

MEMORANDUM

To: Rachna Balakrishna
From: Alan H. Simon
Date: December 27, 2018 (*Revised February 26, 2019*)
Project: 1299 Beacon St. Brookline MA
Subject: Development of Parking Program

Simon Design Engineering (SDE) is pleased to submit the following findings resulting from our parking demand analysis prepared for the proposed age-restricted rental housing development at 1299 Beacon St. These findings are revised from earlier reports by program reduction, and decisions by ownership on operations.

Introduction:

The proposed project is a multi-use development consisting of age-restricted rental housing (40B), and a ground floor commercial space. We reviewed the zoning requirements with the Brookline Planning Department and their parking consultant, and were asked to evaluate the proposed parking requirements within the context of the underlying zoning parking requirements and published criteria developed by others. We were asked to re-assess the parking demand associated with the proposed commercial space on the ground level for differing uses.

SDE met with the town's peer reviewer who recommended utilizing the Urban Land Institute's¹ (ULI) parking demand ratios, and supporting rationale for the number of spaces provided. The typical base parking ratios were generated by the ULI by observing hourly parking accumulations at various standalone land-uses over the course of a typical year. We modified the ULI's base parking ratios in consultation with the town's peer review consultants to accurately represent the unique aspects of this projects location that affect parking demand.

Key Aspects of Development:

- Industry data and parking demand studies indicate that age-restricted housing has a reduced parking demand in comparison to traditional rental housing.
- The project site has ample access to public transit.
- There is available metered on-street parking for daytime/nighttime use.
- Transportation Network Companies (TNC) providers such as Uber & Lyft are far more prevalent and utilized by all ridership groups (residential and commercial) thus reducing need for personal vehicles.
- Portions of the parking space provided will be restricted for residents.
- Operational controls will help in sharing the parking capacity.

¹Shared Parking, second edition, ULI-Urban Land Institute and the International Council of Shopping Centers

Land Uses:

The programming information provided by the client for this development will contain the following land-uses at full build-out:

Table-1 Land Use Data	
Land-Use	Quantity
Commercial Space (Retail or Restaurant)	5,000 GSF ^a
Age-restricted residential housing (55 and older)	74 units

^aGSF= Gross square footage, includes all floor area

SDE utilized this program information to develop an estimate of the number of parking spaces needed to accommodate the 1299 Beacon Street development. Grocery land-use is specifically excluded from this analysis.

Parking Supply:

In total approximately 87 spaces are proposed for the site to accommodate the anticipated parking demand generated at 1299 Beacon Street.

Town of Brookline Zoning Code Required Spaces:

The following section compares the parking spaces required per the Brookline zoning code for the potential uses that may occupy the commercial space. Pursuant to the local code requirement, section 6.02 table of off-street parking the commercial-use portion of the development will require:

- 1 parking space for every 5 seats if occupied by a restaurant
- 1 parking spaces for every 350 square feet of gross floor area if occupied by a retail use

Using the local code requirements, the estimated number of spaces needed for the commercial space for each potential use is summarized in the table below.

Table-2 Zoning Code Required Spaces				
Land-Use	Quantity		Parking Ratio	Spaces Required
Restaurant	200 ^a	Seats	1 per 5 seats	40
Retail	5,000	GSF	1 per 350 sf	14

^aEstimated number of restaurant seats based on 60% seating area 40% back-end area and 15sf per person

ULI Required Spaces:

The ULI divides restaurant parking into three categories, fast food, family restaurant, and fine/casual dining restaurant. The fine/casual restaurant category encompasses both higher priced upscale restaurants where reservations are made by the vast majority of diners, and casual popular dining facilities that are moderately priced, and usually have a bar/lounge. The town's peer reviewer selected the fine/casual restaurant category for this analysis because this restaurant type is common in similar projects and is not precluded from occupying the space.

The ULI divides retail based on square footage, greater than 600K sf, between 400K and 599K sf, and lastly less than 400K sf. The commercial component for this project consists of 5,000 sf therefore the category of less than 400Ksf was utilized. The unadjusted ULI parking requirements for the potential commercial uses under consideration is summarized in the table below:

Table-3 ULI Parking Requirements					
Program		ULI Parking Requirements			
Land Use	Quantity	Weekday		Weekend	
		Parking Ratio	Spaces	Parking Ratio	Spaces
Fine/Casual Dining Restaurant	5,000 sf	18 /ksf	90	20 /ksf	100
Retail less than 400K sf	5,000 sf	3.6 /ksf	18	4.0 /ksf	20

ksf = thousand square feet of gross floor area

Per the table above, the estimated unadjusted ULI parking requirement for the commercial space uses under consideration is as follows:

- (90) spaces on weekdays and (100) spaces on weekends are needed for a restaurant use.
- (18) spaces on weekdays and (20) spaces on weekends for a retail use.

As indicated in the results above, the ULI's unadjusted parking requirements are much higher than the Brookline zoning regulations. This is because the ULI parking ratios are derived from stand-alone suburban land-uses where nearly all patrons arrive at the site by personal passenger vehicles. The ULI sample data comes from projects with a lack of pedestrian access, bicycling, public transportation, and do not reflect local conditions of Coolidge Corner.

