



MEMORANDUM

To: Chuck Gilmore
Shopcore Properties

From: Elizabeth Chau, P.E.
Fareed Pittalwala, P.E.
Kimley-Horn and Associates, Inc.

Date: June 17, 2022

Subject: Brookhurst and Adams Unit #39 Parking and Queuing Analysis

Shopcore is proposing to retrofit the existing Unit 39 building (20100 Brookhurst Street) into a new drive-through restaurant building (“Project”). Kimley-Horn conducted a parking and drive-through queuing analysis to determine any potential impact this proposed project will have on the existing parking for the shopping center, as well as any potential drive-through queuing or site circulation impacts. This memorandum presents the assumptions and results of these analyses.

Project Description

The Project is located within the Business Properties Shopping Center on the southwest corner of Brookhurst Street and Adams Avenue in Huntington Beach, California. As shown in **Figure 1**, Unit 39 is located adjacent to Brookhurst Street, approximately 540 feet south of Adams Avenue. Unit 39 shares parking with other uses within the commercial center.

The proposed site plan is included as **Attachment A**. The Project is proposing to retrofit the existing 7,000 square-foot building into 3,415 square-foot drive-through restaurant with an outdoor patio of 1,353 square feet. The project will continue to use the existing Brookhurst Street driveway access located approximately 660 feet south of Adams Avenue.

It is anticipated that the hours of operation will be from 11:00 AM to 11:00 PM, Sundays through Saturdays. It is estimated the number of on-site employees will be between 10-20 employees, depending on the shift.

TRIP GENERATION

A trip generation analysis was conducted to determine the net number of trips the shopping center would generate with the Project. The trip generation was determined based on data from Institute of Transportation Engineer’s (ITE) publication, *Trip Generation, 11th Edition*.

An internal capture reduction was considered to account for the interaction of other uses within the shopping center. The internal capture reduction was determined based on ITE *Trip Generation Handbook, 3rd Edition*, however, the resulting internal capture exceeds the City’s maximum of 5%, therefore a maximum internal capture of 5% was assumed.



Figure 1: Project Site

Pass-by trip reduction were also applied for retail and restaurant uses to account for trips that were already traveling along Brookhurst Street or Adams Avenue, but would likely stop at these uses. The pass-by from the ITE *Trip Generation Handbook, 3rd Edition* with a maximum of 50% reduction were assumed. Also, ITE *Trip Generation Handbook* does not include pass-by reduction for weekday daily trips, therefore the average of the AM and PM peak hours were used. *Trip Generation Handbook* also does not have pass-by reduction for Land Use 930 Fast Casual Restaurant, therefore pass-by reduction for the similar use of Land Use 934 Fast-Food Restaurant with Drive-Thru were assumed.

Table 1 presents the overall trip generation for the entire shopping center. With the proposed project, the shopping center will generate net new 662 daily, 61 AM peak hour, and 40 PM peak hour trips.

Table 1: Shopping Center Trip Generation

ITE Land Use Code	Land Use	Units	Daily Rate/Equation	AM Peak			PM Peak					
				In%	Out%	Rate/Equation	In%	Out%	Rate/Equation			
712	Small Office Building	1,000 Sq Ft	14.39	0.82	0.18	1.67	0.34	0.66	2.16			
720	Medical-Dental Office Building, Stand Alone	1,000 Sq Ft	$T = 42.97(X) - 108.01$	0.79	0.21	$\ln(T) = 0.90\ln(X) + 1.34$	0.30	0.70	$T = 4.07(X) - 3.17$			
821	Shopping Plaza (40-150k), With Supermarket	1,000 Sq Ft	94.49	0.62	0.38	3.53	0.48	0.52	9.03			
930	Fast Casual Restaurant	1,000 Sq Ft	97.14	0.50	0.50	1.43	0.55	0.45	12.55			
932	High-Turnover (Sit-Down) Restaurant	1,000 Sq Ft	107.20	0.55	0.45	9.57	0.61	0.39	9.05			
934	Fast-Food Restaurant w/ Drive-Thru	1,000 Sq Ft	467.48	0.51	0.49	44.61	0.52	0.48	33.03			
Scenario	ITE Land Use Code	Land Use	Size	Units	Daily Trips	AM Peak			PM Peak			
						In	Out	Total	In	Out	Total	
Existing	712	Small Office Building	7.000	1,000 Sq Ft	101	10	2	12	5	10	15	
	720	Medical-Dental Office Building, Stand Alone	17.885	1,000 Sq Ft	659	40	11	51	21	49	70	
	821	Shopping Plaza (40-150k), With Supermarket	75.277	1,000 Sq Ft	7,113	165	101	266	326	354	680	
	930	Fast Casual Restaurant	19.651	1,000 Sq Ft	1,909	14	14	28	136	111	247	
	932	High-Turnover (Sit-Down) Restaurant	5.502	1,000 Sq Ft	590	29	24	53	31	19	50	
	934	Fast-Food Restaurant w/ Drive-Thru	3.234	1,000 Sq Ft	1,512	73	71	144	56	51	107	
	Existing Subtotal					11,884	331	223	554	575	594	1,169
	Internal Capture (5%) ¹					-594	-17	-11	-28	-29	-30	-59
	Existing External Subtotal					11,290	314	212	526	546	564	1,110
	Shopping Plaza [Daily: 20% AM: 0% PM: 40%] ²					-1,351	0	0	0	-124	-135	-258
	Fast Casual [Daily: 50% AM: 50% PM: 50%] ³					-907	-7	-7	-13	-65	-53	-117
	High-Turnover (Sit-Down) Restaurant Pass-By [Daily: 22% AM: 0% PM: 43%] ²					-121	0	0	0	-13	-8	-20
Fast-food Restaurant w/ Drive-Thru ⁴ [Daily: 50% AM: 50% PM: 50%] ^{2,4}					-718	-35	-34	-68	-27	-24	-51	
Total Existing Generated Trips					8,193	273	172	444	318	345	663	
Proposed	720	Medical-Dental Office Building, Stand Alone	17.885	1,000 Sq Ft	659	40	11	51	21	49	70	
	821	Shopping Plaza (40-150k), With Supermarket	75.277	1,000 Sq Ft	7,113	165	101	266	326	354	680	
	930	Fast Casual Restaurant	19.651	1,000 Sq Ft	1,909	14	14	28	136	111	247	
	932	High-Turnover (Sit-Down) Restaurant	5.502	1,000 Sq Ft	590	29	24	53	31	19	50	
	934	Fast-Food Restaurant w/ Drive-Thru	6.649	1,000 Sq Ft	3,108	151	146	297	114	106	220	
	Proposed Subtotal					13,379	399	296	695	628	639	1,267
	Internal Capture (5%) ¹					-669	-20	-15	-35	-31	-32	-63
	Proposed External Subtotal					12,710	379	281	660	597	607	1,204
	Shopping Plaza [Daily: 20% AM: 0% PM: 40%] ²					-1,351	0	0	0	-124	-135	-258
	Fast Casual [Daily: 50% AM: 50% PM: 50%] ³					-907	-7	-7	-13	-65	-53	-117
	High-Turnover (Sit-Down) Restaurant Pass-By [Daily: 22% AM: 0% PM: 43%] ²					-121	0	0	0	-13	-8	-20
	Fast-food Restaurant w/ Drive-Thru ⁴ [Daily: 50% AM: 50% PM: 50%] ^{2,4}					-1,476	-72	-69	-141	-54	-50	-105
Total Proposed Generated Trips					8,855	301	205	506	342	362	703	
Net New Trips					662	28	33	61	23	17	40	

Source: ITE Trip Generation, 11th Edition; ITE Trip Generation Handbook, 3rd Edition

¹ City allows a maximum internal capture of 5%.

