

TECHNICAL MEMORANDUM

DATE: *Monday, October 16, 2023*

TO: *Mark Gross - Tuscan Village*

CC: *Tony Nigro - Tuscan Village*

FROM: *Andrew S. Hill, Director of Consulting Services – DESMAN, Inc.*

PROJECT: *Tuscan Village Redevelopment* **PROJECT #:** *20-16118.00-3*

RE: *October 2023 Shared Parking Analysis Through Building 13*

DEVELOPMENT PROGRAM

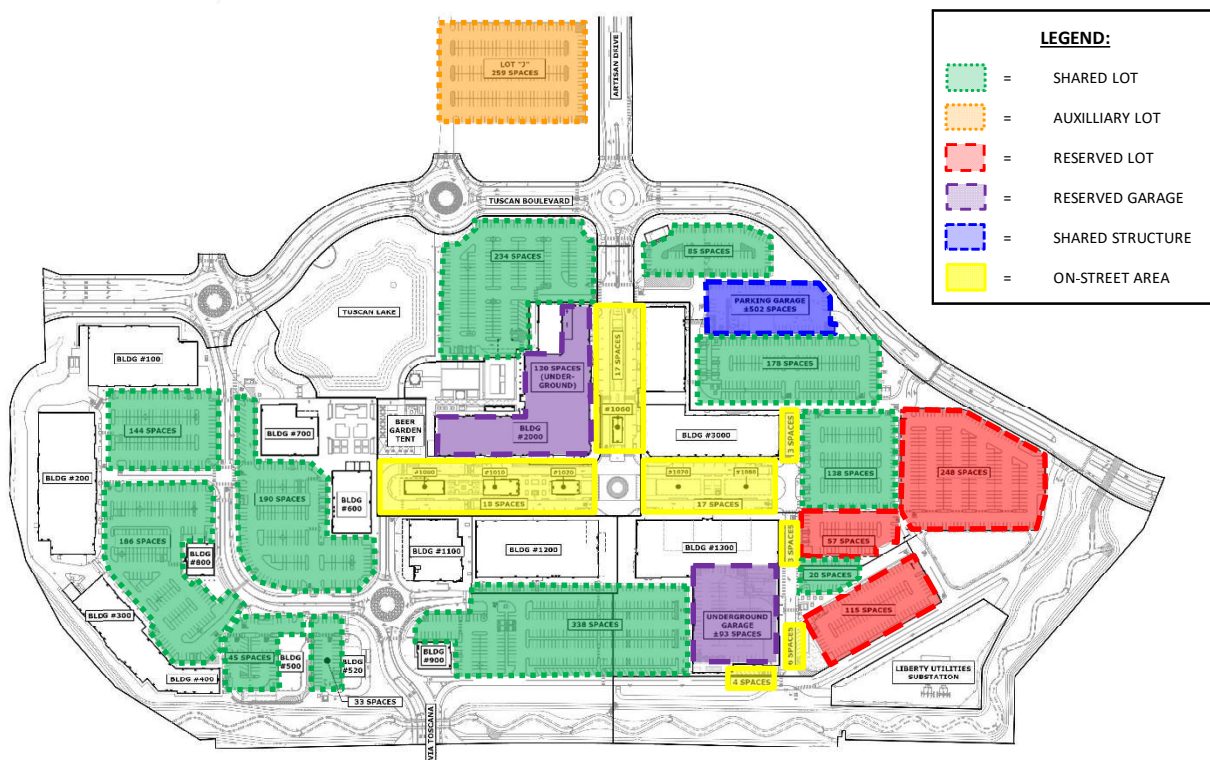
Working off the most recent development plan, DESMAN developed an analysis of parking demand and supply for the South and Central Villages. The development program included in this analysis consists of:

- 224,311 square feet (Gross Leasable Area¹) of soft goods retail;
- 36,812 square feet (Gross Leasable Area) of specialty retail (e.g., Tuscan Market);
- 9,285 square feet (Gross Floor Area) of fine/casual dining equating to 198 indoor seats and 60 outdoor seats;
- 58,135 square feet (Gross Floor Area) of fast/casual dining equating to 1,213 indoor seats and 683 outdoor seats;
- 5,046 square feet (Gross Floor Area) of café/take-out restaurant equating to 102 indoor seats and 16 outdoor seats;
- 38,015 square feet (Gross Leasable Area) of furniture or home furnishings retail;
- A 200-seat Seasonal Beer Garden;
- A 25,000 square foot (Gross Leasable Area) lifestyle fitness center;
- 530 residential apartments;
- 70 residential condominiums;
- 76,069 square feet (Gross Floor Area) of general office space;
- 18,000 square feet (Gross Floor Area) of medical space;
- 3,507 square feet (Gross Floor Area) of bank space;
- 165 hotel rooms;
- A banquet complex with an indoor seating capacity of up to 390 persons;
- 23,756 square feet (Gross Floor Area) of retail common area;
- 3,063 total parking spaces.

¹ Both the Urban Land Institute (ULI) and the Institute of Transportation Engineers (ITE) use Gross Leasable Area (i.e. Gross Floor Area minus Common Space) as the metric for measuring parking demand for retail, entertainment, and other commercial non-office land uses.

There is a total of 852 spaces in the South Village contained in six shared surface parking fields. In the Central Village, there are six shared lots, three reserved lots, one auxiliary lot, two underground garages, one above-grade parking structure, and handful of on-street parking areas, as shown in **Figure 1**, providing a total of 2,211 parking spaces to support the Central Village buildings². Combined, the South Village and Central Village developments included in this analysis share a total parking supply of 3,063 spaces.

Figure 1: Tuscan Village Site Plan Germane to this Analysis



SHARED USE METHODOLOGY

At the request of Tuscan Brands, DESMAN prepared the following Shared Parking model specific to the subject development. Shared Parking is a methodology for calculating the parking demands of a proposed project developed by the Urban Land Institute (ULI) in collaboration with the Institute of Transportation Engineers (ITE) and the International Council of Shopping Centers (ICSC). This methodology is a departure from the standard zoning ordinance method of calculating required parking which is to apply a parking demand ratio (or parking requirement per local code or ordinance) to each component within a project, sum the total of all demands and build against this figure. This traditional methodology treats parking demand as a fixed, unwavering phenomenon and, as result, often results in the provision of parking supply greater than the true need of the development. This methodology allows the planner to accurately

² The 130-space underground garage beneath Building 2000 is reserved exclusively for condominium tenants and their guests. 322 spaces in the 520-space parking structure garage northeast of Building 3000 are reserved for Building 3000 residents. The 115-space, 57-space, and 248-space surface lots to the north of Building 1300 are reserved for exclusive use by Building 1300 residents. Finally, the 93-space garage under Building 1300 as well as an additional 99 surface parking spaces are reserved for use by Building 1300 Specialty Grocery patrons and employees. In total there are 872 spaces reserved for residents and additional 192 spaces reserved for Building 1300 Specialty Grocery patrons and employees.

determine the need for the development as an organic whole, rather than an assembly of disparate parts. The result is provision of a parking supply to support the project which is adequate to meet the project's needs without building excess parking spaces.

Shared Parking models are comprised of industry standard base parking demand ratios, adjusted to reflect for variations in demand specific to each project's composition and locality, as well as fluctuations in demand according to time of day and year. Base parking demand ratios are developed through the long-term study of stand-alone land uses (i.e. office buildings, retail stores, hotel, etc.) with their own dedicated parking facilities. Researchers perform occupancy counts at different times of day, different days of the week, and different times of the year, to isolate the busiest hour of the busiest weekday and/or weekend day annually.

Table 1: Base Parking Demand Ratios

Land Use	User Group	Weekday	Weekend	Unit	Source
Standard Retail	Customer	2.90	3.20	/ksf GLA	Shared Parking: 3rd Edition Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Employee	0.70	0.80	/ksf GLA	Shared Parking: 3rd Edition Washington DC: ULI-The Urban Land Institute, 2020, p.16
Specialty Retail	Customer	3.50	3.70	/ksf GLA	DESMAN Inc. (proprietary information from 14 Trader Joes and Whole Foods, 2003-2006).
	Employee	0.60	0.50	/ksf GLA	DESMAN Inc. (proprietary information from 14 Trader Joes and Whole Foods, 2003-2006).
Fine/Casual Dining	Customer (indoors)	0.73	0.54	/indoor seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.717-718
	Customer (outdoors)	0.73	0.54	/outdoor seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.717-718
	Employee	0.13	0.09	/seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.717-718
Fast Casual Dining	Customer (indoors)	0.49	0.47	/indoor seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.734-735
	Customer (outdoors)	0.49	0.47	/outdoor seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.734-735
	Employee	0.09	0.08	/seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.734-735
Café/Take Out	Customer (indoors)	0.52	0.58	/indoor seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.764-765
	Customer (outdoors)	0.52	0.58	/outdoor seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.764-765
	Employee	0.09	0.10	/seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.764-765
Furniture/Furnishings	Customer	0.77	1.42	/ksf GFA	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.678-679
	Employee	0.07	0.16	/ksf GFA	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.678-679
Seasonal Beer Garden	Customer	0.52	0.58	/seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.717-718
	Employee	0.09	0.10	/seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.717-718
Lifestyle/Fitness	Customer	6.60	5.50	/ksf GLA	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
	Employee	0.40	0.25	/ksf GLA	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
Active Entertainment	Customer	5.50	6.00	/ksf GLA	DESMAN Inc (proprietary information from Kings [2005], Funny Bone Comedy Club, Great Escape Room, Ace Ping Pong Bar, Mind Trek VR Arcade, Fight Club Dart Bar [2016-2018])
	Employees	1.25	1.50	/ksf GLA	
Residential, Suburban	1-Bedroom	0.90	0.90	/unit	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
	2-Bedroom	1.65	1.65	/unit	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
	3-Bedroom	2.50	2.50	/unit	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
	Condominium	1.85	1.85	/unit	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
	Guest	0.10	0.10	/unit	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
General Office	Visitor	0.30	0.03	/ksf GFA	Shared Parking: 3rd Edition Washington DC: ULI-The Urban Land Institute, 2020, p.16
	Employee	3.50	0.35	/ksf GFA	Shared Parking: 3rd Edition Washington DC: ULI-The Urban Land Institute, 2020, p.16
Medical Office Building	Visitor	3.00	0.00	/ksf GFA	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
	Employee	1.60	0.00	/ksf GFA	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
Bank	Visitor	3.50	3.00	/ksf GFA	Shared Parking: 3rd Edition Washington DC: ULI-The Urban Land Institute, 2020, p.15
	Employee	2.50	1.75	/ksf GFA	Shared Parking: 3rd Edition Washington DC: ULI-The Urban Land Institute, 2020, p.16
Hotel	Visitor	1.00	1.00	/room	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
	Employee	0.15	0.15	/room	Shared Parking: 3rd Edition Washington DC: ULI - Urban Land Institute, 2020, p.16
Banquet Facilities	Customer (indoors)	0.54	0.73	/indoor seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.717-718
	Customer (outdoors)	0.54	0.73	/outdoor seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.717-718
	Employee	0.09	0.13	/seat	Parking Generation: 5th Edition Washington DC: ITE - Institute of Transportation Engineers, 2019, p.717-718

Once the peak hour is isolated, researchers divide the number of vehicles parked by the key driving element in each land use, such as the number of hotel rooms or total gross leasable square footage of the building. This division renders a parking demand ratio; the mathematic expression of the number of cars parked at the busiest hour of the busiest day related to the land use's key driver.

