

MARYLAND HIGHWAY SAFETY OFFICE 2026 DISTRACTED DRIVING PROJECT PROCESS REPORT



*Maryland
Highway
Safety
Office*

Table of Contents

Project Background.....	3
Project Overview.....	5
Goals and Objectives.....	5
Timeline.....	5
Site Selection.....	6
Enforcement	7
Media & Public Outreach.....	8
Budget.....	9
Lessons Learned & Recommendations	10
APPENDIX A – Timeline	11
APPENDIX B - Enforcement Results	12
APPENDIX C – Media & Public Outreach Results.....	13
APPENDIX D – Budget & Actual Expenses.....	16

Project Background

Recognizing that distracted driving remains one of the most significant and difficult traffic safety issues to measure, the Maryland Highway Safety Office (MHSO) applied for a non-restricted grant from the Governors Highway Safety Association (GHSA) and General Motors in 2025. MHSO's application was not selected; however, the strength of the proposal prompted GHSA to collaborate with the Insurance Institute for Highway Safety (IIHS) to award grant funding to MHSO to pilot an innovative approach quantifying distracted driving on state roadways and then implement strategies to address this risky driving behavior. This support also included IIHS conducting an outcome evaluation of the project and publishing the findings.

Distracted driving is challenging to quantify through traditional crash reporting because it often leaves no physical evidence and frequently relies on driver admission or witness accounts. Crash reports typically document observable contributing factors but often lack sufficient detail to capture momentary distractions, such as sudden shifts in attention due to road stimuli, or internal distractions, such as daydreaming, which originate from inside the driver's head and distract focus from driving.

In 2024, Maryland revised the distracted-driving definition on the crash report to better enable law enforcement to identify and document the specific source of distraction, in accordance with the Model Minimum Uniform Crash Criteria (MMUCC). This update replaced several broad, catch-all distraction categories, such as *failure to give full time and attention* and *looked but did not see*, with more specific distraction categories. Largely because of the revised reporting methodology, distracted-driving crashes reflected in police crash reports in Maryland declined significantly, from an annual average of approximately 50,000 between 2019 and 2023 to approximately 8,000 in 2024.

The revised MMUCC requires law enforcement officers to identify the specific source of driver distraction whenever possible. Because this information often relies on self-reports by the involved driver or statements from witnesses after the crash, accurately identifying the type of distraction can be challenging, particularly in minor crashes where there is limited investigation or evidence. Consequently, the reduction in police-reported distracted-driving crashes primarily reflects changes in MMUCC practices rather than a true reduction in distracted driving behavior. This shift underscores the need for supplemental data sources that provide a more comprehensive understanding of distracted driving on the state's roadways, such as telematics risk analysis (TRA), observational studies, and driver surveys.

To address this challenge, the MHSO proposed using a portion of the grant funds to purchase TRA data from Cambridge Mobile Telematics (CMT). CMT's StreetVision AI-powered platform uses anonymous telematics data to geospatially map where risky driving behaviors are occurring and predict where collisions are likely to happen, allowing agencies to target countermeasures where they may be most beneficial.

The MHSO used StreetVision to evaluate the effectiveness of two countermeasures on distracted driving and speeding. The project was conducted during Distracted Driving Awareness Month in April 2026 and combined localized, supplementary messaging and targeted social media outreach, beyond federally sponsored national campaign messaging, with coordinated high visibility enforcement efforts. Intervention corridors with high rates of distraction and speeding in Baltimore County were compared with control corridors with similar rates of distraction and speeding in Charles and Wicomico counties.

By leveraging StreetVision's AI technology, Maryland piloted an innovative, next-generation approach to distracted driving and speeding prevention that extended beyond traditional crash data. The project demonstrated the value of integrating behavioral insights with education and enforcement strategies to gain more insight into the prevalence of risky driving behaviors and evaluate efforts to reduce it.

Project Overview

The following is a summary of the project goals and objectives; timeline; intervention and control corridor site selection process; and the enforcement, media, and public outreach efforts undertaken by MHSO and its partners.

Goals and Objectives

The goal of this project was to assess the effectiveness of using telematics data to identify Maryland roadway corridors with a high rate of distracted driving and speeding, and the impact of conducting HVE and public outreach on those corridors to produce measurable changes in these risky driver behaviors.

