

Memorandum

Date: May 20, 2015

To: Los Altos Citywide Parking Committee

From: Parking Ratios Subcommittee

Subject: **Corrections to June 2, 2009 F&P Memo on
Los Altos Office and Retail Parking Standards**

The desire to have a good, sound, factual foundation for our review of parking ratios for the City of Los Altos, prompted us to review available studies. We initially noticed a significant anomaly in the data presented in the subject memo. The peak parking demand at Village Court appeared inconsistent with other data in the study. Review revealed the reason for the anomaly: while the entire parking lot was counted, the area of only one of the two buildings served by the parking counts was used to calculate the ratio. We annotated the subject memo with related corrections.

Our goal was to revise as little of the memo as possible, and to follow the same methodology employed in the original study. We reviewed our corrections with Planning Director, James Walgren on May 4th. In response to that review we made a revision to the seasonal adjustment, suggested by James. Subsequently, we provided the revised annotated copy of the memo with related corrections to the full Committee on May 6, 2015.

As a follow-up to James Walgren's e-mail to the Committee on May 7th, with the focus on Foothill Crossings, we looked at the F&P memo in greater detail. We found that areas of buildings were omitted at Foothill Plaza (Crossings) as well as from Village Court. Therefore, we have revised our corrections to this memo once again. Please see attached.

The City Council relied upon information and recommendations in the June 2, 2009 F&P memo when they considered revising the office and retail parking standards. While our subcommittee has not yet completed our review sufficiently to make recommendations for parking ratios, we want our recommendations to be based upon sound facts, from several locations. We will be using the corrected F&P Memo, as well as reviewing other relevant studies, to make well-founded conclusions.

Parking Ratios Subcommittee:
David Rock, Mark Rogge

Attachment: Revised Annotated June 2, 2009 F&P Memo

Note: 2015 Los Altos Parking Committee recommended corrections shown in annotation

MEMORANDUM

Date: June 2, 2009 Revised 5/19/15
To: James Walgren, City of Los Altos
From: Joe Fernandez and Sohrab Rashid
Subject: *Los Altos Office and Retail Parking Standards*

SJ07-993

This memorandum documents our review of office and retail parking standards for the City of Los Altos. The purpose of this study is to determine if changes to the City's parking standards for office and retail uses are justified. A brief summary of the key findings is provided below, followed by a detailed description of the study approach and results.

SUMMARY

The study includes three main components:

- determine the parking demand characteristics at existing office and retail sites in the City of Los Altos,
- review parking standards for nearby cities and industry-standard rates, and
- recommend changes, if appropriate, to the City's parking standards.

Parking occupancy counts were conducted at three office sites and three retail sites in Los Altos. Table 1 shows that significant variation occurred in the parking demand at the individual sites, but on average the demand was well below the supply required by the Los Altos Municipal Code.

TABLE 1: PARKING DEMAND SUMMARY See Addendum					
	Observed Peak Demand (spaces/1,000 square feet) ¹				Code-Required Supply (spaces/1,000 square feet) ²
	Site 1	Site 2	Site 3	Average	
Office Sites	1.82	2.01	2.57	2.06	4
Retail Sites	3.74	2.21	3.49	3.21	5
1. Demand is based on mid-week counts conducted October 18 & 20, 2007. The highest demand observed on either day is presented for each site. The average is the average peak of all surveyed days. 2. Los Altos Municipal Code §14.74.080, 14.74.100. Source: Fehr & Peers, 2007					

See "A"
See "B"

A review of parking standards for nearby jurisdictions shows a range of 3.33 to 4.44 spaces required per 1,000 square feet (s.f.) of office uses and a range of 4 to 5.56 spaces required per for stand-alone buildings

