

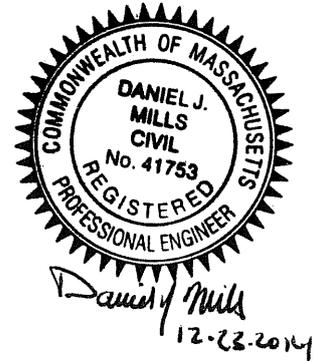
MEMORANDUM

DATE: December 23, 2014

TO: Ms. Gwen Simpkins
Delaporte Development, Inc.
82 Dover Street #3
Somerville, MA 02144

FROM: Daniel J. Mills, P.E., PTOE - Principal
Daniel A. Dumais, P.E. – Senior Transportation Engineer

RE: **Parking Assessment – 315 Highland Avenue
Somerville, Massachusetts**



MDM Transportation Consultants, Inc. (MDM) has prepared this parking assessment for the re-development of 315 Highland Avenue in Somerville, Massachusetts. This memorandum summarize local mode share and public transportation statistics, provides weekday observations of existing (baseline) on-street public parking activity within the site vicinity and reviews industry standard peak parking demand for the proposed residential use.

In summary, parking demand at the Site is projected to be 11 vehicles or less for the proposed residential use which falls below the on-site parking supply of 13 spaces. Furthermore, during the daytime periods, additional surplus spaces are expected to be available on-site to allow a shared parking arrangement for the commercial space. As outlined in this study, ample on-street parking is also available in the immediate area along Highland Avenue that would provide flexibility for an employee at the site to apply for a Business Parking Permit in the future.

PROJECT DESCRIPTION

The project is located at 315 Highland Avenue in Somerville, Massachusetts. The location of the Site relative to adjacent roadways is shown in **Figure 1**. The site currently contains an active daycare/preschool located in the northwest quadrant of the Highland Avenue/Cherry Street intersection. Site access/egress is currently provided via a curb-cut along Cherry Street. Parking is currently provided for approximately 35 vehicles on-site.

Under the redevelopment plan, the existing building is proposed to be demolished and a new three-story building is proposed to be constructed to include seven residential apartment units and 1,660 sf of commercial space. Site access/egress is proposed to remain along Cherry Street

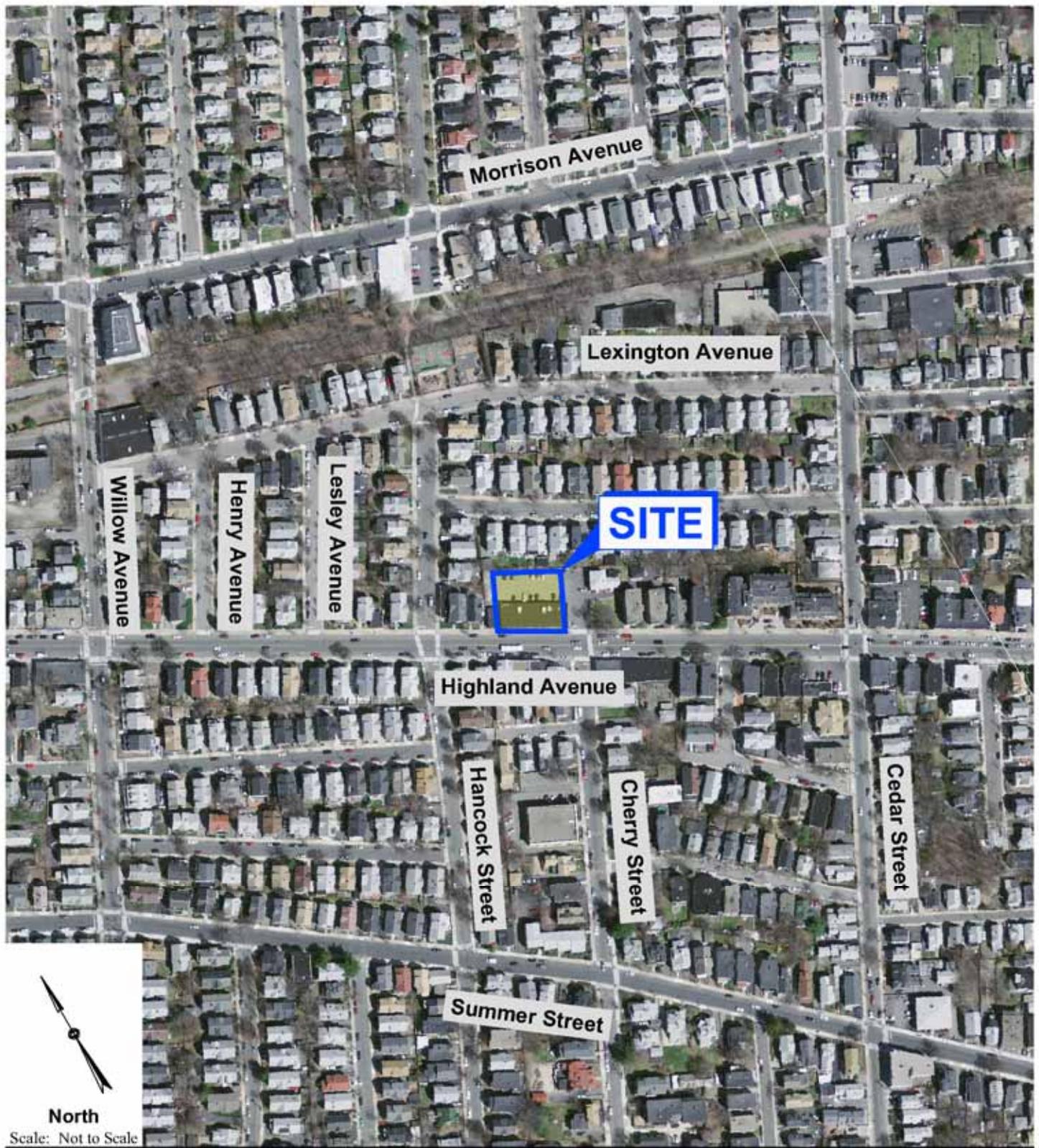


Figure 1

Site Location

and on-site parking is proposed to include 13 marked spaces, consisting of 11 interior spaces and 2 exterior spaces. The preliminary site layout prepared by Peter Quinn Architects, LLC is presented in **Figure 2** for reference purposes.

PARKING ANALYSIS

MDM has prepared a parking assessment to determine whether 13 parking spaces are adequate to accommodate the proposed development. US Census Journey-to-Work and vehicle ownership data, as well as the Institute of Transportation Engineers’ parking generation data have been considered in this evaluation.

Mode Share

US Census data for the City of Somerville indicates that approximately 64 percent of area residents either walk, bike or use public transportation as a means to get to work. MBTA bus routes 88 and 90 have stops immediately adjacent to the Site with direct connections to Lechmere Station, Davis Square, Sullivan Square Station and Assembly Mall. Furthermore, data also indicates an average vehicle ownership of 1.4 vehicles per household within Somerville, resulting in an estimated demand of 10 parked vehicles for the proposed seven residential units. US Census data, MBTA bus route information, and vehicle ownership statistics are provided in the **Attachments**.

