SCHOOL-RELATED CRASH-INFRASTRUCTURE REVIEW

Location: Apple Ridge Road at Watkins Mill Road

Crash Date: October 16, 2024

Crash Time: 4:49 PM

Local Case No.: 240049491

Review Date: July 10, 2025

Description of Incident

On Wednesday, October 16, 2024, at approximately 4:49 PM, a motorist turning right from eastbound Apple Ridge Road turning onto southbound Watkins Mill Road struck a pedestrian crossing the south leg. The motorist turned during a green signal indication. It is not clear if the pedestrian was within the marked crosswalk at the time of contact. The crash report indicated that the pedestrian suffered possible injuries. The driver was deemed at fault and did not suffer any apparent 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 Apple Ridge Road at the intersection with Watkins Mill Road. Watkins Mill High School (HS) is located to the west at 10301 Apple Ridge Road. Watkins Mill HS has a current enrollment of 1,660 students in grades 9th through 12th.

Watkins Mill High School (HS)

The majority of student arrivals are between 7:15 AM and 7:45 AM and dismissal occurs between 2:30 PM and 2:50 PM.

Apple Ridge Road

The posted speed limit along Apple Ridge Road is 25 mph and is classified as a neighborhood connector, is approximately 35 feet wide, and is oriented in the east-west direction. Apple Ridge Road is approximately one mile long, beginning in a residential community to the west and terminating at Montgomery Village Avenue to the east. At the intersection, there are turn lanes and no shoulders. The intersection lies within a school zone with a school crossing assembly over each marked leg of the intersection.

Watkins Mill Road

The posted speed limit along Watkins Mill Road is 35 mph and is classified as a boulevard, is approximately 45 feet wide, and is oriented in the north-south direction. Watkins Mill Road spans over 4 miles, beginning at the roundabout with Blunt Road and terminating at Clopper Road, south of I-270. At the intersection, there are turn lanes and no shoulders with a bus stop on the south leg.



Apple Ridge Road at Watkins Mill Road

The intersection of Apple Ridge Road at Watkins Mill Road is a signalized, four-legged intersection, with Watkins Mill Road extending northerly and southernly from Apple Ridge Road. The signalized intersection contains exclusive-permissive left-turn phasing for all approaches and signalized pedestrian crossings. Pedestrian ramps are provided at all corners of the intersection, including continental crosswalk pavement markings.

At the crash location, both roadways have buffered sidewalks and shoulders on both sides of the street. Montgomery County RideOn bus stops are located on both sides of the roadway at the crash location on either side of the south leg of the intersection.

Refer to **Figure 1** in the attachments for additional details on the Apple Ridge Road at Watkins Mill Road intersection.

The Apple Ridge Road at Watkins Mill Road intersection 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. Please refer to **Figure 1** for additional information.

Crash History

Crash data obtained from dataMontgomery indicates that 15 incidents occurred at the crash site between January 2020 and December 2024, including the subject crash. These 15 crashes include eight (8) injury crashes and seven (7) property damage crashes. The crash types consist of four (4) angle collisions, three (3) head on collisions, three (3) sideswipe collisions, two (2) rear end collisions, one (1) left turn collision, one (1) right turn collision, and one (1) single vehicle collision. There was one (1) pedestrian-related crash at this intersection.

The incidents are illustrated on Figure 3.

Field Observations

Field observations were performed on Monday, March 3, 2025, at approximately 1 PM. Weather conditions were clear, and the roadway surface was dry. Vehicular activity was consistent during the observation period, but no pedestrians or bicyclists were observed at the intersection. The west leg crosswalk is faded over Apple Ridge Road. A School sign with an "Ahead" plaque exists in the westbound direction approaching the intersection, and a "Stop Here On Red" sign is placed in the westbound direction at the stop bar. In the eastbound direction, School Crossing signs are missing on the right side of the roadway for both the west leg and east leg crosswalks.

Findings

Site observations did not find any infrastructural deficiencies that could have contributed to this crash.

Maintenance Recommendations

While not related to the crash incident, the following were identified as maintenance recommendations to enhance the safety of the location:

1. Recommend refreshing the west leg continental crosswalk pavement markings.



Sign Enhancement

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

- 1. Recommend installing a "Turning Veh Yield to Peds (Right)" sign on the mast arm for all right-turns.
- 2. Recommend installing school crossing sign assemblies (S1-1 and W16-7p) on the right side of the roadway for the west leg and east leg crosswalk for the eastbound direction.