² ITE Trip Generation Handbook, 3rd Edition does not include pass-by reduction for daily trips, therefore the average percentage of the AM and PM peak hours were assumed.

³ ITE Trip Generation Handbook, 3rd Edition does not include pass-by reduction for Land Use 930 Fast Casual Restaurant, therefore the pass-by reduction for the similar land use, Land Use 934 were

⁴ City allows a maximum pass-by reduction of 50%.

Parking Analysis

The proposed project will continue to share parking with other uses within the commercial center. A parking analysis was conducted to determine if the Project’s impact on the parking supply and parking demand for the shopping center.

PARKING SUPPLY

The parking supply was evaluated to determine if the shopping center would still provide adequate parking required by the City.

Parking Inventory

Currently the shopping center provides 751 parking stalls. As shown in **Table 2**, the Project will change the parking supply by removing and restriping existing parking north of the building, as well as adding spaces on the east of building, resulting in a net change of -21 spaces area and a new site inventory of 730.

Table 2: Change to Parking Inventory

	Parking Spaces
Net Change	-21
Existing Inventory	751
New Site Inventory	730

City Parking Requirements

The number of parking spaces were determined based on Chapter 231.04 of the City of Huntington Beach Municipal Code. The minimum parking requirements for the land uses in presented in the shopping center are shown in **Table 3**.

Table 3: City Parking Space Requirements

Land Use	Space Requirement
General Retail Store	1 space per 200 square feet
Personal Services	1 space per 200 square feet
Personal Enrichment Services	1 space per 200 square feet
Restaurants	1 space per 100 square feet
Banks	1 space per 200 square feet
Medical and Dental Offices	1 space per 175 square feet
Grocery Retail	1 space per 200 square feet
Animal Services	1 space per 200 square feet
Business Office	1 space per 250 square feet

Based on existing land uses, as of September 21, 2021, the parking requirements for the land uses for the entire site equates to 821 spaces, which the existing supply is 70 spaces deficient. Detail calculation

are included in **Attachment B**. As shown in **Table 4**, the proposed project would result in the entire site being 111 spaces deficient.

Table 4: Change to Required Parking Spaces

	Land Use	Space Requirement	Square Footage	# Required Parking Spaces
Existing	Business Office	1 space per 250 square feet	7,000	28
Proposed	Restaurants	1 space per 100 square feet	4,768*	48
Difference (Proposed – Existing)				+20
Existing Site Parking Requirements				821
New Site Parking Requirements				841
Proposed Parking Inventory				730
Surplus (+) / Deficient (-)				-111

*Includes both building (3,415 SF) and outdoor patio (1,353 SF).

PARKING DEMAND

A parking demand analysis was conducted to determine if the parking inventory would accommodate parking demand for the shopping center.

Parking Occupancy

Existing parking occupancy was collected on a Friday and Saturday every hour from 9:00 AM to 9:00 PM. Parking occupancy data was collected and summarized into four different parking areas as showed in **Figure 2**. A total of 751 parking spaces were surveyed in the study area. A break down of the different parking spaces types and number of spaces by parking area is summarized in **Table 5**.

Parking occupancy data was reviewed, and percent occupancy was calculated for each area. In addition, the weighted average based on number of parking stalls per area were calculated. At a parking occupancy of 85 percent, a parking facility has reached “practical capacity” or a balance point between parking supply and demand. If parking occupancy is greater than 85 percent, it may be difficult for drivers to find available parking and will have to circle or “cruise” to find a space. The hourly parking occupancy was reviewed for each parking area to identify which area reached or exceeded practical occupancy. Raw parking count data can be found in **Appendix C**.

Friday parking occupancy data is summarized in **Table 6**. Overall, the parking occupancy was below practical capacity, never exceeding 44 percent. Saturday parking occupancy data is summarized in **Table 7**. Overall, the parking occupancy was below practical capacity, never exceeding 44 percent.

Table 8 summarizes the change in parking demand for the Project based on data from Institute of Transportation Engineer’s (ITE) publication, *Parking Generation, 5th Edition*. These calculations resulted in the Project increasing parking demand by 24 vehicles on Friday and 31 vehicles on Saturday. This would result 353 occupied spaces (48% occupancy) during the Friday peak and 363 occupied spaces (50% occupancy) during the Saturday peak, which can be accommodated by the proposed 730 parking spaces for the shopping center.



Figure 2: Project Site and Parking Study Area

Table 5: Parking Occupancy Inventory by Parking Area

Parking Space Type	Parking Area				Total
	1	2	3	4	
Regular	145	224	161	146	676
Handicap	3	10	11	10	34
Curbside Pick-Up	-	4	-	3	7
MedPost Only	-	-	7	-	7
10 Minute Green Curb	-	-	11	11	22
15-Mintue Loading/Unloading	-	-	-	5	5
Total	148	238	190	175	751

Table 6: Existing Friday Parking Occupancy

Time	Zone 1		Zone 2		Zone 3		Zone 4		Grand Total	
Restriction	# Parked Vehicle	% Occupancy								
Spaces	148		238		190		175		751	
9:00 AM	14	9%	109	46%	22	12%	32	18%	177	24%
10:00 AM	19	13%	105	44%	29	15%	35	20%	188	25%
11:00 AM	37	25%	136	57%	43	23%	39	22%	255	34%
12:00 PM	33	22%	131	55%	59	31%	61	35%	284	38%
1:00 PM	27	18%	125	53%	71	37%	76	43%	299	40%
2:00 PM	38	26%	125	53%	50	26%	87	50%	300	40%
3:00 PM	30	20%	134	56%	99	52%	66	38%	329	44%
4:00 PM	19	13%	135	57%	98	52%	59	34%	311	41%
5:00 PM	20	14%	121	51%	97	51%	55	31%	293	39%
6:00 PM	22	15%	135	57%	103	54%	63	36%	323	43%
7:00 PM	19	13%	114	48%	69	36%	58	33%	260	35%
8:00 PM	20	14%	101	42%	50	26%	47	27%	218	29%
9:00 PM	17	11%	75	32%	26	14%	29	17%	147	20%

Note: Maximum percent occupancy is bolded and shaded.

Table 7: Existing Saturday Parking Occupancy

Time	Zone 1		Zone 2		Zone 3		Zone 4		Grand Total	
Restriction	# Parked Vehicle	% Occupancy								
Spaces	148		238		190		175		751	
9:00 AM	12	8%	93	39%	22	12%	40	23%	167	22%
10:00 AM	13	9%	100	42%	30	16%	34	19%	177	24%
11:00 AM	17	11%	123	52%	38	20%	30	17%	208	28%
12:00 PM	15	10%	123	52%	82	43%	69	39%	289	38%
1:00 PM	16	11%	147	62%	85	45%	84	48%	332	44%
2:00 PM	15	10%	130	55%	70	37%	96	55%	311	41%
3:00 PM	30	20%	112	47%	76	40%	46	26%	264	35%
4:00 PM	24	16%	118	50%	59	31%	50	29%	251	33%
5:00 PM	21	14%	92	39%	60	32%	27	15%	200	27%
6:00 PM	30	20%	94	39%	44	23%	27	15%	195	26%
7:00 PM	23	16%	73	31%	21	11%	22	13%	139	19%
8:00 PM	20	14%	55	23%	14	7%	23	13%	112	15%
9:00 PM	19	13%	41	17%	12	6%	29	17%	101	13%

Note: Maximum percent occupancy is bolded and shaded.

