

National Transportation Safety Board

Washington, DC 20594

Highway Accident Brief

Fatal Pedestrian Collision with Sport Utility Vehicle Old Saybrook, Connecticut, August 16, 2016

Accident Number:	HWY16SH024
Accident Type:	Fatal pedestrian collision with sport utility vehicle
Location:	Maple Avenue at Cambridge Court West, Old Saybrook, Connecticut
Date and Time:	August 16, 2016, about 8:11 p.m. eastern daylight time
Vehicle:	2007 Toyota FJ Cruiser
Driver:	73-year-old male
Pedestrian:	89-year-old male
Fatalities:	1

Crash Description

About 8:11 p.m. on Tuesday, August 16, 2016, a 2007 Toyota FJ Cruiser sport utility vehicle (SUV) driven by a 73-year-old male was southbound on Maple Avenue in Old Saybrook, Middlesex County, Connecticut. At the intersection of Maple Avenue and Cambridge Court West, an 89-year-old male pedestrian walked from the west side of Maple Avenue to the soft dirt shoulder on the east side, according to a witness, then turned around and crossed the northbound lane of Maple Avenue. He walked about 2 feet into the southbound lane, where he was struck by the left front fender of the SUV (figure 1).

The pedestrian came to rest in the northbound lane of Maple Avenue. The SUV came to final rest south of the intersection. The pedestrian was transported to Middlesex Hospital–Shoreline Medical Center in Westbrook, Connecticut, where he was pronounced dead.

At the time of the collision, it was twilight (the sun had set at 7:47 p.m.), and the moon, which rose at 6:35 p.m., was 96 percent illuminated. The temperature was 78.8° F, winds were from the south at 11.5 mph, and the sky was overcast.¹

¹ Weather data from <u>https://www.wunderground.com/history/</u>.

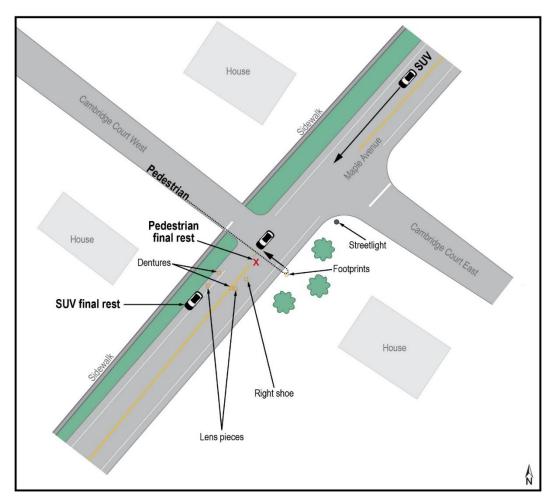


Figure 1. Diagram of crash scene showing pedestrian's path back and forth across Maple Avenue, path of SUV on Maple Avenue, and final rest positions of pedestrian and SUV. Debris on roadway is also indicated.

Crash Location

The area around Cambridge Court West and Maple Avenue is residential (figure 2). Maple Avenue is a two-lane asphalt roadway that has a single lane in each direction (northeast and southwest), separated by a double yellow center line. A single white line ("fog line") separates the northeastbound travel lane from the shoulder. A raised curb and a grassy strip separate the sidewalk from the southwestbound lane. The posted speed limit for Maple Avenue is 35 mph.

The area has no crosswalks or pedestrian control signals. Street lighting is limited to a single lamp mounted on a pole at the intersection of Cambridge Court East and Maple Avenue. The light is above a tree canopy along the east side of Maple Avenue, and the trees project a shadow onto the shoulder of the roadway. No records for pedestrian collisions were found in the crash history of Maple Avenue.



Figure 2. Aerial view of crash location showing intersection of Maple Avenue with Cambridge Court East and Cambridge Court West. (Base photo by Google Earth)

Pedestrian

The pedestrian lived in the area. On the night of the crash, he was wearing a white shortsleeved shirt, dark pants, and shoes. In an interview conducted by law enforcement officers, the pedestrian's family said that he often took nightly walks in the area and would occasionally cross Maple Avenue. The family stated that he had recently been walking at night, when it was cooler outside than during the day. According to his family, the pedestrian had a pacemaker, high cholesterol, and slight dementia, though it did not disable him.

The hospital released the pedestrian's body to the Connecticut Office of the Chief Medical Examiner, which performed an autopsy and toxicological tests. The pedestrian's height was listed as 5 feet 8 inches and his weight as 163 pounds.² The cause of death was recorded as blunt impact of head, torso, and extremities, with fractures and visceral injuries. The toxicological tests were negative for alcohol and other drugs.

