

**DATE:** February 15, 2024  
**TO:** Nicole Criste, Terra Nova Planning & Research, Inc.  
**FROM:** John Kain and Marlie Whiteman, Urban Crossroads  
**JOB NO:** 15504-04 TG Memo

**NORTH APPLE VALLEY INDUSTRIAL AREAS CUMULATIVE TRIP GENERATION ASSESSMENT**

Urban Crossroads, Inc. is pleased to submit the following Cumulative Trip Generation Assessment for the North Apple Valley Industrial Areas, (Study Area) shown on Exhibit 1. The study area includes the North Apple Valley Industrial Specific Plan (NAVISP) and four other industrial areas west and south of the NAVISP.

Two scenarios are compared in this cumulative trip generation assessment, as follows:

- **Town General Plan Baseline** with industrial development included in the Town of Apple Valley General Plan Circulation Element Traffic Study (November 24, 2008, referred to as the **2008 Town GP Traffic Study**), which is part of the Environmental Impact Report (**EIR**) (SCH No. 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002 (certified August 11, 2009, referred to as the 2009 EIR).
- **Baseline Plus Cumulative Logistics Projects** with existing and planned high-cube warehouse/distribution facilities in the study area which generate traffic somewhat differently than the underlying industrial uses analyzed in the 2008 Town GP Traffic Study.

Exhibit 1 shows the traffic analysis zones (TAZs) used in the 2008 Town GP Traffic Study. Within each TAZ, Urban Crossroads has identified the underlying industrial land uses which were utilized in the 2008 Town GP Traffic Study.

**TOWN GENERAL PLAN BASELINE**

The General Plan Baseline industrial land use quantities shown for each TAZ in Table 1 were utilized in the 2008 analysis of Town of Apple Valley General Plan buildout traffic volumes and peak hour level of service (LOS).

The NAVISP encompasses the area bounded by Quarry Road to the north, Waalew Road to the south, Dale Evans Parkway to the west, and Central Road to the east, as well as an annexation area extending east from Central Road to Joshua Road (with Quarry Road to the north and Johnson Road / Lafayette Street to the south).



