# Design Consultants, Inc. 

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MEMORANDUM
DCI JOB NO. 2017-037
$\begin{array}{ll}\text { TO: } & \text { Cassia Silva } \\ & 38 \text { Dane Street } \\ & \text { Somerville, MA 02143 } \\ & \\ \text { FROM: } & \text { Tom Bertulis, P.E., PTOE } \\ & \text { Design Consultants, Inc. } \\ \text { SUBJECT: } & \text { Parking Study } \\ & 34-38 \text { Dane Street } \\ & \text { Somerville, MA }\end{array}$
DATE: April 21, 2017

As per a request by the client, Design Consultants, Inc. (DCI) undertook an on-street parking study for the project located at 34-38 Dane Street in Somerville, Massachusetts. 34 Dane Street currently consists of a vacant lot. 38 Dane Street currently consists of a five-bedroom single-family home. It is our understanding that the client is proposing to redevelop both properties. After construction, 34 Dane Street will consist of a three-unit building. It will consist of two 2-bedroom units and one 3-bedroom unit. After construction, 38 Dane Street will support two 3-bedroom units. There will be a total of five (5) residential units; two 2-bedroom units and three 3-bedroom units. The plan is to provide four (4) off-street parking spaces; one in a garage at 34 Dane Street, one located atgrade between the two buildings, and two located at-grade south of the building at 38 Dane Street. Parking is limited due to the topography of the property, which is adjacent to the MBTA Commuter Rail tracks and the bridge traversing the tracks. Additionally, there are currently zero (0) bicycle parking spaces on-site, and after redevelopment there will be six (6) bicycle parking spaces provided on-site.

As shown in Table 1, the Somerville Zoning Ordinance (SZO) requires a total of nine (9) residential parking spaces. Therefore the client is seeking relief of five (5) of these parking spaces.

This memorandum serves to demonstrate that the relief of five (5) parking spaces will have negligible impact on the local neighborhood parking supply, and that the residential units at 34-38

Dane Street will generate less parking demand that what the SZO calls for. The project location is shown in Figure 1.

Table 1: Required Spaces According to Somerville Zoning Ordinance

| Required Parking Spaces per Somerville Zoning Ordinance |  |  |
| :---: | :---: | :---: |
| \# of Units | 2-Bedroom | 3-Bedroom |
| \# of Required Parking Spaces per Unit | 2 | 3 |
| \# of Required Parking Spaces for Units in Building | 1.5 | 2.0 |
| Total Residential Parking Spaces Required | 9 |  |
| \# of Visitor Parking Spaces Required (1 per 6 units) | 0 |  |
| Total Parking Spaces Required | 9 |  |



Figure 1: Project Location

## Off-Street Parking

The off-street parking will be accessed via two existing curb-cuts along Dane Street; one at 34 Dane Street to access two parking spaces, and one at 38 Dane Street to access two parking spaces. As mentioned, the proposed site plan provides a total of four (4) off-street parking spaces.

## Existing On-Street Parking Utilization

DCI performed a field parking survey of all available on-street parking to determine the existing parking utilization. The study area includes all on-street parking in the vicinity of 34-38 Dane Street within approximately 250 linear feet. Parking on-street in this area of Somerville is limited to mostly private and permit parking. Parking permits can be bought by residents of Somerville at a cost of $\$ 30$ for the year and it allows them to park on any street at any time within City limits. The study area is shown in Figure 2 and includes the following roadways:

- Dane Street: Dane Street is a two-way, two-lane roadway. Parking is permitted along Dane Street in the northbound direction from Washington Street to Dane Avenue, which is limited to one accessible parking space and Permit-only parking spaces. There are shared-lane markings ("sharrows") in both directions along Dane Street. The approximately curb-to-curb width is 28 feet.
- Dane Avenue: Dane Avenue is a one-way roadway in the westbound direction. Parking is permitted along Dane Avenue in the westbound direction from Leland Street to Dane Street, which is limited to Permit-only parking spaces. The approximate curb-to-curb width is 20 feet.
- Skehan Street: Skehan Street is a two-way roadway. Parking is permitted in the westbound direction only, which is limited to Permit-only parking. The approximate curb-to-curb width is 20 feet.
- Village Street: Village Street is a two-way roadway between Nevada Street and Dane Street, and a one-way roadway in the westbound direction from Nevada Street to Hanson Street. Public parking is prohibited along Village Street, as curbside parking is limited to residents of the street only. The approximate curb-to-curb width is 18 feet.
- Nevada Avenue: Nevada Street is a one-way street in the northeasterly direction. Public parking is prohibited along Nevada Street, as curbside parking is limited to residents of the street only. The approximate curb-to-curb width is 17 feet.

DCI recorded the number of available parking spaces during a typical Thursday and Saturday. The parking data was collected during the following time periods:

- Thursday April 6, 2017 (7 to 9 PM)
- Saturday April 8, 2017 (12 to 2 PM)
- Saturday April 8, 2017 (5 to 7 PM)

The results of these surveys are shown in Table 2.


Figure 2: On-Street Parking Utilization Study Area

Table 2: On-Street Parking Survey Summary

|  |  |  |  |  |  |  | Average Number of Cars Parked |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Weekday | Saturday | Saturday |
|  | Street | Side | From | To | Parking Notes /Type | Total No. of Spaces | Evening (7pm to 9pm) | Afternoon (12pm to 2pm) | Evening (5pm to 7pm) |
| 1 | Dane Street | Eastside | 56 Dane Street | 48 Dane Street | Permit Parking | 4 | 1 | 2 | 4 |
|  |  | Eastside | 56 Dane Street | 48 Dane Street | Handicap Parking | 1 | 0 | 0 | 0 |
|  |  | Eastside | 48 Dane Street | 19 Dane Street | No Parking | -- | -- | -- | -- |
|  |  | Westside | 51 Dane Street | 25 Dane Street | No Parking | -- | -- | -- | -- |
| 2 | Dane Avenue | Northside | 20 Dane Avenue | Dane Street | No Parking | -- | -- | -- | -- |
|  |  | Southside | 21 Dane Avenue | Dane Street | Permit Parking | 8 | 6 | 4 | 6 |
| 3 | Skehan Street | Northside | 7 Skehan Street | Dane Street | Permit Parking | 2 | 0 | 2 | 2 |
|  |  | Southside | 6 Skehan Street | Dane Street | No Parking | -- | -- | -- | -- |
| 4 | Village Street | Northside | 17 Village Street | Dane Street | No Parking | -- | -- | -- | -- |
|  |  | Southside | 18 Village Street | Dane Street | No Parking | -- | -- | -- | -- |
| 5 | Nevada Avenue | Northside | 9 Nevada Avenue | Village Street | No Parking | -- | -- | -- | -- |
|  |  | Southside | 8 Nevada Avenue | Village Street | No Parking | -- | -- | -- | -- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Permit Parking Only Totals |  | 14 | 7 | 8 | 12 |
|  |  |  |  | Number of Permit Parking Spaces Available |  |  | 7 | 6 | 2 |
|  |  |  |  | \% of Permit Parking Spaces Available |  |  | 50\% | 43\% | 14\% |
|  |  |  |  | Handicap Parking Only Totals |  | 1 | 0 | 0 | 0 |
|  |  |  |  | Number of Handicap Parking Spaces |  |  | 1 | 1 | 1 |
|  |  |  |  | \% of Handicap Parking Spaces Available |  |  | 100\% | 100\% | 100\% |
|  |  |  |  | Total Parking |  | 15 | 7 | 8 | 12 |
|  |  |  |  | Number of Total Parking Spaces Available |  |  | 8 | 7 | 3 |
|  |  |  |  | \% of Total Parking Spaces Available |  |  | 53\% | 47\% | 20\% |

