MEMORANDUM

DOWNTOWN SUPERIOR—AREA 2 SHARED PARKING ANALYSIS (2022 UPDATE)

PROJECT #23-008639.00

DATE:	May 5, 2022
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PROJECT NAME:	Downtown Superior- Area 2 Shared Parking Analysis 2022 Update
PROJECT NUMBER:	23-008639.00

SUMMARY OF FINDINGS

Walker Consultants (Walker) is pleased to provide the following *Shared Parking Analysis* for Downtown Superior's Area 2 which includes existing uses on Block 12 (the Sports Stable, medical office building, and parking garage), the Block Morgan Ranch DTS main street development, and planned uses on Blocks 2 and 8 (inclusive of former Block 5, which has been combined with Block 2). This analysis has been prepared in accordance with the Planned Development (PD) Plan adopted by the Town of Superior, per the methodology outlined on sheet CS1.1. This methodology generally follows industry- standard best practices for shared parking published by the Urban Land Institute (ULI) and Institute of Traffic Engineers (ITE).[1]

Key findings from this analysis are provided below:

- Based on a previous shared parking analysis submitted to the Town, we recommend a total of **1,062** parking spaces for the Morgan Ranch DTS project. The developer providing this capacity in a combination of shared on-street spaces, surface lots, some dedicated residential parking, and a small shared-use garage parking.
- Sports Stable parking needs were evaluated to arrive at site specific demand ratio for this facility. Our analysis supports the use of the "typical event" ratios previously calculated by the Town, assuming up to **239** spaces for typical event weekdays and **379** spaces for typical event weekends. Hourly and month ratios were applied for the Sports Stable based on field data collected for the site.
- For weekend and evening usage, **1,418** shared public parking stalls are recommended to support Morgan Ranch DTS plus the existing uses on Block 12 including the Sports Stable.
- At this time a total of **roughly 1,500** shared public spaces are planned, which includes weekend and evening public spaces located in the district-owned medical office building (MOB) parking garage.
- At full build-out of Blocks 2 and 8, there are several options for providing sufficient parking to serve the project.
    - If parking infrastructure is shared with the project in its entirety, a total of **1,941 public parking stalls** are recommended. Surface parking lots may be added to these blocks to accommodate the additional recommended spaces (about **440**).
    - If Blocks 2 and 8 are self-parked, a minimum of **750** parking spaces will be needed to satisfy parking demand for the new uses (Life Science buildings and retail/restaurant space). The developer is planning a total of 1,130 spaces, which represents a ratio of roughly 3 spaces per 1,000 gross square feet for the life science buildings. This ratio is consistent with traditional office space parking ratios both seen in the Denver Metro area and as represented in Urban Land Institute and Institute of Transportation Engineers literature.

Peak (weekend and evening) and off-peak parking supply recommendations are detailed in the tables and charts later in this analysis.

INTRODUCTION

Downtown Superior's planning Area 2 is envisioned as a vibrant "live-work-play" mixed-use environment, generally located off McCaslin Blvd. and Main Street to the west of U.S. 36.

Existing and future and land uses will include a public plaza, civic building, multifamily residential and commercial uses along Main Street – generally referred to as the Morgan Ranch DTS project -- and anchored at the east end by the Sports Stable and medical Office building (MOB). Additional commercial uses being proposed for Blocks 2 and 8 include roughly 360,000 square feet of "life science" space (conceptualized as 40% office and 60% lab/research and development), as well as roughly 12,000 square feet of amenity space and local retail and food/beverage options. **Figure 1** shows a detailed summary of existing and proposed land uses by block; **Figure 2** provides a graphical overview of the site in its entirety.

The program being considered for the shared parking analysis is shown highlighted on the table below. Future uses on blocks 1 and 13-27 are generally assumed to be self-parked and will not be included for the purposes of the shared parking district. (Multi-family developments on Blocks 13-27 are considered for the shared parking analysis in that they may generate some "captive" walk-in demand for commercial uses along main street, especially with the improved pedestrian and bicycle infrastructure proposed for the site-wide area.) In **Figure 1**, land uses included in the shared parking analysis are highlighted in green. Note that former Block 5 has been consolidated and combined with Block 2.