The Urban Land Institute (ULI), the Institute of Transportation Engineers (ITE), the International Council of Shopping Center (ICSC), the International Parking Institute (IPI), the National Parking Association (NPA), the American Planning Association (APA) and other agencies gather and consolidate these individual studies into peer-reviewed, statistically reliable resources for application in planning studies, such as this one. DESMAN applied the base demand ratios to the proposed program shown in **Table 1**, above.

Adjustments to base demand ratios can be applied to reflect the actual conditions in the project site. These applied factors included adjustments to reflect choice of transportation mode, internal rates of capture, and other local factors.

Mode adjustments reflect the percentage of users expected to drive themselves to a project, versus arriving by other means. The most recent [2020] American Community Survey (ACS) covering Salem, New Hampshire³ and administered by the US Census Bureau, reported that 83.9% of the local populace drove themselves to work in a personal vehicle; the remainder either carpooled (9.3%), worked from home (5.8%), or walked (0.9%). This is the basis for DESMAN's assumptions regarding mode adjustment specific to the project for employees. Data on mode use by shoppers, diners, tourists and other patrons in Salem is not available, so DESMAN made no adjustment for these users.

Capture adjustments – the percentage of persons already on the project site for one reason, but patronizing another business – is applied so that demand associated with one land use is not credited against another land use during the modeling process. For example, the office worker who goes to Starbucks on break does not generate any new or additional parking demand by getting a latte. If that employee's parking demand is already 'credited' to his office, the capture adjustment to Starbucks assures that his parking demand is NOT associated with the coffee shop, i.e. "double counting" him. Some of these reductions will remain fairly stable, regardless of the day of week or time of day, while others will fluctuate according to time of day or day of the week. Within the proposed project site, DESMAN assumed that the largest 'captive population' would be hotel guests, area employees or project residents who might also patronize retail stores, restaurants, or health clubs onsite without necessarily generating any additional trips or resulting parking demand. Applied capture assumptions to this model were as follows:

- *Retail*: Fifteen percent (15%) of patrons would be captive within the project on weekdays, decreasing to 10% on weekday evenings, and 5% on weekends and weekend evenings.
- *Grocery*: Fifteen percent (15%) of patrons would be captive within the project on weekdays, decreasing to 10% on weekday evenings, and 5% on weekends and weekend evenings.
- *Fine/Casual, Fast Casual and Café/Take-Out Restaurants*: Fifteen percent (15%) of patrons would be captive within the project on weekdays, decreasing to 10% on weekday evenings, and 5% on weekends and weekend evenings.
- *Seasonal Beer Garden*: Five percent (5%) of patrons would be captive within the project on weekdays, weekends, and evenings.
- *Lifestyle Fitness Center*: Twenty percent (20%) of patrons would be captive within the project on weekdays, decreasing to 5% on weekday evenings, weekends, and weekend evenings.
- *Banquet Space*: Events booked for this venue on the occasional weekday or weekday evenings would be roughly half the size of weekend events. On weekdays, roughly twenty-five percent (25%) of attendees would already be parked on-site as hotel guests; on weekday evening, roughly fifty percent (50%) of event attendees would already be parked as hotel guests. On weekend days, approximately fifty percent (50%) of event attendees would also be hotel guests. On events only scheduled for a weekend evening, only thirty-three percent (33%) of Saturday evening event attendees would be hotel guests.

A summary of applied adjustments to base demand ratios are shown in **Table 2**, next page.

³ Census Tract 1003,01 in Rockingham County, New Hampshire.

Table 2: Applied Mode and Capture Adjustments

WEEKDAYS									
DAYTIME (6:00 AM - 4:59 PM)									
Land Use	User Group	Base Ratio	Modal Adj.	Capture Adj.	Local Adj.	Project Ratio	Unit		
Standard Retail	Customer	2.90	1.00	0.85	0.98	2.42	/ksf GLA		
	Employee	0.70	0.88	1.00	0.98	0.60	/ksf GLA		
Specialty Retail	Customer	3.50	1.00	0.85	0.98	2.92	/ksf GLA		
	Employee	0.60	0.88	1.00	0.98	0.52	/ksf GLA		
Fine/Casual Dining	Customer (indoors)	0.73	1.00	0.85	0.98	0.61	/indoor seat		
	Customer (outdoors)	0.73	1.00	0.85	0.98	0.61	/outdoor seat		
	Employee	0.13	0.88	1.00	0.98	0.11	/seat		
Fast Casual Dining	Customer (indoors)	0.49	1.00	0.85	0.98	0.41	/indoor seat		
	Customer (outdoors)	0.49	1.00	0.85	0.98	0.41	/outdoor seat		
	Employee	0.09	0.88	1.00	0.98	0.08	/seat		
Café/Take Out	Customer (indoors)	0.52	1.00	0.85	0.98	0.43	/indoor seat		
	Customer (outdoors)	0.52	1.00	0.85	0.98	0.43	/outdoor seat		
	Employee	0.09	0.88	1.00	0.98	0.08	/seat		
Furniture/Furnishings	Customer	0.77	1.00	1.00	0.98	0.75	/ksf GFA		
	Employee	0.07	0.88	1.00	0.98	0.06	/ksf GFA		
Seasonal Beer Garden	Customer	0.52	1.00	0.95	0.98	0.48	/seat		
	Employee	0.09	0.88	1.00	0.98	0.08	/seat		
Lifestyle/Fitness	Customer	6.60	1.00	0.80	0.98	5.17	/ksf GLA		
	Employee	0.40	0.88	1.00	0.98	0.34	/ksf GLA		
Active Entertainment	Customer	5.50	1.00	0.85	0.98	4.58	/ksf GLA		
	Employees	1.25	0.88	1.00	0.98	1.08	/ksf GLA		
Residential, Suburban	1-Bedroom	0.90	1.00	1.00	0.98	0.88	/unit		
	2-Bedroom	1.65	1.00	1.00	0.98	1.62	/unit		
	3-Bedroom	2.50	1.00	1.00	0.98	2.45	/unit		
	Condminium	1.85	1.00	1.00	0.98	1.81	/unit		
	Guest	0.10	1.00	1.00	0.98	0.10	/unit		
General Office	Visitor	0.30	1.00	1.00	0.98	0.29	/ksf GFA		
	Employee	3.50	0.88	1.00	0.98	3.02	/ksf GFA		
Medical Office Building	Visitor	3.00	1.00	1.00	0.98	2.94	/ksf GFA		
	Employee	1.60	0.88	1.00	0.98	1.38	/ksf GFA		
Bank	Visitor	3.50	1.00	0.95	0.98	3.26	/ksf GFA		
	Employee	2.50	0.88	1.00	0.98	2.16	/ksf GFA		
Hotel	Visitor	1.00	1.00	1.00	0.98	0.98	/room		
	Employee	0.15	0.88	1.00	0.98	0.13	/room		
Banquet Facilities	Customer (indoors)	0.54	1.00	0.75	0.98	0.40	/indoor seat		
	Customer (outdoors)	0.54	1.00	0.75	0.98	0.40	/outdoor seat		
	Employee	0.09	0.88	1.00	0.98	0.08	/seat		

WEEKDAYS									
EVENING (5:00 PM - 12:00 AM)									
Land Use	User Group	Base Ratio	Modal Adj.	Capture Adj.	Local Adj.	Project Ratio	Unit		
Standard Retail	Customer	2.90	1.00	0.90	0.82	2.13	/ksf GLA		
	Employee	0.70	0.88	1.00	0.82	0.50	/ksf GLA		
Specialty Retail	Customer	3.50	1.00	0.90	0.82	2.57	/ksf GLA		
	Employee	0.60	0.88	1.00	0.82	0.43	/ksf GLA		
Fine/Casual Dining	Customer (indoors)	0.73	1.00	0.90	0.82	0.54	/indoor seat		
	Customer (outdoors)	0.73	1.00	0.90	0.82	0.54	/outdoor seat		
	Employee	0.13	0.88	1.00	0.82	0.09	/seat		
Fast Casual Dining	Customer (indoors)	0.49	1.00	0.90	0.82	0.36	/indoor seat		
	Customer (outdoors)	0.49	1.00	0.90	0.82	0.36	/outdoor seat		
	Employee	0.09	0.88	1.00	0.82	0.06	/seat		
Café/Take Out	Customer (indoors)	0.52	1.00	0.90	0.82	0.38	/indoor seat		
	Customer (outdoors)	0.52	1.00	0.90	0.82	0.38	/outdoor seat		
	Employee	0.09	0.88	1.00	0.82	0.06	/seat		
Furniture/Furnishings	Customer	0.77	1.00	1.00	0.82	0.63	/ksf GFA		
	Employee	0.07	0.88	1.00	0.82	0.05	/ksf GFA		
Seasonal Beer Garden	Customer	0.52	1.00	0.95	0.82	0.40	/seat		
	Employee	0.09	0.88	1.00	0.82	0.06	/seat		
Lifestyle/Fitness	Customer	6.60	1.00	0.95	0.82	5.11	/ksf GLA		
	Employee	0.40	0.88	1.00	0.82	0.29	/ksf GLA		
Active Entertainment	Customer	5.50	1.00	0.90	0.82	4.03	/ksf GLA		
	Employees	1.25	0.88	1.00	0.82	0.90	/ksf GLA		
Residential, Suburban	1-Bedroom	0.90	1.00	1.00	0.82	0.73	/unit		
	2-Bedroom	1.65	1.00	1.00	0.82	1.34	/unit		
	3-Bedroom	2.50	1.00	1.00	0.82	2.04	/unit		
	Condminium	1.85	1.00	1.00	0.82	1.51	/unit		
	Guest	0.10	1.00	1.00	0.82	0.08	/unit		
General Office	Visitor	0.30	1.00	1.00	0.82	0.24	/ksf GFA		
	Employee	3.50	0.88	1.00	0.82	2.51	/ksf GFA		
Medical Office Building	Visitor	3.00	1.00	1.00	0.82	2.45	/ksf GFA		
	Employee	1.60	0.88	1.00	0.82	1.15	/ksf GFA		
Bank	Visitor	3.50	1.00	0.95	0.82	2.71	/ksf GFA		
	Employee	2.50	0.88	1.00	0.82	1.79	/ksf GFA		
Hotel	Visitor	1.00	1.00	1.00	0.82	0.82	/room		
	Employee	0.15	0.88	1.00	0.82	0.11	/room		
Banquet Facilities	Customer (indoors)	0.54	1.00	0.50	0.82	0.22	/indoor seat		
	Customer (outdoors)	0.54	1.00	0.50	0.82	0.22	/outdoor seat		
	Employee	0.09	0.88	1.00	0.82	0.06	/seat		