Industry Standard Parking Demand Estimate

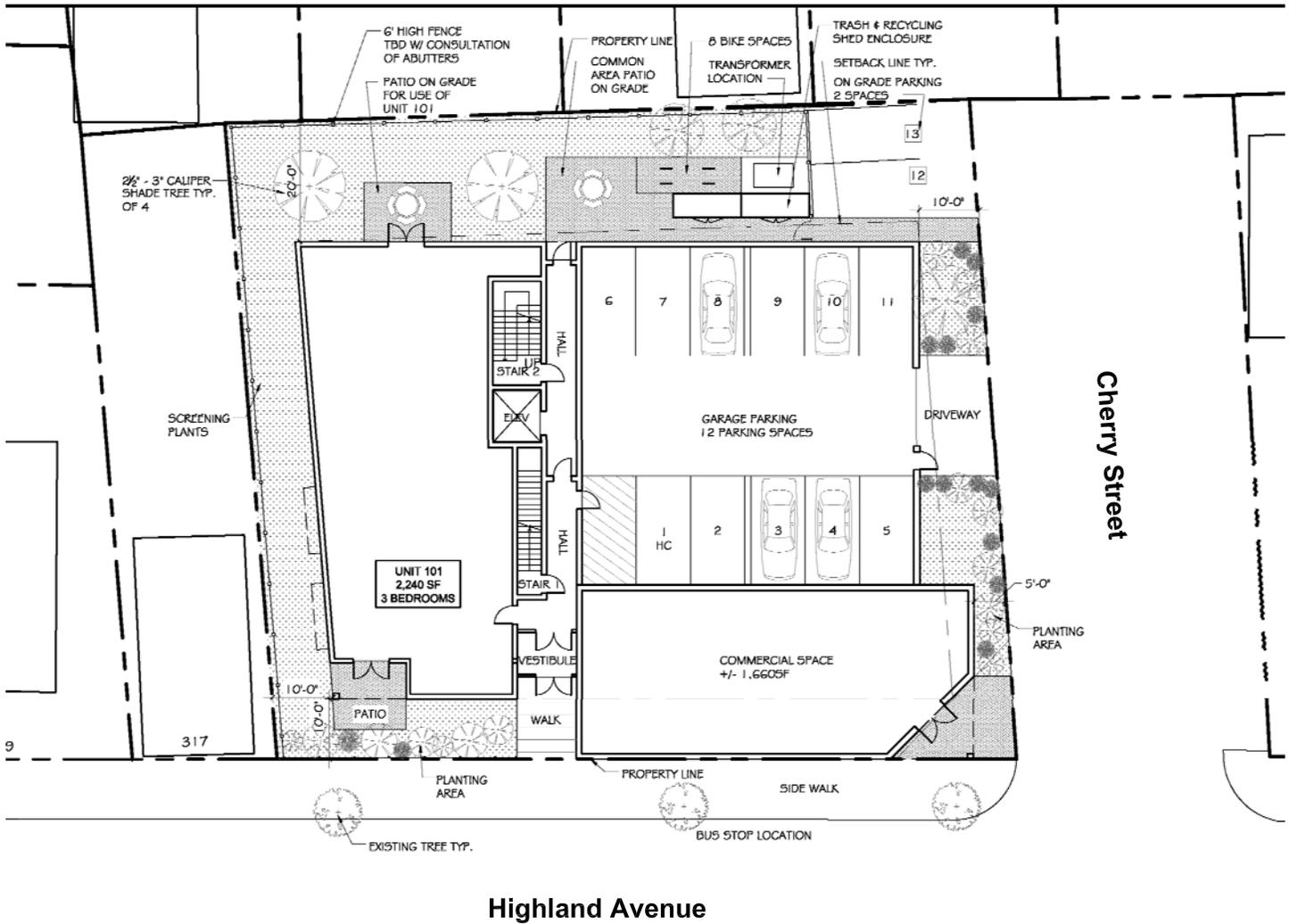
Peak parking generation rates for residential land uses, including condominium/townhouse complexes, are published by the Institute of Transportation Engineers (ITE) in *Parking Generation*¹ which provides a basis for identifying parking demand characteristics for various land uses. **Table 1** provides a summary of peak parking demands for the most appropriate residential land use (i.e., condominium/townhouse use). The ratio provided also accounts for average visitor parking activity.

**TABLE 1
ITE PEAK PARKING DEMAND**

PROPOSED USE	ITE PEAK PARKING DEMAND RATE	PEAK PARKING DEMAND ¹
Residential (7-units)	1.52 spaces per unit	11 spaces

¹ITE 85th percentile demand per LUC 230 (Condominium/Townhouse) applied to seven residential units.

¹ *Parking Generation, 4th Edition*, Institute of Transportation Engineers, Washington D.C. 2010



North

Scale: Not to Scale

Site Plan Source: Peter Quinn Architects LLC

Figure 2

As summarized in **Table 1**, residential peak parking demand for a 7-unit residential complex is approximately 11 vehicles based on ITE parking generation rates with peak demands occurring during the overnight hours. MDM notes that the above peak parking demand derived from industry standard parking demand rates correlates well with the peak parking demand derived from vehicle ownership statistics for Somerville.

Time-of-day factors published by ITE for a residential use were used to model typical hourly parking demands for the residential units at the Site. As shown in **Figure 3**, parking activity at the Site is projected to be 11 vehicles or less throughout the day which falls below the on-site parking supply of 13 spaces. Furthermore, during the daytime periods, additional surplus spaces (up to 9 spaces) will be available on-site to accommodate a shared parking arrangement for the proposed commercial space.

On-Street Parking Observations

A parking accumulation survey was conducted in the immediate Site vicinity along Highland Avenue (within 500± feet of the Site) on Thursday, December 18, 2014 during a weekday morning (8:00 to 9:00 am), weekday midday (12:00 to 2:00 pm) and a weekday evening (4:00 PM and 5:00 PM). The study area is presented in **Figure 4** and divided into parking zones for inventory purposes. The curbside parking capacity within the study area totals 69± public parking spaces, which are restricted to 2-hour parking between 8:30 AM and 2:30 AM (no time restriction with a permit) and restricted exclusively to permit parking overnight between 2:30 AM and 8:30 AM.

Table 2 provides a summary of the observed on-street parking demand for the weekday morning, weekday afternoon and weekday evening study periods. **Figure 5** provides a graphical summary of the total parking supply per zone and the number of vacant spaces for each study period. A detailed breakdown of the survey data is provided in the **Attachments**.

