

**Testimony in support of  
SB 0863  
Judicial Proceedings Committee Hearing  
March 4, 2021**

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**Testimony: Should Delegates support SB 0863, Enforcement and Use of Real-Time Digital Spotters?**



Family of **Jake** Owen, a 5 year old child killed by a distracted driver 10 years ago

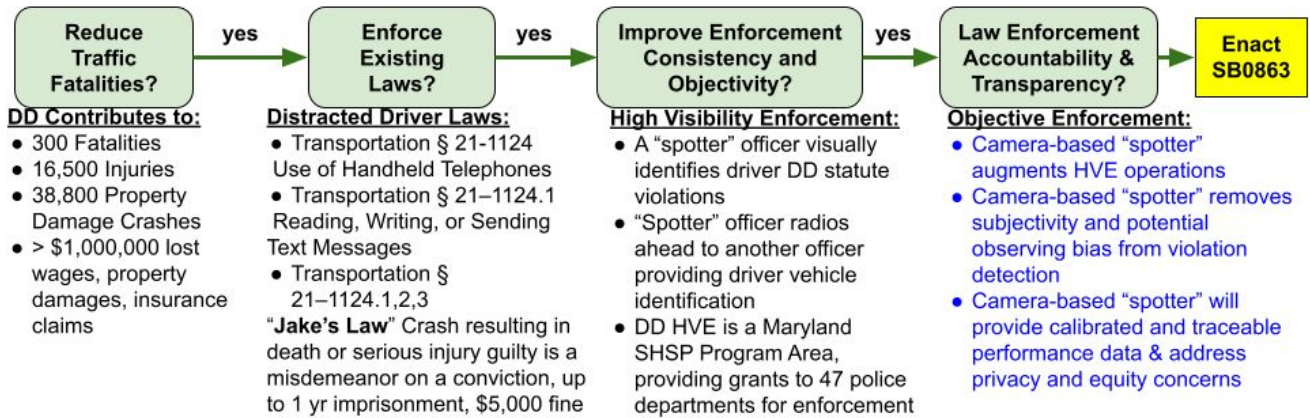
**Should Delegates support SB 0863, Enforcement and Use of Real-Time Digital Spotters?**

*"The problem of **distracted driving** has become increasingly prevalent during the past decade in Maryland and across the United States due in large part to the explosion in use of handheld communication devices, such as cell phones and other electronic devices... over **53,000** distracted driving crashes occur on Maryland roads each year."*

**Maryland Highway Safety Plan (FY2020)**



Shawn Durkin, killed July 15, 2020, leaving behind his wife, Theresa, and four children



**SB 0863**  
**Questions and Answers**

**Bill: Vehicle Laws – Enforcement and Use of Real-Time Digital Spotters**

<https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/sb0863?ys=2021RS>

**How will distracted driving cameras be used in policing?**

-- Typically used in currently funded High Visibility Enforcement campaigns.

**How do you avoid over-policing or dis-proportionate policing?**

-- Approval of use by local justification is included in the bill.

**Will a law enforcement officer have the option to issue a citation based on the camera?**

-- Like other currently used camera-based systems (speed, school bus, traffic signal), the picture provides probable cause. The bill allows a review by a law enforcement officer who decides if a citation should be issued based on the picture. This is true no matter what detection likelihood level the camera AI threshold is set.

**What if the camera picture captures other violations?**

-- The camera's AI software is not trained to detect features other than electronic device or seat belt use. It is possible that other violations may be incidentally captured in a picture. A law enforcement officer will have to use their judgement depending on the circumstances.

**How is the distracted driving threshold set for detecting violations, 80%, 99%?**

-- The camera AI can be set to any threshold. The bill requires an law enforcement officer to review the camera "detection", whatever the threshold is set at, to make the final determination of a violation. In practice, detection level will be set at high confidence levels to minimize the times that law enforcement officer judgement is required.