WEEKENDS									
DAYTIME (6:00 AM - 4:59 PM)									
Land Use	User Group	Base Ratio	Modal Adj.	Capture Adj.	Local Adj.	Project Ratio	Unit		
Standard Retail	Customer	3.20	1.00	0.95	0.95	2.89	/ksf GLA		
	Employee	0.80	0.88	1.00	0.95	0.67	/ksf GLA		
Specialty Retail	Customer	3.70	1.00	0.95	0.95	3.34	/ksf GLA		
	Employee	0.50	0.88	1.00	0.95	0.42	/ksf GLA		
Fine/Casual Dining	Customer (indoors)	0.54	1.00	0.95	0.95	0.49	/indoor seat		
	Customer (outdoors)	0.54	1.00	0.95	0.95	0.49	/outdoor seat		
	Employee	0.09	0.88	1.00	0.95	0.08	/seat		
Fast Casual Dining	Customer (indoors)	0.47	1.00	0.95	0.95	0.42	/indoor seat		
	Customer (outdoors)	0.47	1.00	0.95	0.95	0.42	/outdoor seat		
	Employee	0.08	0.88	1.00	0.95	0.07	/seat		
Café/Take Out	Customer (indoors)	0.58	1.00	0.95	0.95	0.52	/indoor seat		
	Customer (outdoors)	0.58	1.00	0.95	0.95	0.52	/outdoor seat		
	Employee	0.10	0.88	1.00	0.95	0.08	/seat		
Furniture/Furnishings	Customer	1.42	1.00	1.00	0.95	1.35	/ksf GFA		
	Employee	0.16	0.88	1.00	0.95	0.13	/ksf GFA		
Seasonal Beer Garden	Customer	0.58	1.00	0.95	0.95	0.52	/seat		
	Employee	0.10	0.88	1.00	0.95	0.08	/seat		
Lifestyle/Fitness	Customer	5.50	1.00	0.95	0.95	4.96	/ksf GLA		
	Employee	0.25	0.88	1.00	0.95	0.21	/ksf GLA		
Active Entertainment	Customer	6.00	1.00	0.95	0.95	5.42	/ksf GLA		
	Employees	1.50	0.88	1.00	0.95	1.25	/ksf GLA		
Residential, Suburban	1-Bedroom	0.90	1.00	1.00	0.95	0.86	/unit		
	2-Bedroom	1.65	1.00	1.00	0.95	1.57	/unit		
	3-Bedroom	2.50	1.00	1.00	0.95	2.38	/unit		
	Condminium	1.85	1.00	1.00	0.95	1.76	/unit		
	Guest	0.10	1.00	1.00	0.95	0.10	/unit		
General Office	Visitor	0.03	1.00	1.00	0.95	0.03	/ksf GFA		
	Employee	0.35	0.88	1.00	0.95	0.29	/ksf GFA		
Medical Office Building	Visitor	0.00	1.00	1.00	0.95	0.00	/ksf GFA		
	Employee	0.00	0.88	1.00	0.95	0.00	/ksf GFA		
Bank	Visitor	3.00	1.00	0.95	0.95	2.71	/ksf GFA		
	Employee	1.75	0.88	1.00	0.95	1.46	/ksf GFA		
Hotel	Visitor	1.00	1.00	1.00	0.95	0.95	/room		
	Employee	0.15	0.88	1.00	0.95	0.13	/room		
Banquet Facilities	Customer (indoors)	0.73	1.00	0.50	0.95	0.35	/indoor seat		
	Customer (outdoors)	0.73	1.00	0.50	0.95	0.35	/outdoor seat		
	Emplnoee	0.13	0.88	1.00	0.95	0.11	/seat		

WEEKENDS									
EVENING (5:00 PM - 12:00 AM)									
Land Use	User Group	Base Ratio	Modal Adj.	Capture Adj.	Local Adj.	Project Ratio	Unit		
Standard Retail	Customer	3.20	1.00	0.95	0.75	2.28	/ksf GLA		
	Employee	0.80	0.88	1.00	0.75	0.53	/ksf GLA		
Specialty Retail	Customer	3.70	1.00	0.95	0.75	2.64	/ksf GLA		
	Employee	0.50	0.88	1.00	0.75	0.33	/ksf GLA		
Fine/Casual Dining	Customer (indoors)	0.54	1.00	0.95	0.75	0.38	/indoor seat		
	Customer (outdoors)	0.54	1.00	0.95	0.75	0.38	/outdoor seat		
	Employee	0.09	0.88	1.00	0.75	0.06	/seat		
Fast Casual Dining	Customer (indoors)	0.47	1.00	0.95	0.75	0.33	/indoor seat		
	Customer (outdoors)	0.47	1.00	0.95	0.75	0.33	/outdoor seat		
	Employee	0.08	0.88	1.00	0.75	0.05	/seat		
Café/Take Out	Customer (indoors)	0.58	1.00	0.95	0.75	0.41	/indoor seat		
	Customer (outdoors)	0.58	1.00	0.95	0.75	0.41	/outdoor seat		
	Employee	0.10	0.88	1.00	0.75	0.07	/seat		
Furniture/Furnishings	Customer	1.42	1.00	1.00	0.75	1.07	/ksf GFA		
	Employee	0.16	0.88	1.00	0.75	0.11	/ksf GFA		
Seasonal Beer Garden	Customer	0.58	1.00	0.95	0.75	0.41	/seat		
	Employee	0.10	0.88	1.00	0.75	0.07	/seat		
Lifestyle/Fitness	Customer	5.50	1.00	0.95	0.75	3.92	/ksf GLA		
	Employee	0.25	0.88	1.00	0.75	0.17	/ksf GLA		
Active Entertainment	Customer	6.00	1.00	0.95	0.75	4.28	/ksf GLA		
	Employees	1.50	0.88	1.00	0.75	0.99	/ksf GLA		
Residential, Suburban	1-Bedroom	0.90	1.00	1.00	0.75	0.68	/unit		
	2-Bedroom	1.65	1.00	1.00	0.75	1.24	/unit		
	3-Bedroom	2.50	1.00	1.00	0.75	1.88	/unit		
	Condminium	1.85	1.00	1.00	0.75	1.39	/unit		
	Guest	0.10	1.00	1.00	0.75	0.08	/unit		
General Office	Visitor	0.03	1.00	1.00	0.75	0.02	/ksf GFA		
	Employee	0.35	0.88	1.00	0.75	0.23	/ksf GFA		
Medical Office Building	Visitor	0.00	1.00	1.00	0.75	0.00	/ksf GFA		
	Employee	0.00	0.88	1.00	0.75	0.00	/ksf GFA		
Bank	Visitor	3.00	1.00	0.95	0.75	2.14	/ksf GFA		
	Employee	1.75	0.88	1.00	0.75	1.16	/ksf GFA		
Hotel	Visitor	1.00	1.00	1.00	0.75	0.75	/room		
	Employee	0.15	0.88	1.00	0.75	0.10	/room		
Banquet Facilities	Customer (indoors)	0.73	1.00	0.33	0.75	0.18	/indoor seat		
	Customer (outdoors)	0.73	1.00	0.33	0.75	0.18	/outdoor seat		
	Emplnoee	0.13	0.88	1.00	0.75	0.09	/seat		

The final factor comprising the model is the adjustment to reflect for variances for temporal and seasonal *presence*. *Presence* is the expression of parking demand for specific users and land uses according to time of day and time of year. Presence is expressed as a percentage of peak potential demand modified for time of day or year.

For example, the model projects that 5,000 square feet of general retail has a peak parking demand equal up to 15 spaces on a weekday and 19 parking spaces on a weekend. However, this demand is influenced by the hours of operation. At 3:00 AM, a retail store is unlikely to project any parking demand at all. Additionally, parking demand is influenced by the time of year. Traditionally, retail stores are busiest as the winter holidays approach and least busy in January and February, when fewer people shop. Therefore, parking demand associated with a retail store also decreases.

Presence becomes a significant factor in a mixed-use environment like Tuscan Village because it allows different land uses to share the same parking supply. For example, if an office building is placed next to a hotel, summing the peak projected demand of each of the land uses would result in parking supply substantially larger than necessary, as the hotel is largely empty when the office building is occupied and vice versa. However, applying presence factors to the peak demand projections to adjust for hours of operation and use trends, the owner actually needs to provide only a fraction of the spaces needed for the combined land uses to adequately support both the hotel and the office building. The assumption is that demand for the hotel will peak in overnight, while demand for the office space will peak during standard business hours. These presence trends of parking demand for these land uses are complimentary and allow for some sharing of the same spaces, reducing total peak demand.

Variations for time of day and time of year for weekends (Saturdays) were also calculated for Tuscan Village and applied to the model. The majority of presence adjustments were taken from the ULI's **Shared Parking: 3rd Edition**. Presence factors were applied to projections of gross demand and used to generate hourly parking demand projections for a typical weekday and weekend day throughout the year. DESMAN used these projections to isolate the peak hour in each month. The applied presence adjustments for time of year are shown below in **Table 3** on the next page, and time of day presence adjustments are included as **Tables 4** (weekdays) and **5** (weekends) on the following pages.

Note: Neither the Urban Land Institute, the Institute of Transportation Engineers, the American Planning Association, nor the International Council of Shopping Centers have a prescribed methodology for addressing demand associated with outdoor, seasonal seating. As a general rule, in temperate climates in the South and Far West or in settings subject to major seasonal changes in activity such as resort communities, the total combined seating capacity is used. In settings where outdoor seating is only used on a limited basis, it is generally excluded from demand projections.

DESMAN has developed a methodology for addressing this issue based on study of fourteen separate restaurants in the Boston area featuring seasonal outdoor seating as part of a prior engagement. Working with each restaurant, DESMAN analyzed sales receipts to identify the impact of providing outdoor seating had on activity levels, assuming that sales were a reasonable proxy for patron activity, including parking. DESMAN also executed targeted observations of hourly activity at each site on a representative summer weekday and summer weekend day to establish variations in presence according to time of day for indoor and outdoor seating areas. This methodology and associated factors have been applied to our analysis for this project as footnoted on the following pages.

