

Appendix G-2

Vehicle Miles Traveled (VMT) Analysis

The Wren Residential Development, Cathedral City, CA

General Technologies and Solutions

June 3, 2024



MEMORANDUM

Date:	June 3, 2024	GTS: 240408.01
To:	Integrated Engineering Group	
From:	GTS	
Subject:	Vehicle Miles Traveled (VMT) Analysis The Wren Residential Development, Cathedral City, CA	

This memorandum describes the development of vehicle miles traveled (VMT) analysis for The Wren residential development (project) in Cathedral City (City), CA. The project is located southeast of Date Palm Drive and 30th Ave in Cathedral City within Riverside County. The project proposes construction of 204 low-rise multifamily dwelling units.

Background

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 was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT).

Methodology

Cathedral City has yet to adopt Senate Bill 743 (SB 743) guidelines and therefore, the VMT analysis was based upon the methodology and significant threshold criteria identified in the County of Riverside Transportation Analysis (TA) Guidelines for Level of Service (LOS) and Vehicle Miles Traveled, December 2020 (Guidelines).

The guidelines include several project screening criteria which were reviewed for the project evaluation. The project includes residential land uses only. Therefore, project use was assessed with screening criteria established in the guidelines as below:

Small Projects: The county guidelines have identified project size thresholds for multiple land uses that can be screened out of a detailed VMT analysis. Project land use was compared with the criteria established for small projects. The guidelines recommend screening multifamily developments with less than 147 dwelling units from a detailed VMT analysis. The project proposes 204 multifamily dwelling units which is greater than 147 and therefore this screening criteria is not applicable for the project.

Project Near High Quality Transit: Projects within a ½ mile of an existing major transit stop can be screened out of detailed VMT analysis. The project is not within ½ mile of an existing major transit stop and therefore cannot be screened out of VMT analysis using this criterion.

Local-serving retail: Retail project buildings with area less 50 TSF can be screened out VMT analysis with approval from the Transportation Department. The project consists of residential land use and therefore this criterion is not applicable for the project.

Affordable Housing: The project consists of market rate residential land uses only and therefore doesn't qualify for screening under this criterion.

Local Essential Service: Projects with public/local serving uses can be screened out VMT analysis after approval from the Transportation Department. The project doesn't include any local essential services and therefore, the project uses cannot be screened out VMT analysis.

Map-based Screening: The project is not located in a low VMT area and therefore, the project cannot be screened out of VMT analysis using this criterion.

As shown above, the project cannot be screened out of a detailed VMT analysis and therefore, a detailed VMT analysis was conducted using RIVCOM 4.01 as recommended in the guidelines.

The guidelines recommend use of total home-based VMT per capita as the VMT metric to evaluate residential land uses. The home-based VMT is computed by using production VMT for all of the Home-Based trip purposes. According to the guidelines, the project will constitute a significant impact if the project VMT per capita is higher than the Riverside Countywide residential VMT per capita.

VMT Analysis

Both baseline (2018) and horizon year (2045) model runs were used to estimate project's VMT impacts. RIVCOM4.01 socioeconomic databases for the scenarios were updated with the project land use to calculate project VMT. Typically, project VMT is calculated by isolating the project in a new TAZ or multiple TAZs depending on the diversity of project land uses and project size. RIVCOM4.01 does not allow addition of new TAZs or TAZ splits, however it includes some empty zones. One empty zone was borrowed to model the project. Model outputs for the project TAZ with were utilized to calculate project specific VMT per capita.

No project specific network modifications were conducted for the model scenarios. Full model runs with all feedback loops were conducted for all of the project scenarios. It should be noted that the project land use was included in the model as additional land use in the cumulative (2045) scenario and no shifting of land use from other TAZs was used. In that regard, the cumulative VMT analysis can be considered as a conservative estimate.

As indicated before, the project VMT per capita was compared with Riverside Countywide VMT per capita for project evaluation. The Riverside Countywide VMT per capita was estimated using "No Project" RIVCOM 4.01 runs conducted by GTS. VMT metrics for the threshold and project were developed using consistent methodology.

Table 1 below shows the project VMT metrics for both baseline (2018) and cumulative (2045) conditions along with the regional VMT thresholds.

Table 1: Project VMT analysis

2018	Wren Residential (Project) *	Riverside County (County) **
Total Population	660	2,358,439
Total Employment	-	759,857
Homebased Production (HBP) VMT	10,375	42,904,715
HBP VMT per capita	15.7	18.2
2045	Wren Residential (Project) *	Riverside County (County) **
Total Population	660	3,424,454
Total Employment	-	1,116,025
Homebased Production (HBP) VMT	9,785	63,396,364
HBP VMT per capita	14.8	18.5

*: Estimated using RIVCOM4.01 "with project" model runs

**: Estimated using GTS No Project RIVCOM 4.01 model runs

Conclusion

Based on the VMT analysis as shown in the above Table 1, the project does not have a significant impact for VMT.