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## INCIDENT HIGHLIGHTS



**DATE:**  
July 20, 2020



**TIME:**  
11:38 a.m.



**VICTIM:**  
55-year-old equipment operator



**INDUSTRY/NAICS CODE:**  
Solid waste collection, 562111



**EMPLOYER:**  
City public works division;  
315 employees.



**SAFETY & TRAINING:**  
Comprehensive safety and health program



**SCENE:**  
Urban street



**LOCATION:**  
North Carolina



**EVENT TYPE:**  
Struck-by



**REPORT#:** 2022-01    **REPORT DATE:** April 24, 2023

## City sanitation refuse truck driver struck-by motorist – North Carolina

### SUMMARY

On July 20, 2020, at 11:38 am, a 55-year-old city sanitation refuse truck driver was struck-by a motorist. The refuse truck driver was loading trash along with a sanitation technician on a small business sanitation route with roughly 80 customers. The incident occurred on a 4-lane median divided road in an urban business area. The speed limit posted on the roadway was 45 mph. The city sanitation refuse truck driver was at the back driver side of the refuse truck loading trash along with a sanitation technician who was positioned at the back passenger side of the truck at the time of the incident. A male motorist in his mid-60s did not brake or change lanes away from the refuse truck and collided with the refuse truck, pinning the sanitation refuse truck driver. The sanitation refuse truck driver was transported to the hospital where he later died as a result of his crushing injuries. [READ THE FULL REPORT> \(p.3\)](#)

### CONTRIBUTING FACTORS

#### Key contributing factors:

- *sanitation worker position in relation to traffic flow*
- *motorist travel position, speed, and inattention* [LEARN MORE> \(p.9\)](#)

### RECOMMENDATIONS

NIOSH investigators concluded that, to help prevent similar occurrences, employers should:

- *select refuse equipment that reduces struck-by injury hazards for employees*
- *educate and train employees on risks associated with working on roadways with motorists and the importance of maintaining heightened situational awareness*
- *ensure workers and equipment are visible to motorists* [LEARN MORE> \(p.9\)](#)

**FACE IT:** [2022-01 REPORT SLIDES](#)





### Fatality Assessment and Control Evaluation (FACE) Program

The National Institute for Occupational Safety and Health (NIOSH), an institute within the Centers for Disease Control and Prevention (CDC), is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. In 1982, NIOSH initiated the Fatality Assessment and Control Evaluation (FACE) Program. FACE examines the circumstances of targeted causes of traumatic occupational so that safety professionals, researchers, employers, trainers, and workers can learn from these incidents. The primary goal of these investigations is for NIOSH to make recommendations to prevent similar occurrences. These NIOSH investigations are intended to reduce or prevent occupational deaths and are completely separate from the rule making, enforcement and inspection activities of any other federal or state agency. Under the FACE program, NIOSH investigators interview persons with knowledge of the incident and review available records to develop a description of the conditions and circumstances leading to the deaths in order to provide a context for the agency's recommendations. The NIOSH summary of these conditions and circumstances in its reports is not intended as a legal statement of facts. This summary, as well as the conclusions and recommendations made by NIOSH, should not be used for the purpose of litigation or the adjudication of any claim. For further information, visit the program website at [www.cdc.gov/niosh/face/](http://www.cdc.gov/niosh/face/) or call toll free at 1-800-CDC-INFO (1-800-232-4636).



Centers for Disease Control  
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National Institute for Occupational  
Safety and Health

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## SUMMARY

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## INTRODUCTION

On January 31, 2022, a health scientist, an environmental health officer and an occupational health and safety specialist from the National Institute for Occupational Safety and Health (NIOSH) Division of Safety Research met virtually with and interviewed the manager of solid waste services for the city, a safety officer for solid waste services, and the safety and workers' compensation manager. On March 2, 2022, NIOSH met with the State OSHA compliance officer. Photos from the incident site, witness statements, the medical examiner's report, and the city police report were provided to NIOSH by NC OSH personnel and the city police department.

## EMPLOYER

The city waste service department is a municipal solid waste services department that has the responsibility for the collection and disposal of trash and yard debris for the citizens and businesses in the city. Employees collect the debris utilizing city supplied refuse collection vehicles (RCVs), such as automated side loaders and rear loaders, used for transporting waste to a county landfill. The waste service department is also responsible for maintaining the daily cleanliness (trash collection) of the central district and after special events. The city operates a fleet of 62 automatic RCVs for residential collection, 3 rear loader RCVs for commercial collection, 11 trucks for bulky scheduled waste collection, and 34 yard waste collection vehicles. The solid waste department has 315 workers on staff, with 275 in operations, including garbage, yard, and small business waste collection, street sweeping, litter control, and median spraying for weed control. The city waste service department performs their own vehicle maintenance with daily, pre- and post-trip, and weekly inspections.