Table 3: Applied Monthly Presence Factors

Land Use	User Group	January	February	March	April	May	June	July	August	September	October	November	December	Holidays	
Standard Retail	Customer	59%	61%	69%	67%	72%	72%	70%	73%	66%	68%	76%	100%	85%	1
	Employee	69%	71%	79%	77%	82%	82%	80%	83%	76%	78%	86%	100%	95%	1
Specialty Retail	Customer	95%	90%	95%	95%	95%	90%	85%	80%	85%	90%	95%	100%	100%	2
	Employee	100%	100%	100%	100%	100%	95%	90%	90%	95%	95%	100%	100%	100%	2
Fine/Casual Dining	Customer (indoors)	88%	87%	96%	93%	89%	83%	88%	77%	81%	88%	97%	100%	95%	3
	Customer (outdoors)	0%	0%	0%	0%	50%	75%	100%	85%	75%	50%	0%	0%	0%	3
	Employee	88%	87%	100%	95%	100%	96%	95%	98%	91%	94%	92%	95%	75%	4
Fast Casual Dining	Customer (indoors)	86%	86%	95%	93%	79%	65%	47%	47%	58%	72%	98%	100%	95%	3
	Customer (outdoors)	0%	0%	0%	0%	50%	75%	100%	85%	75%	50%	0%	0%	0%	3
	Employee	88%	87%	100%	95%	100%	96%	95%	98%	91%	94%	92%	95%	75%	4
Café/Take Out	Customer (indoors)	88%	88%	99%	94%	86%	71%	54%	59%	67%	77%	96%	97%	100%	3
	Customer (outdoors)	0%	0%	0%	0%	50%	75%	100%	85%	75%	50%	0%	0%	0%	3
	Employee	92%	85%	93%	92%	97%	93%	95%	95%	90%	93%	95%	100%	98%	5
Furniture/Furnishings	Customer	87%	87%	94%	100%	97%	90%	91%	95%	90%	91%	93%	95%	85%	6
	Employee	87%	87%	94%	100%	97%	90%	91%	95%	90%	91%	93%	95%	85%	6
Seasonal Beer Garden	Customer	0%	0%	0%	25%	60%	90%	100%	100%	90%	60%	0%	0%	0%	9
	Employee	0%	0%	0%	25%	60%	90%	100%	100%	90%	60%	0%	0%	0%	9
Lifestyle/Fitness	Customer	100%	95%	85%	70%	65%	65%	65%	70%	80%	85%	85%	100%	95%	1
	Employee	100%	100%	95%	80%	75%	75%	75%	80%	90%	95%	95%	100%	90%	1
Active Entertainment	Customer	84%	86%	98%	99%	100%	91%	94%	96%	92%	98%	96%	90%	95%	7
	Employees	90%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	95%	7
Residential, Suburban	1-Bedroom	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%	1
	2-Bedroom	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%	1
	3-Bedroom	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%	1
	Condominium	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%	1
	Guest	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	100%	1
General Office	Visitor	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%	1
	Employee	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%	1
Medical Office Building	Visitor	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%	1
	Employee	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%	1
Bank	Visitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	1
	Employee	100%	100%	100%	100%	100%	100%	95%	95%	100%	100%	100%	100%	80%	1
Hotel	Visitor	80%	90%	100%	100%	90%	90%	100%	100%	75%	75%	75%	50%	100%	1
	Employee	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	90%	90%	1
Banquet Facilities	Customer (indoors)	70%	70%	85%	90%	95%	100%	100%	100%	95%	90%	85%	90%	80%	8
	Customer (outdoors)	0%	0%	0%	50%	100%	100%	90%	90%	95%	100%	0%	0%	0%	8
	Employee	85%	85%	85%	90%	95%	100%	100%	100%	100%	95%	90%	90%	85%	8

Notes:

1. Sourced from *UL's Shared Parking: 3rd Edition*, 2020, pg. 19
2. Sourced from 2004-2007 sales records at 14 Trader Joes and Whole Foods in MA and RI.
3. Sourced from restaurant sales records for calendar 2008 and reported splits between indoor and outdoor seating for May through October 2018 at 14 Boston-area locations.
4. Sourced from *ITE's Parking Generation: 5th Edition*, 2019, pg. 810 (Food Services and Drinking Places)
5. Sourced from *ITE's Parking Generation: 5th Edition*, 2019, pg. 810 (Food and Beverage Stores)
6. Sourced from *ITE's Parking Generation: 5th Edition*, 2019, pg. 812 (Furniture & Home Furnishings Stores)
7. Sourced from 2004-2006 sales data at 3 Kings locations in MA and two Funny Bone Comedy Clubs, two Great Escape Rooms, and one each: Ace Ping Pong Bar, Mind Trek VR Arcade, Fight Club Dart Bar [2016-2018].
8. Sourced from banquet sales records from five Hyatt facilities in FL 2012-2013.
9. Sourced from 2015-2018 sales data provided by Harpoon Brewery under NDA.

Table 4: Applied Daily Presence Factors for a Weekday

Land Use	User Group	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM
Standard Retail (Typical)	Customer	1%	5%	15%	35%	65%	85%	95%	100%	95%	90%	85%	90%	90%	90%	80%	50%	30%	10%	0%
	Employee	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%	0%
Standard Retail (December)	Customer	1%	5%	15%	30%	55%	75%	90%	100%	100%	100%	95%	85%	80%	75%	65%	50%	30%	10%	0%
	Employee	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%	0%
Standard Retail (Holidays)	Customer	1%	5%	10%	20%	40%	65%	90%	100%	100%	100%	95%	85%	70%	55%	40%	25%	15%	5%	0%
	Employee	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%	0%
Specialty Retail	Customer	0%	3%	23%	35%	68%	71%	80%	78%	63%	72%	85%	96%	100%	94%	71%	48%	10%	2%	0%
	Employee	5%	15%	40%	60%	75%	95%	100%	100%	95%	90%	95%	100%	100%	85%	75%	45%	15%	5%	0%
Fine/Casual Dining	Customer (indoors)	0%	0%	0%	0%	15%	40%	75%	75%	65%	40%	50%	75%	95%	100%	100%	100%	95%	75%	25%
	Customer (outdoors)	0%	0%	0%	0%	0%	25%	75%	75%	64%	40%	50%	75%	95%	100%	90%	70%	55%	45%	5%
	Employee	0%	20%	50%	75%	90%	90%	90%	90%	75%	75%	100%	100%	100%	100%	100%	100%	85%	35%	1%
Fast Casual Dining	Customer (indoors)	25%	50%	60%	75%	85%	90%	100%	90%	50%	45%	45%	75%	80%	80%	60%	55%	50%	25%	6%
	Customer (outdoors)	0%	0%	0%	0%	25%	50%	100%	75%	50%	25%	15%	35%	50%	90%	95%	65%	45%	30%	15%
	Employee	50%	75%	90%	90%	100%	100%	100%	100%	75%	75%	95%	95%	95%	95%	80%	65%	65%	35%	1%
Café/Take Out	Customer (indoors)	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Customer (outdoors)	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employee	20%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Furniture/Furnishings	Customer	5%	10%	20%	40%	60%	80%	90%	90%	85%	80%	70%	75%	85%	100%	85%	60%	10%	1%	3%
	Employee	25%	35%	55%	65%	75%	85%	95%	95%	100%	100%	100%	100%	100%	100%	75%	50%	25%	10%	3%
Seasonal Beer Garden	Customer	0%	0%	0%	0%	0%	15%	30%	55%	50%	40%	45%	80%	100%	90%	75%	50%	25%	0%	0%
	Employee	0%	0%	0%	10%	20%	30%	50%	70%	80%	90%	100%	100%	100%	100%	90%	70%	50%	25%	10%
Lifestyle/Fitness	Customer	70%	40%	40%	70%	70%	80%	60%	70%	70%	70%	80%	90%	100%	90%	80%	70%	35%	10%	0%
	Employee	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	100%	100%	100%	75%	50%	20%	20%	0%	1%
Active Entertainment	Customer	0%	0%	0%	0%	0%	5%	10%	15%	20%	30%	50%	75%	95%	100%	100%	95%	75%	25%	4%
	Employees	0%	5%	10%	15%	20%	25%	30%	40%	50%	60%	75%	100%	100%	100%	100%	100%	85%	35%	4%
Residential, Suburban	1-Bedroom	100%	95%	88%	80%	75%	70%	68%	65%	65%	68%	71%	74%	77%	80%	83%	86%	89%	92%	100%
	2-Bedroom	100%	95%	88%	80%	75%	70%	68%	65%	65%	68%	71%	74%	77%	80%	83%	86%	89%	92%	100%
	3-Bedroom	100%	95%	88%	80%	75%	70%	68%	65%	65%	68%	71%	74%	77%	80%	83%	86%	89%	92%	100%
	Condominium	100%	95%	88%	80%	75%	70%	68%	65%	65%	68%	71%	74%	77%	80%	83%	86%	89%	92%	100%
General Office	Guest	0%	10%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
	Visitor	0%	1%	20%	60%	100%	45%	15%	45%	95%	45%	15%	5%	2%	1%	0%	0%	0%	0%	1%
	Employee	3%	15%	50%	90%	100%	100%	85%	85%	95%	95%	85%	60%	25%	15%	5%	3%	1%	0%	0%
Medical Office Building	Visitor	0%	10%	40%	85%	100%	100%	75%	60%	95%	90%	80%	35%	25%	10%	5%	0%	0%	0%	1%
	Employee	0%	20%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	40%	25%	0%	0%	0%	1%
Bank	Visitor	0%	0%	50%	90%	100%	50%	50%	50%	70%	50%	80%	100%	0%	0%	0%	0%	0%	0%	1%
	Employee	0%	0%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	1%
Hotel	Visitor	95%	90%	80%	70%	60%	55%	55%	60%	60%	65%	70%	75%	80%	85%	95%	100%	100%	100%	1%
	Employee	10%	30%	100%	100%	100%	100%	100%	100%	100%	100%	70%	70%	40%	20%	20%	20%	10%	5%	1%
Banquet Facilities	Customer (indoors)	0%	0%	0%	0%	25%	50%	95%	90%	70%	50%	30%	85%	95%	100%	95%	80%	70%	60%	40%
	Customer (outdoors)	0%	0%	0%	0%	25%	50%	95%	90%	70%	50%	85%	95%	100%	100%	85%	65%	40%	20%	10%
	Employee	5%	10%	20%	50%	70%	90%	95%	90%	80%	80%	90%	100%	100%	100%	100%	90%	80%	70%	50%

Notes:

- Sourced from *UK's Shared Parking: 3rd Edition*, 2020, pg. 20
- Sourced from 2004-2007 sales records and time cards at 14 Trader Joes and Whole Foods in MA and RI.
- Sourced from sales records and time cards at 3 Jordan's Furniture locations in MA & NH, 2014-2015.
- Sourced from 2004-2006 time cards and head counts at 3 Kings locations in MA + staffing and headcount data from Funny Bone Comedy Club, Great Escape Room, Ace Ping Pong Bar, Mind Trek VR Arcade, Fight Club Dart Bar [2016-2018].
- Sourced from banquet sales bookings and time cards from five Hyatt facilities in FL, 2012-2013.
- Sourced from observed splits between indoor and outdoor seating at 14 Boston-area locations observed during July 2008.
- Sourced from 2015-2018 sales and employee timecard data provided by Harpoon Brewery under NDA.