² Pedestrian characteristics, such as height and weight, were documented to aid crash reconstruction and evaluate pedestrian injuries.

Driver

The SUV driver held a Connecticut class D (noncommercial) driver's license with a corrective lens restriction. The driver was not wearing corrective lenses at the time of the collision. During a postcrash interview of the driver, police officers found no signs of impairment. The driver stated that the last prescription medication he had taken earlier in the morning was a muscle relaxant. He further stated that he was a Type II diabetic, noninsulin-dependent, and that he required prescription medication.

Immediately after the crash, the driver was taken to the local police department and willingly submitted to an alcohol breath test. The test showed a blood alcohol concentration of 0.000. A urine sample was collected and submitted to the state toxicology laboratory. Tests were negative for alcohol and other drugs.

The driver gave a written statement to law enforcement officers. He stated that he departed Danbury, Connecticut, at 6:00 p.m. and traveled on Interstate 84 to Route 9, which he exited about 8:15 p.m.³ He stated that it was dark and that his headlights were on. After exiting the highway, he traveled to Old Saybrook on Route 154 (which becomes Main Street) and turned south onto Maple Avenue. He stated that he remembered one or two vehicles behind him, but that there were no vehicles ahead of him and that vehicles traveling north on Maple Avenue had passed him. He stated that at the time of the collision, he was traveling about 30 mph when an elderly male walked in front of his vehicle. The driver said the pedestrian appeared to come from the east side of the road. The driver said he did not have time to brake or swerve to avoid striking the pedestrian.

The driver stated that his Connecticut operator's license had an eyeglass restriction and that at the time of the crash, he was driving without his glasses. Records were obtained from the driver's ophthalmologist for a visit on March 11, 2016, during which the driver complained of slowly worsening vision in both eyes, particularly when driving. The examination revealed distant vision of 20/80 (with two errors) in the right eye and 20/60 (with two errors) in the left eye. His near vision was documented as 20/400 (with two errors) in each eye. In addition, the driver had cataracts in both the central and peripheral areas of the lenses of both eyes.⁴ The physician identified an abnormality of the retina that he was concerned might be cancer. The driver was prescribed glasses for distant and near vision and referred to a retinal specialist. If the retinal abnormality was not cancer, the plan was to remove the cataracts. That had not been done at the time of the collision.

³ The driver slightly misstated the time he exited Route 9, given that the collision occurred about 8:11 p.m.

⁴ A *cataract* is an area of clouding of the lens of the eye. Symptoms include cloudy or blurry vision, seeing faded colors, glare from point sources of light, and halos around lights, as well as a diminished ability to perceive color and contrast in low-light conditions. When a cataract progresses to the point where a person can no longer see well during the day or pass a vision test, the symptoms are usually significant enough that he or she will seek treatment. The National Transportation Safety Board (NTSB) addressed the dangers of cataracts as they relate to pilots in a safety recommendation report issued in 2016 (*Improving Pilot and Aviation Medical Examiner Knowledge of Cataract Hazards*, NTSB/ASR-16-03).

The driver's cell phone record was examined after the collision. It showed that the driver was not talking or texting when the crash occurred.

Vehicle

The crash vehicle was a 2007 Toyota FJ Cruiser SUV. The driver reported that the vehicle was in working order before the crash. Damage to the SUV postcrash included material transfer on the left front fender and front bumper and hood. The left front fender was displaced and dented, and the corner pad of the left front bumper was torn off (figure 3). The left side of the hood was also dented.



Figure 3. Front view of crash SUV showing damage to left fender near turn signal assembly.

The SUV was equipped with air bags, which did not deploy in the crash, and air bag control modules (ACMs) that recorded event data. The ACM data were acquired by Connecticut State Police investigators and interpreted using the Bosch Crash Data Retrieval System. Precrash data indicated that the driver's seatbelt was buckled. The ACM recorded a maximum longitudinal change in velocity of -0.3 mph at 140 milliseconds after the event. The data were consistent with an impact on the front of the vehicle.

Witnesses

Police interviewed three witnesses. Witness No. 1 was traveling behind the SUV at the time of the collision. According to her written statement, the witness first noticed the SUV because it made a wide right turn onto Maple Avenue from Main Street (about a mile and a half north of

the crash site). She stated that the SUV overshot the turn and struck the curb on the island in the intersection. She followed the SUV as it traveled on Maple Avenue at 30 to 40 mph; it never appeared to her to be traveling at a high speed. She stated that the SUV was swerving in its lane and crossed the fog line and double center line several times. She increased her distance from the SUV as both vehicles approached Cambridge Court. She saw the pedestrian coming from the left side. He was in the left lane but had not made it to the middle of the road. She stated, "It did not appear the pedestrian saw the vehicle." She stated that the SUV swerved out of the lane to the left and crossed the double yellow line, then struck the pedestrian in the left lane. She saw the pedestrian fly into the air, then strike the ground. She immediately stopped her vehicle and called 911.

