

# Can Video Help Catch **ILLEGAL PASSERS?**

Cost, quality are just two of the challenges when trying to assist in the prosecution of school bus stop violators

By Ryan Gray

**H**oward “Mac” Dashney admits that Michigan was a bit behind other states when it came to cracking down on motorists who illegally pass school buses. That was before a female driver overtook a stopped school bus recently and struck two students, breaking several bones in the process. At least a dozen other students each year, on average, aren’t so lucky.

Shortly after the Michigan passing occurred, Dashney, a long-time pupil transportation consultant for the Michigan Association for Pupil Transportation, was at his local coffee shop when he overheard two elderly couples at the next table discussing the issue.

“I was just flabbergasted about just how little they knew about our stop law. That becomes an issue,” he recalls.

Well-publicized incidents of illegal passings always seem to jump-start conversations and even debate about exactly how motorists are supposed to respond to stopped school buses. And that inevitably leads to legislators stepping in and seeking to increase fines and perhaps even seek a law requiring school buses to have cameras trained on the roadway in an effort to document just who is breaking the law. Par for the course, the Michigan state legislature responded in June by introducing a bill to double the fines for motorists if they injure or kill another person as a result of an illegal pass by. Dashney said a result has been a renewed interest by the motoring public on how they are supposed to respond when they come upon a stopped school bus, which is a good thing. But the underlying problem is that newly-licensed drivers are seldom, if ever, required to understand school bus stop laws. And, as demonstrated by Dashney’s coffee shop experience, many older drivers have no clue.

Aside from changing how we educate our children, our young drivers and our older ones, how can school transporters better help law enforcement go after these perpetrators?

It’s unrealistic to expect drivers to manage a bus load of students, keep their eyes on the traffic around them and concentrate on crossing students either onto or away from the bus. It can also be nearly impossible for drivers to accurately write down the license plate or make and model of an automobile that blows by, though Michigan currently allows school bus drivers to submit reports. But, according to Dashney, often times the courts are hesitant to prosecute the offenders.

“Judges have a problem trying to get their hands around, ‘Are we being too capricious and arbitrary in going after and giving a ticket to this owner?’”

Are video cameras trained on other motorists the answer? Dashney and others like him say yes.

Ray Miller is a school bus police officer for the Palm Beach District School Board. The district recently began installing external Seon cameras on certain school buses on summer school routes to test video quality. The plan is to eventually capture both the license plate of the passing vehicle and to make a positive identification of the driver. If all goes well, he said the district will expand the number of buses with cameras installed.

“Even if we do nothing more than [send] warning letters, we can capture the public’s attention,” Miller said, adding that the fully uniformed and sworn police department of 200 officers can

also issue citations. “It is a major concern of our school board, and we hear complaints from our bus drivers pretty consistently.”

When interviewed in late June, he said there was still little data to go on, as tape had yet to be downloaded much less viewed. Adjustments were still being made to the cameras themselves, and school bus drivers were just being trained on how the cameras might work, all prep work should the operation ramp up later.

Since last December, North Carolina has allowed school districts to install external cameras to capture footage that will stand up in court. That’s because it’s the only state that requires positive identification of the driver’s face via camera. Examples abound of school districts looking to crack down on illegal passers. And many are turning to cameras to help bring these violators to justice. But the video itself introduces an entirely new set of challenges.

Jeff Tsai, director of the pupil transportation group at North Carolina State’s Institute of Transportation Research and Education, has been studying the effectiveness of camera technology on identifying illegal passers. “My suggestion to North Carolina is to change the legislation,” he says. “I don’t think the industry is capable of producing a system that is affordable but still able to offer the resolution needed to study the offending driver frame by frame.”

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His research included a test in mid-June that used a high-definition, 60 frame-per-second camera mounted on a tripod to determine the quality of footage possible. But catching the driver’s face through the windshield proved difficult.

“It’s almost impossible for a camera to catch both the license plate and the driver’s face because of the glares, the angles you have to have,” says Larry Vaughn, president at mobile surveillance equipment manufacturer Zen-tinel.

“If that doesn’t work, it won’t work on existing products [on the school bus market] because they’re much lower end,” adds Tsai, who was set to present some of his findings at this summer’s STN EXPO in Reno.

The technology does exist to capture whatever you want it to. But the problem, as it nearly always seems to be, is cost. The New York State Police performed an experiment a couple of years ago using a \$25,000 camera unit capable of capturing the nec-

essary type of information. But such an expense is unrealistic for school districts in a normal budget year much less coming out of the Great Recession. Rob Scott, president of school bus surveillance manufacturer 247Security, says the average, more affordable camera for the school bus market shoots at 480 resolution at about 30 frames per second. While that's good enough to catch the driver's license plate

at speeds up to 60 or 70 mph, capturing a face behind the windshield depends on the camera range and the angle it's shooting. This, he adds, can mean that a camera imbedded in the stop arm won't necessarily get you the shot you need.

"It all comes down to what you are trying to do," Scott says. "Capturing a license plate and a person in a car can very well require two different cameras."

If it's just the license plate you're after, stop arm cameras remain an option. There are also externally-mounted cameras that can be moved around the bus to create different angles with a variety of lens sizes that can allow school bus operators to achieve the viewpoint they and law enforcement need to get inside the offender's vehicle. But as Tsai points out, the picture can quickly become blurred by more obstacles that some municipalities have even stumbled over when it comes to much more expensive intersection cameras trained on drivers who run red lights.

"Technology is just part of the problem," he says. "You also need a rigorous process for handling evidence. You must store it, document it and explain how the system works if it goes to court."

School districts must also work with law enforcement officials so they understand what the tape shows and what they need to prove to secure a conviction. This, Tsai adds, can introduce the additional burden on school districts to properly manage the tapes, often with an employee well versed in the technology and especially working in conjunction with the technology provider. And then, the tape might need to remain secured and tamper-proof to meet local evidentiary rules, especially in this "YouTube generation," as Guy Jukes of BUS-WATCH by REI pointed out.

"That hard drive is your evidence of anything that happens. We always tell our customers, 'You guys really have to protect your chain of custody,'" added Jukes, the vice president of marketing at Radio Engineering Inc. "If there's something bad enough, God forbid, you need to pull that hard drive and put it under lock and key. Treat it like you would any other evidence you have to take to court."

This also entails that school districts should go the route of using encrypted, proprietary software that doesn't allow any old Tom, Dick or Harry to gain access via wireless Internet connection or a thumb drive.

"The administrative and legal logistics are really the hard part," says Scott at 247. "This is something for school districts to keep in mind." ■

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