

APPENDIX G

VEHICLE MILES TRAVELED MEMORANDUM



MEMORANDUM

DATE: March 5, 2026

To: Angela Alvarez-Cendejas, Associate Planner
Community Development Department, City of Napa

FROM: Dean Arizabal, Principal, LSA

SUBJECT: Napa Valley Vintners Park Light Industrial Project Vehicle Miles Traveled Analysis
Memorandum (LSA Project# 20252510)

LSA has prepared this vehicle miles traveled (VMT) evaluation for the proposed Napa Valley Vintners Park Project (project). The proposed project would develop a flexible multitenant, light-industrial building on an approximately 10.21-acre site on the north side of Kaiser Road west of Syar Way in Napa, California.

The proposed project would construct a 153,380-square-foot (sf) building consisting of:

- 23,007 sf of office space (approximately 15 percent)
- 130,750 sf of warehouse/light industrial space

BACKGROUND OF CEQA VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines were removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, CEQA transportation impacts are to be evaluated based on project-generated VMT.

The City of Napa (City) Council adopted the City's Senate Bill (SB) 743 guidelines (City Guidelines) on May 4, 2021. The City Guidelines established VMT significance thresholds for residential, office, and retail land uses. Although these guidelines do not provide any VMT screening criteria for land use projects, based on LSA's understanding, the City allows the use of VMT screening approaches consistent with the State's technical guidance. The State's technical guidance for conducting VMT analysis is the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory), prepared in December 2018 by the California Governor's Office of Research and Planning (now known as the Governor's Office of Land Use and Climate Innovation).

The City's adopted VMT significance thresholds are:

- Residential projects: Significant if VMT per capita exceeds 15 percent below the regional average
- Office projects: Significant if VMT per employee exceeds 15 percent below the regional average

- Retail projects: Significant if the project causes a net increase in total VMT

The City determines VMT metrics and thresholds for other project types, such as the proposed industrial project, on a case-by-case basis. City staff indicated that the proposed project may be evaluated using a VMT per employee approach if adequate justification is provided to show why the method is appropriate and how industrial travel patterns relate to office-based VMT assumptions.

VEHICLE MILES TRAVELED SCREENING ANALYSIS

Because the City Guidelines do not specify VMT screening criteria for land use projects, screening approaches in the Technical Advisory were reviewed for applicability to the proposed project. The following is a brief description of the applicability of each of these VMT screening criteria for the proposed project:

- **Small Project:** The Technical Advisory identifies that projects generating less than 110 daily trips could be screened out of a detailed VMT analysis. The proposed project is estimated to generate more than 110 daily trips and as such this screening criteria does not apply to the proposed project.
- **Map-Based Screening for Residential and Office Projects:** Residential and office projects that are in low VMT areas, and those projects that incorporate similar features (i.e., density, mix of uses, transit accessibility) tend to exhibit similarly low VMT, are eligible to be screened out from further VMT analysis.

The City provided traffic analysis zone (TAZ)-based screening maps¹ showing:

- VMT per capita
- VMT per employee

The project site is in a TAZ where VMT per employee is below 85 percent of the Napa County average, which meets the definition of a low VMT area. Typically, the VMT per capita map can be used for residential projects and the VMT per employee map can be used for non-residential and non-retail projects. Based on the VMT per employee map, the proposed project can be screened out of a VMT analysis. However, the City Guidelines explicitly reference the use of VMT per employee for office uses. As such, the City is requesting supporting justification for applying the VMT per employee metric to industrial uses, as provided in subsequent sections of this evaluation.

- **Local-Serving Retail:** The Technical Advisory recommends that retail developments of less than 50,000 square feet may be considered as local serving and could be screened out from further

¹ City of Napa. n.d. Solano-Napa Activity-Based Model Traffic Analysis Zone Maps. Website: <https://www.arcgis.com/home/webmap/viewer.html?webmap=9ed4e08db71243dca34bba256e382997&extent=-122.4476,38.3367,-122.2439,38.44> (accessed February 2026).

VMT evaluation. Per the project description, the proposed project does not include a retail component; therefore, this criterion is not applicable to the proposed project.

- **Other Screening Criteria:** The proposed project is neither an affordable housing project, nor does it include any institutional/government use. Therefore, it could not be screened out using this criterion.

Thus, as mentioned above, the proposed project can be screened out of VMT analysis using map-based screening criteria and VMT per employee if sufficient justification supports its applicability. A discussion on the relationship of VMT per employee between office and industrial land use types is provided below.