As shown in Table 2, on-street parking is under-utilized on street in the vicinity of the project site. Since residents who purchase a parking permit are allowed to park in any parking space in the area, the most important data is shown in "Number of Permit Parking Spaces Available". As shown in Table 2, there are seven (7) parking spaces available within 250 feet of the project site during the weekday evening period, six (6) parking spaces available during the Saturday afternoon period, and two (2) parking spaces available during the Saturday evening period. This further reduces the amount of required parking on site, allowing residents to park on street in the vicinity of the redeveloped site.

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.

Additionally, parking utilization at other sites in Somerville that DCI has studied show an approximate average of 0.5 parked vehicles per dwelling unit. Applied to this Project, that correlates to 2.5 parking spaces needed for the five (5) proposed dwelling units. Consequently, the four (4) proposed parking spaces should meet the demand for this location.

## Mode Split Comparison

Commuting characteristics were analyzed from the 2011-2015 American Community Survey 5Year Estimates. Census Tract 3512.04, which covers the project site, was analyzed and used to estimate mode splits for journeys to work in the project area. Detailed Census Data is attached in the Appendix.

According to the data, only $42.0 \%$ of the residents within the study area census tract use a vehicle to commute to work. Additionally, $23.9 \%$ of residents use public transportation, $19.4 \%$ walk, and $10.7 \%$ bike to commute to work. Figure 3 shows the average difference in mode split between the study area of 34-38 Dane Street, the City of Somerville, and the Commonwealth of Massachusetts.


Figure 3: Mode Split Comparison
Based on the high percentage of non-vehicular mode splits within the study area, as well as observations within the City of Somerville, there is a trend that residents are opting to use nonvehicular modes as their primary means of transportation. With the site's proximity to Union Square, Inman Square, and Harvard Square, there are facilities in place to reduce the need for residents to own vehicles. Additionally, Beacon Street, approximately 0.25 miles from the Project site, is a highly used link for pedestrians and bicyclists to commute throughout Somerville and other central business districts in Cambridge and downtown Boston. With the Beacon Street reconstruction project, walking and biking mode splits have the potential to increase, further reducing the need for vehicle ownership in the area.

## Proximity to Public Transit

Within 0.25 miles of the Project site, the Massachusetts Bay Transportation Authority (MBTA) runs bus routes 83,86 , and 87 . Bus route 83 runs along Beacon Street, with a stop at the intersection of Beacon Street at Washington Street, approximately 0.25 miles from the Project site, between Russell Field in Cambridge and Central Square on the MBTA Red Line in Cambridge. Bus route 86 runs along Washington Street, approximately 700 feet from the Project site, and runs between Reservoir Station in Brookline on the MBTA Green Line and Sullivan Square Station in Boston on the MBTA Orange Line. Bus route 87 runs along Somerville Avenue, approximately 700 feet from the Project site, and runs between the Arlington Center in Arlington and Lechmere Station
on the MBTA Green Line. Detailed schedules and routes for each bus service is provided in the Appendix.

Consequently, given the mode split data, proximity to multi-modal facilities, and project proximity to multiple bus routes, it is expected that there will continue to be a high use of public transit in the area of the $34-38$ Dane Street project. It is anticipated that the four (4) will meet the parking demand for this location.

## Conclusion

The project located at 34-38 Dane Street will have five (5) residential units in total. The proposed development requires nine (9) parking spaces, based on the Somerville Zoning Ordinance. Four (4) will be provided on-site, therefore the proponent is seeking relief of five (5) parking spaces.

This parking study determined that the impact of the five (5) parking spaces that require relief will be negligible on the local neighborhood's parking supply during typical weekday and Saturday periods. Although five (5) parking spaces require relief based on the SZO, the expected number of parking spaces that will require relief is lower. The mode split of the project area, as well as the proximity to multi-modal transportation facilities, serves to reduce the need for a resident to use a vehicle as their primary mode of transportation. The need for vehicle ownership is then lowered, and consequently, less parking is required on-site. Additionally, an on-street parking study determined the number of available on-street parking spaces within the vicinity of the project site during a weekday evening and Saturday afternoon and evening period. This study showed that there is under-utilized on-street parking near the site that can be used by residents who purchase a resident parking permit from the City of Somerville. Although mode split and proximity to multimodal facilities reduces the need for vehicle ownership, there are seven (7) parking spaces available for residents to park within 250 feet of the project site during the weekday evening period, the critical time period. Additionally, 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 five (5) parking spaces for the project at 34-38 Dane Street in Somerville, Massachusetts.

APPENDIX

## COMMUTING CHARACTERISTICS BY SEX

## 2011-2015 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.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.
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.

