

Public Policy Center

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FRONTLINE WORKERS IN THE 495/METROWEST REGION:
A Data Brief from the Public Policy Center at UMass Dartmouth
prepared for the 495/MetroWest Partnership and
the Suburban Edge Community Commission

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by

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In an effort to combat the spread of COVID-19, people across the country are practicing social distancing, avoiding public places, and, in best cases, working from home or in the worst, laid off for the duration of the forced shut down. The goal of these policies is to minimize the number of people infected with the virus at any given point in time, such that hospitals do not become overwhelmed. As a result, the nation has become highly dependent on “frontline workers;” people whose essential jobs must continue functioning and cannot be done from home. These include workers in six important industries (see the Methodology section for more detail):

- **Grocery, Convenience, and Drug Stores**, which provide food and medicine to the general population
- **Public Transit**, which drive buses and trains to allow other frontline workers to commute to their jobs
- **Trucking, Warehouse, and Postal Service**, which delivers essential goods and supplies to the necessary locations such as hospitals and stores
- **Building Cleaning Services**, which to maintains and sanitizes potentially contaminated spaces
- **Select Health Care**, including doctors, nurses, and health professionals directly caring for patients
- **Social Services**, which provide much needed supportive and emergency services to families and individuals in crisis or at-risk of entering a crisis

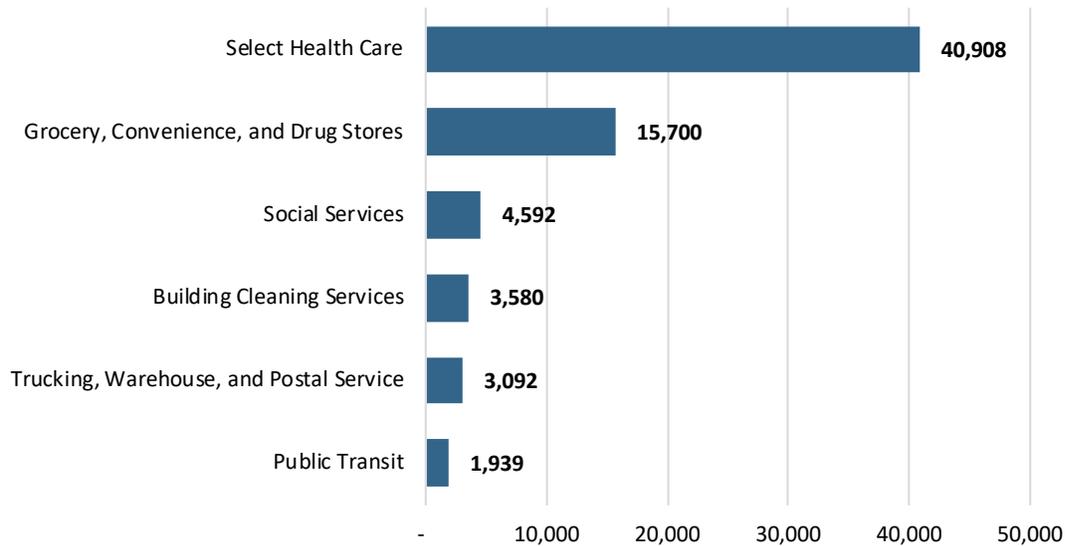
To assist the 495/MetroWest Partnership and the Suburban Edge Community Commission in better understanding who is working on the frontlines of the pandemic, the Public Policy Center has prepared a data brief on this crucial segment of the 495/MetroWest regional workforce. Our analysis demonstrates the following:

- Frontline workers represent about 17 percent of the regional workforce.
- Compared to the regional workforce and other frontline industries, Grocery, Convenience, and Drug Store workers are more likely to be under 25 years old.
- Frontline workers are more likely to be women, particularly in the Select Health Care, Building Cleaning Services, and Social Services industries.
- Compared to the entire regional workforce, frontline workers are slightly less likely to have children at home.
- Workers in the Building Cleaning Services industries are more likely to be people of color and Hispanic/Latino than their counterparts in other frontline industries.
- Over half of all frontline workers earn less than \$50,000 annually.
- Building Cleaning Services workers are more likely than their frontline counterparts to earn incomes that are at or below the poverty threshold.
- Compared to the regional workforce as a whole, frontline workers have a slightly lower rate of home ownership.
- Workers in the Building Cleaning Services industry are considerably more likely to be non-citizens.
- Workers in the Building Cleaning Services industry, who are also more likely to be immigrants and people of color, have the lowest rate of health insurance enrollment.
- Nearly half of all frontline workers have a Bachelor’s degree or higher.

Frontline workers represent about 17 percent of the regional workforce.

Approximately 69,811 people in the 495/MetroWest region work in frontline industries, representing 17 percent of the region's workforce. This number is slightly lower than the 20 percent of workers in frontline industries statewide. The largest frontline industry in the 495/MetroWest region is the Select Health Care industry, which makes up about 58.6 percent of the workers in the frontline industries alone. The second largest industry is the Grocery, Convenience, and Drug Stores industry, while Public Transit is the smallest industry.

