HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: SPONSOR(S): TIED BILLS:	HB 959 CS Roberson	Motor Vehicle Safety IDEN./SIM. BILLS: SB 1	tor Vehicle Safety EN./SIM. BILLS: SB 1022 (s)		
	REFERENCE	ACTION	ANALYST	STAFF DIRECTOR	
1) Transportation Committee		15 Y, 0 N, w/CS	Pugh	Miller	
2) Local Government Council		7 Y, 0 N	DiVagno	Hamby	
3) Transportation & Economic Development Appropriations Committee		nittee 15 Y, 0 N	McAuliffe	Gordon	
4) State Infrastru	cture Council				
5)					

SUMMARY ANALYSIS

Public and private research on guard rails, cable barriers, clay berms, and other types of structural highway barriers indicates that, if properly placed and maintained, these systems improve the safety of public roads. The Federal Highway Administration, with assistance from the American Association of State Highway and Transportation Officials (AASHTO), other engineering associations, and state transportation agencies, continues to research and modify existing requirements for barrier systems.

The need for well-engineered guardrail and other highway barrier structures varies from state-to-state, as well as by the road's type, speed limit, and surrounding topographical features. One such feature common to Florida roadways is the location of natural water bodies, canals, or drainage ditches adjacent to highways.

National and statewide statistics for traffic fatalities caused by, or related to, the absence or failure of highway barrier systems and involving water are not readily available. However, the Florida Department of Transportation (FDOT) was able to collect specific data on traffic fatalities on the State Highway System involving vehicles submerged in water. In 2004, 28 fatal crashes occurred where the vehicles ran off the road and into an adjacent body of water in which 36 people died, including 20 whose deaths may have been caused by being submerged in water.

HB 959 CS requires that guardrails, retention cables, or other types of roadway barriers be installed, as part of a pilot project, along limited-access facilities in Miami-Dade County that are adjacent to canals or other water bodies. FDOT considers limited-access facilities to be part of the Florida Intrastate Highway System, which includes interstate highways and the Florida Turnpike. Roadways in existence on July 1, 2006, which are adjacent to water bodies, must have a barrier system installed by December 31, 2008. The barrier system must be installed and maintained by the appropriate governmental entity in compliance with FDOT standards established in rule. These standards must be designed to limit the loss of life by safely preventing an out-of-control motor vehicle from entering a canal or water body, based on a number of criteria. FDOT is directed to adopt rules to implement the provisions of this bill.

This bill would take effect July 1, 2006, and be repealed on December 31, 2011, unless reenacted by the Legislature.

HB 959 CS has an estimated \$5.3 million fiscal impact on the State Transportation Trust Fund, according to FDOT, and already is included in the agency's Five-Year Work Program.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

HB 959 CS does not implicate any House Principles.

B. EFFECT OF PROPOSED CHANGES:

Background

Federal Highway Administration research reports dating back to 1987 indicate the value of guardrail and other barrier systems in preventing traffic accidents and fatalities. These barrier systems can take many forms including metal guardrails, thick metal cables, concrete barricades, and earthen berms. To be effective barrier systems must be engineered to address a highway's particular features and the type of traffic that comprises the majority of use. The American Association of State Highway and Transportation Officials (AASHTO) has developed a number of nationally accepted standards for barrier systems for federal and state transportation agencies. These standards are continually being tested and updated.

The Florida Department of Transportation (FDOT) has an active highway-barrier installation program, installing more than 2,645.5 miles of guardrails along state highways and the Florida Turnpike and 552 miles of barrier walls. The Turnpike has committed that by 2007, guardrails will run the Turnpike's entire length, from Wildwood to Homestead. Typically the guardrails or cable systems are installed as part of a construction or maintenance project.

