

TECHNICAL MEMORANDUM

To: David Muller
From: Anila Moorthy, EIT
Maribel Donahue
Katie Wagner PE, PTOE
Date: November 3, 2025
Subject: Notley Road – Supplemental Analysis: New Hampshire Avenue and Midland Road Intersection

Ryan Stuart Development

Exhibit 66
OZAH Case No: H-159

Introduction

This supplemental analysis evaluates traffic operations at the signalized intersection of New Hampshire Avenue and Midland Road, located within ¼ mile of the proposed Notley Road development. The signed and approved Scoping Form coordinated with M-NCPPC, SHA, and MCDOT did not require counts to be taken at this intersection as Midland Road is a local street and shopping center that is not anticipated to attract a significant number of trips to and from the site. The approved Notley Road LATR dated October 16, 2025 shows that all study intersections analyzed in the report operate within acceptable thresholds. Alongside the approved Notley Road LATR, this memo supplements this analysis to show that New Hampshire Avenue and Midland intersection, which is within ¼ mile, is also anticipated to operate within acceptable thresholds even with the additional traffic generated by the proposed development.

The findings of this analysis are summarized as follows:

- Due to the ongoing federal government shutdown, updated traffic counts could not be collected at the intersection of New Hampshire Avenue and Midland Road. Instead, traffic volumes were estimated using traffic counts collected in February 2025 at nearby locations and historical 2016 turning movement counts at this location from the SHA counts database.
- Critical Lane Volume (CLV) analysis results show that the intersection operates well within Montgomery County's adequacy standards and will continue to do so with the proposed development.

Analysis Assumptions and Methodology

This section outlines the assumptions and methodologies used in the roadway capacity analysis.

Existing Traffic Volumes

Because of the federal shutdown, current traffic counts at the New Hampshire Avenue and Midland Road intersection were unavailable. Existing volumes along New Hampshire Avenue were estimated using balanced data from nearby intersections collected on February 25, 2025, when schools and federal offices were open. Midland Road traffic volumes are based on 2016 turning movement data from the SHA counts database. As traffic volumes on Midland Road are directly based on the adjacent shopping center development and residential neighborhood, existing turning movements from New Hampshire Avenue to Midland Road and turning movements on the eastbound and westbound approaches of Midland Road were assumed to remain consistent with historical 2016 data as no redevelopment or new development has occurred in the shopping center site or residential neighborhood.

Background Traffic Volumes

Consistent with the approved LATR, no background developments were identified to be included in this analysis. The total background traffic volumes are based on the existing traffic volumes.

Total Future Traffic Volumes (with the project)

The Total Future traffic volumes consist of the existing volumes (same as the background volumes) discussed above and the addition of the traffic volumes generated by the proposed project (site-generated trips). The distributions that were used in the approved LATR were used in this analysis to determine the assignment of the proposed trips at this location.

The existing and proposed traffic volumes are shown in Figure 1 below.

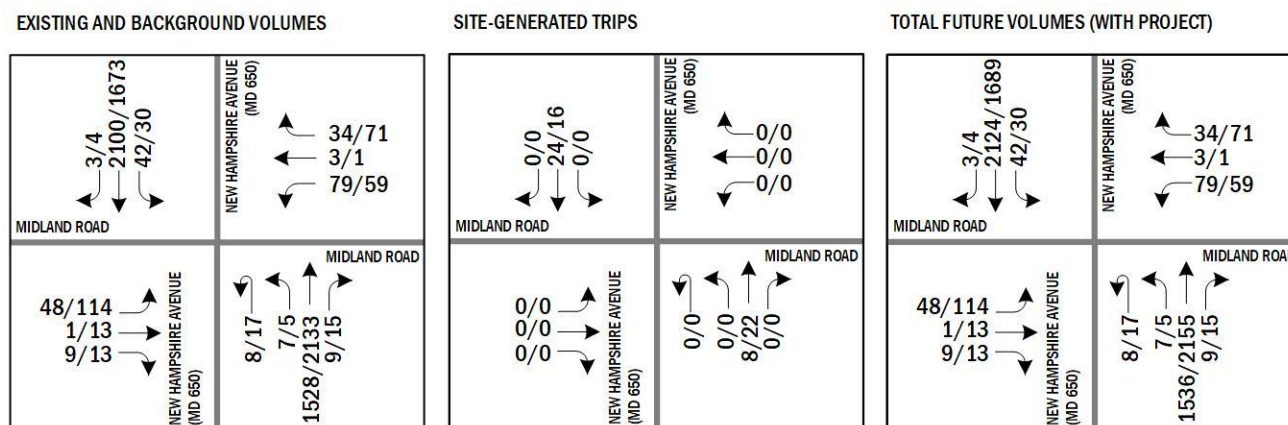


Figure 1: Traffic Volumes

Intersection Capacity Analysis

As outlined in the LATR Guidelines and required for a Local Map Amendment, the Critical Lane Volume (CLV) methodology was used to evaluate intersection capacity for the New Hampshire Avenue and Midland Road intersection which is located within the Colesville yellow policy area. Based on the policy area, a CLV of 1,350 or less is considered acceptable and the HCM delay standards of 59 seconds per vehicle apply to study intersections with a CLV of more than 1,350.

Table 1 presents the results of the CLV analysis and shows that CLV values remain well below the 1,350 threshold under all conditions, so no additional delay analysis is required per County regulations.

Table 1: CLV Results

Intersection	AM Peak Hour				PM Peak Hour			
	Existing and Background		Total Future		Existing and Background		Total Future	
	CLV	LOS	CLV	LOS	CLV	LOS	CLV	LOS
New Hampshire Avenue (MD 650) and Midland Road	957	A	966	A	1070	B	1078	B

Conclusion

Based on this supplemental analysis and the approved LATR, the proposed development will not negatively impact traffic operations at surrounding intersections. All analyzed intersections are expected to operate well below the established CLV standard of 1,350 under future conditions with the project.