The daily waste collection shift starts at 6:30 am and typically ends at 4 pm, with workers usually working 8 to 10 hours a day, 5 days a week, Monday through Friday. The solid waste department services nearly 46,000 residential customers and 200 small businesses. There are 80 stops on average for a route with different routes each day of the week. At the time of the incident, RCVs were staffed with a two-person crew including a driver and sanitation technician. Both the driver and the technician exited the RCVs for refuse collection tasks.

As a result of this incident, the city has implemented new safety measures. All business garbage routes have been fully automated. The city has found the new route automation increases efficiency and safety for their workers (removing the need for the sanitation truck drivers to exit the vehicle for trash collection). Staff displaced by automation were retained and integrated into new crews. The city plans to further increase automation as the city purchases new trucks for the



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fleet. When the use of a rear loader is required for collection, those employees now only work from the curbside<sup>1</sup> of the road to keep them away from the traffic flow of traffic.

### **WRITTEN SAFETY PROGRAMS and TRAINING**

The city waste service department had a comprehensive safety and health program, including safety and health policies and procedures. The department is on the board of the Solid Waste Association of North America (SWANA) and provides weekly tailgate talks. The staff report to the city waste service department manager. The city waste service department workers wear a grey uniform with high visibility retro-reflective material on the uniform, ANSI class 2 vests (staff who work at night wear ANSI class 3 vests), steel-toed boots, high visibility yellow wicking tee shirts, gloves, and safety glasses. Each city waste service department crew member has a 2-way radio.

### **WORKER INFORMATION**

Workers within the city waste department progress through employment and have growth opportunities within the department as a sanitation technician (an entry level non-driving worker that assists with trash collection); to sanitation tech senior (non-CDL license worker that conducts light duty trash collection); to sanitation truck driver (sanitation truck operator with CDL); to senior sanitation truck driver (sanitation truck operator with CDL that specializes in EO3 equipment i.e. automation side loaders, street sweepers, and roll-off trucks).

The 55-year-old senior sanitation truck driver had 20 years of experience with the city and had been working the small business route for 7 years. The sanitation technician was with the city 4 years and had previously worked 5 years in another city operation at the time of the incident. This crew had worked 5 years together as management typically keeps crews together. At the time of the incident, both workers were wearing their ANSI Class 2 high visibility vests while conducting refuse collection activities.

### **EQUIPMENT**

The equipment was a dual axel rear loader 2019 Crane Carrier Company (CCC) truck chassis with a Loadmaster Excel-S. The equipment has a 3-to-4-year life cycle. The refuse truck was equipped with yellow, amber, and white LED lights that alternate, with 3 sets on the hopper and 2 sets on the stairs. Since the incident occurred the city added additional lights and more reflective decals to make the vehicle more visible.

### **INCIDENT SCENE**

The incident occurred on a highly traveled four lane urban business road, two lanes in each direction separated by a median strip along a straight stretch of roadway (Photo 1). The speed limit was 45 mph at the incident location. The landscape along the shoulder consisted of natural vegetation, intersect points from residential and commercial driveways, and some areas with sidewalks.

### **WEATHER**

According to archived weather reports, temperatures were between 88 and 92 degrees, mostly to partly cloudy. There had been no precipitation in the past 24 hours with wind speed between 0 and 5 mph at the time of the incident. The weather was not considered to be a contributing factor [[Weather underground 2022](#)].

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<sup>1</sup> the side of a street or other paved surface bordered by a curb or sidewalk.



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## INVESTIGATION

On July 20, 2020, a city sanitation technician (passenger) and a senior sanitation truck driver arrived at the city refuse truck garage at 6:30 am for work. The small business route usually ran until 4:00 pm and was comprised of 80 stops. The small businesses are mom and pop type stores, with 5 to 90 gallons of trash in roll out carts. A private hauler is used for larger business operations, and the city does not provide service for dumpsters. The procedure for loading trash along the route consisted of both the sanitation truck driver and the sanitation technician (passenger) exiting the truck to load trash into the back of the sanitation truck. The sanitation technician was on the passenger side (curbside) and the sanitation truck driver was on the roadway drivers' side of the equipment. This straight section of roadway was two lanes in each direction divided by a median and transitioned from 35 mph to 45 mph. The crew had not stopped for lunch, but they had taken a 15-minute break. At the time of the incident, the crew had completed approximately 60 stops. At 11:38 am, the sanitation truck driver was at the back driver side of the refuse truck loading trash. The sanitation truck was in a parked position with the brakes and flashing lights activated when the motorist collided with the sanitation truck and the sanitation truck driver was pushed underneath the rear loading portion of the sanitation truck (Photo 2).