Figure 1: Program Summary for Area 2 and Surrounding

Land Use Density by Category

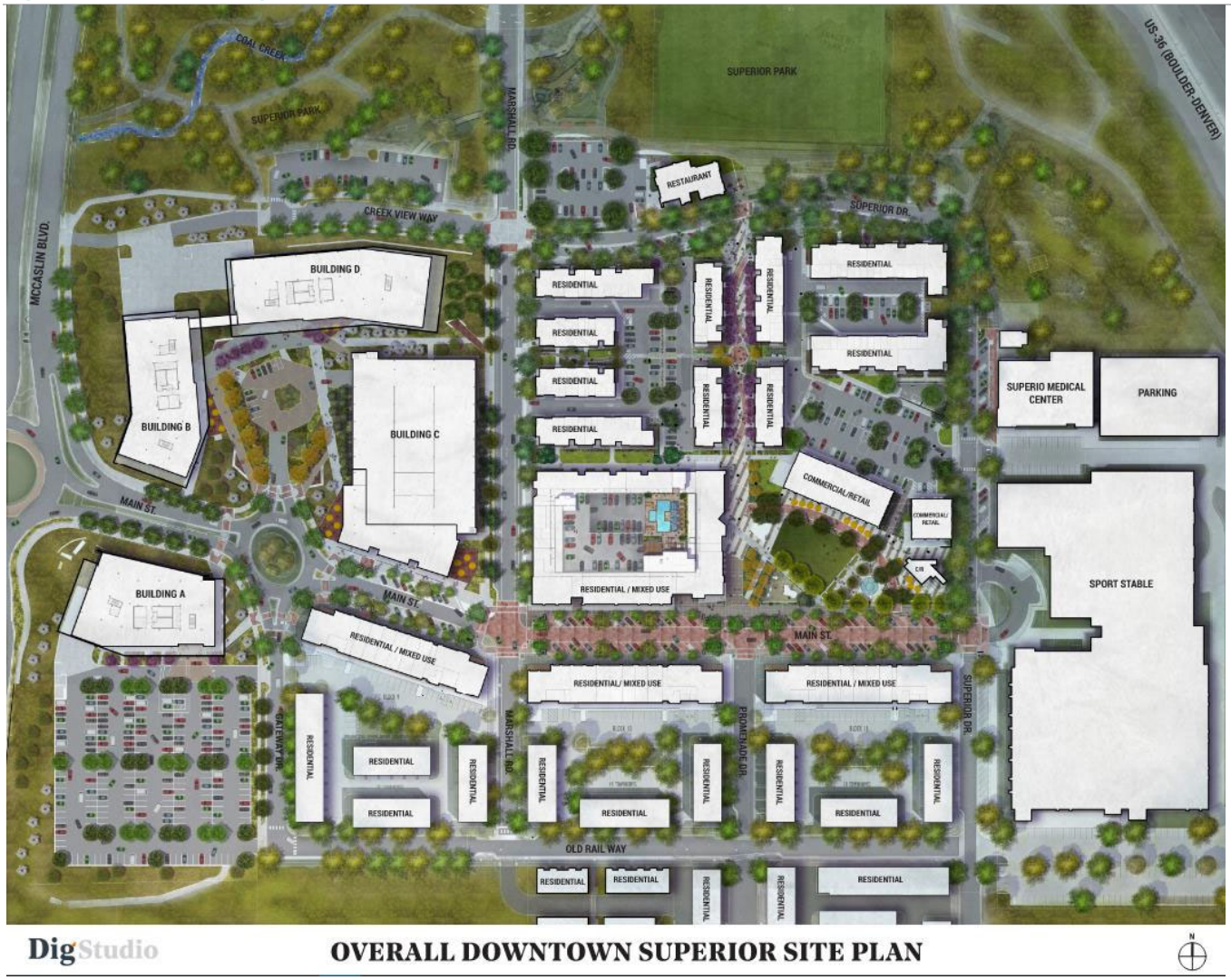
Block	Hotel	Office/Life Science/MOB	Civic Space	Retail/F&B	Residential Multifamily	Residential Single Family	Residential Townhome
1	242 keys			7,484 SF (centerpointe)			
2		275,198 SF		11,843 SF (1)			
6			7,807 SF	8,614 SF	185 Units		
7				16,122 SF	88 Units		
8		84,689 SF					
9				14,188 SF	36 Units		28 Units
10				14,944 SF	38 Units		19 Units
11				14,171	36 Units		18 Units
12		63,825 SF		164,833 (Sport Stable)			
13						14 Units	78 Units
14							26 Units
15							28 Units
16						18 Units	
17							42 Units
18						6 Units	31 Units
19						24 Units	
20						5 Units	
21							50 Units
22							38 Units
24							38 Units
25						18 Units	82 Units
26						54 Units	19 Units
27						18 Units	
Grand Total	242 keys	423,712 SF	7,807 SF	252,199 SF	382 Units	157 Units	497 Units

Total Residential Units	1,036 Units
Total SF Commercial (exc. Hotel)	675,911 SF
Total Civic	7,807 SF
Total Hotel Keys	242 Keys

(1) 20% of this total is assumed to be internal amenity space for surrounding buildings.

Source: Ranch Capital LLC, 2022

Figure 2: Overall Site Design

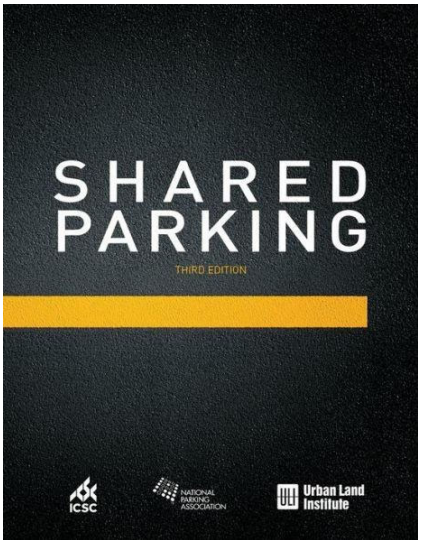


Source: Ranch Capital LLC, 2022

GENERAL APPROACH TO SHARED PARKING

The Town of Superior, CO, Municipal Code Section 16-24-10 states as follows:

> *Shared parking. Applicants are encouraged to explore shared parking and structured parking opportunities. Where shared parking is proposed, a shared parking study, prepared by a professional traffic planner, which justifies the shared parking ratios desired, shall accompany any development proposal.*



In keeping with this approach, the original PD Plan for Superior Town Center allows for site specific shared parking analysis to be submitted for various phases of the project. Specific requirements for this type of analysis are detailed on sheet CS1.1, which is generally in keeping with the ULI / ITE approach for shared parking.

The typical shared parking methodology is described in the Urban Land Institute's, *Shared Parking,* and is considered the industry standard for establishing shared parking needs based on time of day and several other adjustments impacting trips. (The upcoming 3rd Edition model has been used for this study). This publication references research published in the Institute of Transportation Engineers manual entitled, *Parking Generation, 5th Edition* and draws from other industry sources including the National Parking Association (NPA), American Planning Association (APA), and other publications.