**EXHIBIT 1: NORTH APPLE VALLEY INDUSTRIAL AREAS,  
WITH TOWN GENERAL PLAN TRAFFIC ANALYSIS ZONES (TAZs)**

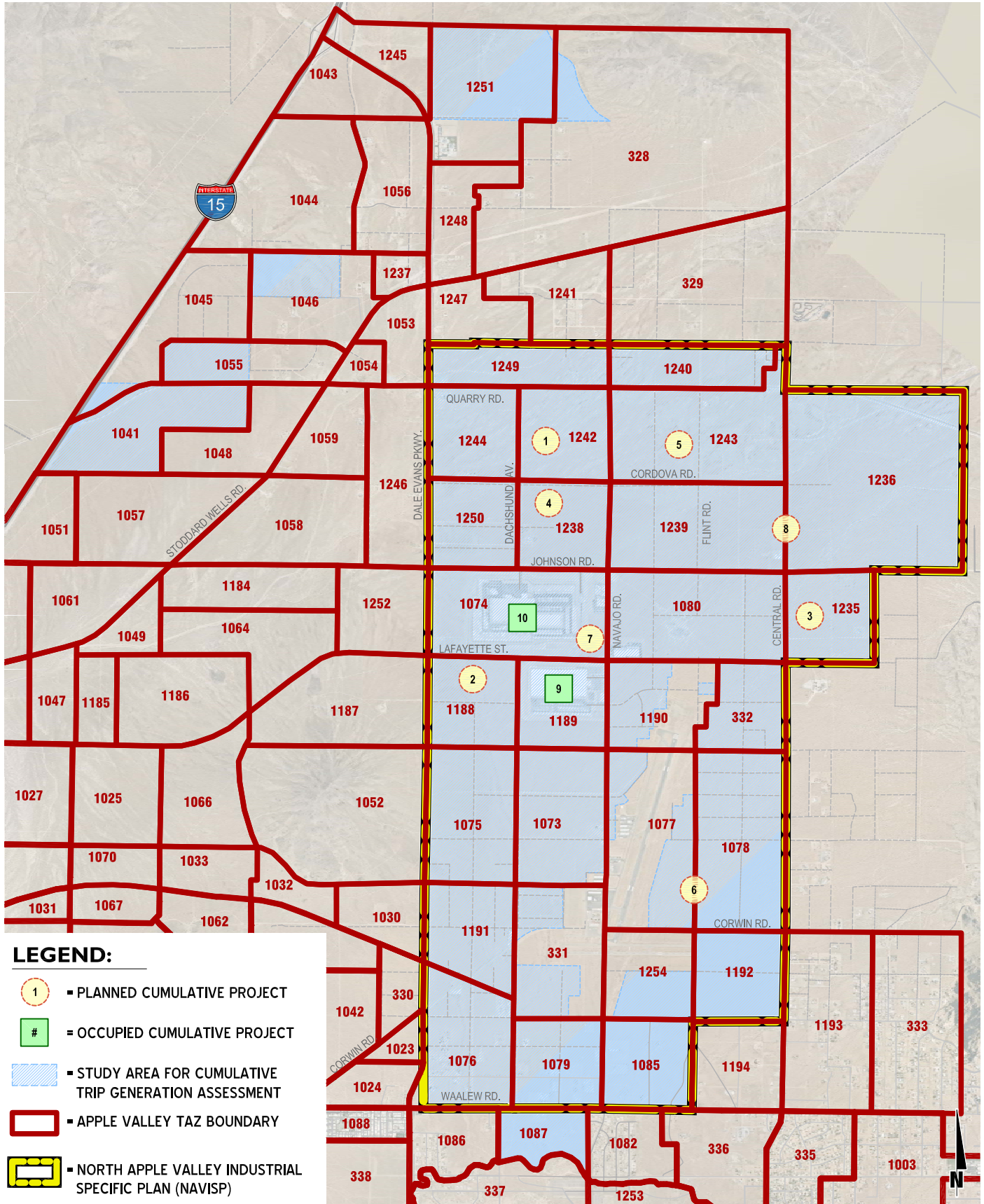


TABLE 1: NORTH APPLE VALLEY INDUSTRIAL AREA  
LAND USES AND TRIP GENERATION BY TRAFFIC ANALYSIS ZONE, PAGE 1 OF 2

AVTM TAZ	Project/Location	Land Use <sup>1</sup>	Quantity <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
328 Part	Planned Industrial	Industrial Park	289.67 TSF	26	20	46	17	32	50	660
331	Planned Industrial	Industrial Park	982.00 TSF	88	69	157	59	108	167	2,239
332	Planned Industrial	Industrial Park	1,413.00 TSF	128	99	226	85	155	241	3,221
1041	Planned Industrial	Industrial Park	1,715.18 TSF	155	120	275	103	188	292	3,911
1046 Part	Planned Industrial	Industrial Park	747.82 TSF	67	52	120	44	82	127	1,705
1055 Part	Planned Industrial	Industrial Park	457.38 TSF	41	32	73	28	51	77	1,043
1073	Planned Industrial	Industrial Park	2,088.00 TSF	188	146	334	125	230	355	4,760
1075	Planned Industrial	Industrial Park	2,088.00 TSF	188	146	334	125	230	355	4,760
1076	Planned Industrial	Industrial Park	2,008.00 TSF	180	140	321	120	221	341	4,578
1079	Planned Industrial	Industrial Park	1,908.00 TSF	171	133	305	114	210	324	4,350
1080	Planned Industrial	Industrial Park	2,684.00 TSF	241	188	429	161	296	456	6,120
1085	Planned Industrial	Industrial Park	1,333.00 TSF	120	94	213	80	147	226	3,039
1087	Planned Industrial	Industrial Park	724.19 TSF	65	50	115	43	80	123	1,651
1190	Planned Industrial	Industrial Park	1,080.00 TSF	97	76	173	65	118	183	2,462
1191	Planned Industrial	Industrial Park	882.00 TSF	79	62	141	53	97	150	2,011
1240	Planned Industrial	Industrial Park	1,034.60 TSF	93	73	165	62	114	175	2,358
1244	Planned Industrial	Industrial Park	1,150.00 TSF	104	81	184	70	127	196	2,623
1249	Planned Industrial	Industrial Park	1,149.07 TSF	103	80	184	68	126	195	2,620
1250	Planned Industrial	Industrial Park	1,533.00 TSF	138	108	245	92	169	260	3,495
1251	Planned Industrial	Industrial Park	1,722.80 TSF	155	120	275	103	190	293	3,928
1254	Planned Industrial	Industrial Park	2,995.84 TSF	270	210	480	180	330	509	6,830
1188	Lafayette Street Logistics site	Former Industrial Park	1,207.54 TSF	108	84	193	72	133	205	2,753
1188	Lafayette Street Logistics (Source: Urban Crossroads 2022)	Logistics	1,207.54 TSF	176	53	229	85	216	301	4,052
1188	Remainder Industrial Park	Remainder Industrial Park	805.03 TSF	72	56	129	48	88	137	1,835
1188	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>2,012.57 TSF</b>	<b>180</b>	<b>140</b>	<b>322</b>	<b>120</b>	<b>221</b>	<b>342</b>	<b>4,588</b>
