FLORIDA HOUSE OF REPRESENTATIVES
BILL ANALYSIS

This bill analysis was prepared by nonpartisan committee staff and does not constitute an official statement of legislative intent.

BILL #: CS/HB 1323	**COMPANION BILL:** CS/SB 1310 (Rodriguez)
TITLE: Railroad Crossing Safety	**LINKED BILLS:** None
SPONSOR(S): Tuck	**RELATED BILLS:** None

Committee References

Economic Infrastructure	➤	Commerce
15 Y, 0 N, As CS		22 Y, 0 N

SUMMARY

Effect of the Bill:
The bill directs the Florida Department of Transportation to conduct a statewide study on the potential cost and feasibility of implementing advanced detection and monitoring technology to increase safety at railroad crossings.

Fiscal or Economic Impact:
None.

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ANALYSIS

EFFECT OF THE BILL:

The bill provides legislative findings that:

- Improving safety at railroad crossings is critical to protecting the lives of pedestrians, motorists, railway workers, and the general public.
- Advanced detection and monitoring systems at railroad crossings may provide a reliable means to reduce collisions and enhance situational awareness.
- Additional analysis is necessary to evaluate the effectiveness, feasibility, and costs of these systems. (Section 1).

The bill defines an advanced detection and monitoring system as a system capable of detecting and classifying objects such as pedestrians, vehicles, and obstructions at railroad crossings and their approaches using technologies such as sensors, high-resolution cameras, and data analytics. (Section 1).

The bill directs the Florida Department of Transportation (FDOT) to conduct a statewide study on the potential use of advanced detection and monitoring systems at public railroad crossings. The study must include, but is not limited to, an analysis of:

- Available advanced monitoring technologies applicable to railroad crossings;
- The effectiveness of these technologies in improving safety outcomes based on available data from pilot programs, deployments in other jurisdictions, or academic research;
- Technical and operational considerations, including compatibility with existing safety systems and protocols;
- Costs associated with deployment of these systems;
- Criteria for identifying high-risk crossings that may benefit most from these systems;
- Potential funding, including federal funds, state funds, grants, or public-private partnerships;
- Legal, regulatory, and operational considerations related to deployment and oversight of the systems; and
- The respective roles of the state, local governments, and railroad owners in potential implementation of the systems. (Section 1)

In conducting the study, FDOT must consult with, as appropriate:

- Railroad owners and industry representatives;
- Local governments with jurisdiction over public railroad crossings;
- Transportation safety experts and academic institutions; and
- Federal agencies or national organizations with expertise in railroad safety.

By December 1, 2026, FDOT must submit a report of its findings and any policy recommendations to the Governor, President of the Senate, and Speaker of the House of Representatives. The report may include potential policy options for legislative considerations, but may not recommend mandatory installations, or upgrades, of technology at railroad crossings. (Section 1).

The bill provides an effective date of July 1, 2026. (Section 2).

RELEVANT INFORMATION

SUBJECT OVERVIEW:

Florida Department of Transportation (FDOT)

FDOT's mission is to provide a safe statewide transportation system that promotes the efficient movement of people and goods, supports the state's economic competitiveness, prioritizes Florida's environment and natural resources, and preserves the quality of life and connectedness of the state's communities.[1]

Florida Rail Safety Coalition

The Florida Rail Safety Coalition (FRSC) was established by FDOT in 2024 to enhance public rail safety across the state. FRSC consists of rail industry partners at local, state, and federal levels, including but not limited to subject matter experts and FDOT team members.[2] Driver and pedestrian behavior was determined to be the most critical and urgent rail safety issue by FRSC at its formation.[3] In response, FRSC and FDOT have started campaigns such as the Be Rail Smart initiative, which focuses on accident prevention and educating the public about rail crossing safety awareness and proper procedure.[4] According to data gathered by FDOT, 88% of Highway-Rail Grade Crossing accidents between 2013-2022 involved stopping on the crossing, going around gates, not stopping, stopping then proceeding, or going through gates.[5] A large portion of the Be Rail Smart initiative focuses on teaching citizens to avoid these preventable behaviors.

