

To: Larry Ginnings
42 Redding, LP

From: Chris Gregerson, P.E., T.E., PTOE

Re: *Redding Distribution Facility – DRAFT SB 743 Analysis*
City of Redding, Shasta County, California

Date: August 13, 2021

This memorandum documents a SB 743 compliant analysis completed for a proposed relocation of a distribution facility (the “project” or “proposed project”) approximately 10 miles from its current location in the City of Redding, Shasta County, California. The proposed relocation of the site is assumed to bring efficiencies in the time and distance of deliveries to the service area. With the introduction of the California Governor’s Office of Planning and Research (OPR) Technical Advisory, Vehicle Miles Traveled (VMT) has become an important indicator for determining if a new development will result in a “significant transportation impact” under the California Environmental Quality Act (CEQA). This memorandum summarizes the VMT analysis and resultant findings for the proposed project.

Purpose of Analysis

Passed in 2013, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving. The change has been made by replacing LOS with Vehicle Miles of Travel (VMT). This shift in transportation impact focus is intended to better align transportation impact analysis and mitigation outcomes with the State’s goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation. Level of service or other delay metrics may still be used to evaluate the impact of projects and was considered for the analysis of this project (documented separately).

In January 2019, the Natural Resources Agency finalized updates to the CEQA Guidelines including the incorporation of SB 743 modifications. The Guidelines’ changes were approved by the Office of Administrative Law and are now in effect. The provisions apply statewide as of July 1, 2020.

To help aid lead agencies with SB 743 implementation, the Governor’s Office of Planning and Research (OPR) produced the Technical Advisory on Evaluating Transportation Impacts in CEQA¹ (December 2018) that provides guidance regarding the variety of implementation questions they face with respect to shifting to a VMT metric. Key guidance from this document includes:

- VMT is the most appropriate metric to evaluate a project’s transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold. In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. OPR notes that this threshold is supported by evidence that connects this level of reduction to the State’s emissions goals.

¹ *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Governor’s Office of Planning and Research State of California. December 2018.

- OPR recommends that where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds described above should apply.
- Lead agencies have the discretion to set or apply their own significance thresholds.

It is understood that the City of Redding has not adopted SB 743 thresholds for analysis or guidance methodology. The analysis methodology was developed based on a meeting with City staff on March 12, 2021.

Methodology and Assumptions

Based on the land use information provided, for the purposes of SB 743 analysis and the determination of transportation-related significant impacts, the following land use was analyzed:

- Delivery Service Warehouse

To analyze the impact of relocating the existing use to the new location, the Shasta County Regional Activity-Based Travel Model (ShastaSIM) and the Geographical Information System (GIS) and routing functions in the TransCAD software modeling package were used.

A comparison of VMT based on the existing site location compared to the proposed site location (net change) was used as the basis for the analysis contained within this memorandum. No modifications were made to the ShastaSIM roadway network or TAZ structure as a part of this analysis.

Quantitative Analysis

Two components of VMT were evaluated in this analysis. First, to determine the VMT related to employee work trips, ShastaSIM was used to determine the VMT per employee at both the existing and proposed location. The person trip output file was used to determine the employee VMT component and isolate the employee commute trips from the total trips heading to and from the two locations (existing and proposed). The existing location has an existing TAZ VMT per employee of 20.08. The proposed location has an existing TAZ VMT per employee of 18.84.

Second, the VMT for the non-work trips was calculated. This VMT is associated with the delivery aspect of the site. To calculate the average trip length, the package destination zip code centroid locations were mapped using the GIS functions in the TransCAD software modeling package. Once mapped, these locations were matched to locations along the street network to allow for routing along the street network and to better estimate the distance to the existing and proposed warehouse locations. Subsequently, the resulting dataset was used as the basis for a multi-path analysis utilizing TransCAD to identify logical paths and estimate trip lengths for calculating VMT. The number of trips to each zip code were provided by the project applicant and assumed to stay constant between the existing and proposed sites to provide an “apples-to-apples” comparison.

Exhibit 1 summarizes the total VMT within the County both with the distribution facility at its current location and at its proposed location. As shown in **Exhibit 1**, the proposed project results in a net decrease in Countywide daily VMT.

Cumulative Year (2040) conditions were not calculated as part of this analysis.

Exhibit 1 – Vehicle Miles Traveled (VMT) by Location

Scenario	VMT
Existing Location	
Work (Commute)	6,366
Non-Work	19,705
Proposed Location	
Work (Commute)	5,972
Non-Work	18,128
Resulting Net Change	26,071 (Existing) – 24,100 (Proposed) = (1,971)

Findings

Based on the results of this analysis, the following findings are made:

- The average VMT per employee is lower at the proposed location compared to the existing location.
- In addition, the relocation of the delivery facility decreases non-work VMT related to deliveries.
- ***Therefore, the proposed project is determined to not have a significant transportation impact due to a net decrease in Countywide VMT.***