
APPENDIX R2: ALTERNATIVES -TRANSPORTATION SUPPORT TABLES



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Table A
REDUCED INTENSITY ALTERNATIVE TRIP GENERATION FORECAST

TRIP GENERATION RATES [1]									
ITE LAND USE CATEGORY	ITE LAND USE CODE	VARIABLE	WEEKDAY DAILY	WEEKDAY AM PEAK HOUR			WEEKDAY PM PEAK HOUR		
				IN (%)	OUT (%)	TOTAL	IN (%)	OUT (%)	TOTAL
Warehousing	150	Per 1,000 SF	1.71	77%	23%	0.17	28%	72%	0.18
High-Cube Transload and Short-Term Storage Warehouse	150-T	Per 1,000 SF	0.60	52%	48%	0.02	52%	48%	0.03
	154	Per 1,000 SF	1.40	77%	23%	0.08	28%	72%	0.10
High-Cube Fulfillment Center Warehouse (Sort)	154-T	Per 1,000 SF	0.22	49%	51%	0.02	47%	53%	0.01
	155	Per 1,000 SF	6.44	81%	19%	0.87	39%	61%	1.20
High-Cube Cold Storage Warehouse	155-T	Per 1,000 SF	0.19	50%	50%	0.02	46%	54%	0.02
	157	Per 1,000 SF	2.12	77%	23%	0.11	28%	72%	0.12
	157-T	Per 1,000 SF	0.75	33%	67%	0.03	52%	48%	0.03
Strip Retail Plaza (<40K)	822	Per 1,000 SF	54.45	60%	40%	2.36	50%	50%	6.59

PROJECT TRIP GENERATION FORECAST									
LAND USE	ITE	SIZE	WEEKDAY DAILY VOLUMES [2]	WEEKDAY AM PEAK HOUR VOLUMES [2]			WEEKDAY PM PEAK HOUR VOLUMES [2]		
	LAND USE CODE			IN	OUT	TOTAL	IN	OUT	TOTAL
<u>High-Cube Cold Storage Warehouse</u>									
[A] All Vehicle Trip Ends	157	117,900 GSF	250	10	3	13	4	10	14
[B] Truck Trip Ends	157-T		88	1	3	4	2	2	4
- 2-Axle (16.95% of All Trucks) [3]			15	0	1	1	0	0	0
- 3-Axle (22.71% of All Trucks) [3]			20	0	1	1	0	0	0
- 4+-Axle (60.34% of All Trucks) [3]			53	1	2	3	1	1	2
- 2-Axle (1.5 PCE)			23	0	2	2	0	0	0
- 3-Axle (2.0 PCE)			40	0	2	2	0	0	0
- 4-Axle (3.0 PCE)			159	3	6	9	3	3	6
[C] Subtotal Trucks (PCE-Adjusted)			222	3	10	13	3	3	6
[A-B] Passenger Vehicle Trip Ends			162	9	0	9	2	8	10
Subtotal High-Cube Cold Storage Warehouse [4]			384	12	10	22	5	11	16
<u>High-Cube Fulfillment Center Warehouse (Sort)</u>									
[A] All Vehicle Trip Ends	155	340,600 GSF	2,193	240	56	296	160	249	409
[B] Truck Trip Ends	155-T		65	4	3	7	3	4	7
- 2-Axle (16.95% of All Trucks) [3]			11	1	1	2	1	1	2
- 3-Axle (22.71% of All Trucks) [3]			15	1	1	2	1	1	2
- 4+-Axle (60.34% of All Trucks) [3]			39	2	2	4	2	2	4
- 2-Axle (1.5 PCE)			17	2	2	4	2	2	4
- 3-Axle (2.0 PCE)			30	2	2	4	2	2	4
- 4-Axle (3.0 PCE)			117	6	6	12	6	6	12
[C] Subtotal Trucks (PCE-Adjusted)			164	10	10	20	10	10	20
[A-B] Passenger Vehicle Trip Ends			2,128	236	53	289	157	245	402
Subtotal High-Cube Fulfillment Center Warehouse (Sort) [4]			2,292	246	63	309	167	255	422
<u>Warehouse</u>									
[A] All Vehicle Trip Ends	150	98,250 GSF	168	13	4	17	5	13	18
[B] Truck Trip Ends	150-T		59	1	1	2	2	1	3
- 2-Axle (16.95% of All Trucks) [3]			10	0	0	0	0	0	0
- 3-Axle (22.71% of All Trucks) [3]			13	0	0	0	0	0	0
- 4+-Axle (60.34% of All Trucks) [3]			36	1	1	2	1	1	2
- 2-Axle (1.5 PCE)			15	0	0	0	0	0	0
- 3-Axle (2.0 PCE)			26	0	0	0	0	0	0
- 4-Axle (3.0 PCE)			108	3	3	6	3	3	6
[C] Subtotal Trucks (PCE-Adjusted)			149	3	3	6	3	3	6
[A-B] Passenger Car Trip Ends			109	12	3	15	3	12	15
Subtotal Warehouse [4]			258	15	6	21	6	15	21