1188	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>2,012.57 TSF</b>	<b>248</b>	<b>109</b>	<b>358</b>	<b>133</b>	<b>304</b>	<b>438</b>	<b>5,887</b>
1235	1M Warehouse site	Former General Light Industrial	1,462.34 TSF	789	716	1,507	322	526	848	21,793
1235	1M Warehouse (Source: Dudek - 2023 Study)	Logistics	1,462.34 TSF	187	44	231	96	150	246	2,784
1235	Remainder Industrial Park	Remainder Industrial Park	1,313.50 TSF	119	92	210	79	144	224	2,995
1235	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>2,775.84 TSF</b>	<b>908</b>	<b>808</b>	<b>1,717</b>	<b>401</b>	<b>670</b>	<b>1,072</b>	<b>24,788</b>
1235	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>2,775.84 TSF</b>	<b>306</b>	<b>136</b>	<b>441</b>	<b>175</b>	<b>294</b>	<b>470</b>	<b>5,779</b>
1238	Cordova Quarry Complex site	Former Industrial Park	1,559.95 TSF	140	109	250	94	172	265	3,557
1238	Cordova Quarry Complex (Source: Apple Valley NOP 2023)	Logistics	1,559.95 TSF	226	68	294	109	278	387	5,234
1238	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>1,559.95 TSF</b>	<b>140</b>	<b>109</b>	<b>250</b>	<b>94</b>	<b>172</b>	<b>265</b>	<b>3,557</b>
1238	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>1,559.95 TSF</b>	<b>226</b>	<b>68</b>	<b>294</b>	<b>109</b>	<b>278</b>	<b>387</b>	<b>5,234</b>
1242	Cordova Road Logistics site	Former Industrial Park	1,144.33 TSF	103	80	183	68	126	195	2,609
1242	Cordova Road Logistics (Source: Urban Crossroads 2023)	Logistics	1,144.33 TSF	125	39	164	60	152	212	2,864
1242	Remainder Industrial Park	Industrial Park	388.67 TSF	35	27	62	23	43	67	887
1242	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>1,533.00 TSF</b>	<b>138</b>	<b>107</b>	<b>245</b>	<b>91</b>	<b>169</b>	<b>262</b>	<b>3,496</b>
1242	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>1,533.00 TSF</b>	<b>160</b>	<b>66</b>	<b>226</b>	<b>83</b>	<b>195</b>	<b>279</b>	<b>3,751</b>
1243	Quarry at Pawnee site	Former Industrial Park	1,462.34 TSF	131	102	234	88	161	248	3,335
1243	Quarry at Pawnee NOP (Source: Apple Valley NOP 2023)	Logistics	1,462.34 TSF	211	64	275	103	261	364	4,908
1243	Remainder Light Industrial	Remainder General Light Industrial	2,162.66 TSF	1,167	1,059	2,228	476	779	1,254	32,231
1243	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>3,625.00 TSF</b>	<b>1,298</b>	<b>1,161</b>	<b>2,462</b>	<b>564</b>	<b>940</b>	<b>1,502</b>	<b>35,566</b>
1243	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>3,625.00 TSF</b>	<b>1,378</b>	<b>1,123</b>	<b>2,503</b>	<b>579</b>	<b>1,040</b>	<b>1,618</b>	<b>37,139</b>

