



FSITE Annual Meeting

Driver-Assistive Truck Platooning Study & Pilot Project

Friday June 24, 2016

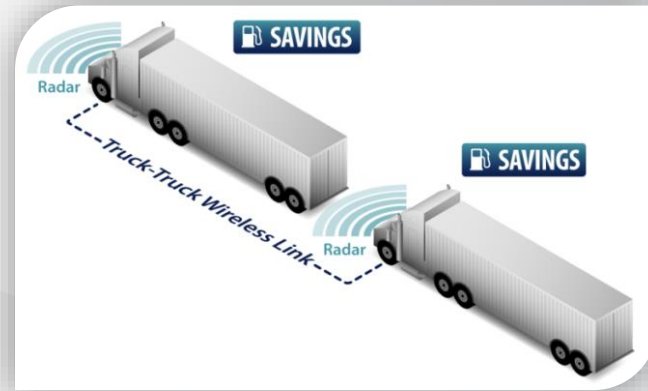


Truck Platooning Background



What is Truck Platooning?

- Radar-based collision mitigation and driver assistance
- V2V communication technology
- Enable close space operation (drafting) of two tractor-trailers (50' – 100' spacing)

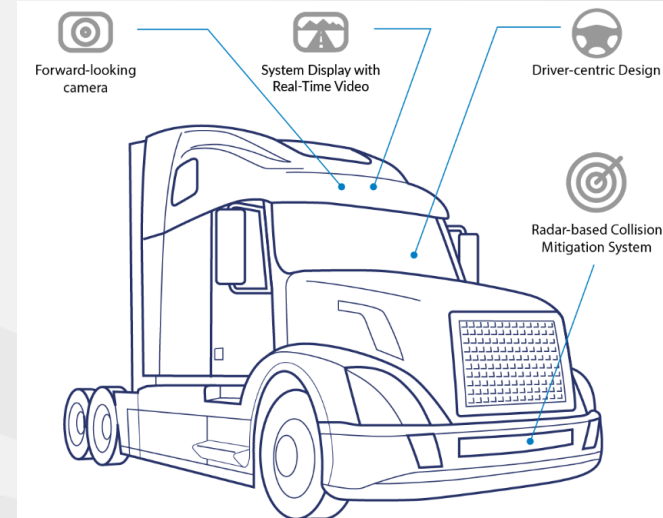


Truck Platooning Background



What is Truck Platooning?

- When engaged the lead truck will take over acceleration and braking for both vehicles
- The Following Vehicle driver will remain in control of steering
- Cameras and monitors will allow the Following Vehicle driver to see what the Lead Vehicle driver sees