Shared-use parking is a concept in which land uses in proximity, with different hourly demand patterns, share a "pool" of available spaces without encroachment or overflow. This arrangement is highly effective to reduce overall parking needs in situations where land uses are directly complimentary in terms of hours of peak usage, such as an office building sharing parking with a cinema. However, the "right-sizing" of a parking system can also be accomplished through a more nuanced look at land uses that may be partially complimentary, such as a hotel, where some patrons leave during the day, sharing with a daytime use like office or retail. Shared parking is the norm for a great many mixed-use environments including downtown districts, transportation-oriented development (TOD), and even sub-urban mixed-use shopping centers and malls with multiple tenants.

For a more in-depth discussion of shared parking and the site-specific adjustments applied for Downtown Superior, please reference Walker's prior shared *Parking Analysis* for the Morgan Ranch DTS project (dated 10/16/2019). Updates to driving adjustments for parkers associated with programmed uses for Blocks 2 and 8 based on the lasting impacts of the COVID-19 pandemic on remote work, as well as new data from the 2020 U.S. Census, are discussed on page 12. The rest of this memorandum will focus on the analysis that was added to the prior parking study to evaluate the needs of the Area 2 considering the Sports Stable, MOB, and future uses.

SITE SPECIFIC ANALYSIS—SPORTS STABLE

Large multi-purpose hockey and recreation venues are not defined specifically by ULI in the most recent publication, though several land uses are similar in terms of possible hourly and monthly demand patterns. The underlying data for these venues is drawn from ITE's *Parking Generation Manual, 5th Edition* and shown on the table below. In general, the number of case studies for these uses are limited and show a huge variation in demand patterns. For example, one hockey venue documented in ITE shows a peak hour demand for only 0.42 spaces / 1,000 while the other site (of only two) jumps up to 4.27/1,000 SF. Similar types of facilities such as Athletic Clubs (which are more diverse than ULI's "Health Club" use) and Recreational Centers also varied quite a bit in terms of peak demand.

Figure 3: ITE Parking Ratios of Hockey and Recreational Venues

Land Use	Ratio (low)	Ratio (high)	85th Percentile	per unit	Summary of ITE Notes
465 - Ice Skating Rink*	0.42	4.27	4.27	/1,000 SF	Stand-alone ice skating rinks; may contain spectator seating, refreshments, locker rooms, arcades, etc.
493 - Athletic Club*	1.48	5.20	5.01	/1,000 SF	Comprehensive athletic facilities; may contain sports courts, pools, exercise/weight rooms; often offer diverse team sports
495 - Recreational Community Center	1.40	4.77	3.78	/1,000 SF	YMCAs and similar; may include classes for adults and children, meeting rooms, day care, exercise/weight rooms, sports courts, pools, etc.
**Based on a very limited number of sites*					

Source: ITE, Parking Generation Manuel, 5th Edition, 2019

Based on our analysis, the Sports Stable facility at Downtown Superiors is both considerably larger (164,833 SF) than most of the ITE venues surveyed and more diverse in terms of internal uses. This means that, overall, this facility has the potential to be more varied in terms of events, but likely a lower parking demand density than the typical high-volume athletic club.

The following is a summary of some of the uses included within the Sports Stable footprint:

- Two NHL sized hockey rinks
- Zamboni room
- Twenty-four locker rooms
- Community room / community space
- Universal ball court
- Adult Fitness Facility (upstairs)
- Physical therapy
- Impact Sports
- Cross Fit
- Batting cages and Indoor golf

With the diversity of uses and large number of amenities, it becomes less likely that all sports fields are used concurrently. Additional more of the internal space at Sports Stable is devoted to circulation, storage, and support features (Such as the Zamboni room) than other similar Athletic clubs.

Several other data points are available for Sports Stable based on parking occupancy counts collected by Town Staff (March 2018) and based on recent parking occupancy surveys collected by Walker Consultants (09/27/19). Attachment 1 includes a breakdown of this data. However, in general both surveys reflected typical busy conditions at the facility. The observed peak hour public parking observed was as follows:

- Counts collected weekend of 03/15 - 03/18/18 218 (demand ratio = 1.32/1,000)
- Counts collected Friday evening 09/27/19 244 (demand ratio = 1.48/1,000)

The final data point reviewed for this study was the original parking and traffic impact analysis prepared by the Town ("BVI and Cornerstone" analysis dated November 7, 2013). This model, provided as Attachment 2,

shows a breakdown for each type of event by venue and user group and projects a typical demand schedule generating a need for up to 239 weekday parking stalls and 379 weekend parking stalls.

The Town analysis estimates about seven events per year that may generate more parking demand (up to 535 stalls) on a tournament weekend. However, for infrastructure purposes, the seven special events would be considered beyond the design day threshold for needs analysis.

CONCLUSION

Based on field data collected in 2019, Walker has confirmed the Town's original assessment of the Sports Stable facility and is comfortable using a design day analysis targeting up to 236 weekday spaces and 379 weekend spaces as a reasonable projection. The table below shows a summary of this conclusion and the demand ratios that have been applied to the model for the Sports Stable (based on 164,833 SF).

Figure 4: Sports Stable Assumed Design Day Parking Ratios

Other Data Points	Weekday	Weekend	85th Percentile	per unit	Notes
Field Surveys (03/18/18)		1.32	1.32	/1,000 SF	Town staff counts; conducted busy weekend in March, 2018 -- peak on Saturday at 11:00 a.m. (218 stall occupied)
Field Surveys (Friday 09/27/19)		1.48	1.48	/1,000 SF	Walker counts; peak public usage on Friday evening at 5 pm (244 stalls occupied)
BVI & Cornerstone Analysis (11/7/2013)	1.45	2.30	2.30	/1,000 SF	239-379 cars projected for typical weekday/weekend; up to 535 for large events (7 weekends / yr.) with special event parking plan

Source: Town staff and Walker Consultants, updated 2019

If special events are scheduled at the facility generating an occasional need for 500+ stalls, we would recommend a special event parking management plan for these dates. These types of events might require usage of more remote or temporary parking facilities. Valet parking and/or shuttles could also be considered for these large events, as needed.