According to statements provided to the investigating police, the sanitation technician was returning a waste container to a customer's driveway when he observed a privately owned vehicle (motorist) driving towards the sanitation truck at the posted speed limit. The sanitation technician jumped back to the curb and yelled to the sanitation truck driver, who didn't have time to react before being struck by the motorist. The sanitation technician called 911 and reported the incident to headquarters. The sanitation truck driver was transported to the hospital and died as a result of his injuries.

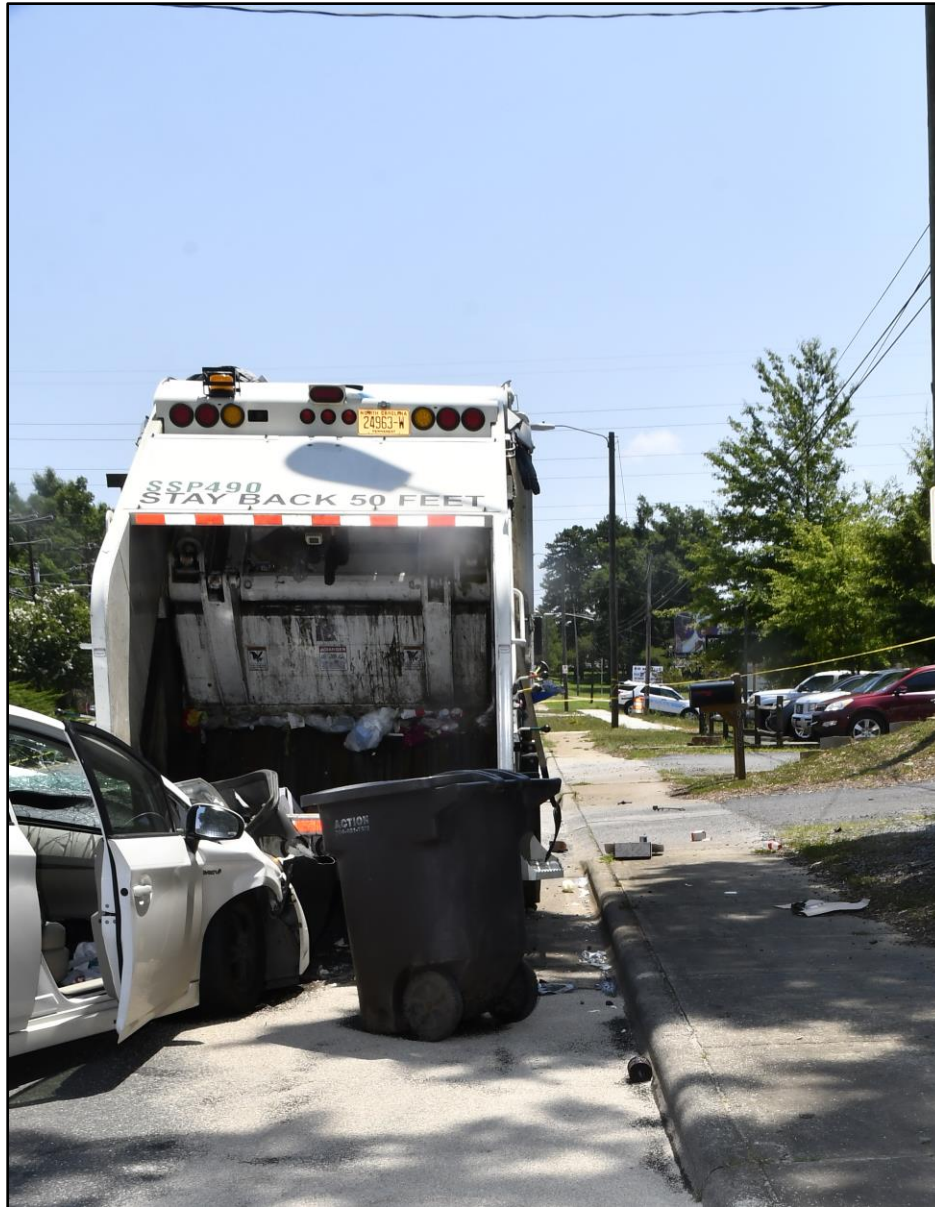
Per the police report, the motorist was not found to be impaired by drugs or alcohol and there were no visual obstructions or sun glare for the driver. In addition, phone records did not indicate the motorist was using his phone at the time of the incident. The motorist stated he looked down and when he looked back up, he struck the sanitation truck driver. There were no tire skid marks at the scene and the motorist did not apply the brakes on his vehicle or change lanes (Diagram 1). The motorist was charged with a misdemeanor death by motor vehicle.