| Subject |  | sus Tract 3512.0 | ddesex County | Massachusetts |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tot |  | Ma |  | Female |
|  | Estimate | Margin of Error | Estimate | Margin of Error | Estimate |
| Workers 16 years and over | 2,557 | +/-286 | 1,337 | +/-270 | 1,220 |
| MEANS OF TRANSPORTATION TO WORK |  |  |  |  |  |
| Car, truck, or van | 42.0\% | +/-6.0 | 37.4\% | +/-8.1 | 47.0\% |
| Drove alone | 36.2\% | +/-5.5 | 35.8\% | +/-7.8 | 36.7\% |
| Carpooled | 5.7\% | +/-3.8 | 1.6\% | +/-2.2 | 10.2\% |
| In 2-person carpool | 5.7\% | +/-3.8 | 1.6\% | +/-2.2 | 10.2\% |
| In 3-person carpool | 0.0\% | +/-1.3 | 0.0\% | +/-2.4 | 0.0\% |
| In 4-or-more person carpool | 0.0\% | +/-1.3 | 0.0\% | +/-2.4 | 0.0\% |
| Workers per car, truck, or van | 1.07 | +/-0.05 | 1.02 | +/-0.03 | 1.12 |
| Public transportation (excluding taxicab) | 23.9\% | +/-7.0 | 29.8\% | +/-12.4 | 17.5\% |
| Walked | 19.4\% | +/-6.0 | 23.1\% | +/-9.5 | 15.4\% |
| Bicycle | 10.7\% | +/-4.6 | 9.7\% | +/-5.7 | 11.7\% |
| Taxicab, motorcycle, or other means | 0.0\% | +/-1.3 | 0.0\% | +/-2.4 | 0.0\% |
| Worked at home | 4.0\% | +/-2.4 | 0.0\% | +/-2.4 | 8.4\% |
|  |  |  |  |  |  |
| PLACE OF WORK |  |  |  |  |  |
| Worked in state of residence | 96.2\% | +/-2.7 | 95.1\% | +/-4.8 | 97.5\% |
| Worked in county of residence | 63.6\% | +/-7.3 | 61.9\% | +/-11.3 | 65.4\% |
| Worked outside county of residence | 32.7\% | +/-6.7 | 33.2\% | +/-10.1 | 32.0\% |
| Worked outside state of residence | 3.8\% | +/-2.7 | 4.9\% | +/-4.8 | 2.5\% |
|  |  |  |  |  |  |
| Living in a place | 100.0\% | +/-1.3 | 100.0\% | +/-2.4 | 100.0\% |
| Worked in place of residence | 15.3\% | +/-5.3 | 11.9\% | +/-6.0 | 19.1\% |
| Worked outside place of residence | 84.7\% | +/-5.3 | 88.1\% | +/-6.0 | 80.9\% |
| Not living in a place | 0.0\% | +/-1.3 | 0.0\% | +/-2.4 | 0.0\% |
|  |  |  |  |  |  |
| Living in 12 selected states | 100.0\% | +/-1.3 | 100.0\% | +/-2.4 | 100.0\% |
| Worked in minor civil division of residence | 15.3\% | +/-5.3 | 11.9\% | +/-6.0 | 19.1\% |
| Worked outside minor civil division of residence | 84.7\% | +/-5.3 | 88.1\% | +/-6.0 | 80.9\% |
| Not living in 12 selected states | 0.0\% | +/-1.3 | 0.0\% | +/-2.4 | 0.0\% |
|  |  |  |  |  |  |


| Subject | Census Tract 3512.04, Middlesex County, Massachusetts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | Male |  | Female |
|  | Estimate | Margin of Error | Estimate | Margin of Error | Estimate |
| Workers 16 years and over who did not work at home | 2,455 | +/-275 | 1,337 | +/-270 | 1,118 |
| TIME LEAVING HOME TO GO TO WORK |  |  |  |  |  |
| 12:00 a.m. to 4:59 a.m. | 0.6\% | +/-1.0 | 1.1\% | +/-1.9 | 0.0\% |
| 5:00 a.m. to 5:29 a.m. | 2.2\% | +/-1.7 | 3.0\% | +/-2.6 | 1.3\% |
| 5:30 a.m. to 5:59 a.m. | 2.0\% | +/-1.6 | 2.5\% | +/-2.8 | 1.3\% |
| 6:00 a.m. to 6:29 a.m. | 4.5\% | +/-2.9 | 4.8\% | +/-4.3 | 4.2\% |
| 6:30 a.m. to 6:59 a.m. | 3.8\% | +/-2.2 | 2.5\% | +/-2.2 | 5.3\% |
| 7:00 a.m. to 7:29 a.m. | 9.2\% | +/-3.7 | 6.4\% | +/-4.9 | 12.6\% |
| 7:30 a.m. to 7:59 a.m. | 11.7\% | +/-4.0 | 6.8\% | +/-4.3 | 17.5\% |
| 8:00 a.m. to 8:29 a.m. | 23.5\% | +/-6.0 | 22.1\% | +/-6.8 | 25.0\% |
| 8:30 a.m. to 8:59 a.m. | 11.7\% | +/-4.6 | 12.0\% | +/-6.2 | 11.4\% |
| 9:00 a.m. to 11:59 p.m. | 30.8\% | +/-8.1 | 38.7\% | +/-13.5 | 21.5\% |
|  |  |  |  |  |  |
| TRAVEL TIME TO WORK |  |  |  |  |  |
| Less than 10 minutes | 10.0\% | +/-4.9 | 9.6\% | +/-5.7 | 10.6\% |
| 10 to 14 minutes | 11.5\% | +/-3.9 | 7.9\% | +/-4.2 | 15.8\% |
| 15 to 19 minutes | 20.0\% | +/-5.3 | 23.4\% | +/-6.9 | 15.8\% |
| 20 to 24 minutes | 12.2\% | +/-4.5 | 12.9\% | +/-6.7 | 11.3\% |
| 25 to 29 minutes | 5.7\% | +/-2.7 | 5.7\% | +/-4.2 | 5.8\% |
| 30 to 34 minutes | 15.4\% | +/-4.2 | 16.9\% | +/-6.2 | 13.6\% |
| 35 to 44 minutes | 10.1\% | +/-4.0 | 7.5\% | +/-4.6 | 13.2\% |
| 45 to 59 minutes | 9.3\% | +/-3.2 | 9.2\% | +/-4.7 | 9.4\% |
| 60 or more minutes | 5.8\% | +/-4.1 | 6.9\% | +/-6.5 | 4.5\% |
| Mean travel time to work (minutes) | 25.0 | +/-2.4 | 25.2 | +/-2.8 | 24.7 |
|  |  |  |  |  |  |
| VEHICLES AVAILABLE |  |  |  |  |  |
| Workers 16 years and over in households | 2,556 | +/-286 | 1,337 | +/-270 | 1,219 |
| No vehicle available | 18.6\% | +/-6.9 | 20.6\% | +/-9.9 | 16.4\% |
| 1 vehicle available | 42.6\% | +/-8.8 | 40.5\% | +/-12.2 | 45.0\% |
| 2 vehicles available | 32.0\% | +/-10.6 | 34.3\% | +/-16.2 | 29.5\% |
| 3 or more vehicles available | 6.8\% | +/-6.0 | 4.7\% | +/-5.8 | 9.1\% |
|  |  |  |  |  |  |
| PERCENT IMPUTED |  |  |  |  |  |
| Means of transportation to work | 7.2\% | (X) | (X) | (X) | (X) |
| Private vehicle occupancy | 4.6\% | (X) | (X) | (X) | (X) |
| Place of work | 10.2\% | (X) | (X) | (X) | (X) |
| Time leaving home to go to work | 19.2\% | (X) | (X) | (X) | (X) |
| Travel time to work | 9.2\% | (X) | (X) | (X) | (X) |
| Vehicles available | 2.9\% | (X) | (X) | (X) | (X) |