Table 5: Applied Daily Presence Factors for a Weekend

Land Use	User Group	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM
Standard Retail (Typical)	Customer	1%	5%	15%	35%	65%	85%	95%	100%	95%	90%	85%	90%	90%	90%	80%	50%	30%	10%	0%
	Employee	10%	15%	25%	45%	75%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	90%	60%	40%	20%
Standard Retail (December)	Customer	0%	0%	0%	0%	35%	63%	75%	82%	74%	68%	57%	58%	73%	89%	100%	100%	88%	50%	10%
	Employee	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	85%	80%	75%	65%	45%	15%	0%
Standard Retail (Holidays)	Customer	1%	5%	10%	20%	40%	60%	80%	95%	100%	100%	95%	85%	70%	60%	50%	30%	20%	10%	0%
	Employee	10%	15%	40%	75%	85%	95%	100%	100%	100%	100%	100%	95%	85%	80%	75%	65%	45%	15%	0%
Specialty Retail	Customer	0%	12%	37%	53%	87%	100%	95%	89%	84%	82%	75%	66%	58%	44%	21%	18%	3%	1%	0%
	Employee	10%	20%	40%	60%	80%	100%	100%	100%	100%	95%	85%	75%	75%	65%	50%	40%	20%	10%	5%
Fine/Casual Dining	Customer (indoors)	0%	0%	0%	0%	0%	15%	50%	55%	45%	45%	45%	60%	90%	95%	100%	90%	90%	90%	50%
	Customer (outdoors)	0%	0%	0%	0%	0%	5%	50%	55%	35%	25%	35%	50%	90%	100%	85%	60%	50%	40%	20%
	Employee	0%	20%	30%	60%	75%	75%	75%	75%	75%	75%	75%	100%	100%	100%	100%	100%	85%	50%	10%
Fast Casual Dining	Customer (indoors)	10%	25%	45%	70%	90%	90%	100%	85%	65%	40%	45%	60%	70%	70%	65%	30%	25%	15%	10%
	Customer (outdoors)	0%	0%	10%	20%	50%	55%	65%	45%	35%	20%	35%	50%	80%	100%	90%	70%	50%	30%	10%
	Employee	50%	75%	90%	90%	100%	100%	100%	100%	100%	75%	75%	95%	95%	95%	95%	80%	65%	65%	35%
Café/Take Out	Customer (indoors)	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Customer (outdoors)	5%	10%	20%	30%	55%	85%	100%	100%	90%	60%	55%	60%	85%	80%	50%	30%	20%	10%	5%
	Employee	15%	20%	30%	40%	75%	100%	100%	100%	95%	70%	60%	70%	90%	90%	60%	40%	30%	20%	20%
Furniture/Furnishings	Customer	5%	10%	25%	45%	66%	80%	90%	95%	100%	95%	90%	80%	70%	60%	50%	40%	30%	20%	10%
	Employee	25%	50%	75%	85%	100%	100%	100%	100%	100%	100%	100%	100%	75%	60%	50%	40%	30%	20%	10%
Seasonal Beer Garden	Customer	0%	0%	0%	0%	0%	25%	50%	75%	60%	55%	65%	85%	95%	100%	100%	100%	50%	25%	0%
	Employee	0%	0%	0%	15%	30%	60%	80%	80%	80%	85%	90%	95%	100%	100%	100%	100%	75%	50%	25%
Lifestyle/Fitness	Customer	80%	45%	35%	50%	35%	50%	50%	30%	25%	30%	55%	100%	95%	60%	30%	10%	1%	1%	0%
	Employee	50%	50%	50%	50%	50%	50%	50%	50%	50%	75%	100%	100%	100%	75%	50%	20%	20%	20%	0%
Active Entertainment	Customer	0%	0%	0%	0%	15%	20%	35%	40%	45%	55%	60%	75%	95%	100%	100%	95%	75%	25%	4%
	Employees	0%	0%	10%	20%	30%	40%	50%	55%	60%	65%	75%	90%	100%	100%	100%	100%	85%	35%	4%
Residential, Suburban	1-Bedroom	100%	90%	85%	80%	75%	70%	65%	70%	70%	70%	75%	85%	90%	97%	98%	99%	100%	100%	100%
	2-Bedroom	100%	90%	85%	80%	75%	70%	65%	70%	70%	70%	75%	85%	90%	97%	98%	99%	100%	100%	100%
	3-Bedroom	100%	90%	85%	80%	75%	70%	65%	70%	70%	70%	75%	85%	90%	97%	98%	99%	100%	100%	100%
	Condominium	100%	90%	85%	80%	75%	70%	65%	70%	70%	70%	75%	85%	90%	97%	98%	99%	100%	100%	100%
	Guest	0%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	40%	60%	100%	100%	100%	100%	80%	50%
General Office	Visitor	0%	20%	60%	80%	90%	100%	90%	80%	60%	40%	20%	10%	5%	0%	0%	0%	0%	0%	0%
	Employee	0%	20%	60%	80%	90%	100%	90%	80%	60%	40%	20%	10%	5%	0%	0%	0%	0%	0%	0%
Medical Office Building	Visitor	0%	0%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	0%	0%
	Employee	0%	0%	60%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	0%	0%
Bank	Visitor	0%	0%	25%	40%	75%	100%	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Employee	0%	0%	90%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Hotel	Visitor	95%	90%	80%	70%	60%	60%	55%	55%	60%	60%	65%	70%	75%	80%	85%	95%	100%	100%	100%
	Employee	100%	100%	90%	80%	70%	70%	65%	65%	70%	70%	75%	80%	0%	0%	0%	0%	60%	100%	100%
Banquet Facilities	Customer (indoors)	0%	0%	0%	0%	25%	50%	95%	90%	80%	70%	50%	85%	90%	95%	100%	95%	80%	70%	60%
	Customer (outdoors)	0%	0%	0%	0%	25%	50%	95%	90%	80%	85%	90%	95%	100%	100%	95%	80%	60%	30%	15%
	Employee	0%	0%	0%	0%	25%	50%	95%	90%	80%	70%	50%	85%	90%	95%	100%	95%	80%	70%	60%

Notes:

1. Sourced from *UK's Shared Parking: 3rd Edition*, 2020, pg. 21

2. Sourced from 2004-2007 sales records and time cards at 14 Trader Joes and Whole Foods in MA and RI.

3. Sourced from sales records and time cards at 3 Jordan's Furniture locations in MA & NH, 2014-2015.

4. Sourced from 2004-2006 time cards and head counts at 3 Kings locations in MA + staffing and headcount data from Funny Bone Comedy Club, Great Escape Room, Ace Ping Pong Bar, Mind Trek VR Arcade, Fight Club Dart Bar [2016-2018].

5. Sourced from banquet sales bookings and time cards from five Hyatt facilities in FL, 2012-2013.

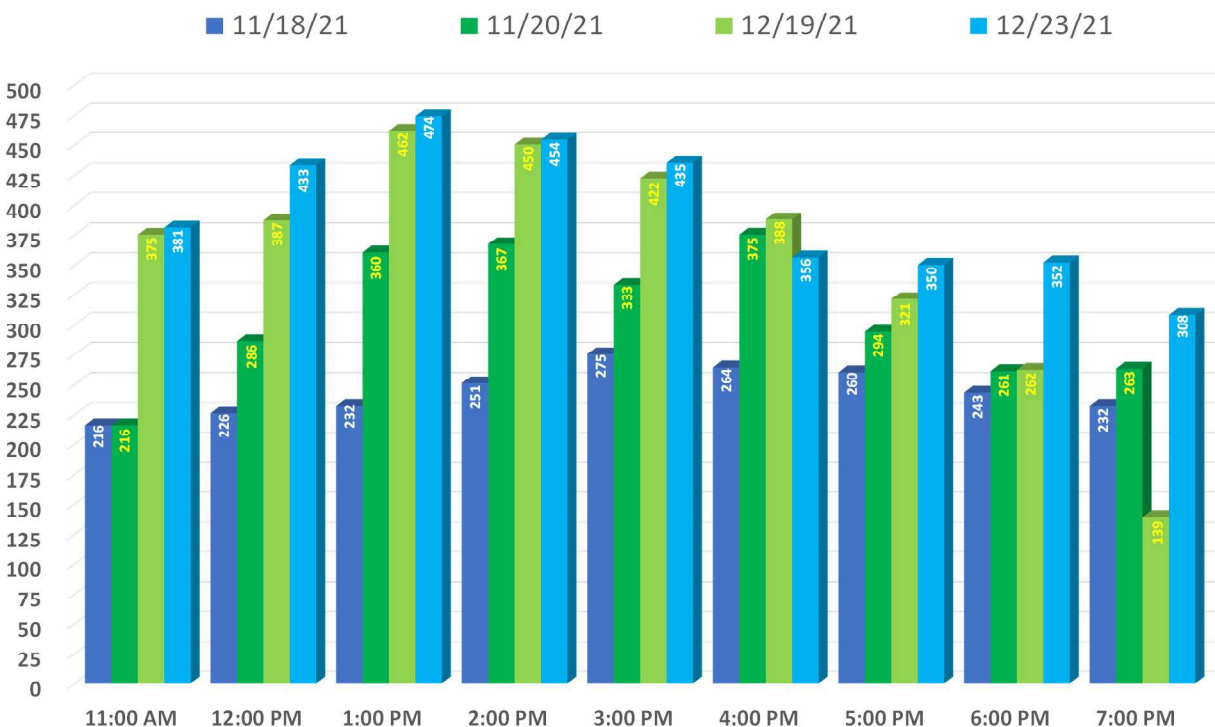
6. Sourced from observed splits between indoor and outdoor seating at 14 Boston-area locations observed during July 2008.

7. Sourced from 2015-2018 sales and employee timecard data provided by Harpoon Brewery under NDA.

In projects still in the planning or design stage, adjusting base ratios to reflect mode choice, capture and presence factors completes the process. In projects in development, where one or more phases have been complete, the model can be further calibrated to align with local conditions not addressed by the adjustments for mode choice, capture and presence. This is done by performing field observations, and recording those conditions, inputting the program in place, producing projections, comparing them to field data, and adjusting the model to align with observed occupancy. The result of this process is a more refined, accurate, and project-specific set of projections of future need which result in a more efficient parking supply.

An initial series of hourly parking occupancy counts were performed between 10:00 AM and 9:00 PM on Thursday, November 18, 2021 and again between 10:00 AM and 9:00 PM on Saturday, November 20, 2021. A second set of parking occupancy counts were performed between 10:00 AM and 8:00 PM on Sunday, December 19, 2021 and again on Thursday, December 23, 2021 between 10:00 AM and 7:00 PM. A distilled record of these hourly occupancy levels spanning the period from 11:00 AM to 7:00 PM across all four days is shown below in **Figure 2**.

Figure 2: 2021 Occupancy Count Summary



The active land use program during the November counts in the South Village included:

- 26,450 SF of furniture/furnishings retail in Building 100;
- 25,156 SF of general retail in Building 200;
- 2,815 SF of general retail and a 2,300 SF café/take-out restaurant with 47 indoor seats and 24 outdoor seats in Building 400;
- 3,507 Sf of bank in Building 520;

- 2,494 SF of specialty grocery, a 3,520 SF fast/casual restaurant with 72 indoor seats and 130 outdoor seats, and 7,056 SF of general retail in Building 600;
- 15,248 SF of general retail in Building 700;
- 5,727 SF of fast/casual restaurant with 150 indoor seats and 98 outdoor seats in Building 800;
- 4,935 SF of general retail in Building 900; and –
- 25,000 SF of lifestyle fitness center in Building 1100.

The active land use program during the December counts included as the previously listed land uses plus an additional 15,163 SF of general retail in Building 200.

When calibrating a model (i.e., applying the local adjustment) to align with actual conditions, it is very common for the model to generate demand projections which are greater than actual observed conditions as the base demand ratios are based on an 85th percentile standard; this means that, of all the land uses studied to render the demand ratio, 85% generated demand less than the recommended ratio and only 15% exhibited demand equal to or greater than the demand ratio. In simple terms, this means the base demand ratios are engineered to be inherently conservative and are intended to represent a level of demand which is exceptionally high, not average or typical.

By the same token, it is extremely rare when actual observed conditions exceed model outputs, which would suggest the project is generating a level of demand well above the 85th percentile standard. When this occurs, a consultant is tasked with investigating the nature of variance and determining whether there has been an error in methodology or if the project is simply exceptional relative to the data pool used to generate the demand ratios.

Comparison of the parking occupancy counts conducted in November to parking model outputs using the November land use program indicated that the model was generating peak hour parking demand projections on a November weekday that were 47% **higher** than observed conditions and that the model outputs were, on average 23% higher than actual observed occupancy. Inversely, on a November weekend day, the model outputs were an average of 3% **lower** than observed condition and, in some cases, as much as 26% lower than observed occupancy.