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*Photo 1. Photo of the scene where the incident occurred.  
(Photo courtesy of NC OSH)*



*Photo 2. Photo of the scene and back of the sanitation/refuse truck  
(Photo courtesy of NC OSH)*



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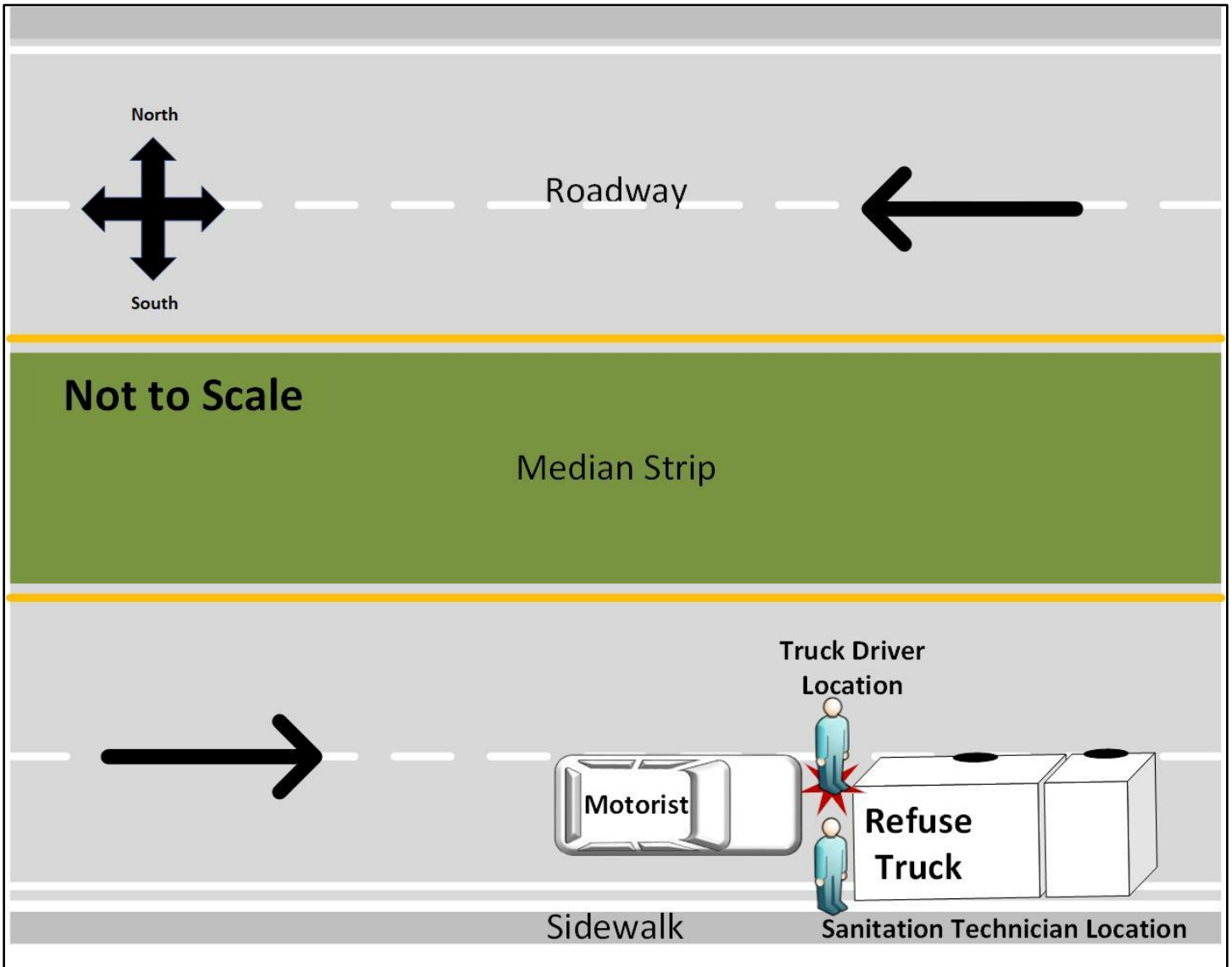


