

## Executive Summary

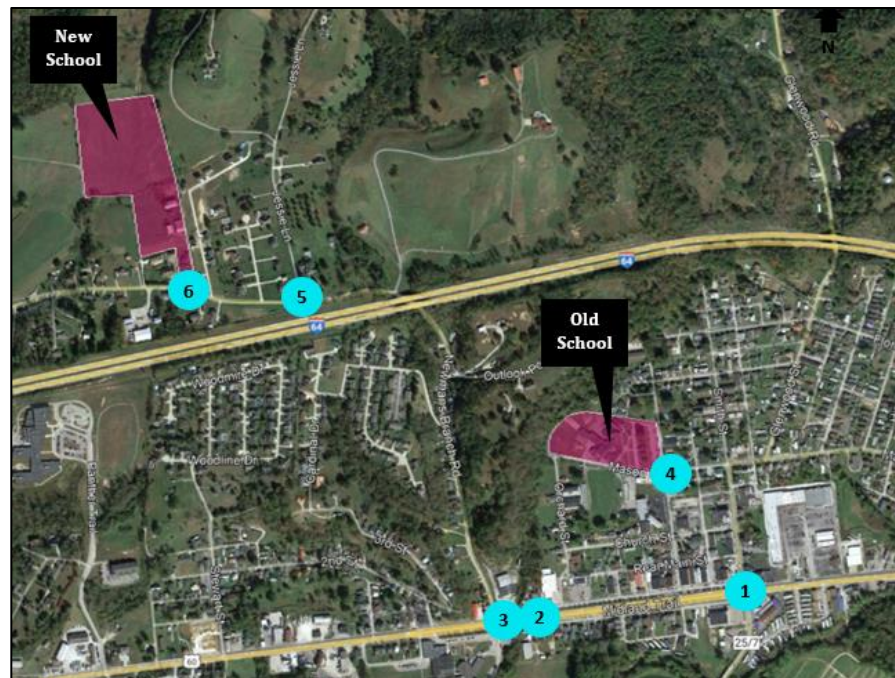
Carpenter Marty Transportation (CM) was selected to develop a US-60/Newman's Branch Road Traffic Study for the City of Milton, West Virginia. The purpose of this project is to study and assess the traffic impacts of a new Milton Elementary School on the north side of Newman's Branch Road, north of IR-64. This study provides recommendations and guidance for implementing strategies to correct existing deficiencies and perform necessary crash analyses to create a safer and more efficient transportation network for all users.

CM systematically reviewed relevant previous studies provided. These included the 2019 Milton Mobility Study and the 2020 Cabell and Wayne Counties Safety Study. The recommendations from these studies provided a basis for the analysis in this study.

With the assistance of KYOVA, a stakeholder group was formed. Initial stakeholder meetings were held on November 1<sup>st</sup> and 8<sup>th</sup>, 2023 to introduce the team, gather information, and discuss the scope, schedule, and expectations of the study. Additional meetings were held on January 11, 2024, February 6, 2024, and February 22, 2024 to discuss study progress/results, plan the public meeting, and next steps. A public meeting was held on February 12<sup>th</sup>, 2024.

An assessment and description of the study area existing conditions were provided. The roadways include US-60, Newman's Branch Road, N. Main Street, and S. Main Street. The study intersections analyzed in the study are as follows:

- 1) US-60 (E. Main Street) & Smith Street/Bill Blenko Drive
- 2) US-60 (W. Main Street) & N. Main Street/S. Main Street
- 3) US-60 (W. Main Street) & Newman's Branch Road/James River Turnpike Road
- 4) Mason Street & Pike Street
- 5) Newman's Branch Road & Jessie Lane
- 6) Newman's Branch Road & Proposed School Access



The new elementary school site is located on the north side of Newman's Branch Road, just west of Kings Gate Drive. The new elementary school is proposed to have a capacity for 464 students, the same amount as the current elementary school. The new school is proposed to have one full access point on Newman's Branch Road.

Trips for the elementary school were generated using ITE methodologies and the Trip Generation Manual, 11<sup>th</sup> Edition to estimate the additional vehicular trips added to the roadway network.

