

Design Consultants, Inc.

120 Middlesex Avenue
Somerville, MA 02145
(617) 776-3350

MEMORANDUM

DCI JOB NO. 2016-011

TO: David Winick
Cedarwood Development
167 Athens Street
Boston, MA 02127

FROM: Tom Bertulis, P.E., PTOE
Design Consultants, Inc.

SUBJECT: **Parking Study**
400 Mystic Avenue
Somerville, MA

DATE: June 14, 2016

As per a request by the client, Design Consultants, Inc. (DCI) undertook a parking study for the project located at 400 Mystic Avenue in Somerville, Massachusetts. The current site consists of three buildings: two commercial and one residential. The proposed redevelopment calls for the demolition of the three buildings and the construction of a new mixed-use building. The first floor will consist of 2,974 square feet of commercial space, and there will be four floors consisting of twenty seven (27) residential units.

As shown in Table 1, the Somerville Zoning Ordinance (SZO) requires a total of forty one (41) residential parking spaces, four (4) visitor parking spaces (one for every six dwelling units), and twelve (12) parking spaces for the commercial property. This is a total of fifty seven (57) required spaces. Therefore the client is seeking relief of twenty seven (27) of these parking spaces.

This memorandum serves to demonstrate that the relief of twenty seven (27) parking spaces will have negligible impact on the local neighborhood parking supply, and that the mixed-use building at 400 Mystic Avenue will generate less parking demand than what the SZO calls for. The project location is shown in Figure 1.

Table 1: Required Spaces According to Somerville Zoning Ordinance

	Number of Bedrooms/ Total Sq ft	Required Spaces per Bedroom/Sq Ft	Total Required Spaces
Proposed Building			
1 Bedroom	5	1.5	8
2-Bedroom	22	1.5	33
Commercial Space	2974	1 per 250 sqft	12
Visitor Parking (1 per 6 Dwelling Units)		4	
Total Spaces Required by SZO for 400 Mystic proposal	57		

Off-Street Parking

The off-street parking is accessed via one curb cut and ramp from Grant Street. The proposed site plan provides a total of thirty (30) off-street parking spaces. The project parking lot layout is shown in Figure 3.

Existing Off-Street Parking Utilization

To determine the actual expected parking demand at the 400 Mystic Avenue project site, off-street parking surveys were conducted at four other similar residential development within the City of Somerville. Off-street parking utilization studies were carried out at the following locations, that had residential units as mentioned below, and shown in Figure 2.

- 1) 303 Lowell Street – 36 residential units
- 2) 301 Lowell Street – 34 residential units
- 3) 625 McGrath Highway – 34 residential units
- 4) 100 Fellsway West – 27 residential units

DCI recorded the number of available parking spaces in the parking lots/garages during a typical Thursday and during a typical Saturday. The parking data was collected during the following time periods, and the results of the parking surveys are summarized in Table 2.

Thursday January 7, 2015 (7-9 PM)

Saturday January 9, 2015 (12-2PM)

Saturday January 9, 2015 (5-7 PM)

