PUBLIC TRANSPORTATION SAFETY BOARD
ABBREVIATED BUS ACCIDENT REPORT

1. CASE#: 9232
2. PROPERTY NAME: MTA NYCT
3a. ACCIDENT TYPE: Angle Collision
3b. Accident Severity Index: 0.30
4a. DATE: January 16, 2007
4b. TIME: 2:29 a.m.
5. ACCIDENT LOCATION: Parsons Boulevard at 160th Street
6. TOWN/CITY/BOROUGH: Queens, NY
7. SUMMONS: No
8. BUS NUMBER: 549
8a. YEAR: 1994
8b. MAKE: Orion V
9. NUMBER OF INJURIES: 6
9. NUMBER OF INJURIES: 6
10. FATALITIES: 0
11. HOURS OF SERVICE: 0 hr 50 min in last 24 hrs/35 hrs 16 min in last 7 days
12. SYNOPSIS:

At approximately 2:29 a.m., MTA New York City Transit (NYCT) bus #549 was traveling west on Archer Avenue and approaching the intersection with 160th Street when an auto traveling north at high speed emerged from the tunneled section of 160th Street, failed to stop for the red traffic signal and collided with the left side of the bus in the vicinity of the left front wheel. After the initial collision the auto rotated and made secondary contact with the left midsection of the bus and continued to final rest in the west crosswalk of Archer Avenue. The bus driver, the sole bus passenger, the auto driver and the three auto passengers claimed various injuries. The injured individuals were transported to local hospitals where they were treated and released. The bus sustained moderate and the auto sustained extensive damage from the collision(s). Concluding treatment, the auto driver was arrested for driving while intoxicated (DWI).

In the vicinity of the accident site Archer Avenue is a 20 foot wide two-way east/west roadway divided by a solid double yellow barrier pavement marking into two travel lanes in each direction. Parking is not permitted at either curb. One Hundred Sixtieth Street is a 50 foot wide two-way north/south roadway which travels in a tunnel under Long Island Railroad tracks. The intersection is severely sight restricted as traffic traveling north on 160th Street cannot be observed by traffic on Archer Avenue until they exit the tunnel. Parking is not permitted at the curbs. Both roadways are asphalt paved, straight, level and in good condition. The intersection is controlled by standard traffic signals which, at the time of the accident investigation, were functioning as designed. The roadways are illuminated by standard overhead luminaires which, at the time of the accident investigation, were all functioning as designed. At the time of the accident it was dark, raining and the pavement was wet. The area speed limit is 30 mph.

Bus #549 is a 1994 Orion V transit type bus housed and maintained at the Casey Stengel Depot with a seating capacity of 40 passengers. A review of the bus records showed that Preventive Maintenance Inspections are performed at regular 3,500 mile intervals (±500miles), the most recent was completed on January 2, 2007 and the bus had traveled 1,401 miles since then. There were no safety or recurring defects noted in the 45 days prior to the accident. Physical inspection of the bus on January 16, 2007 found no defects that could be considered a causative factor in the accident. The inspection showed collision damage to the left front suspension, left windshield, left side body panels and left side frame members. Decelerometer tests were performed on the bus’ braking systems and showed stopping distances that minimally failed to meet the MTA NYCT adopted standards for passenger vehicles of NYS DOT Regulations (Title 17 of NYCRR, Article 3, Part 720).
Further investigation found that the brake application valve was leaking air (when the brakes were applied) and that the left front wheel brake shoe anchor pin bushings had excessive play.

The fact that the application valve may have been damaged in the collision can not be discounted. Upon replacement of the application valve and a four wheel re-line, the bus met NYS DOT brake stopping distances.

The bus driver was hired by the MTA NYCT on July 19, 1999 and completed the New Bus Operator Training Program. A review of the driver's Department of Motor Vehicles records for the past three years showed no violations or convictions. NYS Vehicle & Traffic Law, Article 19-A records were reviewed and found to be complete, in-order and up-to-date. A review of the driver's NYCT accident record for the last three years showed one preventable (04/16/05) and one non-preventable (10/27/05) collision accidents. Post accident drug and alcohol tests performed on the bus driver upon her release from the accident scene, 4 hours and 35 minutes from the time of the accident, were negative.

The bus driver's written statement indicated that she was traveling west on Archer Avenue when a car that was traveling north on 160th Street with a speed of 160-165 mph hit the bus on the left front wheel and the bus went out of control.

In an interview with the MTA NYCT Department of Buses (DOB) Supervisor the bus driver stated that she did not observe the auto prior to the collision, but felt it (the auto) hit the left rear of the bus as it (the bus) moved straight on the roadway.

In an interview at the accident scene the bus driver indicated that she approached and entered the intersection at a speed of about 20-25 mph, with the brake covered, and did not see the auto prior to impact with the bus. The bus driver said that the impact pushed the bus to the right. The bus driver indicated that she then applied the brakes and stopped the bus.

Additional facts:
- After the initial collision, the bus traveled approximately 200 feet to final rest.
- Downloaded information from the bus Electronic Control Module (ECM) showed that the bus was traveling at a speed of approximately 28 mph when it entered the intersection with 160th Street and that the bus was under some acceleration. It further showed that after impact full acceleration was being applied for a distance of approximately 120 feet before acceleration ceased and the bus was brought to a stop under normal braking.
- The tunneled section of 160th Street presents severe sight restrictions for traffic on both 160th Street and Archer Avenue.
- The traffic signals controlling the intersection of Archer Avenue and 160th Street are clearly visible to approaching drivers on both roadways.

The MTA NYCT trains all bus drivers in defensive driving techniques for safely approaching and traversing intersections, statistically one of the most hazardous points in a driver's route. These techniques include, but are not limited to, reducing speed, scanning for hazards, identifying and anticipating potential hazards – particularly those hazards presented by the unanticipated actions of other motorists and pedestrians.
In addition, bus drivers are trained to reduce the speed of the bus by 5 mph and to cover the brake when traversing an intersection. Further, bus drivers are trained to further reduce the speed of the bus in inclement weather or in sight restricted situations.

Public Transportation Safety Board staff finds that the probable causes of this accident were the actions of the auto driver; failing to stop for a red traffic signal, speeding and driving while in an intoxicated condition. Contributing to the accident was the failure of the bus driver to adhere to her training for traversing a sight restricted intersection in inclement conditions.

The MTA NYCT DOB, after reviewing the facts concerning the accident, rated the accident preventable. However, no discipline has been accessed due to the bus driver remaining out of work from injuries sustained in the accident.

Based on the action taken by the MTA New York City Transit regarding this accident, the Public Transportation Safety Board staff makes no recommendation in this case.

INVESTIGATOR: Harry W. Gerham