

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 1207 Autonomous Vehicle Technology

SPONSOR(S): Brandes

TIED BILLS: **IDEN./SIM. BILLS:**

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Transportation & Highway Safety Subcommittee	15 Y, 0 N	Johnson	Kruse
2) Transportation & Economic Development Appropriations Subcommittee	14 Y, 0 N	Rayman	Davis
3) Economic Affairs Committee	17 Y, 0 N, As CS	Johnson	Tinker

SUMMARY ANALYSIS

Florida law does not address the use of autonomous vehicles. Autonomous vehicles are driverless cars that can, in some ways, fulfill human transportation needs. The bill:

- Defines “autonomous technology” and “autonomous vehicle.”
- Provides legislative intent.
- Authorizes the operation of autonomous vehicles.
- Provides requirements for autonomous vehicles.
- Provides guidelines for testing autonomous vehicles.
- Requires the DHSMV to submit a report.

The bill has an insignificant fiscal impact on the state.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Current Situation

Autonomous vehicles are driverless cars that are able to fulfill human transportation needs.¹ While they are not in widespread use, they can provide several distinct advantages including reduced fuel consumption, not requiring anyone behind the wheel so cars could be shared, and the need for fewer parking spaces.²

The only jurisdiction in the world where it is legal to operate autonomous vehicles on public roads is in the state of Nevada, where a law authorizing them passed in June 2011.³

Proposed Changes

Intent

The bill provides legislative intent to encourage the safe development, testing, and operation of motor vehicles with autonomous technology on the public roads of the state. The Legislature finds that the state does not prohibit or specifically regulate the testing or operation of autonomous technology in motor vehicles on public roads

Definitions

The bill defines “autonomous technology” as “technology installed on a motor vehicle that has the capability to drive the vehicle on which the technology is installed without the active control or monitoring by a human operator. The term excludes a motor vehicle enabled with active safety systems or driver assistance systems, including, without limitation, a system to provide electronic blind spot assistance, crash avoidance, emergency braking, park assistance, adaptive cruise control, lane keep assist, lane departure warning, or traffic jam and queuing assistant, unless any such system alone or in combination with other systems enables the vehicle on which the technology is installed to drive without the active control or monitoring by a human operator.”

The bill creates s. 316.003(89), F.S. defining “autonomous vehicle” as any vehicle equipped with autonomous technology.

The bill creates s. 316.85, F.S., relating to the operation of autonomous vehicles. It provides an autonomous vehicle may be driven in autonomous mode by a person who possesses a valid driver license.

Operation

The bill also provides that unless the context otherwise requires, a person is deemed to be the operator of a motor 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.

The bill creates s. 319.145, F.S., relating to autonomous vehicles. It provides that autonomous vehicles registered in this state must continue to meet federal standards and regulations for a motor vehicle. The vehicle shall:

¹ A video of an autonomous vehicle is available at http://www.ted.com/talks/sebastian_thrun_google_s_driverless_car.html (Last visited January 17, 2011).

² *Google Cars Drive Themselves, in Traffic*, New York Times, October 9, 2010. <http://www.nytimes.com/2010/10/10/science/10google.html> (Last visited January 18, 2010).

³ Nevada Assembly Bill 511.

- Have a means to engage and disengage the autonomous technology which is easily accessible to the operator.
- Have a means, inside the vehicle, to visually indicate when the vehicle is in autonomous mode.
- Have a means to alert the operator of the vehicle if a technology failure affecting the ability of the vehicle to safely operate autonomously is detected while the vehicle is operating autonomously in order to indicate to the operator to take control of the vehicle.
- Be capable of being operated in compliance with applicable traffic and motor vehicle laws of this state.

The bill provides that federal regulations promulgated by the National Highway Traffic Safety Administration supersede these regulations when they are found to be in conflict.

Testing

The bill 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. For testing purposes, a human operator shall be present in the autonomous vehicle such that he or she has the ability to monitor the vehicle's performance and intervene, if necessary, unless the vehicle is being tested on a closed course. Prior to the start of testing in this state, the entity performing the testing must submit to the Department of Highway Safety and Motor Vehicles (DHSMV) an instrument of insurance, surety bond or proof of self-insurance acceptable to DHSMV in the amount of \$5 million.

DHSMV Report

The bill requires DHSMV to submit a report to the President of the Senate and the Speaker of the House of Representatives by February 12, 2014, recommending additional legislative or regulatory action that may be required for the safe testing and operation of motor vehicles equipped with autonomous technology.

The bill has an effective date of July 1, 2012.

B. SECTION DIRECTORY:

- Section 1. Defines "autonomous technology," and provides legislative intent.
- Section 2. Amends s. 316.003, F.S., relating to definitions regarding state uniform traffic control.
- Section 3. Creates s. 316.85, F.S., relating to the operation of autonomous vehicles.
- Section 4. Creates s. 319.145, F.S., relating to autonomous vehicles.
- Section 5. Authorizes the operation of autonomous vehicles and requires a report.
- Section 6. Provides an effective date.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

Insignificant impact. There are costs associated with provisions in the bill for DHSMV to prepare a report that will be covered within existing resources.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not Applicable. This bill does not appear to affect county or municipal governments.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On February 24, 2012, the Economic Affairs Committee adopted a strike-all amendment, creating a committee substitute. The amendment:

- Defines “autonomous technology” and “autonomous vehicle.”
- Provides legislative intent.
- Authorizes the operation of autonomous vehicles.
- Provides requirements for autonomous vehicles.
- Provides guidelines for testing autonomous vehicles.
- Requires the DHSMV to submit a report.

This analysis is written to the committee substitute.