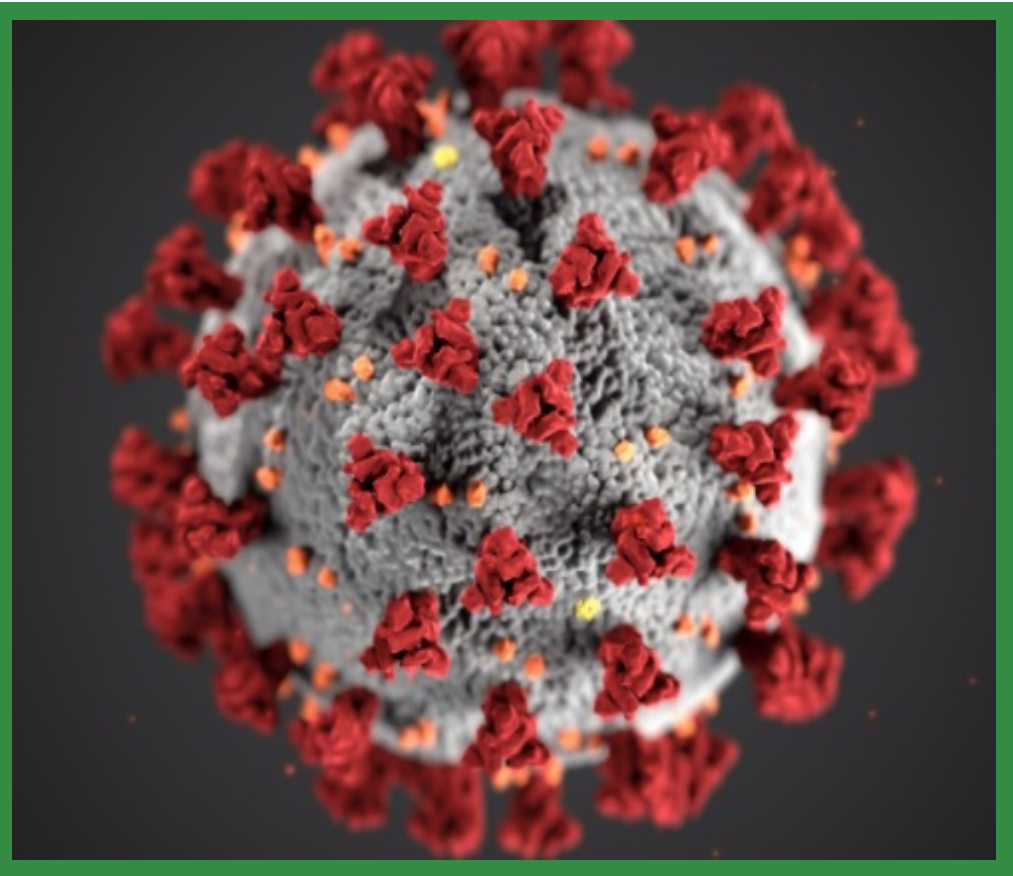


Weathering the Pandemic
in Greater MetroWest:
A COVID-19 Update

NOVEMBER 2020



Massachusetts
State of Emergency
Declared

MARCH 10

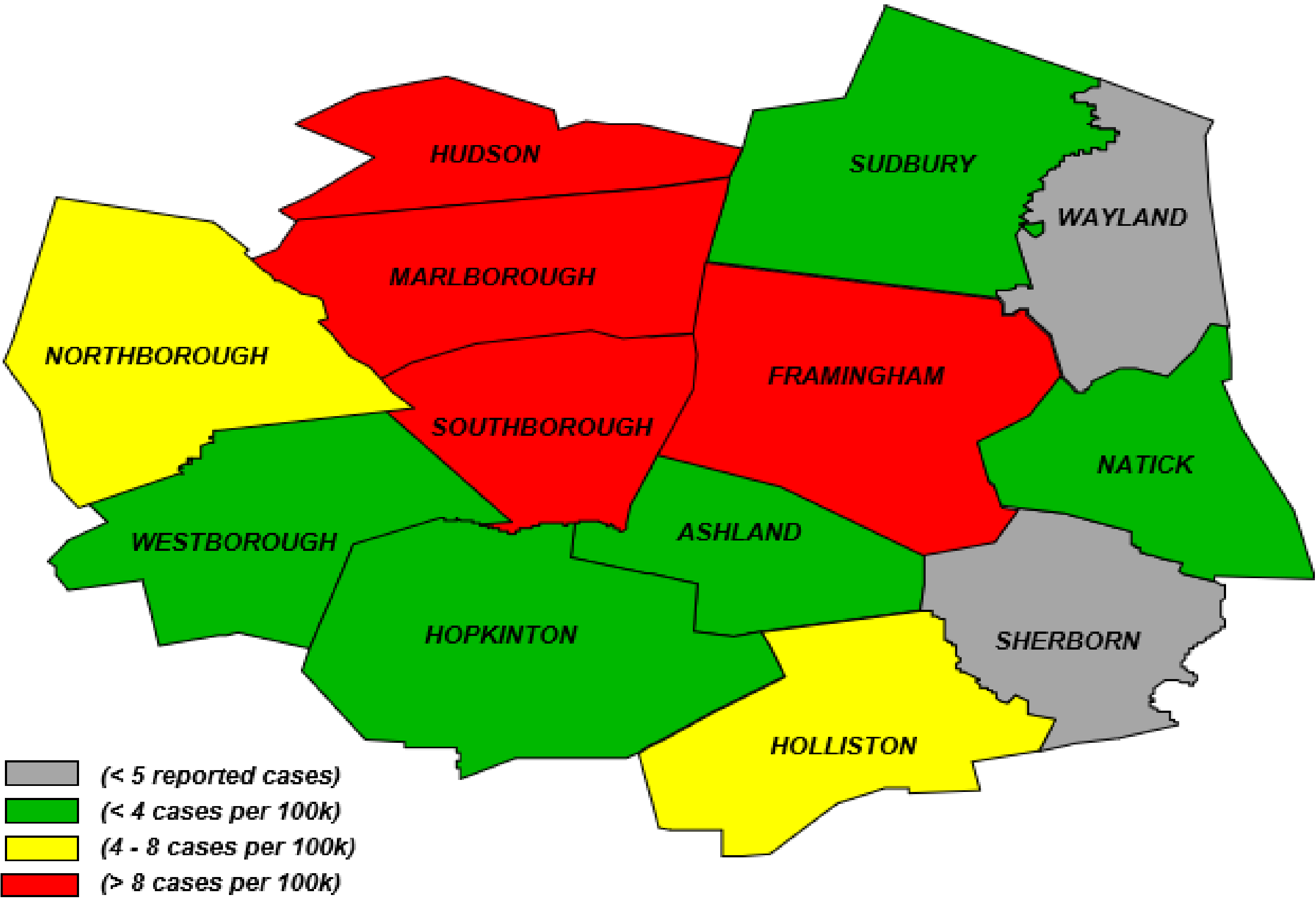
6,039

CASES IN GMW
as of October 7,
2020

Report by:
Luis D. Rosero, PhD
Fahlino Sjuib, PhD
Mary Phelan, MBA, CPA
Beverly Soriano, MS, CPA
Martha Meaney, MA
Maureen Dunne, MBA
Aline Dropsy