| Subject | $\begin{gathered} \text { Census Tract } \\ 3512.04, \\ \text { Middlesex } \\ \text { County, } \\ \text { Massachusetts } \\ \text { Female } \end{gathered}$ |
| :---: | :---: |
|  | Margin of Error |
| Workers 16 years and over | +/-194 |
| MEANS OF TRANSPORTATION TO WORK |  |
| Car, truck, or van | +/-7.5 |
| Drove alone | +/-7.3 |
| Carpooled | +/-7.0 |
| In 2-person carpool | +/-7.0 |
| In 3-person carpool | +/-2.6 |
| In 4-or-more person carpool | +/-2.6 |
| Workers per car, truck, or van | +/-0.09 |
| Public transportation (excluding taxicab) | +/-5.4 |
| Walked | +/-5.4 |
| Bicycle | +/-5.3 |
| Taxicab, motorcycle, or other means | +/-2.6 |
| Worked at home | +/-4.9 |
| PLACE OF WORK |  |
| Worked in state of residence | +/-2.5 |
| Worked in county of residence | +/-6.9 |
| Worked outside county of residence | +/-6.9 |
| Worked outside state of residence | +/-2.5 |
| Living in a place | +/-2.6 |
| Worked in place of residence | +/-8.6 |
| Worked outside place of residence | +/-8.6 |
| Not living in a place | +/-2.6 |
| Living in 12 selected states | +/-2.6 |
| Worked in minor civil division of residence | +/-8.6 |
| Worked outside minor civil division of residence | +/-8.6 |
| Not living in 12 selected states | +/-2.6 |
| Workers 16 years and over who did not work at home | +/-186 |
| TIME LEAVING HOME TO GO TO WORK |  |
| 12:00 a.m. to 4:59 a.m. | +/-2.9 |
| 5:00 a.m. to 5:29 a.m. | +/-1.9 |
| 5:30 a.m. to 5:59 a.m. | +/-1.5 |
| 6:00 a.m. to 6:29 a.m. | +/-4.1 |
| 6:30 a.m. to 6:59 a.m. | +/-4.2 |
| 7:00 a.m. to 7:29 a.m. | +/-5.5 |
| 7:30 a.m. to 7:59 a.m. | +/-7.0 |
| 8:00 a.m. to 8:29 a.m. | +/-7.4 |
| 8:30 a.m. to 8:59 a.m. | +/-5.5 |
| 9:00 a.m. to 11:59 p.m. | +/-6.1 |
|  |  |
| TRAVEL TIME TO WORK |  |
| Less than 10 minutes | +/-7.9 |
| 10 to 14 minutes | +/-6.0 |
| 15 to 19 minutes | +/-7.2 |
| 20 to 24 minutes | +/-5.2 |
| 25 to 29 minutes | +/-3.6 |
| 30 to 34 minutes | +/-4.9 |
| 35 to 44 minutes | +/-7.5 |
| 45 to 59 minutes | +/-3.8 |
| 60 or more minutes | +/-3.2 |
| Mean travel time to work (minutes) | +/-3.1 |


| Subject | $\begin{array}{c}\text { Census Tract } \\ \text { 3512.04, } \\ \text { Middlesex } \\ \text { County, }\end{array}$ |
| :--- | :---: |
| Massachusetts |  |
| Female |  |$]$

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.

The 12 selected states are Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

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

While the 2011-2015 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, 2011-2015 American Community Survey 5-Year Estimates

## 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 '-' 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 '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An ${ }^{\prime * * * \prime}$ 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 ${ }^{\prime * * * * * * ' ~ e n t r y ~ i n ~ t h e ~ m a r g i n ~ o f ~ e r r o r ~ c o l u m n ~ i n d i c a t e s ~ t h a t ~ t h e ~ e s t i m a t e ~ i s ~ c o n t r o l l e d . ~ A ~ s t a t i s t i c a l ~ t e s t ~ f o r ~ s a m p l i n g ~ v a r i a b i l i t y ~ i s ~ n o t ~ a p p r o p r i a t e . ~}$
7. An ' $N$ ' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

## COMMUTING CHARACTERISTICS BY SEX

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| Subject | Somerville city, Massachusetts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | Male |  | Female |
|  | Estimate | Margin of Error | Estimate | Margin of Error | Estimate |
| Workers 16 years and over | 48,912 | +/-1,144 | 25,761 | +/-1,102 | 23,151 |
| MEANS OF TRANSPORTATION TO WORK |  |  |  |  |  |
| Car, truck, or van | 46.6\% | +/-1.8 | 47.9\% | +/-2.5 | 45.1\% |
| Drove alone | 39.8\% | +/-1.6 | 42.0\% | +/-2.3 | 37.4\% |
| Carpooled | 6.8\% | +/-1.0 | 5.9\% | +/-1.2 | 7.7\% |
| In 2-person carpool | 5.3\% | +/-0.9 | 4.4\% | +/-1.0 | 6.2\% |
| In 3-person carpool | 0.6\% | +/-0.3 | 0.4\% | +/-0.2 | 0.9\% |
| In 4-or-more person carpool | 0.9\% | +/-0.4 | 1.1\% | +/-0.7 | 0.6\% |
| Workers per car, truck, or van | 1.09 | +/-0.01 | 1.08 | +/-0.02 | 1.10 |
| Public transportation (excluding taxicab) | 32.3\% | +/-1.8 | 32.2\% | +/-2.8 | 32.5\% |
| Walked | 11.3\% | +/-1.1 | 10.1\% | +/-1.4 | 12.6\% |
| Bicycle | 5.4\% | +/-0.7 | 6.5\% | +/-1.1 | 4.3\% |
| Taxicab, motorcycle, or other means | 0.5\% | +/-0.3 | 0.4\% | +/-0.3 | 0.7\% |
| Worked at home | 3.8\% | +/-0.6 | 2.9\% | +/-0.7 | 4.8\% |
|  |  |  |  |  |  |
| PLACE OF WORK |  |  |  |  |  |
| Worked in state of residence | 98.8\% | +/-0.4 | 98.3\% | +/-0.7 | 99.4\% |
| Worked in county of residence | 60.4\% | +/-1.8 | 59.3\% | +/-2.5 | 61.6\% |
| Worked outside county of residence | 38.5\% | +/-1.9 | 39.0\% | +/-2.6 | 37.9\% |
| Worked outside state of residence | 1.2\% | +/-0.4 | 1.7\% | +/-0.7 | 0.6\% |
|  |  |  |  |  |  |
| Living in a place | 100.0\% | +/-0.1 | 100.0\% | +/-0.1 | 100.0\% |
| Worked in place of residence | 15.1\% | +/-1.5 | 13.4\% | +/-1.8 | 17.1\% |
| Worked outside place of residence | 84.9\% | +/-1.5 | 86.6\% | +/-1.8 | 82.9\% |
| Not living in a place | 0.0\% | +/-0.1 | 0.0\% | +/-0.1 | 0.0\% |
|  |  |  |  |  |  |
| Living in 12 selected states | 100.0\% | +/-0.1 | 100.0\% | +/-0.1 | 100.0\% |
| Worked in minor civil division of residence | 15.1\% | +/-1.5 | 13.4\% | +/-1.8 | 17.1\% |
| Worked outside minor civil division of residence | 84.9\% | +/-1.5 | 86.6\% | +/-1.8 | 82.9\% |
| Not living in 12 selected states | 0.0\% | +/-0.1 | 0.0\% | +/-0.1 | 0.0\% |
|  |  |  |  |  |  |