TABLE 2: CITY PARKING STANDARDS for Stand-alone Buildings

Jurisdiction	Office Rate (per 1,000 s.f.)	Retail Rate (per 1,000 s.f.) ¹
Los Altos ²	4	5
Cupertino ³	3.51	4
Mountain View ⁴	3.33	4
Palo Alto ⁵	4	5
Redwood City ⁶	3.33 – 4	5
Sunnyvale ⁷	4.44	4.44 – 5 – 5.56
Rates in Special Districts		
Los Altos ²	5	N/A
Palo Alto ⁵	3.22 – 3.33	4.17
Redwood City ⁶	3.33	N/A
Notes:		
1 Rates for intensive retail uses reported when differentiated from extensive uses.		
2 Los Altos Municipal Code §14.74.080, 14.74.090, 14.74.100. Special districts are OA-1, OA-4.5, and CN.		
3 Cupertino Municipal Code §19.100.040.		
4 Mountain View City Code §36.37.040.		
5 Palo Alto Municipal Code §18.83.050. Special district office rates for buildings in the California Avenue (3.22) and LM (3.33) districts.		
6 Redwood City Zoning Code §30.2.2. Office rates for buildings generating less than 100 trips (4) and 100 or more trips (3.33) during the PM peak period.		
7 Sunnyvale Municipal Code §19.46.050. Retail rates for shopping centers smaller than 20,000 s.f. (5.56), 20,000 – 50,000 s.f. (5), and larger than 50,000 s.f. (4.44).		
Sources: Codes retrieved online, October 19, 2007.		

Comparison to Industry-Standard Rates

ITE's *Parking Generation* and ULI's *Shared Parking* manuals provide parking supply and demand rates based on surveys of similar land uses across the country. Table 3 summarizes the data provided in these documents.

TABLE 3: INDUSTRY-STANDARD RATES¹

	ITE's <i>Parking Generation</i> (3 rd Edition) ²		ULI's <i>Shared Parking</i> (2 nd Edition) ³
	Average Peak Demand	85 th Percentile Demand	Recommended Supply
Office Uses	2.84	3.44	3.8
Retail Uses	3.76	5.06	3.6

1. All units are spaces per 1,000 square feet floor area, and weekday rates are reported.

2. Office land use code 701, suburban area. Retail land use code 820 (shopping center), in December.

3. Office land use reported for <25,000 s.f. size; rates drop for larger offices. Retail land use is community shopping center, <400,000 s.f., in December.

ITE provides parking demand rates, while ULI provides recommended supply rates. The demand rates are based on the peak occupancy of surveyed parking lots. The average peak demand refers to the average of the maximum demand rates observed at the surveyed sites, while the 85th percentile demand is the point where 85 percent of the surveyed rates are below, and 15 percent of the rates are above it.

The recommended supply is typically estimated by adding a circulation factor to the observed demand. This factor, which varies by land use type, represents the inherent inefficiencies of parking lots and reflects the fact that parking lots are effectively full once 85 to 95 percent of the available spaces are occupied. A circulation factor of 90 percent is commonly applied at office sites because most of the parking is occupied by employees who are familiar with the site, and because employees typically park for a long time, resulting in low levels of parking turnover. A lower circulation factor, typically 85 percent, is applied to retail parking supplies due to large amounts of turnover and because shoppers typically have the flexibility to shop elsewhere if they think that no spaces are available. Accordingly, a parking supply can be equated to parking demand by multiplying the supply by the circulation factor. For example, an office parking lot with a supply of 100 spaces would be expected to accommodate a peak demand of 90 vehicles (90 percent of 100).

ULI's *Shared Parking* also provides demand rates by month of the year, based on surveys of shopping centers throughout the country. The parking demand for retail uses peaks during the December shopping season. Retail parking demand during December is about 30 percent higher than during October. Parking demand for office uses is consistent throughout the year, with little variation from month to month.

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Conclusions See footnote #4 on page 2.

Both the ITE and ULI rates presented above represent conditions on a weekday in December. In October, surveys from ULI's *Shared Parking* show that parking demand at retail uses is about 70 percent of the demand in December. Office parking demand is the same in October and December.

Because retail parking demand is approximately 30 percent higher in December than October, it is likely that the surveyed retail sites would experience higher parking demand during December than what we observed in the field in October. Increasing the average observed peak demand of 3.82 (from Table 1) by 30 percent yields a demand of 5 spaces per 1,000 s.f. This, in conjunction with the rates from nearby jurisdictions and the industry-standard rates, suggests that the current parking standard for retail uses is appropriate, and there is little justification to change the retail parking requirements. We do not recommend any changes to the retail parking requirements.