CM collected and processed turning movement count data on a typical weekday (Tuesday, Wednesday, or Thursday) for the study intersections. A blanket, linear annual growth rate of 2% was utilized throughout the study area, per recommendation of KYOVA, to develop traffic volumes for the Opening (2024) and Horizon (2044) years.

The following analyses were conducted for the study area:

- Turn Lane Warrant & Length Analysis
- Capacity Analysis
- Signal Warrant Analysis
- Queuing Analysis
- Crash History Analysis
- Pedestrian/Cyclist Analysis
- Sight Distance Analysis

The draft recommendations for the study are described below.

### US-60 Road Diet Extension

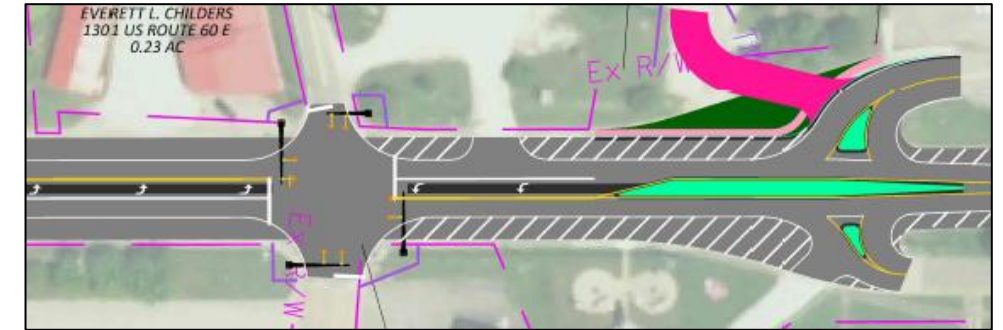
A road diet is recommended for US-60. A road diet involves converting an existing four-lane, undivided highway segment to a three-lane segment consisting of one through lane in each direction and a center two-way left turn lane (with dedicated left turn lanes at intersections). The existing three-lane section from Stewart Street can be extended to just west of the Smith Street/Bill Blenko Drive intersection, where it can taper to meet existing conditions. The excess roadway width could be utilized for bike lanes, pedestrian refuge islands, on-street parking, or a wide shoulder.

### US-60 & Newman's Branch Road Intersection Improvements

Alternative intersection control is required for the intersection. A traffic signal or roundabout is recommended for implementation. The signal meets warrants in all Build conditions of the analysis. A roundabout would also be an appropriate intersection control because of their ability to greatly reduce the types of crashes that result in serious injury or fatality. Both alternatives provide acceptable level-of-service and delay.

### US-60 & N./S. Main Street Intersection Improvements

To improve safety and operations, it is recommended a median be installed at the intersection, restricting eastbound and westbound left movements as well as northbound and southbound left and through movements. N./S. Main Street has many other roadway connections, and these newly restricted movements can reroute to the signalized Smith Street/Bill Blenko Drive intersection.



### Newman's Branch Road Roadway Improvements

Based on the existing narrow typical section and the knowledge that school bus and truck traffic is expected to increase with the addition of the proposed elementary school and anticipated nearby development, future widening of Newman's Branch Road could be considered. This includes widening the roadway from 10' through lanes with 0-1' paved shoulder to 11' through lanes with curb/gutter from US-60 to the proposed elementary school. Note, this improvement is expected to be costly and impactful. A scaled-back option of widening only critical pinch-points could be considered.

### Access Management

Access management is an important tool to increase roadway capacity, manage congestion, and reduce crashes in a roadway network. Reduction and consolidation of access points are recommended for the study area.

### Pedestrian Infrastructure Improvements

It is recommended that gaps in the existing sidewalk along US-60 be filled with new sidewalk. This generally includes:

- North side of US-60, from Stewart Street to Heck Street
- South side of US-60, from Pine Haven Drive to Ray's Way
- South side of US-60, from Ray's Way to 2nd Street

It is recommended a shared-use path (SUP) be installed along the east side of Newman's Branch Road from US-60 to the new elementary school in conjunction with the proposed roadway widening. A crossing with an RRFB can be installed at the Old River Drive & Newman's Branch Road intersection to provide SUP access to the neighborhood west of this intersection.

The proposed school site plan does not currently show any pedestrian infrastructure from Newman's Branch Road to the school. It is recommended that the addition of sidewalk or SUP be considered with the installation of the new school for better pedestrian access.