| Subject | Somerville city, Massachusetts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | Male |  | Female |
|  | Estimate | Margin of Error | Estimate | Margin of Error | Estimate |
| Workers 16 years and over who did not work at home | 47,032 | +/-1,144 | 25,002 | +/-1,108 | 22,030 |
| TIME LEAVING HOME TO GO TO WORK |  |  |  |  |  |
| 12:00 a.m. to 4:59 a.m. | 2.3\% | +/-0.7 | 3.5\% | +/-1.1 | 1.0\% |
| 5:00 a.m. to 5:29 a.m. | 1.3\% | +/-0.4 | 1.4\% | +/-0.5 | 1.2\% |
| 5:30 a.m. to 5:59 a.m. | 2.0\% | +/-0.5 | 2.6\% | +/-0.8 | 1.4\% |
| 6:00 a.m. to 6:29 a.m. | 4.6\% | +/-0.6 | 5.8\% | +/-1.0 | 3.4\% |
| 6:30 a.m. to 6:59 a.m. | 5.9\% | +/-0.7 | 5.5\% | +/-1.0 | 6.4\% |
| 7:00 a.m. to 7:29 a.m. | 13.7\% | +/-1.3 | 12.9\% | +/-1.7 | 14.5\% |
| 7:30 a.m. to 7:59 a.m. | 13.2\% | +/-1.1 | 11.0\% | +/-1.6 | 15.7\% |
| 8:00 a.m. to 8:29 a.m. | 19.6\% | +/-1.5 | 18.5\% | +/-1.8 | 20.8\% |
| 8:30 a.m. to 8:59 a.m. | 10.8\% | +/-1.1 | 10.5\% | +/-1.5 | 11.1\% |
| 9:00 a.m. to 11:59 p.m. | 26.6\% | +/-1.6 | 28.3\% | +/-2.3 | 24.6\% |
|  |  |  |  |  |  |
| TRAVEL TIME TO WORK |  |  |  |  |  |
| Less than 10 minutes | 6.5\% | +/-1.1 | 5.6\% | +/-1.1 | 7.6\% |
| 10 to 14 minutes | 9.3\% | +/-1.1 | 8.9\% | +/-1.6 | 9.7\% |
| 15 to 19 minutes | 12.1\% | +/-1.3 | 12.7\% | +/-1.6 | 11.4\% |
| 20 to 24 minutes | 12.9\% | +/-1.2 | 15.0\% | +/-1.7 | 10.6\% |
| 25 to 29 minutes | 6.1\% | +/-0.6 | 5.9\% | +/-1.0 | 6.4\% |
| 30 to 34 minutes | 18.7\% | +/-1.4 | 18.6\% | +/-1.7 | 18.7\% |
| 35 to 44 minutes | 12.4\% | +/-1.4 | 13.2\% | +/-2.0 | 11.5\% |
| 45 to 59 minutes | 13.2\% | +/-1.1 | 12.3\% | +/-1.5 | 14.2\% |
| 60 or more minutes | 8.7\% | +/-1.1 | 7.8\% | +/-1.4 | 9.8\% |
| Mean travel time to work (minutes) | 29.7 | +/-0.7 | 29.5 | +/-1.1 | 30.0 |
|  |  |  |  |  |  |
| VEHICLES AVAILABLE |  |  |  |  |  |
| Workers 16 years and over in households | 47,863 | +/-1,143 | 25,376 | +/-1,104 | 22,487 |
| No vehicle available | 17.0\% | +/-1.5 | 16.6\% | +/-1.9 | 17.5\% |
| 1 vehicle available | 42.8\% | +/-2.1 | 42.2\% | +/-2.7 | 43.6\% |
| 2 vehicles available | 28.9\% | +/-2.3 | 29.7\% | +/-3.0 | 27.9\% |
| 3 or more vehicles available | 11.3\% | +/-2.0 | 11.6\% | +/-2.0 | 11.0\% |
|  |  |  |  |  |  |
| PERCENT IMPUTED |  |  |  |  |  |
| Means of transportation to work | 12.1\% | (X) | (X) | (X) | (X) |
| Private vehicle occupancy | 13.7\% | (X) | (X) | (X) | (X) |
| Place of work | 15.4\% | (X) | (X) | (X) | (X) |
| Time leaving home to go to work | 17.6\% | (X) | (X) | (X) | (X) |
| Travel time to work | 14.8\% | (X) | (X) | (X) | (X) |
| Vehicles available | 1.0\% | (X) | (X) | (X) | (X) |


| Subject | Somerville city, Massachusetts |
| :---: | :---: |
|  | Female |
|  | Margin of Error |
| Workers 16 years and over | +/-860 |
| MEANS OF TRANSPORTATION TO WORK |  |
| Car, truck, or van | +/-2.2 |
| Drove alone | +/-2.0 |
| Carpooled | +/-1.7 |
| In 2-person carpool | +/-1.6 |
| In 3-person carpool | +/-0.5 |
| In 4-or-more person carpool | +/-0.3 |
| Workers per car, truck, or van | +/-0.02 |
| Public transportation (excluding taxicab) | +/-2.0 |
| Walked | +/-1.5 |
| Bicycle | +/-0.9 |
| Taxicab, motorcycle, or other means | +/-0.6 |
| Worked at home | +/-1.1 |
|  |  |
| PLACE OF WORK |  |
| Worked in state of residence | +/-0.3 |
| Worked in county of residence | +/-2.3 |
| Worked outside county of residence | +/-2.3 |
| Worked outside state of residence | +/-0.3 |
|  |  |
| Living in a place | +/-0.1 |
| Worked in place of residence | +/-2.0 |
| Worked outside place of residence | +/-2.0 |
| Not living in a place | +/-0.1 |
|  |  |
| Living in 12 selected states | +/-0.1 |
| Worked in minor civil division of residence | +/-2.0 |
| Worked outside minor civil division of residence | +/-2.0 |
| Not living in 12 selected states | +/-0.1 |
|  |  |
| Workers 16 years and over who did not work at home | +/-806 |
| TIME LEAVING HOME TO GO TO WORK |  |
| 12:00 a.m. to 4:59 a.m. | +/-0.5 |
| 5:00 a.m. to 5:29 a.m. | +/-0.4 |
| 5:30 a.m. to 5:59 a.m. | +/-0.5 |
| 6:00 a.m. to 6:29 a.m. | +/-0.8 |
| 6:30 a.m. to 6:59 a.m. | +/-1.1 |
| 7:00 a.m. to 7:29 a.m. | +/-1.5 |
| 7:30 a.m. to 7:59 a.m. | +/-1.6 |
| 8:00 a.m. to 8:29 a.m. | +/-2.2 |
| 8:30 a.m. to 8:59 a.m. | +/-1.5 |
| 9:00 a.m. to 11:59 p.m. | +/-2.3 |
|  |  |
| TRAVEL TIME TO WORK |  |
| Less than 10 minutes | +/-1.5 |
| 10 to 14 minutes | +/-1.3 |
| 15 to 19 minutes | +/-1.8 |
| 20 to 24 minutes | +/-1.6 |
| 25 to 29 minutes | +/-0.9 |
| 30 to 34 minutes | +/-2.0 |
| 35 to 44 minutes | +/-1.6 |
| 45 to 59 minutes | +/-1.6 |
| 60 or more minutes | +/-1.4 |
| Mean travel time to work (minutes) | +/-0.8 |
|  |  |
| VEHICLES AVAILABLE |  |


