### An Attempt To Control What Controls Itself: **Unraveling Florida's Autonomous Vehicle Laws**

By Evan P. Dahdah



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Originally published in Trial Advocate. Vol. 38, No. 3 (2019). Used with permission.



George Jetson could get his son ready for school during their morning commute with the help of a flying vehicle driving itself. The idea of owning anything even remotely similar to these vehicles once seemed impossible for the average person. However, fully autonomous vehicles ("AVs") are no longer fantasy; cars with a self-driving option are already being tested across the country.

Overall, Americans — both policymakers and the everyday citizen — expect AVs to serve a wide array of uses.<sup>1</sup> Not only can these vehicles increase the efficiency of our globalized economy. but these vehicles may also have a tremendous impact on driver safety by reducing collisions through the utilization of highly advanced computer systems that can predict and prevent accidents.<sup>2</sup> The beginning stage of a technological era, however, will inevitably carry bugs, glitches, or viruses.<sup>3</sup> These unpredictable dangers with AVs during their beginning stages will be felt by the drivers of the vehicles, but most importantly the public using the same roads. It only takes a split second for an AV to glitch, and a distracted human operator (with the mindset that the vehicle is driving itself) to cause serious harm to the vehicle, driver, or third parties.<sup>4</sup>

As a result of state legislatures encouraging the use of autonomous vehicles on their roads, the public's fears surrounding this technology have commanded federal attention over the past decade. Due to the rapid evolution of vehicles being programmed with various levels of automation, the Department of Transportation (DOT), through the National Highway Traffic Safety Administration (NHTSA), continues to research, test, and implement lower level policy documents and guidelines for states to incorporate into laws regulating these vehicles on their roads.<sup>5</sup> The NHTSA currently regulates the manufacturing safety standards of these vehicles, while state governments are given the discretion of regulating these vehicles' operation on their roadways.<sup>6</sup>

Even though states are given the discretionary power to regulate the operation of AVs, state laws may be preempted if they stand as an "obstacle to the accomplishment and execution of a NHTSA safety standard."<sup>7</sup> And although the NHTSA is currently conducting the early phases of testing and research for these vehicles prior to the enactment of federal uniform laws, several states have raced to establish AV laws without a firm grasp of the technology.

This article will discuss Florida's effort to become one of the first states to allow these vehicles on its roads. The article begins with the legislative history behind the state's current AV laws,

EDITOR'S NOTE: This timely article provides a survey of Florida's efforts to promote autonomous or "self driving" vehicles from 2012, when Florida passed one of the first statutes governing these vehicles, to legislation passed in 2019. The article also looks at approaches to limiting liability for the use of this developing technology in Florida and elsewhere. It was adapted from a Note originally written for the Stetson Law Review.

and then compares the plain language of Florida's laws with other state AV laws. The article will identify several gaps in Florida's current laws and will propose potential solutions for the Florida courts and legislature.

#### I. FLORIDA AND THE AUTONOMOUS VEHICLE

A. Florida's Hopes and Dreams for the Self-Driving Car

In 2012, Florida became one of the first states, alongside Nevada, Michigan, and California, to enact legislation governing the testing and use of autonomous vehicles on its roadways.<sup>8</sup> Senator Brandes, a veteran lawmaker who has been the main proponent of autonomous vehicles, pioneered the first AV bill.<sup>9</sup> He recently spoke about the rapid progression of the AV industry at the 2018 Florida Autonomous Vehicle Summit, and seeks to have these vehicles on Florida roads as soon as possible.<sup>10</sup>

Because Florida's first AV statutes in 2012 mandated a "testing phase" and a report ("the Report") from the Department of Highway Safety and Motor Vehicles (DHSMV) by February 12, 2014, Florida could not establish itself as an automated vehicle testing ground to receive federal grants or private investment until those results were determined. As this article will explain in more detail in the following sections, the Report was a prerequisite for both public and private funding for AVs and related technology. Shortly after the DHSMV's report in 2014, however, the Florida Legislature passed a bill which expanded the entities authorized to conduct autonomous vehicle testing to include research organizations with accredited educational institutions. Florida is currently undertaking massive plans while relying heavily on the private sector to introduce this technology onto its roads as soon as possible. Thus, although the benefits of autonomous vehicle technology are framed in terms of cities using these technologies, the driving force behind this push for automation seems to be grounded in something else - profit.11

Tampa is one of the first cities in the nation to deploy automated and connected vehicle technology on real city streets.<sup>12</sup> The Tampa Hillsborough Expressway Authority (THEA) has created a "Connected Vehicle Pilot Program" ("Pilot Program") in attempts to transform its downtown area into a more advanced, autonomously backed transportation system. The goals of the Pilot Program are several-fold: (1) prevent crashes through the use of automated vehicles; (2) enhance traffic flow; (3) improve transit trip times; and (4) reduce greenhouse gas emissions.<sup>13</sup> Once the Report was finalized in 2014, THEA was able to accept a DOT contract as a part of its own federal pilot program to test these vehicles in various parts of the U.S.<sup>14</sup> In 2016, the DOT authorized THEA and its private sector partners to proceed with a design, testing, and deployment stage that began on January 1, 2018.<sup>15</sup> Over the course of 2017, THEA finalized its \$21 million-project to fully scale the connected vehicle technology throughout Tampa's downtown. Included as one of THEA's partners on the Pilot Program is the University of South Florida Center for

Urban Transportation Research — an "accredited education institution" — which is required under Florida law to allow THEA's AV testing to move forward.

Another new project that Florida has planned is SunTrax, a "large-scale, state-of-the-art facility being developed by the Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise (FTE) dedicated to the research, development and testing of tolling and emerging transportation technologies in safe and controlled environments."<sup>16</sup> Similarly to THEA's Pilot Program, SunTrax's funding comes from its partnership with the U.S. DOT as a "designated AV proving ground" --- among only ten other areas in the nation. SunTrax's mission is simple: it will be a 400-acre site along one of Florida's main interstates that will be solely used to accelerate the future of transportation.17 This massive site will be created to mirror many situations that regular vehicles encounter on a daily basis, including a 2.25-mile oval with a 70 mph design speed, a replicated multi-modal passenger transfer (similar to airport drop-off terminals), a simulation of urban intersections, and an overpass above the main road.

- B. The History of Florida's AV Laws
  - 1. The Climb: 2012

At the time of the AV laws' inception, fully automated vehicles were not even available to the public. Florida's legislature began its mission toward automation by stating that its intent behind its first AV laws was to encourage the "safe development, testing, and operation of motor vehicles with autonomous technology on the public roads of the state."<sup>18</sup> Having high hopes for its new laws in a vastly unknown industry, Florida began its pursuit of automation in 2012.<sup>19</sup> With a quick definition of "autonomous technology,"<sup>20</sup> and a muddled definition of whom the "operators" of the vehicles are during its "testing phase," the original AV laws<sup>21</sup> left puzzling questions.

