Prepared for Edwards Realty Company

Downtown Orland Park Parking Analysis

July 2024

WALKER CONSULTANTS

303 West Madison
Suite 1650
Chicago, IL 60606

July 16, 2024

Mr. Ramzi Hassan
President
Edwards Realty Company
14400 South John Humphrey Drive, Suite 200
Orland Park, IL 60462

Re: *Downtown Orland Park Parking Planning Services*
Orland Park, Illinois
Walker Consultants Project #31-009934.00

Dear Mr. Hassan:

Walker Consultants is pleased to submit for your review this report for the Downtown Orland Park development.

We appreciate the opportunity to be of service to you on this project. If you have any questions or comments, please do not hesitate to call.

Sincerely,

WALKER CONSULTANTS

Andrew Baglini

Andrew Baglini
Parking and Mobility Consultant

Contents

Project Understanding

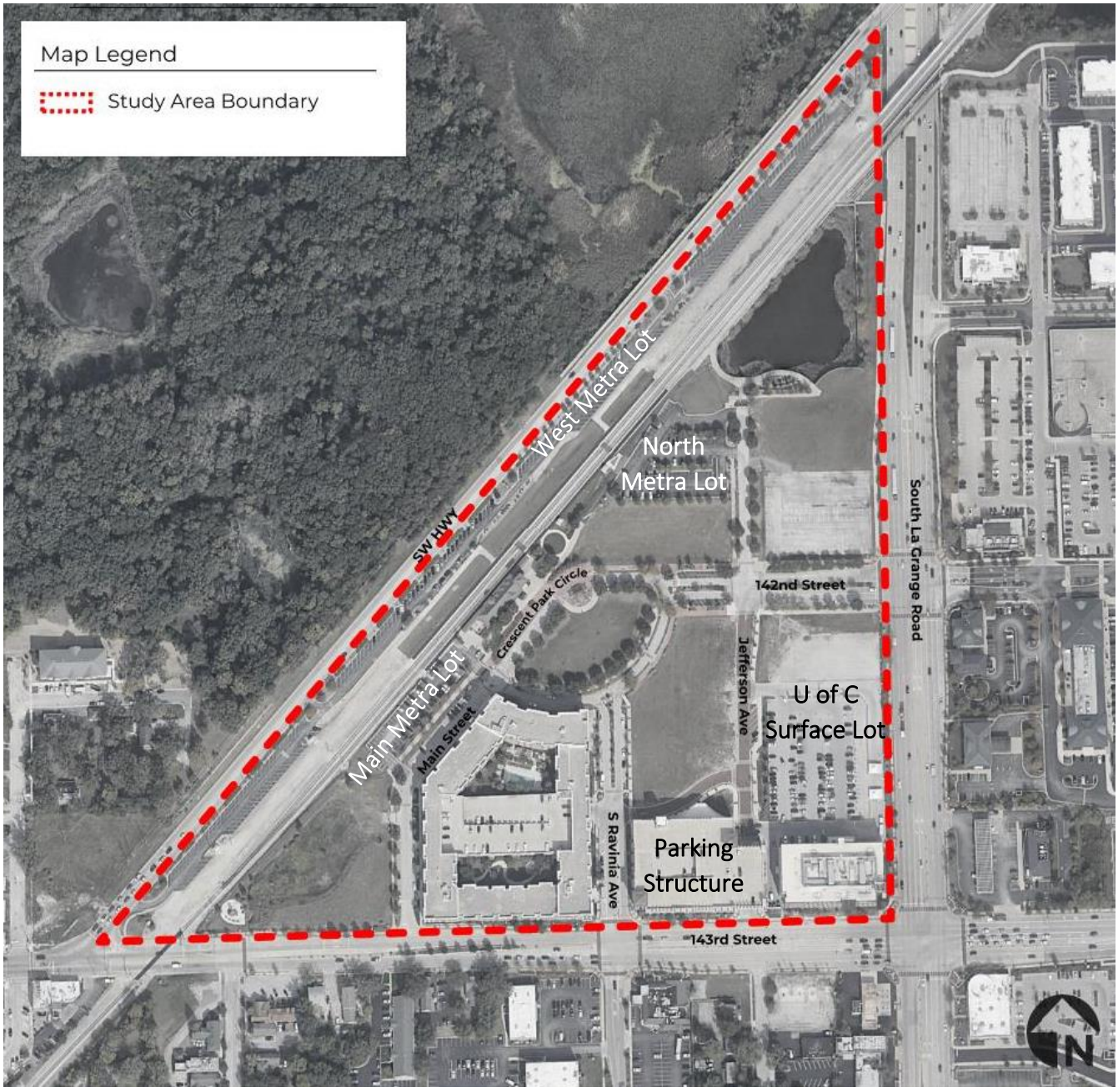
Edwards Realty Company ("Edwards") is proposing to develop the area around the Orland Park/143rd Street Metra Station, near the intersection of 143rd Street and LaGrange Road, into the Downtown Orland Park mixed-use commercial development ("Development") in Orland Park, Illinois. Edwards has asked Walker Consultants ("Walker") to opine on the proposed number of surface parking lot spaces being built for the development, as well as the ability of the adjacent public parking structure and Metra commuter rail surface lots to accommodate overflow parking demand. Further, Walker has been tasked with analyzing the Village of Orland Park's parking requirements and their applicability to the proposed land uses at the development.