**TABLE 1: NORTH APPLE VALLEY INDUSTRIAL AREA  
LAND USES AND TRIP GENERATION BY TRAFFIC ANALYSIS ZONE, PAGE 2 OF 2**

AVTM TAZ	Project/Location	Land Use <sup>1</sup>	Quantity <sup>2</sup>	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
1077	Apple Valley Logistics Ctr. Site	Former Industrial Park	649.00 TSF	58	45	104	38	71	110	1,480
1077	Apple Valley Logistics Ctr. (Source: Urban Crossroads 2023)	Logistics	649.00 TSF	117	35	152	56	144	200	2,742
1077	Remainder Industrial Park	Remainder Industrial Park	531.00 TSF	48	38	85	32	58	90	1,211
<b>1077</b>	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>1,180.00 TSF</b>	<b>106</b>	<b>83</b>	<b>189</b>	<b>70</b>	<b>129</b>	<b>200</b>	<b>2,691</b>
<b>1077</b>	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>1,180.00 TSF</b>	<b>165</b>	<b>73</b>	<b>237</b>	<b>88</b>	<b>202</b>	<b>290</b>	<b>3,953</b>
1078	Apple Valley Logistics Ctr. Site	Former Industrial Park	2,831.74 TSF	255	199	453	170	312	481	6,457
1078	Apple Valley Logistics Ctr. (Source: Urban Crossroads 2023)	Logistics	2,831.74 TSF	553	188	741	234	600	834	10,518
<b>1078</b>	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>2,831.74 TSF</b>	<b>255</b>	<b>199</b>	<b>453</b>	<b>170</b>	<b>312</b>	<b>481</b>	<b>6,457</b>
<b>1078</b>	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>2,831.74 TSF</b>	<b>553</b>	<b>188</b>	<b>741</b>	<b>234</b>	<b>600</b>	<b>834</b>	<b>10,518</b>
1074	Green Trucking & WalMart Sites	Former Industrial Park	1,585.07 TSF	142	111	254	95	175	269	3,614
1074	WalMart Distribution Center (Source: Urban Crossroads estimates)	Logistics	1,200.00 TSF	128	57	186	67	149	215	2,435
1074	Green Trucking Solutions (Source: LSA TG Memo - 2022)	Logistics	385.07 TSF	44	18	62	27	43	70	1,196
1074	Remainder Industrial Park	Remainder Industrial Park	306.00 TSF	27	21	49	18	33	52	698
<b>1074</b>	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>1,891.07 TSF</b>	<b>169</b>	<b>132</b>	<b>303</b>	<b>113</b>	<b>208</b>	<b>321</b>	<b>4,312</b>
<b>1074</b>	<b>W/Cumulative Projects</b>	<b>TAZ Total</b>	<b>1,891.07 TSF</b>	<b>199</b>	<b>96</b>	<b>297</b>	<b>112</b>	<b>225</b>	<b>337</b>	<b>4,329</b>
1236	Apple Valley 3PL Center site	Former General Light Industrial	1,640.00 TSF	885	804	1,689	360	590	952	24,441
1236	Apple Valley 3PL Center (Source: Urban Crossroads 2023)	Logistics	1,640.00 TSF	16	17	33	16	22	38	633
1236	Remainder Light Industrial	Remainder General Light Industrial	3,257.66 TSF	1,759	1,596	3,356	716	1,173	1,890	48,548
<b>1236</b>	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>4,897.66 TSF</b>	<b>2,644</b>	<b>2,400</b>	<b>5,045</b>	<b>1,076</b>	<b>1,763</b>	<b>2,842</b>	<b>72,989</b>
<b>1236</b>	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>4,897.66 TSF</b>	<b>1,775</b>	<b>1,613</b>	<b>3,389</b>	<b>732</b>	<b>1,195</b>	<b>1,928</b>	<b>49,181</b>
1239	Apple Valley 3PL Center site	Former Industrial Park	494.00 TSF	267	242	509	109	178	287	7,362
1239	Apple Valley 3PL Center (Source: Urban Crossroads 2023)	Logistics	494.00 TSF	318	114	432	163	326	489	5,762
1239	Remainder Industrial Park	Remainder Industrial Park	2,766.00 TSF	249	193	443	166	304	471	6,307
<b>1239</b>	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>3,260.00 TSF</b>	<b>516</b>	<b>435</b>	<b>952</b>	<b>275</b>	<b>482</b>	<b>758</b>	<b>13,669</b>
<b>1239</b>	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>3,260.00 TSF</b>	<b>567</b>	<b>307</b>	<b>875</b>	<b>329</b>	<b>630</b>	<b>960</b>	<b>12,069</b>
1189	Big Lots Dist site	Former Industrial Park	1,360.88 TSF	122	95	218	82	150	231	3,103
1189	Big Lots Dist (Source: Urban Crossroads 2015)	Logistics	1,360.88 TSF	145	65	211	76	169	244	2,761
1189	Remainder Industrial Park	Remainder Industrial Park	172.13 TSF	16	12	27	11	19	29	393
<b>1189</b>	<b>GP Baseline</b>	<b>TAZ Total</b>	<b>1,533.00 TSF</b>	<b>138</b>	<b>107</b>	<b>245</b>	<b>93</b>	<b>169</b>	<b>260</b>	<b>3,496</b>
<b>1189</b>	<b>W/Cumulative Project</b>	<b>TAZ Total</b>	<b>1,533.00 TSF</b>	<b>161</b>	<b>77</b>	<b>238</b>	<b>87</b>	<b>188</b>	<b>273</b>	<b>3,154</b>
<b>Town General Plan Baseline Land Use and Trip Generation Total</b>			57,085.36 TSF	<b>9,189</b>	<b>7,780</b>	<b>16,978</b>	<b>4,864</b>	<b>8,536</b>	<b>13,400</b>	<b>243,973</b>
<b>Baseline Plus Cumulative Logistics Projects Trip Generation Total</b>			57,085.36 TSF	<b>8,435</b>	<b>5,955</b>	<b>14,394</b>	<b>4,458</b>	<b>8,452</b>	<b>12,909</b>	<b>209,358</b>

