

School Custodian Struck and Killed by Pick-up Truck on School Grounds While Performing Crossing Guard Duty

CASE SUMMARY

On Wednesday, April 27, 2016, a 69-year-old male custodian (victim) was preparing to assist with after-school traffic control duties at a rural high school. He crossed the street to reach his cross-guard positioning where he was to perform cross-guard duties, then abruptly backtracked and stepped into the path of an oncoming pick-up truck. The truck bumped him causing him to fall backwards, and strike his head. The victim later died after transport to a trauma center.



Figure 1. View of the high school.

Recommendations for prevention:

- **Schools should provide a walkable campus by installing sidewalks, crosswalks, stop signs, and other safety features in areas where pedestrians might be exposed to traffic.**
- **The Kentucky Transportation Cabinet should develop uniform school crossing guard training guidelines and requirements.**
- **Schools should implement initial and annual crossing guard refresher safety training, including working in and around parking lots and crossing areas.**
- **Schools should establish and implement pedestrian safety policies to be adhered to by all faculty, staff, and students in school parking lots and roadways.**

EMPLOYER

The employer was a school district that employed 1,300 employees in a rural Kentucky community.

SAFETY AND TRAINING PROGRAMS

While federal guidance exists, currently, there are no federal training requirements for crossing guards. Through employee interviews, it was unclear whether formal crossing guard training had been provided to the victim by the school system. It was typical at this school for regular employees, including teachers, to assume this additional responsibility. Some employees claimed to have personally received crossing guard training, while others claimed to have not. When asked, the employer was unable to clarify whether the victim had received crossing guard training. A head custodial meeting was held April 1, 2016, that only covered Material Safety Data Sheets (MSDS).

VICTIM

The victim was a 69-year-old high school graduate and married father of two. He had been employed with the school for 23 years, where he primarily served as a custodian, but also as a crossing guard for children on the premises. Approaching retirement, the victim had performed the dual roles of custodian and crossing guard for the duration of his 23-year employment.

INCIDENT SCENE

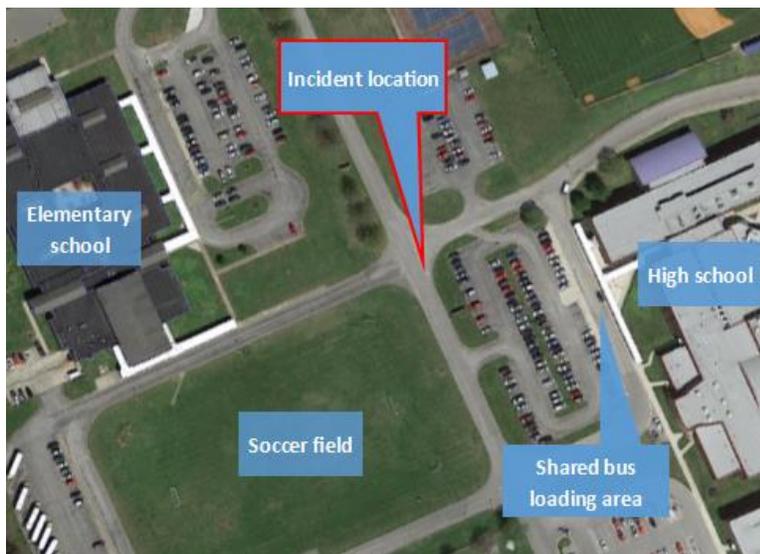


Figure 2. Aerial view of the school grounds; the victim was struck in an intersection connecting drivers to the high school, elementary school, and soccer field. The red line denotes the approximate walking path of the victim, starting at the high school.

The incident occurred in the intersection of two access roads which connected drivers to an elementary school, a high school, and a practice soccer field (see Figure 2). The posted speed limit in this area was 15 miles per hour. On the day of the incident, the victim was to perform crossing guard duties in this intersection, so that children from the elementary school could safely reach the shared school bus access area in front of the high school. The intersection where the victim was struck did not feature crosswalks, sidewalks, or other crossing safety features (see Figure 3, A and B).