The autonomous technology used in AVs was originally defined as the technology installed in the motor vehicle with the capability to drive without the active control or monitoring by a human operator.<sup>22</sup> However, somewhat contradicting this definition, the "operator" of these vehicles was the person who "causes the vehicle's autonomous technology to engage, regardless of whether the person is physically present in the vehicle while the vehicle is operating in autonomous mode."23 Thus, Florida frontloaded its laws in preparation for the inevitable deployment of automated vehicles that would not require a human's monitoring of the environment.<sup>24</sup> Additionally — but unclearly — Florida's introduction of such laws came with controversy about who could use the vehicles. Was Florida's first set of AV laws exclusively created for "employees, contractors, or other persons designated by manufacturers of autonomous technology" who may operate these vehicles for testing purposes, or were the laws crafted to apply to anyone in the public who owns an autonomous vehicle?25

The 2012 versions of sections 316.85 and 316.86, Florida Statutes, are the foundation of Florida's AV law.<sup>26</sup> Analyzing the scope of both sections as originally enacted supports a conclusion that the plain language of each provision was meant to govern two separate functions of law pertaining to AV use.<sup>27</sup> Section 316.85 was meant to be broad, while section 316.86 was meant to be narrow.<sup>28</sup> By cross referencing the language of section 316.85(2), which stated that, "[f]or purposes of this *chapter*," all Chapter 316 of Florida Statutes is applicable to the operation of a vehicle equipped with autonomous technology.<sup>29</sup> However, the operation of an autonomous vehicle could not have been limited to solely testing purposes, because section 316.85(2)'s language stated that "a person who possesses a valid driver license may operate an autonomous vehicle in autonomous mode."<sup>30</sup>

Conversely, section 316.86's limitation on the use of AVs for testing could not be read broadly to cover all of Chapter 316 because doing so would take away the utility of section 316.85. The title of section 316.85 explicitly stated: "Operation of vehicles equipped with autonomous technology on roads for testing purposes."<sup>31</sup>

Another seemingly apparent difference between the two provisions was how each treated the "operator" of the vehicle. While Section 316.85 required only that the operator possess a valid driver license, Section 316.86 limited these vehicles' use to testing purposes.<sup>32</sup> Further, the language of Section 316.86 that *required a human operator inside* the vehicle during its operation was incompatible with the language of Section 316.85, which *did not require the "operator" of the vehicle to be inside* the vehicle while it is in autonomous mode.<sup>33</sup>

#### 2. The Run: DHSMV's Report

In establishing section 316.86, Florida Statutes, the Florida Legislature required that the Report be submitted to the President of the Senate and the Speaker of the House of Representatives by February 12, 2014. Although the DHSMV had almost two years to create the Report, it was filed on February 10, 2014<sup>34</sup> and was only seven pages long. The Report illustrates Florida's attempt to advance AV laws faster than its lawmakers could understand the technology.

Instead of clarifying the "public use" or "testing" debate, the DHSMV's interpretation of the 2012 enacted AV legislation limited the current statutes to authorizing the testing of autonomous vehicles. The Report did not address the operation of AV use for non-testing purposes, and did not shed light on how sections 316.85 and 316.86 were meant to coexist as both a public use statute and a testing requirement statute.<sup>35</sup>

The Report also failed to provide the required precautions and recommendations<sup>36</sup> for the Florida Legislature to consider before continuing its push to automation. While the DHSMV deferred to the NHTSA for vehicle safety standards, the Report further included eight recommendations from the NHTSA suggesting how states should develop their policies regarding the operation of these automated vehicles.<sup>37</sup> The Report's analysis was based on these recommendations<sup>38</sup> while using other state AV laws to establish whether Florida's laws at the time were sufficient to allow lawmakers to proceed into creating new and more detailed AV regulations.

The Department analyzed NHTSA's recommendation that "drivers understand how to operate a self-driving vehicle safely and that on-road testing minimizes risk to other road users."<sup>39</sup> Although pointing to section 316.86 — which ambiguously limited "operators" during a testing stage to licensed drivers who are allowed to test these vehicles — the Report's analysis omitted section 316.85, which unambiguously allowed *any* driver with a valid driver license to operate an AV.<sup>40</sup>

The Report mentioned proposed AV regulations from California, Nevada, and Michigan that include similar testing provisions to that of section 316.86; however, those state laws mandated additional safeguards.<sup>41</sup> For example, Nevada requires "two licensed drivers to be in the autonomous vehicle while testing and that the state issue red license plates to test vehicles." 42 Michigan also requires its AVs to have a "special license plate." 43 This unique requirement provides awareness to other drivers that a vehicle may be operating in autonomous mode --- which could arguably limit the number of crashes during testing phases --- when the technology is most susceptible to glitching. The Report, however, quickly disposed of this idea by stating that "Florida has over 200 specialty license plates, so identification may not be effective."44 The Report ignored the fact that other highly populated states like Nevada and Michigan already had a multitude of specialty license plates.45

The Report also described Florida's simplistic process of establishing liability when AVs cause harm through a finding of only two facts: (1) the person who engages the autonomous technology is the operator; and (2) the original vehicle manufacturer is not liable for a defect in the autonomous technology unless the defect was present when the vehicle was manufactured.<sup>46</sup> However, while the Report stated that "Florida law briefly addresses liability,"<sup>47</sup> this two-prong test does not clearly resolve situations when other Florida laws may apply.

For example, the Florida Ban on Texting While Driving Law ("Texting Law") allows law enforcement to "issue citations as a secondary offense to persons who are texting while driving."48 Included within the Texting Law, however, a person who is operating an autonomous vehicle is permitted to text while the car is moving.49 This is inconsistent with Section 316.145, which requires that an autonomous vehicle have a system to alert the operator if the technology fails so that the operator can take control of the vehicle. How can an operator safely be attentive to the surrounding environment if they are too busy texting? Further, this loophole appears to authorize operators of lower level automated vehicles - who are still required to be aware of the surrounding environment - to text while driving. Like the texting-while-driving scenario, Florida's legislature seemingly authorizes a similar exemption for AVs in its amendment of section 316.303, which

allows vehicles equipped with autonomous technology to have an active television screen while the AV is in motion.<sup>50</sup>

Although the Report found that current Florida law satisfied only four of the eight NHTSA recommendations<sup>51</sup> and stated that "detailed policies and regulations may not be feasible at this time at the federal or state level[,]"<sup>52</sup> the Report proposed no change to the existing law and thus failed to clarify the confusion amongst the public, the policymakers, and even the DHSMV themselves.<sup>53</sup> The Department offered

no guidelines for the Florida legislature to use in their creation of future policies.<sup>54</sup>

#### 3. The Jump: 2016

Following the Report, the Florida Legislature made substantial amendments to the AV laws. These amendments demonstrate that the Florida legislature did not address the precautions mentioned at the end of the Report. The Final Bill Analysis for H.B. 7061, which amended the original AV laws into

what they are today, refers to the federal government's role in developing "vehicle safety" measures to give states more guidance on their formulation of AV laws.<sup>55</sup> Although the NHTSA and the Report both counsel states to slow the pace of broadening the scope of AV laws, very little additional research preceded these amendments, enacted less than two years after the Report was filed.

The first significant change to Florida's AV law in the 2016 amendments occurred with the removal of the "testing" provisions in section 316.86.<sup>56</sup> Autonomous vehicles are now allowed on the public roads without any prior testing procedure or requirements. Currently, section 316.86 only includes liability protections for the original manufacturer of the AV.<sup>57</sup> This continues to encourage large manufacturers and software engineers to bring their products to Florida to pioneer the AV industry.<sup>58</sup>

Other changes to the original AV laws stem from amendments to section 319.145, which demonstrate that registered autonomous vehicles are only required to meet *applicable* federal standards and regulations,<sup>59</sup> rather than simply "[continuing] to meet federal standards and regulations."<sup>60</sup> This subtle alteration to the statute's language demonstrates Florida's willingness to stray away from NHTSA's guidance documents and policy statements by proclaiming that autonomous vehicles now only have to meet applicable federal standards. Due to the lack of any federal law during the beginning stages of this new industry, Florida purposefully positioned itself to be in a zone of autonomy that may have led to new developments by the NHTSA or DOT.