<sup>1</sup> **Remainder** = Town GP land use within TAZ but outside of the footprint of an existing or planned cumulative project;

**Former** = Town GP land use within the footprint of an existing or planned cumulative project

<sup>2</sup> **TSF** = Thousand Square Feet of building floor area either (1) evaluated in the 2008 Town GP Traffic Study, or (2) evaluated in conjunction with an existing or planned cumulative project



Industrial land uses utilized in the 2008 Town GP Traffic Study for the Study Area included both General Light Industrial and Industrial Park categories. Industrial Park is generally used throughout the NAVISP area, except in the northeast corner (bounded by Quarry Road, Johnson Road, Flint Road, and Central Road) and within the annexation area. The NAVISP northeast corner and annexation areas were analyzed as General Light Industrial in the 2008 GP Traffic Study. General Light Industrial uses were evaluated within portions of TAZs 1243, 1235, and 1236.

In 2008, the Industrial Park uses were analyzed with Passenger Car Equivalent (PCE) trip generation rates per thousand square feet of gross floor area of 0.09 in the AM peak hour inbound, 0.07 PCE in the AM peak hour outbound, 0.06 PCE in the PM peak hour inbound, 0.11 PCE in the PM peak hour outbound, and 2.28 PCE daily.

The General Light Industrial uses were analyzed with (PCE) trip generation rates per thousand square feet of gross floor area of 0.54 in the AM peak hour inbound, 0.49 PCE in the AM peak hour outbound, 0.22 PCE in the PM peak hour inbound, 0.48 PCE in the PM peak hour outbound, and 14.90 PCE daily.

As shown on Table 1, the total quantity of General Light Industrial within the Study Area amounts to 8,522,660 square feet, whereas the total quantity of Industrial Park is 48,562,700 square feet.

## CUMULATIVE PROJECTS

Within the study area, ten existing and planned high-cube warehouse / distribution projects are addressed in this trip generation comparison as indicated on Exhibit 1. Each of these cumulative logistics projects are described below.

1. Cordova Road Logistics (within TAZ 1242)
  - 1,144,330 sf logistics located north of Cordova Road and east of Dachshund Avenue.
2. Lafayette Street Logistics (within TAZ 1188)
  - 1,207,540 square feet (sf) logistics located south of Lafayette Street and east of Dale Evans Parkway.
3. 1M Warehouse (within TAZ 1235)
  - 1,462,340 sf logistics located south of Johnson Road and east of Central Road.
4. Cordova Quarry Complex (within TAZ 1238)
  - 1,559,950 sf logistics located south of Cordova Road and east of Dachshund Avenue.
5. Quarry at Pawnee (within TAZ 1243)
  - 1,462,340 sf logistics located north of Cordova Road and west of Flint Road.
6. Apple Valley Logistics Center (within TAZ 1077/1078)
  - 649,000 sf logistics within TAZ 1077 and 2,831,740 sf industrial park within TAZ 1078 (cumulative total of 3,480,740 sf) located north of Corwin Road and west of Central Road.

