

February 23, 2022

Mr. Cornell Kasbergen

c/o Bryan Menne
Bryan Menne & Associates
31988 10th Avenue
South Laguna, CA 92651

SUBJECT: KASBERGEN/HAFLIGER TT34271 VEHICLE MILES TRAVELED (VMT) ANALYSIS

Dear Mr. Cornell Kasbergen:

The following vehicle miles traveled (VMT) analysis has been prepared for the proposed Kasbergen/Hafliger TT34271 development (**Project**) in the City of San Jacinto. For VMT analysis purposes, the Project consists of 151 new single family residential dwelling units. The Project is located east of Alessandro Avenue, south of Ramona Expressway, and west of Vernon Avenue.

Project phasing and long range future traffic conditions with Project land use changes are evaluated in the Kasbergen/Hafliger TT34271 Traffic Analysis (February 23, 2022).

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate was implemented on July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (**Technical Advisory**). (1)

Based on OPR's Technical Advisory, the City of San Jacinto has prepared their Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (**City Guidelines**). (2) This analysis has been prepared based on the adopted City Guidelines.

VMT ANALYSIS METHODOLOGY

The CEQA Assessment – VMT Analysis of the Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (June 2020) (**San Jacinto Guidelines**) is consistent with the VMT analysis methodology recommended by OPR. As outlined in the San Jacinto Guidelines, a residential Project is analyzed, applying the following significance threshold:

- The project-generated VMT per service population exceeds the WRCOG Subregional VMT per service population; or

- The cumulative project-generated VMT per service population exceeds WRCOG Subregional VMT per service population.

Per the City Guidelines, the VMT baseline for the City of San Jacinto is 14.5 daily Residential Home Based VMT per Capita based upon RIVTAM. But the WRCOG screening tool indicates 19.04 daily Residential Home Based VMT per Capita as the jurisdictional average (the Project TAZ daily Residential Home Based VMT per Capita based on the WRCOG screening tool is 19.67).

PROJECT SCREENING

The San Jacinto Guidelines provide details on appropriate “screening thresholds” that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed analysis. Screening thresholds are broken into three types:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening

A land use project need only to meet one of the above screening thresholds to result in a less-than-significant impact.

For the purposes of this analysis, the initial VMT screening process has been conducted using the Riverside County Transportation Analysis Model (RIVTAM).

TPA SCREENING

Consistent with guidance identified in the Technical Advisory, projects located within a Transit Priority Area (TPA) may be presumed to have a less than significant impact. A TPA is defined as within ½ mile of:

- 1) an existing “major transit stop” (containing a rail transit station served by either bus services or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods) or
- 2) an existing stop along a “high-quality transit corridor” (a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours)

The Project site is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor.

The TPA screening threshold is not met.

LOW VMT AREA SCREENING

The San Jacinto Guidelines also states that, “residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to

the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area.” The sub-regional Riverside County Transportation Analysis Model (RIVTAM) is used to measure VMT performance within individual traffic analysis zones (TAZs). An estimate of the VMT in the Project’s physical location was calculated to determine the relevant TAZ’s VMT as compared to the jurisdictional average. The WRCOG screening tool has been reviewed and the Project is not in a low VMT area.

The Low VMT Area screening threshold is not met.

PROJECT TYPE SCREENING

The San Jacinto Guidelines allow residential projects of 53 or fewer single family housing units to be screened out. Because there are more than 53 residential units in the Project, the Project is not considered small enough to not warrant assessment. Therefore, the Project would not be eligible to screen out based on project type screening.

The Project Type screening threshold is not met.

Since none of the project level screening criteria were met, a project level VMT analysis has been prepared.

PROJECT VMT ASSESSMENT

The VMT projections are based upon the Riverside County Model (RIVCOM) version 3.0 which became available in 2021. RIVCOM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. The San Jacinto Guidelines identify RIVCOM as the appropriate tool for conducting VMT analysis for land use projects in San Jacinto.

CITYWIDE BASELINE RESIDENTIAL VMT CALCULATION

In order to provide an appropriate baseline for VMT comparison, the RIVCOM VMT was extracted for the City of San Jacinto. Table 2 shows the total population and VMT data for the City of San Jacinto for 2018 and 2045 conditions. VMT data for 2022 conditions has been interpolated to provide a baseline for the Project comparisons. The Citywide Baseline daily Residential Home Based VMT per Capita based on RIVCOM is 14.12 VMT / Capita, which is less than the RIVTAM VMT / Capita presented earlier.

TABLE 2: CITYWIDE HOME-BASED VMT

Category	2018	2045	2022 (Interpolated)
Population	46,149	70,941	49,822
VMT	639,424	1,070,626	703,306
VMT / Capita	13.86	15.09	14.12

Project VMT has been calculated using the most current version of RIVCOM. Adjustments in socio-economic data (SED) (i.e., employment) have been made to within the RIVCOM model to reflect the Project’s proposed residential land use and population.

