

City of La Cañada Flintridge

Circulation Element Appendix A

Table C-1

TRIP RATES

<u>LAND USE</u>	<u>DESCRIPTOR^(a)</u>	<u>TRIP RATE - DAILY</u> <u>(Trip Ends Per Descriptor)</u>
<u>Retail:</u>		
◦ Shopping Center^(b)		
- 50,000 SF (With 35% Passby Reduction)	1,000 SF	91.7 (59.6)
- 150,000 SF (With 20% Passby Reduction)	1,000 SF	60.7 (48.6)
- 350,000 SF (With 10% Passby Reduction)	1,000 SF	44.2 (39.8)
- 700,000 SF (With 10% Passby Reduction)	1,000 SF	35.0 (31.5)
◦ Office^(b)		
- 10,000 SF	1,000 SF	24.6
- 25,000 SF	1,000 SF	19.7
- 50,000 SF	1,000 SF	16.6
- 300,000 SF	1,000 SF	10.8
◦ Residential		
- Multi-Family	DU	8.0
- Single Family	DU	10.0
◦ Gas Station		
(With 50% Passby Reduction)	Pump	150.0 (75.0)

(a) Basis of the Trip Rate; e.g. 59.6 trip ends per 1,000 square feet (SF) or 10.0 trip ends per dwelling unit (DU).

(b) For shopping center or offices uses, it has been shown that Trip Rates decrease as the size of the development increases. Therefore, rates are shown for various size shopping center and office uses.

SOURCE: Trip Generation, Fifth Edition; Institute of Transportation Engineers (ITE); January, 1991.

TABLE C-2
TRIP GENERATION

<u>AREA / LAND USE</u>	<u>SIZE</u>			<u>NET DAILY TRIP ENDS GENERATED</u>
	<u>PROPOSED</u>	<u>EXISTING</u>	<u>NET</u>	
<u>Area 1:</u>				
◦ Retail ^(a)	33.30 KSF	32.50 KSF	0.80 KSF	40
◦ Residential, Multi-Family	9 DU	-----	9 DU	<u>70</u>
				Total 110
<u>Area 2:</u>				
◦ Retail ^(a)	50.10 KSF	3.34 KSF	46.76 KSF	2,270
◦ Office	-----	6.45 KSF	-6.45 KSF	-160
◦ Residential, Multi-Family	12 DU	12 DU ^(b)	0	0
◦ Residential, Single Family	-----	3 DU	-3 DU	<u>-30</u>
				Total 2,080
<u>Area 3:</u>				
◦ Retail ^(a)	62.80 KSF	60.34 KSF	2.46 KSF	120
◦ Residential, Multi-Family	15 DU	-----	15 DU	<u>120</u>
				Total 240
<u>Area 4:</u>				
◦ Retail ^(a)	8.30 KSF	-----	8.30 KSF	400
◦ Gas Station	-----	8 Pumps	-8 Pumps	<u>-600</u>
				Total -200
<u>Area 5:</u>				
◦ Retail ^(a)	8.30 KSF	5.90 KSF	2.4 KSF	120
◦ Residential, Single Family	-----	1 DU	-1 DU	<u>-10</u>
				Total 110

TABLE C-2 (cont.)

TRIP GENERATION

<u>AREA / LAND USE</u>	<u>SIZE</u>			<u>NET DAILY TRIP ENDS GENERATED</u>
	<u>PROPOSED</u>	<u>EXISTING</u>	<u>NET</u>	
Area 6:				
◦ Retail ^(c)	10.00 KSF	4.92 KSF	5.08 KSF	300
◦ Residential, Multi-Family	3 DU	-----	3 DU	20
◦ Gas Station	-----	16 Pumps	-16 Pumps	<u>-1,200</u>
				Total -880
Area 7:				
◦ Retail ^(c)	13.30 KSF	8.40 KSF	4.90 KSF	290
◦ Residential, Multi-Family	3 DU	-----	3 DU	20
◦ Residential, Single Family	-----	7 DU	-7 DU	-70
◦ Office	-----	4.99 KSF	-4.99 KSF	<u>-120</u>
				Total 120
Area 8:				
◦ Retail ^(c)	25.00 KSF	15.22 KSF	9.78 KSF	580
◦ Office	-----	10.06 KSF	-10.06 KSF	-250
◦ Residential, Multi-Family	-----	3 DU ^(b)	-3 DU	<u>-20</u>
				Total 310
Area 9:				
◦ Retail ^(d)	203.40 KSF	37.89 KSF ^(e)	165.51 KSF	5,210
◦ Residential, Multi-Family	44 DU	-----	44 DU	350
◦ Residential, Single Family	-----	46 DU	-46 DU	-460
◦ Office	-----	7.42 KSF	-7.42 KSF	-180
◦ Public (Use Office)	-----	3.00 KSF	-3.00 KSF	<u>-70</u>
				Total 4,850

TABLE C-2 (cont.)