GREATER METROWEST (GMW) REGION

GMW COVID-19 AVERAGE DAILY INCIDENCE
RATE PER 100,000 OVER LAST 2 WEEKS
As of 10/7/20



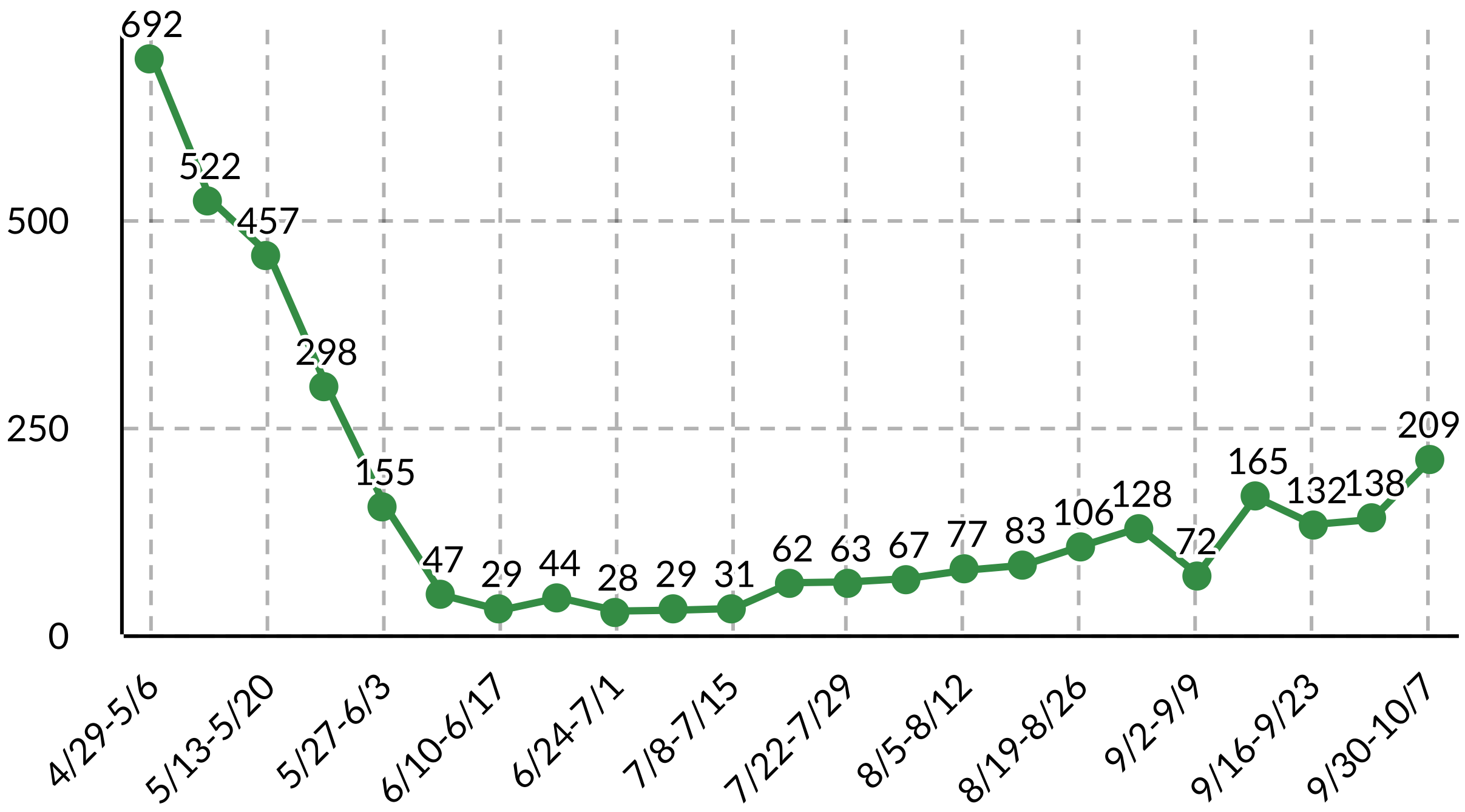
Nearly seven months after Massachusetts declared a state of emergency due to COVID-19, this second special report provides an update on how the Greater MetroWest (GMW) region is weathering the pandemic. Similar to most regions, the number of newly-reported weekly COVID-19 cases in GMW fluctuated over the summer, but shows an upward-trend during the fall.

As expected, the economic effects of the COVID-19 pandemic on the region appear to closely mirror public health conditions. After a precipitous deterioration in most economic indicators, and a subsequent *partial* recovery, GMW's industrial composition allows the region to remain resilient in the face of recent economic challenges. The continued path to recovery will, however, be dependent on the ability to manage the public health crisis. However, it is important to note that our data suggests what are likely to be persistent, and disproportionate, economic repercussions for some sectors and communities in GMW.

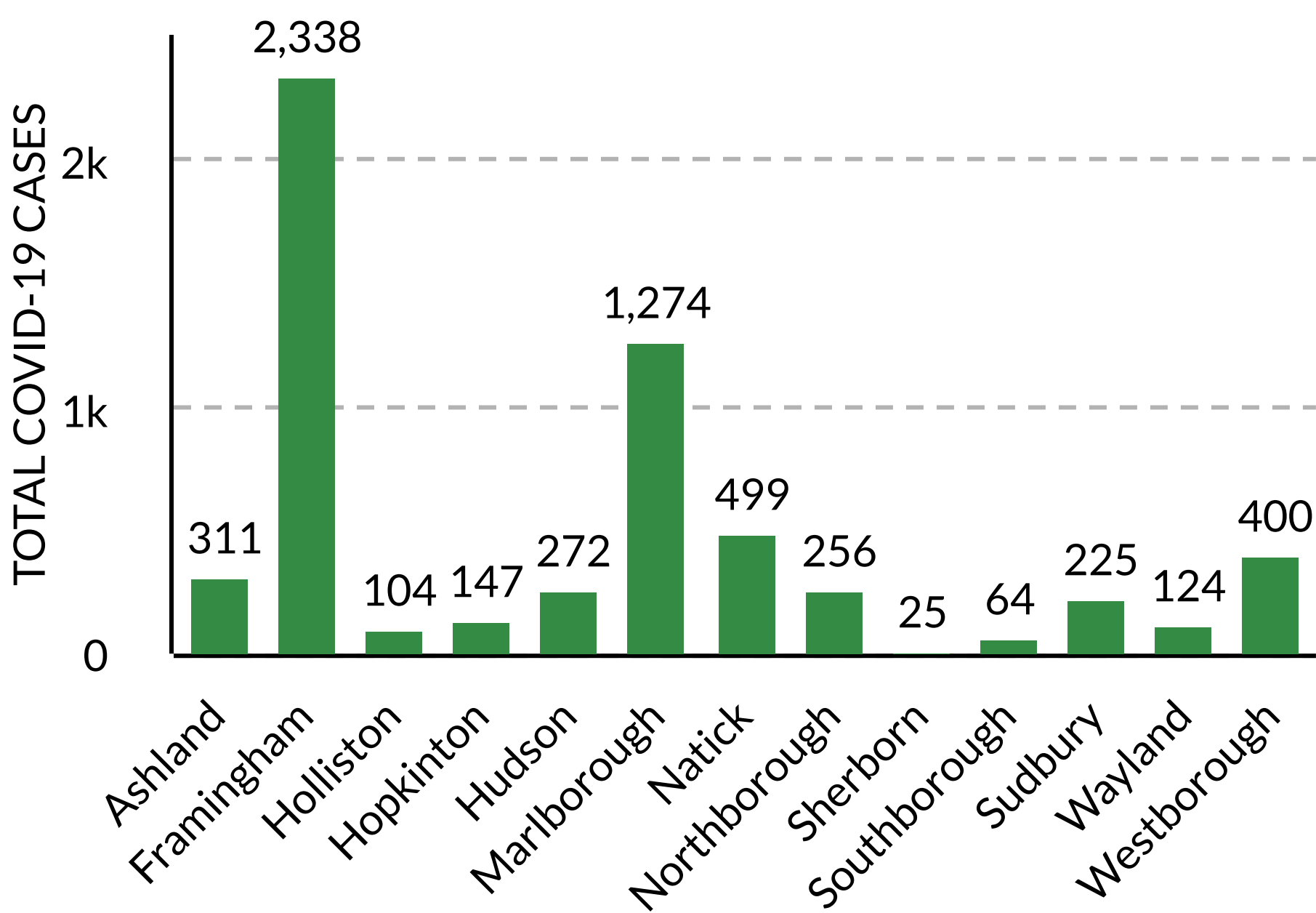
Recent Upswing in New Cases

209 new cases were reported during the week ending October 7th in GMW. Framingham (83) and Marlborough (54) had the most cases. The region has also seen an increase in cases over the last 12 weeks.

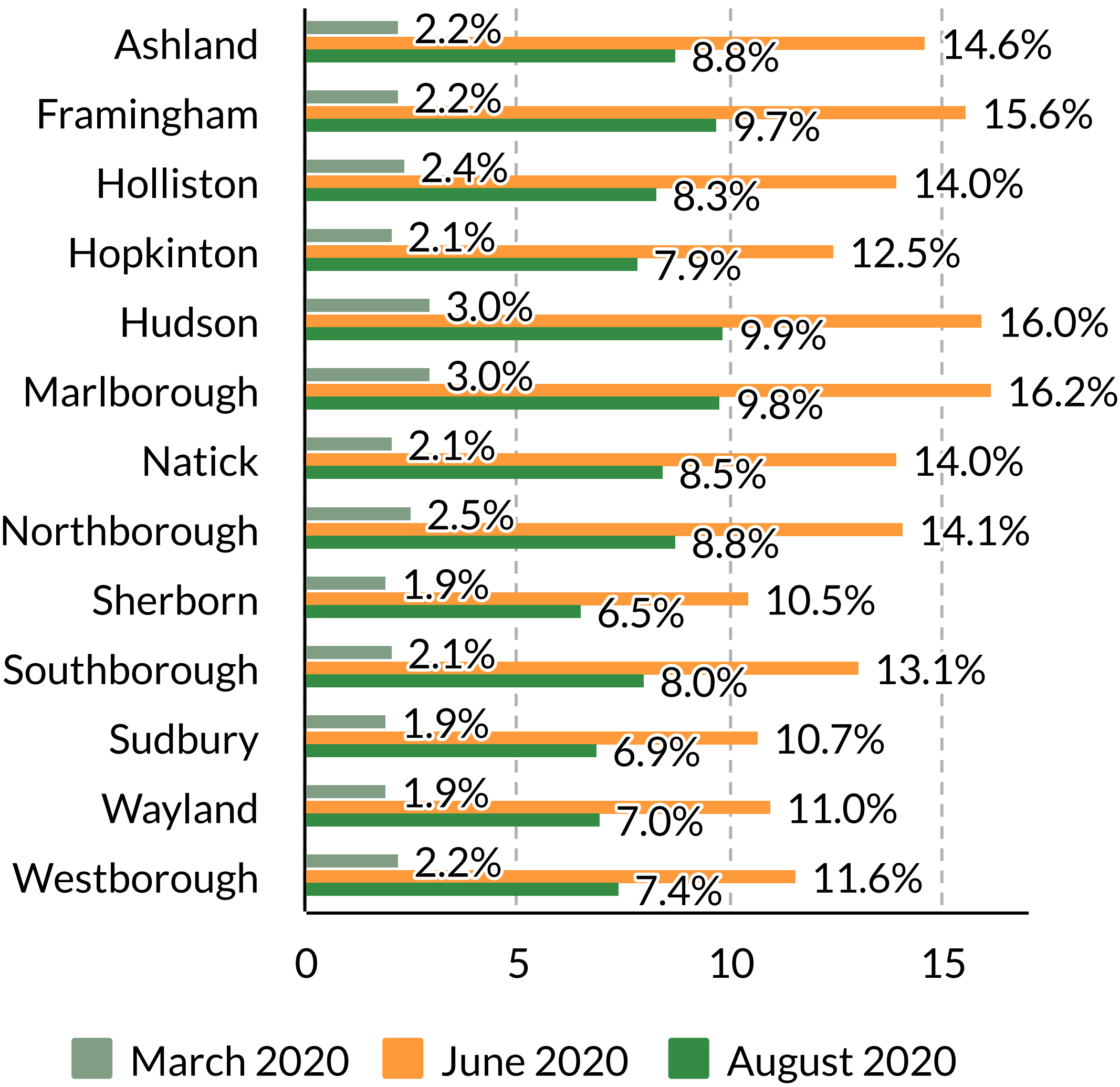
TOTAL NUMBER OF NEW CASES IN GMW BY WEEK