Context

The Development is proposed for a partially vacant site northwest of the LaGrange Road/143rd Street intersection, adjacent to the 143rd Street Metra station. The study area is defined for this analysis as the geographical area generally bound by Southwest Highway to the northwest, 143rd Street to the south, and LaGrange Road (Illinois Route 45) to the east. The study area represents the entirety of the Metra commuter surface lots associated with the 143rd Street Station, as well as the parking supply and development within a reasonable walk of the station and associated lots. Public on-street parking, the University of Chicago medical office building and surface parking lot, and the Village's public parking structure are all included within the study area. A map highlighting the project site study area is provided on the following page in **Figure 1.**

University of Chicago Medicine surface lot in the foreground, eastern edge of the development site in the background; image is taken from the on-site parking structure.

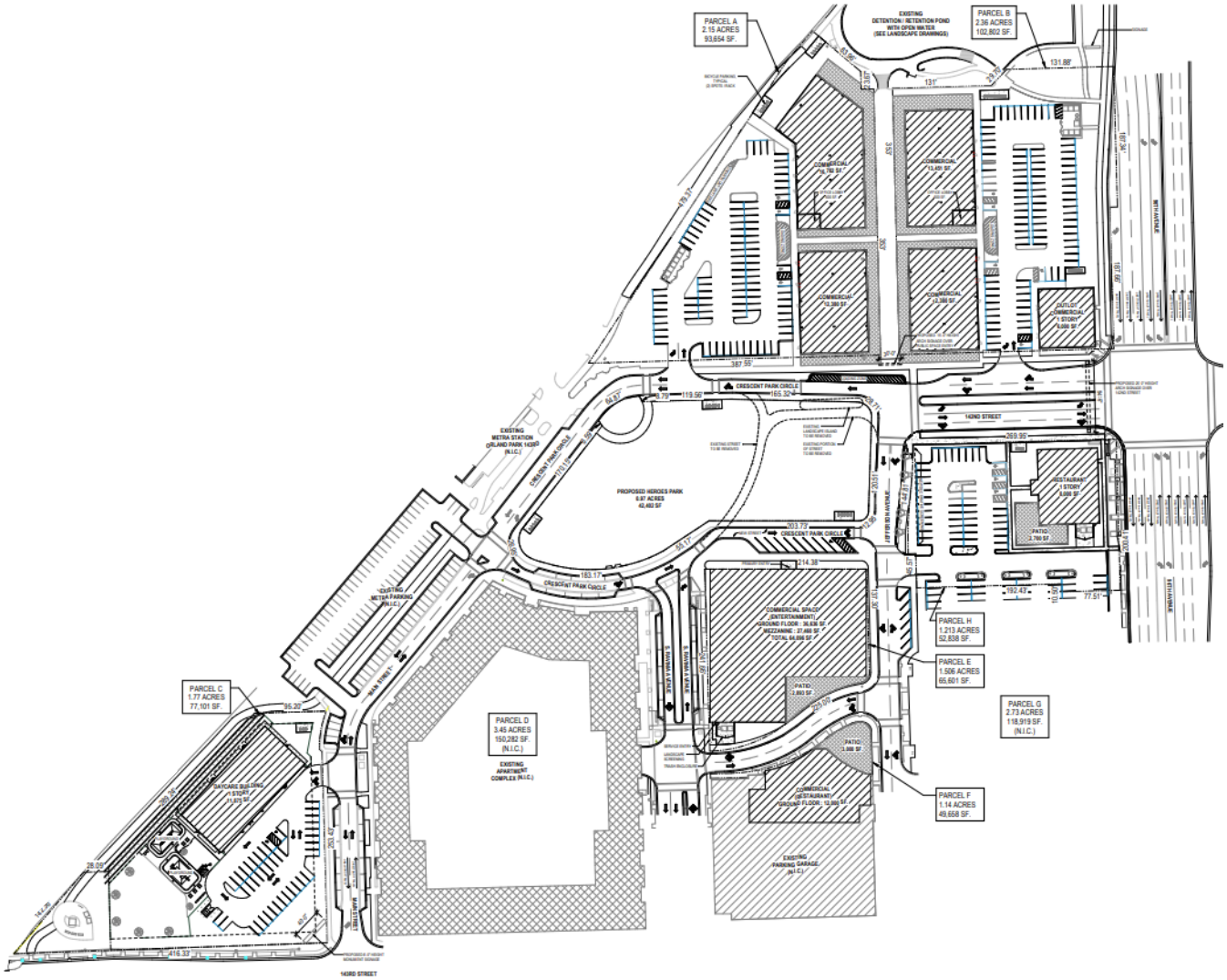
Figure 1. Project Study Area



Source: Google, Walker Consultants

The development concept (as of June 2024) is provided in **Figure 2** on the following page.

Figure 2. Development Site Plan



Source: Dunne | Kozlowski

Existing Parking Conditions

Parking Supply (Inventory)

