MEMORANDUM

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DATE: October 18, 2023
TO: Ms. Tracy Zinn, T&B Planning, Inc.
FROM: John Kain and Marlie Whiteman, Urban Crossroads, Inc.
JOB NO: 13594-06 VMT - Supplement

OAK VALLEY NORTH SPECIFIC PLAN SUPPLEMENTAL VMT ANALYSIS

Urban Crossroads, Inc. is pleased to provide the following Supplemental VMT Analysis for the Oak Valley North Specific Plan (**Project**), which is located at south of Singleton Road at Calimesa Boulevard in the City of Calimesa.

PROJECT OVERVIEW

The VMT analysis will evaluate the following three land use scenarios:

SCENARIO 1:

- 982,232 square feet of logistics in four buildings (PA1).
- 25.62 acres of Truck/Trailer Parking Lot (PA 1).
- 223 multi-family residential units (PA 2).

SCENARIO 2:

- 982,232 square feet of parcel hub warehouse[1] in four buildings (PA 1).
- 25.62 acres of Truck/Trailer Parking Lot (PA 1).
- 223 multi-family residential units (PA 2).

SCENARIO 3:

- 982,232 square feet of logistics in four buildings (PA 1).
- 25.62 acres of Truck/Trailer Parking Lot (PA 1).
- Church with 1,200 seats (PA 2).

BACKGROUND

In an effort to fully disclose potential VMT impacts, this memorandum includes a supplemental VMT evaluation measuring the Proposed Project's estimated Total VMT. The Total VMT calculation differs from the City's adopted VMT metric for

[1] Trip-generation statistics published by the Institute of Transportation Engineers (ITE) as provided in their Trip Generation Manual, 11th Edition (2021) for ITE land use code 156 (high-cube parcel hub warehouse)

industrial projects in that it includes all vehicle trips (i.e., passenger cars and trucks).

Estimation of Total VMT utilizes Institute of Transportation Engineers (ITE) vehicle trip generation rates, multiplied by the average trip length for each vehicle type. Average trip length for passenger cars, 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).

VMT ASSESSMENT

SCENARIO 1

Table 1 shows the passenger car VMT, followed by the truck VMT for the high cube warehouse use. Truck trips for the truck / trailer parking lot are also included (as a separate set of line items) for completeness. The Scenario 1 residential and church components are not expected to generate heavy duty truck trips. The overall VMT for Scenario 1 is the final set of data in Table 1.

TABLE 1: SCENARIO 1 TOTAL VMT

Vehicle Type	Vehicle Trips	Vehicle Trip Length	VMT
Automobile (Baseline)	3,275	16.4	53,756
Automobile (Cumulative)	3,275	16.5	54,010
Logistics			
LHDT	108	15.3	1,652
MHDT	281	14.2	3,990
HHDT	396	39.9	15,800
High-Cube Warehouse Truck Total	785	-	21,442
Truck / Trailer Parking Lot			
LHDT	87	15.3	1,331
MHDT	225	14.2	3,195
HHDT	317	39.9	12,648
Truck / Trailer Parking Lot Total	629	-	17,174
Scenario 1 Total			
Automobile (Baseline)	3,275	16.4	53,756
Automobile (Cumulative)	3,275	16.5	54,010
LHDT	195	15.3	2,984
MHDT	506	14.2	7,185
HHDT	713	39.9	28,449
Total Truck	1,414	-	38,618
Total (Baseline)	**4,689**	**-**	**92,374**
Total (Cumulative)	**4,689**	**-**	**92,628**

[1] Slight variations in results are due to rounding of values.

Table 2 presents the calculation of the efficiency metric Scenario 1's project generated Total VMT per service population (SP), which is the product of the Scenario 1'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: SCENARIO 1 TOTAL VMT PER SP

	Project
SP	1,596
Total VMT (Baseline)	92,374
Total VMT (Cumulative)	92,628
VMT / SP (Baseline)	57.88
VMT / SP (Cumulative)	58.04

Table 3 identifies a comparison between Scenario 1's total VMT per SP to the impact threshold. The Proposed Project VMT / SP is 57.88, which is 19.47 VMT / SP over the City threshold VMT / SP of 38.41 and a potentially significant impact occurs. For cumulative conditions, the Proposed Project's total VMT per SP is slightly higher.