Witness No. 2 was traveling behind witness No. 1. In a written statement, she said she was driving on Maple Avenue behind a vehicle that began to slow down. She realized that a male was in the roadway, and it appeared that he was attempting to cross it. She stated that the pedestrian was moving slowly, as though shuffling. She saw him approach the double yellow line but did not see the collision.

Witness No. 3 was with her daughter at the time of the collision, walking her dog north on Maple Avenue. In her written statement, she said she saw an elderly male cross Maple Avenue from Cambridge Court West to Cambridge Court East. As she approached Cambridge Court West, she saw the same elderly male bend down and appear to drop something, then stand up and proceed to cross Maple Avenue to return to Cambridge Court West. As he was crossing the street, the witness observed the front of a silver SUV strike him. She stated that the SUV did not appear to be traveling at a high speed, and that the driver immediately applied the brakes and pulled off to the side of the roadway. The witness said she called 911 and waited until the police arrived.

Applicable Traffic Laws

Title 14 of the Connecticut general statutes regulates the movement of pedestrians and motor vehicles on public roadways. Pedestrians not in a crosswalk are required to yield the right-of-way to motor vehicles (section 300b):

Each pedestrian crossing a roadway at any point other than within a crosswalk marked as provided in subsection (a) of section 14-300 or any unmarked crosswalk or at a location controlled by police officers shall yield the right of way to each vehicle upon such roadway.

Pedestrians have the right-of-way while in a crosswalk, marked or unmarked, that is not controlled by police officers or traffic signals (section 300c):

 \dots at any crosswalk marked as provided in subsection (a) of this section or any unmarked crosswalk \dots each operator of a vehicle shall grant the right-of-way \dots to any pedestrian crossing the roadway within such crosswalk \dots

Drivers are required to exercise due care to avoid pedestrians (section 300d):

... each operator of a vehicle shall exercise due care to avoid colliding with any pedestrian or person propelling a human powered vehicle and shall give a reasonable warning by sounding a horn or other lawful noise emitting device to avoid a collision.

Under Title 14, section 36-4, a driver's license may be issued that contains one or more limitations (required to be indicated on the license), including the following:

(b)(2) Operation of the motor vehicle is permitted only when the person is using corrective lenses, not including telescopic lenses, as prescribed by a licensed optometrist or ophthalmologist

Conspicuity Test

The Old Saybrook Police Department conducted a conspicuity test several hours after the collision (which occurred during twilight). A police vehicle equipped with a forward-facing camera traveled down Maple Avenue at two speeds, 30 mph and 35 mph. A pedestrian wearing a reflective vest stood on the shoulder at the east edge of Maple Avenue. In the test, the pedestrian was not visible to the driver (figure 4) until perpendicular to the outer left edge of the police vehicle's headlight beam.



Figure 4. Snapshot from video taken during police conspicuity test. Pedestrian wearing reflective vest was standing in area outlined by red rectangle.

NTSB investigators examined the crash scene on a later date, at the approximate time of the collision and in approximately the same lighting conditions. The investigators observed that visibility in the area was poor, particularly at the side and shoulder of the roadway, but that a pedestrian walking in the travel lane would have been illuminated by the nearby streetlight.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the crash in Old Saybrook, Connecticut, was the decision of the pedestrian to walk across the multilane roadway in front of the oncoming vehicle. Contributing to the cause of the crash were the driver's poor vision and the low-light conditions.

BY THE NATIONAL TRANSPORTATION SAFETY BOARD

ROBERT L. SUMWALT, III Chairman EARL F. WEENER Member

BRUCE LANDSBERG Vice Chairman T. BELLA DINH-ZARR Member

JENNIFER HOMENDY Member

Adopted: September 7, 2018

For more details about this accident, visit the <u>NTSB public docket</u> and search for NTSB accident ID HWY16SH024. The accident dockets include such information as police reports, photographs, driver and witness statements, data on previous crashes, highway engineering reports, and timing of traffic signals.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties . . . and are not conducted for the purpose of determining the rights or liabilities of any person." 49 *Code of Federal Regulations*, Section 831.4. Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report. 49 *United States Code*, Section 1154(b).