The current publicly available on- and off-street parking supply, including four surface lots and the public parking structure, was inventoried by Walker staff on Thursday, May 30th, 2024. The resident-reserved and guest spaces at the Ninety7Fifty parking structure were not included in this analysis as they are reserved solely for the use of Ninety7Fifty residents and their guests.

A total of 1,315± public parking spaces are within the study area, of which 1,208± or 92 percent are off-street spaces. The parking supply within the study area is presented in **Figure 3**.

Figure 3. Current Parking Supply

ID	Facility Name	Standard	Reserved	3-hr	ADA	Loading/ EV	Total Supply
1	West Metra Lot	262	0	0	0	0	262
2	East (Main) Metra Lot	60	0	0	5	0	65
3	North Metra Lot	93	3	0	7	9	112
4	U of C Lot	202	0	0	22	0	224
5	Village Parking Structure	359	0	0	8	2	369
6	Village Parking Structure (U of C Reserved)	0	173	0	3	0	176
7	Main Street (On-Street)	0	0	42	0	0	42
8	Crescent Park Circle (On-Street)	21	0	0	0	10	31
9	Ravinia Avenue (On-Street)	0	0	12	0	0	12
10	142nd Street (On-Street)	0	0	0	17	0	17
11	Jefferson Avenue (On-Street)	0	0	6	0	0	6
Total		997	176	60	62	21	1,316

Source: Walker Consultants

Effective Parking Supply

Once the parking supply was verified, an effective supply factor was applied. Effective supply is used in parking planning to build in a small cushion of spaces to help reduce the time necessary for users to find the last few available spaces within a parking facility or system. Effective supply adjustments vary based on the amount of parking and type of user, with off-street parking facilities typically requiring less of a supply cushion and on-street parking benefiting from a larger supply cushion.