SHARED PARKING ANALYSIS—BLOCK 12 PLUS MORGAN RANCH DTS

Figures 5-8 show the updated shared parking recommendations for existing uses plus Morgan Rach DTS. Sports Stable and MOB demand assumptions have been included.

Figure 5: Projected **Weekday** Peak Hour Parking Needs (Block 12 + Morgan Ranch DTS)

Shared Parking Summary

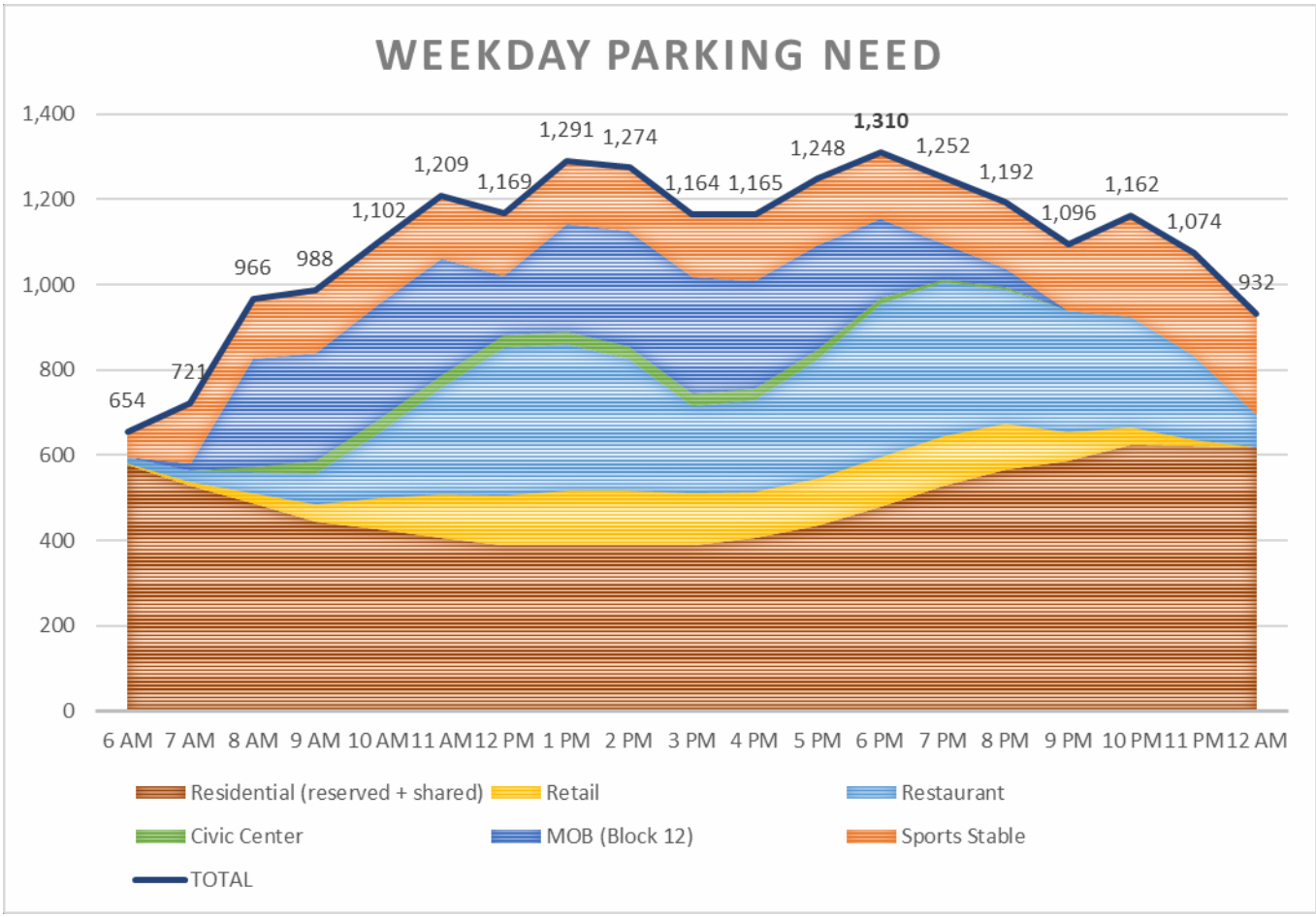
Peak Month: DECEMBER -- Peak Period: 6 PM, WEEKEND