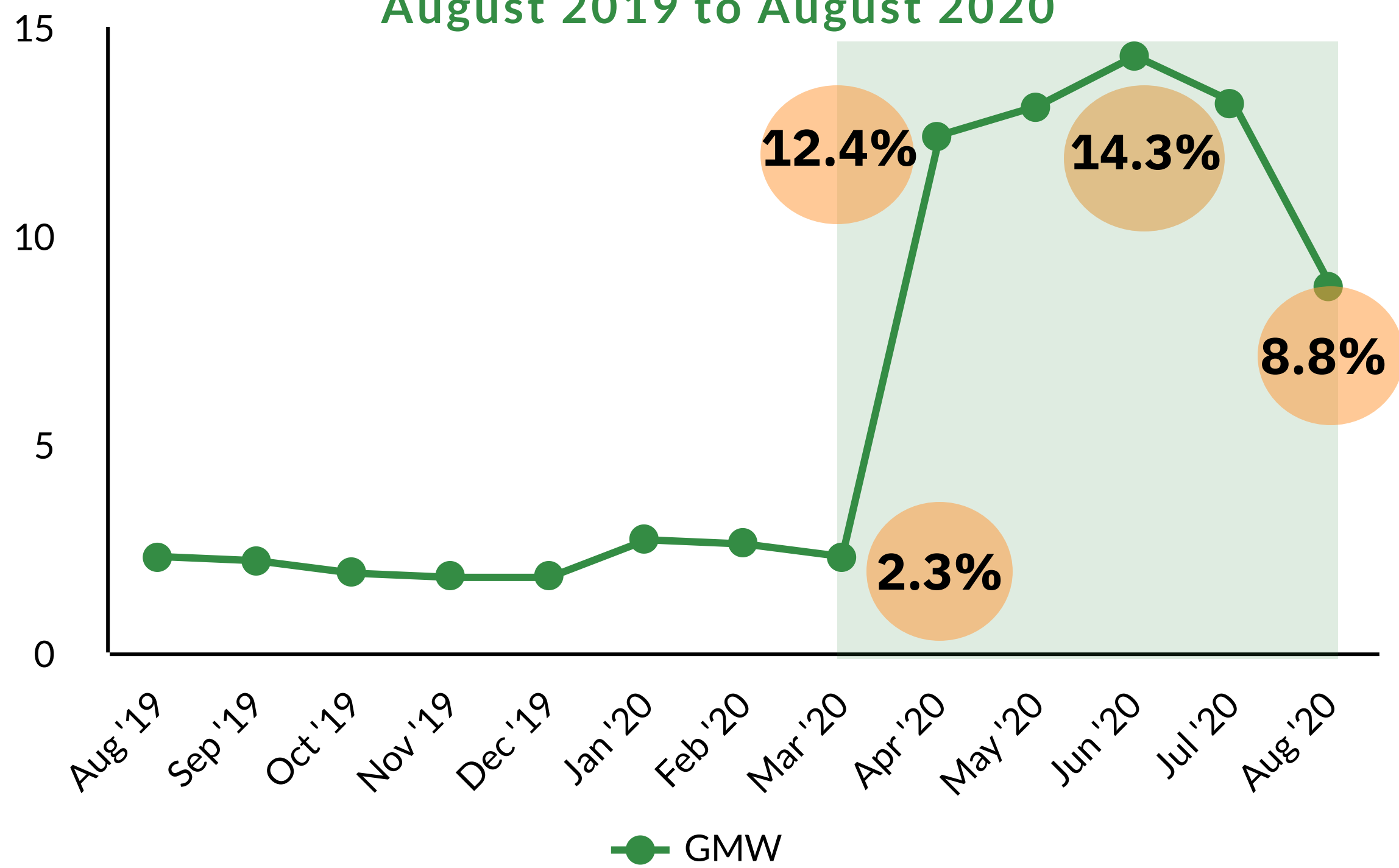
TOTAL COVID-19 CASES BY COMMUNITY
as of October 7, 2020



GMW UNEMPLOYMENT RATES BY COMMUNITY



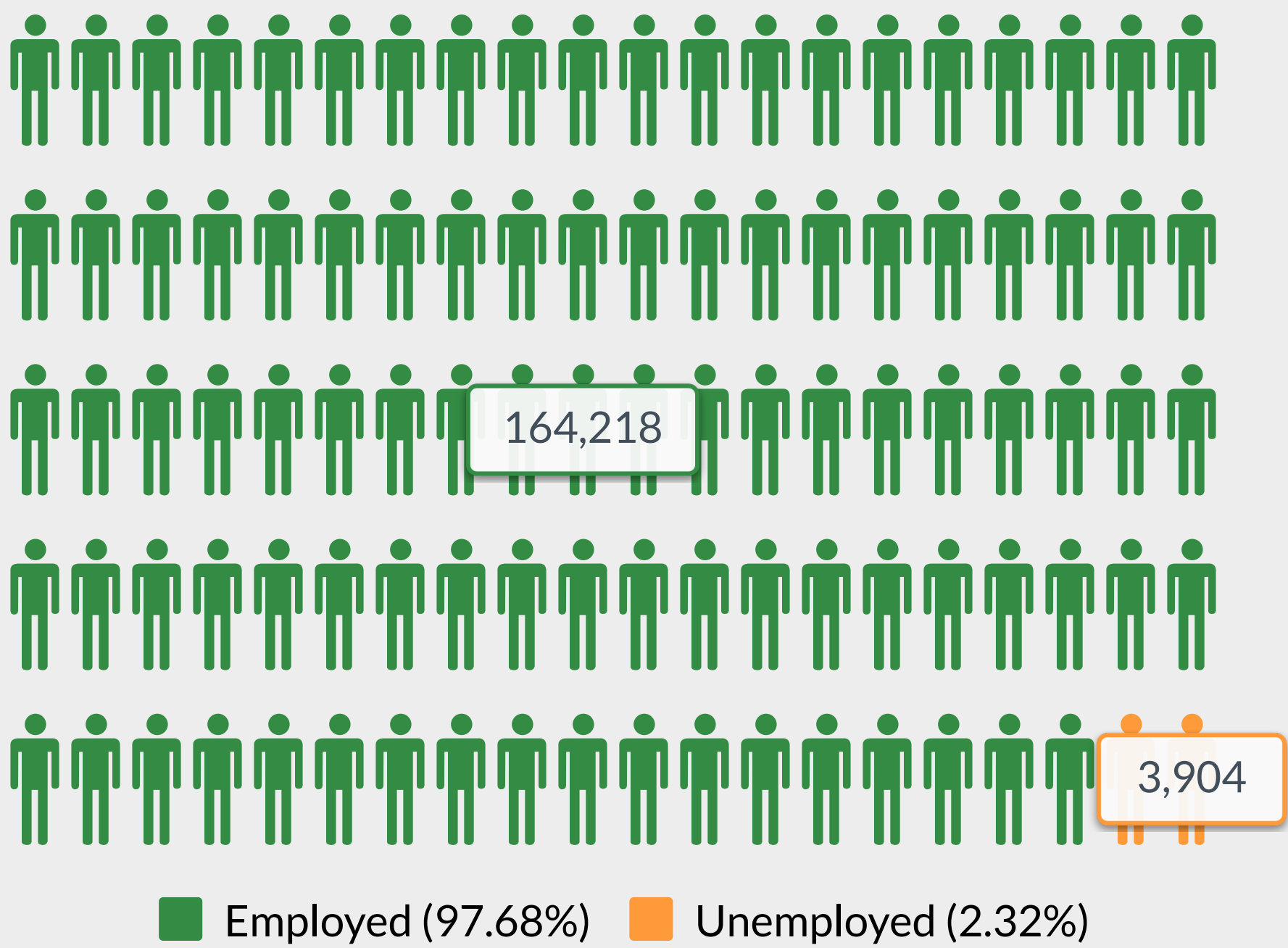
GMW UNEMPLOYMENT RATES August 2019 to August 2020



Compared to June 2020 when unemployment rate for the region was 14.3%, GMW recently reported a lower rate of 8.8% as of August 2020, a drop of