**Is the fine set too low (\$25: first offense, \$50: second offense) such that drivers who receive a citation will pay it even if they believe they are innocent?**

-- Delegate Lopez indicates she is open to fine level change in the bill.

**Is there potential for escalation when the driver is stopped by law enforcement?**

-- Escalation is a risk in all traffic stops. This bill will probably not increase the number of distracted driving traffic stops as the camera will be used as part of existing distracted driving High Visibility Enforcement (HVE) campaigns funded by the [Maryland Highway Safety Office](#) using FAST ACT grants. Most distracted driving citations are issued during the distracted driving HVE campaigns. Each year, the MSHO provides about \$250,000 in grants spread across about 50 police departments for distracted driving High Visibility Enforcement campaigns.

-- In 2017, Maryland law enforcement officers issued (from Maryland Highway Safety Office):

- 33,741 citations issued for cell phone use, and
- 2,575 citations for texting while driving.

-- HVE campaigns are carried out with large teams conducting the operation. Potential for escalation during HVE is lowered by the “safety in number” the campaign provides.

**Privacy: What can the camera “see”?**

- The camera uses an infrared flash which uses thermal imaging to detect the unique characteristics of an electronic device (retangular, relatively hot) in a driver’s hand.
- The infrared flash enables day and night all weather operations.
- The camera will be mounted on the top of a ~25ft telescoping mast, as part of a mobile trailer system.
- The camera siting at a 45 degree angle is optimized to “see” the driver’s hands through the vehicle windshield. This camera angle is not optimized for facial recognition.
- The camera is a thermal device. It does not “see” colors. The gray scale picture shows thermal differences within the picture. Therefore, a driver’s racial characteristics in terms of skin color are not readily identifiable and not included in the camera’s AI detection programming.

**What is the camera AI software trained to detect?**

- The camera AI function has been trained to identify hand-held electronic device and seat belt usage. The camera can be used to detect vehicle speed as well although this function is not part of the bill. The camera AI system is trained to exclude from violation detection the legal use of electronic devices such as hands-free mounted cell phones and GPS.

**Where does distracted driving typically occur?**

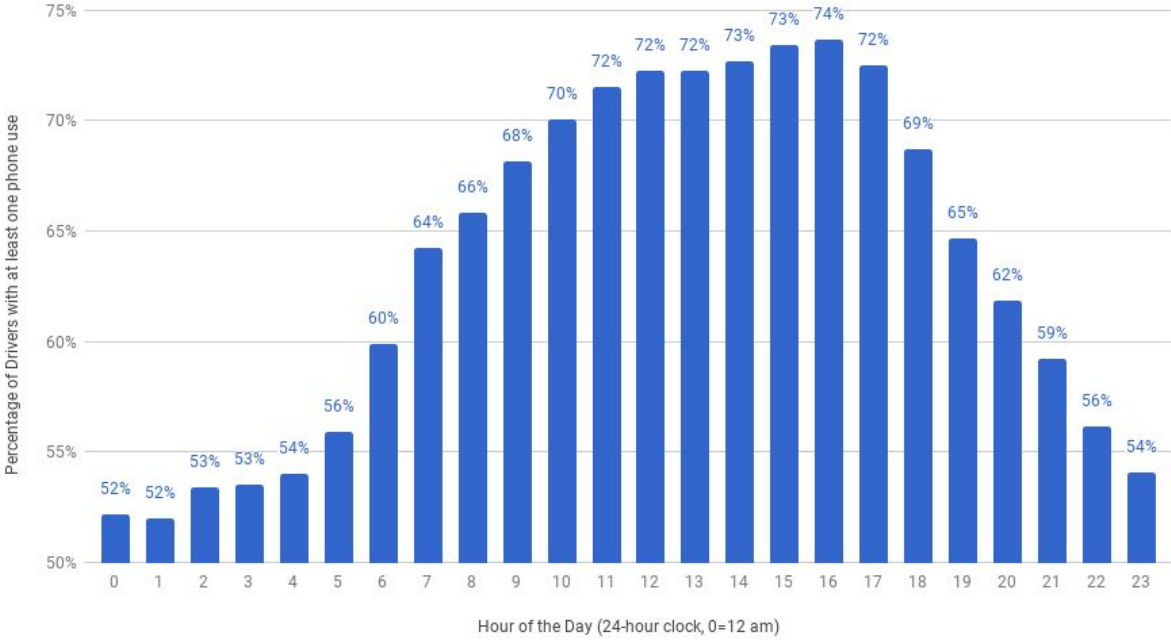
- Distracted driving is ubiquitous, occurring on all roadways. A different question is where is it most dangerous to the drivers and other roadway users (bicyclists and pedestrians) who are endangered by drivers committing distracted driving violations. High crash corridors are monitored by traffic safety programs in counties and municipalities which inform where High Visibility Enforcement will be concentrated.
- [Maryland Highway Safety Office crash reports](#) identifies the number of distracted driving crashes by county:

## Distracted Driver Involved County

County	2015	2016	2017	2018	2019	AVG.	%
Allegany	264	317	333	311	318	309	0.6
Anne Arundel	4,693	5,219	5,403	5,414	5,347	5,215	9.5
Baltimore	7,813	8,780	9,073	9,652	9,255	8,915	16.2
Calvert	621	604	601	581	584	598	1.1
Caroline	217	240	249	204	252	232	0.4
Carroll	1,028	1,115	1,139	1,179	1,161	1,124	2.0
Cecil	843	956	949	1,013	933	939	1.7
Charles	1,418	1,675	1,722	1,717	1,730	1,652	3.0
Dorchester	219	302	286	279	304	278	0.5
Frederick	1,798	2,121	2,141	2,190	2,061	2,062	3.7
Garrett	191	231	296	240	260	244	0.4
Harford	1,751	1,982	1,892	1,981	1,813	1,884	3.4
Howard	1,658	2,012	2,043	2,100	2,050	1,973	3.6
Kent	94	85	82	94	99	91	0.2
Montgomery	7,137	8,099	8,202	8,538	8,561	8,107	14.7
Prince George's	8,949	10,525	10,934	10,976	11,675	10,612	19.3
Queen Anne's	372	412	446	377	420	405	0.7
St. Mary's	816	1,034	1,033	1,130	1,060	1,015	1.8
Somerset	186	186	186	146	167	174	0.3
Talbot	366	411	430	495	410	422	0.8
Washington	1,230	1,509	1,537	1,498	1,358	1,426	2.6
Wicomico	1,070	1,294	1,303	1,260	1,233	1,232	2.2
Worcester	677	832	754	751	789	761	1.4
Baltimore City	5,263	6,430	5,350	5,071	4,850	5,393	9.8
<b>Total Crashes</b>	<b>48,674</b>	<b>56,371</b>	<b>56,384</b>	<b>57,197</b>	<b>56,690</b>	<b>55,063</b>	<b>100.0</b>

-- The vast majority of phone use is in the first 5% of a trip, right when people are getting going. The worst time overall for distracted driving is at night, from 9pm to midnight, when drivers use their phones for an average of 30 seconds longer — an increase of 20%. (Source: [Zendrive](#))

### The Vast Majority of Driver Phone Use Occurs During Daytime Hours



## Acusensus' Heads-Up Solution Overview

<https://www.acusensus.com/heads-up/>

## Acusensus' Heads-Up Solution Overview - Video

<https://youtu.be/P7XOJosMMzk>

## Victoria Trial Sheds Light On The Prevalence Of Distraction

<https://www.acusensus.com/victoria-trial-sheds-light-on-the-prevalence-of-distraction/>

## Distracted Driving Detection Camera - Trailer using a telescoping mast.





**Example of Thermal Flash (gray scale infrared) photo from Distracted Driving Detection Camera**