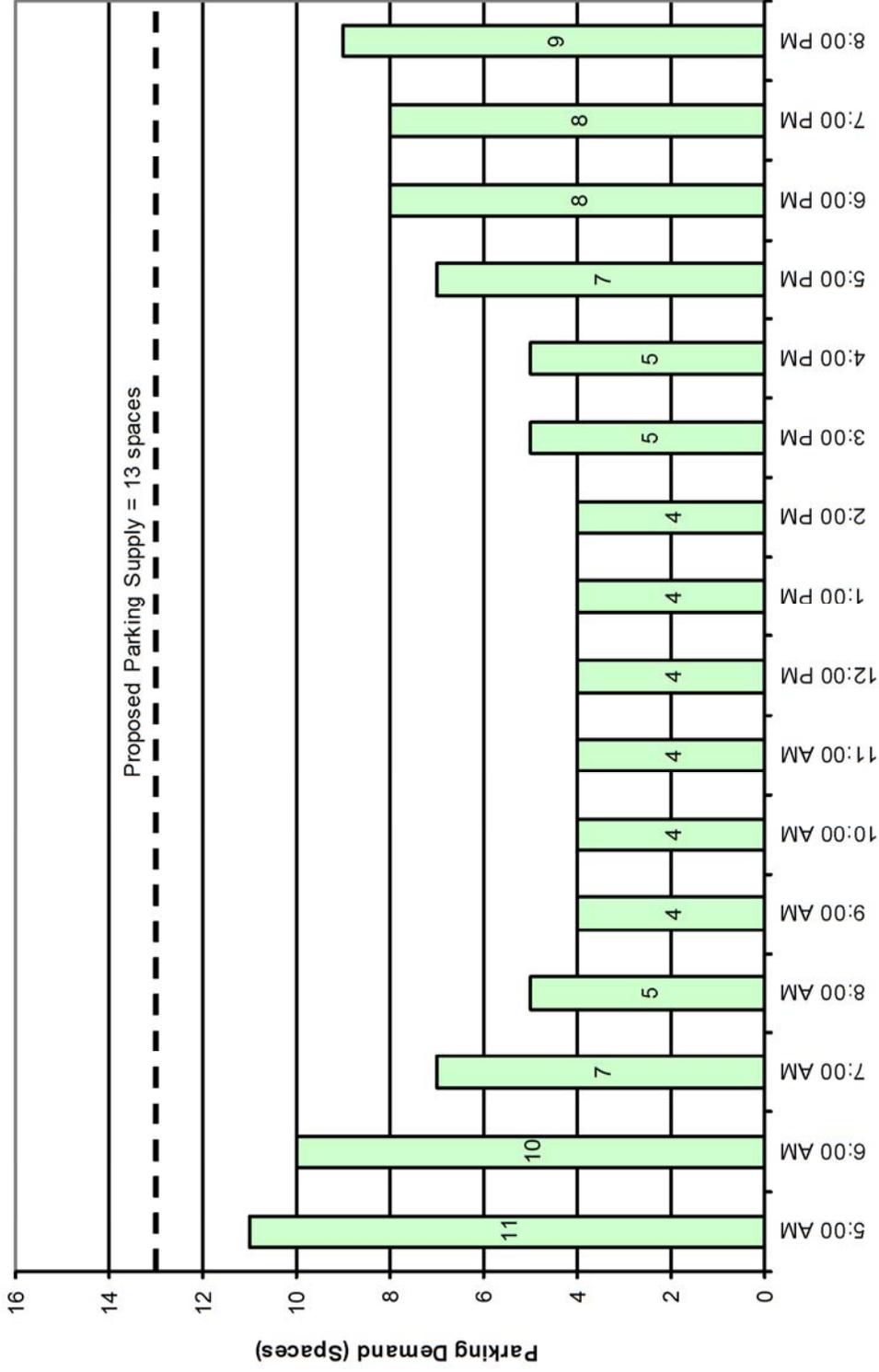
**TABLE 2
EXISTING ON-STREET PARKING DEMAND**

<i>Time Period</i>	<i>On-Street Parking Supply¹</i>	<i>Occupied Spaces²</i>	<i>Available Parking Supply³</i>
<i>Weekday Morning Period (8:00 to 9:00 am)</i>	69	33	36
<i>Weekday Midday Period (12:00 to 2:00 pm)</i>	69	53	16
<i>Weekday Evening Period (4:00 to 5:00 pm)</i>	69	44	25

¹Based on field observations along Highland Avenue (between Willow Avenue and Cedar Street) on Thursday, December 18, 2014.

²Number of observed vehicles parked within study area.

³Parking supply less occupied spaces. The number noted is the minimum number of vacant spaces observed during each time period.



Source: ITE Parking Generation 4th Edition

- ITE 85th percentile demand per LUC 230 (Condominium/Townhouse) applied to 7 units.
- Hourly distribution based on available ITE data.

Figure 3

Hourly Parking Demand (ITE)

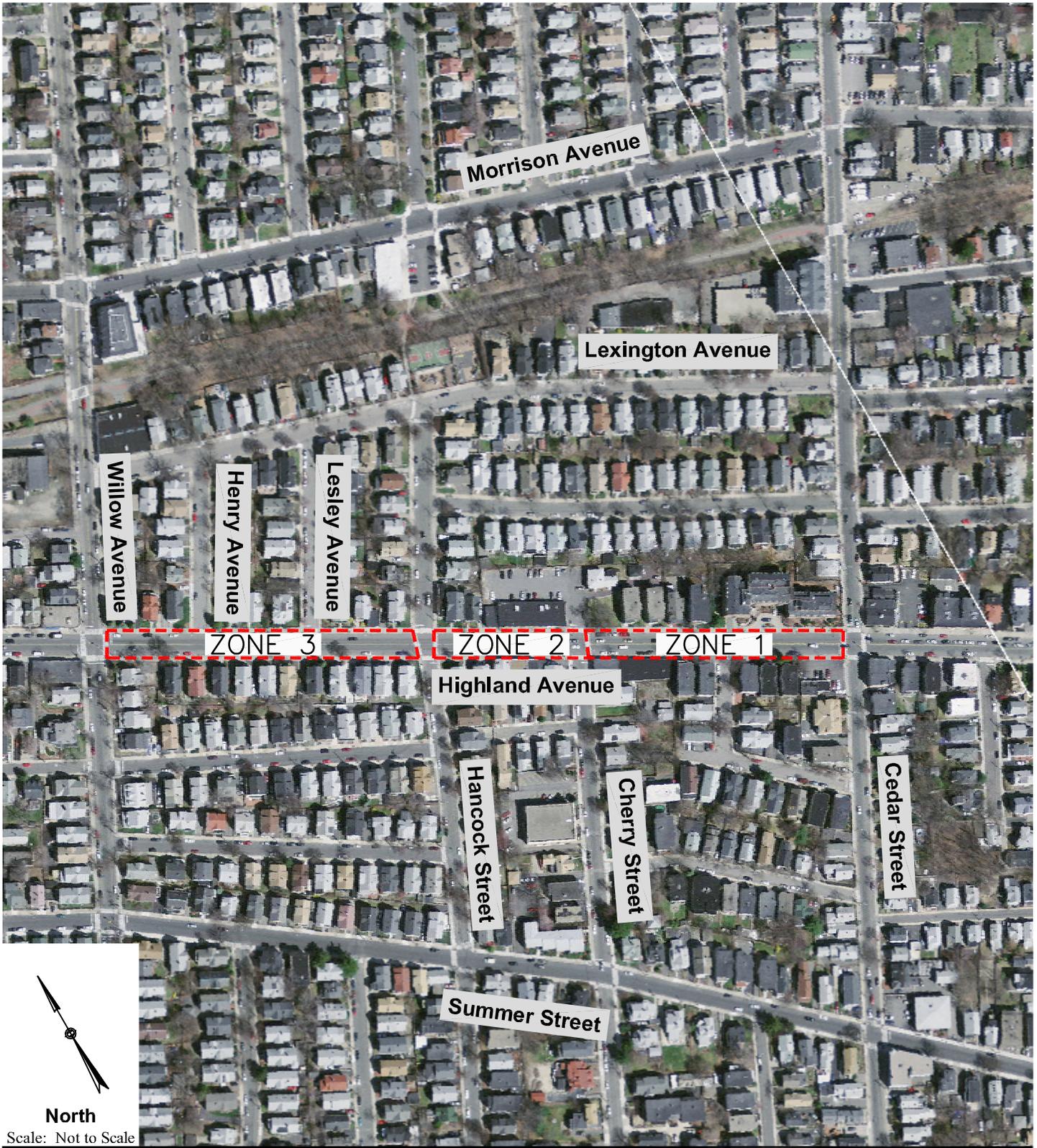


Figure 4



Figure 5

As summarized in **Table 2** and **Figure 5**, parking observations conducted along Highland Avenue during a weekday period indicate that, within 500 feet of the site, a minimum of sixteen (16) on-street parking spaces are generally unoccupied and available for public use.