The age-restricted residential parking requirements were excluded from the tables above as this land-use is not represented in the ULI source or the zoning regulations.

Parking Demand Ratios Utilized:

For this analysis, SDE utilized the parking ratios established in the ULI for the commercial space. The ULI splits the parking ratios between customers/employees, and residents/visitors to allow for flexibility when applying adjustments to the parking ratios.

The table below depicts how the parking ratios are broken down between either land-use type:

Table-4 Base Parking Ratios Used in this Analysis								
Land Use	Weekday		Weekend		Source	Combined Total		
	Customers	Employees	Customers	Employees		Weekday	Weekend	
Fine/Casual Dining	15.25	2.75	17	3	1 ^a	18	20	/ksf
Retail	2.9	0.7	3.2	0.8	1 ^b	3.6	4.0	/ksf

ksf = thousand square feet of gross floor area

Sources:

1. ULI Shared Parking 2nd edition, Land Uses: ^aShopping Less than 400ksf, ^bFine/Casual Dining Restaurant

Per the table above, the parking ratios utilized in this analysis are as follows:

- Restaurant use = 18 spaces per 1,000 on weekdays and 20 spaces per 1,000 on weekends.
- Retail use = 3.6 spaces per 1,000 on weekdays and 4.0 spaces per 1,000 on weekends.

Local Factors

To capture the unique aspects of this project, we applied the following adjustments to the ULI parking ratios to develop a parking demand model that represents local needs.

Transportation Mode – This represents the percentage of users arriving at the site by means other than a personal vehicle. According to the approved traffic study prepared by Vanasse & Associates, Inc. (VAI) for this site, it is projected that 62% of commercial customers will arrive at the site by car. This would reduce the required commercial parking by 38%. This reduction was arrived at with the traffic consultants input based on professional judgment, other local studies, and familiarity with local conditions.

This reduction can be attributed to direct access to the Green-Line stop and two Bus-Line 66 stops at Harvard St. along with the increased use of ride-hailing services. We have also applied adjustments to employee parking due to the service nature of the proposed commercial land-uses. In most urban environments service employees are more likely to utilize public transportation rather than drive. If a restaurant occupies the space, it is assumed some employees will work late hours when public transit is no longer operating; thereby, requiring additional employee spots in the evening. To capture this distinction, we lowered the 38% mode reduction to 10% for restaurant employees. The 38% factor remained the same for the retail employees as transit is still available during retail operating hours.

The following mode reductions were applied to the analysis:

- Restaurant:
 - 38% reduction for customers during daytime and evening hours 10am-12am
 - 38% reduction for employees during daytime only hours 10am-6pm
 - 10% reduction for employees during evening only hours 6pm-12am
- Retail:
 - 38% reduction for customers/employees daytime hours 10am-6pm
 - 38% reduction for customers/employees during evening hours 6pm-12am

The factors indicated above were applied to the base parking ratios to provide project-specific projections. The following tables represent the peak parking demand for each use.

Table-5 ULI Parking Summary							
	Land Use	Quantity	Base Ratio	Transit Adjustment	Project Ratio	Estimated Weekday Spaces	Estimated Weekend Spaces
Weekday	Retail	5,000 sf	3.6 /ksf	0.62	2.23	11	
	Restaurant	5,000 sf	15.25 /ksf	0.62	9.46	47	
	Employee		2.75 /ksf	0.9	2.48	12	
Weekend	Retail	5,000 sf	4.0 /ksf	0.62	2.48		12
	Restaurant	5,000 sf	17.0 /ksf	0.62	10.5		53
	Employee		3.0 /ksf	0.9	2.7		14

ksf = thousand square feet of gross floor area

Per the table above the number of spaces estimated by the adjusted ULI parking ratios is as follows:

- Retail use = requires 11 spaces on a weekday, and 12 spaces on a weekend
- Restaurant use = 59 spaces on a weekday, and 67 spaces on a weekend

Parking Demand Conclusion

After utilizing effects of travel mode adjustments, the projected peak parking demand (based upon the ULI) for the commercial space is **12 ±** parking spaces for a retail establishment or **67 ±** parking spaces for a high-quality restaurant. Based on the projected supply, of **87** spaces, a total of 75 spaces would remain available for the age-restricted residential if a retail establishment occupies the commercial space, and conversely 20 residential spaces would remain if a restaurant occupied the commercial space. Other factors such as a captive audience due to walkability of the area, and/or a higher transit utilization at Coolidge Corner, and further increased use of TNC providers may further reduce the number of spaces needed for the commercial space.

Utilizing the Brookline zoning requirement of 40 spaces for a restaurant would allow for 47 spaces to be reserved for residential with the potential for shared use during off peak hours. The projected demand for a restaurant per the ULI represents a **68%** increase in parking spaces when compared to the local zoning requirement.

APPENDIX

PARKING DEMAND SUMMARY

PEAK MONTH DAILY PARKING DEMAND BY HOUR