

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Budget Subcommittee on Transportation, Tourism, and Economic
Development Appropriations

BILL: SB 1768

INTRODUCER: Senator Negrón

SUBJECT: Autonomous Vehicle Technology

DATE: February 17, 2012

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Looke</u>	<u>Buford</u>	<u>TR</u>	Favorable
2.	<u>Smith</u>	<u>Meyer</u>	<u>BTA</u>	Pre-meeting
3.	_____	_____	<u>BC</u>	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____

I. Summary:

This bill creates a new unnumbered section of the Florida Statutes which defines the term “autonomous technology” and requires the Department of Highway Safety and Motor Vehicles (DHSMV) to prepare a report relating to the safe operation of vehicles equipped with autonomous technology on public roads. The report must be submitted to the President of the Senate and the Speaker of the House of Representatives no later than February 1, 2014.

II. Present Situation:

Presently, there is an effort around the world to develop autonomous vehicles; however, the technology is still in its early development phases and a relatively optimistic estimate puts such technologies into consumer production in ten years.¹ In the United States, Google has been developing driverless cars for several years and last year said that it had “test-driven robotic hybrid vehicles more than 140,000 miles on California roads - including Highway 1 between Los Angeles and San Francisco. More than 1,000 miles had been driven entirely autonomously... [and] one of the company’s engineers was testing some of the car’s autonomous features on his 50-mile commute from Berkeley to Google’s headquarters in Mountain View.”² Also, according to General Motors’ Vice President of Global Research and Development, Alan Taub, GM may

¹ “Where is Driverless Car Technology Now?”, National Public Radio, Jan. 17, 2012, last viewed on Jan 24, 2012, found at <http://www.npr.org/2012/01/17/145357668/where-is-driverless-car-technology-now>

² Markoff, John, “Google Lobbies Nevada to Allow Self-Driving Cars”, *The New York Times*, May 10, 2011. webpage last viewed on Jan. 24, 2012, http://www.nytimes.com/2011/05/11/science/11drive.html?_r=1

have vehicles “that partially drive themselves...by the middle of the decade with more sophisticated self-driving systems by the end of the decade.”³

In Europe, BMW, Volvo, and Audi are all developing their own version of autonomous vehicles.⁴ BMW’s vehicle is semi-autonomous and uses a system of “radar, lidar, ultrasound, video and highly detailed GPS maps to sense the vehicle’s position in relation to its surroundings, including oncoming traffic” so that it can take over for the driver in traffic jams and can pull the car over if the driver is incapacitated.⁵

During its session last year, Nevada’s legislature passed Assembly Bill 511 which has now been engrossed into ch. 482A of the Nevada Revised Statutes. Section 482A.100, N.R.S., which becomes effective on March 1, 2012, states that:

1. The Department [of Motor Vehicles] shall adopt regulations authorizing the operation of autonomous vehicles on highways within the State of Nevada.
2. The regulations required to be adopted by subsection 1 must:
 - (a) Set forth requirements that an autonomous vehicle must meet before it may be operated on a highway within this State;
 - (b) Set forth requirements for the insurance that is required to test or operate an autonomous vehicle on a highway within this State;
 - (c) Establish minimum safety standards for autonomous vehicles and their operation;
 - (d) Provide for the testing of autonomous vehicles;
 - (e) Restrict the testing of autonomous vehicles to specified geographic areas; and
 - (f) Set forth such other requirements as the Department determines to be necessary.

Also, s. 482A.200, N.R.S., states that “[t]he Department shall by regulation establish a driver’s license endorsement for the operation of an autonomous vehicle on the highways of this State. The driver’s license endorsement described in this section must, in its restrictions or lack thereof, recognize the fact that a person is not required to actively drive an autonomous vehicle.” This legislation does not become effective until March 1, 2012, and, as such, it is too early to tell its effect on the state of Nevada.

III. Effect of Proposed Changes:

Section 1 creates a new unnumbered section of the Florida Statutes which defines the term “autonomous technology” and requires that DHSMV prepare a report relating to the safe operation of vehicles equipped with autonomous technology on public roads. DHSMV must submit that report to the President of the Senate and the Speaker of the House of Representatives no later than February 1, 2014.

³ “GM: Self-Driving Vehicles by the End of Decade”, GM News, Oct. 16, 2011, last viewed on Jan 24, 2012, found at http://media.gm.com/content/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2011/Oct/1016_autonomous

⁴ Barry, Keith, “BMW Tests Autonomous Vehicle”, *Wired*, Aug. 30, 2011, webpage last viewed on Jan 24, 2012, <http://www.wired.com/autopia/2011/08/bmw-tests-an-autonomous-vehicle/>

⁵ *Id.*

Section 2 establishes an effective date of July 1, 2012.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

DHSMV's Information Systems Administration (ISA) will require approximately 50 internal hours at \$40.00 per hour, non-recurring, in order to implement the provisions of this bill, for a total of \$2,000.00. These hours can be incorporated into ISA's normal workload.⁶

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

⁶ Florida Department of Highway Safety and Motor Vehicles, *Analysis for Senate Bill 1768- Autonomous Vehicle Technology*, (January 13, 2012) (On file with the Budget Subcommittee on Transportation, Tourism, and Economic Development Appropriations.)

VIII. Additional Information:

- A. **Committee Substitute – Statement of Substantial Changes:**
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

- B. **Amendments:**

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.