The original project parameters included the following outcomes and measures:

Outcome	Measure
Reduction in phone motion while driving	Percent change in seconds of drive time with phone in motion
Reduction in speeding while driving	Percent change in seconds of drive time speeding 5 and 10 mph over the posted speed limit (where speed limit is known), and in 50 th and 85 th percentile mean speeds.
Law Enforcement Contacts	Number of LE contacts during the April enforcement period
Social Media Metrics	Number of impressions to measure awareness, and number of Likes/Comments/Shares to measure engagement
Number of contacts through engagement efforts	Number of people reached through presentations and other educational events

Timeline

Platform familiarization using the StreetVision platform was conducted from March 1-10, 2026. During this period, CMT provided MHSO access to the platform, as well as onboarding, training, and technical support. The subscription provided access to the previous year's phone-based distraction events and speeding measures aggregated at the state, county, county subdivision (e.g., township, district) or place (e.g., city, town, village) level.

MHSO used the aggregated data to identify roadway corridors to target for this project (described below). The selected locations were shared with the Baltimore County Police Department and the MHSO's Communications Manager to support development of an enforcement schedule and the strategic placement of media.

The public awareness campaign ran from March 15-April 30, 2026, and enforcement activities were conducted from April 1-16, 2026. The intervention period was therefore March 15-April

30. The pre-intervention period was March 1-14, 2026. Two, two-week post-intervention periods were defined in May 2026 (post-intervention 1: May 1-14, post-intervention 2: May 15-28). These two post intervention periods were defined to better explore sustained changes over time following removal of the interventions.

IIHS analyzed telematics data to assess changes in driver behavior associated with the enhanced media in the study corridors compared with control corridors during the intervention period. After the intervention ended, IIHS further examined driver behavior in the study corridors relative to the control corridors to determine whether any program-related behavioral changes were sustained over time. IIHS also assessed changes in distracted driving and speeding associated with HVE in the study corridors, relative to when HVE was not being conducted in the study corridors.

The MHSO finalized its project report in mid-July 2026 and distributed it to project partners for review and approval. The complete project timeline is in Appendix A.

Site Selection

After careful consideration, the MHSO selected Baltimore County (highlighted in green in Figure 1) as the pilot project location. The county's central location and large population of approximately 850,000, according to the 2020 U.S. Census, made it well-suited for evaluating the project. Its sizable population was expected to generate sufficient StreetVision data to support meaningful before-and-after analyses and to provide a larger sample than in other jurisdictions in the state.



FIGURE 1: BALTIMORE COUNTY (PILOT COUNTY IN GREEN) AND WICOMICO/CHARLES COUNTIES (CONTROL COUNTIES IN YELLOW)

Baltimore County was also chosen because of its high traffic volumes, diverse roadway network, and history of distracted driving-related and speed-related crashes and citations. The county contains several major commuter corridors where driver distraction poses a significant safety concern, and where public education and high-visibility enforcement efforts can reach large numbers of motorists.

Additionally, the county's geographic diversity and strong law enforcement partnerships made it an ideal location to pilot the use of innovative telematics data to evaluate changes in driver behavior and measure the effectiveness of targeted distracted-driving and speeding countermeasures.

Using StreetVision data collected between March 2, 2025, and March 2, 2026, the MHSO identified sites based primarily on the "Phone Tapping" event, which records instances in

which drivers physically interact with a mobile device by tapping on its unlocked screen. This metric was selected because visual-manual tasks are associated with a higher crash risk than secondary tasks that allow drivers to keep their eyes on the road, and because Maryland bans text messaging. Using this criterion, 31 sites were selected: 11 intervention sites within the intervention county and 20 control sites. No specific time-of-day restrictions were applied because distracted driving and speeding occur at all hours of the day.

The 20 control sites included 10 in Wicomico County and 10 in Charles County. These counties were chosen because they contain roadway environments and traffic characteristics like those found in the Baltimore County intervention areas. For reference, both counties are highlighted in yellow in Figure 1.

To ensure a representative sample, the selected locations included a mix of primary, secondary and local roadways. MHSO staff initially identified corridors through geo-fenced areas, and IIHS further refined some locations to improve consistency across the pilot area and the control jurisdictions.