Figure 1
Number of Workers in Selected Frontline Industries, 495/MetroWest Region, 2018

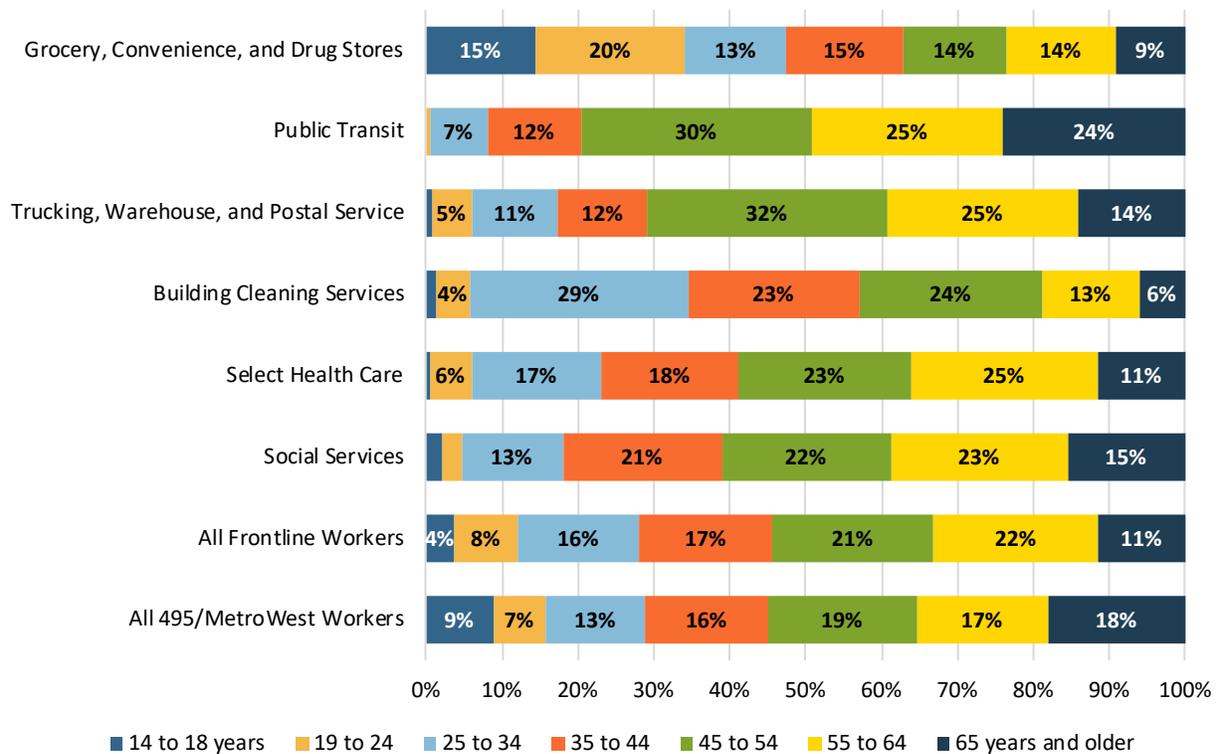


Source: American Community Survey 2014-2018 PUMS Microdata

Compared to the regional workforce and other frontline industries, Grocery, Convenience, and Drug Store workers are more likely to be under 25 years old.

Figure 2 below displays the age cohorts for frontline workers and the regional workforce within the 495/MetroWest region. Most noticeable is the relatively high share of workers in the Grocery, Convenience, and Drug Stores industry who are under 25 years of age (35%, compared with 16% in the total regional workforce). This industry, and retail in general, is a common sector for part-time employment, and attracts high school students and college-age workers. Indeed, the majority (86%) of frontline workers aged 14 to 18 years are employed in the Grocery, Convenience, and Drug Stores industry.

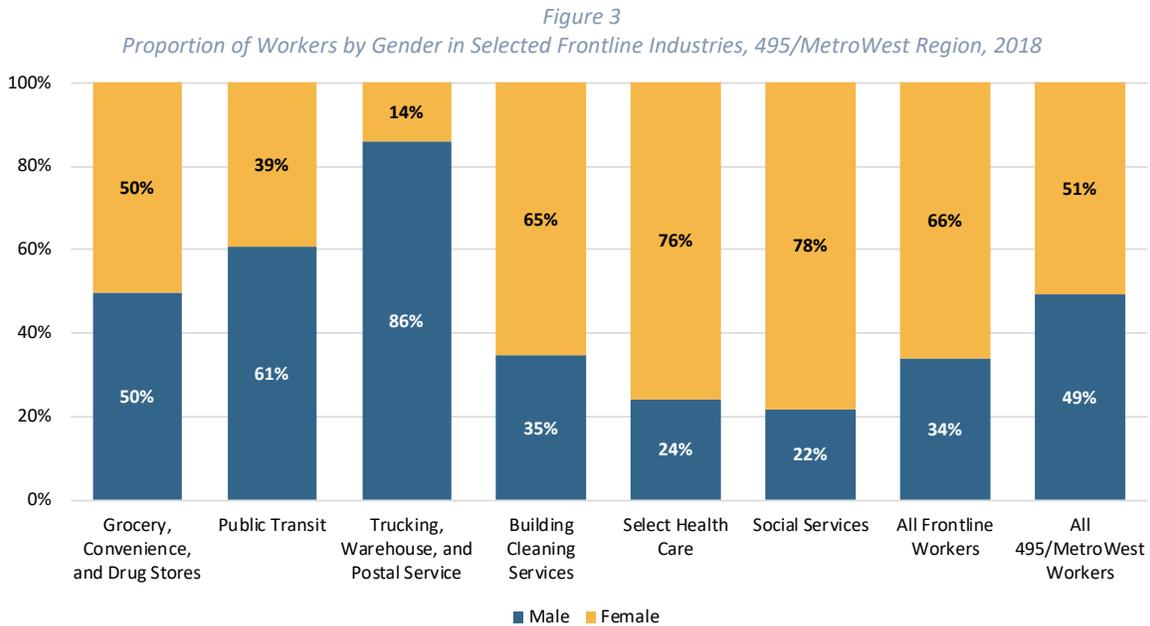
Figure 2
Worker Age Cohorts, 495/MetroWest Region, 2018



Source: American Community Survey 2014-2018 PUMS Microdata

Frontline workers are more likely to be women, particularly in the Select Health Care, Building Cleaning Services, and Social Services industries.