Table 8: Project Parking Demand

	ITE Land Use	KSF	Friday		Saturday	
			Rate	Spaces	Rate	Spaces
Existing	712 – Small Office Building	7.000	2.56	18	0.00*	0
Proposed	934 – Fast-Food Restaurant with Drive-Through	3.415	12.41	42	9.18	31
Difference (Proposed – Existing)				+24		+31

*ITE *Parking Generation* does not have Saturday rates due to office land uses not generating any parking demand due to being closed on Saturdays.

Shared Parking

There is potential for shared parking between the multiple uses within the shopping center. Beneficial shared parking synergies exist between different uses whose peak operating times occur at different times of the day. Uses with non-concurrent peak operating characteristics can share all or a portion of the same parking supply without detriment to the other, rather than each providing their own distinct and complete parking supply. For example, the parking demand for office uses peaks during the mid-morning and mid-afternoon hours on a weekday, while the parking demand for a restaurant peaks during the dinner hour.

A shared parking analysis was conducted to determine the anticipated usage of the shopping center parking supply taking into account the non-concurrent parking peaks for the retail, restaurant, office, and other uses. The shared parking analysis utilized the Urban Land Institute (ULI) *Shared Parking Calculation Model*, which calculates shared parking demand based on the information and methodology in ULI's reference publication *Shared Parking, 3rd Edition*. This reference estimates shared parking results based on land uses, as well as collected data on parking fluctuation based on month and time of day for each land use.

The analysis found that the weekday peak occurred during evening peak (6 PM) in December with a shared parking reduction of 14% and total demand of 782 spaces, which exceeds the proposed available parking of 730 spaces. However, it should be noted that the December peak occurs during the peak shopping season prior to Christmas and that parking lots are not designed for December peak demand since the peak period occurs 2-3 weeks of the year and would result in excess parking inventory and underutilized parking for the majority of the year. For the remaining months, the weekday peak demand is between 495 and 718 spaces, which can be accommodated by the 730 spaces.

During the weekend, the peak occurred during the afternoon peak (1 PM) in December with a shared parking reduction of 24% and a total demand of 674 spaces, which can be accommodated by the proposed available parking of 730 spaces.

ULI Shared Parking outputs are provided in **Attachment D**.

PARKING CONCLUSION

The proposed project will continue to share parking with other uses within the commercial center. Project improvements will result in decreasing the existing 751 spaces by 21 spaces to a new total of 730. Based on the City's requirement the shopping center would be deficient by 111 spaces. However, the parking occupancy for the shopping center with the Project will be 50% or less. In addition, a shared parking analysis resulted in 14-24% shared parking reduction with an average peaking demand between 495 and 718. Based on the existing parking occupancy and shared parking analysis, the proposed parking supply should accommodate the proposed parking demand.

Drive-Through Queuing Analysis

A drive through analysis was conducted to evaluate the adequacy of the drive-through queuing capacity. The entrance to the drive-through will be located at the northeast corner of the project site and will wrap around the building in a counter-clockwise direction. The proposed project would provide two side-by-side entry lanes and two order boards, which would allow the restaurant to take orders from two customers at the same time. After the order boards, the two lanes would merge back into a single drive-through lane prior to the pay and pick-up window. For the outer lane there is approximately 120 feet from the opening of the two drive-through lane to the order board and approximately 150 feet from the order boards to the pick-up window, providing a total length of 270 feet. The inner lane has approximately 80 feet from the opening of the drive-through lane to the order boards and approximately 140 feet from the order boards to the pick-up window, providing a total length of 220 feet. When both lanes are operational the drive-through will provide a total of 490 feet. This would equate to a queuing capacity of 20 to 23 vehicles, assuming 20 to 25 feet per vehicle.

QSR MAGAZINE DRIVE-THRU STUDY

Since there are no existing data because the proposed project is one of the first drive-through restaurant for this particular chain, results from *The 2021 QSR magazine Drive-Thru Study*¹ was utilized for the drive-through queuing analysis. QSR magazine provides news and information related to quick-service and fast casual restaurant. Every year the magazine conducts a drive-through study which includes online surveys as well as onsite audits at the top 10 drive-thru chains throughout the U.S.

Table 9 presents the total time in the drive-through (wait time), and vehicles in line (queuing) for the top 10 chains. It should be noted that the study did not report the average wait time or queuing and the average is based on the values reported in **Table 9**. Excerpt of the QSR study is included as **Attachment E**.

¹ QSR Magazine, *The 2021 QSR magazine Drive-Thru Study*, <https://www.qsr magazine.com/reports/2021-qsr-magazine-drive-thru-study>, accessed Jan 2022

Table 9: QSR Drive-Thru Study Summary

Chain	Total Time in DriveThru* (sec)	Vehicles in Line (veh)
Arby's	374	0.56
Burger King	359	0.62
Carl's Jr/Hardee's	286	0.36
Chick-fil-A	541	4.00
Dunkin'	295	0.91
KFC	272	1.04
McDonald's	311	2.2
Starbucks	409	1.83
Taco Bell	268	0.72
Wendy's	341	1.11
Maximum	541	4.00
Average**	346	1.34

Source: QSR 2021 Drive-Thru Study

*Total time from entry to exit

Average was not presented in QSR report, but an average of the data presented in **Table 9.

CALCULATED QUEUE LENGTH

The drive-through queue length was determined using queuing analysis formulas published in the Institute of Transportation Engineers (ITE) *Transportation Planning Handbook, 3rd Edition* which is based on the M/M/1 single service model. This model is based on queuing theory and estimates the average queue length based on a Poisson distribution for arrival rate (A), and an exponential distribution for the service rate (S). The model also estimates the probability that a specific queue (i.e. drive-through storage length) would be exceeded.

Assumptions

Arrival Rate, A

The arrival rate, A, was based on the estimated trip generation for the proposed project. The Project trip generation was estimated using the industry standard Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. This reference estimates project trips based on survey data by land use category. The average peak hour of the generator rates for ITE Land Use 934, Fast-Food Restaurant with Drive-Through Window were used and summarized in **Table 10**.

Since it is unknown what percentage of project trips that would use the drive-through, as a conservative approach, 100% of inbound trips during the Saturday peak hour of the generator, or 96 vehicles per hour, was assumed.

Table 10: Project Trip Generation Summary

Time Period*	Total	In	Out
AM	172	89	83
PM	174	89	85
Saturday	188	96	92

Service Rate, S

The average service rate, S, was calculated based on the average and maximum wait time from for **Table 9** and the average arrival rate. For M/M/1, the average wait time is calculated by the following equation:

$$W = \frac{1}{S - A}$$

Where:

- W = Average total wait time (i.e. in queue & being served), hr
- S = Average service rate, veh/hr
- A = Average arrival rate, veh/hr

The equation was rearranged to solve for S. An assumed an average wait time of 5.76 minutes (346 seconds) resulted in a service rate of 106.4 vehicles per hour and 102.7 vehicles per hour with an assumed maximum wait time of 9.02 minutes (541 seconds).

Average Queue, Q

The average queue length was determined by the following equation:

$$Q = \frac{A}{S - A}$$

Where:

- Q = Average queue length, veh
- A = Average arrival rate, veh/hr
- S = Average service rate, veh/hr

Probability queue exceeds drive-through storage, p(Q>n)

The probability the drive-through queue will exceed the storage capacity was determined by the following equation:

$$p(Q > n) = \left(\frac{A}{S}\right)^{n+1}$$

Where:

- Q = Average queue length, veh
- n = Queuing capacity, veh
- A = Average arrival rate, veh/hr
- S = Average service rate, veh/hr

Results

The results of the drive-through queuing analysis are shown in **Table 11**. With an average wait time of 5.76 minutes (346 seconds), the probability that the queue will exceed the queuing capacity of 23 vehicles is 8% and the average queue length is 9.2 vehicles, which can be accommodated within the available storage. With a maximum wait time of 9.02 minutes (541 seconds), the probability that the queue will exceed the queuing capacity of 23 vehicles is 20% and the average queue length is 14.4 vehicles, which can be accommodated within the available storage.

