

SCHOOL-RELATED CRASH REVIEW

Location: Greentree Road at Ewing Drive

Crash Date: June 12, 2024

Crash Time: 8:07 AM

Local Case No.: 240027904

Review Date: January 16, 2025

Description of Incident

On Wednesday, June 12, 2024, at approximately 8:07 AM, a motorist traveling eastbound along Greentree Road turned left onto Ewing Drive and struck a pedestrian walking southbound along the west leg crosswalk. According to the crash report, the motorist failed to yield to the right of way of the pedestrian, and the pedestrian suffered serious injuries. Daytime weather conditions were clear, and the roadway surface was dry.

Figure 2 illustrates the crash location and direction of pedestrian and vehicle travel.

Location and Site Description

The subject location is Greentree Road at intersection of Ewing Drive. Bradley Hills Elementary School (ES) is located to the southeast, and North Bethesda Middle School (MS) is located along Ewing Ave to the north. Bradley Hills ES, located at 8701 Hartsdale Avenue, has a current enrollment of 466 students in grades kindergarten through 5th. North Bethesda MS, located at 8935 Bradmoor Drive, has a current enrollment of 1,163 students in grades 6th through 8th.

Bradley Hills School (ES)

The majority of student arrivals are between 8:30 AM and 9:00 AM and dismissal occurs between 3:25 PM and 3:45 PM.

North Bethesda Middle School (MS)

The majority of student arrivals are between 7:45 AM and 8:15 AM and dismissal occurs between 3:00 PM and 3:20 PM.

Greentree Road

Greentree Road is a two-lane undivided roadway with one lane in each direction, is classified as a neighborhood connector, ranges from 24 feet wide at the curb bump out to 35 feet with shoulders and is oriented in the east-west direction. Greentree Road is approximately two miles long between the split with Longwood Drive to the west and MD 187 (Old Georgetown Road) to the east. At the crash location, Greentree Road has buffered sidewalks on the north side of the street, but no sidewalks are present along the eastbound direction to the south. There is discontinuous on-street parking provided along the roadway. At intersections, parking lanes are tapered away to provide for a curb bump out. Bicycle ramps are provided at intersections.

The posted speed limit along Greentree Road is 30 mph. Montgomery County RideOn bus stops exist along the corridor. Multiple pedestrian-related signs exist along the corridor, including Pedestrian crossing signs, advisory distance plaques, and “State Law STOP for [Peds] in X-Walks”. A speed camera

exists in the eastbound direction of Greentree Road on the east leg of Ewing Drive. A “Photo Enforced” plaque is posted.

Refer to **Figure 1** in the attachments for additional details on the Greentree Road segment.

Greentree Road at Ewing Drive

The intersection of Greentree Road at Ewing Drive is a four-legged intersection with the Ewing Drive approaches extending northerly and southerly. Greentree Road is uncontrolled while Ewing Drive is stop-controlled. Both Greentree Road and Ewing Drive contain direct residential frontage. The north leg of Ewing Road is an unmarked roadway spanning approximately 24 feet with on-street parking permitted and speed humps. North Bethesda Middle School driveways are located off Ewing Drive to the north. The south leg of Ewing Drive is a two-lane, undivided roadway spanning approximately 35 feet with on-street parking permitted and speed humps.

A marked, high visibility crosswalk exists across Greentree Road on the west leg of Ewing Drive, spanning approximately 38 feet. Pedestrian ramps are provided at the western corners of the intersection directing pedestrians into the middle of the intersection. A marked standard crosswalk exists over the north leg.

The Greentree Road corridor was evaluated to identify potential infrastructure, maintenance activities, and road user behaviors that contribute to increased safety risk at and in the vicinity of the school-related crash location. The Greentree Road corridor was reviewed between Melwood Road to the west and Rolston Road to the east. Please refer to **Figure 1** for additional information.

Crash History

Crash data obtained from dataMontgomery indicates that 16 incidents occurred within the vicinity of the crash site between January 2020 and December 2023. Of these 16 incidents, six (6) crashes occurred within at the subject crash intersection of Greentree Road and Ewing Drive. The other 10 crashes occurred at the intersections with Bradmoor Drive to the east, or with Ridge Place to the west. The 16 crashes reported included six (6) injury crashes, 10 property damage crashes, and the crash type consisted of nine (9) angle collisions, two (2) sideswipe collisions, three (3) rear end collisions, three (3) head on collisions, three (3) left-turn collisions, one (1) head on collision, and one (1) rear end collision. There was one (1) pedestrian or bicycle-related crashes. Two (2) of the incidents occurred during wet pavement conditions, and three (3) occurred in the dark. The incidents are illustrated on **Figure 3**.

Field Observations and Findings

Field observations were performed on Monday, January 13, 2025, at 10 AM. Weather conditions were clear, and the roadway surface was dry. However, conditions were cold, and snow cover remained from the previous weekend storm. No pedestrians were observed crossing the roadway, but some were observed within the bus shelters along Greentree Road. Vehicular activity was moderate at the intersection during the observation period, with moderate levels of turning movements to and from Ewing Drive. Pavement markings at the intersection are in good condition.

Sight distance is limited for pedestrians crossing northerly and looking to the left at oncoming eastbound traffic. The measured sight distance in the field is approximately 200 feet. AASHTO guidelines indicate that the minimum sight distance along a roadway with a design speed of 30 mph should be 290 feet. The existing pedestrian crossing warning sign (that includes a supplemental, 300 feet plaque) is incorrectly installed 200 feet from the crosswalk. See **Photo 3** and **Photo 4** for sight distance photos.

Recommendations

The following measures were identified as a result of this review:

1. Upgrade existing crosswalk markings across Ewing Drive to continental style.
2. Refresh continental crosswalk markings across Greentree Drive.
3. Relocate the existing pedestrian crossing warning sign an additional 100 feet west from the crosswalk.

Site Photographs



Photo 1. Taken from the northwest corner looking south across Greentree Road. Approximate crash location.



Photo 2. Looking eastbound along Greentree Road. Approximate crash location.



Photo 3: Sight Distance from Southwest Quadrant Looking Left



Photo 4: Stopping Sight Distance for EB Motorist Approaching Ewing Drive



Figure 1 - Greentree Road Corridor Observations



Figure 2 - Crash Diagram



Figure 3 – Crash History (2021-2023)