Also included in section 319.145 are the "safety clauses" which govern the means of how an autonomous vehicle must be created in order to ensure the highest rate of success and

Expecting an operator of an AV moving at high speeds to understand when a failure has occured and then navigate the vehicle safely — within the fraction of a second it occurs is an almost impossible task.

to minimize any possibility of injury.<sup>61</sup> The amendment to section 319.145 merely reworded the "safety clauses" included in the statute and failed to provide any additional protection to AV operators. The only slight difference between the 2012 version of section 319.145 and its 2016 amendment is that instead of requiring a visual indication for the "operator" to take control of the vehicle should the technology fail (as indicated in the 2012 version), the 2016 amendment simplifies the language so that now the operator is "required . . . to take

> control" of the vehicle.<sup>62</sup> However, this requirement will be met with skepticism by consumers once problems arise during an autonomous ride. Why should the operator of an AV be required to take control of the vehicle if a technological failure occurs, when the entire essence of autonomous vehicles is to allow the driver to let the car drive itself? Expecting an operator of an AV moving at high speeds to understand when a failure has occurred and then to navigate the vehicle safely — within the fraction

of a second it occurs — is an almost impossible task.63

Florida's legislature has also deviated substantially from the traditional human operator requirements by statutorily allowing a human operator to have less control within these vehicles. With the recent amendment of section 316.303, "active television broadcast[s] or pre-recorded video entertainment content" is permitted to be visible from the driver's seat while the vehicle is in motion if the vehicle is being operated by autonomous technology.<sup>64</sup> Simply put, under current Florida law the "operator" of the autonomous technology is allowed to watch television during their trip in an automated vehicle. Without offering any explanation or support for the evolution of section 316.303's longstanding prohibition of "television-type receiving equipment" during the operation of a vehicle to expressly authorizing any type of entertainment content in an AV,65 the legislature simply amended the statute and moved on. When section 316.303 is cross-referenced with section 319.145, an important question emerges --- how can Florida's laws require an "operator" of an AV to take control of its vehicle in the split second that the technology fails while it is moving along public roads at very high speeds? Moreover, how can Florida's laws also permit the same "operator" to be watching a final drive of the Rams vs. Patriots Superbowl when this critical situation occurs? Vehicle manufacturers like Tesla, which have already begun to develop alert systems for operators who fall asleep, may provide the answer to this question.66

Another puzzling question that arises when reading Florida's AV laws contemplates a situation where an AV is being operated without a human present inside the vehicle.<sup>67</sup> Should the technology fail in this situation, a human operator would still be legally required to take control of the vehicle as section 316.145 requires.<sup>68</sup> Section 316.145 prescribes an unrealistic alternative that if a human operator cannot take control of the vehicle if the automated technology fails, then the technology itself must be capable of bringing the vehicle to a complete stop.<sup>69</sup> If the technology operating the vehicle fails and there is no operator inside the vehicle to take control, it is highly unlikely that the same failing technology would be able to adequately and safely bring the vehicle to a complete stop.<sup>70</sup>

It seems premature for Florida's legislature to allow these vehicles to be used without a human operator present in the vehicle while expecting an AV to predict a failure and then — while it is failing — to safely stop in accordance with its surrounding environment. However, with the addition of these new requirements that undoubtedly must coexist for these vehicles to work, manufacturers will now have to create a sort of "back-up system" to the vehicle's autonomous technology if the AV technology fails.<sup>71</sup> These examples will undoubtedly arise in situations that are already beginning to develop among various pilot programs and future business opportunities that Florida is actively seeking. The main complication with the coexistence of these statutes will be how courts will assign liability to the person who, although not inside the vehicle, engaged the autonomous vehicle to operate, or the manufacturer who did not safeguard the vehicle with adequate emergency systems.<sup>72</sup> This will be a tricky task for state courts because the only detailed law governing the

use of autonomous vehicles is an exemption from liability of the car manufacturer under Section 316.86.

#### 4. The Splash: 2018's Failed Bills & 2019's Current Law

Following the enactment of Florida's 2016 amended autonomous vehicle laws, the Florida legislature attempted to broaden these laws into an even more progressive and lenient system in 2018.<sup>73</sup> These proposed changes included different terms or phrases to define what is considered the "driver" or "operator" of an autonomous vehicle, such as a change from "autonomous vehicle" to "automated driving system." Additionally, the legislature attempted to distinguish between "fully autonomous vehicles" and "semi-autonomous vehicles" — where the former *no longer would need* a licensed human operator present. Although these two bills died in committee,<sup>74</sup> the legislature quickly revisited these ideas in 2019.

Effective July 1, 2019, House Bill 311 amended a variety of existing AV statutes to provide clarity and conform to ongoing federal research in this field.<sup>75</sup> The legislature revisited the idea of distinguishing fully autonomous vehicles with semi-autonomous vehicles and codified this change in two sections of Florida Statutes.<sup>76</sup> This change clearly separates vehicles that "[do] not require a licensed human operator" and are "designed to function without a human operator"

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from vehicles that are not fully autonomous, likely due to the complex fact-intensive situations that would have previously plagued courts for determining tort liability.<sup>77</sup>

Notably, these amendments tried to clarify the Catch-22 language of the previous AV law, which required the "operator" of an autonomous vehicle to take control of the vehicle if a failure occurred. Now, fully autonomous vehicles must achieve a "minimal risk condition" if a failure of the automated driving system occurs.<sup>78</sup> Fully autonomous vehicles also must be covered by insurance that provides primary automobile coverage of at least \$1 million for death, bodily injury, and personal injury protection benefits.<sup>79</sup>

Legally, by distinguishing and codifying the different types of autonomous vehicles that will use Florida's roadways, the Legislature may have clarified the issues involved in determining liability when accidents occurs. The Legislature's goal in enacting the bill is clearly to encourage further development and use of AVs: "the bill could serve to stimulate private sector investment in Florida and incentivize autonomous vehicle research, testing, and deployment in Florida. Insurance companies may see an indeterminate increase in sales resulting from application of insurance requirements to on-demand autonomous vehicle networks and autonomous vehicles."<sup>80</sup> This demonstrates the confidence and expectations that Florida — along with other states — holds for the future of the autonomous vehicle field.

#### II. PREDICTING LIABILITY FOR AV FAILURES

When dealing with a question of liability involving an AV, fingers will generally be pointed in three directions: (1) the car manufacturer; (2) the company that created the car's AV technology; or (3) the human behind the AV wheel.<sup>81</sup> In each circumstance, there will be arguments that could hold weight under various theories of liability — however, different states have decided to either shield or expose one of these parties in attempts to help courts determine how to impose liability when something goes wrong.<sup>82</sup>

A. Who's Liable? Automobile Manufacturers, Developers, or the "Drivers"?

Currently, under Florida's laws regarding AVs, only two statutes even mention the word "liability," and they each do so briefly and ambiguously.<sup>83</sup> Courts will have to decide how exactly Florida's AV laws can coexist when one statute contemplates liability on the part of a third-party manufacturer if the technology fails<sup>84</sup> and another statute seems to rest liability on the "operator"<sup>85</sup> in certain situations.