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No such disparity between October and December parking demand is expected for offices, which experience consistent demand levels throughout the year. The highest parking demand at the three surveyed locations was 2.57 spaces per 1,000 s.f. A supply rate of 2.86 spaces per 1,000 s.f. would accommodate this demand, assuming a 90 percent circulation factor ($2.86 \times .90 = 2.57$). This rate is well below the rates required by nearby jurisdictions as well as the industry-standard rates, so we do not recommend using it directly, but instead suggest adding a 0.5 space per 1,000 s.f. buffer to this rate to account for potential higher demand rates at unsurveyed sites. This yields a supply rate of 3.33 spaces per 1,000 s.f., which is within the range of rates for nearby jurisdictions and industry standard publications. We recommend changing the parking requirement for offices to 3.33 spaces per 1,000 square feet.

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5. Appropriate increase should be 15% (not 30%) per 2013 CDM/Smith parking study in Los Altos, modified for retail.
6. Increasing the correct average observed peak demand of 2.79 by 15% yields a demand of 3.21 spaces per 1,000 s.f. of retail use.
7. The current retail parking requirement of 5 spaces per 1,000 s.f. is higher than what is justified by the study. See Addenda.
The recommendation should have been to change the parking requirement for retail to 3.60 spaces per 1,000 s.f. retail.
8. Using a 90% circulation factor, 2.01 divided by .90 yields 2.3 spaces per 1,000 s.f. office.
9. Conclusions should be drawn upon the completed study rather than "unsurveyed sites." To accommodate the highest demand found in Los Altos, the average could be increased to 2.50 spaces per 1,000 s.f. of office use at stand-alone sites.
10. The recommendation should have been to change the parking requirement for offices to 2.50 spaces per 1,000 s.f.



**APPENDIX:
Data Summary
Raw Counts**

A.**Los Altos Parking Summary**

Office Sites	Survey Dates	Peak Occupancy	Peak Demand	Corrected Peak Demand
Packard Foundation	10/17/2007	32	1.55	1.50
200 Second Street	10/18/2007	39	1.89	1.82
Multi-tenant office building	10/17/2007	159	2.08	
5150 El Camino Real	10/18/2007	157	2.05	2.01
				1.98
Real estate offices	10/17/2007	84	2.57	
161 & 167 So. San Antonio Rd.	10/18/2007	72	2.20	
		Average peak	2.06	2.01
		Min	1.55	1.50
		Max	2.57	

See C. for corrected areas, which result in corrected Peak Demand.

Also see the Addendum, which combines Tables A, B, and C. for clarity.

B.**Los Altos Parking Summary**

Retail Sites	Survey Dates	Peak Occupancy	Peak Demand	Corrected Peak Demand	
Foothill Plaza	10/18/2007	248	4.74	3.74	f-11
2310 & 2350 Homestead Rd.	10/20/2007	225	4.3	3.39	
Elephant Pharmacy	10/18/2007	21	1.5		
4470 El Camino Real	10/20/2007	31	2.21		
Village Court Shopping Center	10/18/2007	220	5.98	3.49	f-12
4546 El Camino Real	10/20/2007	153	4.16	2.43	
		Average peak	3.82	2.79	
		Min	1.5		
		Max	5.98	3.74	

See C. for corrected areas, which result in corrected Peak Demand.

Also, see the Addendum, which combines Tables A, B, and C. for clarity.

Note: The City encourages mixed uses in Commercial Neighborhood Districts and similar locations. Therefore, parking counts at locations, such as Foothill Plaza and Village Court include restaurants, coffee shops, grocery (Trader Joe's) and other uses beyond pure retail.

Footnote 11

Two buildings were not included in the earlier reported area at Foothill Plaza, (also known as Foothill Crossings.) The building containing Peet's Coffee among others, and the building containing Wells Fargo Bank and Starbucks were omitted. The areas of all 3 buildings must be used when counting the parking generated by all 3 buildings.