Land Use	Project Data		Weekday					Weekday		
			Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit	Peak Hr Adj	Peak Mo Adj	Projected Parking Need
	Quantity	Unit						6 PM	December	
Retail										
Retail (<400 ksf)	39,338	sf GLA	2.90	98%	93%	2.63	ksf GLA	90%	100%	94
Employee			0.70	82%	98%	0.56		100%	100%	23
Food and Beverage										
Fine/Casual Dining	16,953	sf GLA	13.25	98%	92%	12.00	ksf GLA	95%	100%	194
Employee			2.25	82%	98%	1.81		100%	100%	31
Fast Casual/Fast Food/Food Court/F	16,952	sf GLA	12.40	98%	64%	7.76	ksf GLA	85%	96%	108
Employee			2.00	82%	98%	1.61		90%	100%	25
Entertainment and Institutions										
Civic Center - Library	3,670	sf GLA	2.00	100%	93%	1.85	ksf GLA	60%	65%	3
Employee			0.25	82%	98%	0.20		75%	65%	0
Civic Center - Event	4,137	sf GLA	5.50	100%	76%	4.20	ksf GLA	50%	100%	9
Employee			0.50	82%	98%	0.40		40%	100%	1
Hotel and Residential										
Residential, Apartments (suburban)										
Studio Efficiency	85	units	0.66	100%	100%	0.66	units	60%	100%	34
1 Bedroom	146	units	0.69	100%	100%	0.69	units	60%	100%	61
2 Bedrooms	134	units	1.27	100%	100%	1.27	units	60%	100%	103
3+ Bedrooms	17	units	1.93	100%	100%	1.93	units	60%	100%	20
Reserved		res spaces	0.28	100%	100%	0.28	res spaces	100%	100%	107
Visitor	382	units	0.10	98%	100%	0.10	units	60%	100%	23
Residential, Townhomes (suburban)										
Studio Efficiency		units	0.00	100%	100%	0.00	units	70%	100%	-
1 Bedroom		units	0.00	100%	100%	0.00	units	70%	100%	-
2 Bedrooms		units	0.00	100%	100%	0.00	units	70%	100%	-
2-3 Bedrooms	64	units	0.00	100%	100%	0.00	units	70%	100%	-
Reserved		res spaces	2.00	100%	100%	2.00	res spaces	100%	100%	128
Visitor	64	units	0.10	98%	100%	0.10	units	60%	100%	4
Medical/Dental Office	63,825	sf GFA	3.00	98%	100%	2.93	ksf GLA	67%	100%	126
Employee			1.60	100%	91%	1.45		67%	100%	63
Sports Stable	164,833	sf GFA	1.45	100%	100%	1.45	sf GFA	65%	100%	155
Employee			0.00	100%	100%	0.00		65%	75%	-
								Customer/Visitor		715
								Employee/Resident		360
								Reserved		235
								Total		1,310

Note that ULI's 3rd edition model does not round parking needs for individual land uses in a mixed-use environment (for example, 0.5 parking spaces may display as 1 but is carried through the model as 0.5). Therefore, fractional calculations may result in minor rounding discrepancies when summing the peak hour columns.

Source: Walker Consultants, 2022

Figure 6: Projected **Weekday** Parking Needs- Hourly Distribution



Source: Walker Consultants, 2022

The weekend peak hour, depicted in **Figure 7**, is projected as the maximum, with a need for 1,418 recommended spaces.

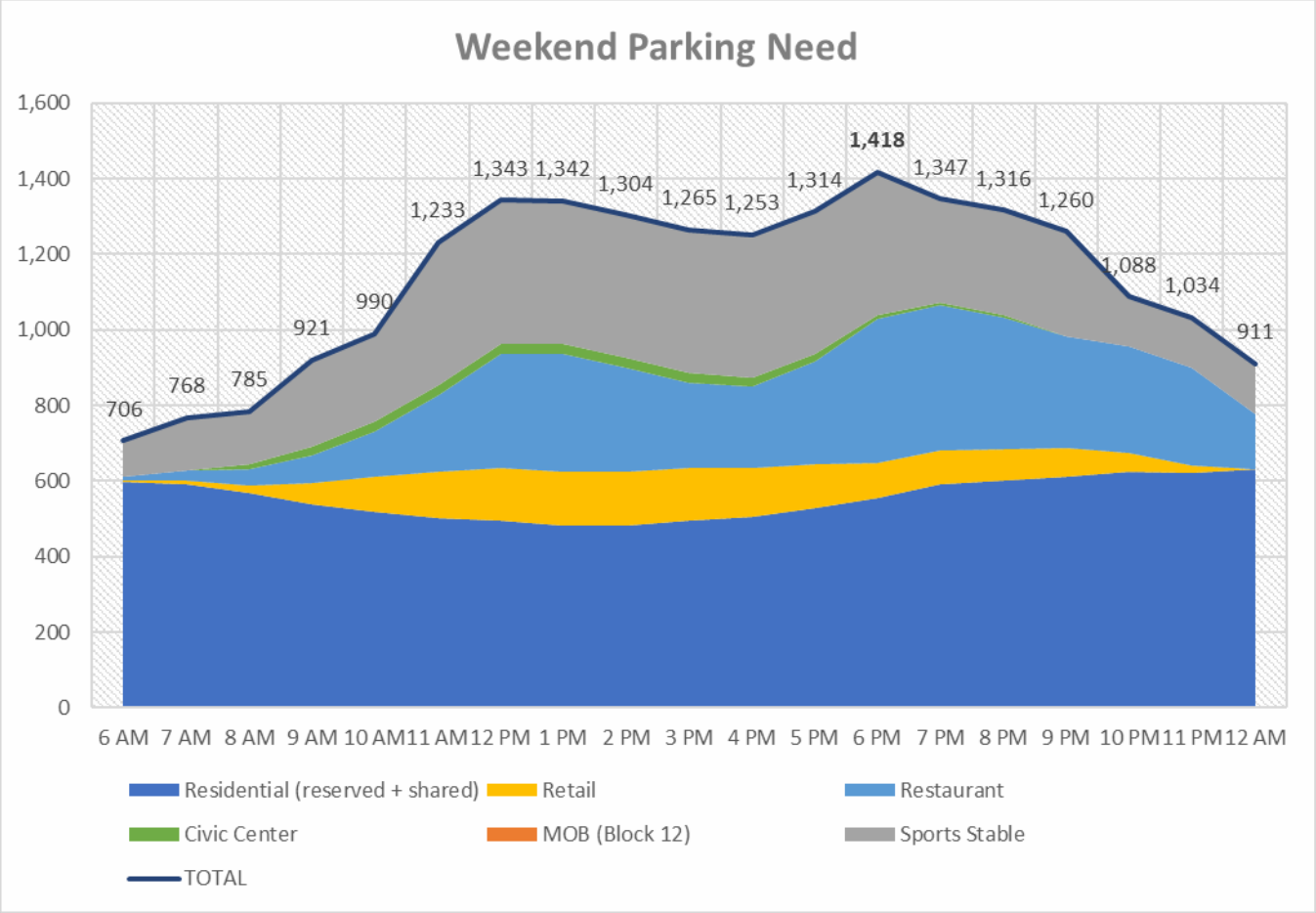
Figure 7: Projected **Weekend** Peak Hour Parking Needs (Block 12 + Morgan Ranch DTS)