Table 11: Drive-Through Queuing Summary

Variable	Average Wait Time	Maximum Wait Time
Average arrival rate, A (veh/hr)	96	96
Average service rate, S (veh/hr)	106.4	102.7
Average total wait time, W (min)	5.76	9.02
Average queue length, Q (veh)	9.2	14.4
Queue capacity, n (veh)	23	23
Probability Queue exceeds n, p(Q>n)	0.08	0.20

Site Circulation

MOBILE ORDER PICK-UP

Many fast-food restaurants have a mobile app where customers can order ahead for pick-up. Typically for these orders, customers would order ahead on the mobile app and specify a time when they will arrive to pick up their order. If the customer chooses to a curbside pickup, customers will park in the designated area and notify the restaurant they have arrived through the mobile app. Once the order is ready, an employee will bring the order to the customer’s vehicle.

The project site will accommodate mobile pick-up orders by providing five (5) parking spaces designated for mobile order pick-up located near the northeast corner of the restaurant. These parking spaces are located further away and will not impeded traffic entering the drive-through lane or the main parking lot area, but still close to the building where employees can easily bring orders to customer’s vehicles.

TRAFFIC MANAGEMENT PLAN

As discussed in the drive-through queuing analysis section, it is anticipated that the drive-through queue length of 23 vehicles will be sufficient for typical demand (9-14 vehicles) and no traffic management plan is necessary for day-to-day operations. However, the Project will work with the City to develop appropriate a traffic management plan for situations when demand is especially high such as during the grand opening period.

Conclusion

Shopcore is proposing to retrofit the existing Unit 39 building (20100 Brookhurst Street) into a new drive-through restaurant building (“Project”). Kimley-Horn conducted a parking, drive-through queuing analysis, and site circulation review to determine any potential impact this proposed project will on the existing parking for the shopping center, as well as any potential drive-through queuing impacts.

The proposed project will continue to share parking with other uses within the commercial center. Project improvements will result in decreasing the existing 751 spaces by 21 spaces to a new total of 730. Based on the City’s requirement the shopping center would be deficient by 111 spaces. However, parking occupancy for the shopping center with the Project is 50% or less. In addition, a shared parking analysis resulted in 14-24% shared parking reduction with an average peaking demand between 495 and 718. Based on the existing parking occupancy and shared parking analysis, the proposed parking supply should accommodate the proposed parking demand.

The proposed project would provide two side-by-side entry lanes and two order boards, which would be able to accommodate 20-23 vehicles. The drive-through queue length was determined using queuing analysis formulas published in the Institute of Transportation Engineers (ITE) Transportation Planning Handbook, 3rd Edition which is based on the M/M/1 single service model. The estimated queue length was calculated to be between 9 and 14 vehicles which can be accommodated by the available storage.

The site will also be providing five (5) dedicated parking spaces for mobile order pick-up. If need, the project will also develop and implement a traffic management plan to direct traffic during very high demand periods such as opening day operations.

ATTACHMENTS

Attachment A – Project Site Plan

Attachment B – City Parking Requirements Calculations

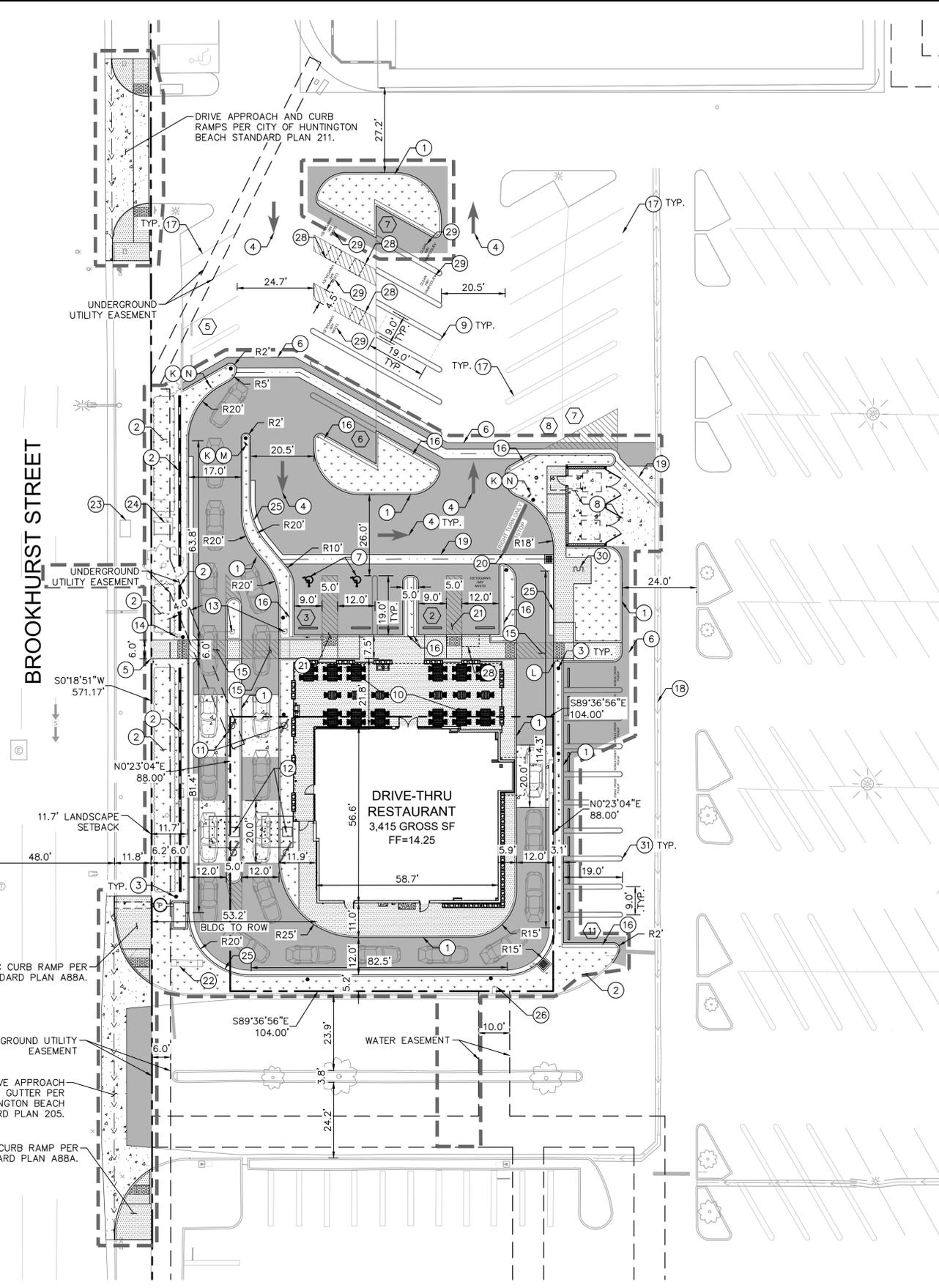
Attachment C – Existing Parking Counts

Attachment D – ULI Shared Parking Outputs

Attachment E – The 2021 QSR magazine Drive-Thru Study

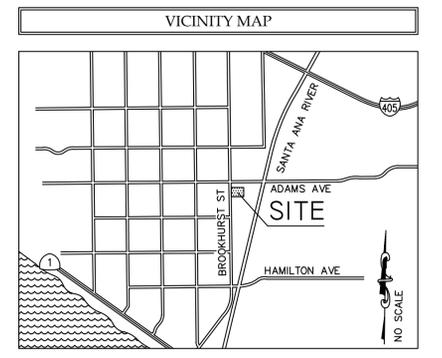
Attachment A – Project Site Plan

DRAWING NAME: K:\SAC_LDEV\197265009 - Shopcore Huntington Beach\08 CADD Exhibits\Planning\Preliminary Site Plan.dwg PRELIMINARY SITE PLAN June 16, 2022 4:30 PM BY: CORREIA, NINA