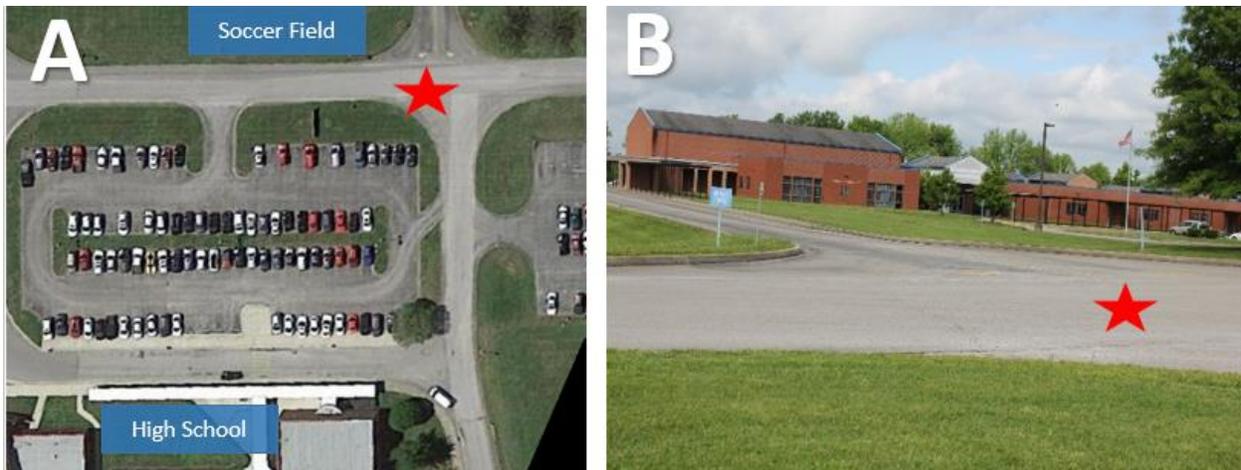


Figure 3. Aerial view of the school grounds (A); view of intersection where victim was struck, looking towards nearby elementary school (B). The red star in each photo denotes the approximate location at which the victim was struck.

WEATHER

The temperature was approximately 73°F with overcast skies at the time of the incident. The humidity was 69%, and the wind was blowing at 5.8 miles per hour from the north-northeast direction. Although it was lightly raining while EMS was assisting the victim, it was not raining at the time of the incident. The weather was stormy when the helicopter arrived to transport the victim to the nearest trauma center, so the victim was transported to a neighboring state since the weather would not affect the flight path.

EQUIPMENT

The victim was struck by a 2007 black Chevrolet Silverado. There was no damage to the vehicle and the airbags did not deploy. The victim was wearing a high visibility safety vest and holding a crossing guard paddle.

INVESTIGATION

On Wednesday, April 27, 2016, the Kentucky Fatality Assessment and Control Evaluation (FACE) Program was made aware by the Kentucky Labor Cabinet of a fatality, that same day, involving a crossing guard. A subsequent site visit and investigation was conducted.

At 3:00 pm on a mid-spring day, a 69-year-old male school custodian (the victim) was preparing to assist with after-school crossing guard duties at an access road intersection connecting an elementary school, a high school, and a soccer field. While custodial work was his primary function and official role within the school, he also served as a crossing guard, as many school employees often did, since he began working at the school 23 years prior. The elementary and high school students both shared the bus access area directly in front of the high school entrance (see Figure 3). To reach the bus access area, children from the elementary school were required

to cross the access road intersection that separated the two schools. On the day of the incident, the victim was assigned crossing guard duties in this intersection to provide the elementary students safe access to the shared bus access area. Absent from this intersection were crosswalks, sidewalks, or other safety features such as signage, etc.

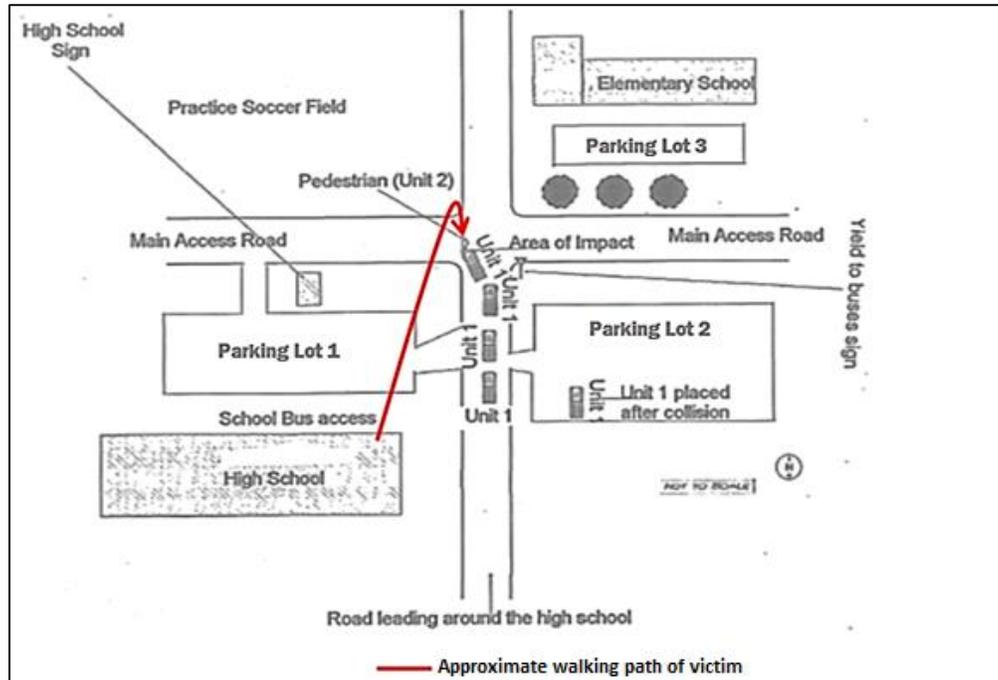


Figure 4. Incident diagram of the scene and the fatal incident. The red line indicates the walking path of the victim. Unit 1 was traveling away from the high school and turning left onto the main access road when the victim was struck. (source: *Kentucky Highway Patrol*).