Diagram 1. Drawing of the location of the sanitation workers and motorist at the time of the incident.  
 (Note: diagram is not to scale)





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## CONTRIBUTING FACTORS

- *sanitation truck driver position in relation to traffic flow*
- *motorist travel position, speed, and inattention*

## RECOMMENDATIONS/DISCUSSION

***Recommendation #1: Employers should select refuse equipment that reduces struck-by injury hazards and minimizes roadside traffic exposure to sanitation workers.***

Discussion: At the time of the incident, the operator and a sanitation worker were working outside the refuse truck manually collecting trash containers. Manufacturers have developed automated side loader refuse trucks that limit worker exposure outside the truck, equipment blind spots, lifting hazards, contact with waste, contact with vehicles, and exposure to chemical and biological hazards [Druley 2018]. Automated side load refuse trucks can be operated by one employee from the safety of the operator cab using a waste container pick-up arm controlled remotely and aided by sensors and cameras. Several metropolitan areas have purchased and integrated these refuse trucks into their routes [Nemo 2020]. Employers typically replace refuse trucks every three to five years. Purchasing and integrating automated side loader trucks may eliminate or substantially reduce the need for manual collection.

After the incident, the solid waste department implemented fully automated waste collection equipment for its small business waste collections.

***Recommendation #2: Employers should conduct job hazard analysis (JHA) to identify potential hazards and risk factors and develop effective measures to prevent worker injuries associated with each refuse collection task.***

Discussion: “For the waste management sector, the likelihood of an accident at work is three times higher than average and this includes crashes and collisions involving vehicles. Therefore, preventing serious injuries and fatalities is critical [ISHN 2018].” One way to help prevent serious injuries and fatalities is to first identify the hazards. This can be accomplished by conducting a job hazard analysis (JHA). A JHA systematically evaluates job tasks to ensure they are performed safely. JHAs identify potential hazards and hazardous situations that could occur when performing tasks by focusing on the relationship between the worker, the task, the tools, and the work environment [OSHA 2002]. While conducting a JHA, employers should examine and review each collection route to identify unique hazards and risk factors. Based on the hazards identified through the JHA, employers can then develop and implement appropriate prevention measures and standard safe work procedures for workers to follow. Employers should review the routes with the collection crews to ensure that they understand the risks and do not deviate from the designated safe work procedures.

In this incident, both the driver and the sanitation technician were required to get out of the truck to collect the trash on a busy highway. Having automated tools or equipment, such as automated side loader refuse trucks, eliminates the need to be outside of the vehicle and working along traffic. However, this type of equipment may not always be available. A JHA could help identify the need for safer work procedures for workers to follow. For example, when there are two sanitation workers present (the driver and the technician), employers should consider only having the passenger conduct the trash pickup from the passenger/curbside of the road, as they are on the side least exposed to traffic hazards.



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**Recommendation #3: Employers should educate and train employees on risks associated with working on roadways with passing motorists and the need to maintain heightened situational awareness.**

Discussion: Waste Industry Training highlights that many companies train workers to not cross roadways and position themselves to the sides (away from traffic) of the refuse truck while working [[WIT 2019](#)]. Other industries that work in roadway environments highlight the need to always be aware of motorists and always have an escape route [[Puget Sound Energy 2015](#)].

*“Situational awareness is the ability to perceive and understand what is happening in the environment around you, in relation to how time is passing, and then using your understanding of the situation to accurately predict future events in time to prevent bad outcomes [Gasaway 2019].”*

Three phases or processes are necessary to achieve situational awareness—perception of the elements in the environment, understanding of the current situation, and predicting future actions of the elements in the environment [[Endsley 1995](#)].