Some experts and attorneys in practice have suggested<sup>86</sup> that traditional products liability<sup>87</sup> will apply to claims against an AV's manufacturer. Although Florida recognizes that manufacturers may be held strictly liable for an injury to the user of its products,<sup>88</sup> section 316.86 seeks to protect manufacturers from liability by developing clear exemptions in its language.<sup>89</sup> This statute, however, may not account for

the various other errors that might expose a manufacturer to liability. Because of the complex designs involved with AVs, manufacturers will have to redesign their vehicles to safely utilize the technology, radars, and sensors for the vehicle to work properly.<sup>90</sup> Due to the symbiotic relationship between the third-party technology company and the manufacturer required to produce a working product, manufacturing defects will still be at the helm of lawsuits and may involve multiple providers of different components of the vehicle. Accordingly, although manufacturers seem shielded from liability, there is still a risk to the public during the early production stages of AVs because of the unforeseen glitches that may arise.<sup>91</sup> Complex questions of liability were left unanswered in 2014 when the DHSMV Report quickly concluded that liability for AVs could be addressed by a simple two-prong test.<sup>92</sup> These questions, however, remain in the present statutory scheme.

- B. State Guidance Towards Defining Liability
  - 1. California

As one of the first states that welcomed AVs onto its roads, California enacted legislation in 2012 that required California's Highway Patrol to adopt "safety standards and performance requirements to ensure the safe operation and testing of autonomous vehicles."<sup>93</sup> The framework of California's first enacted legislation not only includes a more robust testing requirement than Florida's,<sup>94</sup> but also incorporates a different approach as to how liability for the manufacturers of AVs must be established.

Where manufacturers in Florida are "shielded" from liability in the event of a defect or glitch in the autonomous technology, California "requires the manufacturer to sign a document binding them to the autonomous vehicle."<sup>95</sup> "Manufacturer" under California's autonomous vehicle laws is defined as,

The person . . . that originally manufactures a vehicle and equips autonomous technology on the originally completed vehicle or, in the case of a vehicle not originally equipped with autonomous technology by the vehicle manufacturer, the person that modifies the vehicle by installing autonomous technology to convert it to an autonomous vehicle after the vehicle was originally manufactured.<sup>96</sup>

California instituted a less vague path to liability should a defect or a crash occur that will place liability on the manufacturer through a signed document, whether it is the original manufacturer of the vehicle or "the person that modifies the vehicle by installing autonomous technology to convert it to an autonomous vehicle."<sup>97</sup> Consistent with California's approach, multiple representatives from major companies that are advancing this technology like Google, Mercedes-Benz, and Volvo, have stated that they, the manufacturers of self-

driving vehicles, would voluntarily take responsibility for any accidents caused by these cars.<sup>98</sup>

#### 2. Nevada

Nevada boasts twenty separate statutes within its exclusive autonomous vehicle statutory code ("Nevada's Code").<sup>99</sup> Within Nevada's Code are various detailed statutes that pertain to the execution of an autonomous industry, such as defining: (1) the automated driving system;<sup>100</sup> (2) the permitted tasks that the vehicles' may use during their operation;<sup>101</sup> (3) the testing or operation requirements;<sup>102</sup> and most importantly, (4) the questions of liability.<sup>103</sup>

Like Florida and California, Nevada's Code also includes such an exemption.<sup>104</sup> Nevada's Code, however, takes a step further by also protecting the "original manufacturer or developer of an automated driving system" from any damages that may arise out of a defect not caused by their own technology.<sup>105</sup> While using very similar language as Florida's law to shield the vehicle manufacturers, Nevada's Code provides additional coverage for the developer of the AV's technology by clarifying its role in liability. As demonstrated above, vehicle manufacturers will have to adapt the physical structures of AVs in order to coexist with the developer's technology.<sup>106</sup> During the beginning phases of these relationships, the developers of the technology must have a shield from liability for their businesses to be profitable.<sup>107</sup> With Florida's statutory scheme, developers of the autonomous technology do not have any explicit coverage other than a common law claim of products liability against the vehicle manufacturer who is presumed to be exempt from liability.<sup>108</sup> However, Nevada's extra layer of protection for these developers allows Nevada courts to analyze the root of the issues in each case to determine who was at fault - the person, the vehicle manufacturer, or the developer of the AV technology.

Nevada's Code also differentiates between an "autonomous vehicle"109 and a "fully autonomous vehicle."110 This distinction is important for courts to apply a categorical methodology during its initial encounters with AV lawsuits ---- the actual human operator's conduct in the case of an accident should be viewed differently depending on the circumstances. Additionally, Nevada's Code prescribes a three-prong requirement for the human operator of an AV that is not fully autonomous if the vehicle's technology fails.<sup>111</sup> Nevertheless, if the vehicle is fully autonomous - which will likely be without a human operator<sup>112</sup> — the vehicle must be "capable of achieving a minimal risk condition if a failure of the automated driving system occurs." A human operator will certainly interact with a fully autonomous vehicle differently than autonomous vehicle that requires some attention. If a human operator is inside the vehicle that is not fully autonomous, a more workable approach by courts could place liability on those operators since they are supposed to be aware of their surroundings while the AV is in motion.

#### 3. Lessons for Florida

Although Florida's current AV laws are similar to California's, Florida can protect drivers and the public from lengthy litigation involving either the manufacturers or developers who want to stand by their products and have those companies sign an extra form binding them to their AVs. In the event of an accident, courts can look to these pre-signed forms that would provide for less discovery and time during litigation, but more importantly less monetary and emotional costs for the party's involved. Additionally, the manufacturers can win the public's trust and increase customer interest in these vehicles by standing by their products through a binding document.

Florida's AV laws surrounding the liability of an AV's manufacturer or developer should look to the statutory language in Nevada's Code for analyzing cases that will inevitably arise in these third-party situations. Although a violation of a statute raises a presumption of negligence per se,<sup>113</sup> Florida's law must first make sense of the situations at hand. If a "fully autonomous" vehicle is in the same category for liability purposes as a semi-autonomous vehicle, the human operators will be unfairly treated. Although section 316.145 requires the human operator to take control of the vehicle in the event of a failure, the expectation is that a human operator will most likely be focused elsewhere while the vehicle is in motion. Thus, even though the human operator violated the statute and negligence per se would traditionally be presumed, courts must analyze the vehicle's autonomy - like in Nevada's Code — to better understand the individual human operator's situation.

#### III. THE FUTURE FOR AN UNPREDICTABLE ERA

The issues raised here will most likely be solved either through a federal preemptive process, adoption of legislative standards that will fill the gaps of Florida's current AV laws, or the courts' creation of precedent that clarifies the paradoxical language of the laws. Ultimately, autonomous vehicle legislation, implementation, and execution will begin slowly and progress gradually. As the expectations for AVs have been exponentially increasing by the year, manufacturers and large companies have become aware of the high risks involved with making AVs available to the public before they are ready for actual widespread use.