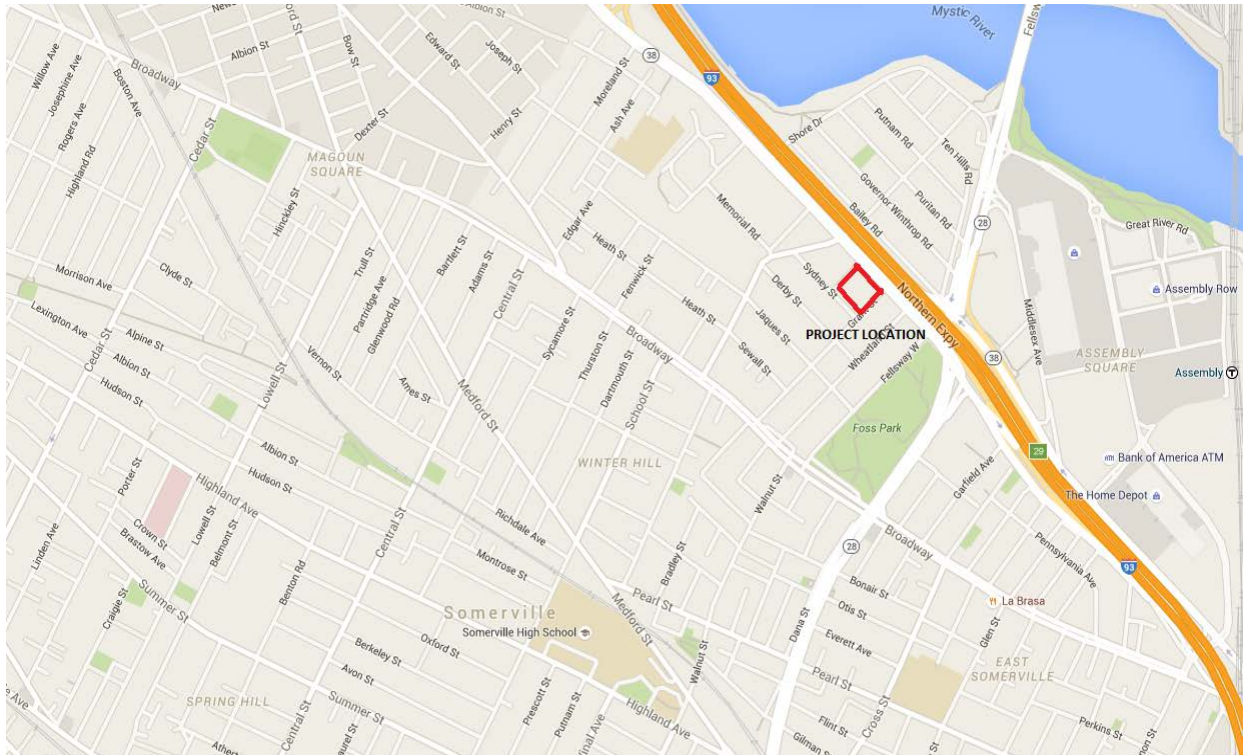


Figure 1: Project Location

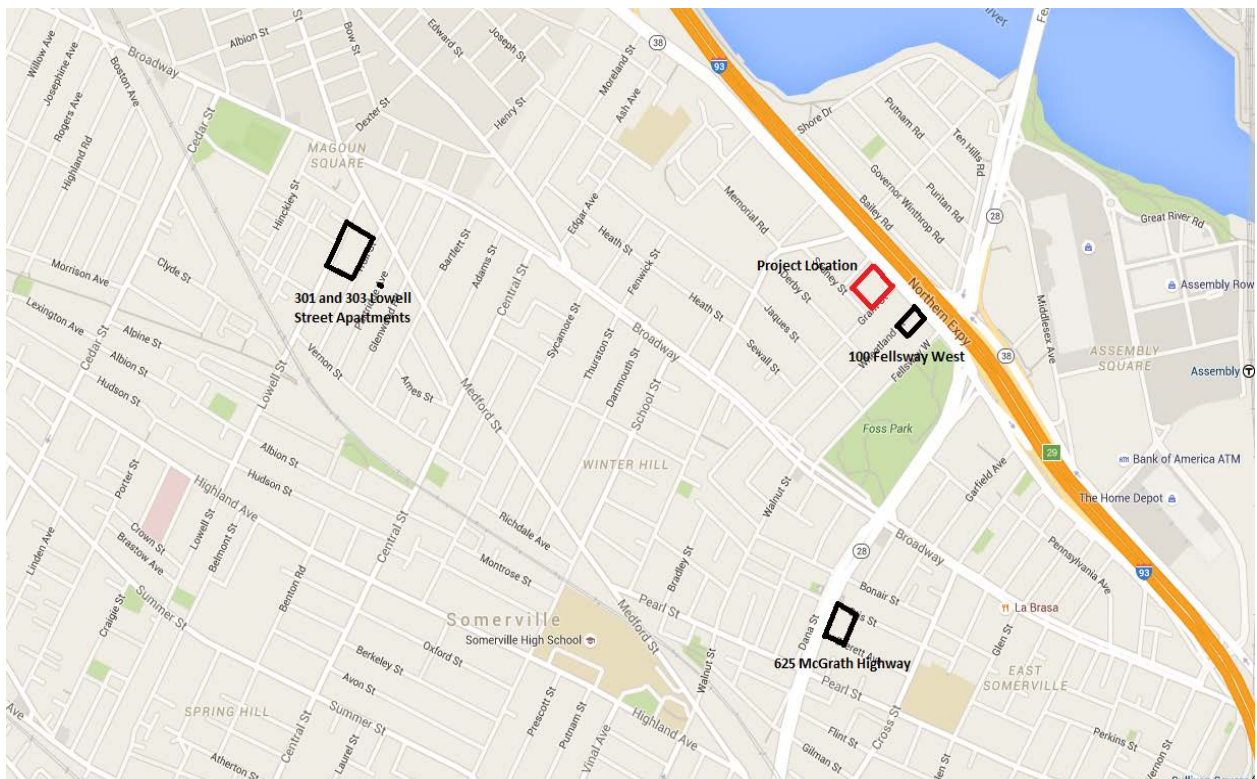


Figure 2: Study Locations

Table 2: Parking Survey Summary

Location	Total Number of Residential Units	Total Number of Off-Street Parking Spaces						
			Thursday		Saturday			
			7-8 PM	8-9 PM	12-1 PM	1-2 PM	5-6 PM	6-7 PM
303 Lowell Street	36	19	10	11	9	11	11	11
301 Lowell Street	34	19	11	14	8	7	9	9
100 Fellsway	27	34	12	14	14	13	15	14
625 McGrath Highway	34	58	29	32	21	21	26	25
			Thursday		Saturday			
			7-8 PM	8-9 PM	12-1 PM	1-2 PM	5-6 PM	6-7 PM
303 Lowell Street			0.28	0.31	0.25	0.31	0.31	0.31
301 Lowell Street			0.32	0.41	0.24	0.21	0.26	0.26
100 Fellsway			0.44	0.52	0.52	0.48	0.56	0.52
625 McGrath Highway			0.85	0.94	0.62	0.62	0.76	0.74
Average Rate			0.47	0.54	0.41	0.40	0.47	0.46
Average Rate (overall)			0.46					

As indicated in Table 2, the average overall parking demand at all three residential sites is 0.46 parking spaces per unit.

It should be noted that residents of the area may also purchase visitor permits from the City of Somerville for someone who is visiting them. This permit costs \$20 for two-day parking or \$40 for three-day parking, with both options being valid for up to one year. These can be purchased by an individual whether they have a vehicle or not, as long as they are an official resident of the City of Somerville. This permit allows a visitor to stay for up to two or three days in a row on the resident's street or an adjacent street. Each household is able to purchase up to two visitor permits if they choose to do so.

Mode Split and Vehicle Ownership Comparison

Commuting characteristics were analyzed from the 2010-2014 American Community Survey 5-Year Estimates. Census Tract 3501.04, which covers the project site, was analyzed and used to estimate mode splits for journeys to work in the project area. Figure 4 and Figure 5 below show the average difference in mode split and vehicle ownership levels between the study areas of 400 Mystic Avenue, the city of Somerville, and the State of Massachusetts.