Table 1 summarizes the household / population estimates for the Project. The population estimates have been developed from household land use to population factors from the City Guidelines.

TABLE 1: SOCIO-ECONOMIC VARIABLE ESTIMATES

Socio-Economic Variable	Estimated Quantity
Single Family Households	151 Households
Population	560 Residents

Adjustments to household and population data for the Project TAZ were made to the RIVCOM base year model (2018) and the cumulative year model (2045). Each model was then run with the updated SED factors included for the Project TAZ.

PROJECT RESIDENTIAL VMT CALCULATION

Consistent with recommendations contained in the San Jacinto Guidelines, the residential calculation of VMT is based upon the home-based project-generated VMT per population and also upon the project effect on VMT. Table 2 shows the home-based VMT associated with the Project for both baseline and cumulative conditions. VMT estimates are provided for both the base year model (2018) and cumulative year model (2045), and linear interpolation was used to determine the Project’s home-based baseline (2022) VMT.

TABLE 2: BASELINE AND CUMULATIVE PROJECT RESIDENTIAL HOME-BASED VMT

Category	Project 2018	Project 2045	Project 2022 (interpolated)
Residents	560	560	560
VMT	7,673	10,155	8,041
VMT / Resident	13.70	18.13	14.36

For baseline (2022) conditions, the Project generates 8,041 Home-Based VMT. There are an estimated 560 Project residents. The result is approximately 14.36 home-based VMT / Capita for the 2022 Baseline with Project conditions.

The Project effect on VMT is based upon the Citywide home-based VMT estimates, which have been developed from the “Without Project” and “With Project” RIVCOM model runs. Once total home-based VMT for the area is calculated, total area VMT is then normalized by dividing by the population as shown on Table 3.

TABLE 3: CITYWIDE HOME-BASED VMT

Category	2018	2045	2022 (Interpolated)
Without Project Population	46,149	70,941	49,822
Without Project VMT	639,424	1,070,626	703,306
Without Project VMT / Capita	13.86	15.09	14.12
With Project Population	46,709	70,941	50,299
With Project VMT	646,063	1,071,033	709,022
With Project VMT / Capita	13.83	15.10	14.10

The estimates of baseline residential home-based Project VMT / Capita are compared to the City of San Jacinto VMT of 14.12 home-based VMT / Capita. The Project home-based VMT / Capita of 14.36 is greater than the City VMT / Capita threshold based on RIVCOM procedures.

PROJECT DESIGN FEATURES FOR VMT REDUCTION

Transportation demand management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant. Quantifying Greenhouse Gas Mitigation Measures (CAPCOA, 2010) provides information on individual measures for potential reduction in VMT. Of the 50 transportation measures presented by CAPCOA, approximately 41 are applicable at a building and site level. The remaining 9 measures are functions of, or depend on, site location and/or actions by local and regional agencies or funders.

On page 58 of the CAPCOA 2010 document, ten percent is referenced as the maximum reduction when combining multiple mitigation strategies for the *suburban* place type (characterized by dispersed, low-density, single-use, automobile dependent land use patterns) and requires a project to contain a diverse land use mix, workforce housing, and project-specific transit. The maximum percent reductions were derived from a limited comparison of aggregate citywide VMT performance rather than based on data comparing the actual performance of VMT reduction strategies in the place type.

Even under the most favorable circumstances, projects located within a suburban context, such as the proposed Project evaluated here, can realize a maximum 10 percent reduction in VMT through implementation of feasible TDM measures. The Project incorporates design features and attributes promoting trip reduction. Because these features/attributes are integral to the Project, and/or are regulatory requirements, they are not considered to be mitigation measures. However, the RIVCOM does not incorporate modeling of these features, so they are considered after the VMT data is extracted from the traffic model.

Project vehicle miles traveled (VMT) are reduced by including design elements that enhance walkability and connectivity. Exhibit A shows these Project design features for pedestrians and bicyclists. In addition to sidewalks on all interior streets, the Project proposes sidewalks adjacent to the development on Vernon Street and Alessandro Avenue. A sidewalk is also proposed to be constructed along the existing residential parcel on the southwest corner of the Project.

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Two 10' shared-use path paseos are proposed: 1) connecting Street "D" with Alessandro Avenue and 2) connecting Street "J" with Vernon Street. With the non-motorized access connections, the Project will provide opportunities for residents to have more direct walk /bike access to adjacent collector streets as well as the regional trail/off-road Class I Bikeway parallel to Ramona Expressway. The Project's implementation of these features could provide for a potential reduction in Project residential VMT of 2%, resulting in 14.07, which is less than the City of San Jacinto VMT / SP threshold.