The workforce of the 495/MetroWest region is split almost evenly between men and women, but in the frontline industries, two-thirds of the workers are women (see Figure 2). This is similar to the statewide frontline workforce, in which women represent 65 percent of the workers. Workers in Select Health Care, Building Services, and Social Services industries are more likely to be women. Together, these industries employ 80 percent of all women working in a frontline industry.



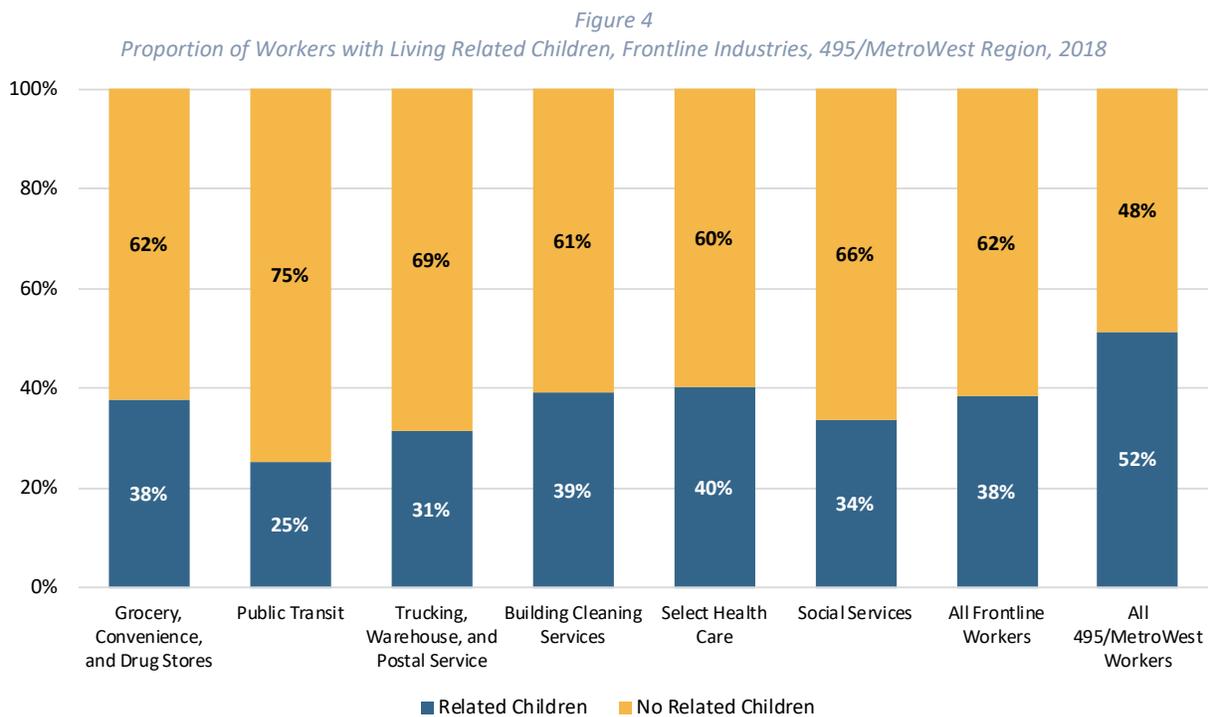
Source: American Community Survey 2014-2018 PUMS Microdata

In healthcare, this disparity puts women on the frontlines for the occupations most likely to interact with people testing positive for COVID-19. Indeed, as discussed in a recent national analysis of essential workers in the *New York Times*, women are more likely to work as cashiers in grocery stores and provide direct patient care in nursing homes, long-term care facilities, and hospitals, while men are more likely have managerial positions that require less direct contact with the general public.¹ Moreover, women are more likely to family caregivers for children and elderly family members. For example, nearly 5,000 workers in the Select Health Care industry are single mothers, which is 18 percent of the Select Health Care workforce.

¹ Robertson, C. & Gebeloff, R. (2020). "How Millions of Women Became the Most Essential Workers in America." *The New York Times*. April 18, 2020. Retrieved from: <https://www.nytimes.com/2020/04/18/us/coronavirus-women-essential-workers.html>.

Compared to the entire regional workforce, frontline workers are slightly less likely to have children at home.

School and daycare closures across Massachusetts have created childcare challenges for many families. This is especially true for parents working in frontline industries, who are unlikely to have the option to work from home, and who risk transmitting the coronavirus to the families when they return home from their shifts.² In frontline industries in the 495/MetroWest region, fewer workers (38%) are responsible for related children than in the region as a whole (52%). The Select Health Care industry is the industry with the highest percentage of workers with related children at home, at 40 percent, while the Public Transit industry has only 25 percent of workers have children at home (Figure 4).