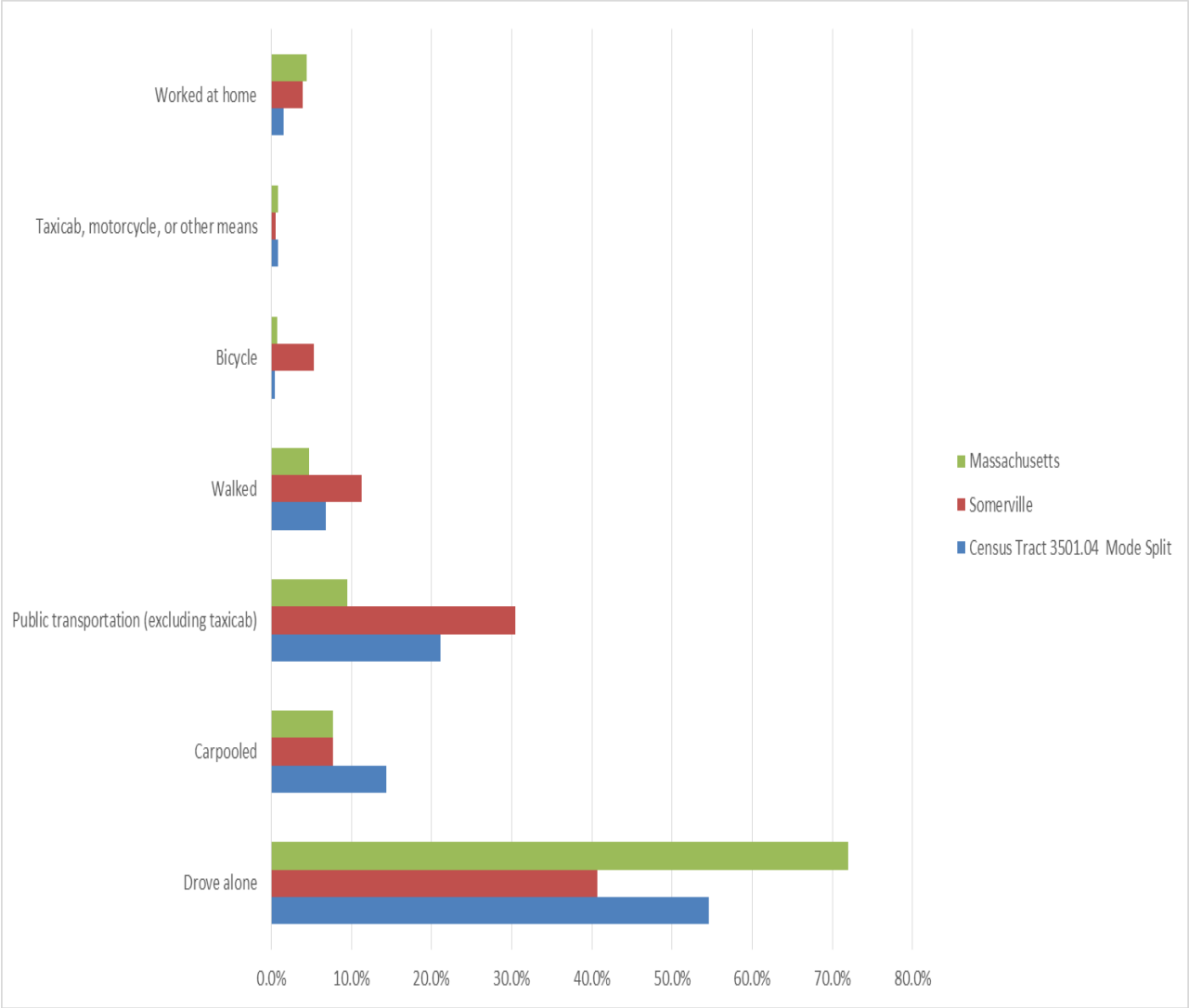


Figure 4: Mode Split Comparison

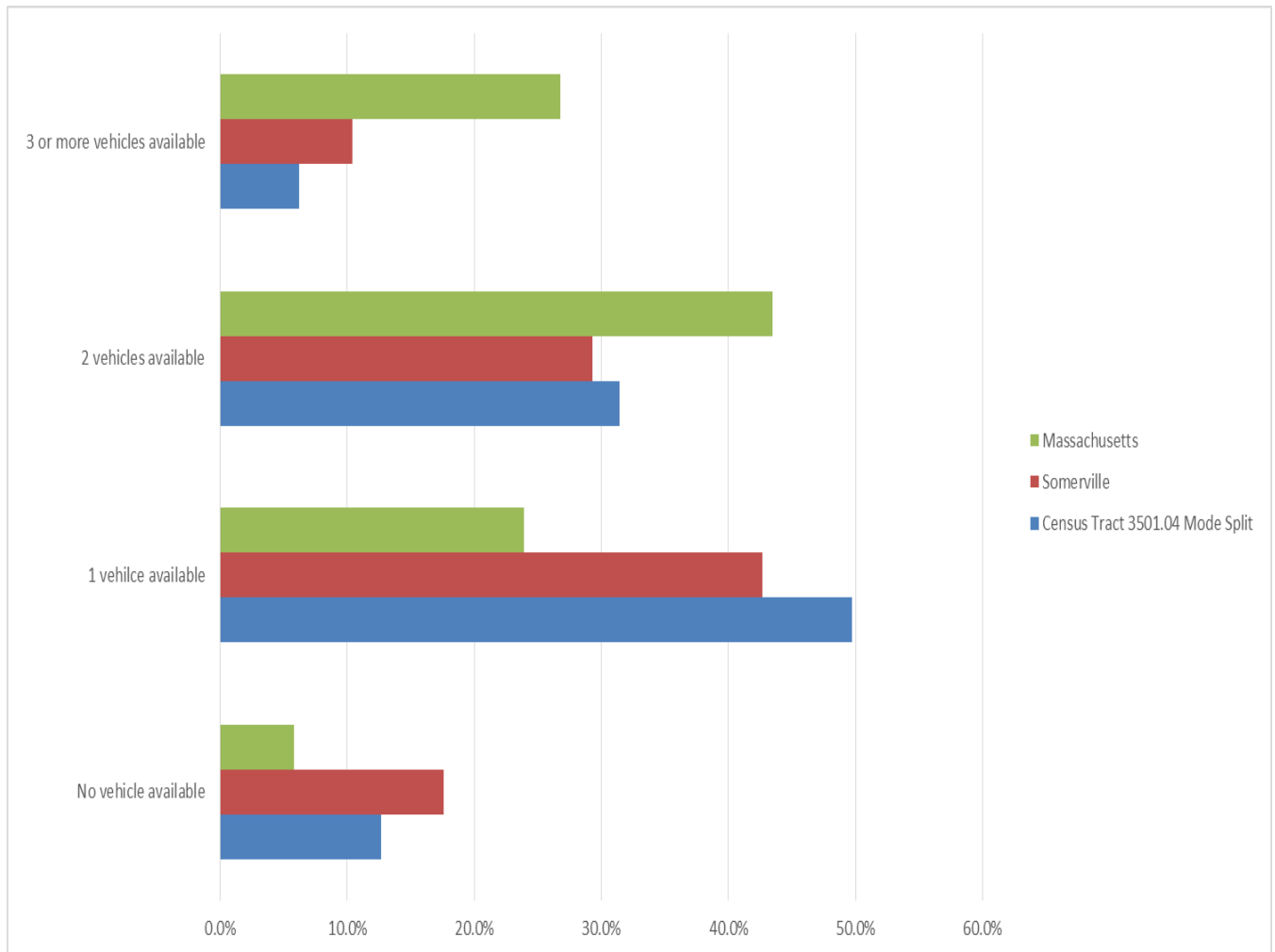


Figure 5: Vehicle Ownership Comparison

Proximity to Public Transit

The MBTA services the study area with bus routes 89, 93, 95, and 101. Bus route 87 runs along Broadway, approximately 0.25 miles from the project site, between Sullivan Square in Somerville and Clarendon Hill in Somerville. Bus route 93, also runs along Broadway, runs between Sullivan Square in Somerville and Devonshire Street at Milk Street in Downtown Boston. Bus route 95 runs along Mystic Avenue, with a stop being less than 300 feet from the project site, between either Sullivan Square in Somerville and West Medford Square in Medford. Bus route 101 runs along Broadway between Sullivan Square in Somerville and Malden Center Station in Malden.

Given the project proximity to multiple bus routes, as well as the already high rate of public transportation use in this area, it is expected that there will continue to be a high use of public transit in the area of the 400 Mystic Avenue project. It is likely that less than a 0.46 parking ratio is needed. Thirty (30) parking spaces would likely meet the parking demand for this location.

Conclusion

The project located at 400 Mystic Avenue will have 27 residential units and 2,974 square feet of commercial space in total. The proposed development requires fifty seven (57) parking spaces, based on the Somerville Zoning Ordinance. This includes forty one (41) spaces for residents, four (4) visitor parking spaces, and twelve (12) parking spaces for the commercial spaces. Thirty (30) spaces will be provided on-site, therefore the proponent is seeking relief of twenty seven (27) spaces.

This parking study determined that the impact of the twenty seven (27) parking spaces that require relief will be negligible on the local neighborhood's parking supply during typical weekday and Saturday periods. The measured parking demand of similar developments in the area was 0.46 parking spaces per residential unit. This would result in twelve (12) required residential parking spaces for the project at 400 Mystic Avenue. Consequently, even with the additional twelve (12) commercial parking spaces and four (4) visitor parking spaces that are required, the thirty (30) parking spaces will be sufficient to support the expected parking demand at 400 Mystic Avenue after the redevelopment.

Furthermore, the residential parking and the commercial parking are complementary of each other. Most parking spaces used for the commercial land use will be occupied during the daytime hours, whereas most of the residential parking spaces will be occupied during the nighttime hours. Consequently, there will be less of a need for the total amount of the required parking for each land use, providing further justification for parking relief.

The City of Somerville also allows residents to buy Visitor Permits, which allows a visitor to park on the resident's street or an adjacent street, which will help mitigate the need for visitor spots on-site. Based on these facts and the results of this study, DCI recommends granting relief for twenty seven (27) parking spaces for the project at 400 Mystic Avenue in Somerville, Massachusetts.