Although taps were used to identify the study corridors, the IIHS ultimately analyzed change in phone motion, or the amount of time the phone is unlocked and in the driver's hand, during and after the study. Phone motion better captures both typing text messages and email (high taps) and reading text messages and email (low taps).

The IIHS will provide the results of the enforcement activities, including site-specific information, in a separate report. For purposes of this report, however, the MHSO is providing images of one intervention site located near White Marsh (see Figure 2 below), a heavily traveled commercial area outside Baltimore County. White Marsh is home to numerous businesses and attractions, including a major shopping mall, and is readily accessible via I-695 and U.S. Route 40, both of which carry substantial traffic volumes.



FIGURE 2: INTERVENTION SITE NEAR WHITE MARCH IN BALTIMORE COUNTY

Enforcement

The Baltimore County Police Department (BCPD) was selected as the law enforcement partner for this demonstration project based on its proven success in implementing highway safety initiatives and its longstanding partnership with MHSO. BCPD has consistently demonstrated its ability to manage grant-funded enforcement programs, meet reporting requirements and effectively deploy resources in support of statewide traffic safety goals.

BCPD also embraced the opportunity to participate in this innovative enforcement and media and public outreach project, which required close coordination with state and national

partners. The department committed personnel and operational resources to support the project's enhanced enforcement strategy.

From April 1-16, 2026, BCPD officers dedicated more than 121 hours to enforcement activities within the designated corridors. During that period, officers conducted 204 stops and issued 277 citations, including 16 serious violations requiring a mandatory court appearance. Citations addressed a range of unsafe driving behaviors, including handheld cell phone use, speeding, and seat belt violations involving drivers and front seat passengers. Officers also issued 86 traffic warnings. A detailed summary of enforcement hours and outcomes is provided in Appendix B.

Media & Public Outreach

To support the enforcement effort, the MHSO worked with its media contractor, Weber Shandwick, to adapt existing *Be the Driver* creative assets for a corridor-specific campaign. *Be the Driver* has multiple components that address speeding, distracted driving, seat belt use, preventing impaired driving, and other roadway behaviors, and has proven to be an asset in reaching drivers with traffic safety messaging. The communications strategy was designed to reinforce HVE activity, increase awareness of distracted driving and speeding risks, and alert drivers to the heightened law enforcement presence. Click [here](#) for a link to Maryland's Be the Focused Driver Resources and more information.

The MHSO also coordinated with GHSA and IIHS to refine messaging, incorporate partner feedback and identify appropriate evaluation measures. The speed + distracted campaign, referred to as "Double Trouble" by the media contractor, addressed two major traffic safety risks occurring at the same time. Each behavior, when considered independently, increases the likelihood and severity of a crash, but when combined, they create an even greater danger by reducing a driver's ability to recognize hazards, react quickly, and safely control the vehicle.

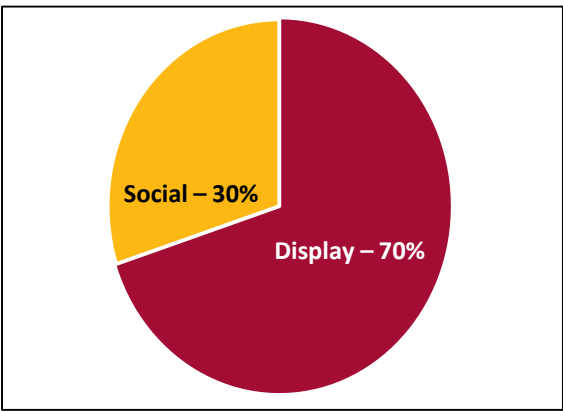


FIGURE 3: PERCENT OF IMPRESSIONS BY MEDIA TYPE

The digital media campaign was geofenced by the selected enforcement corridors to reach people who lived, worked or regularly traveled in those areas. The primary audience was drivers ages 18 to 44, with additional emphasis on male drivers, who are disproportionately represented in distracted driving and speeding crashes. Of the campaign's \$49,800 media budget, approximately 70% (\$34,800) supported digital display advertising through GumGum and Life360, while the remaining 30% (\$15,000) funded targeted social media advertising on Facebook and Instagram.