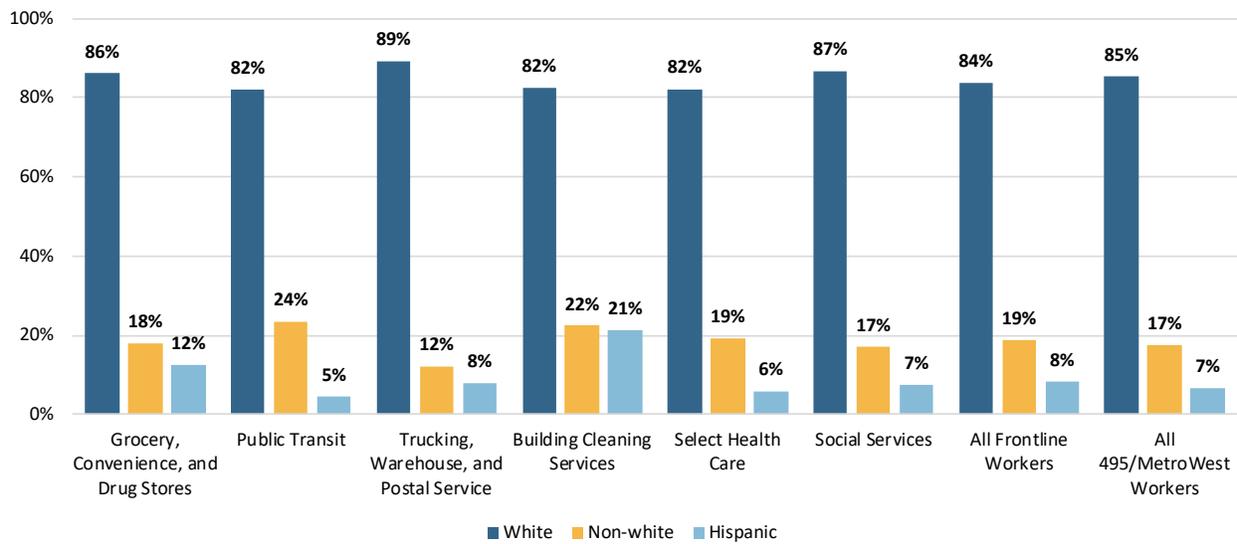
Source: American Community Survey 2014-2018 PUMS Microdata

² Chen, A. & Bebinger, M. (2020). "Bringing Home Something Deadly: How Health Workers Are Isolating From Their Families." *WBUR*. April 3, 2020. Retrieved from: <https://www.wbur.org/commonhealth/2020/04/03/bringing-home-something-deadly-how-health-workers-are-isolating-from-their-families>.

Workers in Building Cleaning Services industries are more likely to be people of color and Hispanic/Latino than their counterparts in other frontline industries.

The region’s frontline workers are slightly more likely to be to people of color, compared the overall workforce (see Figure 5). For industries other than the Trucking, Warehouse, and Postal Service and Social Services industries, people of color are slightly overrepresented in the frontline workforce relative to their share of the total workforce. In particular, over 20 percent of all workers in the Building Cleaning Services industries are non-white. Statewide, people of color account for 25 percent of the frontline workforce, which is slightly higher than the share of non-white workers in the overall state workforce (21%). As such, the 495/MetroWest region has a less diverse workforce overall, including frontline workers.

Figure 5
Workers by Race and Hispanic or Latino Ethnicity, 495/MetroWest Region, 2018



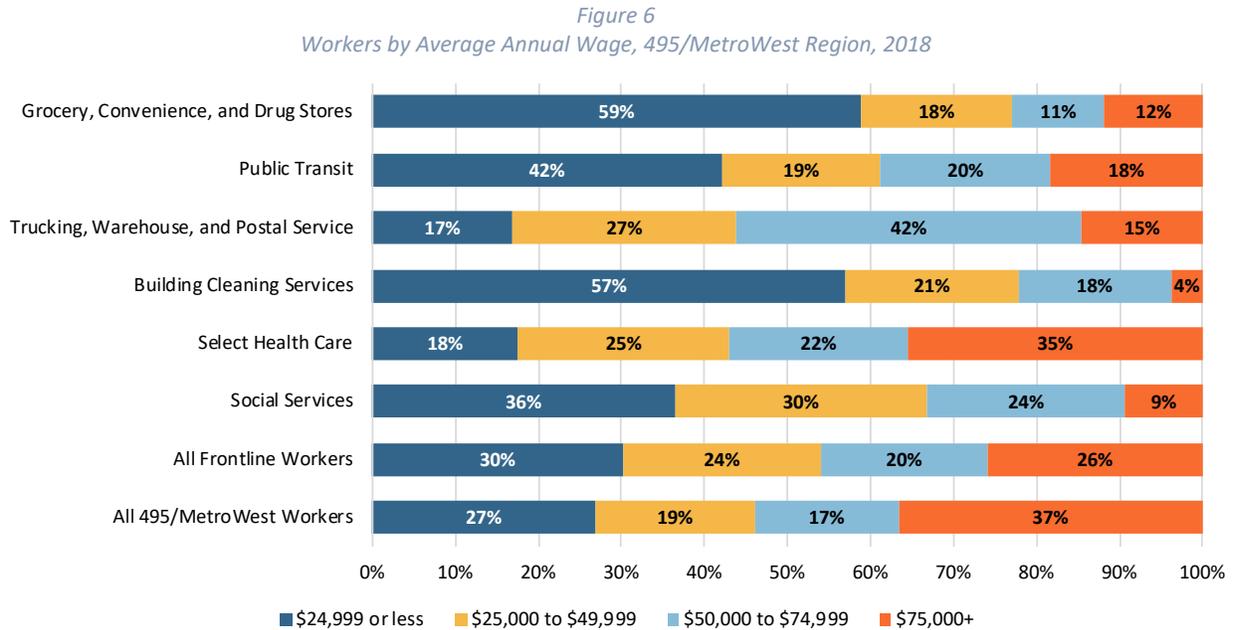
Source: American Community Survey 2014-2018 PUMS Microdata

“White” refers to people who identify as “White Alone” on the ACS and “Non-white” refers to all other race categories, include “Multiple Races.”

Industry totals are greater than 100% because Hispanic and Latino ethnicity is not included the PUMS microdata for race, and was calculated separately.

Over half of all frontline workers earn less than \$50,000 annually.