CONCLUSIONS

Key findings of the parking assessment are as follows:

- *Adequate On-Site Parking Supply for Residential Units.* Based on US Census data and Institute of Transportation Engineers' parking generation data, anticipated parking activity at the Site for the residential units is projected to be 11 vehicles or less which can be accommodated by the 13 on-site parking spaces.
- *Adequate On-Site Parking Supply for Commercial Space.* Due to parking characteristics associated with the residential use, on-site parking spaces will not be fully occupied by residents during business hours. This provides the building management with an opportunity to designate a certain number of parking spaces to be shared during the daytime with the commercial space and visitors without relying on the existing street parking. It is expected that 5 to 9 spaces will be unused by residents during daytime hours.
- *Adequate Off-site Parking Supply for Commercial Space.* As outlined in the study, ample off-site parking is available along Highland Avenue in the site vicinity to accommodate the proposed commercial space. Specifically, parking observations conducted during a weekday period indicate that a minimum of sixteen (16) on-street parking spaces are generally unoccupied and available for public use within 500 feet of the site. The available on-street parking provides flexibility for an employee at the site to apply for a Business Parking Permit.

Attachments

- Parking Survey Data
- Mode Share/ Public Transportation Data
- ITE Parking/ Hourly Distribution Data
- Business Parking Permit Application

□ Parking Survey Data

Parking Accumulation Survey

Location: 315 Highland Avenue
 Date: 12/18/2014, Thursday
 Count Technician: Dan Mills/ Ethan Ceceyla

# Available Parking Spaces (designated as Handicapped Parking)	Zones (Highland Street)						Total
	Cedar to Cherry (1)		Cherry to Hancock (2)		Hancock to Willow (3)		
	North	South	North	South	North	South	
# Spaces Supply (Estimated)	12	13	6	7	16	15	69

Time/ Parking Zone	Cedar to Cherry (1)						Cherry to Hancock (2)						Hancock to Willow (3)						Total	Available	
	Cedar to Cherry (1)		Cherry to Hancock (2)		Hancock to Willow (3)		Cedar to Cherry (1)		Cherry to Hancock (2)		Hancock to Willow (3)		Cedar to Cherry (1)		Cherry to Hancock (2)		Hancock to Willow (3)				
	North	South	North	South	North	South	North	South	North	South	North	South	North	South	North	South	North	South			
8:00 AM	4	3	1	0	10	8													26	43	
8:30 AM																					36
9:00 AM	5	5	2	2	10	9															
12:00 PM	12	10	2	7	11	11															16
12:30 PM	9	10	3	3	10	10															24
1:00 PM	10	11	3	5	11	10															19
1:30 PM	10	11	3	5	12	10															18
2:00 PM	7	10	2	4	11	9															26
4:00 PM	9	7	2	6	9	7															29
4:30 PM	5	10	2	6	8	9															29
5:00 PM	6	10	2	6	10	10															25

NOTES:
 Parking Restriction/ Time Restrictions, Etc.
 1 Car parked in restricted zone (Cedar to Cherry NS) for construction From 12pm-4pm.

□ Mode Share/ Public Transportation Data



B08134

MEANS OF TRANSPORTATION TO WORK BY TRAVEL TIME TO WORK

Universe: Workers 16 years and over who did not work at home
2009-2013 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Block Group 5, Census Tract 3510, Middlesex County, Massachusetts	
	Estimate	Margin of Error
Total:	523	+/-145
Less than 10 minutes	58	+/-44
10 to 14 minutes	33	+/-51
15 to 19 minutes	22	+/-28
20 to 24 minutes	39	+/-38
25 to 29 minutes	119	+/-73
30 to 34 minutes	134	+/-74
35 to 44 minutes	45	+/-39
45 to 59 minutes	64	+/-58
60 or more minutes	9	+/-17
Car, truck, or van:	187	+/-110
Less than 10 minutes	40	+/-49
10 to 14 minutes	33	+/-51
15 to 19 minutes	0	+/-12
20 to 24 minutes	23	+/-28
25 to 29 minutes	17	+/-20
30 to 34 minutes	45	+/-52
35 to 44 minutes	20	+/-25
45 to 59 minutes	0	+/-12
60 or more minutes	9	+/-17
Drove alone:	158	+/-80
Less than 10 minutes	40	+/-49
10 to 14 minutes	33	+/-51
15 to 19 minutes	0	+/-12
20 to 24 minutes	23	+/-28
25 to 29 minutes	17	+/-20
30 to 34 minutes	16	+/-25
35 to 44 minutes	20	+/-25
45 to 59 minutes	0	+/-12
60 or more minutes	9	+/-17
Carpooled:	29	+/-45
Less than 10 minutes	0	+/-12
10 to 14 minutes	0	+/-12
15 to 19 minutes	0	+/-12
20 to 24 minutes	0	+/-12

**Block Group 5, Census Tract 3510,
Middlesex County, Massachusetts**

	Estimate	Margin of Error
25 to 29 minutes	0	+/-12
30 to 34 minutes	29	+/-45
35 to 44 minutes	0	+/-12
45 to 59 minutes	0	+/-12
60 or more minutes	0	+/-12
In 2-person carpool:	29	+/-45
Less than 10 minutes	0	+/-12
10 to 14 minutes	0	+/-12
15 to 19 minutes	0	+/-12
20 to 24 minutes	0	+/-12
25 to 29 minutes	0	+/-12
30 to 34 minutes	29	+/-45
35 to 44 minutes	0	+/-12
45 to 59 minutes	0	+/-12
60 or more minutes	0	+/-12
In 3-or-more-person carpool:	0	+/-12
Less than 10 minutes	0	+/-12
10 to 14 minutes	0	+/-12
15 to 19 minutes	0	+/-12
20 to 24 minutes	0	+/-12
25 to 29 minutes	0	+/-12
30 to 34 minutes	0	+/-12
35 to 44 minutes	0	+/-12
45 to 59 minutes	0	+/-12
60 or more minutes	0	+/-12
Public transportation (excluding taxicab):	274	+/-97
Less than 10 minutes	0	+/-12
10 to 14 minutes	0	+/-12
15 to 19 minutes	0	+/-12
20 to 24 minutes	0	+/-12
25 to 29 minutes	96	+/-64
30 to 34 minutes	89	+/-58
35 to 44 minutes	25	+/-31
45 to 59 minutes	64	+/-58
60 or more minutes	0	+/-12
Bus or trolley bus:	0	+/-12
Less than 10 minutes	0	+/-12
10 to 14 minutes	0	+/-12
15 to 19 minutes	0	+/-12
20 to 24 minutes	0	+/-12
25 to 29 minutes	0	+/-12
30 to 34 minutes	0	+/-12
35 to 44 minutes	0	+/-12
45 to 59 minutes	0	+/-12
60 or more minutes	0	+/-12
Streetcar or trolley car (carro publico in Puerto Rico), subway or elevated:	274	+/-97
Less than 10 minutes	0	+/-12
10 to 14 minutes	0	+/-12
15 to 19 minutes	0	+/-12
20 to 24 minutes	0	+/-12
25 to 29 minutes	96	+/-64
30 to 34 minutes	89	+/-58
35 to 44 minutes	25	+/-31
45 to 59 minutes	64	+/-58
60 or more minutes	0	+/-12
Railroad or ferryboat:	0	+/-12
Less than 10 minutes	0	+/-12
10 to 14 minutes	0	+/-12