LEGEND:

- CENTER LINE
- PROPERTY LINE
- - - EASEMENT LINE
- - - APPROXIMATE LIMIT OF WORK LINE
- FLOW LINE
- [Pattern] LANDSCAPE/PLANTER AREA
- [Pattern] HEAVY DUTY ASPHALT PAVEMENT
- [Symbol] SIGN POST
- [Symbol] NUMBER OF PARKING SPACES
- [Pattern] STANDARD DUTY CONCRETE PAVEMENT
- [Pattern] HEAVY DUTY CONCRETE PAVEMENT



CONSTRUCTION NOTES:

- 1 CONCRETE CURB
- 2 32" HIGH MINIMUM DECORATIVE SCREENING WALL AND 20" MINIMUM HEIGHT LANDSCAPE BERM.
- 3 SITE BOLLARD
- 4 DIRECTIONAL MARKING PER PLAN
- 5 JOIN EXISTING SIDEWALK
- 6 JOIN EXISTING PAVEMENT
- 7 ADA PARKING MARKING
- 8 COVERED TRASH ENCLOSURE AND RECYCLING BIN STORAGE
- 9 STANDARD 60" PARKING STALL STRIPING.
- 10 OUTDOOR COVERED PATIO
- 11 PREVIEW BOARD
- 12 ORDER BOARD
- 13 HEADACHE BAR
- 14 EXISTING SITE LIGHTING
- 15 ACCESSIBLE PATH OF TRAVEL STRIPING.
- 16 18" WALK-OFF CURB
- 17 STANDARD 60" PARKING STALL TO REMAIN
- 18 VALLEY GUTTER TO REMAIN
- 19 VALLEY GUTTER
- 20 "STOP" BAR AND "RIGHT TURN ONLY" STRIPING
- 21 ACCESSIBLE PARKING STALL STRIPING
- 22 EXISTING MONUMENT SIGN TO REMAIN
- 23 EXISTING ELECTRIC VAULT TO REMAIN
- 24 EXISTING TRANSFORMER TO REMAIN
- 25 CURB & GUTTER
- 26 EXISTING 2" SERVICE AND WATER METER TO REMAIN
- 27 ACCESSIBLE PARKING SIGN
- 28 FUTURE EVCS STALL
- 29 DESIGNATED LOW-EMITTING, FUEL-EFFICIENT, CARPOOL/VANPOOL AND ELECTRIC VEHICLE STALL
- 30 BICYCLE RACK
- 31 STANDARD 90" PARKING STALL STRIPING.

SITE DATA:

PROJECT DESCRIPTION: SHOPCORE IS PROPOSING TO DEVELOP A 3,415 S.F. RESTAURANT WITH DUAL LANE DRIVE THROUGH, EXTERIOR PATIO, AND ASSOCIATED PARKING AREA IN HUNTINGTON BEACH. THE SITE IS CURRENTLY A VACANT OFFICE BUILDING AND PARKING LOT.

ADDRESS: 20100 BROOKHURST ST., HUNTINGTON BEACH, CA 92646

ZONING DISTRICT: CG - COMMERCIAL GENERAL

LAND USE: RESTAURANT WITH DRIVE THROUGH

FLOOD ZONE: ZONE X - AREA OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD

TOTAL DISTURBED AREA:	25,826 S.F.	(0.59 AC)	
TOTAL PAD AREA:	3,415 S.F.	(0.08 AC)	
PROPOSED PARCEL AREA:	9,152 S.F.	(0.21 AC)	

LOT COVERAGE			
TOTAL SITE AREA:	25,836 S.F.	(0.59 AC)	100%
BUILDING AREA:	3,415 S.F.	(0.08 AC)	13.2%
IMPERVIOUS AREA:	17,995 S.F.	(0.41 AC)	69.7%
LANDSCAPE AREA:	4,426 S.F.	(0.10 AC)	17.1%

PARKING/LANDSCAPE BUFFER

FRONT: 12.2'

REAR: 4.6'

SIDE (N): 0.0'

SIDE (S): 5.2'

QUEUEING SUMMARY:

QUEUE LENGTH FOR WEST DRIVE THRU LANE: 325.0'

QUEUE LENGTH FOR EAST DRIVE THRU LANE: 140.0'

TOTAL QUEUE LENGTH PROVIDED: 465.0'

PARKING SUMMARY:

3,415 S.F. BUILDING & 1,353 S.F. OUTDOOR PATIO (1 STALL/100 S.F.) = 48 STALLS REQUIRED PER CITY CODE.

ADA PARKING FOR 26-50 PARKING STALLS = 2 ADA PARKING STALLS REQUIRED PER 2019 CBC.

FUTURE EV FOR 26-50 PARKING STALLS = 4 FUTURE EV STALLS REQUIRED PER 2019 CA GREEN BUILDING STANDARDS.

1 FUTURE EV STALL MUST BE VAN ACCESSIBLE (PER 2019 CBC)

NUMBER OF REQUIRED DESIGNATED STALLS FOR LOW-EMITTING, FUEL-EFFICIENT, CARPOOL/VANPOOL AND ELECTRIC VEHICLES (PER 2019 CALIFORNIA GREEN BUILDING STANDARDS) = 6.

PARKING TABLE:	REQUIRED	PROPOSED
STANDARD	40	40
COMPACT (C)	-	-
MOTORCYCLE	-	-
DESIGNATED	6 (INCLUDES 4 EVCS)	6 (INCLUDES 4 EVCS)
ACCESSIBLE	2	2
TOTAL:	48	48*

***NOTE:** THERE IS A SHARED PARKING AGREEMENT AMONGST THE CENTER. PLEASE REFER TO THE PARKING EXHIBIT/MATRIX AND PARKING STUDY.