Equipped with his high visibility safety vest and handheld stop paddle, the victim exited the main high school building and spent a few minutes talking with several employees, who were waiting in front of the high school for buses to line up and students to begin loading. After saying his good byes, he walked toward the intersection separating the elementary school from the high school where he would perform his crossing guard duties. He took his normal route of walking through the faculty parking lot (Figure 4, Parking Lot 1).

During this time, a fellow school employee was in his Chevrolet pickup truck traveling next to the high school and toward the intersection (Figure 4, Unit 1). The fellow school employee had stopped and talked with two co-workers before preceding towards the access road intersection. There was no stop sign but a yield to bus sign in this intersection. The victim had almost crossed the main access road when, according to witness account, he abruptly reversed direction and walked back across the road into the direct path of the Chevrolet pick-up truck that was making a left turn (Figure 4, red line). The fellow school employee said that he had just looked to his right for traffic clearance and was traveling less than 5mph, when he felt a bump and witnessed the victim stagger and fall straight backwards. He immediately exited the truck to help the victim.

Several other employees came to assist while emergency medical services were called to the scene at 3:08 pm. EMS arrived within 4 minutes. The victim was unresponsive, but breathing with blood coming from his nose and mouth. He was airlifted to a neighboring state trauma center where he was pronounced dead later that evening.

Lack of Intersection Safety Features

The access road intersection where the incident occurred was notably missing a crosswalk, sidewalk, or any other safety features to encourage drivers to proceed in the area with caution. The speed limit on the school campus was 15 mph. While the road on which the pickup truck was traveling did contain a yield to buses sign, there were no stop signs present in the intersection. The driver approached this intersection in his truck, intending to make a left turn. As he approached the intersection he came to a stop, looked left, saw the victim crossing the access road, and then looked right. Assuming the victim had successfully crossed the road, he released his brake without realizing that the victim had reversed course. The pickup truck driver indicated that, prior to turning left, he did not realize that the victim had doubled back into the path of his vehicle.



Figure 5. Emergency Medical Services on scene to render aid to the victim.

CAUSE OF DEATH

The death certificate indicated that the cause of death was due to multiple blunt force injuries.

CONTRIBUTING FACTORS

This investigation identified the following factors that may have contributed to the fatality:

- Lack of crosswalks, sidewalks, and proper signage in the intersection.
- Sudden change of direction when crossing the road/intersection.
- Failure of pedestrian to stop and look both ways before crossing the road.
- Lack of school pedestrian safety policies.

RECOMMENDATIONS AND DISCUSSIONS

Recommendation No. 1: Schools should provide a walkable campus by installing sidewalks, crosswalks, stop signs, and other safety features in areas where pedestrians might be exposed to traffic.

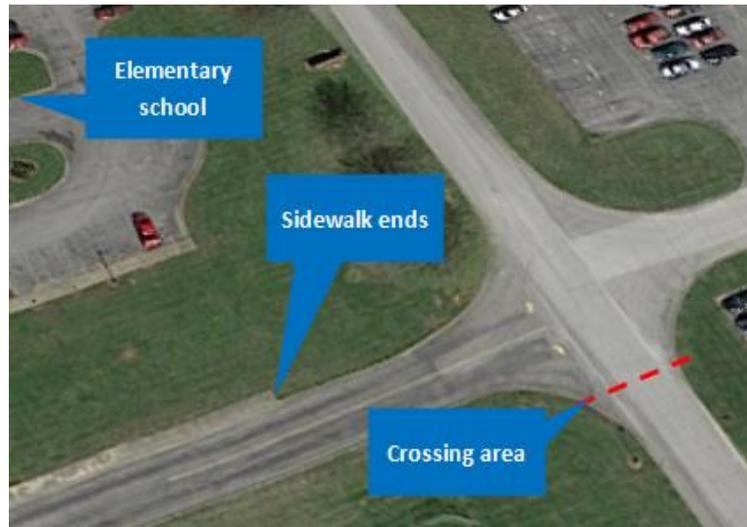


Figure 6. Intersection and crossing area. The elementary school crosswalk did not extend to the intersection.