7. Green Trucking Solutions (within TAZ 1074)
  - 385,070 sf logistics located north of Lafayette Street and west of Navajo Road.
  
8. Apple Valley 3PL Center (within TAZ 1236/1239)
  - 1,640,000 sf logistics within TAZ 1236 located north of Johnson Road and east of Central Road and 494,000 sf industrial park within TAZ 1239 (cumulative total of 2,134,000 sf) located north of Johnson Road and west of Central Road.
  
9. Big Lots Distribution (within TAZ 1189)
  - 1,360,880 sf logistics currently built and occupied, located south of Lafayette Street and west of Navajo Road.
  
10. WalMart Distribution Center (within TAZ 1074)
  - Approximately 1,200,000 sf logistics currently built and occupied, located south of Johnson Road and east of Dale Evans Parkway.

In each case, where a traffic study or trip generation analysis was available, trip generation data from the available source is used in Table 1.

## TRIP GENERATION DIFFERENCES

Table 1 includes the trip generation comparison between **Town General Plan Baseline** industrial land uses previously studied in the 2008 Town GP Traffic Study, and the **Baseline Plus Cumulative Logistics Projects** land uses. As shown, the General Plan Baseline trip generation is greater overall than the Baseline Plus Cumulative Logistics Projects trip generation. The Baseline Plus Cumulative Logistics Projects trip generation is anticipated to be 34,615 fewer two-way PCE trip ends per day with 2,584 fewer PCE AM peak hour trips and 491 fewer PCE PM peak hour trips as compared to the Town General Plan Baseline industrial land uses.

For the following TAZ's, there are no trip generation differences since there are no cumulative projects included in this assessment:

328 Partial	1073	1087	1250
331	1075	1190	1251
332	1076	1191	1254
1041	1079	1240	
1046 Partial	1080	1244	
1055 Partial	1085	1249	

For the following TAZ's, the Baseline Plus Cumulative Logistics Projects daily trip generation decreased in comparison to the Town General Plan Baseline:

- For TAZ 1235, which contains 1M Warehouse, there is a decrease in daily trip generation of 19,009 daily trips.
- For TAZs 1236 & 1239, which contain Apple Valley 3PL Center, there is a decrease in daily trip generation of 25,408 daily trips.
- For TAZ 1189, which contains Big Lots Distribution, there is a decrease in daily trip generation of 342 daily trips.

For the following TAZ's, there is an estimated increase in daily trip generation for the Baseline Plus Cumulative Logistics Projects, in comparison to the Town General Plan Baseline. However, in each instance, updated cumulative project Level of Service studies would address any potential LOS issues in the Study Area:

- For TAZ 1188, which contains Lafayette Street Logistics, there is an increase in daily trip generation of 1,299 daily trips.
- For TAZ 1238, which contains Cordova Quarry Complex, there is an increase in daily trip generation of 1,677 daily trips.
- For TAZ 1242, which contains Cordova Road Logistics, there is an increase in daily trip generation of 255 daily trips.
- For TAZ 1243, which contains Quarry at Pawnee, there is an increase in daily trip generation of 1,573 daily trips.
- For TAZs 1077 & 1078, which contain Apple Valley Logistics Center, there is an increase in daily trip generation of 5,323 daily trips.
- For TAZ 1074, which contains Green Trucking Solutions and WalMart Distribution Center, there is an increase in daily trip generation of 17 daily trips.

Based on the overall comparison with Baseline Plus Cumulative Logistics Projects to the Town General Plan Baseline, the logistics land uses included in the ten existing and planned high-cube warehouse/distribution facilities in the study area fall within the overall envelope of analysis included in the Town of Apple Valley General Plan Circulation Element Traffic Study (November 24, 2008, referred to as the 2008 Town GP Traffic Study), which is part of the Environmental Impact Report (EIR) (SCH No. 2008091077) for the Apple Valley General Plan and Annexations 2008-001 & 2008-002 (certified August 11, 2009, referred to as the 2009 EIR).

If you have any questions regarding this traffic assessment, please contact us at (949) 375-2435 for John or (714) 585-0574 for Marlie.