TRIP GENERATION

<u>AREA / LAND USE</u>	<u>SIZE</u>		<u>NET</u>	<u>NET DAILY TRIP ENDS GENERATED</u>
	<u>PROPOSED</u>	<u>EXISTING</u>		
<u>Area 10:</u>				
◦ Retail ^(d)	100.40 KSF	17.74 KSF	82.66 KSF	2,600
◦ Residential, Multi-Family	24 DU	-----	24 DU	190
◦ Residential, Single Family	-----	15 DU	-15 DU	-150
◦ Office	-----	37.57 KSF	-37.57 KSF	-620
◦ Public (Use Office)	-----	17.52 KSF	-17.52 KSF	<u>-290</u>
				Total 1,730
<u>Area 11:</u>				
◦ Retail ^(d)	36.60 KSF	39.44 KSF	-2.84 KSF	-90
◦ Residential, Multi-Family	10 DU	-----	10 DU	80
◦ Office	-----	2.94 KSF	-2.94 KSF	<u>-70</u>
				Total -80
<u>Area 12:</u>				
◦ Retail ^(d)	312.00 KSF	119.69 KSF ^(e)	192.31 KSF	6,060
◦ Office	-----	15.15 KSF	-15.15 KSF	-370
◦ Residential, Single Family	-----	1 DU	-1 DU	-10
◦ Public (Use Office)	-----	26.30 KSF	-26.30 KSF	<u>-520</u>
				Total 5,160
<u>Area 13:</u>				
◦ Retail ^(d)	13.80 KSF	7.17 KSF	6.63 KSF	210

TABLE C-2 (cont.)

TRIP GENERATION

<u>AREA / LAND USE</u>	<u>SIZE</u>			<u>NET DAILY TRIP ENDS GENERATED</u>
	<u>PROPOSED</u>	<u>EXISTING</u>	<u>NET</u>	
Area 14:				
◦ Retail ^(d)	37.70 KSF	24.55 KSF ^(e)	13.15 KSF	410
◦ Office	-----	6.98 KSF	-6.98 KSF	-170
◦ Residential, Multi-Family	8 DU	-----	8 DU	60
◦ Residential, Single Family	-----	1 DU	-1 DU	<u>-10</u>
			Total	290

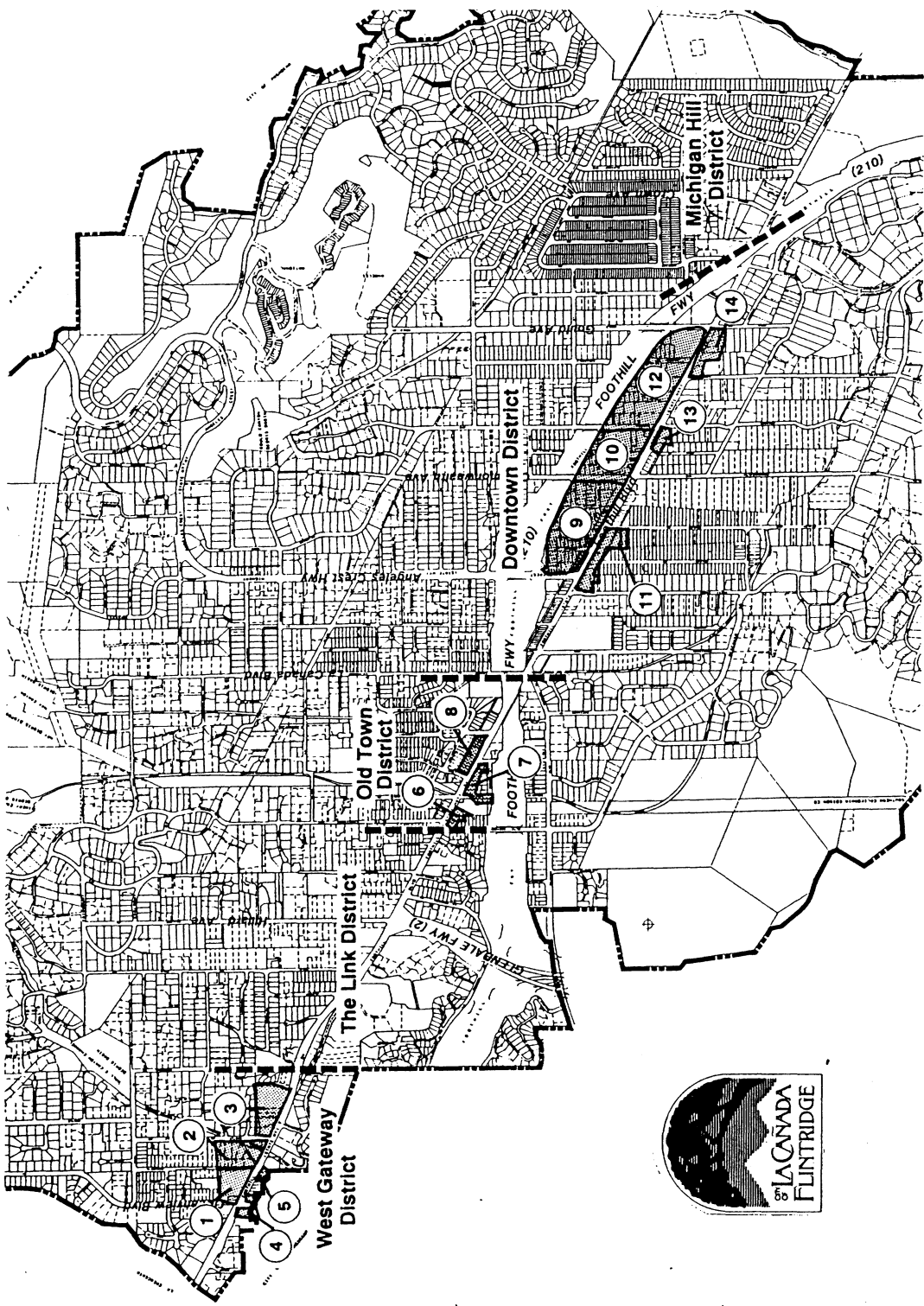
Note: The "Areas" are illustrated on Figure LU-4 of the Land Use Element.