Shared Parking Summary										
Peak Month: DECEMBER -- Peak Period: 6 PM, WEEKEND										
Land Use	Project Data		Weekend					Weekend		
			Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit	Peak Hr Adj	Peak Mo Adj	Projected Parking Need
	Quantity	Unit						6 PM	December	
Retail										
Retail (<400 ksf)	39,338	sf GLA	3.20	98%	92%	2.87	ksf GLA	65%	100%	74
Employee			0.80	82%	98%	0.64		85%	100%	22
Food and Beverage										
Fine/Casual Dining	16,953	sf GLA	15.25	98%	92%	13.82	ksf GLA	90%	100%	211
Employee			2.50	82%	98%	2.01		100%	100%	35
Fast Casual/Fast Food/Food Court/F	16,952	sf GLA	12.70	98%	63%	7.89	ksf GLA	85%	96%	110
Employee			2.00	82%	98%	1.61		90%	100%	25
Entertainment and Institutions										
Civic Center - Library	3,670	sf GLA	1.90	100%	92%	1.74	ksf GLA	5%	65%	0
Employee			0.20	82%	98%	0.16		10%	65%	0
Civic Center - Event	4,137	sf GLA	5.50	100%	73%	4.01	ksf GLA	50%	100%	8
Employee			0.50	82%	98%	0.40		40%	100%	1
Hotel and Residential										
Residential, Apartments (suburban)										
Studio Efficiency	85	units	0.66	100%	100%	0.66	units	77%	100%	43
1 Bedroom	146	'	0.69	100%	100%	0.69	units	77%	100%	79
2 Bedrooms	134	units	1.27	100%	100%	1.27	units	77%	100%	132
3+ Bedrooms	17	units	1.93	100%	100%	1.93	units	77%	100%	25
Reserved		units	0.28	100%	100%	0.28	res spaces	100%	100%	107
Visitor	382	res spaces	0.15	98%	100%	0.15	units	60%	100%	34
		units								
Residential, Townhomes (suburban)										
Studio Efficiency		units	0.00	100%	100%	0.00	units	50%	100%	-
1 Bedroom		units	0.00	100%	100%	0.00	units	50%	100%	-
2 Bedrooms		units	0.00	100%	100%	0.00	units	50%	100%	-
2-3 Bedrooms	64	units	0.00	100%	100%	0.00	units	50%	100%	-
Reserved		res spaces	2.00	100%	100%	2.00	res spaces	100%	100%	128
Visitor	64	units	0.15	98%	100%	0.15	units	60%	100%	6
Medical/Dental Office	63,825	sf GFA	0.00	98%	100%	0.00	ksf GLA	0%	100%	-
Employee			0.00	100%	91%	0.00		0%	100%	-
Sports Stable	164,833	sf GFA	2.30	100%	100%	2.30	sf GFA	100%	100%	379
Employee			0.00	100%	100%	0.00		100%	75%	-
								Customer		822
								Employee/Resident		361
								Reserved		235
								Total		1,418

Note that ULI's 3rd edition model does not round parking needs for individual land uses in a mixed-use environment (for example, 0.5 parking spaces may display as 1 but is carried through the model as 0.5). Therefore, fractional calculations may result in minor rounding discrepancies when summing the peak hour columns.

Source: Walker Consultants, 2022

Figure 8: Projected **Weekend** Parking Needs- Hourly Distribution



Source: Walker Consultants, 2022

At this phase of the development a total parking capacity of roughly 1,500 spaces will be available to support the existing and proposed uses.

On weekdays, medical office building demand will be accommodated on upper floors of the shared garage. On weekends and evenings, this garage would be available for shared public use supporting Main Street uses and the Sports Stable.

The Morgan Ranch DTS project is expected to provide a total of 1,062 parking stalls, including the roughly 56 street spaces currently available along Main Street.

Figure 9 shows the estimated parking at this phase of the project.

Figure 9: Projected **Weekday** Parking Needs- Area 2 Full Build-Out

	Existing Parking Inventory	Parking Inventory with Morgan Ranch DTS	
Big Lot (temporary)	106	-	
Sports Stable Lot	110	110	
Garage (GLL + L1)	36	36	
Garage (L1 - L4)*	193	193	
Public On-Street	153	97	*Main street spaces included for Morgan Ranch count
New Morgan Rach DTS Supply	-	1,062	
TOTAL SPACES PROVIDED	**598**	**1,498**	
*Available weekends and evenings for public use on on weekdays for MOB only			

Source: Ranch Capital LLC and Walker Consultants, 2022

SHARED PARKING ANALYSIS – AREA 2 (FULL BUILD-OUT)

PARKING ANALYSIS FOR LIFE SCIENCE (OFFICE/LAB) SPACE

The roughly 275,000 square feet of development on Block 2 and roughly 85,000 square feet of development on Block 8 are conceptualized as "Life Science" space, with 60% dedicated to functional lab space and 40% dedicated to more traditional office space. To evaluate parking needs for these uses, Walker used standard office base ratios for the space dedicated to office, and incorporated a 58.3% decrease in this ratio for the lab space based on employee density data for labs collected in 2021 by the International Facility Management Association (IFMA). Walker also attributed all visitor parking demand to the traditional office space.