Footnote 12

A large building was not included in earlier reported area at Village Court. Village Court includes retail, restaurants and office. The lower office use may be offset by the higher restaurant use. The areas of both buildings must be used when counting the parking generated by both buildings.

See footnote 4 on page 2.

C.

Office Sites	Bldg. area provided to F&P from City	Corrected	
	Size (square feet)	Size (square feet)	
Packard Foundation 300 Second Street	20,632	21,400	
Multi-tenant office building 5150 El Camino Real	76,400	79,150	
Real estate offices 161 - 167 So. San Antonio Rd.	32,738		
Retail Sites			
Foothill Plaza 2310 & 2350 Homestead Rd.	52,315		
22356 & 22390 Homestead Rd	14,041	66,356	f-11
Elephant Pharmacy 4470 El Camino Real	14,004		
Village Court Shopping Center 4546 El Camino Real	36,800	63,012	f-12

Corrected areas (s.f.) per tax-payer/Title Company records

See the Addendum, which combines Tables A, B, and C, for clarity.

Footnote 11

Two buildings were not included in the earlier reported area at Foothill Plaza, (also known as Foothill Crossings.) The building containing Peet's Coffee among others, and the building containing Wells Fargo Bank and Starbucks were omitted. The areas of all 3 buildings must be used when counting the parking generated by all 3 buildings.

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A large building was not included in earlier reported area at Village Court. Village Court includes retail, restaurants and office. The lower office use may be offset by the higher restaurant use. The areas of both buildings must be used when counting the parking generated by both buildings.

See footnote 4 on page 2

161-167 San Antonio

DATE:10-17-07

RECORDER: MARWIN

	SEVILLE	FINANCIAL	HANDICAPPED	UNMARKED	LOWER LEVEL	TOTAL
# SPACES	41	41	2	6	39	129
9:00	15	11	0	1	9	36
9:30	17	17	0	2	11	47
10:00	21	21	0	2	10	54
10:30	17	19	0	4	12	52
11:00	18	20	0	2	12	52
11:30	21	24	0	3	13	61
12:00	27	20	0	4	12	63
12:30	24	22	0	3	15	64
1:00	24	26	0	4	17	71
1:30	22	24	0	5	14	65
2:00	26	24	0	5	14	69
2:30	26	22	0	6	17	71
3:00	35	27	0	3	19	84

161-167 San Antonio

DATE:10-18-07

RECORDER: MARWIN

	SEVILLE	FINANCIAL	HANDICAPPED	UNMARKED	LOWER LEVEL	TOTAL
# SPACES	41	41	2	6	39	129
9:00	11	9	0	1	8	29
9:30	15	14	0	6	9	44
10:00	18	16	0	6	10	50
10:30	20	15	0	6	12	53
11:00	22	19	0	3	12	56
11:30	20	23	0	4	14	61
12:00	24	20	0	3	12	59
12:30	22	22	0	4	10	58
1:00	23	24	0	5	15	67
1:30	25	26	0	4	17	72
2:00	31	17	0	6	12	66
2:30	27	23	0	5	11	66
3:00	30	23	0	5	13	71

2310-2350 Homestead Road
Foothill Plaza

DATE:10-18-07

RECORDER: A. LEONARD

# SPACES	UNMARKED	10 MIN	WELLS FARGO	MOTORCYCLE	HANDICAP	UNDEFINED	TOTAL
	298	3	6	4	9	45	365
11:00	166	2	5	0	3	33	209
11:30	178	2	5	0	2	33	220
12:00	190	2	5	0	5	36	238
12:30	172	3	5	0	3	40	223
1:00	196	2	5	0	4	41	248
1:30	187	3	5	0	3	34	232
2:00	193	2	6	0	5	29	235
2:30	177	2	6	0	6	30	221
3:00	170	3	6	0	6	23	208
3:30	177	3	5	0	4	27	216
4:00	172	3	6	0	3	28	212

