

# AUTONOMOUS VEHICLES: OVERVIEW OF FEDERAL AND ALABAMA STATUTE AND REGULATION



A fully autonomous vehicle (AV) has been described as one carrying “a central processing unit that is fully responsible for controlling its operation and is inherently different from the most advanced form of driver assist.”<sup>1</sup> Expansion of the AV market in the U.S. could generate economic benefits of around \$196 billion as a result of increases in vehicle miles traveled and parking savings and decreases in crashes, air pollution, and time spent in congested traffic.<sup>2</sup> In the U.S., AV operation is regulated primarily by state and local authorities. This report provides a brief overview of federal and Alabama AV law and regulation.

In September 2016, the National Highway Traffic Safety Administration (NHTSA) and the U.S. Department of Transportation (USDOT) issued the *Federal Automated Vehicles Policy* that introduced a proactive approach in providing safety assurance and facilitating innovation. In September 2017, NHTSA issued *Automated Driving Systems: A Vision for Safety 2.0 (ADS 2.0)* to offer a flexible non-regulatory approach to automated vehicle technology safety and accommodate the safe testing and deployment of automated driving systems (ADS) levels 3 through 5 (Table 1). ADS 2.0 has been augmented with AV 3.0.<sup>3</sup>

Although attempts have been made to develop a federal statutory framework, these efforts have not been successful. Members of the 115<sup>th</sup> Congress proposed the American Vision for Safer Transportation through the Advancement of Revolutionary Technologies Act (AV Start Act) in 2018.<sup>4</sup> This act would have served as a federal framework for regulation, testing, deployment, and ensuring safety of automated vehicles. However, the Act’s progress halted in the Senate, partially due to concerns regarding AV safety and implementation.<sup>5</sup>

Table 1. Society of Automotive Engineers (SAE) automation levels.

SAE Level	0	1	2	3	4	5
	<b>Highly Automated Vehicles (HAVs)</b>					
	No Automation	Driver Assistance	Partial Automation	Conditional Automation	High Automation	Full Automation
NHTSA Description	Zero autonomy; the driver performs all driving tasks.	Vehicle is controlled by the driver, but some driving assist features may be included in the vehicle design.	Vehicle has combined automated functions like acceleration and steering, but the driver must remain engaged with the driving task and monitor the environment at all times.	Driver is a necessity, but is not required to monitor the environment. The driver must be ready to take control of the vehicle at all times with notice.	The vehicle is capable of performing all driving functions under certain conditions. The driver may have the option to control the vehicle.	The vehicle is capable of performing all driving functions under all conditions. The driver may have the option to control the vehicle.

Alabama is one of 37 states that have enacted legislation or issued executive orders regarding the operation and testing of AVs.<sup>6,7</sup> Developing such legislation at a state level may address different aspects of the transportation sector within the state that can potentially be affected by AV operation including court system funding, public safety, liability in car crashes, access to alcohol inside the car, roadway infrastructure, and the requirement of driver's license and insurance coverage.<sup>8,9,10</sup>

Currently, Alabama has no laws or regulations pertaining to autonomous *non-commercial* (passenger) vehicles.<sup>11,12</sup> However, in 2019 Alabama passed legislation for *commercial* vehicles allowing for AV deployment on public roads with the requirement of liability insurance for \$2 million and no requirement for the presence of an operator in the vehicle. The restriction to commercial vehicles could be explained by the fact that Alabama officials expect commercial vehicles to become the first instance of AVs in the state.<sup>13</sup> The state's current statutes also allow for on-highway testing of short-distance platooning convoys of trucks, as Alabama in 2018 exempted self-driving trucks from certain traffic laws when they are controlled by electronically coordinated speed and braking systems.