Table A (Continued)
REDUCED INTENSITY ALTERNATIVE TRIP GENERATION FORECAST

PROJECT TRIP GENERATION FORECAST									
LAND USE	ITE LAND USE CODE	SIZE	WEEKDAY DAILY VOLUMES [2]	WEEKDAY AM PEAK HOUR VOLUMES [2]			WEEKDAY PM PEAK HOUR VOLUMES [2]		
				IN	OUT	TOTAL	IN	OUT	TOTAL
<u>High-Cube Short-Term Storage Warehouse</u>									
[A] All Vehicle Trip Ends	154	98,250 GSF	138	6	2	8	3	7	10
[B] Truck Trip Ends	154-T		22	1	1	2	0	1	1
- 2-Axle (16.95% of All Trucks) [3]		4	0	0	0	0	0	0	
- 3-Axle (22.71% of All Trucks) [3]		5	0	0	0	0	0	0	
- 4+-Axle (60.34% of All Trucks) [3]		13	1	1	2	0	1	1	
- 2-Axle (1.5 PCE)		6	0	0	0	0	0	0	
- 3-Axle (2.0 PCE)		10	0	0	0	0	0	0	
- 4-Axle (3.0 PCE)		39	3	3	6	0	3	3	
[C] Subtotal Trucks (PCE-Adjusted)			55	3	3	6	0	3	3
[A-B] Passenger Car Trip Ends			116	5	1	6	3	6	9
Subtotal High-Cube Short-Term Storage Warehouse [4]			171	8	4	12	3	9	12
Strip Retail Plaza	822	12,000 GSF	653	17	11	28	40	39	79
Subtotal Strip Retail Plaza			653	17	11	28	40	39	79
PROJECT TRIPS			3,758	298	94	392	221	329	550

[1] Source: ITE "Trip Generation Manual", 11th Edition, 2021.

[2] Trips are one-way traffic movements, entering or leaving.

[3] Based on information contained in the "Truck Trip Generation Study for City of Fontana, County of San Bernardino, State of California" prepared by Transportation Engineering and Planning, Inc., August 2003 for Heavy Warehouse land uses. A PCE factor of 1.5 was applied to all 2-axle trucks, a PCE factor of 2.0 was applied to all 3-axle trucks, and a PCE factor of 3.0 was applied to all 4 or more axle trucks.

[4] The weekday daily, AM, and PM peak hour trip subtotals represent the sum of the passenger vehicle trip ends and the PCE-adjusted truck trip ends ([A-B] + [C]).

Table 4-3
VMT COMPARISON

	HBW Daily VMT/EMP [1]	TRUCK Daily VMT [2]
Proposed Project	30.47	42,693
No Project/ No Development	0	0
Reduced Intensity Alternative	29.36	9,337

Notes:

[1] HBW Daily VMT/EMP = Home-Based Work Daily VMT per Employee
The Project Area is situated within TAZ 22281100. The baseline HBW Daily VMT/EMP in the TAZ is 28.99. Since the Reduced Intensity Alternative is forecast to generate approximately 25.31% of the daily trips as the Proposed Project, the corresponding HBW Daily VMT/EMP for the Reduced Intensity Alternative is calculated to be 29.36 (i.e., $28.99 + 25.31\% \times [30.47 - 28.99] = 29.36$).

[2] An assumed truck trip length of 39.9 miles provided by the South Coast Air Quality Management District (SCAQMD) was used in calculating Daily Truck VMT.

Table 4-2
TRIP GENERATION COMPARISON [1]

	DAILY (TRIPS)	MORNING PEAK HOUR (TRIPS)	EVENING PEAK HOUR (TRIPS)
Proposed Project	14,845	1,656	2,238
No Project/ No Development	0	0	0
Reduced Intensity Alternative	3,758	392	550

Note:

[1] The forecast of vehicle trips includes a conversion of truck trips to passenger car equivalents based on the estimated number and size (i.e., 2-axle, 3-axle, 4 or more-axle) of truck trips.