GumGum placed visual ads across websites and mobile applications, while Life360 used location-based insights from its family safety and location-sharing app to reach people in

relevant geographic areas. Together, these platforms helped deliver safety messages to road users in the intervention corridor through the devices and digital services they use every day. The campaign generated more than 10.7 million impressions during the enforcement period. Display advertising accounted for approximately 7.2 million impressions (68%), while social media generated 3.5 million impressions (32%) and reached more than one million unique users. Display advertising provided high message frequency within the project corridors, while social media expanded reach and supported repeated exposure.

Audience engagement exceeded expectations, generating 14,667 clicks across all digital platforms. Facebook produced the strongest click-through rate (0.55%), while GumGum’s expandable video units achieved a 0.21% click-through rate among display advertisements.

In addition to website traffic, the campaign generated more than 314,000 social media engagements. Live-action video accounted for more than 99 percent of all interactions, indicating strong engagement with the campaign’s safety messages.

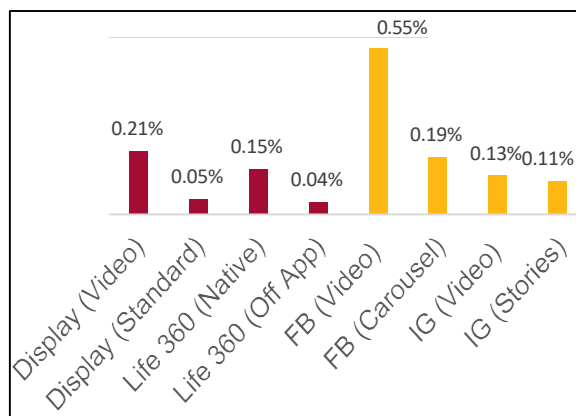


FIGURE 4: PERCENT OF IMPRESSIONS BY AD-TYPE SERVED

Although media performance showed strong reach and engagement, IIHS evaluated the campaign’s overall effectiveness in conjunction with enforcement activity and roadway observations to assess changes in distracted driving and speeding behavior within the targeted corridors. Those results will be provided by IIHS in a separate report. Additional information on the MHSO public outreach and media campaign is provided in Appendix C.

Budget

The proposed project budget was \$100,000. Half of the funding supported the StreetVision license and access to one year of data, while the remaining funds were used for media placement. A comparison of the budgeted amount and actual expenses can be found in Appendix D.

Lessons Learned & Recommendations

Several lessons emerged during implementation that may strengthen future distracted driving demonstration projects.

Allow sufficient time for planning. The most significant was the need for a longer planning period before implementation begins. Because the project operated under a compressed timeline, opportunities for collaborative planning, operational coordination, and community outreach were more limited than anticipated. Future projects should build in additional lead time so partners can coordinate schedules, clarify roles, and develop supporting activities before enforcement and media efforts begin.

Develop enforcement plans collaboratively. The project also highlighted the importance of jointly developing enforcement deployment strategies with participating law enforcement agencies. Although enforcement locations were identified based on data and project objectives, future efforts would benefit from a more collaborative planning process that incorporates agency operational considerations and results in mutually agreed-upon deployment plans. Regular coordination meetings throughout the campaign can help keep enforcement activities aligned with project goals, while allowing flexibility to address operational needs as they arise.

Begin community engagement early. Future projects should initiate community engagement well before the media campaign launches. Additional lead time would allow agencies to build stronger partnerships with community organizations, schools, businesses, and other local stakeholders. Early engagement can reinforce campaign messaging, increase community support for enforcement activities, and broaden awareness of distracted driving risks.

Use objective behavioral data to strengthen evaluation. Future demonstration projects should continue to pair objective, technology-based measures of driver behavior, such as StreetVision data, with traditional enforcement and media metrics. Incorporating these tools during the planning phase helps agencies establish measurable performance objectives, monitor behavioral changes over time, and more effectively assess the impact of combined enforcement and public education strategies.