Site Photograph

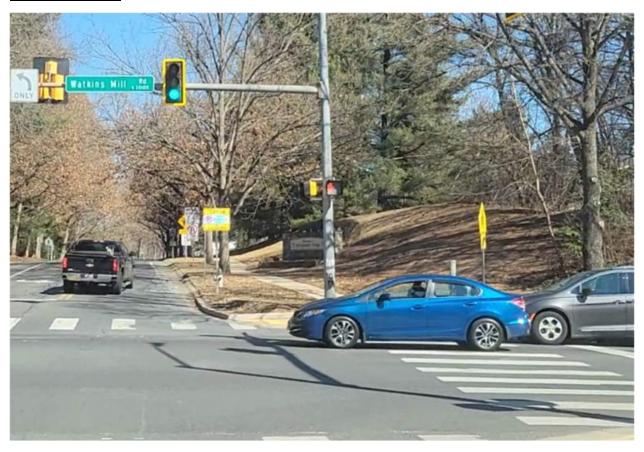


Photo 1. Taken along eastbound Apple Ridge Rd, looking east at Watkins Mill Rd. Northbound vehicle runs red light and stops past stop line within the crosswalk.





Photo 2. Taken along eastbound Apple Ridge Rd, looking east at Watkins Mill Rd. Southbound left-turning truck oversteers across the westbound approach. Faded west leg crosswalk and missing School Crossing signs on the right side of the roadway for both crosswalks over Apple Ridge Rd.







Figure 2 – Crash Diagram

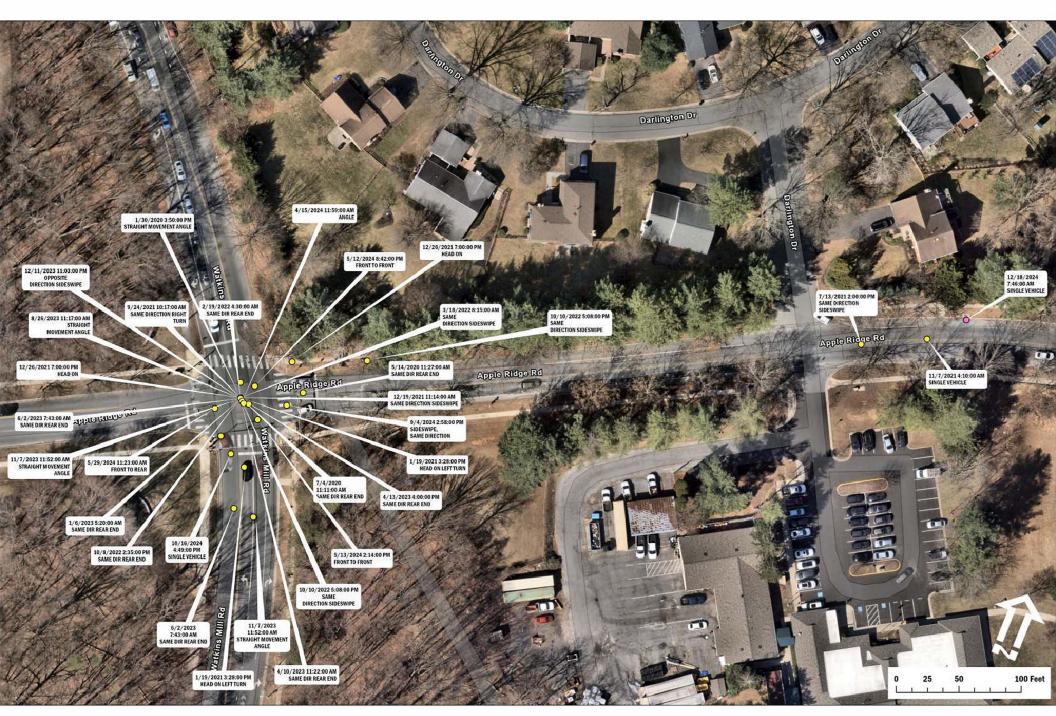


Figure 3 – Crash History (2020-2024)