| Subject | Somerville city, Massachusetts |
| :---: | :---: |
|  | Female |
|  | Margin of Error |
| Workers 16 years and over in households | +/-832 |
| No vehicle available | +/-2.0 |
| 1 vehicle available | +/-2.7 |
| 2 vehicles available | +/-2.3 |
| 3 or more vehicles available | +/-2.5 |
|  |  |
| PERCENT IMPUTED |  |
| Means of transportation to work | (X) |
| Private vehicle occupancy | (X) |
| Place of work | (X) |
| Time leaving home to go to work | (X) |
| Travel time to work | (X) |
| Vehicles available | (X) |

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.

The 12 selected states are Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

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

While the 2011-2015 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, 2011-2015 American Community Survey 5-Year Estimates

## 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 '-' 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 '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An ' + ' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An ${ }^{\text {'***' }}$ 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 ${ }^{\prime * * * * * ' ~ e n t r y ~ i n ~ t h e ~ m a r g i n ~ o f ~ e r r o r ~ c o l u m n ~ i n d i c a t e s ~ t h a t ~ t h e ~ e s t i m a t e ~ i s ~ c o n t r o l l e d . ~ A ~ s t a t i s t i c a l ~ t e s t ~ f o r ~ s a m p l i n g ~ v a r i a b i l i t y ~ i s ~ n o t ~ a p p r o p r i a t e . ~}$
7. An ' N ' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

## COMMUTING CHARACTERISTICS BY SEX

## 2011-2015 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.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.
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.

| Subject | Massachusetts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | Male |  | Female |
|  | Estimate | Margin of Error | Estimate | Margin of Error | Estimate |
| Workers 16 years and over | 3,346,749 | +/-8,960 | 1,703,780 | +/-5,075 | 1,642,969 |
| MEANS OF TRANSPORTATION TO WORK |  |  |  |  |  |
| Car, truck, or van | 79.1\% | +/-0.1 | 79.4\% | +/-0.2 | 78.9\% |
| Drove alone | 71.4\% | +/-0.2 | 71.8\% | +/-0.2 | 71.1\% |
| Carpooled | 7.7\% | +/-0.1 | 7.6\% | +/-0.1 | 7.8\% |
| In 2-person carpool | 6.1\% | +/-0.1 | 6.0\% | +/-0.1 | 6.3\% |
| In 3-person carpool | 0.9\% | +/-0.1 | 0.9\% | +/-0.1 | 0.9\% |
| In 4-or-more person carpool | 0.6\% | +/-0.1 | 0.7\% | +/-0.1 | 0.6\% |
| Workers per car, truck, or van | 1.06 | +/-0.01 | 1.06 | +/-0.01 | 1.06 |
| Public transportation (excluding taxicab) | 9.8\% | +/-0.1 | 9.5\% | +/-0.2 | 10.1\% |
| Walked | 4.8\% | +/-0.1 | 4.5\% | +/-0.1 | 5.1\% |
| Bicycle | 0.8\% | +/-0.1 | 1.1\% | +/-0.1 | 0.5\% |
| Taxicab, motorcycle, or other means | 1.0\% | +/-0.1 | 1.1\% | +/-0.1 | 0.9\% |
| Worked at home | 4.5\% | +/-0.1 | 4.4\% | +/-0.1 | 4.6\% |
|  |  |  |  |  |  |
| PLACE OF WORK |  |  |  |  |  |
| Worked in state of residence | 96.0\% | +/-0.1 | 95.3\% | +/-0.1 | 96.7\% |
| Worked in county of residence | 65.2\% | +/-0.2 | 62.4\% | +/-0.2 | 68.1\% |
| Worked outside county of residence | 30.8\% | +/-0.2 | 32.9\% | +/-0.2 | 28.6\% |
| Worked outside state of residence | 4.0\% | +/-0.1 | 4.7\% | +/-0.1 | 3.3\% |
|  |  |  |  |  |  |
| Living in a place | 69.9\% | +/-0.1 | 69.3\% | +/-0.2 | 70.5\% |
| Worked in place of residence | 23.9\% | +/-0.2 | 22.3\% | +/-0.2 | 25.5\% |
| Worked outside place of residence | 46.1\% | +/-0.2 | 47.1\% | +/-0.2 | 45.0\% |
| Not living in a place | 30.1\% | +/-0.1 | 30.7\% | +/-0.2 | 29.5\% |
|  |  |  |  |  |  |
| Living in 12 selected states | 100.0\% | +/-0.1 | 100.0\% | +/-0.1 | 100.0\% |
| Worked in minor civil division of residence | 31.1\% | +/-0.2 | 29.2\% | +/-0.3 | 32.9\% |
| Worked outside minor civil division of residence | 68.9\% | +/-0.2 | 70.8\% | +/-0.3 | 67.1\% |
| Not living in 12 selected states | 0.0\% | +/-0.1 | 0.0\% | +/-0.1 | 0.0\% |
|  |  |  |  |  |  |