Block Group 5, Census Tract 3510, Middlesex County, Massachusetts		
	Estimate	Margin of Error
15 to 19 minutes	0	+/-12
20 to 24 minutes	0	+/-12
25 to 29 minutes	0	+/-12
30 to 34 minutes	0	+/-12
35 to 44 minutes	0	+/-12
45 to 59 minutes	0	+/-12
60 or more minutes	0	+/-12
Walked:	49	+/-43
Less than 10 minutes	18	+/-29
10 to 14 minutes	0	+/-12
15 to 19 minutes	9	+/-16
20 to 24 minutes	16	+/-24
25 to 29 minutes	6	+/-14
30 to 34 minutes	0	+/-12
35 to 44 minutes	0	+/-12
45 to 59 minutes	0	+/-12
60 or more minutes	0	+/-12
Taxicab, motorcycle, bicycle, or other means:	13	+/-22
Less than 10 minutes	0	+/-12
10 to 14 minutes	0	+/-12
15 to 19 minutes	13	+/-22
20 to 24 minutes	0	+/-12
25 to 29 minutes	0	+/-12
30 to 34 minutes	0	+/-12
35 to 44 minutes	0	+/-12
45 to 59 minutes	0	+/-12
60 or more minutes	0	+/-12

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

While the 2009-2013 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-l' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-l' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+u' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '****' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because



QT-H11

Vehicles Available and Household Income in 1999: 2000

Census 2000 Summary File 4 (SF 4) - Sample Data

NOTE: Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see <http://www.census.gov/prod/cen2000/doc/sf4.pdf>

Population Group: Total population

Subject	Somerville city, Middlesex County, Massachusetts	
	Number	Percent
TENURE BY VEHICLES AVAILABLE		
Owner-occupied housing units	9,663	100.0
No vehicle available	1,484	15.4
1 vehicle available	4,170	43.2
2 vehicles available	3,022	31.3
3 vehicles available	672	7.0
4 vehicles available	246	2.5
5 or more vehicles available	69	0.7
Vehicles per household	1.4	(X)
Renter-occupied housing units	21,892	100.0
No vehicle available	5,690	26.0
1 vehicle available	10,418	47.6
2 vehicles available	4,403	20.1
3 vehicles available	1,060	4.8
4 vehicles available	188	0.9
5 or more vehicles available	133	0.6
Vehicles per household	1.1	(X)
TENURE BY HOUSEHOLD INCOME IN 1999		
Owner-occupied housing units	9,663	100.0
Less than \$5,000	204	2.1
\$5,000 to \$9,999	295	3.1
\$10,000 to \$14,999	430	4.4
\$15,000 to \$19,999	424	4.4
\$20,000 to \$24,999	347	3.6
\$25,000 to \$34,999	916	9.5
\$35,000 to \$49,999	1,509	15.6
\$50,000 to \$74,999	2,076	21.5
\$75,000 to \$99,999	1,412	14.6
\$100,000 to \$149,999	1,399	14.5
\$150,000 or more	651	6.7
Median (dollars)	58,041	(X)
Renter-occupied housing units	21,892	100.0
Less than \$5,000	958	4.4
\$5,000 to \$9,999	1,622	7.4
\$10,000 to \$14,999	1,364	6.2
\$15,000 to \$19,999	1,166	5.3
\$20,000 to \$24,999	1,151	5.3
\$25,000 to \$34,999	2,512	11.5
\$35,000 to \$49,999	4,010	18.3
\$50,000 to \$74,999	4,753	21.7
\$75,000 to \$99,999	2,236	10.2
\$100,000 to \$149,999	1,567	7.2
\$150,000 or more	553	2.5
Median (dollars)	42,251	(X)

schedule change

88

Fall August 30, 2014 - December 26, 2014

Clarendon Hill- Lechmere Station

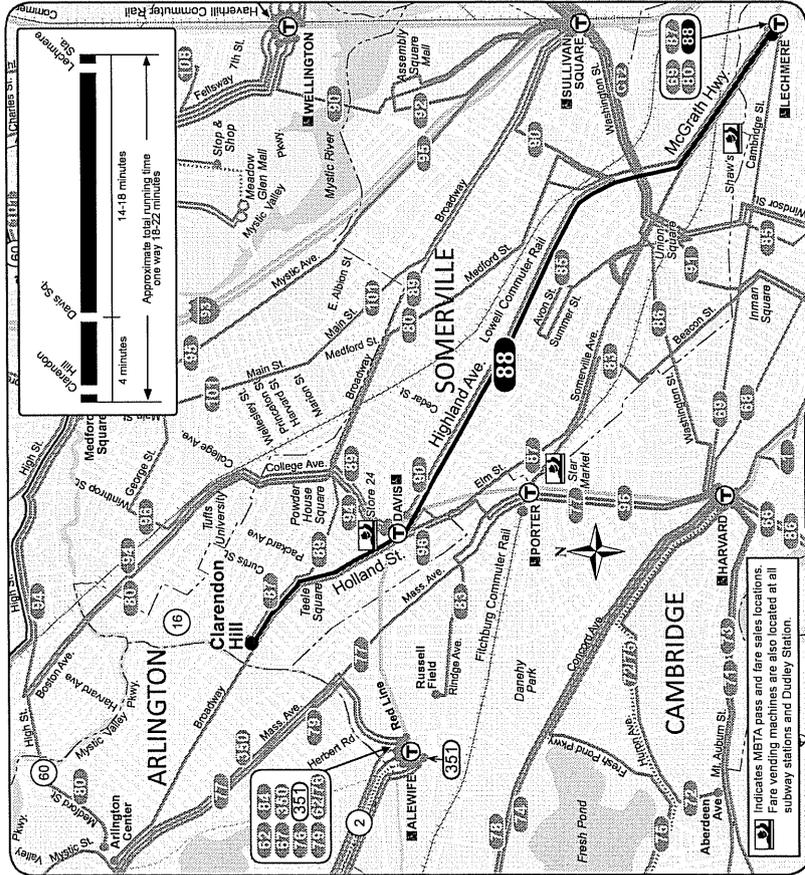
- Serving
- Teele Square
 - Davis Station
 - Somerville City Hospital
 - Somerville High School
 - Somerville City Hall
 - Green Line
 - Red Line