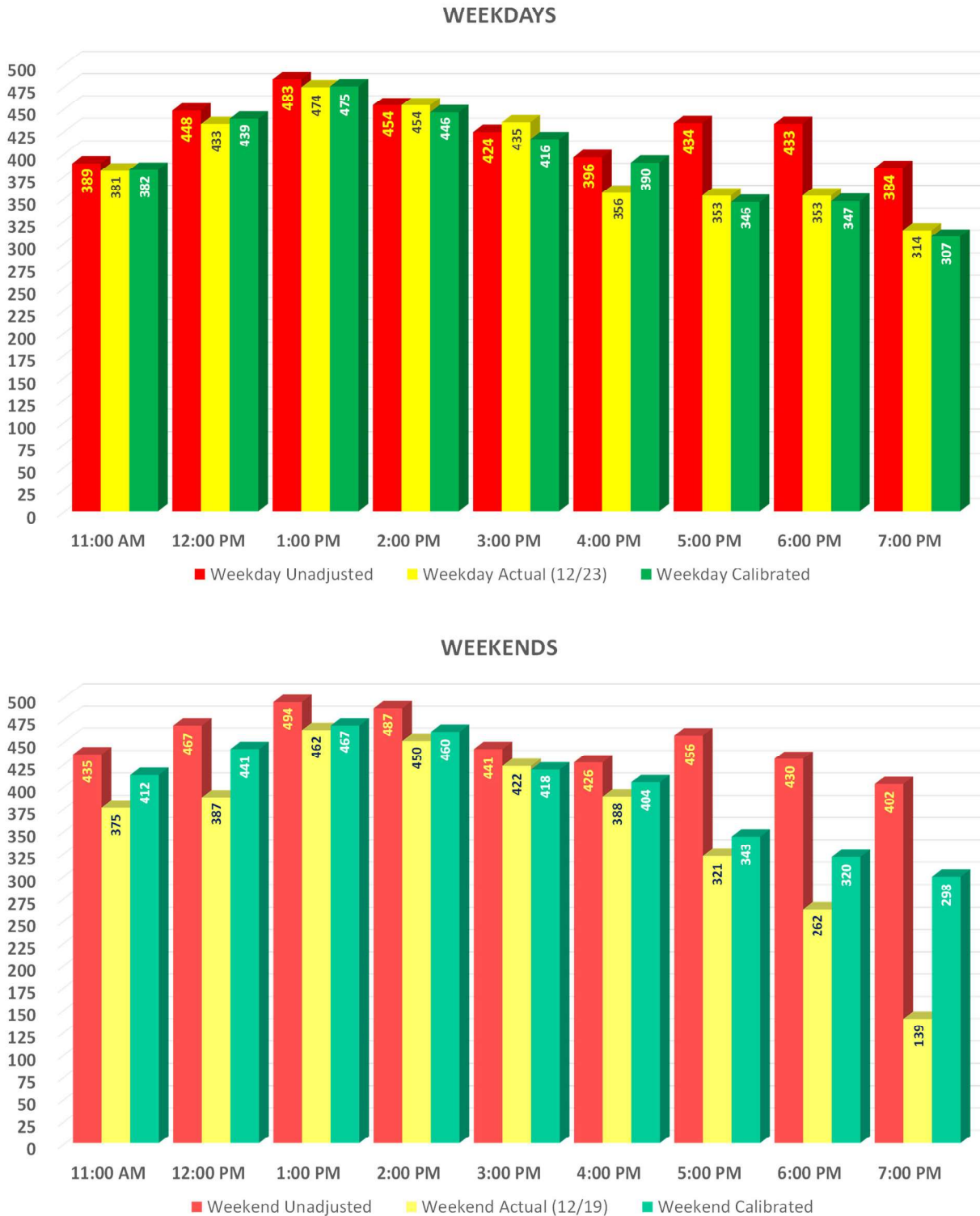
In contrast, comparison of model outputs using the December land use program to actual observed conditions on a December weekday indicate the model was forecasting results that were, on average, 9% higher than actual conditions, but the difference between peak hour projections and actual conditions at the peak hour on a weekday was only 2%, with the model projections being the greater of the two numbers. On weekends in December, the model projections were an average of 40% higher than actual observed conditions, with difference between model projections and actual conditions at the peak hour on a December Saturday being 7%, with the model projections being the greater of the two numbers.

Calibration to align the model with actual observed conditions in December 2021 required the following local adjustments:

- A reduction to base demand ratios of .02 on weekdays (6:00 AM-4:59 PM);
- A reduction to base demand ratios of .185 on weekday evenings (5:00 PM-12:00 AM);
- A reduction to base demand ratios of .05 on weekend days (6:00 AM-4:59 PM); and -
- A reduction to base demand ratios of .25 on weekday evenings (5:00 PM-12:00 AM).

These applied local adjustments are included in Table 2 on page 5 of this report. As shown in **Figure 3**, these adjustments brought model outputs in close alignment with actual observed conditions.

Figure 3: Comparison of Unadjusted and Calibrated Projections to Observed Conditions



PARKING DEMAND PROJECTIONS

The model developed by DESMAN projects parking demand for a typically busy weekday and weekend day between the hours of 6:00 AM and 12:00 AM for each month of the year, as well as the last two weeks of December (shown as “Holidays” in the model). Hourly parking demand projections are presented according to land use and user. DESMAN’s model has the capacity to isolate parking demand projections for the busiest hour of each weekday and weekend day as well.

The Full Build development program included in this analysis consists of:

- 224,311 square feet (Gross Leasable Area) of soft goods retail;
- 36,812 square feet (Gross Leasable Area) of specialty retail (e.g., Tuscan Market);
- 9,285 square feet (Gross Floor Area) of fine/casual dining equating to 198 indoor seats and 60 outdoor seats;
- 58,135 square feet (Gross Floor Area) of fast/casual dining equating to 1,213 indoor seats and 683 outdoor seats;
- 5,046 square feet (Gross Floor Area) of café/take-out restaurant equating to 102 indoor seats and 16 outdoor seats;
- 38,015 square feet (Gross Leasable Area) of furniture or home furnishings retail;
- A 200-seat Seasonal Beer Garden;
- A 25,000 square foot (Gross Leasable Area) lifestyle fitness center;
- 530 residential apartments;
- 70 residential condominiums;
- 76,069 square feet (Gross Floor Area) of general office space;
- 18,000 square feet (Gross Floor Area) of medical space;
- 3,507 square feet (Gross Floor Area) of bank space;
- 165 hotel rooms;
- A banquet complex with an indoor seating capacity of up to 390 persons;
- 23,756 square feet (Gross Floor Area) of retail common area;
- 3,063 total parking spaces.

A detailed accounting of land use by building is included at the conclusion of this document as **Exhibit A**.

The Full Build development program generates gross demand for up to 4,029 spaces on a weekday and 3,826 spaces on a weekend as shown in **Table 7**, next page.

Table 7: Full Build Projected Gross Demand

Land Use	User Group	Land Use Data	WEEKDAYS		WEEKDAY EVENINGS		WEEKEND DAYS		WEEKEND EVENINGS	
			Project Ratio	Vehicles	Project Ratio	Vehicles	Project Ratio	Vehicles	Project Ratio	Vehicles
Standard Retail	Customer	224,311 sf GLA	2.42 /ksf GLA	542	2.13 /ksf GLA	477	2.89 /ksf GLA	648	2.28 /ksf GLA	511
	Employee		0.60 /ksf GLA	135	0.50 /ksf GLA	113	0.67 /ksf GLA	150	0.53 /ksf GLA	118
Specialty Retail	Customer	36,812 sf GLA	2.92 /ksf GLA	107	2.57 /ksf GLA	95	3.34 /ksf GLA	123	2.64 /ksf GLA	97
	Employee		0.52 /ksf GLA	19	0.43 /ksf GLA	16	0.42 /ksf GLA	15	0.33 /ksf GLA	12
Fine/Casual Dining	Customer (indoors)	198 indoor seats	0.61 /indoor seat	120	0.54 /indoor seat	106	0.49 /indoor seat	96	0.38 /indoor seat	76
	Customer (outdoors)	60 outdoor seats	0.61 /outdoor seat	36	0.54 /outdoor seat	32	0.49 /outdoor seat	29	0.38 /outdoor seat	23
	Employee		0.11 /seat	29	0.09 /seat	24	0.08 /seat	19	0.06 /seat	15
Fast Casual Dining	Customer (indoors)	1,213 indoor seats	0.41 /indoor seat	495	0.36 /indoor seat	436	0.42 /indoor seat	515	0.33 /indoor seat	406
	Customer (outdoors)	683 outdoor seats	0.41 /outdoor seat	279	0.36 /outdoor seat	245	0.42 /outdoor seat	290	0.33 /outdoor seat	229
	Employee		0.08 /seat	147	0.06 /seat	122	0.07 /seat	127	0.05 /seat	100
Café/Take Out	Customer (indoors)	102 indoor seats	0.43 /indoor seat	44	0.38 /indoor seat	39	0.52 /indoor seat	53	0.41 /indoor seat	42
	Customer (outdoors)	16 outdoor seats	0.43 /outdoor seat	7	0.38 /outdoor seat	6	0.52 /outdoor seat	8	0.41 /outdoor seat	7
	Employee		0.08 /seat	9	0.06 /seat	8	0.08 /seat	10	0.07 /seat	8
Furniture/Furnishings	Customer	38,015 sf GLA	0.75 /ksf GFA	29	0.63 /ksf GFA	24	1.35 /ksf GFA	51	1.07 /ksf GFA	40
	Employee		0.06 /ksf GFA	2	0.05 /ksf GFA	2	0.13 /ksf GFA	5	0.11 /ksf GFA	4
Seasonal Beer Garden	Customer	200 seats	0.48 /seat	97	0.40 /seat	81	0.52 /seat	105	0.41 /seat	83
	Employee		0.08 /seat	16	0.06 /seat	13	0.08 /seat	17	0.07 /seat	13
Lifestyle/Fitness	Customer	25,000 sf GLA	5.17 /ksf GLA	129	5.11 /ksf GLA	128	4.96 /ksf GLA	124	3.92 /ksf GLA	98
	Employee		0.34 /ksf GLA	9	0.29 /ksf GLA	7	0.21 /ksf GLA	5	0.17 /ksf GLA	4
Active Entertainment	Customer	0 sf GLA	4.58 /ksf GLA	0	4.03 /ksf GLA	0	5.42 /ksf GLA	0	4.28 /ksf GLA	0
	Employees		1.08 /ksf GLA	0	0.90 /ksf GLA	0	1.25 /ksf GLA	0	0.99 /ksf GLA	0
Residential, Suburban	1-Bedroom	106 units	0.88 /unit	93	0.73 /unit	78	0.86 /unit	91	0.68 /unit	72
	2-Bedroom	266 units	1.62 /unit	430	1.34 /unit	358	1.57 /unit	417	1.24 /unit	329
	3-Bedroom	158 units	2.45 /unit	387	2.04 /unit	322	2.38 /unit	375	1.88 /unit	296
	Condominium	70 units	1.81 /unit	127	1.51 /unit	106	1.76 /unit	123	1.39 /unit	97
	Guest	600 units	0.10 /unit	59	0.08 /unit	49	0.10 /unit	57	0.08 /unit	45
General Office	Visitor	76,069 sf GFA	0.26 /ksf GFA	20	0.22 /ksf GFA	17	0.03 /ksf GFA	2	0.02 /ksf GFA	2
	Employee		2.59 /ksf GFA	197	2.15 /ksf GFA	164	0.03 /ksf GFA	2	0.02 /ksf GFA	2
Medical Office Building	Visitor	18,000 sf GFA	2.94 /ksf GFA	53	2.45 /ksf GFA	44	0.00 /ksf GFA	0	0.00 /ksf GFA	0
	Employee		1.38 /ksf GFA	25	1.15 /ksf GFA	21	0.00 /ksf GFA	0	0.00 /ksf GFA	0
Bank	Visitor	3,507 sf GFA	3.26 /ksf GFA	11	2.71 /ksf GFA	10	2.71 /ksf GFA	9	2.14 /ksf GFA	7
	Employee		2.16 /ksf GFA	8	1.79 /ksf GFA	6	1.46 /ksf GFA	5	1.16 /ksf GFA	4
Hotel	Visitor	165 room	0.98 /room	162	0.82 /room	134	0.95 /room	157	0.75 /room	124
	Employee		0.13 /room	21	0.11 /room	18	0.13 /room	21	0.10 /room	16
Banquet Facilities	Customer (indoors)	390 sf GFA	0.40 /ksf GFA	155	0.22 /ksf GFA	86	0.35 /ksf GFA	135	0.18 /ksf GFA	70
	Customer (outdoors)	0	0.40 /ksf GFA	0	0.22 /ksf GFA	0	0.35 /ksf GFA	0	0.18 /ksf GFA	0
	Employee	390	0.08 /ksf GFA	30	0.06 /ksf GFA	25	0.11 /ksf GFA	42	0.09 /ksf GFA	33
Subtotal Customers and Guests				2,286		1,960		2,345		1,815
Subtotal Residents and Visitors				1,096		913		1,063		839
Subtotal Employees				647		539		418		329
TOTAL				4,029		3,412		3,826		2,983

