

321 SW 4th Ave., Suite 400 Portland, OR 97204 503.248.0313 lancastermobley.com

Memorandum

To: Lauren Hollenbeck, City of Camas

From: Todd E. Mobley, PE

Date: August 5, 2022

Subject: Camas Station (CUP22-02) – Transportation Rebuttal



8/5/2022

Introduction

This memorandum is submitted to respond to transportation-related testimony and evidence received for the subject development application. Please enter this memo into the land use record.

Public testimony received for the project focuses primarily on the influence of traffic from the nearby school, intersection safety and operations, sight distance, and trip generation. The sections below cover these topics in response to the testimony received.

Influence of School Traffic

A common concern is the influence of school-related traffic, particularly busy drop off and pick up times that correspond with the start and end of the school day. Testimony and evidence were received showing queuing along NW 16th Avenue during these peak periods. Traffic count data conducted for the project shows that the morning school peak congestion lasts approximately 15 minutes.

This type of school-related congestion is very common, and we encounter it frequently at or near school sites throughout the area. However, its commonality and short duration do not make it less important than other factors. Traffic around schools during these peak periods is universally slow and congested, but this is intentional and by design. Safety for people walking or biking to and from school increases exponentially as vehicle speeds decrease. This is the reason for traffic control such as 20 mph school speed limits. Slow, orderly movement of passenger vehicles is essential to safe traffic operations during school peaks, and while some drivers may consider this congestion unacceptable or an indication of a failing or unsafe transportation system, in fact, the opposite is true.

School Traffic & Site Development

The presence of congestion during school peaks does not preclude development on the subject site. The site is zoned for commercial development and as shown in the Transportation Impact Study, applicable intersection performance standards are satisfied, even with commercial and school traffic on the system.

While congestion may be present during the school peaks, the very short duration and seasonality of these periods does mean that for the vast majority of time throughout the year traffic operations will be much better than what is shown in the Transportation Impact Study.

As described in the following sections, intersection operational standards are intended to allow some amount of congestion and development of other allowed uses on the site would introduce a similar level of new peak hour traffic to the transportation system.

NW Tidland Street at NW 16th Avenue

As explained by City staff at the public hearing, this intersection was not included for analysis in the Transportation Impact Study. It was not included because only a very small portion of site-generated traffic is intended to travel to and from the west of the site and the impacts on that intersection from this site will be de minimis and does not rise to the need for further analysis based on standard industry practice of the City of Camas review standards. Additionally, the intersection serves only Prune Hill Elementary School.

However, not including analysis of this small intersection does not mean that the influence of the school or school-generated traffic is not included. As explained in the Transportation Impact Study and in this memorandum, school traffic and its operational impact is considered in detail.

Intersection Operational Standards

The operation of intersections is commonly analyzed based on a system that considers the average delay for drivers called level of service (LOS). Rankings range from LOS A, where there is little or no delay, to LOS F, where delays are very long. This methodology is defined by the *Highway Capacity Manual*, which is an industry-standard publication from the Transportation Research Board.

In Camas, the LOS standard for collector and arterial streets and intersections, including the intersection of NW 16th Avenue and NW Brady Road, is LOS D. Like all urban areas in SW Washington, the City's standards allow some level of delay and congestion. While the calculation of LOS is detailed and prescriptive as shown in the Transportation Impact Study, LOS D is described generally in the *Highway Capacity Manual* as follows

Level of service D: Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

Traffic operations observed in the field, including those reported by the public in opposition testimony, are consistent with the general description of LOS above. While some drivers may be frustrated by delay at intersections, noticeable congestion and waiting through more than one signal cycle (often resulting in long traffic queues) does not indicate a failing or inherently unsafe condition.

As demonstrated in the Transportation Impact Study, intersection operational standards are satisfied with the project in place.

Sight Distance & Safety

Testimony was received regarding limited sight distance at its impact on safety. Both intersection and stopping sight distance at the site access locations were examined in detail beginning on page 17 of the Transportation Impact Study and sight distance standards are satisfied.



The Transportation Impact Study also conducted a safety analysis that examined a five-year crash history at the intersection of NW 16th Avenue and NW Brady Road. The safety analysis did not show excessive crashes or a crash rate that would indicate an unsafe condition. It is also important to note that this intersection has been consistently upgraded in recent years, significantly improving both safety and intersection operation:

2018: Installation of a traffic signal to replace the prior four-way stop control.

2020: Roadway improvements to provide left-turn lanes on all four approaches, upgraded sidewalks and ADA-compliant pedestrian ramps, and protected pedestrian crossings on all four approaches. Previously, marked and protected pedestrian crossings were only available on two of the four legs of the intersection.

Exhibit 117 in the land use record attributed a conflict between pedestrians in the western crosswalk with a southbound right-turning vehicle (a white SUV) to "minimal sightlines" and a link to a video of the interaction was provided. However, the driver was making the right turn at a very low speed under congested conditions and a clear line of sight was available between the driver and the pedestrians. While the pedestrians had the right of way and the driver was required to yield, the driver's behavior appears to be due to either inattention or aggressiveness since clear line of sight was available. The interaction is not indicative of any substandard infrastructure or unsafe design.

Trip Generation Considerations

It is important to understand that the proposed development focuses primarily on attracting traffic that is already passing the site on the existing transportation system. These trips are known as "pass-by" trips, as they are already passing the site on the existing roadways. This is the reason that commercial developments such as Camas Station are almost always located along arterial streets where significant traffic already exists. Accordingly, the majority of trips to and from the site are expected to be pass-by trips.

Site-generated trips that are not already on the roadway system are known as "primary" trips. These primary trips do add additional traffic to the surrounding street network. In this case, primary trips are expected to come primarily from areas in and around Prune Hill. For example, similar services are available in other commercial areas and corridors, so a significant number of trips are not expected from the SE 192nd Avenue corridor, downtown Camas, Washougal, or other surrounding areas.

Also, it is noted that other allowed commercial uses on the site would generate a similar number of primary trips as the development that is proposed. From a trip generation perspective, the proposed development is consistent with the traffic intensity that has been planned for the site and is possible under the current zoning designation.

Summary & Conclusions

The presence of traffic congestion during peak periods and queuing from school-related traffic does not indicate a failed or unsafe condition or imply that no additional development can be accommodated. The transportation system surrounding the site is operating as designed and intended.

Materials from the applicant in the record demonstrate that the traffic generated by the proposed use,



- 1. Will not adversely impact the public welfare and will not be injurious to the property or improvements in the vicinity or in the district in which the subject property is situated;
- 2. Conforms to the applicable standards required by the property's zone;
- 3. Is compatible with the surrounding land uses;
- 4. Does not require additional measures to mitigate its impacts on the surrounding area;
- 5. Is in conformance with the goals and policies expressed in the comprehensive plan for property's zoning and designation; and
- 6. Is not impacted by special circumstances that require the imposition of additional requirements by the Hearings Officer.

As documented in the Transportation Impact Study and addressed in more detail in this memorandum, applicable transportation performance standards and approval criteria are met with the project in place, and it is recommended that the proposed development be approved.