Foothill Plaza

DATE:10-20-07

RECORDER: A. LEONARD

# SPACES	UNMARKED	10 MIN	WELLS FARGO	MOTORCYCLE	HANDICAP	UNDEFINED	TOTAL
	298	3	6	4	9	45	365
11:00	196	2	6	0	3	16	223
11:30	190	2	6	0	5	19	222
12:00	180	3	6	0	5	18	212
12:30	163	3	6	0	3	19	194
1:00	192	3	6	0	4	17	222
1:30	178	2	6	0	0	19	205
2:00	191	2	6	0	1	19	219
2:30	191	3	5	0	3	20	222
3:00	168	2	4	0	1	18	193
3:30	178	3	6	0	2	19	208
4:00	198	3	5	0	2	17	225

Apparently the "UNDEFINED" spaces are those at the rear of the building near Foothill.

4470 El Camino Real

Elephant Pharm

DATE:10-18-07

	UNMARKED	HANDICAP	TOTAL
# SPACES	65	3	68
11:00	15	0	15
11:30	9	0	9
12:00	15	0	15
12:30	21	0	21
1:00	18	1	19
1:30	19	1	20
2:00	17	1	18
2:30	16	0	16
3:00	17	0	17
3:30	16	0	16
4:00	15	0	15

Elephant Pharm

DATE:10-20-07

	UNMARKED	HANDICAP	TOTAL
# SPACES	65	3	68
11:00	25	0	25
11:30	31	0	31
12:00	24	0	24
12:30	9	0	9
1:00	26	0	26
1:30	20	0	20
2:00	21	0	21
2:30	25	0	25
3:00	21	0	21
3:30	25	0	25
4:00	14	0	14

4546 El Camino Real

Village Court

DATE:10-18-07

RECORDER JIM LEONARD

	UNMARKET	15 MIN	HERITAGE	30 MIN	HANDICAP	TOTAL
# SPACES	266	3	10	2	4	285
11:00	142	1	1	1	0	145
11:30	163	1	1	2	1	168
12:00	185	2	3	3	2	195
12:30	200	3	3	3	1	210
1:00	212	2	3	1	2	220
1:30	190	2	2	1	1	196
2:00	154	2	1	2	1	160
2:30	140	1	2	1	0	144
3:00	127	1	2	1	0	131
3:30	124	2	1	2	1	130
4:00	125	1	1	2	1	130

Village Court

DATE:10-20-07

RECORDER JIM LEONARD

	UNMARKET	15 MIN	HERITAGE	30 MIN	HANDICAP	TOTAL
# SPACES	266	3	10	2	4	285
11:00	106	1	1	1	0	109
11:30	106	1	2	2	1	112
12:00	116	3	4	2	1	126
12:30	113	3	5	1	1	123
1:00	144	3	3	1	2	153
1:30	140	2	3	1	1	147
2:00	128	1	2	2	0	133
2:30	88	1	2	1	0	92
3:00	88	1	1	1	1	92
3:30	80	1	1	2	1	85
4:00	70	1	1	2	1	75

5150 ECR		DATE:10-17-07	
	UNMARKED HANDICAP	TOTAL	
# SPACES	290	4	294
9:00	68	0	68
9:30	91	0	91
10:00	106	0	106
10:30	119	0	119
11:00	134	0	134
11:30	132	0	132
12:00	129	0	129
12:30	125	1	126
1:00	127	0	127
1:30	131	0	131
2:00	134	0	134
2:30	148	0	148
3:00	159	0	159

5150 ECR		DATE:10-18-07	
	UNMARKED HANDICAP	TOTAL	
# SPACES	290	4	294
9:00	64	0	64
9:30	73	0	73
10:00	99	0	99
10:30	114	0	114
11:00	126	0	126
11:30	131	0	131
12:00	137	0	137
12:30	138	0	138
1:00	144	0	144
1:30	141	0	141
2:00	146	0	146
2:30	151	0	151
3:00	157	0	157