In the 495/MetroWest region, frontline workers typically earn less than the workforce as a whole. Figure 6 below groups all workers into income brackets, and demonstrates that over half of all frontline workers (54%) earn less than \$50,000 annually. The Select Health Care and Trucking, Warehouse, and Postal Services industries have the highest shares of workers earning more than \$50,000, with 57 percent each. Workers in the Grocery, Convenience, and Drug Stores, Public Transit, and Building Cleaning Services industries are most likely to earn less than \$25,000 annually, which is partially due to the concentration of part-time workers in these industries.



Source: American Community Survey 2014-2018 PUMS Microdata

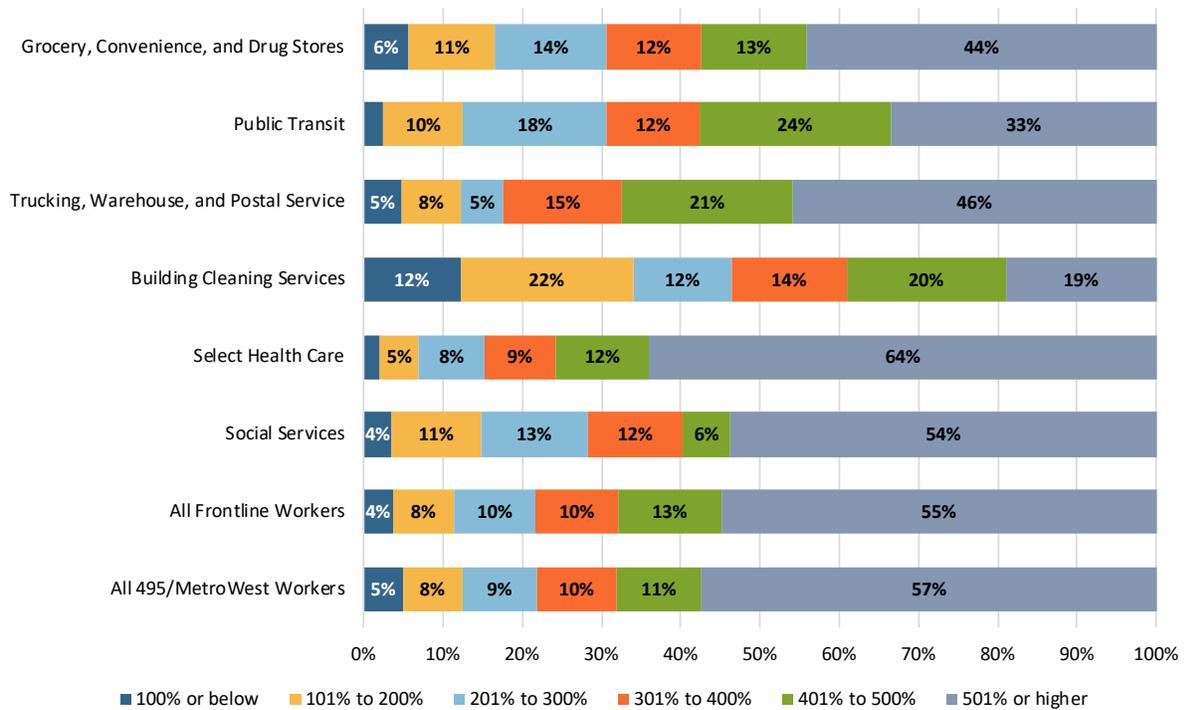
Recently, some frontline health care workers coming into direct contact with COVID-19 patients have received hazard pay increases to compensate them for the risks.³ However, the minimum wage prevails for workers in other parts of the health care industry, such as personal care assistants, nursing assistants, whose jobs demand physical contact with patients, and for many workers in grocery, convenience, and drug stores who interact directly with the public for their entire shift.

³ Cho, D. & Markos, M. (2020). "Health Care Workers in Mass. to Receive Hazard Pay Amid Coronavirus Pandemic." *NBC News Boston*. April 13, 2020. Retrieved from: <https://www.nbcboston.com/news/local/health-care-workers-in-mass-to-receive-hazard-pay-amid-coronavirus-pandemic/2106619/>

Building Cleaning Services workers are more likely than their frontline counterparts to earn incomes that are at or below the poverty threshold.

Figure 7 displays the income-to-poverty ratio for workers in the 495/MetroWest region overall and in frontline industries, which is calculated by dividing a worker's total income by the poverty threshold for their household size. Across the region, 5 percent of all workers have incomes that are either at or below the poverty threshold, while 57 percent have incomes that are over 500 percent of the poverty threshold for their household size. As whole, in this metric, frontline workers look very similar to the regional workforce. Among the frontline industries, there are some exceptions, such as Building Cleaning Services, which has considerably higher shares of workers with incomes at or below 200 percent of the poverty threshold.