APPENDIX A – Timeline

Activity	Timeframe
Site determination (using 12 months of aggregated data)	March 1-10, 2026
Pre-intervention	March 1-14, 2026
Media & Public Outreach Campaign	March 15-April 30, 2026
High-Visibility Enforcement	April 1-16, 2026
Post-intervention phase 1	May 1-14, 2026
Post-intervention phase 2	May 15-28, 2026
Draft Process Report	Mid-June 2026 (no monthly reporting on required by GHSA or IIHS)
Final IIHS Analysis	July 1-30, 2026
IIHS Evaluation Report	Expected fall 2026

APPENDIX B - Enforcement Results

The Baltimore County Police Department (BCPD) provided the following data because of their participation in this project:

Enforcement Hours	Traffic Stops	Citations Issued	Warnings Issued
121.5	204	277	86

Citation types. Some citations issued during the campaign involved offenses other than distracted driving. These included 13 citations for seat belt non-use and 12 citations for speeding. In addition, 16 citations carried “must appear” conditions, which may indicate more serious traffic-related offenses or prior violations requiring additional judicial review.

BCPD conducted 15 high-visibility enforcement details between April 2 and 16, 2026:

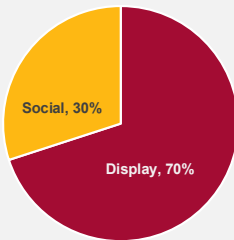
Date	Time	Location
04/02/26	1500-1900	Dulaney Valley Road/Jarrettsville Pike
04/02/26	1500-1900	Dulaney Valley Road/Jarrettsville Pike
04/02/26	1500-1900	Dulaney Valley Road/Jarrettsville Pike
04/02/26	1500-1900	Route 140/Route 30/Reisterstown Road
04/02/26	1500-1900	Pulaski Highway
04/03/26	1000-1400	Route 702
04/07/26	1500-1900	Liberty Road
04/07/26	1500-1900	Eastern
04/08/26	1000-1400	Route 43
04/09/26	1500-1900	York Road
04/09/26	1500-1900	Joppa Road
04/09/26	1500-1900	Belair Road
04/09/26	1500-1900	Pulaski Highway
04/11/26	1000-1400	Joppa Road
04/16/26	1500-1900	Perring Parkway

APPENDIX C – Media & Public Outreach Results

This appendix summarizes the media investment, audience reach, and engagement generated by the social media advertising included in the MHSO pilot project funded by GHSA and IIHS.

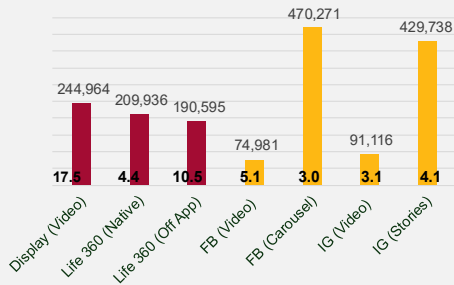
The Speed + Distracted (“Double Trouble”) campaign heightened awareness around the importance of slowing down and focusing on the road. The nearly \$50,000 investment focused on engagement leveraging mobile-first placements in native, high-impact display, and social to priority audiences.

INVESTMENT



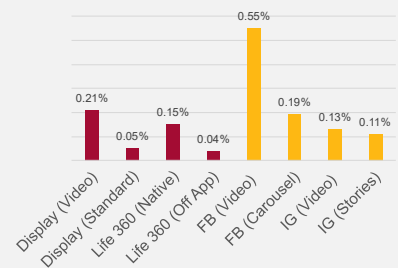
Of the \$49.8K budget, display media commanded 70% (\$34.8K) to scale broad visibility across GumGum and Life360. Social media captured the remaining 30% (\$15K). This social investment was divided between Facebook and Instagram, utilizing targeted placements to drive active interaction.

AD DELIVERY: REACH & FREQUENCY



The campaign delivered a robust 10.7M total impressions. Display channels generated 68% (7.2M) of this footprint, led by GumGum achieving the campaign's highest frequency (17.5) across 245K users. Meanwhile, social efficiently maximized broad visibility, yielding 3.5M impressions (32%) and reaching over 1M unique users with an average frequency of 3.5.

AD ENGAGEMENT: CTR



The campaign drove 14,667 total clicks, highlighted by Facebook in-feed video's exceptional 0.55% CTR. Display also performed efficiently, anchored by GumGum expandable video's strong 0.21% CTR. Beyond clicks, social placements generated 314K+ active engagements, with live-action videos driving over 99% of all interactions.

be the
driver
who saves lives

MDOT
Michigan Department of Transportation
safer roads. smarter decisions. stronger communities.

