

STUDY FINDS MAJORITY OF VEHICLES SPEED THROUGH PALM BEACH COUNTY SCHOOL ZONES

Introduction

A “school zone” is a traffic calming area surrounding primary and secondary schools. The special designated zone usually includes the school grounds and the adjacent roadways. The special zones are marked with special signage and street markings to signify traffic calming enforced while school is in session. In 1991, the Department of Justice made the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the Public Rights-of-Way Accessibility Guidelines (PROWAG) standard, implementing school zones nationwide.¹

School zone speed limits are generally set between 15 and 25 miles an hour to ensure drivers are cognizant of their surroundings. Yet unfortunately there are still fatalities in these vulnerable

40 students are hit by a vehicle while walking each day

zones. “Sadly, there were more than 1,000 fatal school-transportation-related crashes between 2011 and 2020, with an average of 113 fatalities per year. Some studies have found that as many as 40 students are hit by a vehicle while walking each day, resulting in more than 15,000 injuries on an annual basis.”²

Traditional solutions to control speeding are cost and labor intensive. Crossing guards, police officers, parents and school staff are often called upon to work as traffic monitors. With today’s advancements in technology, automated speed enforcement is possible through speed camera technology that frees up resources allowing police departments to focus more on keeping our communities safe.

To gauge the severity of the problem, road safety company Jenoptik conducted a multi-week study outside of two Palm Beach County elementary schools.



¹ Pedestrian and Bicycle Information Center (PBIC) in collaboration with SRTS (n.d.). *Around the School*. Safe Routes to School Online Guide. Retrieved January 10, 2023, from http://guide.saferoutesinfo.org/engineering/the_school_zone.cfm

² Rivelli, E. (2022, August 10). *Back to school traffic safety and statistics*. Bankrate. Retrieved January 10, 2023, from <https://www.bankrate.com/insurance/car/back-to-school-traffic-safety-statistics/>



School Zones in Florida

Speed enforcement in Florida school zones is important as it helps protect the safety of children who are walking, biking, or otherwise traveling to and from school. Children are more susceptible to accidents and injuries when they are hit by a vehicle, and speeding increases the risk of a collision and the severity of any injuries that might occur. In a 2016 study conducted by the FIOL LAW GROUP³ using data from the Florida Department of Highway Safety and Motor Vehicles, it was found that in 2016, 68% of all crashes in Florida occurred within 2/3 of a mile of a school – a total of 270,704 motor vehicle collisions. Reducing speeds in school zones can help to reduce the risk of accidents and injuries, as well as improve the overall safety of the area. This is especially important during the times when children are likely to be present, such as when they are arriving at or departing from school.

In the State of Florida, school zones are marked by school zone specific signage and road markings or signs denoting the beginning and end of the respective school zone. The posted limit of school zones is 20 miles per hour and are active for a one hour period in the mornings and afternoons, starting at approximately 7 am and 2 pm, respectively.



³ (2017, November 27). *NEW STUDY: Most Dangerous School Zones in Florida*. FIOL LAW GROUP. Retrieved January 10, 2023, from <https://www.fiolinjurylaw.com/dangerous-school-zones-florida/>



Palm Beach County, FL School Zone Speed Study

For a 23-day period in 2022, Jenoptik conducted a school zone speed study throughout the Palm Beach County School District. A speed camera system developed by Jenoptik and deployed at 30,000 sites globally was used to capture the speed data. This system consists of a camera used to capture images and a video of the vehicle as evidence of movement, and a radar capable of capturing vehicle speeds up to 180 mph. The camera system was placed at the entrance of school zones. Thus, any vehicle traversing through the school zone was afforded ample time to adjust its speed before being measured for speed.

The majority of drivers are speeding (over 20 mph) during the morning and afternoon

Over this 23-day period, the study monitored over 25,000 vehicles driving through the school zones. It was found that the **majority of drivers are speeding (over 20 mph)** during the morning and afternoon school zone periods. Furthermore, it was found that traffic in

the afternoon period was travelled at considerably faster speeds – likely due to the absence of rush hour traffic.

The data further indicated that an average of 355 drivers per day were driving at speeds exceeding 31 mph. During the afternoon alone, as shown in Figure A, 82% of drivers were speeding in excess of the school zone speed limit. This equated to approximately 8,000 speeding violations over the 23-day study period.