Although current law allows the use of AVs, perhaps Florida should tap the brakes until more research and development into the safety of these vehicles is conducted and disseminated. For example, the Department of Transportation is currently undertaking pilot programs to test and research AVs, and the Drafting Committee on Highly Automated Vehicles is working on a uniform law to cover the deployment of automated driving systems for statewide adoption.<sup>114</sup> This Committee is attempting to answer various questions that most states advancing the use of AVs simply cannot answer.<sup>115</sup> A 2017 Committee report noted that, according to USDOT and NHTSA, the "goal of state policies in the automated realm should be *sufficiently consistent* to avoid a patchwork of inconsistent State laws that could *impede innovation and the expeditious and widespread distribution of safety enhancing automated vehicle technol-*

ogies."<sup>116</sup> A uniform code could help to fill the widespread holes within not only Florida's quick-paced AV laws but within the laws states across the country.

The federal government has granted state policymakers an enormous amount of power with the creation of AV laws. State policymakers must take a step back and fully understand the implications of allowing an emerging industry to Although current law allows the use of AVs, perhaps Florida should tap the brakes until more research and development into the safety of these vehicles is conducted and disseminated.

have free reign in the world of transportation that already has a multitude of complex issues. Before passing legislation to expand the use of self-driving vehicles on Florida roads, state policymakers should shift gears and slow down their rapid progression of new AV laws until NHTSA researches and implements national safety standards. Only then can AVs in Florida fufill the state legislature's mission for the "safe development, testing, and operation of [AVs] on the public roads."

- <sup>1</sup> THINK, America THINKS: The Road to Autonomous Vehicles 2018. This survey polled a random nationwide sample of 1,000 adults 18 years or older and found that these services can include travel between transit/ train stations or airports, taxi services, campus travel, local delivery, trucking services, and personal use.
- <sup>2</sup> See NHTSA, Automated Vehicles for Safety, The Evolution of Automated Safety Technologies, https://www.nhtsa.gov/technology-innovation/automated-vehicles-safety (last visited Oct. 23, 2019) (explaining that 94 percent of serious crashes are due to human error).
- <sup>3</sup> See, e.g., Patrick Lin, Why Ethics Matters for Autonomous Cars, in Autonomous Driving Technical, Legal and Social Aspects 69, 79 (Markus Maurer, J. Christian Gerdes, Barbara Lenz, Hermann Winner eds., 2016) (demonstrating that "no complex technology we have created has been infallible"); DB, China Hacked the Pentagon to Get Weapons Programs Data, TPM (May 29, 2013, 4:14 AM), https://talkingpointsmemo.com/ news/china-hacked-the-pentagon-to-get-weapons-programs-data (showing the cyberattacks on the Pentagon by China exploiting vulnerable technology).
- <sup>4</sup> The National Transportation Safety Board indicated that the autonomous Uber vehicle detected the pedestrian six seconds before the crash, but the human "backup" driver failed to intervene in time. Daisuke Wakabayashi, *Self-Driving Uber Car Kills Pedestrian in Arizona, Where Robots Roam*, New York Times, Mar. 18, 2018, https://www.nytimes. com/2018/03/19/technology/ uber-driverless-fatality.html. Tesla's first major incident with its autonomous vehicle technology occurred on May 7, 2016, in Williston Florida, where the vehicle failed to apply the brakes when "neither the autopilot nor the driver noticed the white side of [a] tractor trailer against a brightly lit sky." Bill Vlasic & Neal E. Boudette, *Self-Driving Tesla Was Involved in Fatal Crash, U.S. Says*, New York Times, June 30, 2016, https://www.nytimes.com/2016/07/01/business/ self-driving-tesla-fatal-crash-investigation.html?module=inline.
- <sup>5</sup> NHTSA has adopted and implemented SAE International's Levels of Automation and other applicable terminology. U.S. Dept. of Transportation, *Preparing for the Future of Transportation, Automated Vehicles 3.0* iv (Oct. 2018), https://www.transportation.gov/sites/ dot.gov/files/docs/ policy-initiatives/automated-vehicles/320711/preparing-future-transportation-automated-vehicle-30.pdf [hereinafter AV 3.0] ("Level 1 automation only includes a few driver assistance features, but the vehicle is still controlled by the driver; Level 2 automation has combined automated functions such as acceleration and steering, but the driver must remain

engaged with the driving task and monitor the environment at all times; *Level 3* automation requires a driver that is ready to take control of the vehicle at all times with notice, but that driver is not required to monitor the environment; *Level 4* automated vehicles are capable of performing driving functions under certain conditions, and the driver may have the option to control the vehicle; *Level 5* automation is a fully automated

vehicle under all conditions.").

<sup>6</sup> Brian A. Browne, *Self-Driving Cars: On the Road to a New Regulatory Era*, 8 Case W. Reserve J.L. Tech. & Internet 1, 1 (2017); *see* Pilot Program for Collaborative Research on Motor Vehicles with High or Full Driving Automation, 83 Fed. Reg. 50,872, 50,875 (Oct. 10, 2018) ("NHTSA's authority over [automated driving systems] is broad and clear. The Act obligates NHTSA to regulate the safety of motor vehicles and 'motor vehicle equipment.'").

<sup>7</sup> Geier v. American Honda Motor Co., 529 U.S. 861, 863 (2000). The Court also noted that the DOT is "likely to have a thorough understanding of its own regulation[s] and its objectives and is uniquely qualified to comprehend the likely impact of state requirements." *Id.* 

8 2012 Fla. Sess. Law Serv. Ch. 2012-111

(C.S.H.B. 1207); Nev. Rev. Stat. § 482A (West 2012); Mich. Comp. Laws. §§ 227, 257 (West 2014); Cal. Veh. Code § 38750 (West 2013); Ben Husch & Anne Teigen, *A Roadmap for Self-Driving* Cars, State Legislatures Magazine (Jan. 1, 2017), http://www.ncsl.org/bookstore/state-legis-latures-magazine/a-roadmap-for-self-driving-cars.aspx.

- 2012 Fla. Sess. Law Serv. Ch. 2012-111 (C.S.H.B. 1207).
- <sup>10</sup> Janelle I. Taylor, Jeff Brandes: 5 Takeaways from Autonomous Vehicle Summit, FLAPOL (Nov. 29, 2018), http://floridapolitics.com/archives/282227-jeff-brandes-5-takeaways-from-autonomous-vehicle-summit.
- <sup>11</sup> See Stephen McBride, The Driverless Car Revolution Has Begun Here's How to Profit, Forbes (Sep. 6, 2018, 10:08 AM), https://www. forbes.com/sites/stephenmcbride1/2018/ 09/06/the-driverless-car-revolution-has-begun-heres-how-to-profit/#495d1fb461cf; Michelle Andersen, et. al., Where to Profit as Tech Transforms Mobility, BCG, (Aug. 23, 2018), https://www.bcg.com/en-us/publications/2018/profit-tech-transforms-mobility.aspx (explaining that the transformation of the automobile industry towards automation will allow for the private sector to monetarily capitalize through new social trends (such as shared mobility and ride sharing) and expansion of the typical "automobile boundaries").
- <sup>12</sup> Tampa Hillsborough Expressway Authority, THEA Connected Vehicle Pilot – Fact Sheet, Connected Vehicle Pilot THEA (Nov. 14, 2018), https:// www.tampacvpilot.com/wp-content/uploads/2018/11/2672-THEA-Connected-Vehicle-Pilot-Fact-Sheet-20181114-rgb.pdf.
- <sup>13</sup> *Id*.