For this analysis, Walker has assumed an effective supply factor equal to 97 percent of the available supply for off-street parking, leaving three percent of spaces open for possible maintenance, re-striping, or incorrectly parked vehicles. On-street parking is more often unavailable due to mis-parked vehicles, road maintenance and construction, and reserved or closed spaces for special events. With this in mind, Walker assumed an effective supply factor equal to 90 percent of the total on-street spaces (leaving a ten percent cushion).

When the effective supply factors are applied to the total number of available spaces, the result is the effective supply of parking. Based on the above assumptions, the effective supply of parking in the study area was calculated as **1,268± spaces**, as shown in **Figure 4**. This represents the portion of the parking inventory that can be consistently relied upon to serve parking demand in the study area.

Figure 4. Effective Parking Supply

ID	Facility Name	Total Supply	Effective Supply Factor	Effective Supply
1	West Metra Lot	262	0.97	254
2	East (Main) Metra Lot	65	0.97	63
3	North Metra Lot	112	0.97	109
4	U of C Lot	224	0.97	217
5	Village Parking Structure	369	0.97	358
6	Village Parking Structure (U of C Reserved)	176	0.97	171
7	Main Street (On-Street)	42	0.90	38
8	Crescent Park Circle (On-Street)	31	0.90	28
9	Ravinia Avenue (On-Street)	12	0.90	11
10	142nd Street (On-Street)	17	0.90	15
11	Jefferson Avenue (On-Street)	6	0.90	5
Total		1,316	-	1,269

Source: Walker Consultants

Parking Occupancy

Walker staff conducted parking occupancy (parked vehicle) counts in the study area during a typical business day – Thursday, May 30th, 2024. Counts were conducted five times during the following periods:

Morning starting at 10:00 am | **Afternoon/Evening** starting at 12:00 pm, 2:00 pm, 5:00 pm, 7:00 pm

Thursday was chosen as Metra ridership is highest on Tuesdays, Wednesdays, and Thursdays, and in Walker's experience, may indeed be greatest on Thursdays. Additionally, Thursday, May 30th was ideal weather-wise and falls before the typical summer vacation period of late June, July, and August.

Data Collection Observations

- Time of Year and Weather:
  - Walker's data collection occurred during the late spring. Temperatures were in the 70's and conditions were clear and sunny. The weather likely contributed to a typical post-Covid late spring parking occupancy condition.

- Peak Demand:
  - **Overall peak parking occupancy (demand) occurred at 10:00 am when 561± parked vehicles were observed.** Forty-three (43) percent of all public parking spaces were occupied by a vehicle during this time. **Fifty-seven (57) percent of the parking inventory, or 754 spaces, remained available during the peak demand condition.**

- Metra Commuter Lots:
  - During Walker's survey day, only the Main Metra lot immediately south of the station experienced an 85 percent parking occupancy level or greater (peaked at 85 percent at 2:00 pm). The North Metra Lot experienced peak parking demand at noon with 75 percent occupancy (84 parked vehicles), and the West Metra lot experienced a peak parking demand of 23 percent (59 parked vehicles) between noon and 2:00 pm.
  - The Metra parking lots as a whole experienced peak demand at 2:00 pm, with 196 parked vehicles. **Compared to the Metra parking inventory of 439 spaces (excluding the public parking structure), this represents a peak parking occupancy level of 45 percent (243 empty spaces).**

- University of Chicago Medicine Parking
  - The University of Chicago ("U of C") surface lot experienced a peak parking occupancy of 63 percent during the 10:00 am observation period, while the U of C-reserved portion of the parking structure experienced a peak parking occupancy of 18 percent, between 10:00 am and 2:00 pm.

- Public Parking Structure
  - The public portion of the on-site parking structure also experienced peak parking occupancy at 10:00 am with 41 percent of the spaces occupied (219 empty spaces).