SIGN INFORMATION

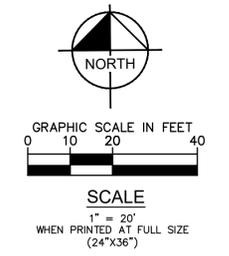
- (K) CMUTCD SIGN R5-1 - "DO NOT ENTER"
- (L) CMUTCD SIGN R1-5 - "YIELD TO PEDESTRIANS."
- (M) CMUTCD SIGN R3-5 - LEFT TURN ONLY
- (N) CMUTCD SIGN R3-5 - RIGHT TURN ONLY

LEGAL DESCRIPTION:

PARCEL 10, IN THE CITY OF HUNTINGTON BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON PARCEL MAP FILED IN BOOK 108, PAGES 40 AND 41 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

A.P.N. 155-181-24

SUBJECT	CODE SECTION	REQUIRED	PROPOSED
PARKING	231.04	RESTAURANT: 1 SPACE / 100 SF 3,415 SF BUILDING + 1,353 S.F. OUTDOOR PATIO = 4,768 SF = 48 SPACES	SHARED PARKING AMONGST CENTER (SEE PARKING MATRIX AND STUDY)
LANDSCAPING	211.06	MIN. 8% OF ENTIRE SITE: SITE = 25,826 S.F. @ 8% = 2,066 S.F.	4,426 S.F.
FLOOR AREA RATIO	211.06	MIN. 1.5 = 6,101 MAX BUILDING AREA FOR 9,152 S.F. PROPOSED PARCEL	2.68 = 3,415 S.F. BUILDING AREA
SETBACKS	-	-	-
FRONT	211.06	MIN. DIMENSION 10 FT	12 FT
SIDE STREET	211.06	MIN. DIMENSION 10 FT	N/A
BUILDING HEIGHT	211.06	MAX. HEIGHT 50 FT	24 FT



ISSUE	DATE	BY	DESCRIPTION	APP'VD
	01-26-2022		1ST CUP SUBMITTAL	
	04-29-2022		2ND CUP SUBMITTAL	
	03-17-2022		3RD CUP SUBMITTAL	

SOILS ENGINEER
FRED BUHAMDAN
TERRACON CONSULTANTS.
23041 AVENIDA DE LA CARLOTA, SUITE 350
LAGUNA HILLS, CA 92653
(949) 261-0051
PROJECT #60215236
DATE PREPARED:
NOVEMBER 30, 2021

BA
DRAWN BY
NC
CHECKED BY
FP
RECOMMENDED



KimleyHorn
555 CAPITOL MALL, SUITE 300
SACRAMENTO, CA 95814
(916) 858-5800
PREPARED UNDER THE DIRECT SUPERVISION OF:
Fareed Pittalwala
DATE: 06/16/2022
EXP. 09/30/2023

REVIEWED BY:
H.B. PLANNING DEPARTMENT
DATE:

PROJECT OWNER:
SHOPCORE PROPERTIES
233 S WACKER DRIVE, SUITE 4600
CHICAGO, IL 60606
(312) 798-5151
APN: 155-181-24
PROJECT ADDRESS:
20100 BROOKHURST STREET
HUNTINGTON BEACH, CA 92646
PROJECT ID: 2021-0027

CITY OF HUNTINGTON BEACH
PRELIMINARY SITE PLAN
CUP 22-004
20100 BROOKHURST ST. HUNTINGTON BEACH, CA 92646

SHEET 1
OF 5
SHEETS

Attachment B – City Parking Requirements Calculations

Brookhurst & Adams - Existing Parking Requirements

Sep-21

Address: South East Corner Brookhurst & Adams, Huntington Beach, CA 92646

Bldg/Unit	Business Name	Business Address (Huntington Beach, CA 92646)	Land Use Category	Area (Sq. Ft.)	Parking Ratio	Parking Spaces Required
1	ALKA Living Water	10042 Adams Ave	Retail	1,590	1:200	8
2	MM Tailor	10044 Adams Ave	Retail	1,060	1:200	6
3	Anna's Nails	10046 Adams Ave	Personal Services	954	1:200	5
4	Newport Peach	10052 Adams Ave	Personal Enrichment	2,074	1:200	11
5	Hambones Bar & Grill	10056 Adams Ave	Restaurant	3,020	1:200	16
7a	Restaurant	-	Restaurant	3,500	1:100	35
7b	Restaurant	-	Restaurant	3,500	1:100	35
8	Shima Restaurant	10076 Adams Ave	Restaurant	2,358	1:100	24
9	Eggroll King	10078 Adams Ave	Restaurant	1,035	1:100	11
10	Lamposse Pizza	10084 Adams Ave	Restaurant	3,452	1:100	35
11	Huntington Flowers	10086 Adams Ave	Retail	1,173	1:200	6
12	Beachside Optometry	10088 Adams Ave	Personal Services	2,010	1:200	11
13	HB Beauty Supply	10090 Adams Ave	Retail	5,865	1:200	30
14	Perspire Sauna	10104 Adams Ave	Personal Enrichment	1,750	1:200	9
15	A/B Dental	10114 Adams Ave	Dental	3,500	1:175	20
16	United Healthcare	10114 Adams Ave	Medical	5,500	1:175	32
18	Stater Bros No. 0147	10114 Adams Ave	Grocery	41,975	1:200	210
19	Premier Martial Arts	10116 Adams Ave	Personal Enrichment	1,400	1:200	7
20	R Cleaners	10118 Adams Ave	Retail	1,400	1:200	7
21	Liberty Coin	10122 Adams Ave	Retail	3,640	1:200	19
23	Simone & Son	10124 Adams Ave	Retail	3,360	1:200	17
25	The Tutoring Center	9011 Adams Ave	Personal Enrichment	1,190	-	6
26	Adams Pet Clinic	10130 Adams Ave	Veterinary	1,260	1:200	7
27	Chiropractor	10132 Adams Ave	Medical	2,100	1:175	12
28	Woody's Diner	10136 Adams Ave	Restaurant	5,502	1:100	56
29	Raising Canes Chicken Finger	10142 Adams Ave	Restaurant	3,234	1:100	33
29	Raising Canes Chicken Fingers (Outdoor Area)	10142 Adams Ave	Restaurant	800	1:100	8
30A	Vacant		Retail	1,800	1:200	9
30B	WeVitalize		Personal Enrichment	1,450	1:200	8
31	C.O.R.E. Rehab Center	10162 Adams Ave	Medical	3,282	1:175	19
33	Orthodontics Office		Dental	2,243	1:175	13
34	Lean Feast	10176 Admas Ave	Restaurant	1,586	1:100	16
35	Moonwood Coffee	10178 Admas Ave	Restaurant	1,200	1:100	12
36	Vacant	10180 Admas Ave	Retail	1,260	1:200	7
37	Vacant	10184 Admas Ave	Retail	2,068	1:200	11
38	Work Fitness	-	Personal Enrichment	4,386	1:200	22
39	First Team Real Estate (NewRez LLC Sublease)	20100 Brookhurst St.	Office	7,000	1:250	28
Total Center SF				134,477		821
TOTAL SPACES REQUIRED						821
TOTAL SPACES PROVIDED						751
PARKING SURPLUS/DEFICIT						-70