- <sup>15</sup> *Id*.
- <sup>16</sup> Florida's Turnpike Enterprise (FTE) SunTrax, FDOT (last visited Oct. 23, 2019), http://www.fdot.gov/traffic/its/projects\_deploy/cv/MapLocations/ FTE SunTrax.shtm.
- <sup>17</sup> Accelerating the Future of Transportation, SunTrax (last visited Oct. 23, 2019), http://www.suntraxfl.com/wp-content/uploads/2017/11/SunTrax -Brochure-.pdf.
- <sup>18</sup> House of Representatives, Final Bill Analysis, C.S./H.B. 1207 at 2 (Fla. 2012).
- <sup>19</sup> Both the Florida's House and Senate unanimously voted for the passage of these new automated vehicle laws. *Id.* at 1.
- <sup>20</sup> "[T]echnology installed on a vehicle enabling it to operate without the active control and continuous monitoring of a human operator." *Id.*
- <sup>21</sup> These statutes are: (1) § 316.003, Fla. Stat. (2012) defining the terms "autonomous vehicle" and "autonomous technology" when used in provisions for traffic control); (2) § 316.85, Fla. Stat. (2012) (authorizing a person who possesses a valid driver license to operate an autonomous vehicle as well as defining the "operator" of an autonomous vehicle); (3) § 319.145, Fla. Stat. (2012) (requiring that autonomous vehicles registered in the state meet federal standards and regulations, specifying certain requirements for such vehicles, authorizing the operation of "vehicles equipped with autonomous technology by certain persons for testing purposes under *certain conditions*," limiting liability of the "original manufacturer of a vehicle converted to an autonomous vehicle," and requiring the DHSMV to prepare a report on the safe testing and operation

<sup>&</sup>lt;sup>14</sup> *Id*.

of autonomous vehicles by February 12, 2014).

- <sup>22</sup> § 316.003, Fla. Stat. (emphasis added).
- <sup>23</sup> Id. § 316.85 (emphasis added). This statute included a testing provision. Compare House of Representatives Final Bill Analysis C.S./H.B. 1207 (2012) (stating "[§ 316.85, F.S.] provides that vehicles equipped with autonomous technology may be operated on roads in this state by employees, contractors, or other persons designated by manufacturers of autonomous technology for the purpose of testing the technology"), with House of Representatives Final Bill Analysis C.S./H.B. 7061 (2016) (amending § 316.85 to "expressly authorize a person holding a valid driver license to operate an autonomous vehicle in autonomous mode on roads in this state ... Operation of an autonomous vehicle on roads in this state would no longer be limited to licensed drivers designated for testing purposes.") (emphasis added). See also id. at n.51 (2016) (discussing a DHSMV email to committee staff dated Jan. 25, 2016, stating that the DHSMV will authorize operation of autonomous without a human physically present in the vehicle only on a closed course).
- See AV 3.0, supra note 5 (explaining how these levels of automation do not require a human to be monitoring the vehicle while it is in autonomous mode).
- Compare § 316.86, with House of Representatives Final Bill Analysis C.S./H.B. 1207 (2012); John W. Terwilleger, Navigating the Road Ahead: Florida's Autonomous Vehicle Statute and its Effect on Liability, 89 FLA. B.J. 26 at 3 (2015) (citing § 316.85 "[o]perators are limited to either the autonomous technology manufacturer's 'employees, contractors, or other designated persons,' or 'research organizations associated with accredited educational institutions"), with § 316.85 ("Autonomous vehicle operation . . . (1) A person who possesses a valid driver license may operate an autonomous vehicle in autonomous mode (2) For purposes of this chapter . . . a person shall be deemed to be the operator of an autonomous vehicle operating in autonomous mode when the person causes the vehicle's autonomous technology to engage, regardless of whether the person is physically present in the vehicle . . . . "). See also Jeffery Mackowski, Comment, Good But Not Great: Autonomous Vehicles and the Law in Florida, 11 FIU L. REV. 221, 232-33 (2015) (arguing that Florida's original autonomous vehicle laws did not limit the operation of these vehicles to only testing use).
- <sup>26</sup> The text of § 316.86, Fla. Stat. (2014) is identical to the session law text to which it was enacted in 2012. See 2012 Fla. Laws. ch. 2012-174, 100.
- <sup>27</sup> But see DHSMV Publication, Excellence in Service, Education and Enforcement, https://www.flhsmv.gov/html/CJSummer2012.pdf (last visited Oct. 23, 2019) (stating that "a person who possesses a valid driver license may operate an autonomous vehicle in autonomous mode on a Florida road-way if manufacturers of the technology designate the person as a driver for testing purposes") (emphasis added). This statement by the DHSMV on the front page of its "2012 Legislative Update" derives from a mix of both § 316.85 and § 316.86 to create an ambiguous definition of who could actually use these vehicles from the onset of the initial AV laws by taking away the plain language of each statute.
- <sup>28</sup> Mackowski, *supra* note 25, at 234.
- <sup>29</sup> § 316.85(2) (emphasis added).
- <sup>30</sup> Id.
- <sup>31</sup> § 316.86.
- <sup>32</sup> Compare § 316.85(1) ("A person who possesses a valid driver license may operate an autonomous vehicle in autonomous mode on roads in this state if the vehicle is equipped with autonomous technology."), *with* § 316.86(1) ("Vehicles equipped with autonomous technology *may be operated on roads in this state* by employees, contractors, or other persons designated by manufacturers of autonomous technology . . . .").
- <sup>33</sup> §§ 316.86, 316.85 (emphasis added).
- <sup>34</sup> Julie L. Jones, Fla. Dep't of Highway Safety and Motor Vehicles, Autonomous Vehicle Report 1 (Feb. 1, 2014), www.flhsmv.gov/html/HSMVAutonomousVehicleReport2014.pdf [hereinafter AV Report (2014)].
- <sup>35</sup> Compare id. at 6 (stating that the NHTSA "does not recommend that states attempt to establish safety standards for autonomous vehicle technologies (for public use)"), with § 316.85 (prescribing safety standards for public use of autonomous vehicles).
- <sup>36</sup> § 316.86 (requiring the DHSMV to submit a report "recommending additional legislative or regulatory action that may be required for the safe testing and operation of motor vehicles equipped with autonomous technology").
- <sup>37</sup> AV Report (2014), *supra* note 34, at 3 ("(1) Ensure that the driver understands how to operate a self-driving vehicle safely[;] (2) Ensure that on-road testing of self-driving vehicles minimizes risks to other road

users[;] (3) Limit testing operations to roadway, traffic and environmental conditions suitable for the capabilities of the tested self-driving vehicles[;] (4) Establish reporting requirements to monitor the performance of self-driving technology during the testing[;] (5) Ensure that the process for transitioning from self-driving mode to driver control is safe, simple, and timely[;] (6) Self-driving test vehicles should have the capability of detecting, recording, and informing the driver that the system of automated technologies has malfunctioned[;] (7) Ensure that installation and operation of any self-driving vehicle technologies does not disable any federally required safety features or systems[;] (8) Ensure that self-driving test vehicles record information about the status of the automated control technologies in the event of a crash or loss of vehicle control.").