TABLE 3: SCENARIO 1 VMT PER SP COMPARISON

	Baseline	Cumulative
City VMT / SP Threshold	38.41	38.41
Proposed Project VMT / SP	57.88	58.04
VMT / SP Over Threshold	19.47	19.63
Potentially Significant?	Yes	Yes

SCENARIO 2

Table 4 presents an estimation of Total VMT for Scenario 2. Table 4 shows the passenger car VMT, followed by the truck VMT for Scenario 2. Truck trips for the truck / trailer parking lot are also included (as a separate set of line items) for completeness. The overall VMT for Scenario 2 is the final set of data in Table 4.

TABLE 4: SCENARIO 2 TOTAL VMT

Vehicle Type	Vehicle Trips	Vehicle Trip Length	VMT
Automobile (Baseline)	4,895	33.2	162,742
Automobile (Cumulative)	4,895	32.2	157,663
PA1 Parcel Hub Mix			
LHDT	246	15.3	3,764
MHDT	303	14.2	4,303
HHDT	917	39.9	36,588
PA1 Parcel Hub Mix Truck Total	1,466	-	44,655
Truck / Trailer Parking Lot			
LHDT	108	15.3	1,652
MHDT	281	14.2	3,990
HHDT	396	39.9	15,800
Truck / Trailer Parking Lot Total	785	-	21,442
Scenario 2 Total			
Automobile (Baseline)	4,895	33.2	162,742
Automobile (Cumulative)	4,895	32.2	157,663
LHDT	354	15.3	5,416
MHDT	584	14.2	8,293
HHDT	1313	39.9	52,389
Total Truck	2,251	-	66,098
Total (Baseline)	**7,146**	**-**	**228,840**
Total (Cumulative)	**7,146**	**-**	**223,761**

[1] Slight variations in results are due to rounding of values.

Table 5 presents the calculation of the efficiency metric Scenario 2's Project generated Total VMT per service population (SP), which is the product of the Scenario 2's Total VMT divided by its SP (i.e., estimated number of Project employees).

TABLE 5: SCENARIO 2 TOTAL VMT PER SP

	Project
SP	3,916
Total VMT (Baseline)	228,840
Total VMT (Cumulative)	223,761
VMT / SP (Baseline)	58.44
VMT / SP (Cumulative)	57.14

Table 6 identifies a comparison between Scenario 2 total VMT per SP to the impact threshold. The Project VMT / SP is 58.44, which is 20.03 VMT / SP over the City threshold VMT / SP for of 38.41 and a potentially significant impact occurs.

TABLE 6: SCENARIO 2 VMT PER SP COMPARISON

	Baseline	Cumulative
City VMT / SP Threshold	38.41	38.41
Parcel Hub Mix Project VMT / SP	58.44	57.14
VMT / SP Over Threshold	20.03	18.73
Potentially Significant?	Yes	Yes

SCENARIO 3

Table 7 presents an estimation of Total VMT for Scenario 3. Table 7 shows the passenger car VMT, followed by the truck VMT for the high cube warehouse use. Truck trips for the truck / trailer parking lot are also included (as a separate set of line items) for completeness. The overall VMT for Scenario 3 is the final set of data in Table 7.