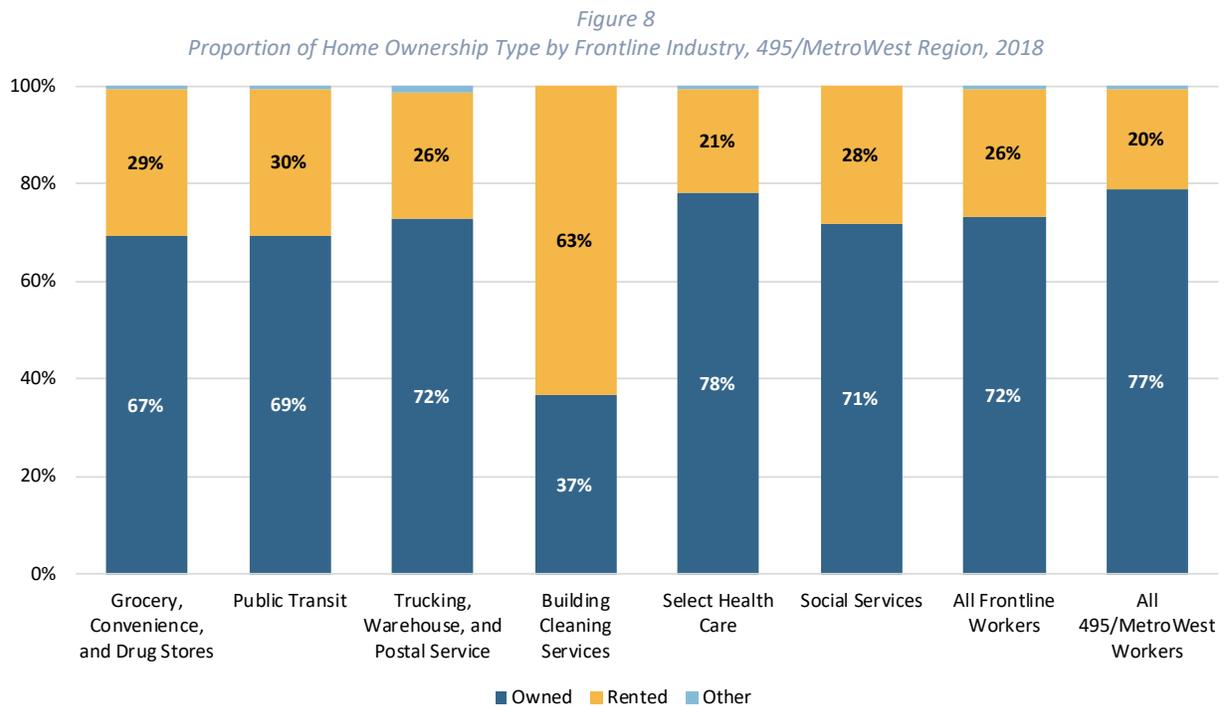
Figure 7
Income-to-Poverty Ratio, 495/MetroWest Region, 2018



Source: American Community Survey 2014-2018 PUMS Microdata

Compared to the regional workforce as a whole, frontline workers have a slightly lower rate of home ownership

As Figure 8 demonstrates, the majority (72%) of frontline workers in the 495/MetroWest own their homes, a slightly lower share as the 495/MetroWest region as a whole (77%). The frontline industry with the highest percentage of home ownership is the Select Health Care industry, with 78 percent of workers owning their home. This industry is the only to have a higher rate of homeownership than the region as a whole. Conversely, the frontline industry with the lowest homeownership percentage is the Building and Cleaning Services industry, at just 37 percent. Comparatively, a slightly larger share (35%) of the statewide workforce rents their housing, which is not surprising, as renting is less common in the 495/MetroWest region than the state.



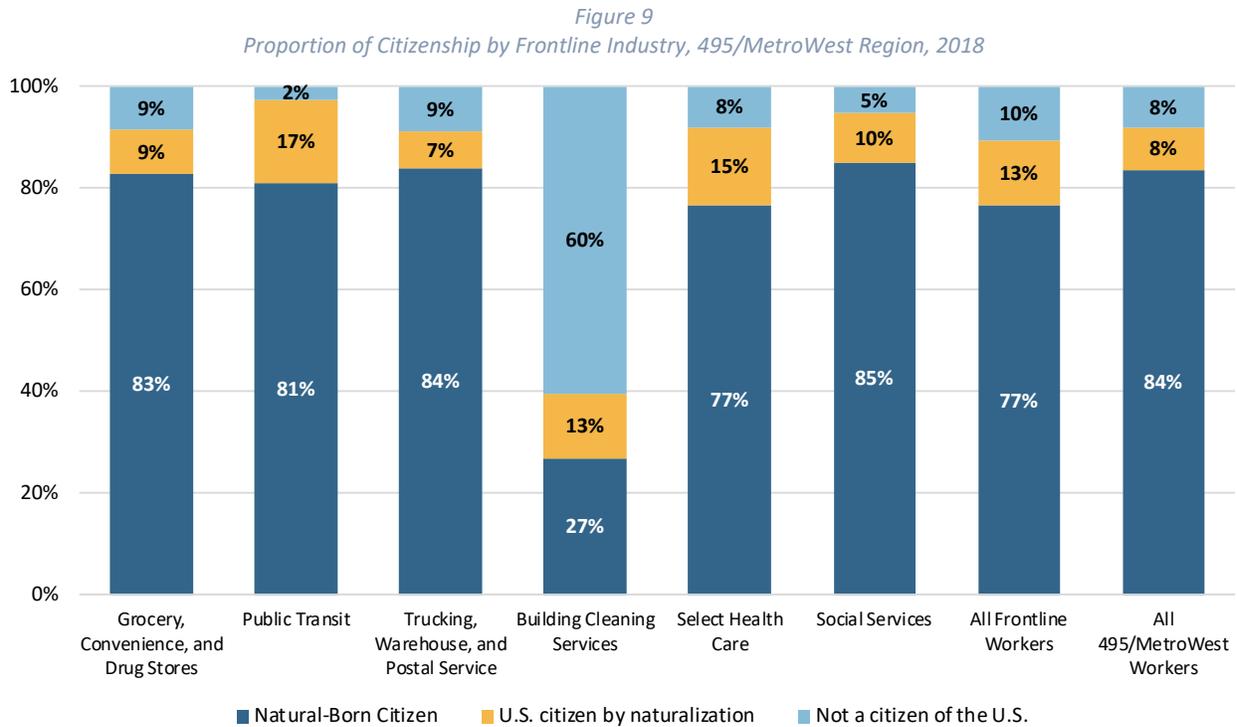
Source: American Community Survey 2014-2018 PUMS Microdata
“Other” refers to people living in group quarters and units occupied rent free.