To further explain, Dr. Rich Gassaway defines situational awareness as a process with 3 levels:

- Level 1. Perception: Perceive, observe, or sense the situation. Effective perception should involve all 5 senses (hearing, taste, touch, sight, and smell) as applicable. This first level in the situational awareness process must be deliberate, accurate, and continual. This involves perceiving audible indicators such as the flow of traffic, skidding tires, racing or loud engines, car horns, and emergency sirens. Visual indicators including large or wide vehicles, speeding vehicles, and erratic driving such as weaving in and out of traffic. Other visual indicators include areas with limited visibility, high traffic areas, and various roads (residential, commercial, rural) travelled as part of the collection route.
- Level 2. Comprehension: Apply knowledge and past experiences to perception and develop an understanding of the meaning of the situation. In order to fully understand the critical things that are perceived, those working along the roadway must have the proper knowledge from education and training and also ability, which comes from experience. If there are any doubts about what is comprehended, re-evaluate the process and when possible, seek the input of others. Comprehending different things can indicate that there is a misinterpretation or potentially multiple understandings for what is being perceived. Sanitation workers should understand the importance of proper positioning and the potential exit or escape routes to safe locations in and around the refuse truck. Previous experiences and training should be applied to mitigate known hazards that may be encountered during collection activities. Although sanitation workers are not considered emergency responders, the Emergency Responder Safety Institute recommends those working along roadways to train to “work under the premise of if it’s moving, and you’re not driving it, it is out to kill you” [[Emergency Responder Safety Institute 2009](#)].
- Level 3. Application: Applying, projecting, or forecasting the understanding to the future allows you to predict how and when the situation will change and what action is appropriate. This involves knowing how to react to your environment so you can analyze how you should respond [Gasaway 2013, 2017, 2022]. Forecasting and projecting for sanitation workers could involve assessing patterns of high traffic. Understanding that variants may influence approaching vehicles and could include weather (road conditions, snow, ice, or wet roads), time of day (darkness reduces visibility and reaction time and sunlight can obscure drivers’ visibility), as well as visual



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obstructions (lay of the land, vegetation, curves, hilltops and buildings). Forecasting the factors that may be encountered during the work shift trains workers to safely position themselves away from traffic and always identify an escape route.

The OSHAcademy has developed a training module to help employees understand the risk of injury from a variety of general traffic vehicles passing, such as:

- *drivers under the influence of alcohol*
- *sleepy or impaired drivers*
- *impatient, upset, or reckless drivers*
- *drivers using cell phones or other inattentive drivers*
- *law enforcement and emergency vehicles*
- *disabled vehicles pulling in and parking*
- *lost drivers looking for directions* [[OSHAcademy 2022](#)].

In summary, situational awareness involves being aware of one's surroundings, identifying potential threats or dangerous conditions that can occur around you, and knowing how to apply that knowledge to avoid the threat. It is important to maintain and practice good situational awareness throughout a job, especially alongside highways/roadways. One of the most complex aspects of situational awareness is attempting to accurately predict multiple future scenarios. Those who work along the roadway should be mindful and vigilant when on the roadway. At any given time, there can be many drivers affected by the list of contributors that result in worker-victim roadway incidents [[Gasaway 2023](#)].

***Recommendation #4: Employers should ensure workers are visible to motorists.***

Discussion: Although not considered a contributing factor in this incident, and as an example of a good safety practice, employers should ensure workers are visible to motorists during daytime and nighttime operations. *“Visibility problems are the cause for many of the deaths and injuries that happen when workers get hit by vehicles or mobile equipment* [[eLCOSH 2023](#)].” A first line of defense to protect workers against being struck-by a vehicle is high visibility apparel [[eLCOSH 2023](#)]. A motorist's ability to see and respond appropriately to workers is affected by search and attention conspicuity. Search conspicuity is the motorist's ability to search for an object and to pick it out from the various other objects in the field of vision. Attention conspicuity is an object's ability to draw attention when a person is not actively looking for the object [[IAFF 2010](#)]. Additionally, motorists can see pedestrians better in the daytime and lights better at night [[Flannagan, Blower and Devonshire 2008](#)].

Yellow and orange clothing as defined by [ANSI/ISEA 107](#) provides increased worker visibility [[ANSI 2017](#)]. The American National Standards Institute (ANSI) published Safety Standards for Mobile Refuse Collection and Compaction Equipment that also includes recommendations for pedestrian safety. [ANSI Z245.1](#), section 6.6.7, provides guidance on apparel, “requiring the appropriate high-visibility apparel for employees that experience struck-by hazards as prescribed in [ANSI/ISEA 107](#)” [[ANSI 2020](#)]. NIOSH developed a Workplace Solutions document which outlines safety measures for workers on foot and recommends wearing high visibility apparel that is appropriate for the job task and work environment and is compliant with [ANSI/ISEA 107](#) [[NIOSH 2014](#)].



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**Recommendation #5: Employers should ensure equipment is visible to motorists.**

Discussion: Although not considered a contributing factor in this incident, for good safety measure practice, employers should ensure equipment is visible to motorists during daytime and nighttime operations.