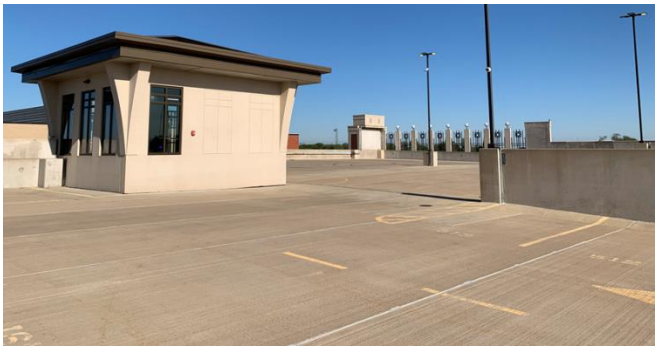
The following figure (and associated parking occupancy legend) provides the observed parking occupancy information in tabular form for the Thursday observation periods.

Legend
0-64.5%
64.5-74.5%
74.5-84.5%
>84.5%

Figure 5. Thursday Observed Parking Occupancy

ID	Facility Name	Parking Supply	Thursday, May 30th, 2024 Parking Occupancy									
			10:00 AM	Occ. %	12:00 PM	Occ. %	2:00 PM	Occ. %	5:00 PM	Occ. %	7:00 PM	Occ. %
1	West Metra Lot	262	58	22%	59	23%	59	23%	28	11%	3	1%
2	East (Main) Metra Lot	65	52	80%	52	80%	55	85%	43	66%	18	28%
3	North Metra Lot	112	83	74%	84	75%	82	73%	69	62%	8	7%
4	U of C Lot	224	142	63%	113	50%	131	58%	43	19%	26	12%
5	Village Parking Structure	369	150	41%	135	37%	147	40%	49	13%	21	6%
6	Village Parking Structure (U of C Reserved)	176	32	18%	31	18%	32	18%	5	3%	1	1%
7	Main Street (On-Street)	42	25	60%	22	52%	26	62%	27	64%	35	83%
8	Crescent Park Circle (On-Street)	31	12	39%	11	35%	9	29%	11	35%	4	13%
9	Ravinia Avenue (On-Street)	12	7	58%	8	67%	9	75%	4	33%	6	50%
10	142nd Street (On-Street)	17	1	6%	1	6%	0	0%	0	0%	0	0%
11	Jefferson Avenue (On-Street)	6	0	0%	1	17%	0	0%	0	0%	0	0%
Total		**1,316**	**562**	**43%**	**517**	**39%**	**550**	**42%**	**279**	**21%**	**122**	**9%**

Source: Walker Consultants



Vacant spaces on the top level of the on-site parking structure.

Main Street looking south from the Orland Park/143rd Metra station.

Future Conditions

Shared Parking Needs Analysis

Walker prepared a Shared Parking needs analysis to ascertain the approximate number of parking spaces needed to effectively serve proposed developments in Downtown Orland Park during peak-hour demand conditions. Shared parking leverages the presence of complementary land uses on a site having different periods of peak parking demand, allowing for the sharing of parking spaces among uses in a mixed-use environment, in lieu of providing a minimum number of parking spaces for each individual use. For example, an office building can share parking with residential units because parking demand peaks in the daytime for the office workers and it peaks in the evening for the residents. This results in an opportunity to provide adequate parking without building more parking spaces than necessary for customers, employees, and residents. Shared parking commonly results in a reduction in the total need for parking spaces and in more efficient use of land dedicated to parking.

Walker's Shared Parking Model is based on the Urban Land Institute (ULI) and the International Council of Shopping Center's (ICSC) Shared Parking publication. Walker led a team of consultants in writing the updated Shared Parking Third Edition and it features the most up-to-date parking demand model. The model projects the parking needs of various types of development from 6:00 a.m. to 12:00 midnight on a typical weekday and weekend day for every month of the year.

