Introducing the Federal Motor Carrier Safety Administration's Accelerating the Adoption of Advanced Driver Assistance Systems (ADAS) Program

"TechCelerate Now" Phase 2

Program Description

"TechCelerate Now" is an ongoing initiative of the Federal Motor Carrier Safety Administration (FMCSA) in partnership with the ITS Joint Program Office. Entitled "Accelerating the Adoption of Advanced Driver Assistance Systems (ADAS)" and using the project brand name "TechCelerate Now," the program is focused on accelerating the adoption of ADAS by the trucking industry to reduce fatalities and prevent injuries and crashes. This is Phase 2 of the initiative, a four-year program that will develop new and updated technical information and guidelines for various ADAS





technologies. Many industry leaders are working together on "TechCelerate Now," under the leadership of the American Transportation Research Institute (ATRI), the American Trucking Associations (ATA), ATA's Technology & Maintenance Council (TMC), and the Owner-Operator Independent Drivers Association (OOIDA) Foundation.









The "**TechCelerate Now**" Program will promote FMCSA's goals of accelerating ADAS adoption to reduce crashes — saving lives — and realizing substantial return-on-investment through initial safety values and long-term benefits. Among other key tasks, the program will survey trucking industry stakeholders to determine the level of ADAS deployment, serve as an industry resource on available ADAS technology, and provide technical information and video content to spur additional adoption. The Program specifically targets:

- Fleet Executives and Fleet Managers Early investment in ADAS will reduce crashes/injuries and
 operator liability, increase driver productivity, reduce driver turnover, and improve driver satisfaction,
 without negatively impacting the profitability of fleet operations.
- Fleet Safety Directors Proper specification, training and maintenance of ADAS will reduce crashes/
 injuries and operator liability and improve driver satisfaction without negatively impacting the profitability
 of fleet operations and maintenance.
- Owner-Operators/Small Carriers Early adoption and use of ADAS will reduce crashes/injuries and operator liability and improve the driving experience without negatively impacting the profitability of owner-operator / small carrier operations.
- Company Drivers Use of ADAS will reduce crashes/injuries and operator liability, and improve the driving experience for company drivers.
- OEMs, Tier 1 Brake Suppliers, and ADAS Suppliers Standardization and consistent industry messaging will help vehicle manufacturers, major component providers and ADAS suppliers improve technology deployment, product performance and long-term acceptance.

What is ADAS?

Phase 2 of the TechCelerate Now program is proposing revising its categorization of ADAS technologies defined in TMC RP 547*, *Guidelines For Advanced Driver Assistance System Nomenclature* into three tiers, based on the level of performance data available for active safety system employed, including but not limited to:

Tier 1 (High Data Availability)

- Road-facing Cameras
- Lane Keep Assistance
- Blind Spot Intervention
- Lane Departure Warning
- Forward Collision Warning
- Automatic Emergency Braking
- Rear/Backing Automatic Emergency Braking

* TMC RP 547 was the result of activity stemming from the TechCelerate Now Phase 1 Program.



Automatic Emergency Braking

Tier 2 (Moderate Data Availability)

- Lane Centering Assistance
- Pedestrian Automatic Emergency Braking
- Adaptive Steering Control
- Adaptive Headlamps
- Driver Drowsiness detection
- Parking Assistance



Lane Centering Assist

Tier 3 (Limited Data Availability)

- Traffic Sign/Light Recognition
- Traffic Sign/Light Indicator
- 360° Visibility
- Night Vision
- Automatic Crash Notification
- Front/Rear Cross Traffic Alert
- Electric Vehicle Warning Sounds
- Brake Hold Mode
- Lane Change Assistance
- Crosswind Stabilization
- Lane Keep Intervention
- Lane Change Intervention
- Automatic Emergency Steering
- Remote Parking
- Lane Centering Intervention
- Hill Descent Control



Lane Departure Warning

Look for Bogie, your faithful ADAS companion for highway safety!



Want more information on the TechCelerate Now Program?

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