5.5 Percentage points

GMW LABOR FORCE MARCH 2020



The labor force in GMW decreased by

6.0%

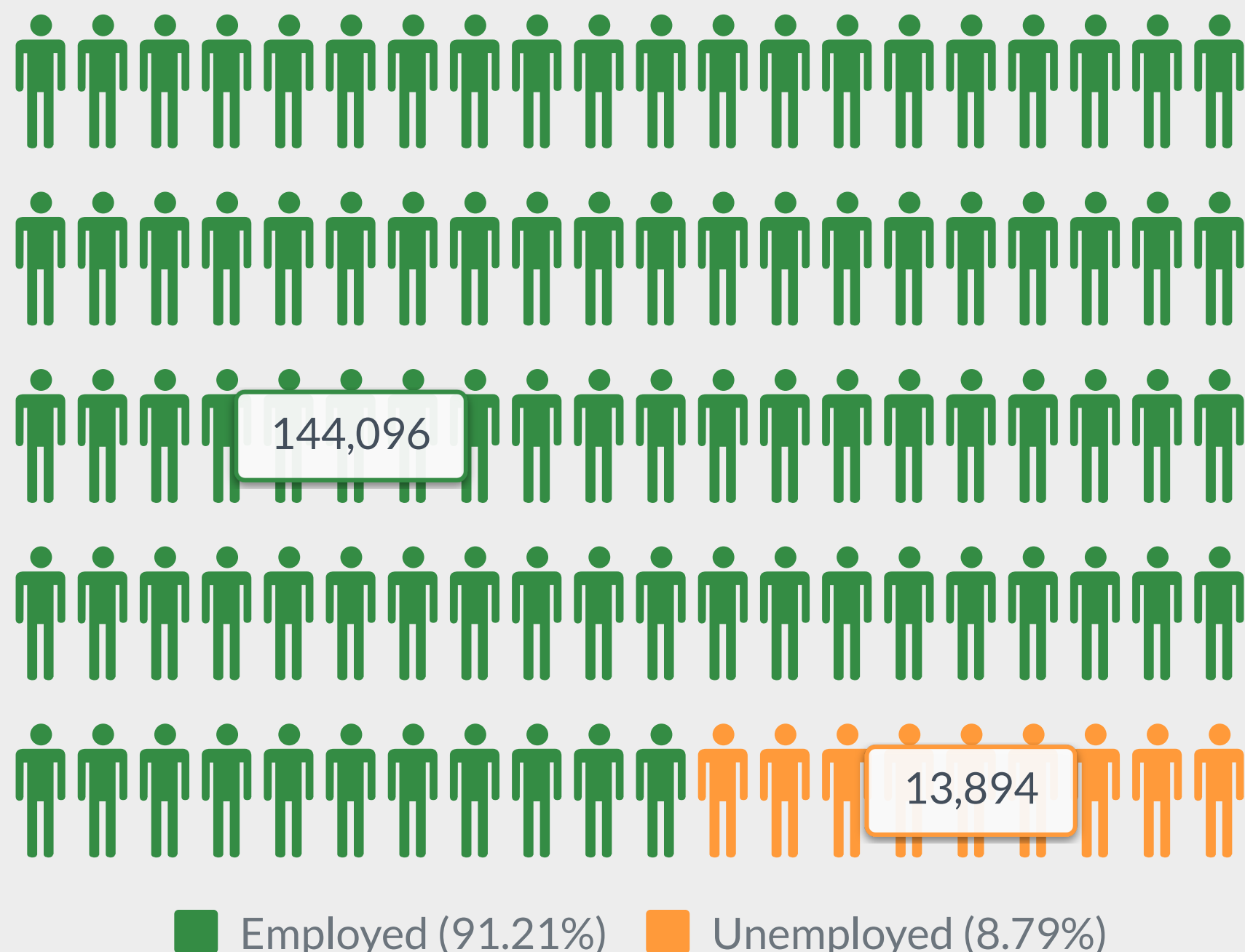
from March 2020 to August 2020 with a total decrease of

10,132

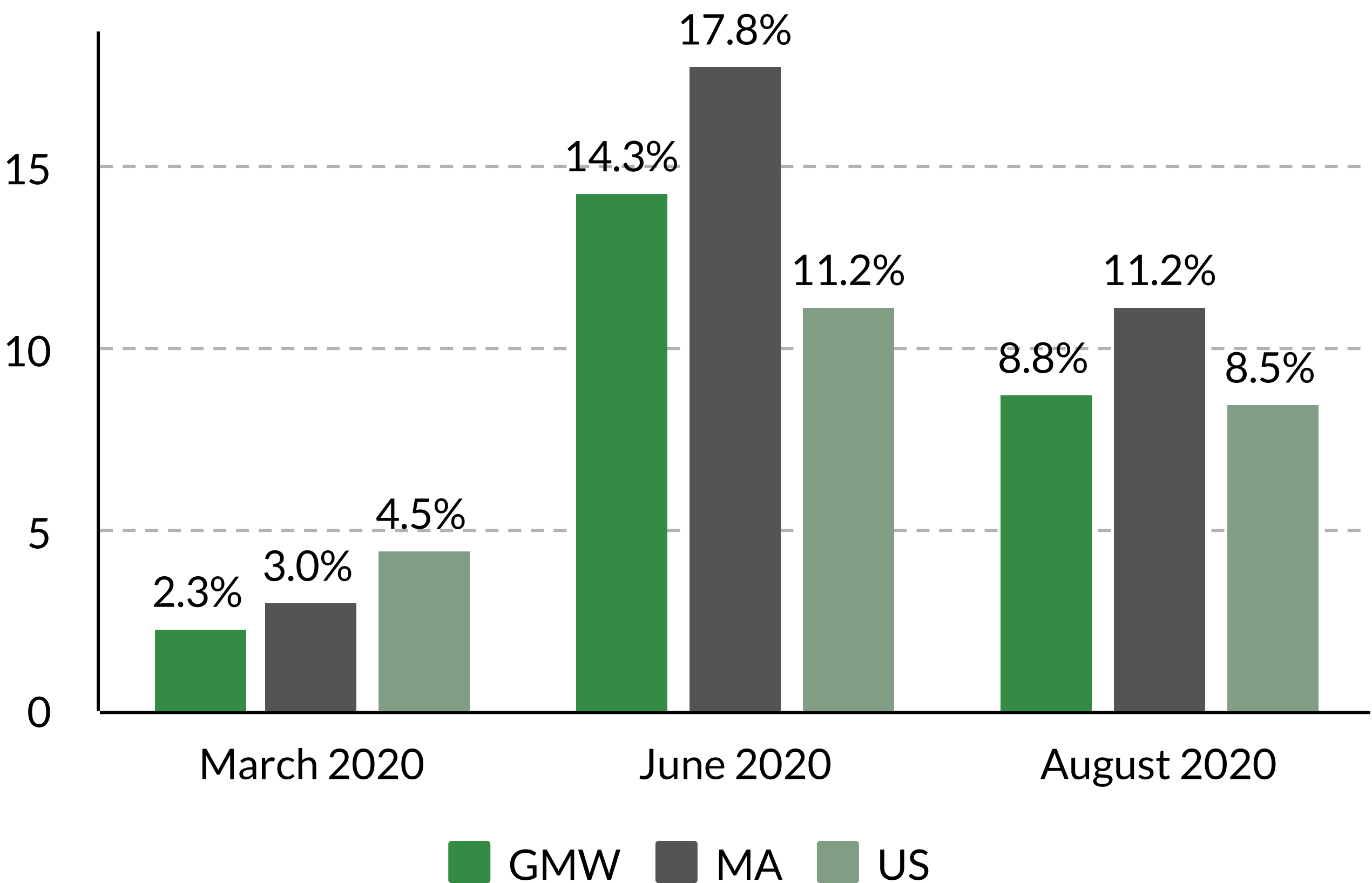
individuals. While the number of people who lost their jobs increased by

9,990 individuals.