Both the high school and the elementary school main entrance areas had sidewalks and crosswalks connecting to the nearest parking lots; however, the intersection where the victim was struck did not feature sidewalks, crosswalks, or other pedestrian safety features. A sidewalk extending from the elementary school stopped short of reaching the intersection. Although there was a ‘yield to buses’ sign in the side of the intersection from which the pickup truck driver was traveling, there were no stop signs in the intersection. The four-way intersection should have featured stop signs since children and other pedestrians were expected to cross. School personnel indicated that buses and other vehicles often traveled in this intersection. The speed limit on the school campus was 15mph; the crash report did not state the estimated speed of the driver at the time of the crash.

A 2008 report by the National Highway Traffic Safety Administration found that roadways lacking crosswalks accounted for 42 percent of all pedestrian fatalities from 1997-2006.¹ Sidewalks and crosswalks should be planned, designed, and installed to facilitate safe walkability and roadway crossing in areas where pedestrians are exposed to passing traffic. Sidewalks should be regularly repaired and crosswalk stripes repainted so that they are readily visible both to pedestrians and motorists. To further protect pedestrians, pedestrian crossing warning signs should be placed in advance of crosswalks to alert approaching motorists, and stop lines should be painted on the road as a stopping point for motorists. This incident may have been prevented if such pedestrian safety features had been in place.

Recommendation No. 2: The Kentucky Transportation Cabinet should develop uniform school crossing guard training guidelines and requirements.

Only two states, Florida and North Carolina, have passed legislation and implemented school crossing guard training requirements. Florida's Department of Transportation established uniform school crossing guard training guidelines to be followed by each local government entity that administers a school crossing guard program. North Carolina implemented a program that trains local law enforcement officers to provide adult school crossing guard training within their jurisdiction².

In addition to traffic control practices and strategies, school crossing guard training should focus on traffic hazard analysis prior to beginning crossing guard duties.

Recommendation No. 3: Schools should implement initial and annual crossing guard refresher safety training, including working in and around parking lots and crossing areas.

In states that have not adopted requirements for school crossing guard training, the design and implementation of such a program is largely the decision of local school systems and communities. Performing initial and annual refresher training in the absence of state requirements would increase the awareness of traffic hazards and ensure that crossing guards are capable of performing their duties in a safe manner. The development of such programs should ideally be a collaborative effort between local law enforcement agencies, traffic engineers and school systems³.

Recommendation No 4: Schools should establish and implement pedestrian safety policies to be adhered to by all faculty, staff, and students in school parking lots and roadways.

School policies promoting pedestrian safety should be developed and completed by all faculty, staff and students on campus. Policies should focus on the use of available crosswalks as a means of crossing roadways and exercising caution when crossing, among other safety strategies. The training of faculty, staff, and students should be performed prior to, and at the start of the new school year.

Please take the time to [complete our brief survey](https://uky.az1.qualtrics.com/jfe/form/SV_emxwKfljwJq1Vhr) regarding this report:

(https://uky.az1.qualtrics.com/jfe/form/SV_emxwKfljwJq1Vhr)

KEYWORDS

Schools
Crossing guards
Parking lots

REFERENCES

¹National Highway Traffic Safety Administration, U.S. Department of Labor. *National Pedestrian Crash Report*. Published June 2008.

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²Florida Department of Transportation. *School Crossing Guard Training Program*.

[<http://www.fdot.gov/safety/2A-Programs/SchoolCrossingGuard.shtm>]

³National Center for Safe Routes to School and the Pedestrian Bicycle Information Center. *Adult Crossing Guard Guidelines*.

[http://guide.saferoutesinfo.org/crossing_guard/pdf/crossing_guard_guidelines_web.pdf]

PHOTO CREDIT

Photos in Figures 1 and 3B are property of the Kentucky FACE Program. The aerial views (figures 2, 3A, and 6) are property of Google Maps. The Incident Scene (Figure 4) was provided by the State Highway Patrol. The photo in figure 5 is property of local news media.

ACKNOWLEDGEMENTS

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DISCLAIMER

Kentucky FACE maintains objectivity to allow for a technically accurate and useful report. However, we cannot ignore the tragic nature of our investigations, and our staff would like to extend our deepest sympathy to the family and friends of the deceased worker in this report.

This case report was developed to draw the attention of employers and employees to a serious safety hazard and is based on preliminary data only. This publication does not represent final determinations regarding the nature of the incident, cause of the injury, or fault of employer, employee, or any party involved.

This case report was developed by the Kentucky Fatality Assessment and Control Evaluation (FACE) Program. Kentucky FACE is a NIOSH-funded occupational fatality surveillance program with the goal of preventing fatal work injuries by studying the worker, the work environment, and the role of management, engineering, and behavioral changes in preventing future injuries. The FACE Program is located in the [Kentucky Injury Prevention and Research Center \(KIPRC\)](#). KIPRC is a bona fide agent for the Kentucky Department for Public Health.

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