Equipment and vehicle reflectivity and lighting play a large role in worker and equipment visibility or conspicuity [[IAFF 2010](#)]. Equipment and vehicle reflectivity and lighting needs to convey to motorists the presence of the equipment or vehicle and provide guidance on how the motorist should respond. Lighting levels should be adjusted to brighter in daytime and dimmer in nighttime operations [[Flannagan, Blower and Devonshire 2008](#)]. White, amber, and yellow lights are typically used in the refuse industry. Amber and yellow lights are generally seen as caution lights to motorists [[FEMA 2014](#)]. White lights are used as a contrasting color and should not be used alone [[FEMA 2014](#)]. SAE recommends flash rates which are one to two per second [[SAE 2021](#)].

The American National Standards Institute (ANSI) published Safety Standards for Mobile Refuse Collection and Compaction Equipment which includes recommendations for vehicle conspicuity [[ANSI 2017](#)]. According to the ANSI standard 11.4.1.2 and in 11.4.1.3, the standard states the solid waste vehicles shall be equipped with:

- *Retroreflective sheeting shall consist of a smooth, flat, transparent exterior film with embedded or suspended retroreflective elements which form an optical system. The sheeting shall meet the requirements of ASTM D4956 for Type V sheeting.*
- *Retroreflective sheeting shall be applied in a pattern of alternating red and white color segments to the side and rear of each vehicle, and to the underride bar, and in white to the upper rear corners of each vehicle, in the locations specified below for each type of vehicle. Top white sheeting shall be applied as close to vertical as practical, and as close to horizontal as practical. Bottom alternating red and white sheeting, where practical, shall be recessed for durability.*
- *Neither white nor red sheeting shall represent more than two-thirds of the aggregate of any continuous strip marking the width of the vehicle or any continuous or broken strip marking its length.*
- *Retroreflective sheeting shall have a minimum width of 2 in. (50 mm) (Grade DOT-C2), 3 in. (76 mm) minimum (Grade DOT-C3), or 4 in. (102 mm), minimum (Grade DOT-C4), except on rear underride bars where the minimum width shall be 1.5 in. (38 mm) (Grade DOT-C2).*
- *Retroreflective sheeting shall be applied as horizontal as practicable in alternating colors across the full width of the vehicle as close to the extreme edges as practicable, and as close as practicable to, but not less than 15 in. (38 cm) and not more than 60 in. (153 cm) above the road surface at the strip centerline.*
- *Two sets of white strips (minimum 2 strips per set) of sheeting shall be applied, one set on each side, horizontally and vertically as practicable to the upper right and upper left contours of the body, as viewed from the rear, as close to the top of the vehicle, with each set as far apart as practicable.*
- *A strip of sheeting in alternating red and white colors shall be applied across the full width of the horizontal member of the rear underride protection device [[ANSI 2017](#)].*

Some trade organizations sell additional retroreflective vehicle decals to be installed on refuse trucks [[SWANA 2022](#)]. These decals are 23 inches high by 86 inches wide and part of a campaign to encourage motorists to “[slow down to get around](#)” [[SWANA 2020](#)].



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After the incident, the solid waste department implemented additional safety lighting along the rear of the trucks and added retroreflective sheeting as described in the ANSI standard. In addition, sanitation workers are trained to determine if the collection points require the use of any additional safety equipment, such as safety cones for heavily traveled roadways and longer duration waste collection sites.

**Recommendation #6: States, counties and municipalities should consider creating and promoting public awareness campaigns to educate motorists on move over laws.**

Discussion: States, counties and municipalities should consider creating and promoting public awareness campaigns to educate motorists on the move over laws to reduce risks workers face while working along the roadside and roadways. Almost all states have laws that require motorists “approaching stationary emergency vehicles that are displaying flashing lights, traveling in the same direction, to vacate the lane closest [[Extreme Tactical Dynamics 2022](#)].” “Move Over America” was founded in 2007 to inform motorists about Move Over legislation in their states. All fifty states have move over laws. Who the law covers varies by state but the laws cover a variety of work-related roadway activities, including first responders such as law enforcement, fire departments, rescue squad vehicles, and ambulances, towing and waste management vehicles, and any vehicle with flashing lights [[Extreme Tactical Dynamics 2022](#)]. According to the National Waste & Recycling Association, Waste and Recycling workers are only covered in 33 states’ move over laws. States should consider including all vehicles/industries that have work-related roadway activities in their move over laws, including sanitation and towing operations if they do not already. Federal agencies, trade groups and organizations have developed materials and videos to demonstrate the impact of the move over law on families [[NHTSA 2022](#); [Trott T n.d.](#)].