GMW LABOR FORCE AUGUST 2020



GMW, MA, and US UNEMPLOYMENT RATES March 2020, June 2020, and August 2020



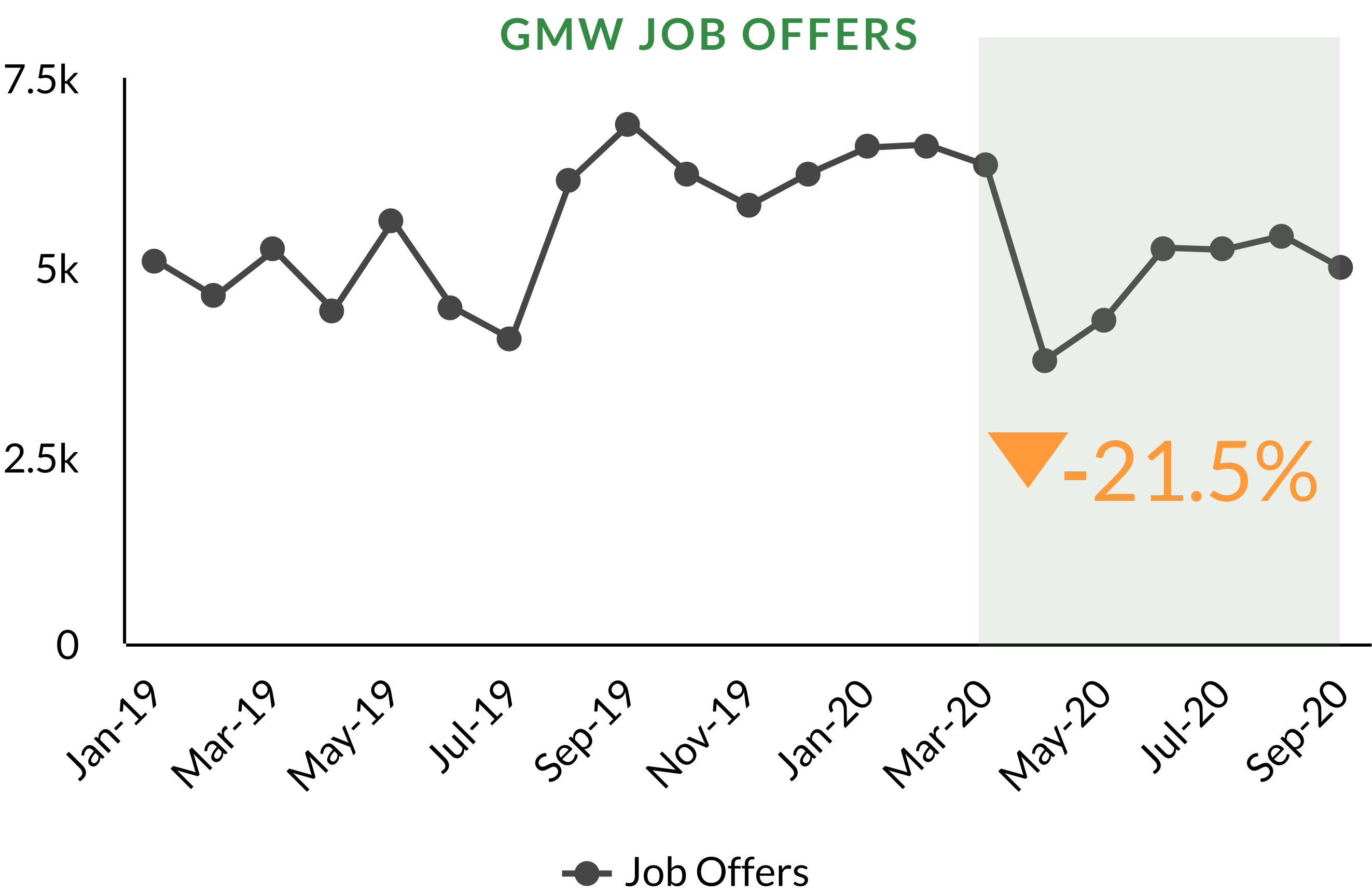
In March 2020 the GMW unemployment rate was

Lower

than the unemployment rate in the state and the nation.

In June 2020 and August 2020 GMW unemployment rates were

Higher than the national rate, but Lower than the state rate.




1,917

Fewer Job Offers

in September 2020 relative to September 2019.


A precipitous drop in the number of offers in April 2020 was followed by a rapid **partial recovery** in May-June 2020. However, the number of job offers appears to have **plateaued** since July 2020.

GMW Job Offers by Occupation Family: Percent Change Sept. 2019-Sept. 2020



INCREASING

- Health Care Support: 80%
- Personal Care and Service: 40%
- Life, Physical, and Social Science: 27%
- Construction and Extraction: 19%
- Production: 14%



DECREASING

- Computer and Mathematical: -56%
- Food Preparation and Serving Related: -53%
- Architecture and Engineering: -45%
- Management: -43%
- Arts, Design, Entertainment, Sports, and Media: -43%

Top 10 GMW Employers: By Number of Job Offers

SEPT. 2019

1. Mathworks (125)
2. TJX Companies, Inc. (89)
3. Tenet Health System (78)
4. Quest Diagnostics Incorporated (74)
5. Raytheon (71)
6. Hospitals of Providence (70)
7. General Electric Corporation (63)
8. Dell (62)
9. Bose Corporation (60)
10. Boston Scientific Corporation (58)

