



**CRASH SUMMARY
FACTUAL REPORT**

Valhalla, NY

DCA15MR006

(3 pages)

DCA15MR006 Crash Summary

On February 3, 2015, at about 6:26 pm eastern standard time, in Valhalla, New York, northbound Metro-North (MN) passenger train 659 consisting of eight electrically powered M-7 railcars, struck a 2011 Mercedes Benz ML350 sports utility vehicle (SUV) at the Commerce Street grade crossing on the Harlem line, resulting in a fire to the SUV and lead railcar (MN 4333). The lead railcar was carrying an estimated 20 passengers at the time of the accident and there were five confirmed passenger fatalities, all from the first railcar and 13 passengers reported to have injuries. The driver of the SUV was also fatally injured.

The SUV was stopped partially fouling the tracks in the grade crossing and positioned in an easterly direction when the railroad crossing gates closed. Witnesses described the driver of the SUV as being stopped in the crossing prior to the gates lowering. When the crossing arm lowered, it struck the rear portion of the SUV. The driver of the SUV exited to look at the back of the SUV, then got back in the SUV, drove forward (east) and was struck by the train.



Figure 1-Aerial photograph of Metro North train 659 after collision with SUV at the Commerce St. grade crossing in Valhalla, NY

Preliminary review of event recorder data showed that train was traveling at 58 miles per hour (mph) prior to emergency braking. The maximum allowable speed on this section of track is 60 mph. The data also showed proper horn operation on the approach to the crossing. The engineer initiated his emergency brake about 230 feet before the collision after describing what he characterized as a vehicle partially fouling the crossing. The data also showed one long horn blast upon initiation of the emergency brake.

Event recorder data indicates the train slowed from 58 mph to 49 mph in 4 seconds. The train and SUV came to rest about 665 feet from the point of collision. The movement resulted in damage to the electrified 3rd rail. The 3rd rail detached, pierced the SUV, entering the first railcar in two locations from the underside at the aft end of the left side passenger doorway.

An estimated 386 feet of 3rd rail was damaged, of which about 343 feet was located inside the lead car. Eleven sections of rail were found inside the first railcar and the entire railcar interior was consumed by fire. The train was occupied by 2 crew members and approximately 650 passengers at the time of the accident. The weather at the time of the accident was reported 20°F and with very light wind, clear skies, and good visibility. Damage has been estimated by MN at \$3.1M

The parties to the investigation include Metro-North Railroad, the Federal Railroad Administration, the Association of Commuter Rail Employees, the Town of Mount Pleasant, and the New York Public Transportation Safety Board.