Both renters and homeowners face challenges related to COVID-19. While many mortgage lenders immediately offered some form forbearance for homeowners in response to economic fallout of the pandemic, until recently, renters in Massachusetts were not protected from evictions.⁴ Since these protections extend through the summer, it is still unknown how delayed mortgage and rent payments will impact housing tenure in the region.

⁴ Logan, T. (2020) “Baker signs bill blocking evictions during coronavirus crisis.” *The Boston Globe*. April 20, 2020. Retrieved from: <https://www.bostonglobe.com/2020/04/20/business/baker-signs-bill-blocking-evictions-during-coronavirus/>.

Workers in the Building Cleaning Services industry are considerably more likely to be immigrants and non-citizens.

Most of the workers in frontline industries in the 495/MetroWest region have slightly lower proportions of citizenship compared to the region as a whole, and similar proportions to the share of foreign-born workers in statewide frontline workforce (22%). The major exception is the Building Cleaning Services industry, in which 60 percent of workers are not U.S. citizens and 13 percent are naturalized citizens (Figure 9).

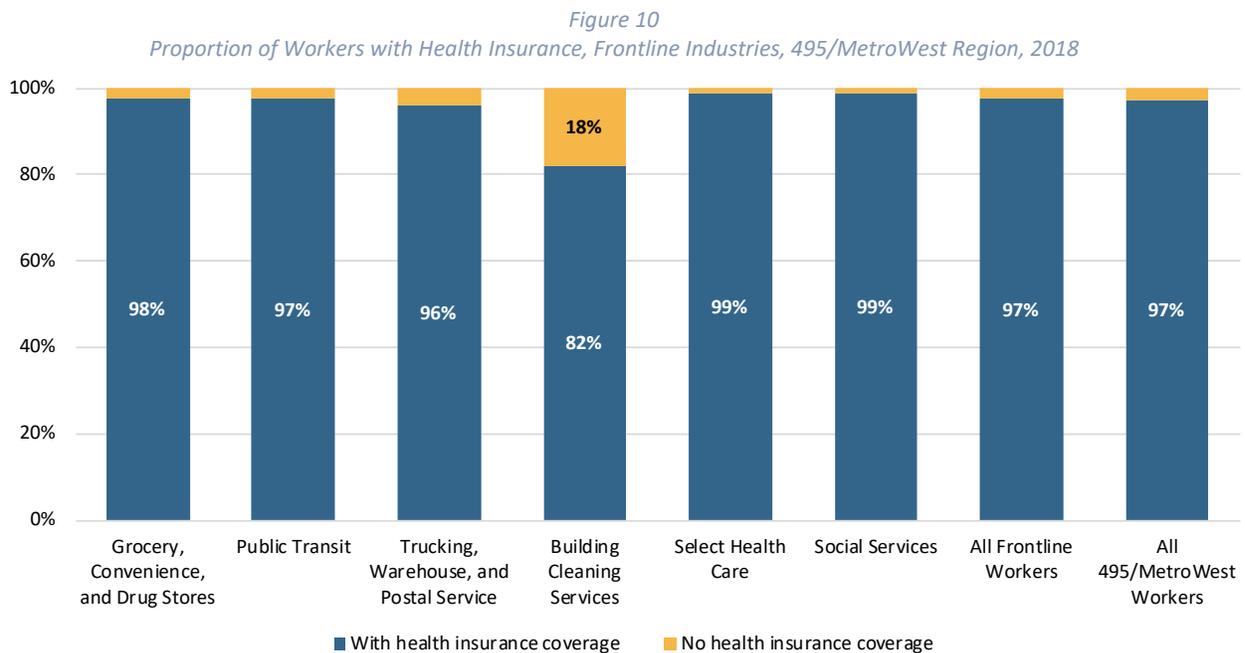


Source: American Community Survey 2014-2018 PUMS Microdata

Workers in the Building Cleaning Services industry, who are also more likely to be immigrants and people of color, have the lowest rate of health insurance enrollment.

Massachusetts has high rates of insurance enrollment. Statewide, just 3 percent of frontline workers lack health insurance, and the rate for all workers statewide is nearly the same (3.3%). In the 495/MetroWest region, the proportion of frontline workers who have health insurance the same as it is for the total regional workforce—97 percent (see Figure 10). The Building Cleaning Services industry in the region has the lowest proportion of workers with health insurance, at 82 percent, which is still relatively high. Meanwhile, the Select Health Care and Social Services industry has the highest proportion at 99 percent.

Uninsured people are less likely to seek out preventative health care, and would therefore be less likely to be aware of pre-existing conditions that make them more susceptible to the coronavirus. Fortunately, Massachusetts has improved telehealth access and created a system for uninsured residents to receive COVID-19 related telehealth visits.⁵