- <sup>38</sup> *Id.* at 5.
  <sup>39</sup> *Id.*
- <sup>40</sup> See § 316.85, Fla. Stat. (describing that anyone who owns a valid driver license may operate an autonomous vehicle).
- <sup>41</sup> See AV Report (2014), *supra* note 34, at 4 (explaining these additional safeguards).
- <sup>42</sup> Nev. Rev. Stat. Ann. § 482A.070 (West 2013); AV Report (2014), *supra* note 34, at 4.
- <sup>43</sup> Mich. Dep't of Transp., Public Act 231 of 2013; Section 665(3) Testing and Operation of Automated Vehicles 1 (2013) (discussing how Public Act 231 will allow autonomous vehicles to drive on public roads if they display a "manufacturer" license plate); AV Report (2014), *supra* note 35, at 4.
- <sup>44</sup> AV Report (2014), *supra* note 34, at 4.
- <sup>45</sup> These states have a variety of special license plates that are available to purchase. See State of California Department of Motor Vehicles, *California Special Interest License Plates*, https://www.dmv.ca.gov/portal/dmv/ detail/online/elp/elp; Department of Motor Vehicles Official Website of the State of Nevada, *License Plates*, DMV, http://www.dmvv.com/platesmain.htm; *License Plate Store*, State of Michigan Secretary of State, https://www.michigan.gov/sos/0,4670,7-127-1585\_1595---,00.html.
  <sup>46</sup> MV (2014) supra poto 34, et 5.
- <sup>46</sup> AV Report (2014), *supra* note 34, at 5.
  <sup>47</sup> *Id.*
- <sup>48</sup> § 316.305(1)(d), Fla. Stat. (2018); Mackowski, *supra* note 25, at 237.

- <sup>50</sup> Further discussed in Part II(B)(3).
- <sup>51</sup> Mackowski, *supra* note 25, at 231.
- <sup>52</sup> AV Report (2014), *supra* note 34, at 6.
- <sup>53</sup> "[T]here are no national safety standards and many unknowns. Policymaking at this juncture is difficult, at best." *Id.* at 7.
- <sup>54</sup> See Mackowski, supra note 25, at 232 (explaining that the Department did not even attempt to use its comparison of other state regulations in its Report for future Florida law that may have created some solutions to the lack of satisfaction for the NHTSA recommendations).
- <sup>55</sup> House of Representatives, Final Bill Analysis, C.S./H.B. 7061 at 2 (Fla. 2016).
- <sup>56</sup> § 316.86, Fla. Stat. (2016).
- <sup>57</sup> Id.
- See Brandes, supra note 10 (demonstrating through Senator Brandes, the lead support of AVs, that Florida's AV laws are intended to encourage private development through exemptions of liability for big manufacturers).
- <sup>59</sup> § 319.145, Fla. Stat. (2012).

61 Id.

- <sup>63</sup> See Klaus Dietmayer, Automated Driving in Its Social, Historical and Cultural Contexts, in Autonomous Driving Technical, Legal and Social Aspects 407 (Markus Maurer, J. Christian Gerdes, Barbara Lenz, Hermann Winner eds., 2016) ("While simulator studies of highly-automated driving have shown that realistic transfer times to the driver . . . can be assumed before the driver can reliably take over the driving task again, with *fully automated* driving a human would not provide any backup whatsoever.") (emphasis added); Christian Gold et. al., "Take over!" How Long Does it Take to Get the Driver Back into the Loop?, BMW Group Research & Technology 1942 (2016) (demonstrating that quick decision-making with a failed automated vehicle operating in autonomous mode generally leads to the "excessive use of the brakes, a low quality of manifestation of awareness, and a high risk of collision if another vehicle is near").
- <sup>64</sup> § 316.303, Fla. Stat. (2018).
- <sup>65</sup> Compare § 316.303(1), Fla. Stat. (2016) ("No motor vehicle operated on the highways of this state shall be equipped with television-type receiving equipment so located that the viewer or screen is visible from the driver's

<sup>&</sup>lt;sup>49</sup> § 316.305(3)(b)(7).

<sup>60</sup> Id.

<sup>62</sup> Id.

seat), with § 316.303(1), Fla. Stat. (2018) ("No motor vehicle may be operated on the highways of this state if the vehicle is actively displaying moving television broadcast or pre-recorded video entertainment content that is visible from the driver's seat while the vehicle is in motion, *unless the vehicle is equipped with autonomous technology . . . and is being operated in autonomous mode . . . ."*) (emphasis added).

- § 316.85, Fla. Stat. (2016) ("[A] person shall be deemed to be the operator of an autonomous vehicle operating in autonomous mode when the person causes the vehicle's autonomous technology to engage, regardless of whether the person is physically present in the vehicle while the vehicle is operating in autonomous mode.").
- <sup>67</sup> See *id*.§ 319.145 (requiring the operator to "take control of the autonomous vehicle" should the autonomous technology fail).
- <sup>68</sup> *Id*.
- See Dietmayer, supra note 63, at 407 (stating that a vehicle can only achieve a safe degree of autonomy if it can "perceive its surroundings, interpret them appropriately and be able to derive and execute reliable actions continuously").
- <sup>70</sup> Elon Musk discussed new updates to the Tesla autopilot software, such as the vehicle gradually slowing down if the human operator has not touched the vehicle's wheel, the vehicle triggering emergency lights to alert the operator, or the car's horn sounding to wake up the operator. Joe Rogan, Joe Rogan Experience #1159 – Elon Musk, 01:08:22– 01:10:16 (Sep. 7, 2018).
- <sup>71</sup> See Walther Wachenfeld & Hermann Winner, Automated Driving in Its Social, Historical and Cultural Contexts, in Autonomous Driving Technical, Legal and Social Aspects 428–29 (Markus Maurer, J. Christian Gerdes, Barbara Lenz, Hermann Winner eds., 2016) (explaining that the goal of "emergency intervening systems"—which would automatically engage once the vehicle senses the driver has lost control—would only activate "when the loss of control becomes obvious and thus there is a severely increased risk" of harm).
- <sup>72</sup> See Terwilleger, supra note 25, at 32 (suggesting that traditional products liability law will apply).
- <sup>73</sup> Included in the Transportation Committee's analysis for C.S./S.B. 712, the Florida Senate uses the NHTSA's federal guidance for automated driving systems, but without confronting the various weaknesses that the federal guidance documents continuously state are still abundant in this sector. Florida Senate, Transportation Bill Analysis and Fiscal Statement, C.S./S.B. 712 at 2–3 (Fla. 2018).
- <sup>74</sup> H.B. 353 (Fla. 2018); S.B. 712 (Fla. 2018). H.B. 353 died in Government Accountability Committee and S.B. 712 died in the Banking and Insurance Committee.
- <sup>75</sup> See Chapter 2019-101, Laws of Florida (amending §§ 316.003, 316.85, 319.145, 322.015, 338.2216, 316.062, & 316.065, Fla. Stat. (2019)).
- 76 §§ 316.003 & 316.85, Fla. Stat.
- 77 Id.
- <sup>78</sup> "Minimal risk condition" is defined as a "reasonably safe state, such as bringing the vehicle to a complete stop and activating the vehicle's hazard lights." § 319.145 (2019).
- <sup>79</sup> § 627.749, Fla. Stat. (2019).
- <sup>80</sup> C.S./H.B. 311 at 6.
- <sup>81</sup> See generally Terwilleger, supra note 25, at 32.
- <sup>82</sup> For example, Florida has expressly manifested its intent to protect the manufacturers of these vehicles to encourage development and its economy intrastate. See § 316.86, Fla. Stat. (2016); AV Report (2014), supra note 34, at 7.
- See § 316.86 (regarding a manufacturer's liability); § 319.145 (requiring the human driver to take control of the vehicle if the technology fails); House of Representatives, Transportation and Ports Subcommittee Staff Analysis, C.S./H.B. 7061 at 8 (Fla. 2016) (stating that the effect of the legislature's failed proposed change to § 316.85 would "[place] responsibility for actionable [liability] events related to an autonomous vehicle while operating in autonomous mode *with the driving system*, potentially including the owner, manufacturer, or seller of the system").
- <sup>84</sup> See § 316.86 (shielding an original manufacturer of an autonomous vehicle if there is a defect in the technology created by a third party).
- § 319.145. This statute can also add another layer of liability to the situation by stating that the "autonomous vehicles registered in [Florida] must continue to meet applicable federal standards and regulations" thus the original manufacturer, although protected on the surface from liability should a technological defect arise, must also be subject to liability if federal standards change and the manufacturer fails to follow those standards.