Massachusetts Bay
Transportation Authority

Information 617-222-3200 • 1-800-392-6100
(TTY) 617-222-5146 • www.mbta.com

Route 88 Clarendon Hill - Lechmere Station



88 **Weekday** **88** **Saturday** **88** **Sunday**

Inbound				Outbound			
Leave	Arrive	Leave	Arrive	Leave	Arrive	Leave	Arrive
Clarendon Hill	Somerville High School	Lechmere Station	Davis Square	Clarendon Hill	Somerville High School	Lechmere Station	Davis Square
5:16A	5:19A	5:25A	5:32A	5:35A	5:41A	5:47A	5:51A
5:41	5:44	5:50	5:57	6:00	6:06	6:12	6:20
6:06	6:09	6:15	6:22	6:35	6:42	6:50	6:54
6:28	6:33	6:41	6:52	6:57	7:04	7:12	7:16
6:50	6:55	7:03	7:14	7:19	7:28	7:36	7:41
7:06	7:11	7:19	7:30	7:40	7:48	7:58	8:03
7:17	7:23	7:31	7:42	7:58	8:06	8:16	8:21
7:22	7:27	7:37	7:48	8:14	8:22	8:32	8:37
7:38	7:44	7:55	8:06	8:30	8:38	8:48	8:53
7:40	7:46	8:01	8:11	8:46	8:54	9:04	9:09
7:54	8:00	8:11	8:22	9:05	9:13	9:23	9:28
8:00	8:06	8:17	8:28	9:30	9:38	9:48	9:53
8:10	8:16	8:27	8:38	10:00	10:08	10:18	10:23
8:20	8:26	8:45	8:56	10:35	10:43	10:53	10:58
8:28	8:34	8:45	8:56	11:05	11:13	11:23	11:28
8:46	8:52	9:02	9:12	11:35	11:43	11:53	11:58
9:03	9:07	9:17	9:27	12:05P	12:13P	12:23P	12:28P
9:23	9:27	9:37	9:47	12:35	12:43	12:53	12:58
9:45	9:49	9:59	10:09	1:05	1:13	1:23	1:28
10:05	10:09	10:19	10:29	1:35	1:43	1:53	1:58
10:35	10:39	10:49	10:59	2:05	2:13	2:23	2:28
11:05	11:09	11:19	11:29	s 2:35	2:43	2:49	2:54
11:35	11:39	11:49	11:59	s 2:40	2:48	2:54	2:59
12:05P	12:09P	12:19P	12:29P	2:30	2:40	2:50	2:55
12:35	12:39	12:49	12:59	s 2:50	2:58	3:04	3:09
1:05	1:09	1:19	1:29	3:00	3:10	3:15	3:20
1:35	1:39	1:49	1:59	3:30	3:40	3:45	3:50
2:05	2:09	2:19	2:29	4:00	4:10	4:15	4:20
2:35	2:39	2:49	2:59	4:20	4:30	4:35	4:40
2:50	2:54	3:04	3:14	4:40	4:50	4:55	5:00
3:00	3:04	3:14	3:24	5:00	5:10	5:15	5:20
3:30	3:34	3:44	3:54	5:20	5:30	5:35	5:40
3:50	3:54	4:04	4:14	5:40	5:50	5:55	6:00
4:10	4:14	4:24	4:34	6:00	6:10	6:15	6:20
4:30	4:34	4:44	4:54	6:20	6:30	6:35	6:40
4:50	4:54	5:04	5:14	6:40	6:50	6:55	7:00
5:10	5:14	5:24	5:34	7:00	7:10	7:15	7:20
5:30	5:34	5:44	5:54	7:20	7:30	7:35	7:40
5:50	5:55	6:05	6:15	7:40	7:50	7:55	8:00
6:10	6:15	6:25	6:35	8:00	8:10	8:15	8:20
6:30	6:35	6:45	6:55	8:20	8:30	8:35	8:40
6:55	7:00	7:11	7:21	8:40	8:50	8:55	9:00
7:20	7:25	7:34	7:43	9:00	9:10	9:15	9:20
7:40	7:44	7:52	8:01	9:20	9:30	9:35	9:40
8:10	8:14	8:22	8:31	9:40	9:50	9:55	10:00
8:40	8:44	8:52	9:01	10:00	10:10	10:15	10:20
9:10	9:14	9:22	9:31	10:20	10:30	10:35	10:40
9:40	9:43	9:50	9:58	10:40	10:50	10:55	11:00
10:10	10:18	10:25	10:33	11:00	11:10	11:15	11:20
10:50	10:53	11:00	11:08	11:20	11:30	11:35	11:40
11:25	11:28	11:35	11:43	11:40	11:50	11:55	12:00
12:00M	12:02A	12:08A	12:15A	12:10A	12:15A	12:21A	12:24A
12:35A	12:37	12:43	12:50	12:20A	12:23A	12:31A	12:38A
				1:00	1:08	1:14	1:19

s - Does NOT run during school vacation
w - Waits for fast trolley to arrive at Lechmere Station. Sunday through Thursday only. Friday & Saturday leaves at scheduled time.
All buses are accessible to persons with disabilities
Route 88
Clarendon Hill-Lechmere Station

Inbound		Outbound	
Leave	Arrive	Leave	Arrive
Clarendon Hill	Somerville High School	Lechmere Station	Davis Square
6:40A	6:43A	6:49A	6:56A
7:40	7:43	7:49	7:58
8:40	8:43	8:49	8:58
9:10	9:13	9:19	9:28
9:42	9:46	9:53	9:59
10:20	10:23	10:31	10:40
11:05	11:08	11:16	11:25
11:45	11:48	11:56	12:05P
12:25P	12:28P	12:37P	12:44P
1:05	1:08	1:17	1:29
1:45	1:49	1:58	2:10
2:25	2:29	2:38	2:50
3:05	3:09	3:18	3:29
3:45	3:49	3:56	4:04
4:25	4:29	4:36	4:44
5:05	5:09	5:16	5:24
5:45	5:49	5:56	6:07
6:25	6:29	6:36	6:44
7:05	7:08	7:15	7:24
7:45	7:48	7:55	8:04
8:25	8:28	8:35	8:44
9:05	9:08	9:15	9:24
9:45	9:48	9:55	10:04
10:25	10:28	10:34	10:42
11:00	11:03	11:09	11:17
11:30	11:33	11:39	11:47
12:10A	12:13A	12:19A	12:27A
12:40	12:43	12:49	12:57

Fare
Local Bus Bus + Bus Rapid Transit Bus + Rapid Transit
CharlieCard \$2.10 \$2.10 \$2.65 \$4.75
Cash-on-Board \$2.10 \$4.20 \$2.65 \$4.75
Student CharlieCard** \$0.80 \$0.80 \$1.05 \$1.05
Senior/TAAP \$0.80 \$0.80 \$1.05 \$1.05
VALID PASSES: LinkPass (\$75/mo.), Monthly Local Bus (\$50/mo.), *Student Pass (\$26.00/Month for 5-Day validity, Mon-Fri or 7-Day validity on all days), **Senior/TAAP Pass (\$26.00/Month for 5-Day validity, Mon-Fri or 7-Day validity on all days)
FREE PASSES: Disabled students, commuter bus, and bus-passes issued by an adult; Blind Access CharlieCard holders ride free and if using a guide, the guide rides free.
** Requires Student CharlieCard, available to students through participating middle schools and high schools.
*** Senior/TAAP Pass, available to Medicare cardholders, seniors 65+, and persons with disabilities.