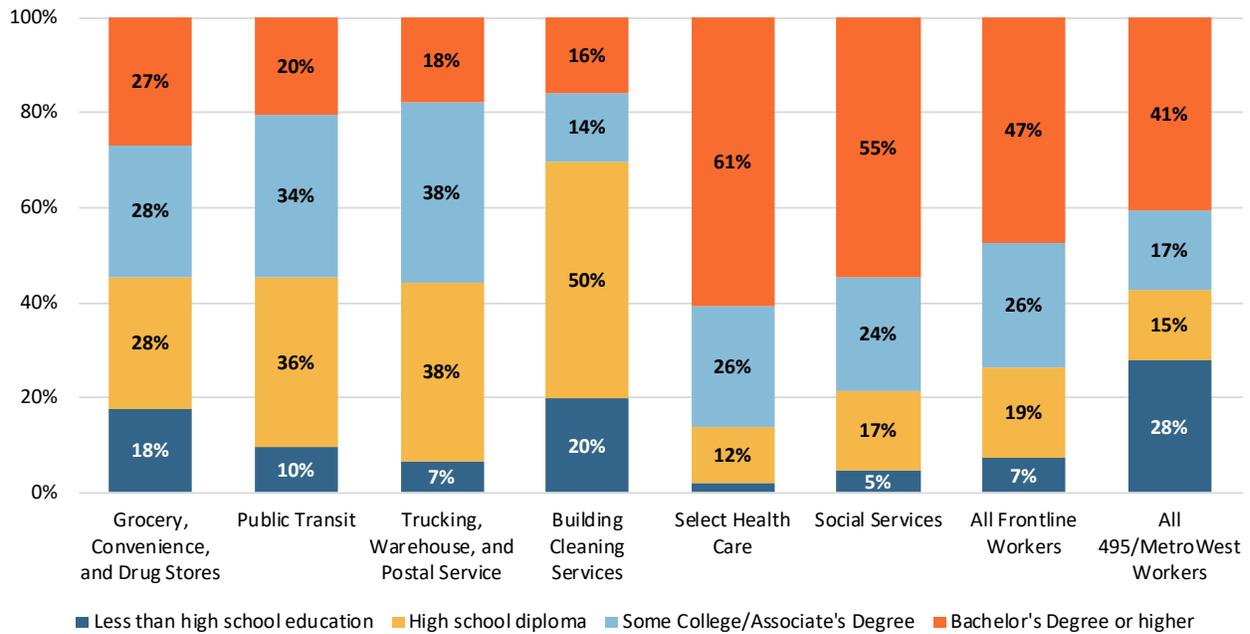
Source: American Community Survey 2014-2018 PUMS Microdata

⁵ Muoio, D. (2020). “Massachusetts’ uninsured can access free COVID-19 telehealth visits via Doctor on Demand.” *Mobihealthnews*. April 24, 2020. Retrieved from: <https://www.mobihealthnews.com/news/massachusetts-uninsured-can-access-free-covid-19-telehealth-visits-doctor-demand>.

Nearly half of all frontline workers have a Bachelor's degree or higher.

Frontline workers in the 495/MetroWest region have higher levels of education than regional workforce as whole (Figure 7). The Select Health Care and Social Services industries are considerably more likely to have a college education when compared to their fellow frontline workers, with Bachelor's degrees or higher being held by 61 percent and 55 percent, respectively. Even industries such as Grocery, Convenience, and Drug Stores and Building Cleaning Services, which have the highest shares of workers without a high school education (18% and 20%, respectively), had smaller percentages of such workers than the workforce as a whole (28%).

Figure 11
Educational Attainment, Frontline Industries, 495/MetroWest Region, 2018



Source: American Community Survey 2014-2018 PUMS Microdata

Methodology

This report uses 5-year American Community Survey 2018 data from the U.S. Census Bureau MDAT site, which provides Public Use Microdata Sample (PUMS) files that allow for flexible analyses of census data. This is the most recent data available. For the most part, the regional definition used here conforms to the traditional definition of the 495/MetroWest. The data analyzed is limited to five Public Use Microdata Areas which are listed below:

- Middlesex (West Central) & Worcester (East) [01400]
- Worcester County (East Central) [00303]
- Framingham town, Marlborough city, and Natick town [00504]
- Middlesex (Far Southwest), Norfolk (Northwest), and Worcester (Far East) [02400]
- Norfolk (Southwest) Greater Franklin [03601]

The motivation to perform this type of analysis is based on the research brief “A Profile of Frontline Workers in Massachusetts” from The Boston Research Snapshot, wherein authors Luc Schuster and Trevor Mattos provide a demographic overview of frontline workers. Their definition of frontline industries originates from a definition developed by the New York City Comptroller’s Office. This report uses the same frontline definition used by The Boston Research Snapshot.⁶

The six frontline industries are made up of individual Census-defined industries, defined as follows:

Grocery, Convenience, and Drug Stores

- Grocery and related product merchant wholesalers (INDP=4470)
- Supermarkets and other grocery stores (INDP=4971)
- Convenience Stores (INDP=4972)
- Pharmacies and drug stores (INDP=5070)
- General merchandise stores, including warehouse clubs and supercenters (INDP=5391)

Public Transit

- Rail transportation (INDP=6080)
- Bus service and urban transit (INDP=6180)

Trucking, Warehouse, and Postal Service

- Truck transportation (INDP=6170)
- Warehousing and storage (INDP=6390)
- Postal Service (INDP=6370)

Building Cleaning Services

- Cleaning Services to Buildings and Dwellings (INDP=7690)

Select Health Care

- Offices of physicians (INDP=7970)

⁶ For more information please see: <https://comptroller.nyc.gov/reports/new-york-citys-frontline-workers/#Methodology> and https://www.bostonindicators.org/article-pages/2020/april/frontline_workers.

- Outpatient care centers (INDP=8090), Home health care services (INDP=8170)
- Other health care services (INDP=8180)
- General medical and surgical hospitals, and specialty hospitals (INDP=8191)
- Psychiatric and substance abuse hospitals (INDP=8192)
- Nursing care facilities (skilled nursing facilities) (INDP=8270)
- Residential care facilities, except skilled nursing facilities (INDP=8290)

Social Services

- Individual and family services (INDP=8370)
- Community food and housing, and emergency services (INDP=8380)