In April 2016, the Alabama Joint Legislative Committee on Self-Driving Vehicles was established to study self-driving vehicles. The committee was reconstituted in 2019 and currently consists of five Senators (Tom Whatley (Chair), Gerald Allen, Randy Price, Clay Scofield, and Rodger Smitherman), and five Representatives (Barbara Drummond, Danny Garrett, Wes Kitchens, Craig Lipscomb, and Margie Wilcox) who are working to formulate a plan for transition of self-driving vehicles into everyday life.<sup>14</sup>

<sup>1</sup> Deloitte (n.d.). Forces of change: the future of mobility. *The Atlantic*. Available at: <https://www.theatlantic.com/sponsored/deloitte-2017/future-of-mobility/1763/>

<sup>2</sup> Fagnant and Kockelman (2015). Preparing a nation for autonomous vehicles: opportunities, barriers and policy recommendations. *Transport. Res. Part A Policy Pract.* 77, 167-181. doi: 10.1016/j.tra.2015.04.003

<sup>3</sup> U.S. Department of Transportation (2018). Preparing for the Future of Transportation: Automated Vehicles 3.0. <https://www.transportation.gov/briefing-room/automated-vehicles>

<sup>4</sup> Nelson, K. (2019). Autonomous Vehicle Federal Regulation. Foley and Lardner LLP. Available at:

<https://www.foley.com/en/insights/publications/2019/01/autonomous-vehicle-federal-regulation>

<sup>5</sup> Kong, S. (2019). Autonomous Vehicle Federal Regulation. *The National Law Review*. Available at: <https://www.natlawreview.com/article/autonomous-vehicle-federal-regulation>

<sup>6</sup> Governors Highway Safety Association. (n.d.). Autonomous vehicles. Available at: <https://www.ghsa.org/state-laws/issues/autonomous%20vehicles>

<sup>7</sup> Thornton, W. (2019). How the Alabama Legislature is preparing for self-driving cars. AL.com <https://www.al.com/news/anniston-gadsden/2019/03/how-the-alabama-legislature-is-preparing-for-self-driving-cars.html>

<sup>8</sup> Ibid

<sup>9</sup> Nusbaum, L. (2019). Lawmakers try to pave way for self-driving vehicles. WSFA 12 News. Alabama Politics. <https://www.wsfa.com/2019/09/27/lawmakers-try-pave-way-self-driving-vehicles/>

<sup>10</sup> Little, J. (2017). Legislative Committee meets to prepare for the coming of self-driving cars. OANow.com. [https://www.oanow.com/news/legislative-committee-meets-to-prepare-for-the-coming-of-self/article\\_1ece077c-decd-11e6-8265-97655265ad80.html](https://www.oanow.com/news/legislative-committee-meets-to-prepare-for-the-coming-of-self/article_1ece077c-decd-11e6-8265-97655265ad80.html)

<sup>11</sup> Tanenblatt, E., Adolf, J., Daubert, T., and Schneider, C. (2019). United States: Autonomous Vehicles: U.S. Legal and Regulatory Landscape. Mondaq.

<http://www.mondaq.com/unitedstates/x/833422/cycling+rail+road/Autonomous+Vehicles>

<sup>12</sup> SB 47, 2019 Reg. Sess. (Alabama 2019). Available at: <http://alisondb.legislature.state.al.us/ALISON/SearchableInstruments/2019RS/PrintFiles/SB47-enr.pdf>

<sup>13</sup> Alabama News Network (2019). The future of self-driving cars in Alabama. 26 September 2019. <https://www.alabamaneews.net/2019/09/26/the-future-of-self-driving-cars-in-alabama/>

<sup>14</sup> Blankenship, A. (2019). State committee preparing for self-driving vehicles. *The Auburn Villager*. Available at: [https://www.auburnvillager.com/news/state-committee-preparing-for-self-driving-vehicles/article\\_77929bd2-eb65-11e9-befa-c3dad0188595.html](https://www.auburnvillager.com/news/state-committee-preparing-for-self-driving-vehicles/article_77929bd2-eb65-11e9-befa-c3dad0188595.html)

## Acknowledgement

This report was prepared by Olga A. Bredikhina for the Alabama Transportation Institute at the University of Alabama. Produced by the Transportation Policy Research Center, a unit of the Alabama Transportation Institute.