Adjusting for presence and reserved parking, the projected peak hour demand is actually for 3,085 spaces on weekdays and 2,805 spaces on weekends, as shown in **Table 8**, next page.

These projections include a “Residential Adjustment” which represents the number of reserved residential parking spaces (872) not in use by tenants or their guests at any given time. Similarly, the “Whole Foods Adjustment” which represents the number of reserved parking spaces (192) not in use by grocery patrons and employees at any given time. While these spaces are technically unoccupied, they are not available to other users and are therefore, for all practical purposes, filled.

Application of presence factors reduces gross projected demand for weekdays by 23% (from 4,029 to 3,085, a difference of 944 spaces) and 27% on weekends (from 3,826 to 2,805, a difference of 1,021 spaces) when compared to the projected peak hour demand.

When compared to the busiest hour of the busiest day (a December weekday at 1:00 PM) of the year, the planned parking supply (3,063 spaces) is inadequate to meet the peak hour projected demand (3,085 cars) with a shortfall of 22 spaces. Shortfalls only occur in conjunction with a Banquet Facility event and are only projected for a couple of hours (12:00-1:00 PM) on December weekdays; at all other times of the year the planned supply is adequate to meet peak demand on weekdays. Given this, DESMAN believe this shortfall can be managed and will not require to provision of additional supply to correct.

Table 8: Full Build Peak Hour Demand Projections and Adequacy

Land Use	User	Month: Hour:	WEEKDAYS												Holidays 1:00 PM
			January 12:00 PM	February 12:00 PM	March 12:00 PM	April 12:00 PM	May 12:00 PM	June 12:00 PM	July 12:00 PM	August 12:00 PM	September 12:00 PM	October 12:00 PM	November 12:00 PM	December 1:00 PM	
Standard Retail	Customer		304	314	355	345	371	371	360	376	340	350	391	542	461
	Employee		93	96	107	104	111	111	108	112	103	105	116	135	128
Specialty Retail	Customer		81	77	81	81	81	77	73	68	73	77	81	83	83
	Employee		19	19	19	19	19	18	17	17	18	18	19	19	19
Fine/Casual Dining	Customer (indoors)		79	78	86	84	80	75	79	69	73	79	87	90	86
	Customer (outdoors)		0	0	0	0	14	20	27	23	20	14	0	0	0
	Employee		23	23	26	25	26	25	25	26	24	25	24	25	20
Fast Casual Dining	Customer (indoors)		426	426	470	460	391	322	233	233	287	356	485	446	423
	Customer (outdoors)		0	0	0	0	140	209	279	237	209	140	0	0	0
	Employee		129	128	147	140	147	141	140	144	134	138	135	140	110
Café/Take Out	Customer (indoors)		39	39	44	41	38	31	24	26	29	34	42	43	44
	Customer (outdoors)		0	0	0	0	4	5	7	6	5	4	0	0	0
	Employee		8	8	8	8	9	8	9	9	8	8	9	9	9
Furniture/Furnishings	Customer		23	23	25	26	25	23	24	25	23	24	24	25	22
	Employee		2	2	2	2	2	2	2	2	2	2	2	2	2
Seasonal Beer Garden	Customer		0	0	0	7	17	26	29	29	26	17	0	0	0
	Employee		0	0	0	2	5	7	8	8	7	5	0	0	0
Lifestyle/Fitness	Customer		77	74	66	54	50	50	50	54	62	66	66	90	86
	Employee		7	7	6	5	5	5	5	5	6	6	6	7	6
Active Entertainment	Customer		0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee		0	0	0	0	0	0	0	0	0	0	0	0	0
Residential, Suburban	1-Bedroom		63	63	63	63	63	63	60	60	63	63	63	60	60
	2-Bedroom		292	292	292	292	292	292	278	278	292	292	292	280	280
	3-Bedroom		263	263	263	263	263	263	250	250	263	263	263	252	252
	Condominium		86	86	86	86	86	86	82	82	86	86	86	83	83
	Guest		12	12	12	12	12	12	11	11	12	12	12	12	12
General Office	Visitor		3	3	3	3	3	3	3	3	3	3	3	9	7
	Employee		167	167	167	167	167	167	159	159	167	167	167	167	134
Medical Office Building	Visitor		40	40	40	40	40	40	38	38	40	40	40	32	25
	Employee		25	25	25	25	25	25	24	24	25	25	25	25	20
Bank	Visitor		6	6	6	6	6	6	6	6	6	6	6	6	6
	Employee		8	8	8	8	8	8	8	8	8	8	8	8	6
Hotel	Visitor		71	80	89	89	80	80	89	89	67	67	67	45	89
	Employee		19	21	21	21	21	21	21	21	21	21	21	19	19
Banquet Facilities	Customer (indoors)		103	103	125	133	140	147	147	147	140	133	125	126	112
	Customer (outdoors)		0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee		24	24	24	26	27	29	29	29	29	27	26	24	23
Subtotal Customers and Guests			1,252	1,263	1,390	1,369	1,480	1,485	1,468	1,429	1,403	1,410	1,417	1,537	1,444
Subtotal Residents and Visitors			716	716	716	716	716	716	681	681	716	716	716	687	687
Residential Adjustment			156	156	156	156	156	156	191	191	156	156	156	185	185
Whole Foods Adjustment			98	102	98	98	98	103	108	112	107	103	98	96	96
Subtotal Employees			524	528	560	552	572	567	555	564	552	555	558	580	496
TOTAL			2,746	2,765	2,920	2,891	3,022	3,027	3,003	2,977	2,934	2,940	2,945	3,085	2,908
Total Supply			3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063
Surplus/(Deficit)			317	298	143	172	41	36	60	86	129	123	118	(22)	155

Land Use	User	Month: Hour:	WEEKENDS												Holidays 12:00 PM
			January 12:00 PM	February 12:00 PM	March 12:00 PM	April 12:00 PM	May 12:00 PM	June 12:00 PM	July 12:00 PM	August 12:00 PM	September 12:00 PM	October 12:00 PM	November 12:00 PM	December 12:00 PM	
Standard Retail	Customer		363	376	425	412	443	443	431	449	406	419	468	486	441
	Employee		104	107	119	116	123	123	120	125	114	117	129	150	143
Specialty Retail	Customer		111	105	111	111	111	105	99	93	99	105	111	117	117
	Employee		15	15	15	15	15	14	14	14	14	14	15	15	15
Fine/Casual Dining	Customer (indoors)		42	42	46	45	43	40	42	37	39	42	47	48	46
	Customer (outdoors)		0	0	0	0	7	11	15	12	11	7	0	0	0
	Employee		13	12	14	14	14	14	14	14	13	13	13	14	11
Fast Casual Dining	Customer (indoors)		443	443	489	479	407	335	242	242	299	371	505	515	489
	Customer (outdoors)		0	0	0	0	94	141	189	160	141	94	0	0	0
	Employee		112	110	127	121	127	122	121	124	116	119	117	121	95
Café/Take Out	Customer (indoors)		47	47	52	50	46	38	29	31	36	41	51	51	53
	Customer (outdoors)		0	0	0	0	4	6	8	7	6	4	0	0	0
	Employee		9	9	9	9	10	9	10	10	9	9	10	10	10
Furniture/Furnishings	Customer		40	40	43	46	45	41	42	44	41	42	43	44	39
	Employee		4	4	5	5	5	5	5	5	5	5	5	5	4
Seasonal Beer Garden	Customer		0	0	0	13	32	47	53	53	47	32	0	0	0
	Employee		0	0	0	3	8	12	14	14	12	8	0	0	0
Lifestyle/Fitness	Customer		62	59	53	43	40	40	40	43	50	53	53	62	59
	Employee		3	3	2	2	2	2	2	2	2	2	2	3	2
Active Entertainment	Customer		0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee		0	0	0	0	0	0	0	0	0	0	0	0	0
Residential, Suburban	1-Bedroom		59	59	59	59	59	59	56	56	59	59	59	59	59
	2-Bedroom		271	271	271	271	271	271	257	257	271	271	271	271	271
	3-Bedroom		244	244	244	244	244	244	232	232	244	244	244	244	244
	Condominium		80	80	80	80	80	80	76	76	80	80	80	80	80
	Guest		11	11	11	11	11	11	11	11	11	11	11	11	11
General Office	Visitor		2	2	2	2	2	2	2	2	2	2	2	2	1
	Employee		2	2	2	2	2	2	2	2	2	2	2	2	1
Medical Office Building	Visitor		0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee		0	0	0	0	0	0	0	0	0	0	0	0	0
Bank	Visitor		8	8	8	8	8	8	8	8	8	8	8	8	8
	Employee		5	5	5	5	5	5	5	5	5	5	5	5	4
Hotel	Visitor		69	78	86	86	78	78	86	86	65	65	65	43	86
	Employee		12	14	14	14	14	14	14	14	14	14	14	12	12
Banquet Facilities	Customer (indoors)		90	90	109	115	122	128	128	128	122	115	109	115	103
	Customer (outdoors)		0	0	0	0	0	0	0	0	0	0	0	0	0
	Employee		34	34	34	36	38	40	40	40	40	38	36	36	34
Subtotal Customers and Guests			1,277	1,290	1,424	1,410	1,482	1,463	1,414	1,395	1,372	1,400	1,462	1,491	1,442
Subtotal Residents and Visitors			665	665	665	665	665	665	632	632	665	665	665	665	665
Residential Adjustment			207	207	207	207	207	207	240	240	207	207	207	207	207
Whole Foods Adjustment			74	80	74	74	74	81	86	92	86	81	74	69	69
Subtotal Employees			313	315	346	342	363	362	361	369	346	346	348	373	331
TOTAL			2,536	2,557	2,716	2,698	2,791	2,778	2,733	2,728	2,676	2,699	2,756	2,805	2,714
Total Supply			3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063
Surplus/(Deficit)			527	506	347	365	272	285	330	335	387	364	307	258	349

PEAK HOUR =

The planned supply (3,063 spaces) is adequate to meet peak hour demand (2,805 cars) on the busiest hour of the busiest weekend day of the year (December Saturday at 12:00 PM) with a surplus of 258 spaces projected.

