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ULTIMATE DRIVER SAFETY

MARYLAND ADAS SAFETY & CALIBRATION ACT
Legislative Briefing Document
Prepared for Members of the Maryland Senate

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Purpose: To summarize the ADAS calibration gap and the need for Maryland legislation

Executive Summary

Advanced Driver Assistance Systems (ADAS) such as Automatic Emergency Braking (AEB), lane-keeping assistance, and blind-spot monitoring are now standard on most new vehicles. By 2029, NHTSA will require AEB and pedestrian-detection systems on 100% of new vehicles.

These systems prevent crashes and save lives — but only when properly calibrated after collision repairs or glass replacement.

National data shows a dangerous mismatch between the number of vehicles requiring calibration and the number actually receiving it. Even more concerning, poor or incorrect calibrations can be more dangerous than no calibration at all.

Consumers often inherit the consequences, discovering issues only when their safety systems fail. Many pay out of pocket to correct improper repairs.

The Maryland ADAS Safety & Calibration Act addresses these gaps and aligns with SENSI Auto Technologies' mission: *Ultimate Driver Safety*

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THE CALIBRATION GAP

What Should Happen After a Collision

OEM repair procedures require calibration when: Cameras or sensors are removed, replaced, or impacted

- Windshields on 2018+ vehicles are replaced
- Bumpers, mirrors, or structural components are repaired
- Mounting brackets move
- Ride height or alignment changes

This means 55–70% of repairs require ADAS calibration.
98% of windshield replacements require camera calibration.

What Actually Happens

National data (CCC Intelligent Solutions):

- Only 23% of vehicles receive calibration
- Only 42% of glass claims include required calibration
- 45% of calibrations show up late on supplements
- Only 21% of shops have optimized calibration processes
- Many lack proper tools, targets, or space

Result: 30–45% of required calibrations are never performed.

POOR CALIBRATION RISKS

Poor Calibration Is More Dangerous Than No Calibration

Ascential Technologies Findings:

- Up to 42% of completed calibrations were done incorrectly
- Many passed shop checks but failed OEM validation
- Sensors often produced no warning lights
- Drivers believed systems were working when they were not

Conclusion: A poor calibration can be more dangerous than none.

Real-World Safety Failures

Improper calibrations can cause:

- AEB to fail
- Lane-keeping to drift
- Blind-spot monitors to miss vehicles
- Phantom braking
- Pedestrian detection loss

These failures are invisible to consumers.

Consumers Absorb the Consequences

When ADAS calibrations are missed or incorrect:

- Consumers must return to the shop
- Repairs are delayed
- Insurance disputes arise
- Many pay out of pocket
- Some never learn calibration was required
- Safety systems silently fail

This is a consumer protection and public safety issue.

Liability Is Rising

Improper calibration lawsuits:

- 3 cases in 2018
- 60+ cases in 2024
- Many settlements exceed $1 million

Courts consistently rule that failing to follow OEM procedures is negligence.

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FEDERAL MANDATES & READINESS

Federal Mandates Expand the Need

FMVSS No. 127 requires:

- AEB
- Pedestrian AEB
- Forward Collision Warning
- Dynamic Brake Support on all new vehicles by 2029.

Federal law does not regulate post-collision calibration.

States must fill this life-safety gap.

Industry Readiness Gaps

- Only 54% of shops have calibration equipment
- Only 25% meet OEM environment requirements
- Technician training is inconsistent
- Many calibration environments are unsuitable

This legislation raises standards and supports qualified professionals.

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BILL SUMMARY & GOALS

Goals of the Maryland ADAS Safety & Calibration Act

- Protect Maryland drivers
- Prevent consumers from absorbing repair errors
- Increased awareness and training
- Standardize calibration practices
- Elevate high-quality repair professionals
- Ensure insurers recognize and reimburse OEM-required procedures
- Reduce liability for repairers
- Ensure ADAS systems function on Maryland roads

What the Bill Requires

- OEM procedures for all calibrations
- Licensing for ADAS calibration technicians
- Facility & equipment standards
- Insurance recognition of OEM-required calibrations
- Consumer disclosure requirements
- Full documentation of scans and calibrations
- Enforcement via MDOT MVA

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Key Data Sources

- CCC Intelligent Solutions – Crash Course
- AAA Research – ADAS Repair Costs
- Asential Technologies / asTech – Calibration Accuracy Study
- NHTSA – FMVSS 127
- I-CAR RTS – OEM Calibration Database
- Repairer Driven News & Autobody News