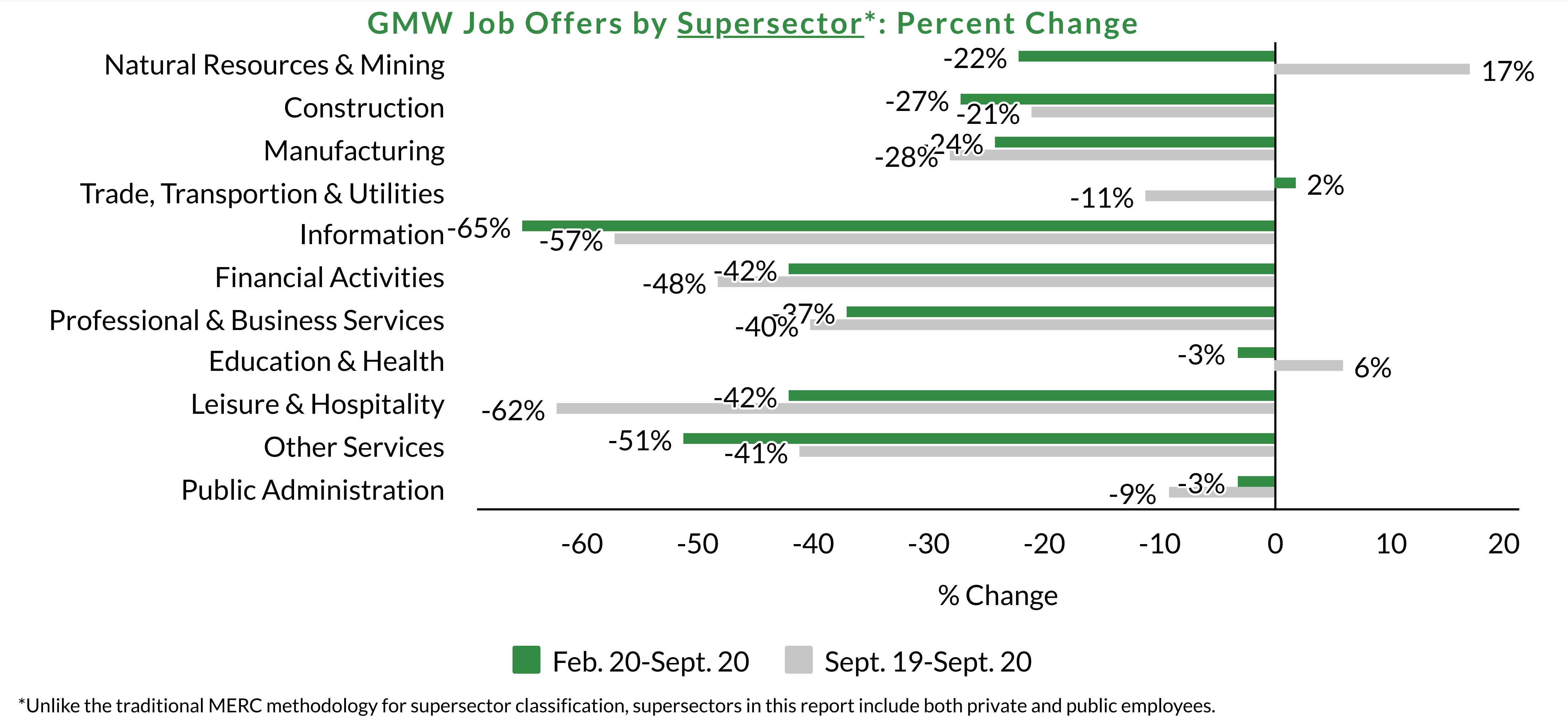
VS

SEPT. 2020

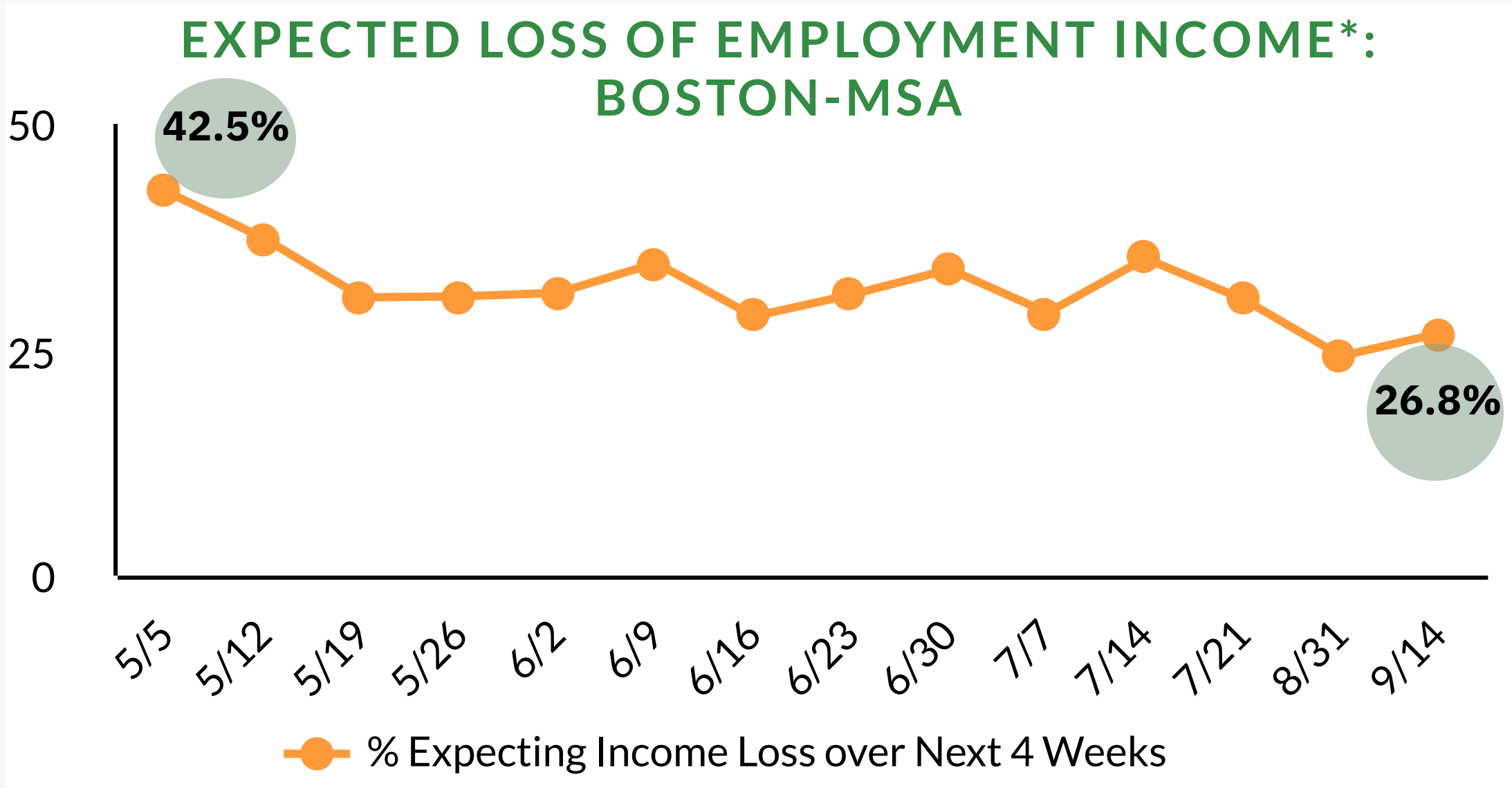
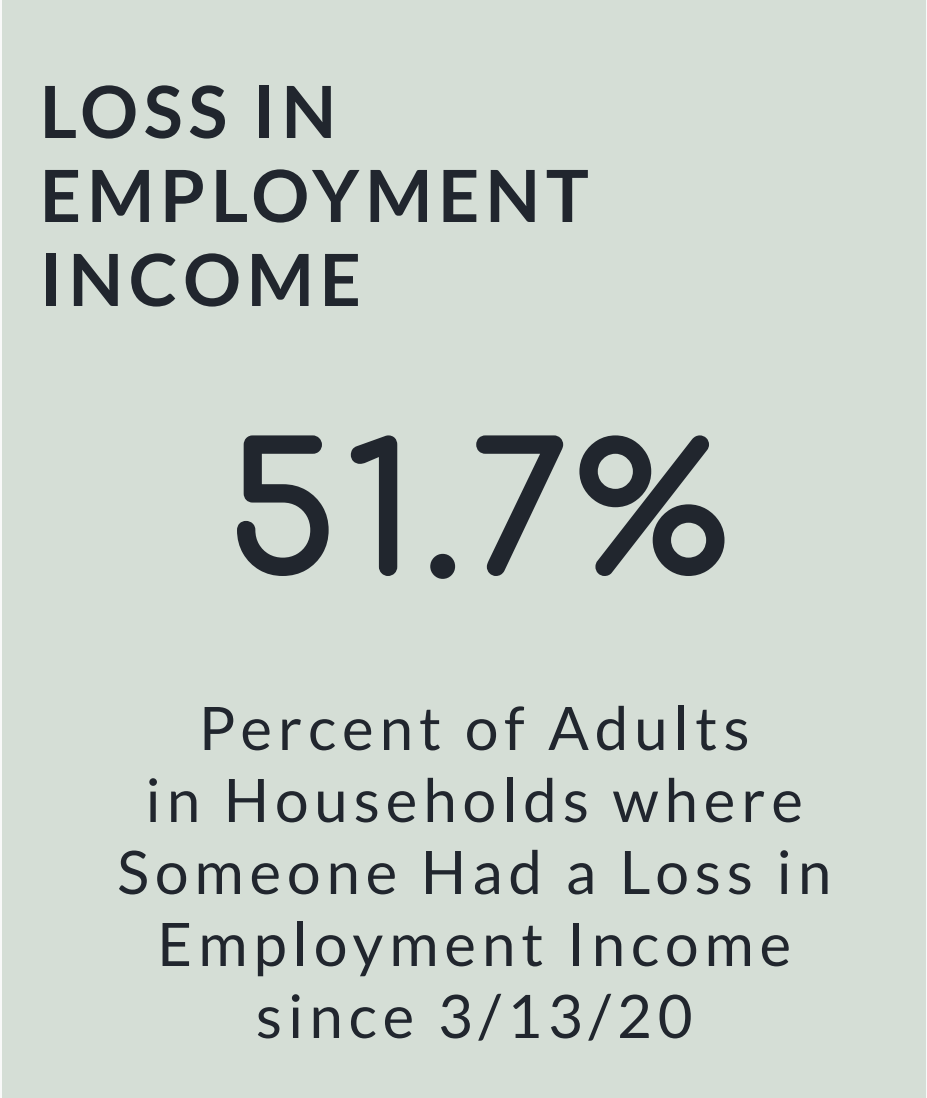
1. Amazon (115)
2. Connected Home Care Llc (101)
3. Raytheon (88)
4. MetroWest Medical Center (67)
5. Boston Scientific Corporation (58)
6. Tenet Health System (54)
7. Danaher Corporation (53)
8. Quest Diagnostics Incorporated (50)
9. Sanofi Aventis (46)
10. Natick Public Schools (45)

Information, Other Services, Leisure & Hospitality, and Financial Activities

have been the most adversely affected industrial supersectors in terms of job offers in GMW.