To determine a recommended parking supply for the proposed development site, which is a mix of retail, office, restaurant, hotel, and entertainment land uses, Walker utilized the shared parking methodology. The resulting recommended supply for the proposed project is based on the projected peak hour of parking demand. This does not represent the maximum parking demand ever generated by the development. In Walker's experience, designing a parking system for the absolute peak busiest day of the year leads to overbuilding of parking spaces. Similarly, one does not build for an average day and have insufficient supply for the peak (if not multiple) hours on 50 percent of the days in a year. The peak in this analysis refers to the "design day" or "design hour," one that occurs frequently enough to justify providing spaces for that level of parking activity. The 85th percentile of peak-hour observations is generally recommended by Shared Parking, except for retail shopping, for which the 20th highest hour of the year is employed. The following graphic provides an illustrative view of the steps involved in the Shared Parking analysis.

Figure 6. Steps of Shared Parking Analysis

Land Use Units (Number of rooms, square footage, etc.)	X	Standard or Base Parking Generation Ratio	X	Monthly Factor	X	Hourly Factor	X	Driving Ratio	X	Non-Captive Ratio	=	Total

Source: Walker Consultants

List of Shared Parking Steps

1. Identification and Quantification of Project Land Use Components;
2. Application of Standard or Base Parking Generation Ratios;
3. Application of Presence (Monthly, Hourly) Factors;
4. Application of Drive Ratio;
5. Application of Non-Captive Ratio; and
6. Total Weekday and Weekend Day Recommended Number of Spaces from Shared Parking Analysis.

Land Use Components: Development Program Information

Walker utilized the design team architect's (Dunne | Kozlowski) overall site plan drawing A-100, dated June 18, 2024, for the land use components to be utilized in this analysis. All proposed future development analyzed here is part of the Downtown Orland Park development and falls within the boundaries of the project study area. Additionally, all land uses listed here are considered within a reasonable suburban walking distance of all current and proposed future parking inventory on the site. Two development options were provided for analysis, Option 1 and Option 2.

Walker entered the land use data into the Shared Parking Model by development option. **Figure 7** details all land uses by development parcel, type, and quantity for development Option 1, while **Figure 8** provides the same information for Option 2.

Figure 7. Development Land Use Information – Option 1

Parcel	Land Use	Shared Parking Land Use	Unit	
A Option 1	Commercial/General Retail	General Retail	GFA	11,650
A Option 1	Restaurant	Fine/Casual Dining	GFA	22,500
A Option 1	Office	Office	GFA	20,600
B	Office	Office	GFA	20,600
B	Commercial/General Retail	General Retail	GFA	10,400
B	Restaurant	Fine/Casual Dining	GFA	20,495
B	Commercial/General Retail - Outlot	General Retail	GFA	6,000
H Option 1	Restaurant	Fine/Casual Dining	GFA	8,000
C	Daycare	Daycare	GFA	11,875
Heroes	Park	Public Park/Destination Open Space	Acres	0.97
E	Commercial/Entertainment	Adult Active Entertainment	GFA	62,050
F	Restaurant	Fine/Casual Dining	GFA	12,000
Total			sf	206,171

Source: Dunne | Kozlowski

Figure 8. Development Land Use Information – Option 2

Parcel	Land Use	SPM Land Use	Unit	
A Option 2	Commercial/General Retail	General Retail	GFA	11,650
A Option 2	Office	Office	GFA	3,624
A Option 2	Restaurant	Fine/Casual Dining	GFA	13,645
B	Office	Office	GFA	20,600
B	Commercial/General Retail	General Retail	GFA	10,400
B	Restaurant	Fine/Casual Dining	GFA	20,495
B	Commercial/General Retail - Outlot	General Retail	GFA	6,000
H Option 2	Medical Office Building	M.O.B.	GFA	12,000
C	Daycare	Daycare	GFA	11,875
Heroes	Park Area	-	Acres	0.97
E	Commercial/Entertainment	Adult Active Entertainment	GFA	62,050
F	Restaurant	Fine/Casual Dining	GFA	12,000
Total			**sf**	**184,340**
A Option 2	Hotel	Rooms	Keys	120

Source: Dunne | Kozlowski

Drive Ratio (Transportation Mode Split)

A drive ratio, or transportation mode split adjustment, is the percentage of patrons and employees that are projected to drive to the site in a personal vehicle, expressed as a ratio. This excludes all non-driving modes of transportation including ride-hail services (Uber/Lyft), taxis, public transit, biking, and walking. Drive ratio adjustments were made to the base ratios based on commuter survey data provided by the United States Census Bureau's 2022 American Community Survey as shown in the following table.