TABLE 7: SCENARIO 3 TOTAL VMT

Vehicle Type	Vehicle Trips	Vehicle Trip Length	VMT
Automobile (Baseline)	1,772	26.3	46,586
Automobile (Cumulative)	1,772	26.4	46,806
High-Cube Warehouse			
LHDT	108	15.3	1,652
MHDT	281	14.2	3,990
HHDT	396	39.9	15,800
High-Cube Warehouse Truck Total	785	-	21,442
Truck / Trailer Parking Lot			
LHDT	87	15.3	1,331
MHDT	225	14.2	3,195
HHDT	317	39.9	12,648
Truck / Trailer Parking Lot Total	629	-	17,174
Scenario 3 Total			
Automobile (Baseline)	1,772	26.3	46,586
Automobile (Cumulative)	1,772	26.4	46,806
LHDT	195	15.3	2,984
MHDT	506	14.2	7,185
HHDT	713	39.9	28,449
Total Truck	1,414	-	38,618
Total (Baseline)	**3,186**	**-**	**85,204**
Total (Cumulative)	**3,186**	**-**	**85,424**

[1] Slight variations in results are due to rounding of values.

Table 8 presents the calculation of the efficiency metric Scenario 3's project generated Total VMT per service population (SP), which is the product of the Scenario 3 Project's Total VMT divided by its SP (i.e., estimated number of Project employees).

TABLE 8: SCENARIO 3 TOTAL VMT PER SP

	Project
SP	954
Total VMT (Baseline)	85,204
Total VMT (Cumulative)	85,424
VMT / SP (Baseline)	89.31
VMT / SP (Cumulative)	89.54

Table 9 identifies a comparison between Scenario 3's total VMT per SP to the impact threshold. The Project VMT / SP is 89.31, which is 50.90 VMT / SP over the City threshold VMT / SP for of 38.41 and a potentially significant impact occurs.

TABLE 9: SCENARIO 3 VMT PER SP COMPARISON

	Baseline	Cumulative
City VMT / SP Threshold	38.41	38.41
Proposed Project VMT / SP	89.31	89.54
VMT / SP Over Threshold	50.90	51.13
Potentially Significant?	Yes	Yes

PARTIAL REDUCTION OF POTENTIAL VMT IMPACT

The "*Oak Valley North Specific Plan VMT Analysis*" (Urban Crossroads, October 18, 2023) provides mitigation measures for potential reduction in automobile (passenger car) VMT. Truck VMT is not subject to similar reductions because goods movement requires large vehicle activity which is not reduced by modification of the project built environment to enhance pedestrian and bicycle activity or on-site transportation demand management measures. Therefore, any potential reduction in Project-generated passenger car VMT would be reflected by a smaller reduction in Total VMT. A potentially significant impact occurs with all of the project land use scenarios.

CONCLUSION

Based on the results of this supplemental VMT evaluation which considers truck activity for the three alternative Project land use scenarios a potentially significant VMT impact is estimated to occur for project generated VMT per SP as compared to the City's adopted impact threshold.

- Scenario 1 - The high cube warehouse generates approximately 21,442 truck VMT while the truck / trailer parking lot generates approximately 17,174 truck VMT, which results in total Baseline VMT of 92,374 and Cumulative VMT of 92,628.
- Scenario 2 - The PA 1 Parcel Hub Mix generates approximately 44,655 truck VMT while the truck / trailer parking lot generates approximately 21,442 truck VMT, which results in total Baseline VMT of 228,840 and Cumulative VMT of 223,761.

- Scenario 3 - The high cube warehouse generates approximately 21,442 truck VMT while the truck / trailer parking lot generates approximately 17,174 truck VMT, which results in total Baseline VMT of 85,204 and Cumulative VMT of 85,424.

Implementation of VMT reduction measures presented in the "*Oak Valley North Specific Plan VMT Analysis*" (Urban Crossroads, October 18, 2023) could slightly reduce Project-related passenger car activity in terms of vehicle miles traveled. However, with truck activity is included to the standard VMT analysis, the total Project-generated VMT / SP is higher than the City's adopted impact threshold for any Scenario.

If you have any questions, please contact us directly at jkain@urbanxroads.com for John or mwhiteman@urbanxroads.com for Marlie.

REFERENCES

1. **City of Calimesa.** *Final City of Calimesa Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.* City of Calimesa : s.n., May 2020.

2. **SCAQMD.** *Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce emissions (WAIRE) Program.* May 2021.