- (a) The total retail square footage in this vicinity is 162,800 SF, so the trip rate for a 150,000 SF shopping center was applied.
- (b) Estimated based on the building square footage.
- (c) The total retail square footage in this vicinity is 48,300 SF, so the trip rate for a 50,000 SF shopping center was applied.
- (d) The total retail square footage in this vicinity is 703,900 SF, so the trip rate for a 700,000 SF shopping center was applied.
- (e) Maintained the gas station in the calculation, since not all are expected to be redeveloped. For calculation purposes, the stations in this development area were maintained.

Development Opportunity Areas
(refer to page 25, 27 in Element)

Land Use Districts

Figure LU-4
Foothill Boulevard
Development
Opportunity Overlay

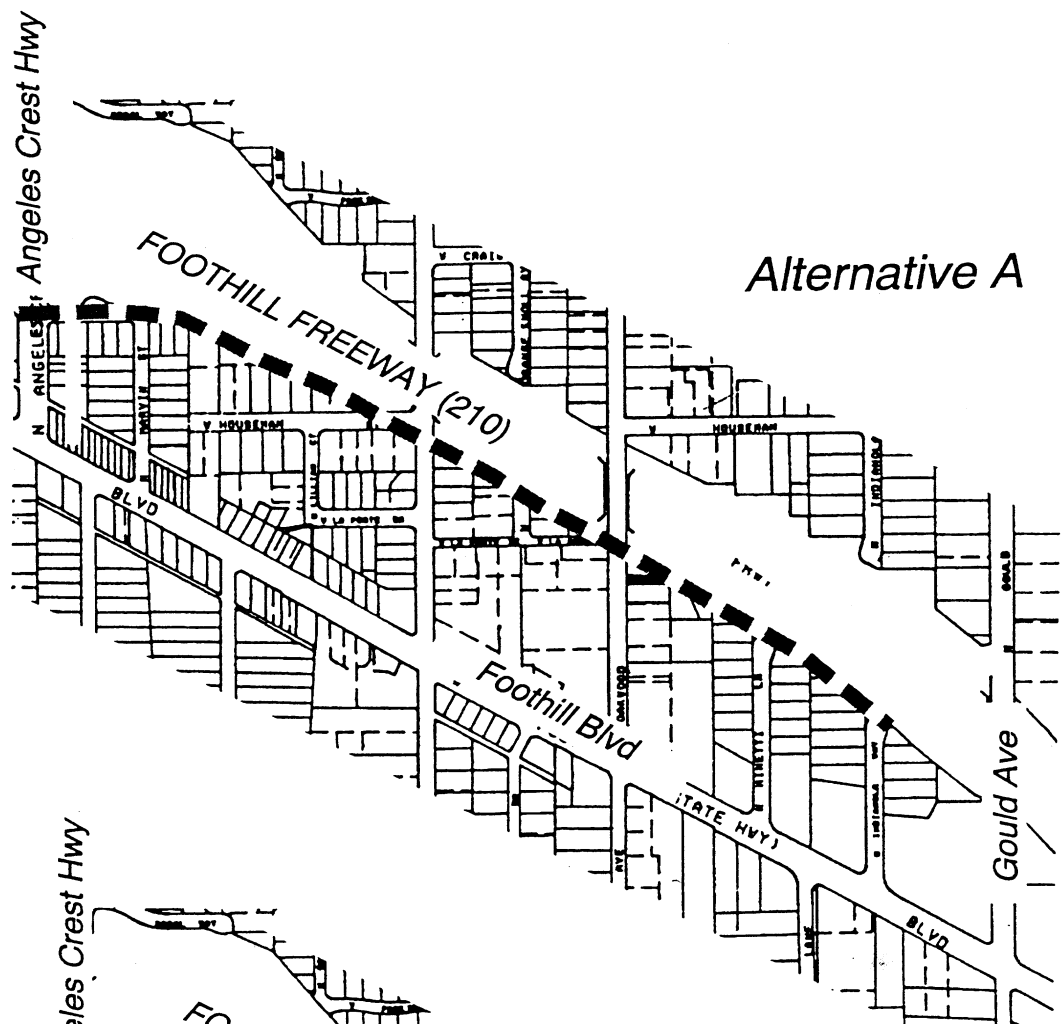


0 1425
scale in feet

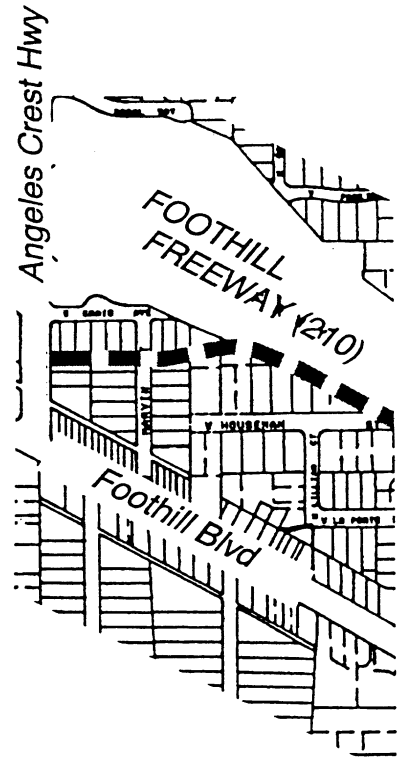
North ↑



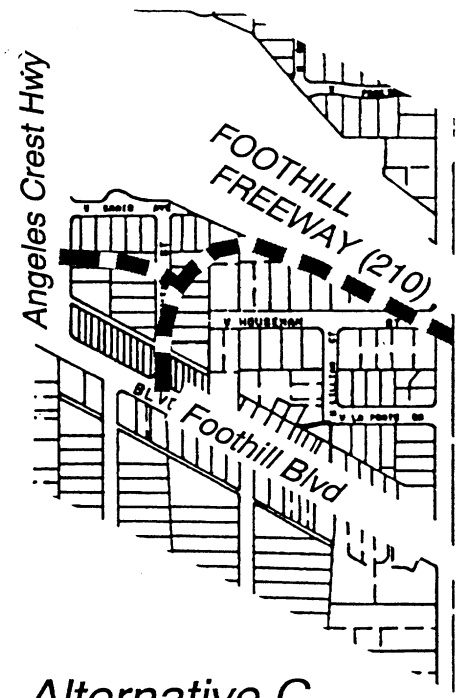
11/06/04



Alternative A



Alternative B



Alternative C

Figure C-8

NORTH ROAD ALIGNMENT

Table C-3
LEVEL OF SERVICE DESCRIPTIONS

ROADWAY SECTIONS

<u>LEVEL OF SERVICE</u>		<u>NOMINAL RANGE OF VOLUME TO CAPACITY RATIO</u>
A	Low volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers can maintain their desired speeds with little or no delay.	0.00 - 0.60
B	Stable flow with potential for some restriction of operating speeds due to traffic conditions. Maneuvering is only slightly restricted. The stopped delays are not bothersome and drivers are not subject to appreciable tension.	0.61 - 0.70
C	Stable operations; however, the ability to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signed coordination or longer queues cause delays.	0.71 - 0.80
D	Approaching unstable traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in their ability to maneuver and their selection of travel speeds. Comfort and convenience are low, but tolerable.	0.81 - 0.90
E	Operations characterized by significant approach delays and average travel speeds of one-half to one-third of the free flow speed. Flow is unstable and there is potential for stoppages of brief duration. High signal density, extensive queuing, or signal progression/timing are the typical causes of the delays.	0.91 - 1.00
F	Forced flow operations with high approach delays at critical signalized intersections. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of downstream congestion.	Not Meaningful

SOURCE: Highway Capacity Manual; Special Report 209; Transportation Research Board; 1985.