Figure 9. US Census Drive Ratio Data

Mode of Transportation	% of Total	Drive Ratio
Drove Alone	73.1%	79.8%
Carpooled	6.7%	
Work at Home	13.7%	20.3%
Public Transit	4.0%	
Walked	1.5%	
Other	1.1%	
Total	**100.0%**	**100.0%**

Source: Walker Consultants, US Census Bureau

According to 2022 US Census data, approximately 80 percent of Orland Park residents commute to work via private vehicle, either alone or as part of a carpool. To be conservative, office workers were modeled at a slightly higher 83 percent rate, while service employees were modeled at the 80 percent rate. Retail, dining, and entertainment customers were modeled at a 90 percent drive ratio during the daytime, and at 85 percent during the evenings (for both weekdays and weekends).

Future Parking Inventory

In addition to the new development, several parking inventory changes are proposed for the site. The North Metra lot and 142nd Street on-street spaces are proposed to be removed (bolded in red in the following figure), according to the development plans provided by Dunne Kozlowski. Additionally, Crescent Park Circle is proposed to be partially realigned with a new parking configuration (bolded in green below). Further, four new parking facilities are planned to be built as part of the new development. These four surface lots would add approximately 282 spaces, highlighted and bolded in blue in **Figure 10**.

Figure 10. Future Proposed Parking Inventory

ID	Facility Name	Total Supply	Effective Supply Factor	Effective Supply	Notes
1	West Metra Lot	262	0.97	254	
2	East (Main) Metra Lot	65	0.97	63	
3	**North Metra Lot**	**-**	**-**	**-**	**Removed for future**
4	U of C Lot	224	0.97	217	
5	Village Parking Structure	369	0.97	358	
6	Village Parking Structure (U of C Reserved)	176	0.97	171	
7	Main Street (On-Street)	42	0.90	38	
8	**Crescent Park Circle (On-Street)**	19	0.90	17	**Adjusted for future**
9	Ravinia Avenue (On-Street)	12	0.90	11	
10	**142nd Street (On-Street)**	**-**	**-**	**-**	**Removed for future**
11	Jefferson Avenue (On-Street)	6	0.90	5	
-	**Parcel A Parking**	**92**	**0.97**	**89**	**New supply**
-	**Parcel B Parking**	**93**	**0.97**	**90**	**New supply**
-	**Parcel C Parking**	**40**	**0.97**	**39**	**New supply**
-	**Parcel H Parking**	**57**	**0.97**	**55**	**New supply**
Total		**1,457**	**-**	**1,408**	

Source: Dunne | Kozlowski, Walker Consultants

The future proposed parking supply for the study area totals approximately 1,457 spaces, or 1,408 effective parking spaces after the effective supply factor is applied. The proposed changes described above **equate to a net new gain of 141 spaces at the development site.**

Shared Parking Results and Summary

Walker analyzed the two development planning scenarios provided by the developer and design team and input the land use components into the shared parking model to determine the future parking needs for the site. The results of these two analyses, and comparison to the future effective parking supply at the site, are summarized in **Figures 11 and 12.**

Figure 11. Shared Parking Needs Analysis – Weekday at 8:00 pm

Scenario	Future Total Supply	Future Effective Supply	Existing Demand	Projected New Demand	Total Future Demand	Effective Occupancy %	Parking Surplus / (Deficit)
Future, 8:00 pm (Option 1)	1,457	1,408	122	1,177	1,299	92%	109
Future, 8:00 pm (Option 2)	1,457	1,408	122	1,016	1,138	81%	270

Source: Walker Consultants

After the full build-out of the Downtown Orland Park development, Walker's shared parking model suggests that 1,299± spaces will be needed to accommodate peak-hour parking demand conditions for the development during a weekday at 8:00 pm with Option 1, and 1,138± spaces will be needed at 8:00 pm with Option 2. When compared to the future effective supply, this represents an effective occupancy of 92 and 81 percent, respectively, with projected parking surpluses of 109 and 270 spaces during peak demand conditions.