| Subject | Massachusetts |
| :---: | :---: |
|  | Female |
|  | Margin of Error |
| Workers 16 years and over | +/-5,245 |
| MEANS OF TRANSPORTATION TO WORK |  |
| Car, truck, or van | +/-0.2 |
| Drove alone | +/-0.3 |
| Carpooled | +/-0.2 |
| In 2-person carpool | +/-0.2 |
| In 3-person carpool | +/-0.1 |
| In 4-or-more person carpool | +/-0.1 |
| Workers per car, truck, or van | +/-0.01 |
| Public transportation (excluding taxicab) | +/-0.2 |
| Walked | +/-0.1 |
| Bicycle | +/-0.1 |
| Taxicab, motorcycle, or other means | +/-0.1 |
| Worked at home | +/-0.1 |
|  |  |
| PLACE OF WORK |  |
| Worked in state of residence | +/-0.1 |
| Worked in county of residence | +/-0.3 |
| Worked outside county of residence | +/-0.2 |
| Worked outside state of residence | +/-0.1 |
|  |  |
| Living in a place | +/-0.2 |
| Worked in place of residence | +/-0.2 |
| Worked outside place of residence | +/-0.3 |
| Not living in a place | +/-0.2 |
|  |  |
| Living in 12 selected states | +/-0.1 |
| Worked in minor civil division of residence | +/-0.3 |
| Worked outside minor civil division of residence | +/-0.3 |
| Not living in 12 selected states | +/-0.1 |
|  |  |
| Workers 16 years and over who did not work at home | +/-4,647 |
| TIME LEAVING HOME TO GO TO WORK |  |
| 12:00 a.m. to 4:59 a.m. | +/-0.1 |
| 5:00 a.m. to 5:29 a.m. | +/-0.1 |
| 5:30 a.m. to 5:59 a.m. | +/-0.1 |
| 6:00 a.m. to 6:29 a.m. | +/-0.1 |
| 6:30 a.m. to 6:59 a.m. | +/-0.2 |
| 7:00 a.m. to 7:29 a.m. | +/-0.2 |
| 7:30 a.m. to 7:59 a.m. | +/-0.2 |
| 8:00 a.m. to 8:29 a.m. | +/-0.2 |
| 8:30 a.m. to 8:59 a.m. | +/-0.1 |
| 9:00 a.m. to 11:59 p.m. | +/-0.2 |
|  |  |
| TRAVEL TIME TO WORK |  |
| Less than 10 minutes | +/-0.2 |
| 10 to 14 minutes | +/-0.2 |
| 15 to 19 minutes | +/-0.2 |
| 20 to 24 minutes | +/-0.2 |
| 25 to 29 minutes | +/-0.1 |
| 30 to 34 minutes | +/-0.2 |
| 35 to 44 minutes | +/-0.1 |
| 45 to 59 minutes | +/-0.2 |
| 60 or more minutes | +/-0.2 |
| Mean travel time to work (minutes) | +/-0.1 |
|  |  |
| VEHICLES AVAILABLE |  |
| Workers 16 years and over in households | +/-5,121 |


| Subject | Massachusetts <br> Female |
| :--- | ---: |
|  | Margin of Error |$|++/-0.10$ +/-0.3

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.

The 12 selected states are Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

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

While the 2011-2015 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, 2011-2015 American Community Survey 5-Year Estimates

## 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 '-' 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 '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An ${ }^{\prime * * * \prime}$ 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 the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

Route 83 Rindge Avenue - Central Square, Cambridge


Spring March 25, 2017 - June 23, 2017
Rindge Avenue-
Central Square, Cambridge
Serving