300 2nd Street

PACKARD

DATE:10-17-07

RECORDER HARVEY

	UNMARKET	VISITOR	HANDICAP	UNMARKET	MAIL VAN	HANDICAP	TOTAL
# SPACES	7	10	1	63	1	3	85
9:00	5	1	0	20	0	0	26
9:30	5	3	0	21	0	0	29
10:00	5	3	0	21	0	0	29
10:30	4	2	0	22	0	0	28
11:00	3	3	0	22	0	0	28
11:30	5	4	0	21	0	0	30
12:00	3	3	0	22	0	0	28
12:30	4	3	0	22	0	0	29
1:00	4	3	0	21	0	0	28
1:30	4	4	0	21	0	0	29
2:00	4	6	0	22	0	0	32
2:30	4	6	0	22	0	0	32
3:00	4	5	0	22	0	0	31

PACKARD

DATE:10-18-07

RECORDER HARVEY

	UNMARKET	VISITOR	HANDICAP	UNMARKET	MAIL VAN	HANDICAP	TOTAL
# SPACES	7	10	1	63	1	3	85
9:00	7	7	0	21	0	0	35
9:30	7	7	0	22	0	0	36
10:00	7	9	0	23	0	0	39
10:30	7	8	0	24	0	0	39
11:00	5	8	0	25	0	1	39
11:30	6	7	0	24	0	0	37
12:00	6	7	0	24	0	0	37
12:30	5	7	0	24	0	0	36
1:00	5	8	0	24	0	0	37
1:30	5	5	0	24	0	0	34
2:00	4	4	0	23	0	0	31
2:30	4	4	0	23	0	0	31
3:00	4	4	0	23	0	0	31

Los Altos Office and Retail Parking Standards

Addenda to June 2, 2009 F&P Memo

5/14/15

This table combines Appendix A, B, and C, in one table, with calculations to support corrections
 Note that calculations are for stand-alone sites. These should be reduced for shared parking uses.

A. Office Sites
C.

Location	Area Square Feet	Survey Dates	Peak Occupancy Spaces	Corrected Peak Demand Spaces/1,000 SF
Packard Foundation	21,400	10/17/07	32	1.50
200 Second Street		10/18/07	39	1.82
Multi-tenant office bldg.	79,150	10/17/07	159	2.01
5150 El Camino Real		10/18/07	157	1.98
Real Estate offices	32,738	10/17/07	84	2.57
161 & 167 San Antonio Rd.		10/18/07	72	2.20
Totals	133,288		Average peak	2.01
			Min.	1.50
			Max.	2.57

(No seasonal correction for office)

	Average Peak	Circulation Factor	Parking Ratio
Circulation Factor increase	2.01	0.90	2.23

B. Retail Sites

Foothill Plaza total	66,356	10/18/07	248	3.74
2310 & 2350 Homestead Rd.	52,315	10/20/07	225	3.39
22356 & 22390 Homestead	14,041			
Elephant Pharmacy	14,004	10/18/07	21	1.50
4470 El Camino Real		10/20/07	31	2.21
Village Court Shopping Center	63,012	10/18/07	220	3.49
4546 El Camino Real		10/20/07	153	2.43
Totals	209,728		Average peak	2.79
			Min.	1.5
			Max.	3.74

Seasonal Correction	Average Peak	Oct. to Dec.	Increase amt.	Total
Increase from Oct. to Dec.	2.79	15.00%	0.42	3.21
		Circulation Factor		Parking Ratio
Circulation Factor increase	3.21	0.90		3.57

Area by building

Lcn.	Address	Major Tenants	Area in Sq. ft.	% of Reported Area
Foothill Plaza				
	2310 Homestead Rd.	Trader Joe's etc.	29,902	57%
	2350 Homestead Rd.	Rite Aid, Chain Reaction	22,413	43%
	Subtotal	Previously Reported	52,315	100%
	22356 Homestead Rd.	Peets, Subway, etc.	7,257	14%
	22390 Homestead Rd.	Wells Fargo, Starbucks	6,784	13%
	Subtotal	Previously Omitted	14,041	27%
Total Foothill Plaza or Foothill Crossings			<u>66,356</u>	<u>127%</u>