UPDATES TO DRIVING ADJUSTMENTS AT FULL BUILD-OUT CONDITIONS

Walker has incorporated a 95% driving ratio (5% non-SOV transportation usage) for all Block 2 and 8 user groups.

Figures 10 and **11** show the updated shared parking recommendations for existing uses plus Morgan Rach DTS, plus remaining planned developments on Blocks 2 and 8. As additional densities, and land uses types are added to the site, the shared parking system can become more efficient. With the addition of the office/lab space, the peak hour need is projected to shift to a weekday afternoon, with a weekend evening being the secondary peak hour.

Assuming a shared, site-wide approach, a total of **1,941 stalls** are recommended for full build-out of Phase 2, which represents a net increase of roughly 443 stalls over the total already provided in Morgan Ranch DTS and Block 12.

Figure 10: Projected **Weekday** Parking Needs- Area 2 Full Build-Out (Site-Wide Shared Parking Scenario)

	Project Data									
Land Use	Quantity	Unit	Base Ratio	Driving Adj	Non-Captive Adj	Project Ratio	Unit	Peak Hr Adj 2 PM	Peak Mo Adj Dec	Projected Parking Nee
Retail										
General Retail	44,076	sf GLA	2.90	95%	93%	2.56	ksf GLA	100%	100%	113
Employees	44,076		0.70	95%	99%	0.66	ksf GLA	100%	100%	29
Food and Beverage										
Fine/Casual Dining	19,322	sf GLA	13.25	95%	99%	12.46	ksf GLA	65%	100%	157
Employees	19,322	sf GLA	2.25	95%	99%	2.12	ksf GLA	90%	100%	37
Fast Casual/Fast Food/Café	19,321	sf GLA	12.40	95%	38%	4.48	ksf GLA	95%	100%	82
Employees	19,321	sf GLA	2.00	95%	99%	1.88	ksf GLA	95%	100%	35
Civic/Institutions										
Civic Center- Library	3,670	sf GLA	2.00	100%	93%	1.85	ksf GLA	72%	65%	3
Employees	3,670	sf GLA	0.25	72%	99%	0.01	ksf GLA	60%	65%	0
Civic Center- Event	4,137	sf GLA	5.50	100%	23%	1.26	ksf GLA	100%	100%	5
Employees	4,137	sf GLA	0.50	72%	99%	0.36	ksf GLA	100%	100%	1
Residential										
Residential, Apartments (suburban)										
Studio/Efficiency	85	units	0.66	100%	100%	0.66	units	40%	100%	22
1-Bedroom	146	units	0.69	100%	100%	0.69	units	40%	100%	40
2-Bedroom	134	units	1.27	100%	100%	1.27	units	40%	100%	68
3+ Bedrooms	17	units	1.93	100%	100%	1.93	units	40%	100%	13
100% Reserved		spaces	0.28	100%	100%	0.28	spaces	100%	100%	107
Visitors	382	units	0.10	98%	100%	0.1	units	20%	100%	8
Residential, Townhomes (suburban)										
2-3 Bedrooms	64	units	0.00	100%	100%	0	units	50%	100%	-
100% Reserved		spaces	2	100%	100%	64	spaces	100%	100%	128
Visitors	64	units	0.10	98%	100%	0.10	units	20%	100%	1
Office/Life Science/MOB										
Office										
Visitors	143,954	sf GLA	0.25	95%	100%	0.24	ksf GLA	95%	100%	32
Employees	143,954	sf GLA	3.14	95%	98%	2.92	ksf GLA	95%	100%	400
Lab										
Employees	197,933	sf GLA	1.31	95%	98%	1.22	ksf GLA	95%	100%	229
Medical/Dental Office										
Visitors	63,825	sf GLA	3.00	95%	100%	2.85	ksf GLA	100%	100%	182
Employees	63,825	sf GLA	1.60	95%	98%	1.49	ksf GLA	100%	100%	95
Recreational										
Sports Stable	164,833	sf GLA	1.45	100%	100%	1.45	ksf GLA	62%	100%	148

Total Project (Shared)	**Customer/Visitor**	**736**
	Employee/Resident	**970**
	Reserved	**235**
	Total	**1,941**

Figure 11: Projected **Weekend** Parking Needs- Area 2 Full Build-Out (Site-Wide Shared Parking Scenario)