Brookhurst & Adams - Proposed Parking Requirements

Sep-21

Address: South East Corner Brookhurst & Adams, Huntington Beach, CA 92646

Bldg/Unit	Business Name	Business Address (Huntington Beach, CA 92646)	Land Use Category	Area (Sq. Ft.)	Parking Ratio	Parking Spaces Required
1	ALKA Living Water	10042 Adams Ave	Retail	1,590	1:200	8
2	MM Tailor	10044 Adams Ave	Retail	1,060	1:200	6
3	Anna's Nails	10046 Adams Ave	Personal Services	954	1:200	5
4	Newport Peach	10052 Adams Ave	Personal Enrichment	2,074	1:200	11
5	Hambones Bar & Grill	10056 Adams Ave	Restaurant	3,020	1:200	16
7a	Restaurant	-	Restaurant	3,500	1:100	35
7b	Restaurant	-	Restaurant	3,500	1:100	35
8	Shima Restaurant	10076 Adams Ave	Restaurant	2,358	1:100	24
9	Eggroll King	10078 Adams Ave	Restaurant	1,035	1:100	11
10	Lamppose Pizza	10084 Adams Ave	Restaurant	3,452	1:100	35
11	Huntington Flowers	10086 Adams Ave	Retail	1,173	1:200	6
12	Beachside Optometry	10088 Adams Ave	Personal Services	2,010	1:200	11
13	HB Beauty Supply	10090 Adams Ave	Retail	5,865	1:200	30
14	Perspire Sauna	10104 Adams Ave	Personal Enrichment	1,750	1:200	9
15	A/B Dental	10114 Adams Ave	Dental	3,500	1:175	20
16	United Healthcare	10114 Adams Ave	Medical	5,500	1:175	32
18	Stater Bros No. 0147	10114 Adams Ave	Grocery	41,975	1:200	210
19	Premier Martial Arts	10116 Adams Ave	Personal Enrichment	1,400	1:200	7
20	R Cleaners	10118 Adams Ave	Retail	1,400	1:200	7
21	Liberty Coin	10122 Adams Ave	Retail	3,640	1:200	19
23	Simone & Son	10124 Adams Ave	Retail	3,360	1:200	17
25	The Tutoring Center	9011 Adams Ave	Personal Enrichment	1,190	-	6
26	Adams Pet Clinic	10130 Adams Ave	Veterinary	1,260	1:200	7
27	Chiropractor	10132 Adams Ave	Medical	2,100	1:175	12
28	Woody's Diner	10136 Adams Ave	Restaurant	5,502	1:100	56
29	Raising Canes Chicken Finger	10142 Adams Ave	Restaurant	3,234	1:100	33
29	Raising Canes Chicken Fingers (Outdoor Area)	10142 Adams Ave	Restaurant	800	1:100	8
30A	Vacant		Retail	1,800	1:200	9
30B	WeVitalize		Personal Enrichment	1,450	1:200	8
31	C.O.R.E. Rehab Center	10162 Adams Ave	Medical	3,282	1:175	19
33	Orthodontics Office		Dental	2,243	1:175	13
34	Lean Feast	10176 Admas Ave	Restaurant	1,586	1:100	16
35	Moonwood Coffee	10178 Admas Ave	Restaurant	1,200	1:100	12
36	Vacant	10180 Admas Ave	Retail	1,260	1:200	7
37	Vacant	10184 Admas Ave	Retail	2,068	1:200	11
38	Work Fitness	-	Personal Enrichment	4,386	1:200	22
39	(FT) Proposed Drive Thru-Restaurant	20100 Brookhurst St.	Restaurant	4,768	1:100	48
Total Center SF				132,245		841
TOTAL SPACES REQUIRED						841
TOTAL SPACES PROVIDED						730
PARKING SURPLUS/DEFICIT						-111

Attachment C – Existing Parking Counts

Parking Study

Location: 10114 Adams Ave
 City: Huntington Beach, CA

Date: 11/5/2021
 Day: Friday

Time Restriction	Zone 001			Zone 002				Zone 003					Zone 004					
	Regular	Handicap	HC Van Accessible	Regular	Handicap	HC Van Accessible	Curbside Pick-Up	Regular	Handicap	HC Van Accessible	MedPost Only	10 Min Green Curb	Regular	Handicap	HC Van Accessible	Cane's Mobile Curbside PickUp	10 Min Green Curb	15 Min Loading & Unloading Zone Only
Spaces	145	1	2	224	6	4	4	161	6	5	7	11	146	6	4	3	11	5
9:00 AM	14	0	0	105	3	1	0	19	3	0	0	0	28	3	0	0	0	1
10:00 AM	19	0	0	103	1	1	0	27	2	0	0	0	32	2	0	0	0	1
11:00 AM	36	1	0	131	4	1	0	42	1	0	0	0	37	1	0	0	0	1
12:00 PM	33	0	0	125	4	2	0	56	3	0	0	0	58	2	0	0	0	1
1:00 PM	27	0	0	122	2	1	0	69	2	0	0	0	71	4	0	0	0	1
2:00 PM	38	0	0	120	4	1	0	47	3	0	0	0	83	3	0	0	0	1
3:00 PM	30	0	0	131	3	0	0	92	1	0	0	6	54	0	0	0	11	1
4:00 PM	19	0	0	127	5	2	1	93	1	0	0	4	45	2	1	0	10	1
5:00 PM	20	0	0	115	4	2	0	89	2	0	3	3	43	2	0	0	9	1
6:00 PM	22	0	0	129	5	1	0	92	1	0	4	6	49	2	1	0	10	1
7:00 PM	19	0	0	111	3	0	0	60	0	0	3	6	46	1	0	0	10	1
8:00 PM	20	0	0	99	1	0	1	43	1	0	1	5	39	1	0	0	6	1
9:00 PM	17	0	0	73	1	0	1	25	1	0	0	0	27	0	0	0	1	1

Note: Zone 004: A boom Lift equipment occupied 1 '15 Min loading & unloading Zone' space, all time intervals (included in the occupancy count)

Parking Study

Location: 10114 Adams Ave
 City: Huntington Beach, CA

Date: 11/6/2021
 Day: Saturday

Time Restriction	Zone 001			Zone 002				Zone 003					Zone 004					
	Regular	Handicap	HC Van Accessible	Regular	Handicap	HC Van Accessible	Curbside Pick-Up	Regular	Handicap	HC Van Accessible	MedPost Only	10 Min Green Curb	Regular	Handicap	HC Van Accessible	Cane's Mobile Curbside PickUp	10 Min Green Curb	15 Min Loading & Unloading Zone Only
Spaces	145	1	2	224	6	4	4	161	6	5	7	11	146	6	4	3	11	5
9:00 AM	12	0	0	89	4	0	0	21	1	0	0	0	37	2	0	0	0	1
10:00 AM	13	0	0	97	2	1	0	28	2	0	0	0	32	1	0	0	0	1
11:00 AM	17	0	0	118	3	1	1	37	1	0	0	0	29	0	0	0	0	1
12:00 PM	15	0	0	115	5	3	0	79	3	0	0	0	65	3	0	0	0	1
1:00 PM	16	0	0	141	4	2	0	83	2	0	0	0	78	5	0	0	0	1
2:00 PM	15	0	0	124	3	3	0	64	5	0	0	1	92	3	0	0	0	1
3:00 PM	30	0	0	109	3	0	0	69	0	0	2	5	38	1	0	0	6	1
4:00 PM	24	0	0	112	3	2	1	52	0	0	2	5	40	1	0	0	8	1
5:00 PM	21	0	0	89	2	1	0	51	0	0	2	7	23	0	0	0	3	1
6:00 PM	29	0	1	92	1	0	1	40	1	1	2	0	21	0	0	1	4	1
7:00 PM	23	0	0	70	2	0	1	17	0	0	2	2	19	0	0	1	1	1
8:00 PM	20	0	0	53	1	0	1	14	0	0	0	0	21	0	0	0	1	1
9:00 PM	19	0	0	41	0	0	0	11	0	0	0	1	27	0	0	0	1	1

Note: Zone 004: A boom Lift equipment occupied 1 '15 Min loading & unloading Zone' space, all time intervals (included in the occupancy count)

Attachment D – ULI Shared Parking Outputs

Project: Brookhurst Adams Shopcore
 Description: Shared Parking with Brookhurst Adams