The state of North Carolina law [§ 20-157](#) requires:

- *“When an authorized emergency vehicle as described in subsection (a) of this section or any public service vehicle is parked or standing within 12 feet of a roadway and is giving a warning signal by appropriate light, the driver of every other approaching vehicle shall, as soon as it is safe and when not otherwise directed by an individual lawfully directing traffic, do one of the following:*
- *Move the vehicle into a lane that is not the lane nearest the parked or standing authorized emergency vehicle or public service vehicle and continue traveling in that lane until safely clear of the authorized emergency vehicle. This paragraph applies only if the roadway has at least two lanes for traffic proceeding in the direction of the approaching vehicle and if the approaching vehicle may change lanes safely and without interfering with any vehicular traffic.*
- *Slow the vehicle, maintaining a safe speed for traffic conditions, and operate the vehicle at a reduced speed and be prepared to stop until completely past the authorized emergency vehicle or public service vehicle. This paragraph applies only if the roadway has only one lane for traffic proceeding in the direction of the approaching vehicle or if the approaching vehicle may not change lanes safely and without interfering with any vehicular traffic.*
- *For purposes of this section, “public service vehicle” means a vehicle that (i) is being used to assist motorists or law enforcement officers with wrecked or disabled vehicles, (ii) is being used to install, maintain, or restore utility service, including electric, cable, telephone, communications, and gas, (iii) is being used in the collection of refuse, solid waste, or recycling, or (iv) is a highway maintenance vehicle owned and operated by or contracted by the State or a local government and is operating an amber-colored flashing light authorized by G.S. 20-130.2. Violation of this subsection shall be negligence per se [[North Carolina 2022](#)].”*



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Founded by the National Waste and Recycling Association, the annual national Slow Down To Get Around (SDTGA) safety campaign reminds motorists to drive more carefully when near waste and recycling collection vehicles [[NWRA 2023](#)]. “SDTGA is also the name commonly applied to legislation that requires motorists to slow down or move over when passing waste and recycling vehicles that are in the process of collection. It is like many existing laws that require motorists to be cautious when traveling through a construction work zone or when passing a stopped public safety vehicle. In fact, many states enact SDTGA legislation simply by amending existing laws to add waste and recycling vehicles to the list [[SWANA 2023](#)].”

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### **ADDITIONAL RESOURCES**

There are numerous trade associations where employers can network with industry leaders, and stay apprised of the latest technologies, standards development, regulation guidance, education opportunities and safety measures in waste management. Several of those trade associations are:

[National Waste & Recycling Association \(NWRA\)](#)

[Solid Waste Association of North America \(SWANA\)](#)

[American Public Works Association \(APWA\)](#)



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[International Solid Waste Association \(ISWA\)](#)

[Slow Down to Get Around - National Waste & Recycling Association \(wasterecycling.org\)](#)

[Please be safe around garbage trucks - YouTube](#)

[NW&RA: Slow Down to Get Around PSA - YouTube](#)

[APWA-Supports-National-Traffic-Incident-Response-Week-November-14-18.FNL.pressrelv2.pdf](#)

[AAA Move Laws in the 50 States](#)

[Driving Safely Around Emergency Vehicles](#)

[Move Over America](#)

### **INVESTIGATOR INFORMATION**

This incident was investigated by LCDR Melanie Fowler, Environmental Health Officer, Nancy Romano, Safety and Occupational Health Specialist, and Jennifer E. Lincoln, Health Scientist, with the Fatality Investigations Team of the Surveillance and Field Investigations Branch, Division of Safety Research, NIOSH, located in Morgantown, West Virginia. This report was co-authored by LCDR Melanie L. Fowler, Nancy Romano, and Jennifer E. Lincoln.

### **ACKNOWLEDGEMENT**

The NIOSH FACE Program would like to acknowledge North Carolina OSH, Compliance Safety and Health Officer II, Griselle Negron; the City Solid Waste Services, Eric DeLaPena, Deputy Director and LaShonya Walker, Safety Supervisor, for providing assistance and information for this investigation. In addition, Kirk M. Sander, Chief of Staff & Vice President, Safety and Standards, National Waste & Recycling Association, for his review and contributions to this report.

### **OTHER RESOURCES**

3M. [Reflective Tape: Help Improve the Visibility of your Vehicles.](#)

NTEA. [Are There Requirements for Strobe, Beacon, and Other Forms of Auxiliary Lighting?](#)

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