Fall 2014 Holidays
October 13 & November 11: see Weekday
September 1, November 21, & December 25: see Sunday

schedule change

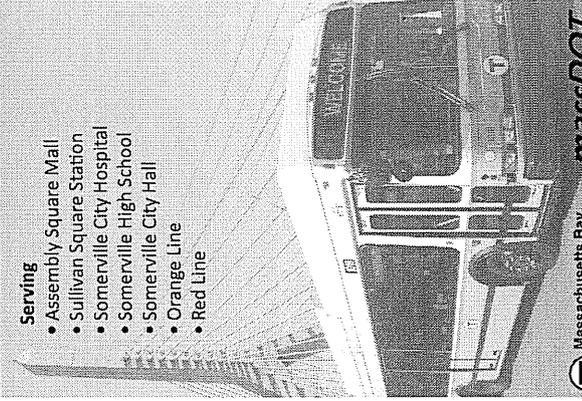
90

Fall August 30, 2014 - December 26, 2014

Davis Square-Wellington Station

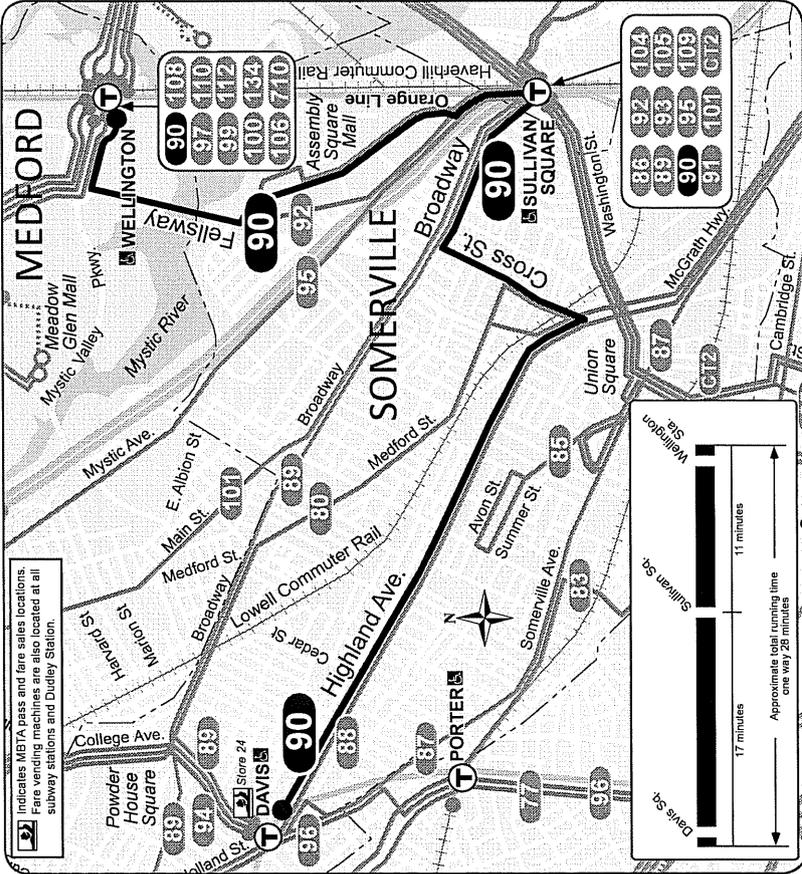
Serving

- Assembly Square Mall
- Sullivan Square Station
- Somerville City Hospital
- Somerville High School
- Somerville City Hall
- Orange Line
- Red Line



Massachusetts Bay Transportation Authority
Information 617-222-3200 • 1-800-392-6100
 (TTY) 617-222-5146 • www.mbta.com

Route 90 Davis Square - Wellington Station



90				90				90				90					
Weekday		Saturday		Sunday		Weekday		Saturday		Sunday		Weekday		Saturday		Sunday	
Inbound		Inbound		Inbound		Inbound		Inbound		Inbound		Inbound		Inbound		Inbound	
Leave Davis Square	Arrive Sullivan Station																
6:30A	6:46A	7:00A	7:10	7:24	7:43	7:30	7:43	7:49	8:05	8:14	8:28	10:30	10:47	10:56	11:05A	11:17A	11:33A
7:10	7:33	7:42	7:50	8:07	8:26	8:40	8:53	8:59	9:10	9:19	9:33	11:40	11:58	12:07P	12:15P	12:27P	12:46P
7:50	8:13	8:22	8:30	8:47	9:04	9:45	10:01	10:08	10:20	10:29	10:43	12:50P	1:11P	1:20P	1:25	1:37	1:53
8:30	8:53	9:05	9:15	9:28	9:43	10:55	11:11	11:18	11:30	11:39	11:53	2:00	2:20	2:32	2:35	2:48	3:04
9:15	9:34	9:50	9:55	10:08	10:23	12:05P	12:24P	12:31P	12:40P	12:49P	1:03P	3:10	3:28	3:39	3:45	3:56	4:12
10:25	10:44	11:00	11:05	11:18	11:33	1:15	1:36	1:44	1:50	2:04	2:21	4:20	4:39	4:47	4:55	5:07	5:22
11:35	11:54	12:10P	12:15P	12:28P	12:43P	2:25	2:46	2:54	3:00	3:14	3:31	5:30	5:48	5:56	6:00	6:10	6:24
12:45P	1:04P	1:19P	1:25	1:41	1:58	3:35	3:56	4:04	4:10	4:24	4:40						
1:25	1:46	2:01	2:05	2:21	2:37	4:45	5:06	5:14	5:20	5:33	5:49						
2:05	2:26	2:38	3:00	3:18	3:35	5:55	6:13	6:21	6:30	6:42	6:57						
3:00	3:25	3:39	3:50	4:08	4:25	7:05	7:23	7:31	7:40	7:52	8:07						
3:45	4:07	4:21	4:30	4:48	5:05	8:15	8:32	8:38	8:50	9:02	9:17						
4:35	4:57	5:11	5:20	5:38	6:01	9:25	9:42	9:48	10:00	10:11	10:24						
5:15	5:37	5:51	6:00	6:16	6:37												
6:10	6:31	6:46	6:50	7:04	7:19												
6:50	7:12	7:29	7:35	7:46	8:01												
7:30	7:47	7:56	8:05	8:16	8:31												
8:35	8:52	9:01	9:10	9:21	9:36												
9:40	9:57	10:06	10:15	10:26	10:41												

All buses are accessible to persons with disabilities



Fare	Local Bus	Bus + Bus	Rapid Transit	Bus + Rapid Transit
CharlieCard	\$1.60	\$1.60	\$2.10	\$2.10
CharlieTicket	\$2.10	\$2.10	\$2.65	\$4.75
Cash-on-Board	\$2.10	\$4.20	\$2.65	\$4.75
Student CharlieCard*	\$0.80	\$0.80	\$1.05	\$1.05
CharlieCard**	\$0.80	\$0.80	\$1.05	\$1.05

VALID PASSES: LinkPass (\$75/mo.); Monthly Local Bus (\$50/mo.); *StudentPass (\$26.00/Month for 5-Day validity Mon-Fri or 7-Day validity on all days); **Senior/TAP Pass (\$29/mo.); and express bus, commuter rail, and boat passes. Access CharlieCard holders ride free and if using a guide, the guide rides free. * Requires Student CharlieCard, available to students through participating middle schools and high schools. ** Requires Senior/TAP card, available to Medicare cardholders, seniors 65+, and persons with disabilities.

