



MEMORANDUM

DATE: June 8, 2020
To: Pietro Martinez, Pacific Medical Buildings
FROM: Arthur Black, LSA
SUBJECT: Main Street Medical Office Building Parking Management Plan

LSA is pleased to present this parking management plan for the Main Street Medical Office Building Project (project) in Orange, California. The project site is 331, 353, and 393 Main Street. The proposed project would demolish the existing 20,882 square foot (sf) of medical office building and an existing 12-room motel. The proposed project would construct a new four-story 137,500 sf medical office building on the cleared parcels. Medical outpatient services would occupy the Medical Office Building. Five floors of subterranean parking garage, including 550 spaces, would provide parking for the new building. The upper floors of the subterranean parking garage would be reserved for customers, while employees and staff would be permitted to park on the lower floors.

This memorandum identifies the anticipated parking demand for the proposed medical office building, compares the anticipated parking demand to the parking supply, and outlines the parking management plan for managing the parking supply.

Municipal Code Parking Requirements

Orange Municipal Code Section 17.34.060 identifies a parking requirement for medical and dental offices of 5 spaces per 1,000 sf. Table A identifies the parking requirement for the project. As Table A shows, application of the Orange Municipal Code rates would require 688 parking spaces for the project. The project provides 550 parking spaces on site. In addition to vehicle parking spaces, the project would provide motorcycle parking and bicycle parking (14 short-term racks and 15 long-term enclosures) consistent with Orange Municipal Code requirements and California Green Building Code recommendations. Although not required by the Orange Municipal Code, the project would provide an off-street drop-off/pickup area for taxis and rideshare vehicles with space for approximately five vehicles. The presence of these alternatives to vehicle parking may reduce parking demand on-site. Based on the City's Code requirements, a parking deficit of 138 spaces would occur on site. As demonstrated below, however, based on surveyed parking generation rates for medical office buildings, the project's parking supply is anticipated to be able to accommodate the parking demand.

Table A: Municipal Code Parking Requirements

Land Use	Parking Space Rates per Orange Municipal Code Section 17.34.060	Project Parking Requirements		
		Size	Unit	Required Parking Spaces
Medical and Dental Offices	5 spaces per TSF	137,500	TSF	688
			TOTAL	688

TSF = thousand square feet

Parking Generation—Published Survey Data

The Institute of Transportation Engineers (ITE) *Parking Generation*, 4th edition, provides information based on four decades of research. Many medical-dental office sites have been researched in recent years. Of the 77 studies conducted by ITE, eight sites were located in Orange County. Medical-dental offices were revealed to generate an average peak-period parking demand for 4 spaces per 1,000 sf of gross floor area. In January 2019, ITE *Parking Generation*, 5th edition was published with a total of 117 data points for medical-dental office sites. The revised data indicates an average parking demand for 3.23 spaces per 1,000 sf of gross floor area and a 95 percent confidence interval between 3.04 and 3.42 spaces per 1,000 sf. For medical offices, 11:00 a.m. represented the highest-demand hour of the day.

Parking Generation—Orange County Surveys

Katz, Okitsu & Associates (KOA Corporation) prepared a study dated January 24, 2007, in which the firm surveyed three medical office sites in Orange County near hospitals: Santa Ana Tustin Medical Center in Santa Ana, St. Joseph Outpatient Pavilion in Orange, and Val Mesa Medical Building in Fullerton. The observed peak-hour parking rates at these locations were all below 4 spaces per 1,000 sf of gross floor area.

LSA has previously prepared reports on medical office parking rates in Orange County. While these facilities are smaller than the proposed project, parking ratios are normalized for size and the information is provided here for informational purposes. Results of the parking surveys are displayed in Table B. As seen in the south Orange County surveys, all three sites have a parking demand of fewer than 4 spaces per 1,000 sf.

In 2016, LSA had parking accumulation data collected at two Hoag Health Centers in central Orange County. Hoag Medical Group Newport Beach at 500–538 Superior Avenue in Newport Beach had a total of 330,611 sf of medical offices, including a 2,775 sf café. In addition to providing parking for its medical offices, Hoag Medical Group Newport Beach has entered into reciprocal parking agreements with nearby businesses that permit employees and patrons to use a total of 248 Hoag Health Center parking spaces during business hours on weekdays. As it was not possible to differentiate these vehicles from off-site sources, the parking ratio calculated for this property is higher than the medical office generated parking demand. Hoag Medical Group Huntington Beach at 19582 Beach Boulevard in Huntington Beach had a total of 95,999 sf of medical offices; however, at the time the parking surveys were taken, only 83,015 sf (86 percent) were occupied.

Table B: South Orange County Surveyed Medical Office Parking Rates

	Pacific Park Medical 21,438 sf		Bristol Park Medical 33,731 sf		Mission Hills Medical 30,450 sf	
	Parked Cars	Parking Rate	Parked Cars	Parking Rate	Parked Cars	Parking Rate
7:00 AM	4	0.19	1	0.03	6	0.20
8:00 AM	13	0.61	25	0.74	16	0.53
9:00 AM	24	1.12	56	1.66	67	2.20
10:00 AM	38	1.77	72	2.14	93	3.05
11:00 AM	27	1.26	72	2.14	97	3.19
12:00 PM	26	1.21	65	1.93	95	3.12
1:00 PM	30	1.40	52	1.54	63	2.07
2:00 PM	38	1.77	65	1.93	84	2.76
3:00 PM	37	1.73	56	1.66	97	3.19
4:00 PM	37	1.73	57	1.69	104	3.42
5:00 PM	21	0.98	39	1.16	55	1.81
6:00 PM	8	0.37	16	0.47	17	0.56
7:00 PM	3	0.14	1	0.03	6	0.20

Note: **Bold** text indicates the highest calculated parking rate.
sf = square feet

The results of the parking surveys are displayed in Table C. As seen in Table C, the parking rate at Hoag Health Center Newport Beach was highest during the 11:00 a.m. hour, with a rate of 3.80 spaces per 1,000 sf. For Hoag Health Center Huntington Beach, the parking rate was highest during the 10:00 a.m. peak hour, with a rate of 3.67 spaces per 1,000 sf.

