



Memorandum

To: Cindy Petkac, AICP
Director of Planning and Zoning
Town of Vienna
127 Center Street S
Vienna, VA 22180

From: David B. Samba, P.E., PTOE
Ed Papazian, P.E.
Kimley-Horn

Date: August 2, 2018

Subject: 444 Maple Avenue Multimodal Neighborhood Traffic Assessment
Independent Review

This memorandum summarizes Kimley-Horn's review of neighborhood traffic assessment prepared by Wells & Associates as part of the proposed 444 Maple Avenue rezoning proposal for the development located in the southeast quadrant of intersection of Nutley Street SW and Maple Avenue. The neighborhood traffic assessment is dated June 22, 2018.

Overview

The Applicant is seeking a rezoning application for a proposed redevelopment in the Town of Vienna, Virginia. The project would redevelop the subject site with a mixed-use development including approximately 160 multifamily dwelling units and 20,000 gross square foot (GSF) of retail uses. The proposed uses would replace a 119-room hotel and a 3,500 GSF sit-down restaurant. The proposed rezoning application would convert the property from C-1 (local commercial) to MAC (Maple Avenue Commercial).

Access to the site is currently provided via a right-in/right-out driveway on Nutley Street, a right-in/right-out driveway on Maple Avenue, and a full-movement driveway at an existing, unsignalized median break on Maple Avenue. The right-in/right-out along Maple Avenue would be removed with this application.

The purpose of the assessment was to address concerns raised by local citizens and the Town of Vienna related to the possibility of additional cut-through traffic to local streets with the approval of the 444 Maple Avenue project. Specifically, a concern was raised that additional traffic would cause a degradation in the levels of service ("LOS") of the Maple Avenue/Nutley Street signalized intersection, resulting in people "cutting-through" the neighboring side streets in order to avoid the delay at this signalized intersection.

Wells & Associates conducted traffic counts along the surrounding local streets to determine the existing traffic volumes and also reviewed the policies described in the Town of Vienna's Guide to Traffic Calming (the "Guide").

Neighborhood Traffic Assessment Review Comments

1. The methodology used by Wells and Associates appears to be sound and appropriate to contextualize the existing traffic volumes.
2. 36-hour traffic counts were conducted along the relevant side streets (Wade Hampton Drive SW, Glen Avenue SW, and Roland Street SW). The duration and location of the counts are appropriate for this study to establish the existing traffic volumes along these roads.
3. Based on the Town of Vienna's The Citizen's Guide to Traffic Calming in Vienna (2002):

"The minimum street volume for physical traffic calming measures to be considered shall be 500 vehicles per day (vpd) (total volume)" and "Cut-through Traffic: Restrictive entrance signs may be considered when cut-through traffic is 40% or more of the one-hour single direction volume and a minimum of 150 cut-through trips occur in one hour in one direction (for roadways carrying up to 6,000 vehicles per day). For roadways with over 6,000 vehicles per day the threshold shall be 30% or more of the one-hour single direction volume."
4. The existing traffic counts (summarized in Table 1 of the Neighborhood Traffic Assessment) suggest that only Glen Avenue (544 vpd) meets the criteria (500 vpd) for considering physical traffic calming measures. Both Wade Hampton Drive (460 vpd) and Roland Street (447 vpd) are just below the threshold.
5. It is noted that based on the methodology that was used, no conclusions can be drawn regarding the specific percentage of the existing traffic that represents cut-through traffic. For such a conclusion to be drawn, the data collection effort would have had to include a tracking of vehicles to identify where they entered and exited the side and or main streets.
6. Regardless of the specific percentage of cut-through traffic, Table 1 of the Neighborhood Traffic Assessment demonstrates that the peak hour traffic volumes along each of the side streets are well below the minimum 150 vehicles that trigger the consideration of restrictive entrance signs.
7. The Wells Assessment makes the case that it is extremely unlikely that site generated traffic would cut-through the neighborhood side streets of concern to avoid the intersection of Nutley Street and Maple Avenue.
 - a. The right-in/right out entrance along Nutley Street precludes vehicle from using that location as an exit to access the neighborhood streets
 - b. While exiting vehicles could use the full movement exit to turn right on to Maple Avenue and then turn right through the neighborhoods, there is no apparent time savings or advantage to this maneuver (assuming that for these exiting trips the ultimate destination is to west of Nutley Street)
 - c. The combination of inbound or outbound site traffic added to the existing inbound or outbound side street traffic would still be less than the minimum 150 vehicles that trigger the consideration of restrictive entrance signs (even in the unlikely event that all site traffic was routed through the side streets)

8. Based on a review of the travel speed data, along Roland Street 60 percent of northbound traffic and 90 percent of southbound traffic operate within the posted speed limit; along Glen Avenue, 94 percent of northbound traffic and 95 percent of southbound traffic operate within the posted speed limit; and along Wade Hampton, 80 percent of eastbound traffic and 75 percent of westbound traffic operate within the posted speed limit. This suggests that cut-through traffic is generally not contributing to excessive speeding along the side streets.
9. Based on a review of the 444 Maple Avenue Transportation Impact Analysis, the proposed development increases the overall delay at the intersection of Maple Avenue and Nutley Street by 5.0 seconds during the AM peak hour, by 2.4 seconds under the PM peak hour, and by 12.7 seconds during the Saturday midday peak hour. Because the intersection generally operates at high delays under existing conditions (and is projected to operate under higher delays in the 2022 without development scenario), the increases in delay associated with the proposed development are unlikely to greatly alter the travel patterns or perceptions of the average traveler.

As such, it is unlikely that the build-out of the proposed development will result in delays at the intersection of Nutley Street SW and Maple Avenue SW that make “cutting-through” neighborhood streets any more attractive or appealing than the option is under existing conditions.

Based on the above, we feel that the neighborhood traffic assessment (in combination with the 444 Maple Avenue TIA) adequately addresses the concern about cut-through traffic.

Thank you for the opportunity to review the 444 Maple Avenue Neighborhood Traffic Assessment. Please feel free to contact us at 703-674-1300 should you have any questions.