AI Analytics & High-Resolution Cameras

The use of artificial intelligence and data analytics in railway safety is creating new possibilities for proactive and predictive safety management, as opposed to traditional reactive protocols. A Deloitte 2024 study found that AI-enabled predictive maintenance can reduce accident risks by up to 25% while potentially saving millions in operational costs annually.[6] AI algorithms can analyze data provided by high-resolution sensors and cameras to forecast equipment failures before they occur.[7] Analytics models can also help railway managers prioritize safety investment in high-risk areas and increase response times in comparison to manual oversight alone.[8]

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[1] FDOT, *About DOT*, https://www.fdot.gov/agencyresources/aboutfdot.shtm (last visited Jan. 28, 2026).
[2] FDOT, Florida Rail Safety Coalition, https://www.fdot.gov/rail/programs/florida-rail-safety-coalition (last visited Jan. 29, 2026).
[3] FDOT, *Florida Rail Safety Coalition Presentation*, https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/rail/programs/florida-rail-safety-coalition/frsc-presentation_2024-11-14.pdf?sfvrsn=d9e88546_1 (last visited Jan. 29, 2026).
[4] FDOT, Be Rail Smart, https://www.fdot.gov/agencyresources/be-rail-smart/ (last visited Jan. 29, 2026).
[5] FDOT, Florida Rail Safety Coalition, https://www.fdot.gov/rail/programs/florida-rail-safety-coalition (last visited Jan. 29, 2026).
[6] Railway Academy, *How AI and Data Analytics are Redefining Safety in Rail Operations*, https://railwayacademy.org/how-ai-and-data-analytics-are-redefining-safety-in-rail-operations/ (last visited Feb. 2, 2026).
[7] *Id.*
[8] *Id.*

LiDAR Sensors

LiDAR, which stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulse laser to measure ranges of the Earth.[9] This information generates precise, three-dimensional information about the shape of the Earth and its surface characteristics.[10] These sensors are an innovative method of collecting geospatial data identifying the geographic location and characteristics of natural or manmade features on Earth.[11] This data is tied to specific coordinates such as latitude, longitude, and altitude, allowing for analysis of spatial patterns, relationships, and trends.[12]

Public-private Partnerships

Public-private partnerships (P3s) are contractual arrangements between public entities and private sector entities[13] that facilitate increased private sector involvement in the funding and execution of public building and infrastructure projects.[14] These agreements enable the collaboration of skills and assets from both public and private sectors to provide services or facilities for the benefit of the general public.

Responsible public entities (RPEs)[15] may engage in P3 projects aimed at developing an extensive array of public-use facilities or projects that fulfill a public purpose. Examples of qualifying projects[16] include those for mass transit, vehicle parking, airports or seaports, educational facilities, and public sector buildings or complexes such as courthouses or city halls. RPEs must adhere to specific requirements, including protocols for reviewing and approving proposals

BILL HISTORY

COMMITTEE REFERENCE	ACTION	DATE	STAFF DIRECTOR/ POLICY CHIEF	ANALYSIS PREPARED BY
Economic Infrastructure Subcommittee	15 Y, 0 N, As CS	2/4/2026	Keating	Dallas
THE CHANGES ADOPTED BY THE COMMITTEE:	Removed provisions requiring the implementation of new technologies at railroad crossings and directed FDOT to conduct a study on the potential costs and effectiveness of these technologies.			
Commerce Committee	22 Y, 0 N	2/18/2026	Hamon	Dallas

THIS BILL ANALYSIS HAS BEEN UPDATED TO INCORPORATE ALL OF THE CHANGES DESCRIBED ABOVE.

[9] Florida Geographic Information Office, *LiDAR Resources*, https://www.floridagio.gov/pages/lidar-resources (last visited Jan. 29, 2026).
[10] *Id*.
[11] Advanced Navigation, *Geospatial Data*, https://www.advancednavigation.com/glossary/geospatial-data/ (last visited Jan. 29, 2026).
[12] *Id*.
[13] "Private entity" means any natural person, corporation, general partnership, limited liability company, limited partnership, joint venture, business trust, public benefit corporation, nonprofit entity, or other private business entity. S. 255.065(1)(g), F.S.
[14] S. 255.065(2)(b), F.S.
[15] "Responsible public entity" means a county, municipality, school district, special district, or any other political subdivision of the state; a public body corporate and politic; or a regional entity that serves a public purpose and is authorized to develop or operate a qualifying project. S. 255.065(1)(j), F.S.
[16] "Qualifying project" means a facility or project that serves a public purpose; an improvement, including equipment, of a building that will be principally used by a public entity or the public at large or that supports a service delivery system in the public sector; a water, wastewater, or surface water management facility or other related infrastructure; or projects that involve a facility owned or operated by the governing board of a county, district, or municipal hospital or health care system, or projects that involve a facility owned or operated by a municipal electric utility, only those projects that the governing board designates as qualifying projects. S. 255.065(1)(i), F.S.