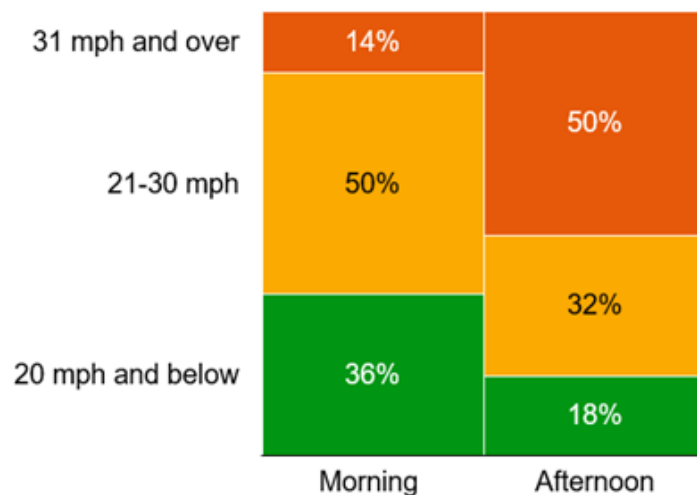


Figure A

Furthermore, as shown in Figure B, 31.5% of those violations were drivers going more than 10 mph over the posted school zone speed limit – some as fast as 90 mph.

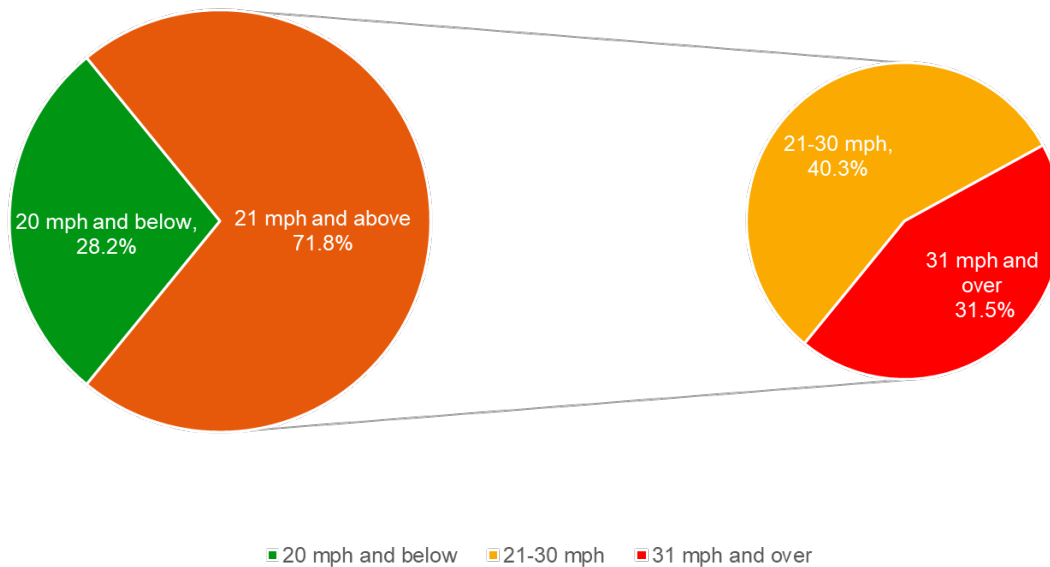


Figure B

There is strong data supporting the reduced speed in school zones, specifically the 20 mph speed limit. According to the AAA “A pedestrian struck by a person driving 30 mph is 75% more

A pedestrian struck by a person driving 30 mph is 75% more likely to be seriously injured or killed

likely to be seriously injured or killed than a pedestrian hit at 20 mph. If struck by a driver going 20 mph or less, a pedestrian is typically not permanently injured or killed. But a pedestrian hit by a driver going 32 mph has a 1 in 4 chance of dying.

At 42 mph, the risk of death jumps to 50%.⁴ The speeding issue, especially in the afternoons, in Palm Beach County is putting a lot of children’s lives at risk.

⁴ Ferreira, M. (2022, August 16). *No, It's Not Okay to Drive 5 MPH Over the Speed Limit*. AAA. Retrieved January 10, 2023, from <https://mwg.aaa.com/via/car/dangers-of-speeding>



MORE LIGHT

Speed Cameras are proven to Change Driver Behavior

An extensive independent study for New York City’s Automated Speed Enforcement Program demonstrates that “as of December 2020, speeding at fixed camera locations has

Speeding at fixed camera locations has dropped, on average, 72%

dropped, on average, 72%.”⁵ Not only was speeding reduced, crashes and injuries were reduced in every metric reported. Most encouraging, bicycle or pedestrian crashes involving children decreased by

almost 20%. The study utilized over 1,600 Jenoptik cameras installed across 750 separate school zones.