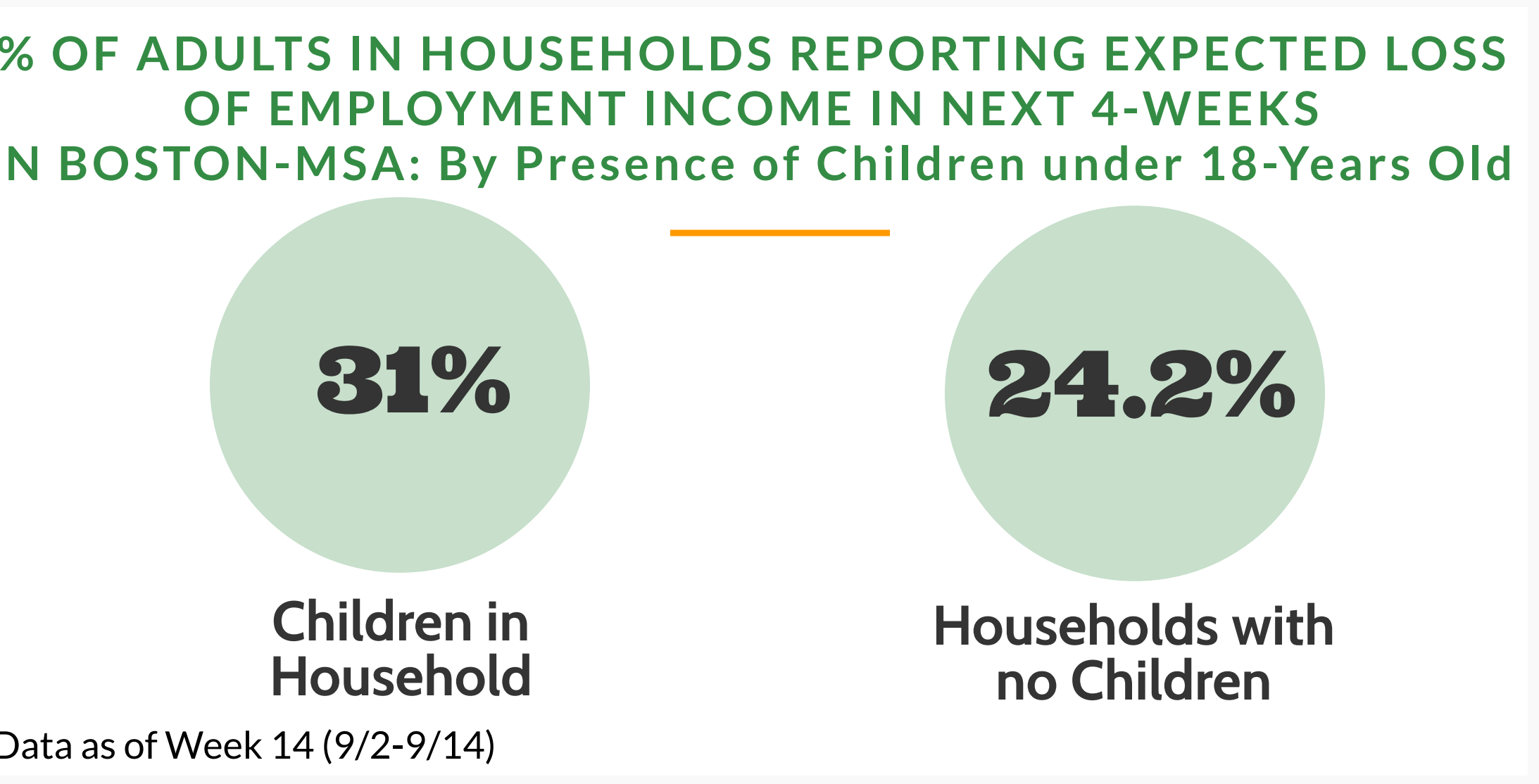
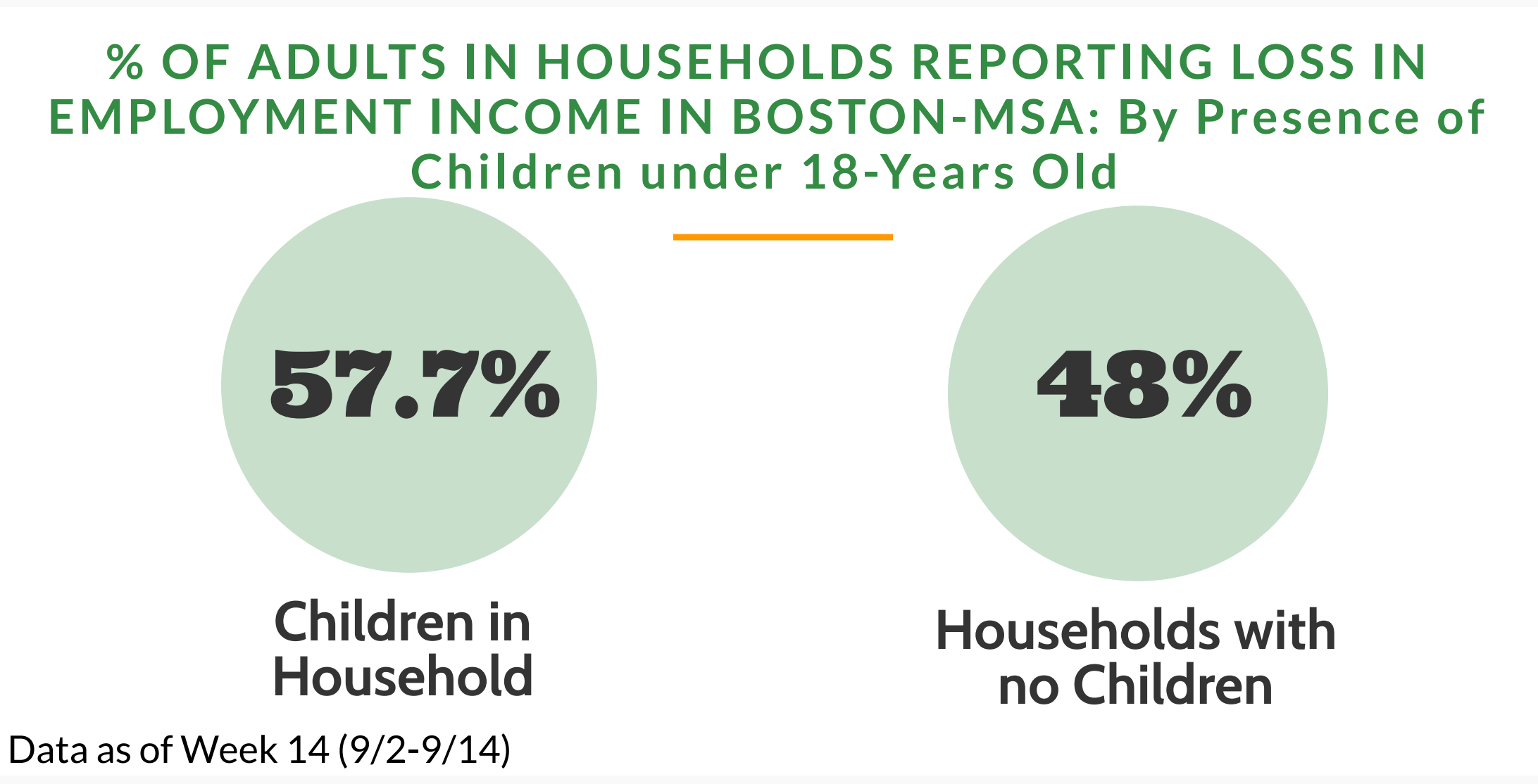
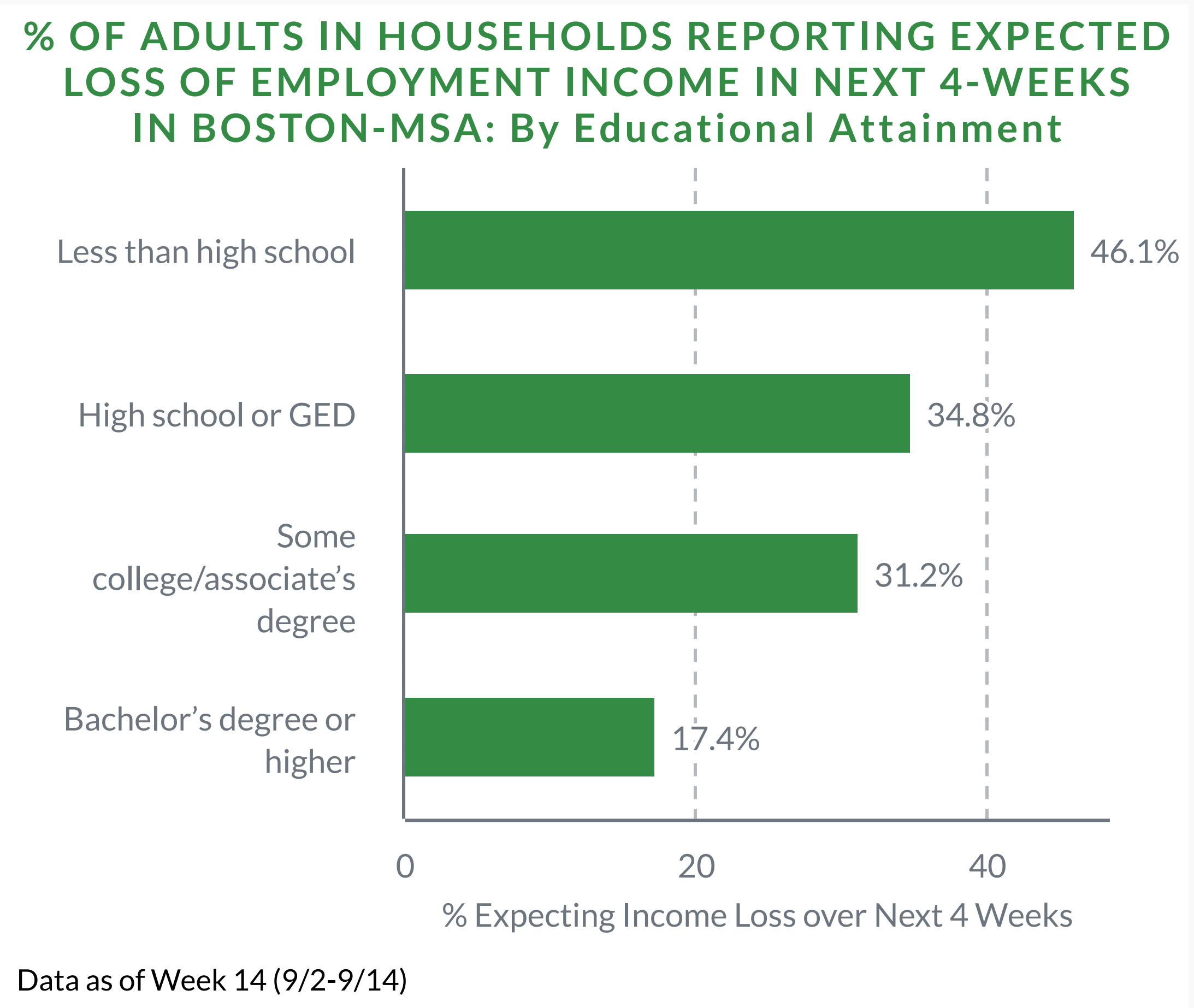
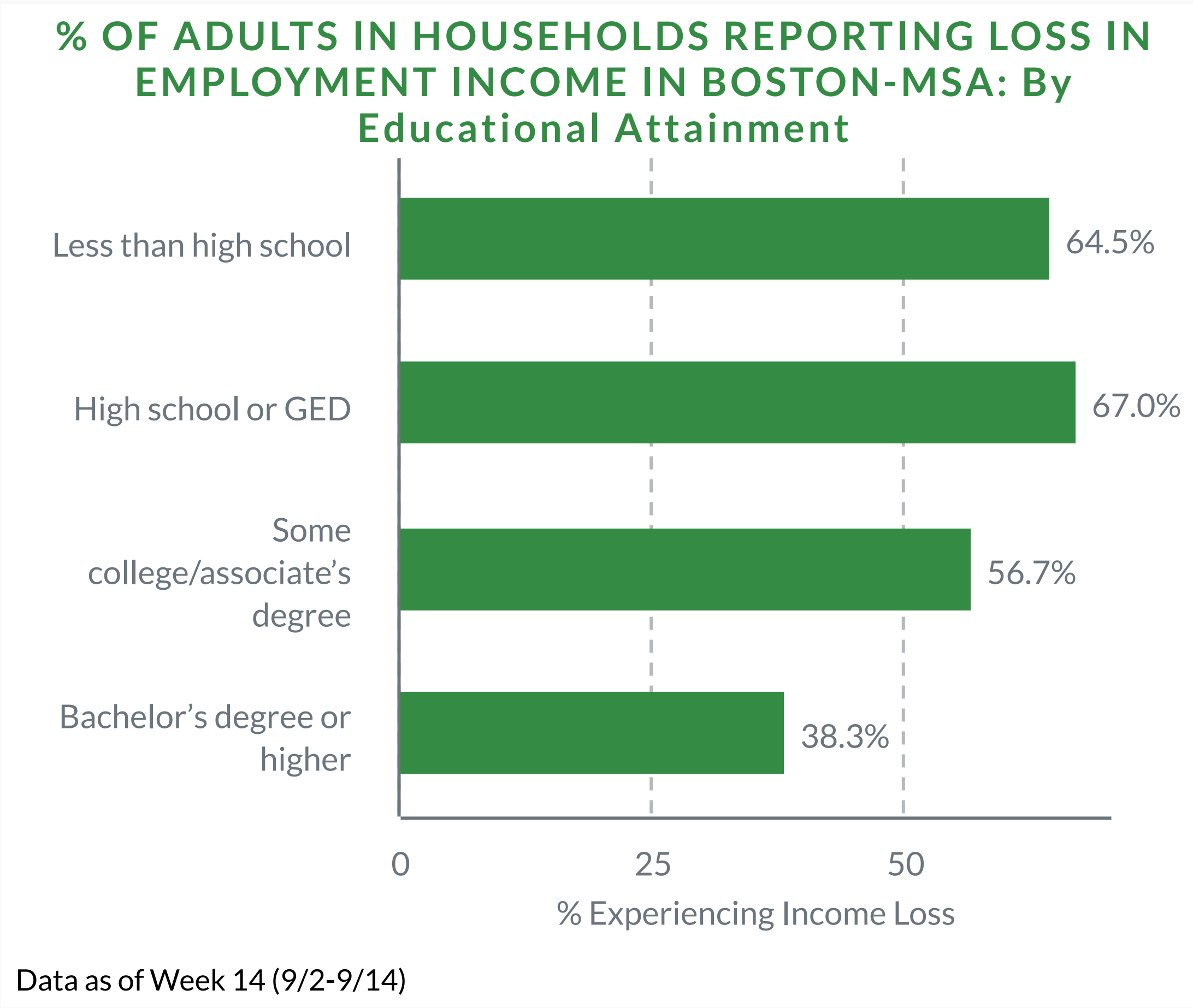
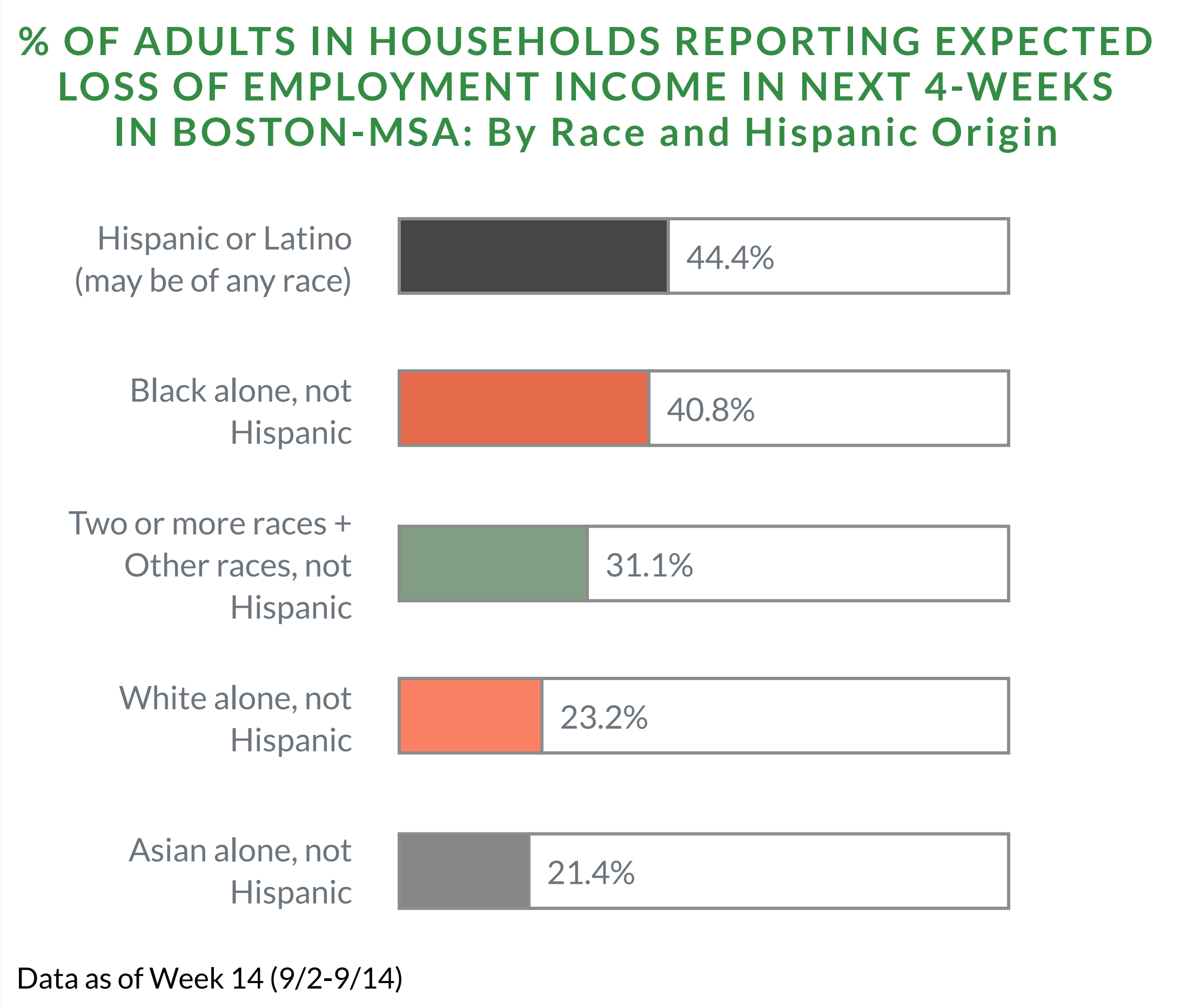