Table C: Hoag Health Centers Surveyed Medical Office Parking Rates

	Hoag Health Center Newport Beach		Hoag Health Center Huntington Beach	
	Parked Cars	Parking Rate	Parked Cars (86 percent occupied)	Parking Rate for Occupied Floor Area
7:00 AM	234	0.72	27	0.32
8:00 AM	651	2.01	131	1.58
9:00 AM	1,105	3.40	258	3.13
10:00 AM	1,188	3.66	303	3.67
11:00 AM	1,234	3.80	283	3.43
12:00 PM	1,088	3.35	263	3.19
1:00 PM	1,048	3.23	238	2.89
2:00 PM	1,154	3.56	292	3.54
3:00 PM	1,062	3.27	294	3.56
4:00 PM	876	2.70	278	3.36
5:00 PM	477	1.47	137	1.66
6:00 PM	189	0.58	80	0.97
7:00 PM	68	0.21	36	0.44
8:00 PM	49	0.15	21	0.25

BOLD = highest calculated parking rate

Similar to the south Orange County surveys, the two Hoag Health Centers sites experienced a parking demand of fewer than 4 spaces per 1,000 sf.

Parking Generation—Similar Facility in Orange

The project applicant owns and operates the Center for Cancer Prevention and Treatment and Medical Tower at 1010 La Veta Avenue. That building contains a total of 215,435 sf of medical offices including an 85,498 sf cancer center. The parking garage supporting that medical office building contains 1,085 parking spaces. However, surveys in 2019 showed an average minimum of 238 unused parking spaces on typical days. An average parking demand for 847 spaces (1,085 supplied minus 238 vacant spaces) means that the parking rate is 3.93 spaces per 1,000 sf (847 spaces/215,435 sf).

Parking Demand Summary

To summarize the parking demand data provided above:

- ITE *Parking Generation* for Medical/Dental Office—4 spaces per 1,000 sf and 3.23 spaces per 1,000 sf
- Six surveys of Orange County medical office buildings less than 75,000 sf—3.42 spaces per 1,000 sf or less
- Three surveys of Orange County medical office buildings greater than 75,000 sf—3.67, 3.80, and 3.93 spaces per 1,000 sf

Based on this parking survey data, LSA anticipates that parking demand at the proposed project will not exceed 3.93 spaces per 1,000 sf. Therefore, the 137,500 sf medical office building would require no more than 541 parking spaces. As currently designed with standard parking stalls, the five-story parking garage would provide 550 parking spaces. This presents a parking surplus of at least 9 spaces. It should be noted that this is the minimum parking surplus that would be expected at the time of peak parking demand; a greater parking surplus would be expected during the remainder of the day.

Parking Management Plan

The entrance to the parking garage would be gated. The parking gate would be operated either by a monthly parking key card provided to employees/staff or by taking a parking ticket. A validation program would be available to lessees of space within the medical office building. Employees/staff with monthly parking would use their key card to activate the exit gate. Customers with validated parking would be able to proceed directly to the exit gate. Customers without validated parking would use a pay-before-exit machine before returning to their cars. It is the operational plan to mirror parking fees at the adjacent St. Joseph's parking garage to avoid providing an incentive for off-site parking.

The lowest levels of the parking garage are planned to be used for employee and staff parking. The upper levels, which are closest to the garage entrance, would serve customers. The location of employee/staff parking would be specified in lease agreements. Because parking rates for the

proposed project's parking garage would mirror the adjacent St. Joseph's parking garage, no incentive would be provided for customers to park outside their destination's parking garage. This would be further supported by the possibility of validated parking only for cars parked in the appropriate location. The proposed project's customers (visitors of a medical office building) are particularly anticipated to seek parking spaces in the proposed project's parking garage.

Summary

Nationwide studies (i.e., ITE *Parking Generation*) determined that the parking generation rate for medical offices is fewer than 4 spaces per 1,000 sf. Surveys conducted in Orange County at multiple sites at multiple times identified parking generation rates of fewer than 4 spaces per 1,000 sf. Parking demand data at a similar and nearby site in 2019 also indicated a parking rate of fewer than 4 spaces per 1,000 sf. As such, the proposed project is anticipated to have a lower parking demand than calculated by the Orange Municipal Code. Applying the highest observed parking rate to the proposed 137,500 sf medical office building results in anticipated peak parking demand for 541 spaces. The project's parking garage will provide 550 parking spaces, which is greater than the anticipated parking demand. The proposed project will also provide motorcycle parking and bicycle parking according to the City's requirements. Off-street rideshare drop-off/pickup areas provided in the site plan may further reduce parking demand.

REFERENCES

Institute of Transportation Engineers. 2010. *Parking Generation*. 4th ed.

_____. 2019. *Parking Generation*. 5th ed.