation pending your consideration. My name is Emily Frascaroli, and I focus on safety and regulatory policy issues. I am here to express Ford's support for Senate Bills 995, 997, and 998. We are grateful that Michigan is taking action to permit autonomous vehicle operations and support their deployment on the State's roads.

As you know, Michigan is the hub of Ford's global manufacturing operations. Virtually every Ford vehicle you see on the road today has a connection to Michigan. Ford employs 47,000 people in Michigan, we have 13 major manufacturing facilities in Michigan, and the home to Ford's product development center, research and engineering, safety and emissions labs, and two test tracks are here in Michigan. In 2015, we purchased over \$16 billion worth of goods and services from Michigan-based suppliers.

We at Ford see autonomous vehicles as having potentially as significant an impact on society as Ford's moving assembly line did 100 years ago. We are serious about deploying safe autonomous vehicles and have spent more than a decade researching and developing them. Ford is the first automaker to test its autonomous research vehicles at night, in complete darkness, as part of light detection and ranging (LiDAR) sensor development. And Ford is the first automaker to begin testing its vehicles at Mcity, the University of Michigan's simulated urban environment. We want to thank Senator Warren for championing SB997, which will aid in the creation of the American Center for Mobility at Willow Run and provide additional resources for AV testing right here in Michigan. Ford has dedicated significant resources to lab, track, and on-road testing of autonomous vehicles in Michigan, and we feel SB997 will help our company and the State remain leaders in the future of mobility.

Our CEO, Mark Fields, recently announced that Ford intends to deliver a high-volume, SAE Level 4, fully autonomous vehicle for ride sharing in geo-fenced areas in 2021. So what does that mean? It is a vehicle that has no steering wheel, no gas or brake pedal, and will be used by ride-sharing or commercial fleets. To achieve that goal, we recently announced four key investments and collaborations that are expanding our company's strong research in advanced algorithms, 3D mapping, LiDAR, and radar and camera sensors. These partnerships will advance and expand the important work we began and will continue to do in Michigan.

So, we are serious about deploying autonomous vehicles. We are also serious about working with federal and state policymakers in order to establish a legal and regulatory framework that ensures safety and provides certainty for efficient market deployment of autonomous vehicles. For our customers and us, the right framework is ideally uniform and nationally applicable. We have been

regularly engaged with the National Highway Traffic Safety Administration (NHTSA) as they have developed autonomous vehicle guidelines over the past year.

Ford is also a founding member of the Self-Driving Coalition for Safer Streets, whose members include Google, Lyft, Uber, and Volvo Cars. Our group's core mission is to promote the benefits of self-driving vehicles and support the safe and rapid deployment of these innovative technologies, which have enormous potential to help people drive more safely, facilitate mobility, and reduce the environmental impact of traffic congestion. Our coalition's members agree about a uniform and nationally applicable framework for autonomous vehicles.

With respect to state legislative or regulatory action in this sphere, Ford is engaged with the American Association of Motor Vehicle Administrators (AAMVA) and NHTSA in their development of model state policies. Ford respectfully recommends that any state action be consistent with action taken at the federal level in order to avoid potentially conflicting state-specific requirements that could serve as a disincentive to autonomous vehicle testing and deployment. It is for that reason that I would reiterate how pleased we are to see that Michigan's legislature is making moves to advance autonomous vehicle deployment. The most important thing about SB995 is that it permits on-road use of AVs. Ford supports this bill and commends its author, Senator Kowall, and the Administration for their willingness to consider Ford's point of view. Passage of this bill will keep Michigan at the forefront of AV development and use.

Thank you again for inviting Ford to testify this morning. To underscore Ford's commitment to developing and deploying autonomous vehicles, I would like to direct the Committee's attention to a brief video about our advancements in autonomous vehicle technology.