

Appendix M

Alternatives 2 and 3 Trip Generation Table

**IMPERIAL AVALON PROJECT - ALTERNATIVE 2 - GENERAL PLAN AND ZONING CONSISTENT ALTERNATIVE
ESTIMATED PROJECT TRIP GENERATION**

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]						Estimated Trip Generation							
			Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour Trips			PM Peak Hour Trips		
				Rate	In%	Out%	Rate	In%	Out%		In	Out	Total	In	Out	Total
PROPOSED PROJECT																
Single-Family Detached Housing	210	120 DU	9.44	0.74	25%	75%	0.99	63%	37%	1,133	22	67	89	75	44	119
Less: Internal capture			0%		0%	0%		0%	0%	0	0	0	0	0	0	
Less: Walk/Bike/Transit Credit [b]			0%	0%			0%			0	0	0	0	0	0	
Net External Vehicle Trips										<u>1,133</u>	<u>22</u>	<u>67</u>	<u>89</u>	<u>75</u>	<u>44</u>	<u>119</u>
Automobile Sales (New)	840	165 KSF	27.84	1.87	73%	27%	2.43	40%	60%	4,594	226	83	309	160	241	401
Less: Internal capture			0%		0%	0%		0%	0%	0	0	0	0	0	0	
Less: Walk/Bike/Transit Credit [b]			0%	0%			0%			0	0	0	0	0	0	
Net External Vehicle Trips										<u>4,594</u>	<u>226</u>	<u>83</u>	<u>309</u>	<u>160</u>	<u>241</u>	<u>401</u>
TOTAL DRIVEWAY TRIPS										<u>5,727</u>	<u>248</u>	<u>150</u>	<u>398</u>	<u>235</u>	<u>285</u>	<u>520</u>
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										<u>5,727</u>	<u>248</u>	<u>150</u>	<u>398</u>	<u>235</u>	<u>285</u>	<u>520</u>
EXISTING USE CREDIT																
Mobile Home Park	-	225 DU	-	-	-	-	-	-	-	1,141	25	49	74	49	38	87
	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL EXISTING DRIVEWAY TRIPS [c]										<u>1,141</u>	<u>25</u>	<u>49</u>	<u>74</u>	<u>49</u>	<u>38</u>	<u>87</u>
NET INCREMENTAL EXTERNAL TRIPS										4,586	223	101	324	186	247	433

Notes:

[a] Source: Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition*, 2017.

[b] A 0% Walk/Bike/Transit Credit was used based on the site's general suburban context.

[c] 24-hour counts were taken at existing driveways at the proposed Project site in lieu of using estimated existing trips from ITE Trip Generation.

**IMPERIAL AVALON PROJECT - ALTERNATIVE 3 - REDUCED DENSITY AND SENSITIVE TRANSITION ALTERNATIVE
ESTIMATED PROJECT TRIP GENERATION**

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]									Estimated Trip Generation					
			Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour Trips			PM Peak Hour Trips			
				Rate	In%	Out%	Rate	In%	Out%		In	Out	Total	In	Out	Total	
PROPOSED PROJECT																	
Multifamily Housing (Mid-Rise) <i>Less: Internal capture</i> <i>Less: Walk/Bike/Transit Credit [b]</i> Net External Vehicle Trips	221	1,033 DU	5.44 5% 0%	0.36 5% 0%	26% 5% 0%	74% 9% 0%	0.44 4% 0%	61% 4% 0%	39% 7% 0%	5,620 (281) 0	97 (5) 0	275 (25) 0	372 (30) 0	278 (11) 0	177 (12) 0	455 (23) 0	
Single-Family Detached Housing <i>Less: Internal capture</i> <i>Less: Walk/Bike/Transit Credit [b]</i> Net External Vehicle Trips	210	28 DU	9.44 0% 0%	0.74 0% 0%	25% 0% 0%	75% 0% 0%	0.99 0% 0%	63% 0% 0%	37% 0% 0%	264 0 0	5 0 0	16 0 0	21 0 0	18 0 0	10 0 0	28 0 0	
Quality Restaurant <i>Less: Internal capture</i> <i>Less: Walk/Bike/Transit Credit [b]</i> Total Driveway Trips <i>Less: Pass-by</i> Net External Vehicle Trips	931	8.47 KSF	83.84 11% 0%	0.73 20% 0%	55% 20% 0%	45% 4% 0%	7.8 14% 0%	67% 18% 0%	33% 18% 0%	710 (78) 0	3 (1) 0	3 0 0	6 (1) 0	44 (6) 0	22 (4) 0	66 (10) 0	
Coffee/Donut Shop without Drive-Through Window [c] <i>Less: Internal capture</i> <i>Less: Walk/Bike/Transit Credit [b]</i> Total Driveway Trips <i>Less: Pass-by</i> Net External Vehicle Trips	936	1.882 KSF	346.23 10% 0%	101.14 0% 0%	51% 20% 0%	49% 4% 0%	36.31 14% 0%	50% 18% 0%	50% 18% 0%	652 (65) 0	97 (19) 0	93 (4) 0	190 (23) 0	34 (5) 0	34 (6) 0	68 (11) 0	
Senior Adult Housing - Attached <i>Less: Internal capture</i> <i>Less: Walk/Bike/Transit Credit [b]</i> Net External Vehicle Trips	252	83 DU	3.85 0% 0%	0.2 0% 0%	35% 0% 0%	65% 0% 0%	0.26 0% 0%	55% 0% 0%	45% 0% 0%	320 0 0	6 0 0	11 0 0	17 0 0	12 0 0	10 0 0	22 0 0	
TOTAL DRIVEWAY TRIPS										7,142	183	369	552	364	231	595	
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										6,618	148	330	478	336	211	547	
EXISTING USE CREDIT																	
Mobile Home Park	-	225 DU	-	-	-	-	-	-	-	1,141	25	49	74	49	38	87	
	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL EXISTING DRIVEWAY TRIPS [d]										1,141	25	49	74	49	38	87	
NET INCREMENTAL EXTERNAL TRIPS										5,477	123	281	404	287	173	460	

Notes:

- [a] Source: Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition*, 2017 and NCHRP 8-51, Internal Trip Capture Estimation Tool, Texas Transportation Institute.
- [b] A 0% Walk/Bike/Transit Credit was used based on the site's general suburban context.
- [c] ITE use 933 - Fast-Food Restaurant without Drive-Through Window used for daily rate due to lack of daily rate data for ITE use 936 - Coffee/Donut Shop without Drive-Through Window.
- [d] 24-hour counts were taken at existing driveways at the proposed Project site in lieu of using estimated existing trips from ITE Trip Generation.