www.peloton-tech.com/how-it-works



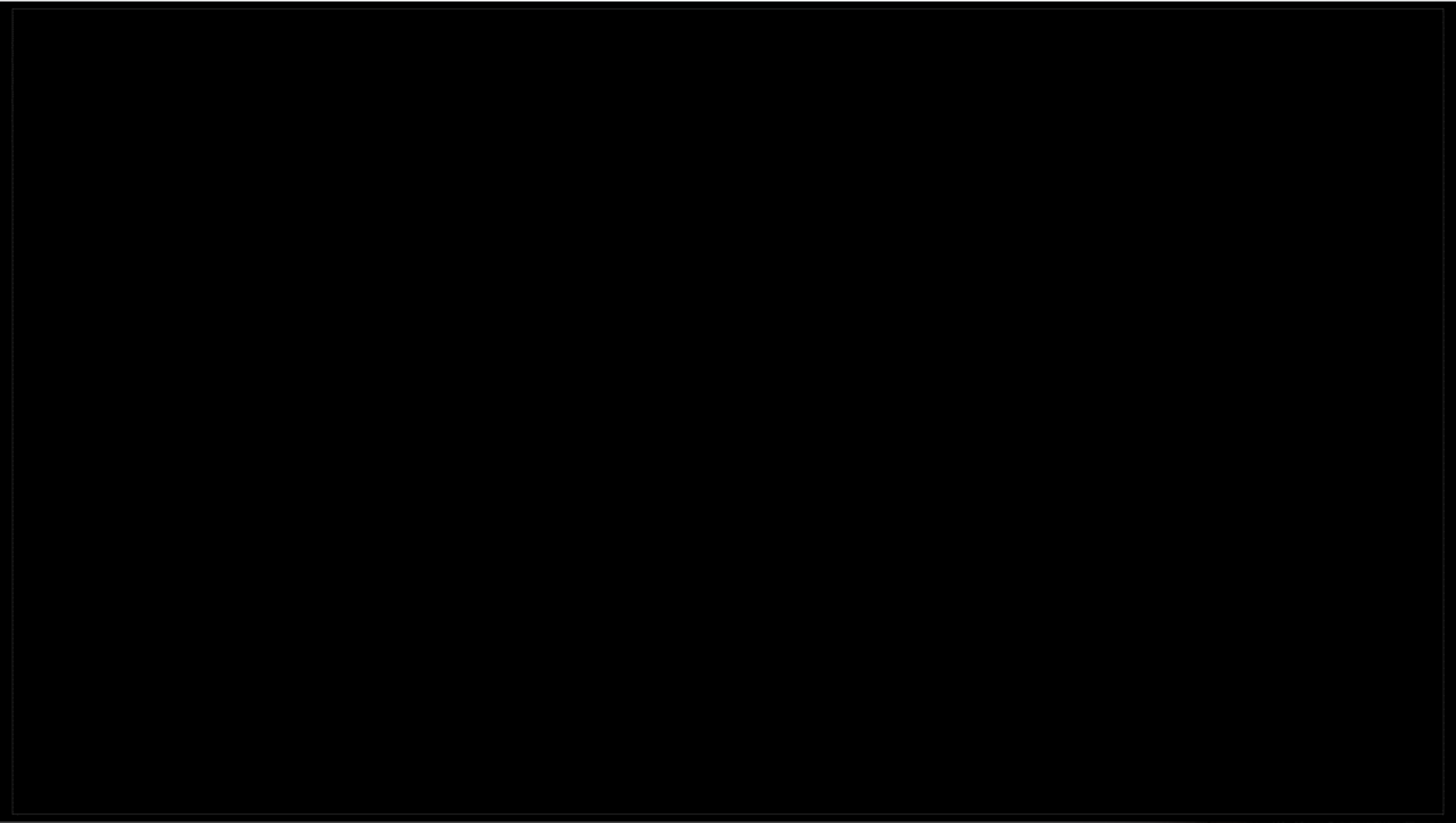
Truck Platooning Background



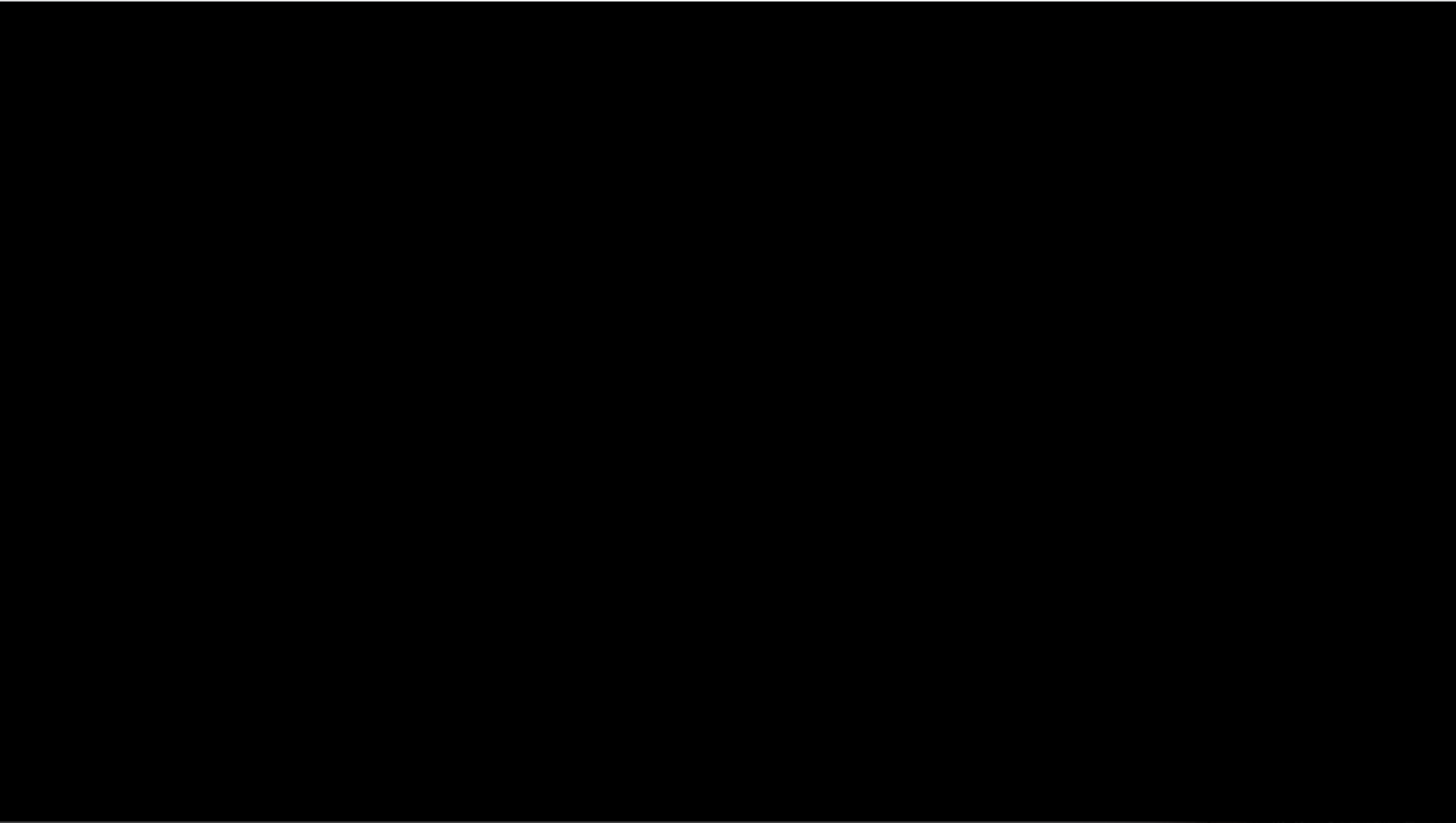
Benefits of Truck Platooning:

- Improve highway safety
- Potential for roadway capacity improvements (with adequate market saturation)
- Decreases in fuel consumption and greenhouse-gas emissions (for both trucks)
- Possible reduction of stress on truckers by easing their workload at the wheel









Driver-Assistive Truck Platooning Study and Pilot Project



Florida House Bill 7027 (2016) mandates:

“The Department of Transportation, in consultation with the Department of Highway Safety and Motor Vehicles, shall *study the use and safe operation* of driver-assistive truck platooning technology, as defined in s. 316.003, Florida Statutes, for the purpose of developing a pilot project to test vehicles that are equipped to operate using driver-assistive truck platooning technology.”



Driver-Assistive Truck Platooning Study and Pilot Project



F.S. 316.003 – Definitions

Driver-Assistive Truck Platooning Technology – “vehicle automation and safety technology that integrates sensor array, wireless vehicle-to-vehicle communications, active safety systems, and specialized software to link safety systems and synchronize acceleration and braking between *two* vehicles while leaving each vehicle’s *steering control* and systems command in the control of the *vehicle’s driver* in compliance with the National Highway Traffic Safety Administration rules regarding vehicle-to-vehicle communications.”



Driver-Assistive Truck Platooning Study and Pilot Project



- 1) Upon conclusion of the study, [DOT] may conduct a pilot project to test the use and safe operation of vehicles equipped with driver-assistive truck platooning technology.
- 2) Notwithstanding Florida Statutes ss. 316.0895, following too closely, and ss. 316.303, television receivers, [DOT] may conduct the pilot project in such a manner and at such locations as determined by the DOT based on the study.



New Legislation Exemptions – Specific to Study/Pilot Project



Florida Statutes ss. 316.0895 – ‘following too closely’ – provides that trucks engaged in DATP are exempt from law

Florida Statutes ss. 316.303 – ‘television receivers’ – provides that trucks engaged in DATP are exempt from law



Insurance Requirements for Manufacturers' Participation



- 3) Before the start of the pilot project, manufacturers of driver-assistive truck platooning technology being tested in the pilot project must submit to the DHSMV an instrument of insurance, a surety bond, or proof of self-insurance acceptable to the department in the amount of \$5 million.



Study Goals

- Identification of:
 - Infrastructure requirements and impacts
 - Licensing and permit requirements
 - Operating guidelines on FDOT facilities
 - Necessary parameters for the *use and safe operation* of this technology to operate on public roadways



Scope Development



- What should be studied?
 - What has already been studied?
- Why?
- What frequency?
- Where?
- How?
- When?
- Project partners/stakeholders?
- Timeline?



DATP Task Force Members



Chair – Assistant Secretary Tom Byron (ISD)

Co-chair – Ed Hutchinson (Statistics)

Chief of Staff – Mike Dew

Legislative Affairs – Shannan Schuessler

Engineering and Operations

Traffic Operations – Trey Tillander

ITS – Fred Heery, Raj Ponnaluri

Safety – Joe Santos

Commercial Vehicle – Jeff Frost

Design – Tim Lattner

Maintenance – Rudy Powell, Jeff Pouliotte

Structures – Robert Robertson

Construction – David Sadler

Turnpike Enterprise – Paul Satchfield

Intermodal Systems Development

Transportation Development Admin. – Jim Wood

Policy Planning – Carmen Monroy, Dana Reiding

Motor Carrier Operations – Ed Lee

Systems Planning – Huiwei Shen

Access Management - Gary Sokolow

Managed Lanes – Jennifer Fortunas

SIS – Chris Edmonston

Research Center – Darryll Dockstader

Other Agencies

DHSMV – Kevin Jacobs, Jennifer Langston

FHP – Lt. Colonel Troy Thompson

Florida Trucking Association – Tisha Keller

DATP Study and Pilot Project Timeline



May – Task Force Kick-Off Meeting – 1 of 3

- Initial Project Notification Meetings
- Develop Project Scope
- Literature Review
- Stakeholder Engagement (FDOT/DHSMV/FHP)

June

- Address Potential Issues
- Finalize Scope
- Stakeholder Engagement (Industry)

July

- DATP Study Begins



DATP Study and Pilot Project Timeline



August – Task Force Update Meeting – 2 of 3 (date TBD)

- DATP Study Continues

September

- Complete First Draft of DATP Study
- Stakeholder Engagement (FDOT/DHSMV/FHP)

October

- Complete Draft DATP Study



DATP Study and Pilot Project Timeline



November – Task Force Approval Meeting – 3 of 3 (date TBD)

- Final Draft DATP study to FDOT Management
- Final Draft DATP study to DHSMV Management
- Final study presentation to stakeholders

December

- Submit Final Study to Senate President

January (2017)

- Await Response



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