	Project Data									
Land Use	Quantity	Unit	Base Ratio	Driving Adj	Non-Captive Adj	Project Ratio	Unit	Peak Hr Adj 6 PM	Peak Mo Adj Dec	Projected Parking Nee
Retail										
General Retail	44,076	sf GLA	3.20	95%	91%	2.77	ksf GLA	65%	85%	67
Employees	44,076		0.80	95%	98%	0.74	ksf GLA	85%	95%	27
Food and Beverage										
Fine/Casual Dining	19,322	sf GLA	15.25	95%	79%	11.45	ksf GLA	65%	100%	144
Employees	19,322	sf GLA	2.25	95%	99%	2.12	ksf GLA	90%	100%	37
Fast Casual/Fast Food/Café	19,321	sf GLA	12.40	95%	38%	4.48	ksf GLA	95%	100%	82
Employees	19,321	sf GLA	2.00	95%	99%	1.88	ksf GLA	95%	100%	35
Civic/Institutions										
Civic Center- Library	3,670	sf GLA	2.00	100%	93%	1.85	ksf GLA	72%	65%	3
Employees	3,670	sf GLA	0.25	72%	99%	0.01	ksf GLA	60%	65%	0
Civic Center- Event	4,137	sf GLA	5.50	100%	23%	1.26	ksf GLA	100%	100%	5
Employees	4,137	sf GLA	0.50	72%	99%	0.36	ksf GLA	100%	100%	1
Residential										
Residential, Apartments (suburban)										
Studio/Efficiency	85	units	0.66	100%	100%	0.66	units	40%	100%	22
1-Bedroom	146	units	0.69	100%	100%	0.69	units	40%	100%	40
2-Bedroom	134	units	1.27	100%	100%	1.27	units	40%	100%	68
3+ Bedrooms	17	units	1.93	100%	100%	1.93	units	40%	100%	13
100% Reserved		spaces	0.28	100%	100%	0.28	spaces	100%	100%	107
Visitors	382	units	0.10	98%	100%	0.1	units	20%	100%	8
Residential, Townhomes (suburban)										
2-3 Bedrooms	64	units	0.00	100%	100%	0	units	50%	100%	-
100% Reserved		spaces	2	100%	100%	64	spaces	100%	100%	128
Visitors	64	units	0.10	98%	100%	0.10	units	20%	100%	1
Office/Life Science/MOB										
Office										
Visitors	143,954	sf GLA	0.25	95%	100%	0.24	ksf GLA	95%	100%	33
Employees	143,954	sf GLA	3.14	95%	98%	2.92	ksf GLA	95%	100%	400
Lab										
Employees	197,933	sf GLA	0.14	95%	98%	0.13	ksf GLA	95%	100%	25
Medical/Dental Office										
Visitors	63,825	sf GLA	3.00	95%	100%	2.85	ksf GLA	100%	100%	182
Employees	63,825	sf GLA	1.60	95%	98%	1.49	ksf GLA	100%	100%	95
Recreational										
Sports Stable	164,833	sf GLA	1.45	100%	100%	1.45	ksf GLA	62%	100%	148

Total Project (Shared)	**Customer/Visitor**	**678**
	Employee/Resident	**763**
	Reserved	**235**
	Total	**1,676**

If Blocks 2 and 8 are self-parked, a minimum of **750 stalls** is recommended to satisfy market demand. The developer is planning a total of 1,130 spaces, which represents a ratio of roughly 3 spaces per 1,000 gross square feet for the life science buildings. This ratio is consistent with traditional office space parking ratios both seen in the Denver Metro area and as represented in Urban Land Institute and Institute of Transportation Engineers literature. **Figures 12** and **13** depict parking needs by use assuming a self-parked scenario is pursued.

Figure 12: Projected **Weekday** Parking Needs- Block 2 and 8 Only (Self-Parked Scenario)

	Project Data										
Land Use	Quantity	Unit	Base Ratio	Driving Adj	Non-Captive Adj	Project Ratio	Unit	Peak Hr Adj 2 PM	Peak Mo Adj Dec	Projected Parking Nee	
Retail											
General Retail	4,737	sf GLA	2.90	95%	93%	2.56	ksf GLA	100%	100%	12	
Employees	4,737		0.70	95%	99%	0.66	ksf GLA	100%	100%	3	
Food and Beverage											
Fine/Casual Dining	2,369	sf GLA	13.25	95%	99%	12.46	ksf GLA	65%	100%	19	
Employees	2,369	sf GLA	2.25	95%	99%	2.12	ksf GLA	90%	100%	5	
Fast Casual/Fast Food/Café	2,369	sf GLA	12.40	95%	38%	4.48	ksf GLA	95%	100%	10	
Employees	2,369	sf GLA	2.00	95%	99%	1.88	ksf GLA	95%	100%	4	
Office/Life Science/MOB											
Office											
Visitors	143,954	sf GLA	0.25	95%	100%	0.24	ksf GLA	100%	100%	34	
Employees	143,954	sf GLA	3.14	95%	98%	2.92	ksf GLA	100%	100%	421	
Lab											
Employees	197,933	sf GLA	1.31	95%	98%	1.22	ksf GLA	100%	100%	241	

Blocks 2 & 8 Only	**Customer/Visitor**	**76**
	Employee/Resider	**674**
	Reserved	**-**
	Total	**750**

Figure 13: Projected **Weekend** Parking Needs- Block 2 and 8 Only (Self-Parked Scenario)

	Project Data										
Land Use	Quantity	Unit	Base Ratio	Driving Adj	Non-Captive Adj	Project Ratio	Unit	Peak Hr Adj 6 PM	Peak Mo Adj Dec	Projected Parking Nee	
Retail											
General Retail	4,737	sf GLA	3.20	95%	91%	2.77	ksf GLA	65%	85%	7	
Employees	4,737		0.80	95%	98%	0.74	ksf GLA	85%	95%	3	
Food and Beverage											
Fine/Casual Dining	2,369	sf GLA	15.25	95%	79%	11.45	ksf GLA	65%	100%	18	
Employees	2,369	sf GLA	2.25	95%	99%	2.12	ksf GLA	90%	100%	5	
Fast Casual/Fast Food/Café	2,369	sf GLA	12.40	95%	38%	4.48	ksf GLA	95%	100%	10	
Employees	2,369	sf GLA	2.00	95%	99%	1.88	ksf GLA	95%	100%	4	
Office/Life Science/MOB											
Office											
Visitors	143,954	sf GLA	0.25	95%	100%	0.24	ksf GLA	95%	100%	33	
Employees	143,954	sf GLA	3.14	95%	98%	2.92	ksf GLA	95%	100%	400	
Lab											
Employees	197,933	sf GLA	0.14	95%	98%	0.13	ksf GLA	95%	100%	25	

Blocks 2 & 8 Only	**Customer/Visitor**	**68**
	Employee/Resident	**436**
	Reserved	**-**
	Total	**504**