Florida has more highway accidents involving out-of-control vehicles veering off a highway into an adjacent canal, drainage ditch, or natural water body than any other state. National and statewide statistics for traffic fatalities caused by, or related to, the absence or failure of highway barrier systems and involving water are not readily available. However, FDOT was able to compile statistics on 2003 and 2004 traffic accident data involving vehicles running off state roads and into water bodies. FDOT staff verified the data by pulling the written reports and reading the narrative description of the accident. FDOT's review indicated that:

- In 2004, there were 28 fatal crashes on the State Highway System where the vehicles ran off the road and into an adjacent body of water. These crashes resulted in 36 fatalities, of which 20 were possibly caused or influenced by the vehicle being submerged.
- In 2003, there were 34 crashes where the vehicles ran off the road and into an adjacent body of water. These crashes resulted in 49 fatalities, 28 of which were possibly caused or influenced by the vehicle being submerged.

According to the accident reports, some of these accidents were caused by drunken, medicated, speeding, or careless drivers. The reports also show that in some accidents the vehicle went over, under, or through guardrails or fences before going into the water.

Effect of Proposed Changes

HB 959 CS requires, as a pilot project, each limited-access facility in Miami-Dade County that is adjacent to a canal or other water body to have a system of guard rails, barrier cables, or other barrier installed between the highway and the water body. The guardrail or barrier system must be installed and maintained pursuant to FDOT standards, which must be designed to protect against loss of life from out-of-control vehicles running off highways and into water. The standards should take into account such factors as the width, depth, or proximity of the water body to the highway. Limited-access facilities in existence on July 1, 2006, which are adjacent to water bodies, must have a barrier system installed by December 31, 2008, according to the bill.

"a street or highway especially designed for through traffic, and over, from, or to which owners or occupants of abutting land or other persons have no right or easement of access, light, air, or view by reason of the fact that their property abuts upon such limited access facility or for any other reason. Such highways or streets may be facilities from which trucks, buses, and other commercial vehicles are excluded; or they may be facilities open to use by all customary forms of street and highway traffic."

FDOT considers limited-access facilities to be part of the Florida Intrastate Highway System, which includes interstate highways and the Florida Turnpike. With this bill affecting only limited-access facilities, no county or municipal roads in Miami-Dade County would be subject to the pilot project's requirements.

FDOT is directed to adopt rules to implement the provisions of HB 959 CS, although it appears to have sufficient existing standards on guardrails and barrier systems based in part on national engineering standards.

HB 959 CS provides an effective date of July 1, 2006. The pilot project is repealed December 31, 2011, unless the Legislature reenacts it.

According to FDOT staff, the cost of implementing HB 959 CS is an estimated \$5.3 million, which already is included in the FY 2006-2011 Five-Year Work Program.

C. SECTION DIRECTORY:

<u>Section 1</u>: Creates pilot project to install guardrail and other barriers on certain limited-access facilities in Miami-Dade County. Specifies requirements that must be met. Specifies deadline for completing installation. Provides for rule-making. Provides for future repeal.

Section 2: Provides an effective date of July 1, 2006.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

- A. FISCAL IMPACT ON STATE GOVERNMENT:
 - 1. Revenues:

None.

2. Expenditures:

HB 959 CS has an estimated \$5.3 million fiscal impact on the State Transportation Trust Fund, according to FDOT, and is already incorporated in the current Five-Year Work Program.

- B. FISCAL IMPACT ON LOCAL GOVERNMENTS:
 - 1. Revenues:

None.

2. Expenditures:

None, according to FDOT.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

None.

III. COMMENTS

- A. CONSTITUTIONAL ISSUES:
 - 1. Applicability of Municipality/County Mandates Provision:

HB 959 CS does not: require counties or municipalities to spend funds or to take an action requiring the expenditure of funds; reduce the percentage of a state tax shared with counties or municipalities; or reduce the authority that municipalities have to raise revenues.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

HB 959 CS directs FDOT to adopt rules to implement the bill's provisions.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE & COMBINED BILL CHANGES

Transportation Committee

At its March 27, 2006, meeting, the Transportation Committee adopted without objection a strike-all amendment from the bill's sponsor that limited the barrier-system requirement to limited-access highways (or certain state highways) adjacent to water bodies located only in Miami-Dade County as a pilot project.

This amendment eliminated the local unfunded mandate issues raised by the bill as originally filed, and reduced its fiscal impact on FDOT from \$268 million to \$5.3 million – which FDOT representatives said is already budgeted in the work program.

After adopting the main amendment, the committee voted 15-0 to report the bill as favorable with a committee substitute.