Route 90
Davis Square-Wellington Station

Fall 2014 Holidays
October 13 & November 11: see Weekday
September 1, November 27, & December 26: see Sunday

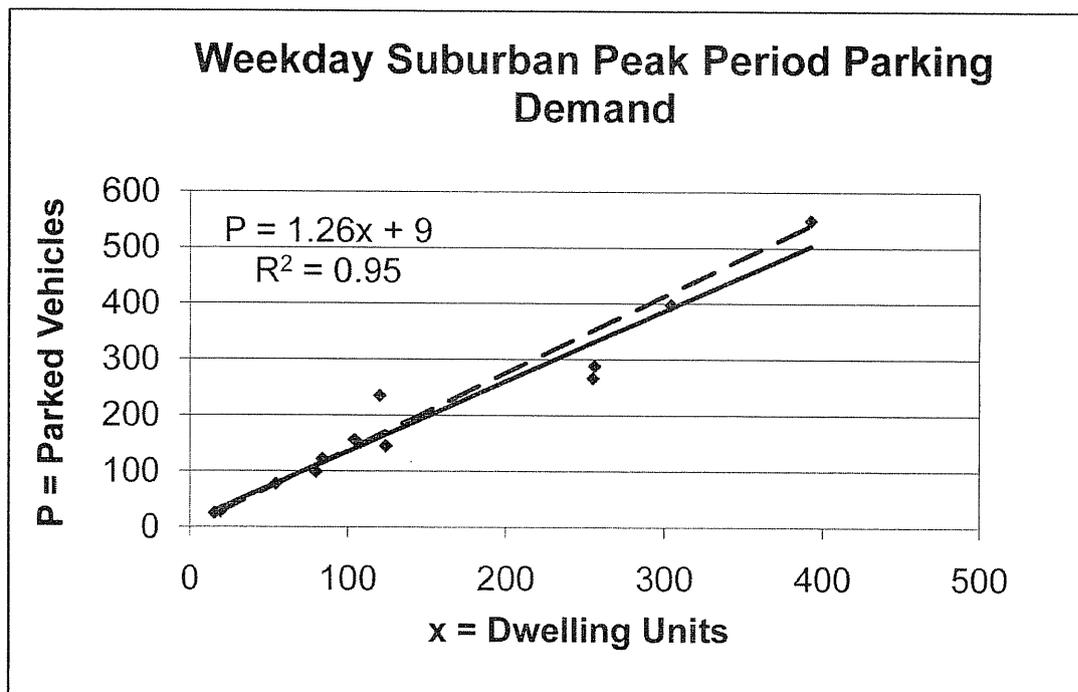
□ ITE Parking/ Hourly Distribution Data

Land Use: 230

Residential Condominium/Townhouse

Average Peak Period Parking Demand vs. Dwelling Units
On a: Weekday
Location: Suburban

Statistic	Peak Period Demand
Peak Period	11:00 p.m.–6:00 a.m.
Number of Study Sites	12
Average Size of Study Sites	151 dwelling units
Average Peak Period Parking Demand	1.38 vehicles per dwelling unit
Standard Deviation	0.24
Coefficient of Variation	17%
Range	1.04–1.96 vehicles per dwelling unit
85th Percentile	1.52 vehicles per dwelling unit
33rd Percentile	1.28 vehicles per dwelling unit



◆ Actual Data Points — Fitted Curve - - - Average Rate

Land Use: 224 Rental Townhouse

FOR HOURLY
DISTRIBUTION
PURPOSES ONLY

Description

Rental townhouses are townhouse developments with rented rather than owned units and a minimum of two attached units per building structure. Units are not stacked on top of one another.

Database Description

- Average parking supply ratio: 1.7 parking spaces per dwelling unit (three study sites).

For one of the study sites, parking demand was compiled for 24 consecutive hours on a weekday, Saturday and Sunday. The following table presents the time-of-day distribution of parking demand at the site.

Based on Vehicles per Dwelling Unit	Weekday		Saturday		Sunday	
	Percent of Peak Period	Number of Data Points*	Percent of Peak Period	Number of Data Points*	Percent of Peak Period	Number of Data Points*
12:00–4:00 a.m.	98	1	95	1	93	1
5:00 a.m.	100	1	100	1	99	1
6:00 a.m.	84	1	98	1	98	1
7:00 a.m.	62	1	94	1	96	1
8:00 a.m.	41	1	89	1	94	1
9:00 a.m.	34	1	59	1	89	1
10:00 a.m.	32	1	71	1	85	1
11:00 a.m.	31	1	67	1	78	1
12:00 p.m.	30	1	66	1	72	1
1:00 p.m.	31	1	64	1	73	1
2:00 p.m.	33	1	64	1	72	1
3:00 p.m.	37	1	69	1	73	1
4:00 p.m.	45	1	73	1	75	1
5:00 p.m.	61	1	78	1	83	1
6:00 p.m.	69	1	80	1	89	1
7:00 p.m.	72	1	83	1	93	1
8:00 p.m.	80	1	84	1	95	1
9:00 p.m.	89	1	87	1	100	1
10:00 p.m.	92	1	89	1	98	1
11:00 p.m.	94	1	95	1	100	1

* Subset of database

Study Sites/Years

Canada:
Brooks, AB (1998)

United States:
Howard County, MD (1989); Middletown, NJ (2001); New Brunswick, NJ (2001)

4th Edition Source Number

1114

□ Business Parking Permit Application

Business Parking Permit Application

Date: _____

Name: _____

Employer: _____

Complete business mailing address & zip code:

Phone: _____

Email: _____

License Plate: _____

Check box if you have current Business Parking Permit

NUMBER IN ORDER OF PREFERENCE:

___ On-Street Parking

Desired location: _____

Off-Street Parking:

___ (Davis Square) Buena Vista Road Lot

___ (Davis Square) Grove Street Lot
between Highland Avenue and Elm Street

___ (Davis Square) Rite Aid Lot

___ (Magoun Square) Magoun Square Lot

SHIFT:

___ 1st Shift (8am-6pm)

___ 2nd Shift (6pm-3:30am)

___ Other (list hours, 10hr maximum)

Two-shift permits are required for periods over 10 hours; fee will be charged as TWO permits

Application must include following:

Copy of Vehicle Registration

Must be a Massachusetts (or neighboring state) vehicle registration. Permits not issued if outside Massachusetts commuting distance.

Copy of payroll stub or statement on employer letterhead confirming employment

If paying by mail, include check or money order.

ADDITIONAL INFORMATION:

- On-Street Permits issued on annual basis (\$150/year).
- Off-Street Permits issued in increments of three, six, or twelve months (\$100/month).
- You will be charged the cost of TWO permits for shift times exceeding 10 hours.
- While attempts are made to accommodate location requests, assignments are based on availability.
- You will be contacted by email upon approval of your application.
- Applications that include payment will have the permits sent by mail and **MUST** include complete address information. You may also pay in person at the Traffic and Parking Office when you pick up your permit. Check, cash or credit card payment accepted.
- **ALL** outstanding parking tickets must be PAID before application is processed.
- Permits are non-transferable and non-refundable.
- Permit applications are accepted by email or standard mail.
- Contact Barbara Sullivan to submit permits/questions:
 - Email: bsullivan@somervillema.gov
 - Phone: 617-625-6600 ext. 7935