- Porter Square Station
- Inman Square
- Red Line
- Fitchburg Commuter Rail

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

| 83 |  | Weekday |  | Outbound |  | 83 |  | Saturday |  | Outboun |  | Sunday |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Leave Rindge Avenue | $\begin{aligned} & \text { Arrive } \\ & \text { Porter Sq. } \\ & \text { Station. } \end{aligned}$ | Arrive Central Square | Leave Central Square | Arrive Porter Sq. Station | Arrive Rindge Avenue | Leave Rindge Avenue | $\begin{aligned} & \text { Arrive } \\ & \text { Porter Sq. } \\ & \text { Station. } \end{aligned}$ | Arrive Central Square | $\begin{aligned} & \text { Leave } \\ & \text { Central } \\ & \text { Square } \end{aligned}$ | $\begin{aligned} & \text { Arrive } \\ & \text { Porter Sq. } \\ & \text { Station } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Arrive } \\ & \text { Rindge } \\ & \text { Avenuu } \\ & \hline \end{aligned}$ | Leave Rindge Avenue <br> Avenue | $\begin{gathered} \text { Arrive } \\ \text { Porter Sq. } \\ \text { Station } \end{gathered}$ | $\begin{aligned} & \text { Arrive } \\ & \text { Central } \\ & \text { Square } \end{aligned}$ | Leave Central Square | $\begin{aligned} & \text { Arrive } \\ & \text { Porter Sq. } \\ & \text { Station } \end{aligned}$ | Arrive Rindge Avenue |
| 5:10A | 5:14A | 5:24A | 5:30A | 5:38A | 5:44A | 5:10A | 5:12A | 5:24A | 5:30A | 5:38A | 5:43A | 7:45A | 7:49A | 8:00A | 7:25A | 7:35A | 7:40A |
| 5:30 | 5:34 | 5:44 | 5:50 | 5:58 | 6:04 | 5:50 | 5:52 | 6:04 | 6:10 | 6:19 | 6:24 | 8:45 | 8:50 | 9:03 | 8:25 | 8:35 | 8:40 |
| 5:50 | 5:54 | 6:04 | 6:10 | 6:18 | 6:24 | 6:30 | 6:32 | 6:44 | 6:50 | 6:59 | 7:04 | 9:40 | 9:45 | 10:00 | 9:15 | 9:26 | 9:32 |
| 6:10 | 6:14 | 6:24 | 6:30 | 6:38 | 6:44 | 7:10 | 7:12 | 7:24 | 7:30 | 7:39 | 7:44 | 10:30 | 10:35 | 10:50 | 10:05 | 10:16 | 10:22 |
| 6:30 | 6:35 | 6:50 | 6:55 | 7:06 | 7:11 | 7:50 | 7:53 | 8:05 | 8:10 | 8:19 | 8:24 | 11:20 | 11:25 | 11:40 | 10:55 | 11:07 | 11:14 |
| 6:50 | 6:55 | 7:10 | 7:20 | 7:33 | 7:40 | 8:30 | 8:34 | 8:48 | 8:50 | 9:01 | 9:08 |  |  |  | 11:45 | 11:57 | 12:04P |
| 7:10 | 7:15 | 7:30 | 7:40 | 7:55 | 8:02 | 8:55 | 8:59 | 9:13 | 9:20 | 9:31 | 9:38 | 12:10P | 12:16P | 12:31P |  |  |  |
| 7:30 | 7:37 | 7:57 | 8:05 | 8:20 | 8:27 | 9:20 | 9:24 | 9:38 | 9:45 | 9:56 | 10:03 | 1:00 | 1:06 | 1:21 | 12:35P | 12:49P | 12:56P |
| 7:50 | 7:57 | 8:17 | 8:25 | 8:40 | 8:47 | 9:45 | 9:49 | 10:05 | 10:10 | 10:21 | 10:28 | 1:50 | 1:56 | 2:11 | 1:25 | 1:39 | 1:46 |
| 8:10 | 8:17 | 8:37 | 8:50 | 9:05 | 9:12 | 10:10 | 10:14 | 10:30 | 10:35 | 10:48 | 10:56 | 2:40 | 2:45 | 3:00 | 2:15 | 2:29 | 2:36 |
| 8:35 | 8:42 | 9:02 | 9:10 | 9:25 | 9:32 | 10:35 | 10:39 | 10:55 | 11:00 | 11:13 | 11:21 | 3:30 | 3:35 | 3:50 | 3:05 | 3:19 | 3:26 |
| 8:55 | 9:02 | 9:22 | 9:35 | 9:50 | 9:57 | 11:00 | 11:05 | 11:22 | 11:30 | 11:43 | 11:52 | 4:20 | 4:25 | 4:40 | 3:55 | 4:10 | 4:18 |
| 9:20 | 9:27 | 9:44 | 10:00 | 10:15 | 10:22 | 11:30 | 11:35 | 11:52 |  |  |  | 5:10 | 5:15 | 5:30 | 4:45 | 4:59 | 5:05 |
| 9:40 | 9:46 | 10:02 | 10:30 | 10:45 | 10:52 |  |  |  |  |  |  | 6:00 | 6:05 | 6:20 | 5:35 | 5:49 | 5:55 |
| 10:05 | 10:11 | 10:27 | 11:00 | 11:15 | 11:22 | 12:00N | 12:05P | 12:22P | 12:00N | 12:13P | 12:22P | 6:50 | 6:55 | 7:08 | 6:25 | 6:39 | 6:45 |
| 10:30 | 10:36 | 10:52 | 11:30 | 11:45 | 11:52 | 12:30P | 12:35 | 12:52 | 12:30P | 12:43 | 12:52 | 7:40 | 7:44 | 7:57 | 7:15 | 7:29 | 7:35 |
| 11:00 | 11:06 | 11:22 |  |  |  | 1:00 | 1:05 | 1:22 | 1:00 | 1:13 | 1:22 | 8:40 9 | 8:44 | 8:57 | $8: 15$ 9.15 | 8:29 9 | 8:35 |
| 11:30 | 11:36 | 11:52 | 12:00N | 12:15P | 12:22P | 1:30 | 1:35 | 1:52 | 1:300 | 1:43 | 1:22 | 10:42 | 10:46 | 10:58 | 10:22 | 10:32 | 10:38 |
|  |  |  | 12:30 | 12:45 | 12:52 | 2:30 | 2:35 | 2:52 | 2:30 | 2:43 | 2:52 | 11:44 | 11:47 | 11:57 | 11:24 | 11:33 | 10:38 |
| 12:00N | 12:06P | 12:22P | 1:00 | 1:15 | 1:22 | 3:00 | 3:05 | 3:22 | 3:00 | 3:13 | 3:22 | 12:46A | 12:49A | 12:59A | 12:26 | 12:34 | 12:39 |
| $12: 30$ $1: 00$ | $12: 36$ $1: 06$ | 12:52 | 1:30 2:00 | 1:45 2:16 | $1: 52$ $\mathbf{2 : 2 3}$ | 3:30 | 3:35 | 3:52 | 3:30 | 3:43 | 3:52 |  |  |  | w 1:08 | 1:17 | 1:22 |
| 1:00 | 1:36 | 1:52 | 2:00 | 2:16 | 2:23 | 4:00 | 4:05 | 4:22 | 4:00 | 4:13 | 4:22 |  |  |  |  |  |  |
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| 2:30 | 2:36 | 2:52 | s 2:40 | 2:58 | 3:12 | 5:00 | 5:05 | 5:22 | 5:00 | 5:13 | 5:22 |  |  |  |  |  |  |
| 3:00 | 3:06 | 3:26 | 3:00 | 3:16 | 3:23 | 6:30 | 6:35 | 5:52 | 6:300 | 6:43 | 6:521 | Fare |  | Bus | + Bus | Rapid Bus Transit | + Rapid Transit |
| 3:30 | 3:36 | 3:56 | 3:30 | 3:49 | 3:58 | 6:30 | 6:35 | 6:52 | 6:35 | 6:48 | 6:56 |  |  |  |  |  |  |
| 4:05 | 4:11 | 4:31 | 4:00 | 4:19 | 4:28 | 7:00 | 7:04 | 7:20 | 7:10 | 7:23 | 7:31 | CharlieC |  | 70 | . 70 | \$2.25 | \$2.25 |
| 4:40 | 4:46 | 5:06 | 4:25 | 4:46 | 4:55 | 7:40 | 7:44 | 8:00 | 8:15 | 8:27 | 8:35 | Charlie | ket | . 00 | . 00 | \$2.75 | \$4.75 |
| 5:05 | 5:11 | 5:31 | 4:50 | 5:13 | 5:22 | 8:40 | 8:44 | 8:57 | 9:20 | 9:32 | 9:40 | Cash-on- | Board | 00 | 00 | \$2.75 | \$4.75 |
| 5:30 | 5:36 | 5:56 | 5:15 | 5:41 | 5:50 | 9:40 | 9:44 | 9:57 | 10:25 | 10:34 | 10:40 |  |  |  |  |  |  |
| 5:55 | 6:01 | 6:21 | 5:40 | 6:05 | 6:14 | 10:45 | 10:49 | 11:02 | 11:30 | 11:38 | 11:44 | Student* |  | 85 | . 85 | \$1.10 | 1.10 |
| 6:20 | 6:26 | 6:46 | 6:05 | 6:26 | 6:34 | 11:50 | 11:53 | 12:04A | 12:30A | 12:38A | 12:44A | Senior/T | P** | 85 | . 85 | \$1.10 | \$1.10 |
| 6:45 | 6:51 | 7:09 | 6:30 | 6:47 | 6:55 | 12:50A | 12:53A | 1:04 | 1:15 | 1:23 | 1:29 |  |  |  |  |  |  |
| 7:15 | 7:20 | 7:36 | 6:55 | 7:12 | 7:20 | s - Leaves from Broadway at Felton Steet and does NOT run during school vacation. <br> w-Waits for last train to arrive at Central Square Station. |  |  |  |  |  | **SeniortTS | Ss | and exp | con | riil | mses. |
| 7:45 | 7:50 | 8:04 | 7:20 | 7:36 | 7:42 |  |  |  |  |  |  | FREE FARES | bidren 11 ard | dor ide fid | n accom | panied ${ }^{\text {a a ad ad }}$ |  |
| 8:40 | 8:45 | 8:58 | 7:45 | 7:59 | 8:05 |  |  |  |  |  |  | ${ }_{\text {* }}^{\text {Reeguiresta }}$ midile | tudent Char |  |  | ugh participa |  |
| 9:40 $10: 40$ | 9:45 $10: 44$ | 9:58 | 8:15 9:15 | 8:29 | 8:35 |  | buses are | ccessible |  |  |  | and persons with disabilities. |  |  |  |  |  |
| 11:40 | 11:44 | 11:54 | 10:15 | 10:25 | 10:31 | E All buses are accessible to persons with disabilities |  |  |  |  |  |  |  |  |  |  |  |
| 12:35A | 12:39A | 12:49A | 11:15 | 11:25 | 11:31 |  |  |  |  |  |  | Spring 2017 Holidays |  |  |  |  |  |
|  |  |  | 12:15A | 12:25A | $\underset{\substack{12: 31 A \\ 1: 20}}{ }$ | Rindge Ave.-Central Sq., Cambridge |  |  |  |  |  | April 17: see Weekday May 29: see Sund |  |  |  |  |  |

Route 86 Sullivan Square Station - Reservoir Station (Cleveland Circle)


Spring March 25, 2017 - June 23, 2017
Sullivan Square Station-
Reservoir Station
(Cleveland Circle)

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