Before/After Change in Crashes and Injuries in School Speed Zone Camera Corridors During Hours of Operation* ⁵

(Before: an average of the 3 years prior to installation. After: one full year after installation)

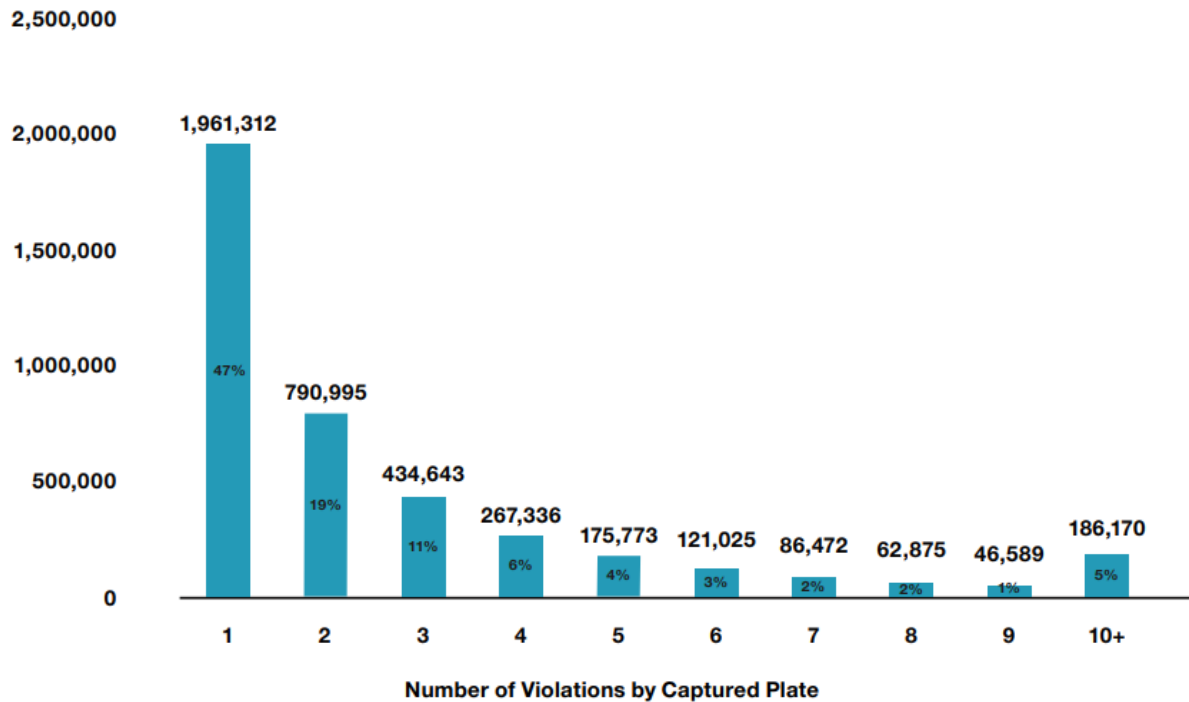
	Before Period, Citywide	After Period, Citywide	Percent Change
Crashes			
Total Crashes	1,370	1333	-2.7
Crashes with Injuries	1,006	926	-8.0
Injuries			
Motor Vehicle Occupant	1187	996	-16.1
Pedestrian	220	211	-4.1
Cyclist	41	40	-2.4
Total Injuries	1449	1247	-13.9
Fatalities	4	2	NA
Bicycle/Pedestrian Crashes wth Children	46	37	-19.6

⁵ (n.d.). *New York City Automated Speed Enforcement Program, 2014–2020 Report*. The Official Website of the City of New York. Retrieved January 10, 2023, from <https://www1.nyc.gov/html/dot/downloads/pdf/speed-camera-report.pdf>



The study also found that almost 50% of total violations issued were first offenders. This demonstrates that it only took one violation for most drivers to change their driving behavior and respect school zone speed laws.

Repeat Violators, 2014–2020 ⁵



Conclusion

Speeding in school zones is a serious problem, not only in Florida, but throughout the entire country. It puts children, parents, teachers and other caregivers in serious danger and is difficult to monitor without technological assistance. Speed Cameras are proven to reduce speeding, accidents, and pedestrian injury in school zones.



Enforcing speed limits in school zones can also help to improve traffic flow and reduce congestion. Slower speeds can make it easier for children, parents, teachers, crossing guards, and other pedestrians and vehicles to navigate the area, reducing the risk of accidents and improving the overall efficiency of the road.

While it's important to maintain safe driving habits every time you're behind the wheel, it's especially vital to protect our children.

About Jenoptik's Smart Mobility Solutions division

Jenoptik's Smart Mobility Solutions division provides photonics-based, innovative and sustainable solutions, including technology and services for Road Safety and Public Security. Their customers include local and governmental authorities, police and enforcement agencies, as well as public and private organizations.

As pioneers of sensor-based road safety cameras and automatic license plate recognition (ANPR/ALPR), Traffic Law Enforcement and ALPR technology is at the core of their product portfolio. Their solutions cover a wide range of stationary and mobile applications such as vehicle monitoring and classification, average and spot speed, red-light enforcement, civil security and more.

With over 4,000 cameras installed across the US and 30,000 cameras worldwide, they have a strong global presence. With innovation as their driving force, Jenoptik is a world-leading enabler for smart mobility, with intelligent solutions and services constantly evolving to help make roads, journeys, communities and our environment safer around the globe.

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