Dental OfficeParking Occupancy Analysis Report

Prepared by:



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PURPOSE

The purpose of this study is to address the City of Naperville staff's concern regarding the parking availability for the proposed site.

The parking occupancy study documents the analysis and findings for a proposed dental office at 2323 Naperville Road, as part of the Danada Building, a multi-office purposed building.

EXISTING CONDITIONS

The dental office space will be located at Suite 110, for a total square footage of 1,446 S.F. Based on the info provided by the building administration, the total square footage of Danada Center is approximately 44,100 S.F., with 5,200 S.F. of office space currently empty.

The dental office will include four consultation rooms, and the anticipated number of staff at any time is four people. The intended hours of operations are Monday between noon and 6 PM, and Tuesday, Thursday and Friday between 9 AM and 5 PM.

Naperville Road is a north-south arterial (northeast to southwest in the area). Its cross-section is 70 feet, and operates as two lanes in each direction, plus either a painted median or exclusive left turn lanes in the center.

The access to the parking lot surrounding the building is directly from Naperville Road via an unsignalized T intersection to the west, through a 38-feet wide access consisting of three traffic lanes (one lane in and two lanes out).

The Danada Center parking lot has a total capacity of 173 spaces. Of these, 46 spaces are designated for patron/customer use only, while the remaining 127 spaces are reserved for the building owner and existing businesses.

DATA COLLECTION AND PARKING OCCUPANCY

The building has allocated four parking spaces to the dental office, including one accessible space. However, considering the four employees and the potential for all four consultation rooms to be occupied simultaneously (with four patients), the dental office ideally requires a total of eight parking spaces.

InNova did a parking study to identify the occupancy of the parking lot during normal business hours.

InNova technicians installed video cameras (Miovision technology) to monitor the number of vehicles entering and exiting the Danada Center parking lot. Data collection occurred between 8:00 AM and 8:00 PM on Wednesday, May 8th, and Thursday, May 9th, 2024.

The data, initially collected in 15-minute intervals (see Appendix), was aggregated into 60-minute intervals for simplified analysis. The results are presented in the following two tables, one for each day of observation.

The hourly occupancy was calculated by considering the initial number of vehicles in the lot at the start of data collection and then adding and subtracting vehicles as they entered and exited. The "free parking spaces" column indicates the difference between the total parking capacity (173 spaces) and the number of occupied spaces. The "parking occupancy" column represents the ratio of occupied spaces to total spaces.

Wednesday, 5/8/2024								
Time	Vehicles In	Vehicles Out	Occupied Parking Spaces	Free Parking Spaces	Parking Occupancy %			
8:00 AM	33	9	36	137	21			
9:00 AM	28	13	51	122	29			
10:00 AM	23	25	49	124	28			
11:00 AM	25	24	50	123	29			
12:00 PM	26	28	48	125	28			
1:00 PM	13	20	41	132	24			
2:00 PM	23	10	54	119	31			
3:00 PM	26	26	54	119	31			
4:00 PM	23	22	55	118	32			
5:00 PM	18	39	34	139	20			
6:00 PM	2	36	0	173	0			
7:00 PM	4	2	2	171	1			
Note: 12 ve	Note: 12 vehicles in the parking lot at 8 AM							

Thursday, 5/9/2024								
Time	Vehicles In	Vehicles Out	Occupied Parking Spaces	Free Parking Spaces	Parking Occupancy %			
8:00 AM	29	15	28	145	16			
9:00 AM	21	25	24	149	14			
10:00 AM	17	21	20	153	12			
11:00 AM	16	20	16	157	9			
12:00 PM	21	15	22	151	13			
1:00 PM	16	14	24	149	14			
2:00 PM	13	14	23	150	13			
3:00 PM	12	22	13	160	8			
4:00 PM	13	3	23	150	13			
5:00 PM	8	14	17	156	10			
6:00 PM	8	22	3	170	2			
7:00 PM	0	3	0	173	0			
Note: 14 vehicles in the parking lot at 8 AM								

CONCLUSIONS

Based on a two-day observation, Danada Center parking lot has a comfortable capacity to handle additional parking needs for the proposed dental office.

At its peak, the parking lot occupancy reached only 32%. This translates to at least 118 parking spaces readily available at any given time during the observation period.

Therefore, accommodating the dental office's parking requirements won't negatively impact the parking availability for other tenants or businesses at Danada Center.