

MEMORANDUM

To: Aric Evatt, Urban Crossroads, Inc.

From: Mehul Champaneri, Michael Schmitt
Kimley-Horn and Associates, Inc.

Date: November 23, 2020

Subject: JS 63 Motorcross –VMT Analysis

The memorandum documents SB 743 compliant analysis based on Riverside County's current draft guidelines for the proposed JS 63 Motor Cross development located in unincorporated Riverside County near the City of Perris.

Project Description

The proposed Project is located west of State Highway 74 on Ethanac Road in unincorporated Riverside County. The Project consists of various motor-cross tracks, approximately six structures, and five parking lots. **Figure 1** shows the project site location along with an existing motor cross facility located northeast of the proposed project site along Ramona Expressway in Riverside County. The existing motor-cross facility shown in the figure is assumed to be closing before the proposed facility is operational and the existing customers are expected to use the new facility. The project site plan is included in the attachment to this memorandum.

The Project was recently assessed for traffic impacts in the JS 63 MX Traffic Impact Analysis (referred to as "Traffic Study"). The traffic impacts were assessed based on the LOS analysis. This memorandum documents the assessment of impacts based on VMT analysis.

Senate Bill 743 (SB 743)

SB 743, approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Governor's Office of Planning and Research (OPR) has recommended the use of VMT as the replacement for automobile delay-based LOS for the purposes of determining a significant transportation impact under CEQA. As of December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT). To assist in the implementation of VMT as the primary measure of a transportation impact under CEQA, the Governor's Office of Planning and Research (OPR) published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* in December 2018 (OPR's Guidelines). Statewide application of the new guidelines went into effect on July 1, 2020.

The County of Riverside has developed draft VMT thresholds of significance and guidance for determining the significance of transportation impacts based on the OPR's Guidelines. The analysis contained within this document is based on these draft guidelines.

Figure 1 – Project Site Location



While the OPR guidance related to SB 743 is a helpful introduction to using VMT to evaluate projects, it does not provide a complete solution. There are a multitude of complex practical issues that are not addressed by the OPR guidance. OPR guidance does not specifically address land uses beyond residential, office and retail, and it provides latitude on some elements of implementation. While it is often preferential to use a travel demand model (TDM) as the basis of a VMT analysis, TDM's are not always appropriate given the unique travel behavior associated with a potential project. Recognizing this, OPR has established that a broad range of analysis tools may be acceptable for the purposes of VMT analysis including:

Travel demand models, sketch models, spreadsheet models, research, and data can all be used to calculate and estimate VMT. To the extent possible, lead agencies should choose models that have sensitivity to features of the project that affect VMT. Those tools and resources can also assist in establishing thresholds of significance and estimating VMT reduction attributable to mitigation measures and project alternatives. When using models and tools for those various purposes, agencies should use comparable data and methods, in order to set up an “apples-to-apples” comparison between thresholds, VMT estimates, and VMT mitigation estimates.¹

Specifically, given that this project has a market area that extends beyond RIVTAM's limits (Riverside County's TDM), that trip generation primarily occurs during the weekend (RIVTAM is a weekday model), and that a motocross facility would not be well represented by land use options included within RIVTAM, an alternative method based on available existing customer travel data was established.

VMT Thresholds

Draft thresholds of significance, as currently proposed by Riverside County, are summarized in **Table 1**. Since the proposed project falls under the category of costumer-based land use type (VMT primarily comes from motocross riders/attendees and not employees), the threshold of significance is based on the net increase in total VMT.

Table 1 – VMT Thresholds of Significance

Land Use	Threshold of Significance
Residential	Existing county-wide average VMT per capita
Office	Existing county-wide average VMT per employee
Retail/ Other Costumer	Net increase in total VMT

¹ OPR Guidelines, page 30

VMT Analysis

The net change in VMT due to the proposed Project was principally determined based on two distinct data sources, customer locations that use the existing facility and weekend travel behavior based on a Big Data source licensed to Kimley-Horn. As previously noted, it is assumed that the existing motor-cross facility will be closing before the proposed facility is operational and the existing customers are expected to use the new facility. Therefore the basis of the net change in VMT is the anticipated change in travel patterns of existing customers resulting from the introduction of the new facility. From the previous traffic impact analysis, it was determined that the proposed facility would generate approximately 268 daily vehicle trips on a typical weekend. This daily trip estimate was used as the basis for the VMT analysis provided within this memorandum. As this trip generation includes all trips (customer and employment) it is assumed that employees, which are relatively minor contributor to VMT considering that it is understood to be less than 10, could also be reasonably assumed to be represented within the analysis of customers described herein.

As noted, existing customer location data was based on information provided by the owner of the existing facility. Specifically, locations were determined based on a database of existing customer cell phone numbers. This data included area codes in Riverside, San Bernardino, Orange, Los Angeles and San Diego Counties. While it is recognized that area codes are not always indicative of actual residence locations (cell phone numbers are portable), given the extent of the database and the locations or area codes provided, it is believed to be a representative sample of customers. Note that cell phone records from areas located outside the Southern California region were excluded based on the assumption that they may not be representative of actual residence locations.

Big Data, identifying origins and destinations, for select trip purposes for the project vicinity was obtained from Teralytics. Big Data utilized for this project included origins and destination at the Census Tract level for weekends in October 2019. Note that this dataset is representative of conditions prior to the onset of the effects of COVID-19 including any resulting governmental restrictions and as such represents more normal travel behavior than is what currently being identified using Big Data sources. This database was utilized for the purposes of further refining the probable residences (origins) of customers based on trip purpose.

