MEMORANDUM

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DATE: January 30, 2023
TO: Connie Anderson, T&B Planning, Inc
FROM: Alex So, Urban Crossroads
JOB NO: 14482-01 Supplemental VMT

8TH STREET INDUSTRIAL SUPPLEMENTAL VEHICLE MILES TRAVELED (VMT) ANALYSIS

Connie Anderson,

Urban Crossroads, Inc. is pleased to provide the following Supplemental Vehicle Miles Traveled (VMT) Analysis for the 8th Street Industrial (**Project**), which is located on the southeast corner of 8th Street and Rancho Vista Boulevard in the City of Palmdale.

SUPPLEMENTAL VMT EVALUATION

In an effort to fully disclose potential VMT impacts, this memorandum includes a supplemental VMT evaluation measuring the Project's estimated Total VMT. The Total VMT calculation differs from the County's adopted VMT metric for industrial projects of Work VMT in that it includes all vehicle trips (i.e., passenger cars and trucks) and all trip purposes (i.e., not just home-based work trips). Table 1 presents an estimation of Total VMT for the Project, which utilizes vehicle trip generation rates consistent with the Project's greenhouse gas analysis, multiplied by the average trip length for each vehicle type. Average trip length for passenger cars was obtained from the SCAG Model, light heavy-duty trucks (LHDT), medium heavy-duty trucks (MHDT) and heavy heavy-duty trucks (HHDT) has been obtained from the South Coast Air Quality Management District's (SCAQMD) Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce emissions (WAIRE) Program (May 2021) (3). Using trip lengths consistent with the SCAQMD's rule 2305 provides an average daily Total VMT estimate for the Project consistent with the approach used in the Project's greenhouse gas analysis.

TABLE 1: PROJECT TOTAL VMT

Vehicle Type	Vehicle Trips	Vehicle Trip Length	VMT
Automobile	608	20.69	12,580
LHDT	16	15.3	245
MHDT	18	14.2	256
HHDT	56	39.9	2,234
Total Truck	90	-	2,735
Total	**698**	**-**	**15,314**

Table 2 presents the calculation of the efficiency metric Project generated Total VMT per service population (SP), which is the product of the Project's Total VMT divided by its SP (i.e., estimated number of Project employees). This efficiency metric is a common VMT metric used by many agencies throughout Southern California to evaluate the efficiency of travel for a given project based on Total VMT.

TABLE 2: PROJECT TOTAL VMT PER SP

	Project
SP	454
Total VMT	15,314
Total VMT per SP	33.73

Table 3 identifies a comparison between Project's total VMT per SP to an applicable impact threshold. Although not specified by County Guidelines, it is reasonable to assume that a project with a total VMT per SP that exceeds the baseline 16.8% below North Los Angeles County average total VMT per SP would result in a potentially significant impact, consistent with North County regional averages identified in the Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report (June 2020) (2). For the purposes of this evaluation, the North County regional average total VMT per SP for baseline conditions is 43.1[1], which a 16.8% below North County threshold would result in 35.86 VMT per SP.

TABLE 3: PROJECT VMT PER SP COMPARISON

	Baseline
Regional Threshold	35.86
Project	33.73
Percent Below Threshold	-5.94%
Potentially Significant?	No

[1] LA County SB 743 Implementation and CEQA Update; Page 16, Table 4

CONCLUSION

Based on the results of this supplemental VMT evaluation the following findings are made:

- The Project's VMT analysis found the Project's VMT per SP to be below the Regional VMT per SP threshold and is determined to have a less than significant transportation impact.

If you have any questions, please contact me directly at aso@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.

Alexander So
Senior Associate

REFERENCES

1. **SCAQMD.** *Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce emissions (WAIRE) Program.* May 2021.
2. **Los Angeles County Public Works.** *Transportation Impact Analysis Guidelines.* July 2020.

ATTACHMENT A
PROJECT'S TRIP GENERATION SUMMARY

TABLE A-1: PROJECT TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center (Non-Sort)[3]	TSF	155	0.122	0.028	0.150	0.062	0.098	0.160	1.810
Passenger Cars			0.112	0.018	0.130	0.057	0.093	0.150	1.580
2-Axle Trucks			0.002	0.001	0.003	0.001	0.001	0.002	0.038
3-Axle Trucks			0.002	0.002	0.004	0.001	0.001	0.002	0.048
4+-Axle Trucks			0.006	0.007	0.013	0.003	0.003	0.006	0.144

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).
[2] TSF = thousand square feet
[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

TABLE A-2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort)	384.800	TSF							
Passenger Cars:			43	7	50	22	36	58	608
2-axle Trucks:			1	1	1	0	0	1	16
3-axle Trucks:			1	1	2	0	0	1	18
4+-axle Trucks:			2	3	5	1	1	2	56
Total Truck Trips (Actual Vehicles):			4	5	9	1	1	2	90
Total Trips (Actual Vehicles)[2]			**47**	**12**	**59**	**23**	**37**	**60**	**698**

[1] TSF = thousand square feet
[2] Total Trips = Passenger Cars + Truck Trips.