In summary, VMT for the Project based upon City of San Jacinto guidelines and accounting for the enhanced pedestrian design features indicates that the Project VMT / SP is lower than the threshold.

If you have any questions, please contact us at (949) 375-2435 for John or (714) 585-0574 for Marlie.

Respectfully submitted,

URBAN CROSSROADS, INC.



John Kain, AICP
Principal

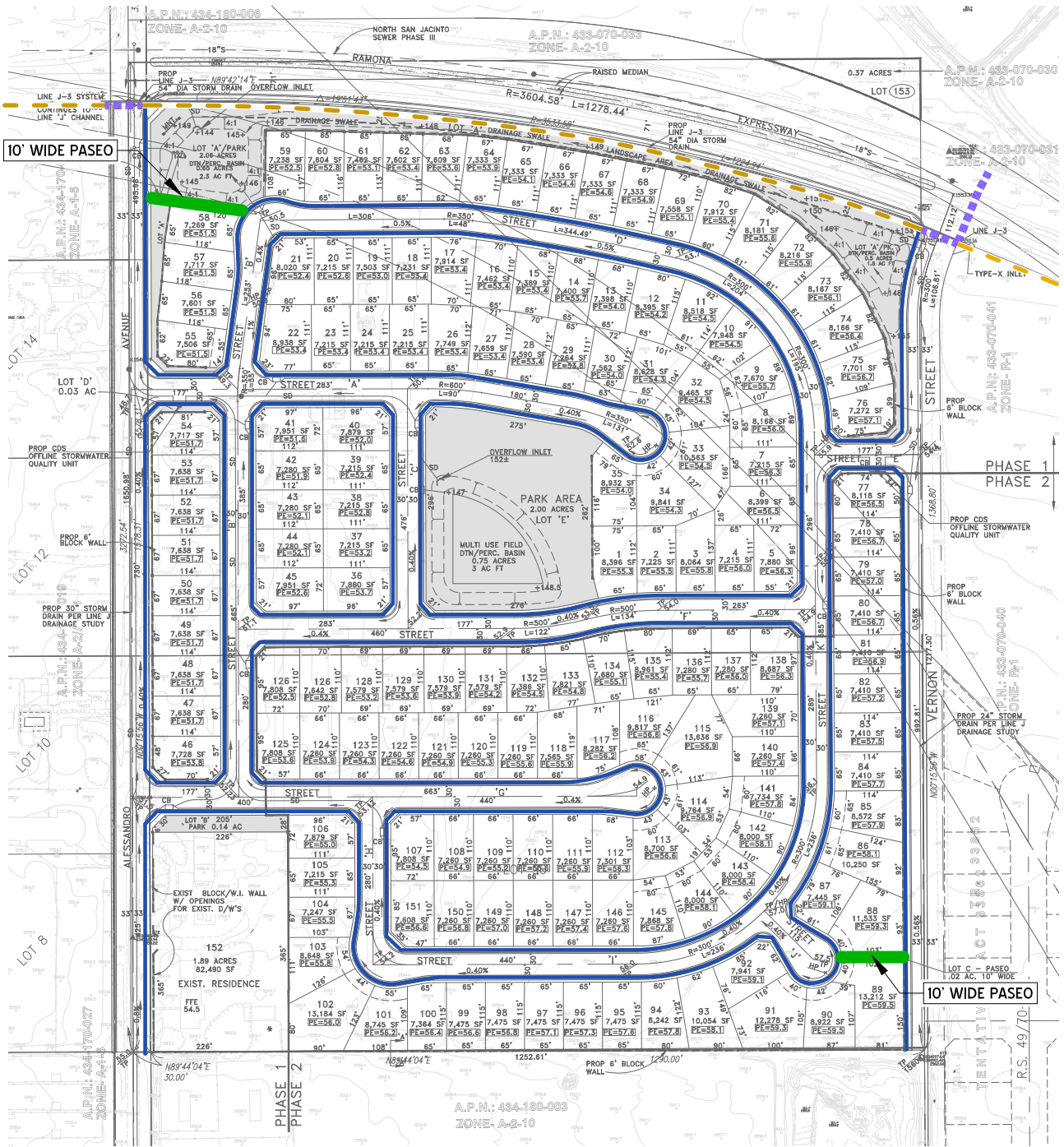


Marlie Whiteman, PE
Senior Associate

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **City of San Jacinto.** *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.* June 16, 2020.
3. **County of Riverside.** *Appendix E: Socioeconomic Build-Out Assumptions and Methodology.* County of Riverside : s.n., April 2017.

EXHIBIT 1: PEDESTRIAN DESIGN FEATURES



LEGEND:

- = SIDEWALK
- = PASEO
- - - = EXISTING CROSSWALK
- - - = EXISTING BIKE PATH