The MHSO used multiple platforms to deliver distracted-driving-focused messaging in the intervention corridors in Baltimore County.

DISTRACTED DRIVING (GHSA) Campaign Performance Metrics

RUN PERIOD: 3/12/26 – 4/30/26

Media	Partner	Placement	Impressions	Clicks	CTR	Social Engagements	Spend
Display	GumGum	In-Screen Expandable Video	2,283,150	4,838	0.21	N/A	\$25,000.00
		Standard	2,002,152	1,077	0.05	N/A	
	Life 360	On App - Native	930,322	1,364	0.15	N/A	\$3,256.12
		Off App - Display	2,009,296	733	0.04	N/A	\$6,537.38
Social	Facebook	In-Feed Video – Live Action Distracted	383,055	2,103	0.55	196,797	\$7,499.51
		In-Feed Carousel – Speed Text – Deadly	706,197	1,368	0.19	793	
		In-Feed Carousel – Eyes Up Phone Down	681,188	1,266	0.19	741	
	Instagram	Stories Static – Texting -55 MPH/100 Yds	665,924	726	0.11	621	\$7,555.35
		Stories Static – Speed Distracted - Double Trouble	668,472	721	0.11	639	
		In-Feed Video – Live Action Distracted	373,708	471	0.13	115,023	
				10,703,464	14,667	0.17	314,614

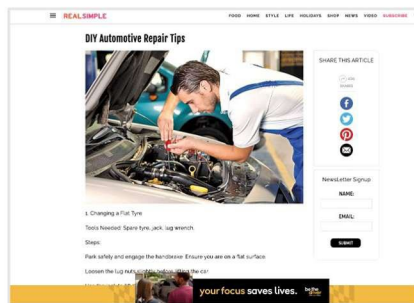


3

The following are examples of the creative used during the campaign.

DISTRACTED DRIVING (GHSA) Creative Examples

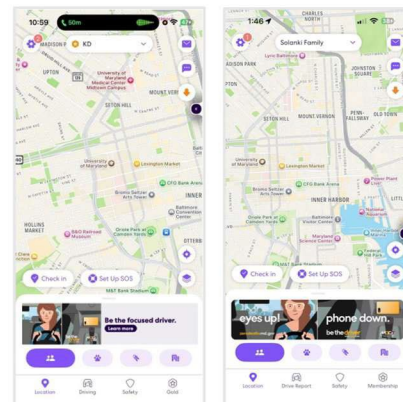
RUN PERIOD: 3/12/26 – 4/30/26



Display | In Screen Expandable Video



Display | Standard



Life360 | In App

4

The creative used specifically for this campaign was augmented with ongoing speed messaging. However, the selected corridor received a much heavier mix of distracted-driving messaging.

SPEED + DISTRACTED DRIVING (GHSA)

Creative Examples

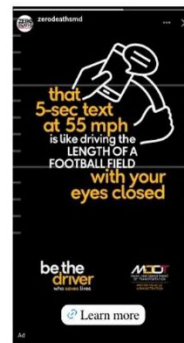
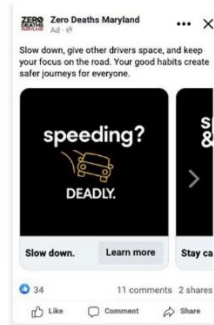
RUN PERIOD: 3/12/26 – 4/30/26



Facebook | Live Action Video



Facebook | Carousels



Instagram | Stories



APPENDIX D – Budget & Actual Expenses

Proposed Budget

Category	Amount
Data analysis and reporting (CMT)	\$50,000
Campaign materials and media buys	\$50,000

Actual Expenses

The table below identifies the MHSO media expenses associated with this project, shown in second line labeled “GHSA.” While media fees were funded through this project, no additional media management fees were charged by MHSO. After the purchase of the StreetVision licenses, the remaining \$50,000 was used exclusively for media placements.

Budget Source	Task Order Total	Campaign	Media OOP Expenses	Fees
MDOT	\$150,000	Teen Driver Safety Campaign <i>Completed (10/13 - 10/31)</i>	\$35,695.20	\$32,000*
		Distracted Driving Awareness Month	\$82,304.80	
GHSA	\$50,000	Distracted Driving Awareness Month	\$50,000	\$0.00
TOTAL			\$168,000	\$32,000