Figure 12. Shared Parking Needs Analysis – Weekend at 9:00 pm (Peak Projected Parking Need)

Scenario	Future Total Supply	Future Effective Supply	Existing Demand	Projected New Demand	Total Future Demand	Effective Occupancy %	Parking Surplus / (Deficit)
Future, 9:00 pm (Option 1)	1,457	1,408	80	1,284	1,364	97%	44
Future, 9:00 pm (Option 2)	1,457	1,408	80	1,120	1,200	85%	208

Source: Walker Consultants

During a weekend day, the shared parking model suggests that 1,364± spaces will be needed to accommodate peak-hour (9:00 pm) parking demand conditions with Option 1, and 1,200± spaces will be needed with Option 2. When compared to the future effective supply, this represents an effective occupancy of 97 and 85 percent, respectively, with projected parking surpluses of 44 and 208 spaces during peak demand conditions.

Peak projected parking need is expected to occur with development Option 1 on a weekend around 9:00 pm. 1,364 spaces are expected to be needed out of a future effective parking supply of 1,408 spaces, which equates to a 97 percent effective occupancy rate, and a parking surplus of 44 spaces. Development Option 2 is also expected to experience peak parking need on a weekend around 9:00 pm with 1,200 spaces needed versus the future effective supply of 1,408 spaces. This equates to an effective occupancy rate of 85 percent and a surplus of 208 spaces. Walker projects that the proposed plus existing number of parking spaces will accommodate peak parking needs for both development scenarios.

As the existing on-site parking structure will accommodate much of the parking need during peak demand times, it will need to be marketed to parkers as a good option on the southern end of the development site and will need to be signed as such. Signs indicating that the parking structure is available for public parking will be a necessity, as well as directional signage indicating how to drive and walk there. Additionally, good north-south pedestrian crossings and pathways will be needed as many parkers will likely be walking north into the development from the garage, and vice versa. Further, the proposed hotel could enhance its guest experience by offering a valet service, particularly during typical late afternoon and evening check-in times, as the surface lots adjacent to the hotel will likely be full or nearly full with afternoon and evening retail and restaurant parkers.

Zoning Analyses

Off-Street Minimum Parking Requirement

Walker analyzed the off-street parking requirements in the Village of Orland Park Land Development Code, and the results are presented in **Figure 13**.

Figure 13. Off-Street Minimum Parking Requirement

Scenario	Future Off-Street Supply [1]	Zoning Req.	Zoning Surplus / (Deficit)
Future, 7:00 pm (Option 1)	1,378	1,241	137
Future, 7:00 pm (Option 2)	1,378	1,195	183
Notes: [1] Future off-street supply excludes on-street spaces in this zoning comparison.			

Source: Village of Orland Park Land Development Code, Walker Consultants, 2024

Based on Walker's interpretation of the 2024 S-103 (current) Land Development Code, Article 5, Section 6-306 (Off-Street Parking and Loading Requirements) it appears the development will provide sufficient off-street parking, if including the existing 545-space, on-site parking garage and U of C surface lot. (It is Walker's understanding that 176 garage spaces reserved for the University of Chicago are open to the public after 5:00 pm.)

ADA Parking Requirement

Per the Land Development Code, the required number of ADA (Americans with Disabilities Act) spaces depends on the size of the parking facility. Walker analyzed the design team's plans, and it appears that a sufficient number of ADA spaces are outlined for each proposed new surface lot.

Bicycle Parking Requirement

The development site plans also appear to indicate a sufficient number of new bicycle parking spaces. The Land Development Code requires bicycle parking to be greater than 10 percent of all provided off-street spaces at the site (857 new vehicle parking spaces equates to 86 bicycle parking spaces required versus the 88 that are proposed to be provided).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