APPLICABILITY OF VMT PER EMPLOYEE TO INDUSTRIAL USES

As previously indicated, the City Guidelines recommend the use of “VMT per capita” for residential uses, “VMT per employee” for office uses, and “net change in VMT” for retail/commercial uses. The City Guidelines do not recommend any specific VMT metric for industrial land uses. However, applying VMT per employee to industrial land uses is appropriate for the following reasons.

- **Travel Behavior:** Industrial uses function similarly to office uses in terms of travel patterns. Industrial uses are non-residential and generally do not generate substantial customer trips. Instead, employee commute travel typically accounts for the majority of project VMT. This travel pattern more closely resembles office uses than retail uses, which generate significant customer-based VMT.
- **Employment-Based Scaling:** Industrial projects are fundamentally employment-generating land uses, and project intensity is typically defined by number of employees rather than customers or visitors. Accordingly, a VMT per employee metric provides a proportional and scalable measure of transportation impact.
- **Industry Practice:** Application of employment-based VMT metrics to industrial uses is also consistent with practices adopted by multiple California jurisdictions where local guidance does not specify a separate industrial metric.
- **Limitations of Net VMT for Industrial Uses:** Industrial uses do not generate substantial customer trips or pass-by travel; therefore, evaluating such projects using a net-change VMT approach—commonly applied to retail uses—would not meaningfully capture their transportation characteristics. Because industrial VMT is driven primarily by employee commute patterns, an employment-based metric provides a more appropriate and proportional method for evaluating project impacts.

Retail development is typically evaluated using a net change in VMT approach because such uses often redistribute existing consumer travel within a regional market rather than generating entirely new travel demand. Retail trips frequently include pass-by, linked, and diverted trips, meaning that a portion of project traffic would occur even in the absence of the proposed project, but at different

locations. For this reason, net change in VMT more accurately reflects the incremental transportation effect of retail development and is widely applied in SB 743 implementation.

Industrial uses, however, do not generally function as interchangeable customer destinations within a retail market. Instead, industrial VMT is primarily driven by employee commute trips and site-specific logistics that are strongly influenced by project location. These trips are less likely to be redistributed from other industrial sites and therefore represent a more direct reflection of project characteristics. Consequently, a retail-oriented net VMT framework would not appropriately capture the transportation effects of industrial development.

COMPARISON OF VEHICLE MILES TRAVELED FOR INDUSTRIAL AND OFFICE USES

As previously noted, the VMT per employee map indicates that the proposed project is in a low VMT area. Based on discussion with City staff, it is appropriate to apply the VMT screening map if it can be demonstrated that industrial VMT is similar to or lower than office VMT.

VMT is a function of both the number of vehicle trips and the length of those trips. Therefore, describing why industrial uses generate fewer trips and have shorter average commute distances would confirm that industrial VMT is lower compared to office uses. The following justifies that with all other factors equal, such as project location, industrial uses generate lower VMT than office uses.

Trip Generation: The Institute of Transportation Engineer (ITE) *Trip Generation* Manual is considered the industry standard for estimating the number of trips generated by a land use type. Based on the ITE *Trip Generation* Manual, trip generation rates for industrial uses (per thousand square feet [TSF]) are substantially lower than those for office uses. For example, the trip generation rate for general light industrial (ITE Land Use 110) is approximately 4.870 trips per day, and the trip generation rates for general office building (ITE Land Use 710) and small office building (ITE 712) are approximately 10.77 and 10.84 trips per day, respectively. This illustrates that industrial uses typically generate fewer trips (by over 50 percent) than office uses on a per TSF basis.

Commute Trip Length: Research on commute behavior indicates that average commute distances often correlate with wage and job type. Industrial employment tends to include a larger share of low- and moderate-income occupations, which are commonly associated with shorter commute distances than higher-income office employment.

While commute lengths vary regionally, this general pattern supports the conclusion that industrial uses are unlikely to generate greater VMT per employee than office uses in the same location.

Based on the analysis above, the following findings are supported:

1. The project site is in a TAZ identified by the City's VMT screening maps as a low VMT per employee area.
2. Industrial uses generate fewer vehicle trips per TSF than office uses.
3. Industrial commute patterns are not expected to exceed office commute trip lengths in the same location.

4. Industrial projects do not generate customer VMT typical of retail land uses.
5. The project TAZ contains uses consistent with the project type, indicating that the VMT screening criteria is representative of expected travel behavior.

In summary, industrial projects (like the proposed project) would have less VMT per employee compared to office projects.

CONCLUSION

Based on the project's location in a low VMT area and the appropriateness of the VMT per employee metric for industrial uses as shown above, the project can be screened out of a detailed VMT analysis with the presumption of a less than significant CEQA transportation impact.