The analysis relied on first weighting each area code by its number of occurrences within the database provided by the existing owner than subsequently distributing that value across the census tracts included in a given area code based on the Big Data described above. Specifically, for the Big Data, the analysis was limited to trip purposes representing home-based activities on weekends. **Figure 2** shows the area codes weightage of regular costumers of the existing facility. **Figure 3** shows the subsequent refinement based on the application of Big Data. The resulting spatial database, along with the trip generation previously developed within the traffic impact analysis, was used as the basis for establishing origins for both the existing and planned motocross facility.

To determine the distance each customer would travel to the existing and proposed motocross facility, the Geographical Information System ("GIS") functions in the TransCAD software modeling package were used. TransCAD is the most widely-used travel demand modeling/routing software package by Metropolitan Planning Organizations ("MPOs") in the United States. Note that although RIVTAM was not used as the basis of this analysis, TransCAD is the same software package on which RIVTAM relies. Subsequently using TransCAD the origin and destination data described previously was used to estimate VMT for both the existing and proposed motocross facilities. **Table 2** shows the resultant net change in VMT. As shown in the Table the proposed project will result in a reduction of VMT in the region.

Table 2 – Project VMT Impact Evaluation

Land Use	Daily VMT
Existing MX Facility	12,617
Proposed MX Facility	11,919
Net Change	-698

Conclusion

The Project's transportation impact based on this VMT analysis is determined to be non-significant based on Draft Riverside County guidelines.

Figure 2 – Existing Motor-cross Market by Area Code

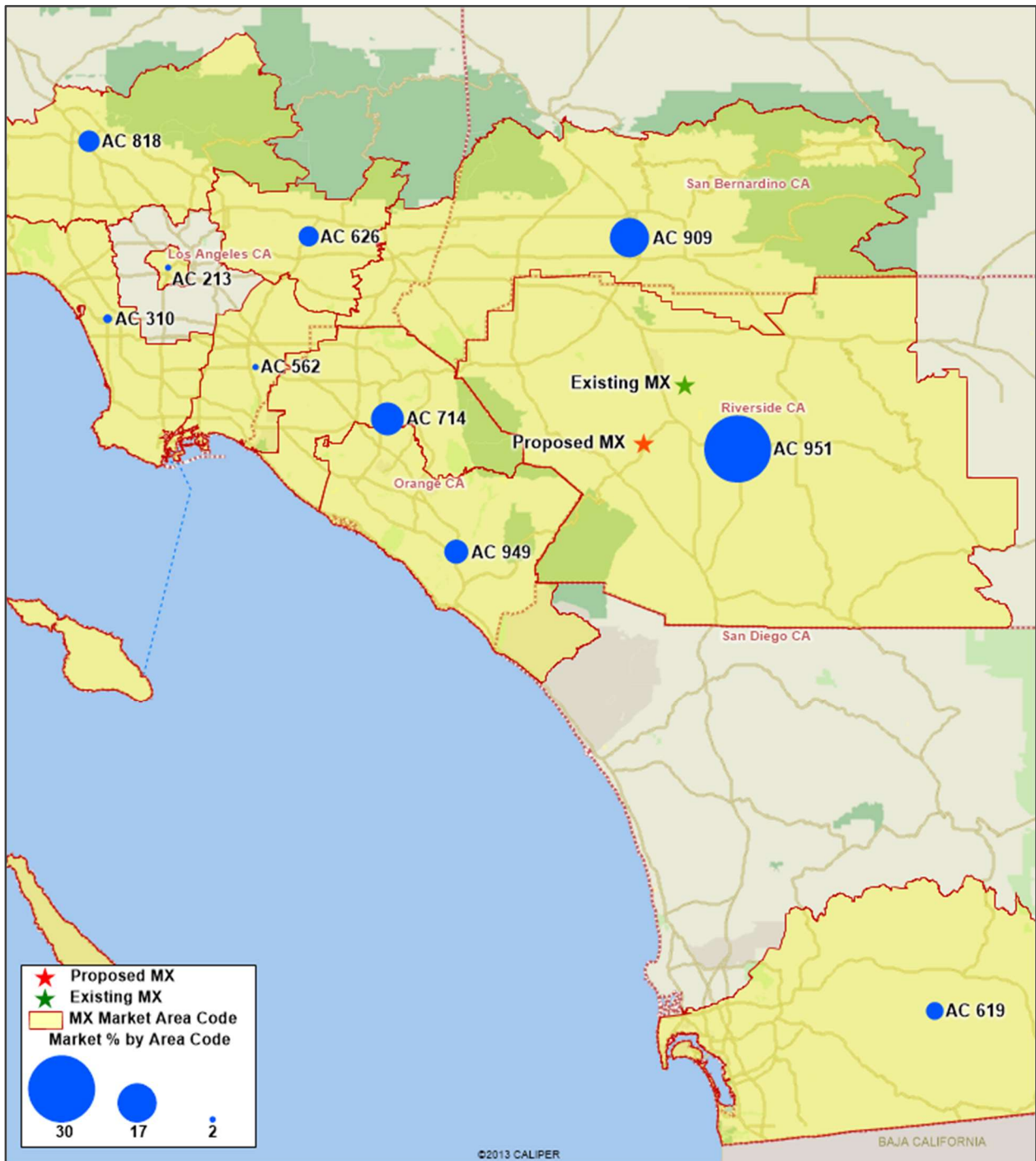


Figure 3 –Motor-cross Market Distribution using Big Data