Shared Parking Demand Summary																		
Peak Month: DECEMBER -- Peak Period: 6 PM, WEEKDAY																		
Land Use	Project Data		Weekday					Weekend					Weekday			Weekend		
			Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand
	Quantity	Unit										6 PM	December		1 PM	December		
Retail																		
Retail (600 ksf to 1,000 ksf) Employee	954	sf GLA	3.20	100%	98%	3.15	ksf GLA	3.60	100%	99%	3.57	ksf GLA	90%	100%	4	100%	100%	4
			0.80	100%	100%	0.80		0.90	100%	100%	0.90		100%	100%	1	100%	100%	1
Retail (1,000 ksf to 2,000 ksf) Employee	14,073	sf GLA	3.50	100%	98%	3.44	ksf GLA	3.99	100%	99%	3.97	ksf GLA	90%	100%	44	100%	100%	57
			0.90	100%	100%	0.90		1.00	100%	100%	1.00		100%	100%	13	100%	100%	15
Retail (over 2,000 ksf) Employee	19,017	sf GLA	2.90	100%	98%	2.86	ksf GLA	3.20	100%	99%	3.18	ksf GLA	90%	100%	50	100%	100%	61
			0.70	100%	100%	0.70		0.80	100%	100%	0.80		100%	100%	14	100%	100%	16
Supermarket/Grocery Employee	41,975	sf GLA	4.00	100%	98%	3.94	ksf GLA	4.00	100%	99%	3.97	ksf GLA	100%	100%	165	100%	100%	167
			0.75	100%	100%	0.75		0.75	100%	100%	0.75		80%	100%	26	100%	100%	32
Food and Beverage																		
Fine/Casual Dining Employee	22,367	sf GLA	13.25	100%	100%	13.19	ksf GLA	15.25	100%	99%	15.13	ksf GLA	95%	100%	281	55%	100%	187
			2.25	100%	100%	2.25		2.50	100%	100%	2.50		100%	100%	51	75%	100%	42
Fast Casual/Fast Food Employee	8,882	sf GLA	12.40	100%	67%	8.31	ksf GLA	12.70	100%	68%	8.69	ksf GLA	85%	96%	61	100%	96%	74
			2.00	100%	100%	2.00		2.00	100%	100%	2.00		90%	100%	16	100%	100%	18
Entertainment and Institutions																		
Active Entertainment Employee	4,386	sf GLA	1.50	100%	10%	0.15	ksf GLA	1.80	100%	10%	0.18	ksf GLA	100%	60%	-	90%	60%	-
			0.15	100%	100%	0.15		0.20	100%	100%	0.20		100%	70%	1	100%	70%	1
Office																		
Medical/Dental Office Employee	17,885	sf GFA	3.00	100%	99%	2.98	ksf GFA	0.00	100%	100%	0.00	ksf GFA	67%	100%	36	0%	100%	-
			1.60	100%	100%	1.60		0.00	100%	100%	0.00		67%	100%	19	0%	100%	-
													Customer/Visitor	641	Customer	549		
													Employee/Resident	141	Employee/Resident	125		
													Reserved	-	Reserved	-		
													Total	782	Total	674		

Shared Parking
 Reduction 14% 24%

Project: Brookhurst Adams Shopcore
 Description: Shared Parking with Brookhurst Adams

Monthly Comparison Summary								
Month	Weekday							
	Overall Pk		AM Peak Hr		PM Peak Hr		Eve Peak Hr	
	Time	Demand	Time	Demand	Time	Demand	Time	Demand
January	6 PM	680	11 AM	505	1 PM	652	6 PM	680
February	6 PM	668	11 AM	497	1 PM	642	6 PM	668
March	6 PM	732	11 AM	538	1 PM	700	6 PM	732
April	6 PM	712	11 AM	527	1 PM	683	6 PM	712
May	6 PM	742	11 AM	545	1 PM	710	6 PM	742
June	6 PM	725	11 AM	536	1 PM	695	6 PM	725
July	6 PM	729	11 AM	536	1 PM	697	6 PM	729
August	6 PM	731	11 AM	537	1 PM	537	6 PM	731
September	6 PM	696	11 AM	518	1 PM	669	6 PM	696
October	6 PM	716	11 AM	531	1 PM	688	6 PM	716
November	6 PM	714	11 AM	532	1 PM	687	6 PM	714
December	6 PM	782	11 AM	576	1 PM	751	6 PM	782
Late December	6 PM	714	11 AM	525	1 PM	699	6 PM	714

Monthly Comparison Summary								
Month	Weekend							
	Overall Pk		AM Peak Hr		PM Peak Hr		Eve Peak Hr	
	Time	Demand	Time	Demand	Time	Demand	Time	Demand
January	1 PM	571	11 AM	437	1 PM	571	6 PM	553
February	1 PM	560	11 AM	427	1 PM	560	6 PM	546
March	1 PM	618	11 AM	468	1 PM	618	6 PM	604
April	1 PM	601	11 AM	458	1 PM	601	6 PM	586
May	1 PM	628	11 AM	478	1 PM	628	6 PM	611
June	1 PM	615	11 AM	470	1 PM	615	6 PM	595
July	1 PM	620	11 AM	473	1 PM	620	6 PM	601
August	1 PM	623	11 AM	476	1 PM	623	6 PM	603
September	1 PM	589	11 AM	453	1 PM	589	6 PM	567
October	1 PM	607	11 AM	465	1 PM	607	6 PM	587
November	1 PM	609	11 AM	472	1 PM	609	6 PM	580
December	1 PM	674	11 AM	508	1 PM	674	6 PM	644
Late December	1 PM	631	11 AM	454	1 PM	631	6 PM	616

Attachment E – The 2021 QSR magazine Drive-Thru Study



The 2021 QSR® magazine Drive-Thru Study: Speed of Service



CHAIN	TOTAL TIME THROUGH DRIVETHRU SECONDS
Arby's	374
Burger King	359
Carl's Jr/Hardee's	286
Chick-fil-A	541
Dunkin'	295
KFC	272
McDonald's	311
Starbucks	409
Taco Bell	268
Wendy's	341

Note: 312 drive-thru locations, geographically balanced. Total time from entry to exit shown for drive-thru experience.

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- ACRELEC** The FoodserviceResults team, in partnership with *QSR* magazine, conducted a comprehensive, nationally representative survey of drive-thru consumers in the U.S. using an online survey sample.
- melitron**
- STRATACACHE**
- DSA SIGNAGE**
- DELPHI DISPLAY SYSTEMS** Additionally, onsite audits were



2021. Leveraging insights from numerous industry experts, the finalized survey was completed by 1,007 drive-thru consumers during fieldwork. To ensure a relevant respondent base was achieved, all participants were screened to only include those who had at least one drive-thru occasion in the last 30 days. The onsite drive-thru audits were balanced against geographic region (West, South, Midwest, and Northeast) and were conducted to coincide with breakfast, lunch, and dinner dayparts. In total, 312 audits were conducted at 10 top quick-service restaurant chains across the U.S. An extensive cross tabulation of the respondent sample data was conducted in order to identify major trends, demographic/behavioral themes, and other nuances in the data.

THE 2021 QSR® MAGAZINE DRIVE-THRU STUDY

The Future of Fast-Food Drive- The Environment and Drive-Th Anymore

THE CHARTS:

Speed of Service

Order Accuracy

Customer Service

Vehicles in Line

Digital Menuboard

With Digital Menuboard

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The 2021 QSR® magazine Drive- Thru Study: Vehicles in Line



CHAIN	AVERAGE NUMBER OF VEHICLES
Arby's	0.56
Burger King	0.62
Carl's Jr./Hardee's	0.36
Chick-fil-A	4
Dunkin'	0.91
KFC	1.04
McDonald's	2.2
Starbucks	1.83
Taco Bell	0.72
Wendy's	1.11

Base: 312 drive-thru locations, geographically balanced

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THE 2021 QSR® MAGAZINE DRIVE-THRU STUDY METHODOLOGY:



The FoodserviceResults team, in partnership with QSR magazine, conducted a comprehensive, nationally representative survey of drive-thru consumers in the U.S. using an online survey sample. Additionally, onsite audits were conducted at the top 10 drive-thru chains in the U.S. Both waves of the research were conducted in July

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