Zonal Analysis

As shown in **Figure 4** on the next page, projected peak hour shortfalls in the South Village for the 100-200 Buildings (-37 spaces) and 300-400-800 Buildings (-7 spaces) can be accommodated in the surplus capacity in the lots serving the 600-700 Buildings (+76 spaces). This will leave +32 spaces open in the Building 600-700 lot.

In the Central Village, the shortfalls for 1,000 Buildings (-50 spaces) can be mitigated by the remaining capacity in the Building 600-700 lots (+32 spaces) and the parking lots servicing Building 2000 (+42 spaces). This will leave +24 open spaces in the Building 2000 lots.

The shortfalls (-31 spaces) associated with Building 1300 at peak hour may be mitigated by the surpluses projected in the parking supply supporting Building 3000 (+78 spaces), leaving +47 spaces open for other users.

The shortfall associated with Buildings 900-1100-1200-1400 (-133 spaces) can be partially offset by the surplus capacity in the parking facilities serving Buildings 500-520 (+12 spaces) and 1500 (+28 spaces), but a shortfall of -93 spaces will still persist. The +47 remaining open spaces in the Building 3000 parking facilities and +24 spaces in the Building 2000 lots will reduce this to -22 spaces.

This -22 space shortfall, which only exists if there is a full-capacity event at the Banquet Facility at the same time⁴, could be corrected by parking those vehicles off-site. Alternately, the project has roughly 360 vehicles associated with retail and service industry employees; some of these vehicles could be parked off the project site during Banquet Facility events to correct projected shortfalls.

As shown in **Figure 5** on the following page, projected peak hour shortfalls in the South Village for the 100-200 Buildings (-43 spaces) and 300-400-800 Buildings (-10 spaces) can be accommodated in the surplus capacity in the lots serving the 600-700 Buildings (+74 spaces). This will leave +21 spaces open in the Building 600-700 lot.

Similarly, in the Central Village, the projected peak hour shortfalls for the 1,000 Buildings (-50 spaces) and Building 1300 (-25 spaces) can be offset by the surplus in the Building 900-1100-1200-1400 lot (+55 spaces) and Building 3000 parking facilities (+128 spaces). The additional surpluses in the Building 1500 lot (+85 spaces) and Building 2000 parking facilities (+43 spaces) will remain open and available at this time.

⁴ These events would account for a total of 126 vehicles associated with Banquet Facility guests and 24 vehicles associated with Banquet Facility employees.

Figure 4: Zone Analysis of Peak Weekday Hour Parking Supply and Demand at Full Build Out (December Weekday @ 1:00 PM)

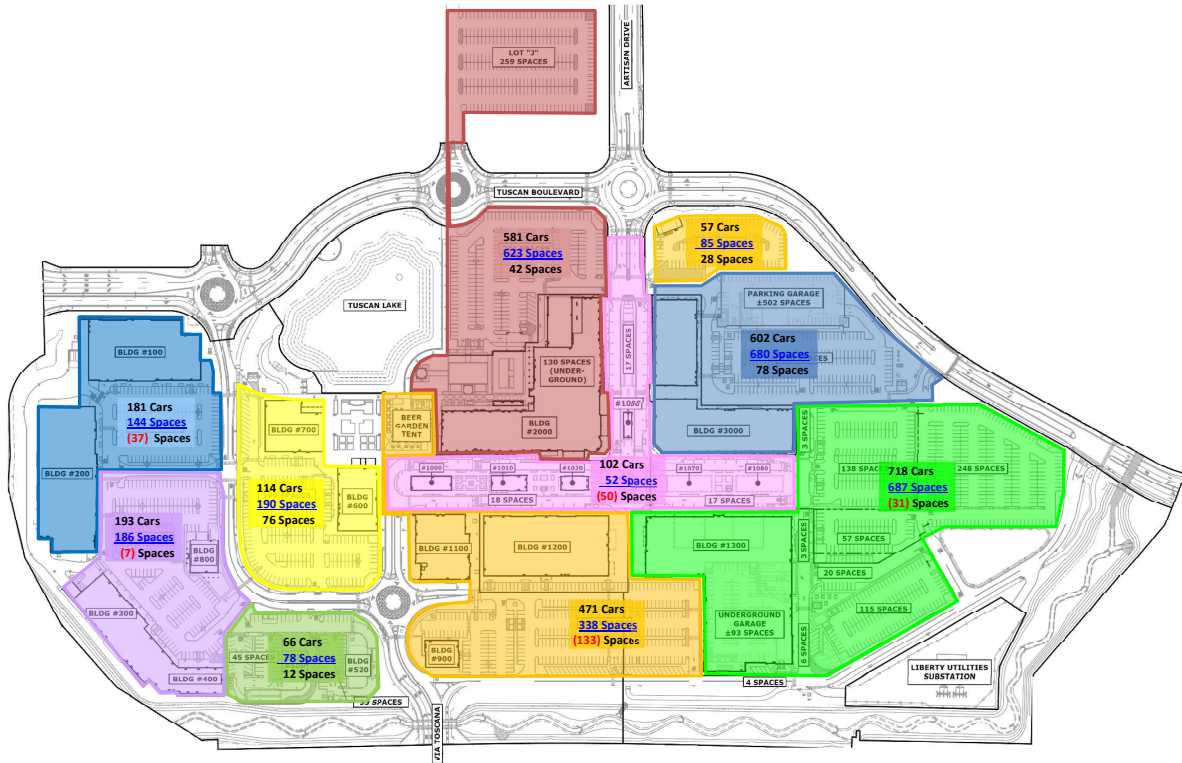


Figure 5: Zone Analysis of Peak Weekend Hour Parking Supply and Demand at Full Build Out (December Saturday @ Noon)

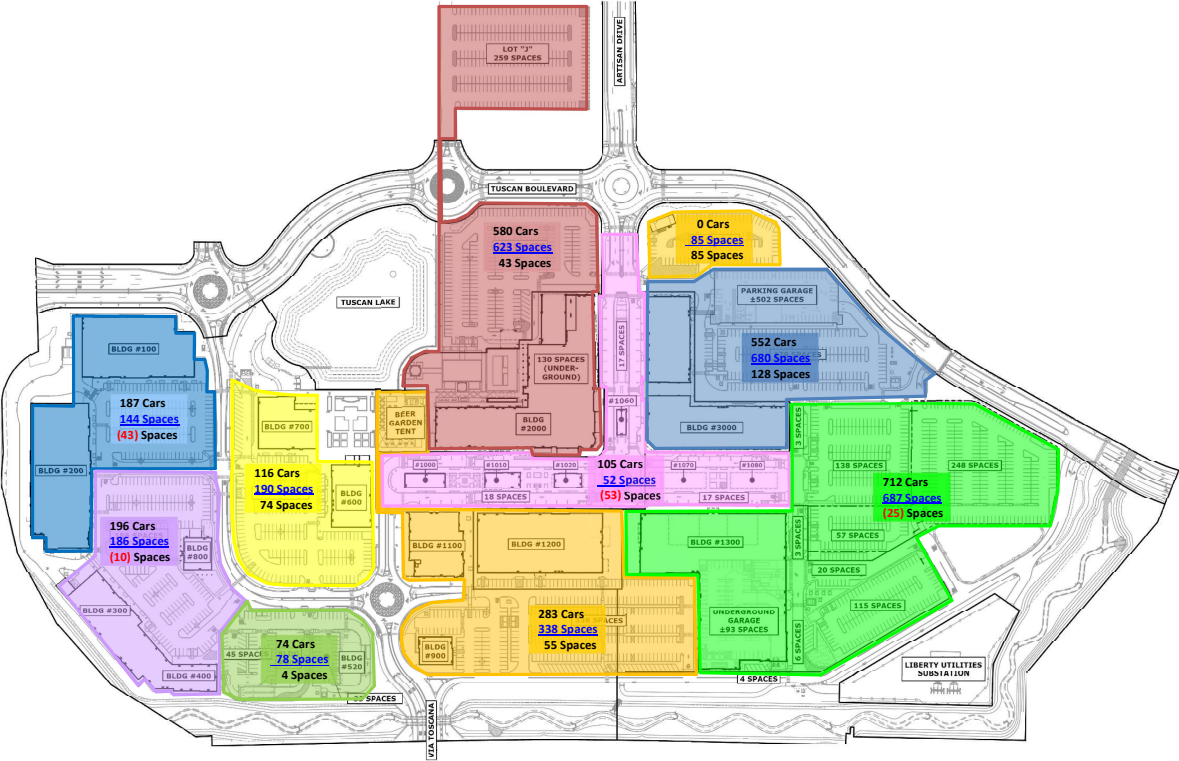


Exhibit A: Full Build Development Program

	Standard Retail	Specialty Retail	Fine/Casual Dining		Fast/Casual Dining		Cafe/Take-Out Dining		Furniture/ Furnishings	Seasonal Beer Garden	Fitness	Active Entertainment	Multi-Family Residential				General Office	Medical Office	Bank	Hotel	Banquet Space		Common Area Space	Parking			
	(sf GLA)	(sf GLA)	(Indr sts)	(otdr sts)	(sf GFA)	(Indr sts)	(otdr sts)	(sf GFA)	(sf GLA)	(seats)	(sf GFA)	(sf GLA)	(sf GLA)	(units)	1-BR	2-BR	3-BR	Condo	(sf GFA)	(sf GFA)	(sf GFA)	(rooms)	(Indr sts)	(otdr sts)	(sf GFA)	(spaces)	
Buildings																											
100									26,450																1,473	72	
200																									550	72	
300																									62	62	
400						67	24	3,552													3,507			600	62	62	
500-520																									78	78	
600																									936	95	
700						72	130	3,520																	95	95	
800																									62	62	
900						150	98	5,727																	198	85	
1100													25,000													85	85
1400											200															84	84
SV Subtotal	110,001	2,494	0	0	0	289	252	12,799	102	16	5,046	26,450	200	0	0	0	0	0	0	0	3,507	0	0	0	3,257	852	852
1000-1075	9,512					152	84	8,600																		52	52
1200	12,623					291	94	13,068											76,069							84	84
1300	35,561	34,318							11,565																	543	543
1500														30	150	120										85	85
2000	29,543					303	197	15,668											18,000				165	390		665	364
3000	27,071		198	60	9,285	178	56	8,000																		680	680
4000																										144	144
6001																										219	219
Subtotal	214,310	34,318	198	60	9,285	924	431	45,135	0	0	0	11,565	0	0	0	0	0	0	76,069	18,000	0	165	390	0	19,999	2,271	2,271
TOTAL	224,311	36,812	198	60	9,285	1,213	683	58,135	102	16	5,046	38,015	200	0	0	0	0	70	76,069	18,000	3,507	165	390	0	23,756	3,063	3,063