- <sup>86</sup> Terwilleger, *supra* note 25, at 32; Jeffrey K. Gurney, *Sue My Car Not Me: Products Liability and Accidents Involving Autonomous Vehicles*, 2013 U. III. J.L. Tech. & Pol'y 101, 127 (2013).
- <sup>37</sup> Under Florida's strict liability laws, there are three different categories of ways that a product may be considered "defective," (1) virtue of a design defect; (2) manufacturing defect; (3) or an inadequate warning. *Faddish* v. Buffalo Pumps, 881 F. Supp. 2d 1361 (S.D. Fla. 2012).
- See Aubin v. Union Carbide Corp., 177 So. 3d 489, 510–11 (Fla. 2015) ("[W]here a manufacturer places a defective and unreasonably dangerous product into the stream of commerce, the manufacturer, not the injured customer, should bear the costs of the risks posed by the product.") (quoting *Green v. Smith & Nephew AHP, Inc.*, 629 N.W. 2d 727, 752 (2001)).
- § 316.86 (stating that the "original manufacturer of a vehicle converted by a third party into an autonomous vehicle is not liable in, and shall have a defense to and be dismissed from, *any legal action* brought against the original manufacturer by any person injured due to an alleged vehicle defect caused by the conversion of the vehicle, or by equipment installed by the converter, unless the alleged defect was present in the vehicle as originally manufactured") (emphasis added).
- <sup>90</sup> See Hermann Winner & Walther Wachenfeld, Effects of Autonomous Driving on the Vehicle Concept, in Autonomous Driving, Technical, Legal, and Social Aspects 257–61 (Markus Maurer, J. Christian Gerdes, Barbara Lenz & Hermann Winner eds., 2016) (illustrating the required areas for a car manufacturer's design either inside or outside that will need to be altered for a vehicle to adequately use autonomous technology).
- <sup>91</sup> See Dana M. Mele, Comment, The Quasi-Autonomous Car as an Assistive Device for Blind Drivers: Overcoming Liability and Regulatory Barriers, 28 Syracuse Sci. & Tech. L. Rep. 26, 42 (2013) (explaining that developers of these computer and software systems will have a greater incentive to create a safer product if exposed to a heightened liability standard, but can also be deterred if liability also rests on the manufacturers once the product is in the market).
- <sup>92</sup> See text accompanying notes 46-47, above.
- <sup>93</sup> Senate Bill No. 1298, S.B. 1298 (Cal. 2012).
- <sup>24</sup> California law requires that: (1) An autonomous vehicle that was to be operated on public roads for testing purposes must have a driver that possesses a proper class of license for the autonomous vehicle; (2) The manufacturer of the vehicle must designate a person for the testing; (3) The driver must monitor the vehicle; and (4) The manufacturer must obtain and prove insurance in the amount of five million dollars as well as have a certification that meets various safety mechanisms for the testing of the vehicle. Cal. Veh. Code Ann. § 38750(5)(b) (West 2012). See Mackowski, *supra* note 25, at 241 (demonstrating that the testing entities in California must jump through more detailed and expensive hoops than under Florida's testing policies).
- <sup>95</sup> AV Report (2014), *supra* note 34, at 5; Cal. Veh. Code Ann. § 38750(G) (3) (West 2017).
- 96 Cal. Veh. Code Ann. § 38750(a)(5).
- <sup>97</sup> Id.
- <sup>98</sup> Browne, *supra* note 6, at 6.
- <sup>99</sup> See Nev. Code. Ch. 482A. Autonomous Vehicles (2019).
- <sup>100</sup> Nev. Rev. Stat. § 482A.025–482.036 (West 2019).
- <sup>101</sup> *Id.* § 482A.034.
- <sup>102</sup> *Id.* § 482A.070.
- <sup>103</sup> *Id.* § 482A.090.
- <sup>104</sup> *Id.* <sup>105</sup> *Id.*
- <sup>106</sup> Winner & Wachenfeld, *supra* note 90.
- <sup>107</sup> See generally Gary E. Marchant & Rachel A. Lindor, *The Coming Collision Between Autonomous Vehicles and the Liability System*, 52 Santa Clara L. Rev. 1321, 1340 (2012) (explaining that because of the deep pockets of the manufacturers and developers of new products, these developers historically need to be protected during the initial stages since the rate of failure is high; otherwise, they will be "unduly impeded by liability concerns").
- <sup>108</sup> See § 316.86 (defining this exemption).
- <sup>109</sup> Nev. Rev. Stat. § 482A.030 (West 2019).
- <sup>110</sup> *Id.* § 482A.036.
- <sup>111</sup> "If the autonomous vehicle is not a fully autonomous vehicle, the autonomous vehicle is: (1) Equipped with a means to engage and disengage the automated driving system which is easily accessible to the human operator of the autonomous vehicle; (2) Equipped with an indicator located inside the autonomous vehicle which indicates when the automated

driving system is operating the autonomous vehicle; and (3) Equipped with a means to alert the human operator to take manual control of the autonomous vehicle if a failure of the automated driving system occurs which renders the automated driving system unable to perform the dynamic driving task relevant to its intended operational design domain." *Id.* § 482A.080(2)(a).

- <sup>112</sup> *Cf. id.* § 482A.200 (specifically prescribing that no Nevada laws "shall be construed to require a human driver to operate a fully autonomous vehicle which is being operate by an automated driving system").
- <sup>113</sup> Restatement (Third) of Torts § 14 (2010); see also Andrew R. Swanson, Comment, "Somebody Grab the Wheel!": State Autonomous Vehicle Legislation and the Road to a National Regime, 97 Marq. L. Rev. 1085, 1118 (2014) (explaining that a court may adopt standards of reasonable care under the circumstances for driver liability).
- <sup>114</sup> In one of the Drafting Committee's early memos regarding the scope of the Committee's jurisdiction over highly automated vehicles, Commissioner Pam Bertani states that "it is no surprise that the current State-ofthe-States regarding automated vehicle legislation is, at best, in a state of disarray." Memorandum from Commissioner Pam Bertani, Chair, Study Committee on State Regulation of Driverless Cars, to ULC Committee on Scope and Program, *Final Study Committee Report to Scope and Program*, Uniform Law Commission (Jan. 9, 2017), https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?Document-FileKey=11589fe3-8399-d300-bd53-3f4752d2f059&forceDialog=0.
- <sup>115</sup> Some questions include: (1) "When driving does not involve a traditional human driver, should there be some legal entity with similar obligations? If not, what is the alternative?"; (2) "Does the draft uniform law place appropriate requirements on relevant state agencies?"
- <sup>116</sup> Memorandum from Commissioner Pam Bertani, *supra* note 114, at 6.

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