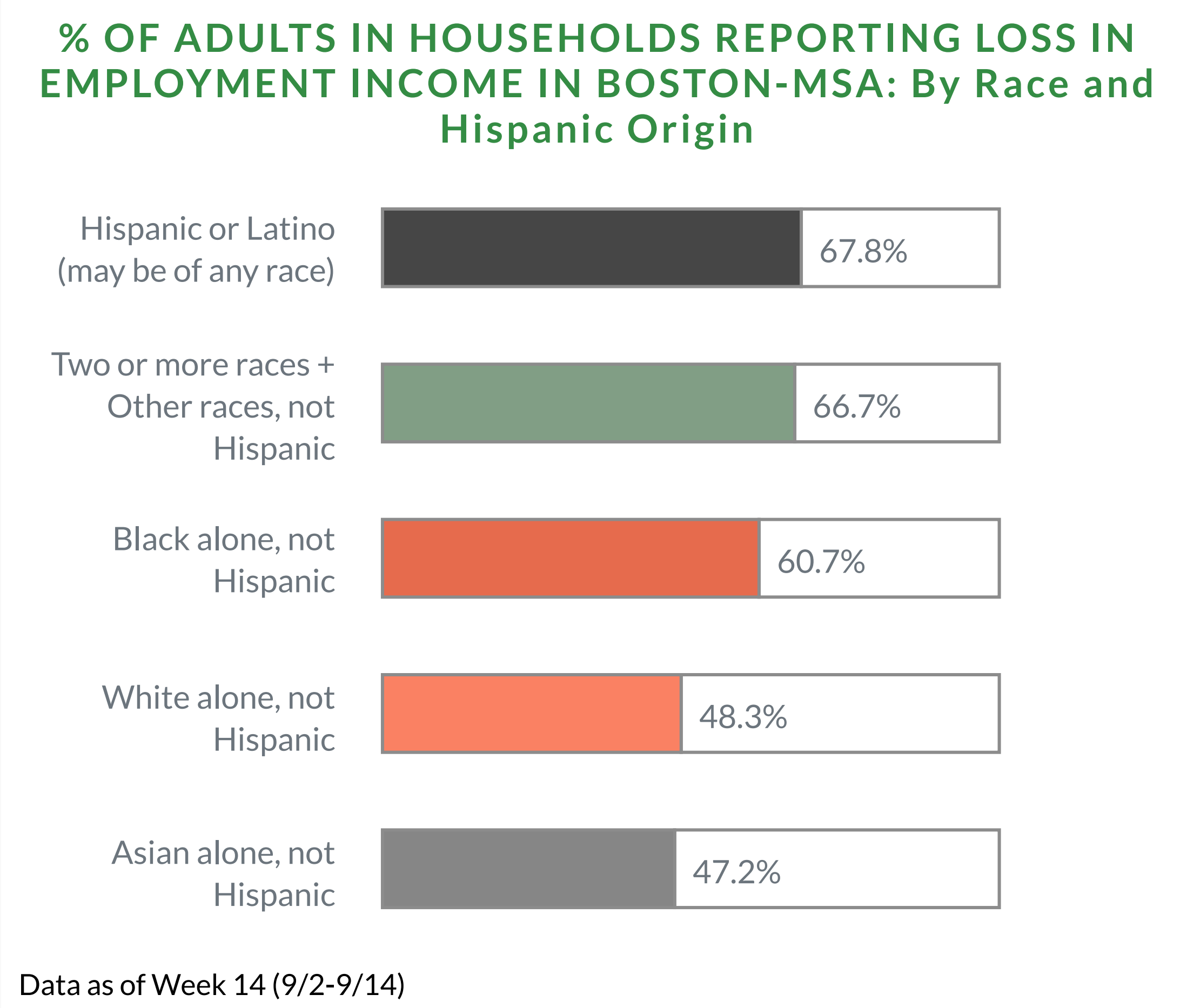


*Unlike the traditional MERC methodology for supersector classification, supersectors in this report include both private and public employees.



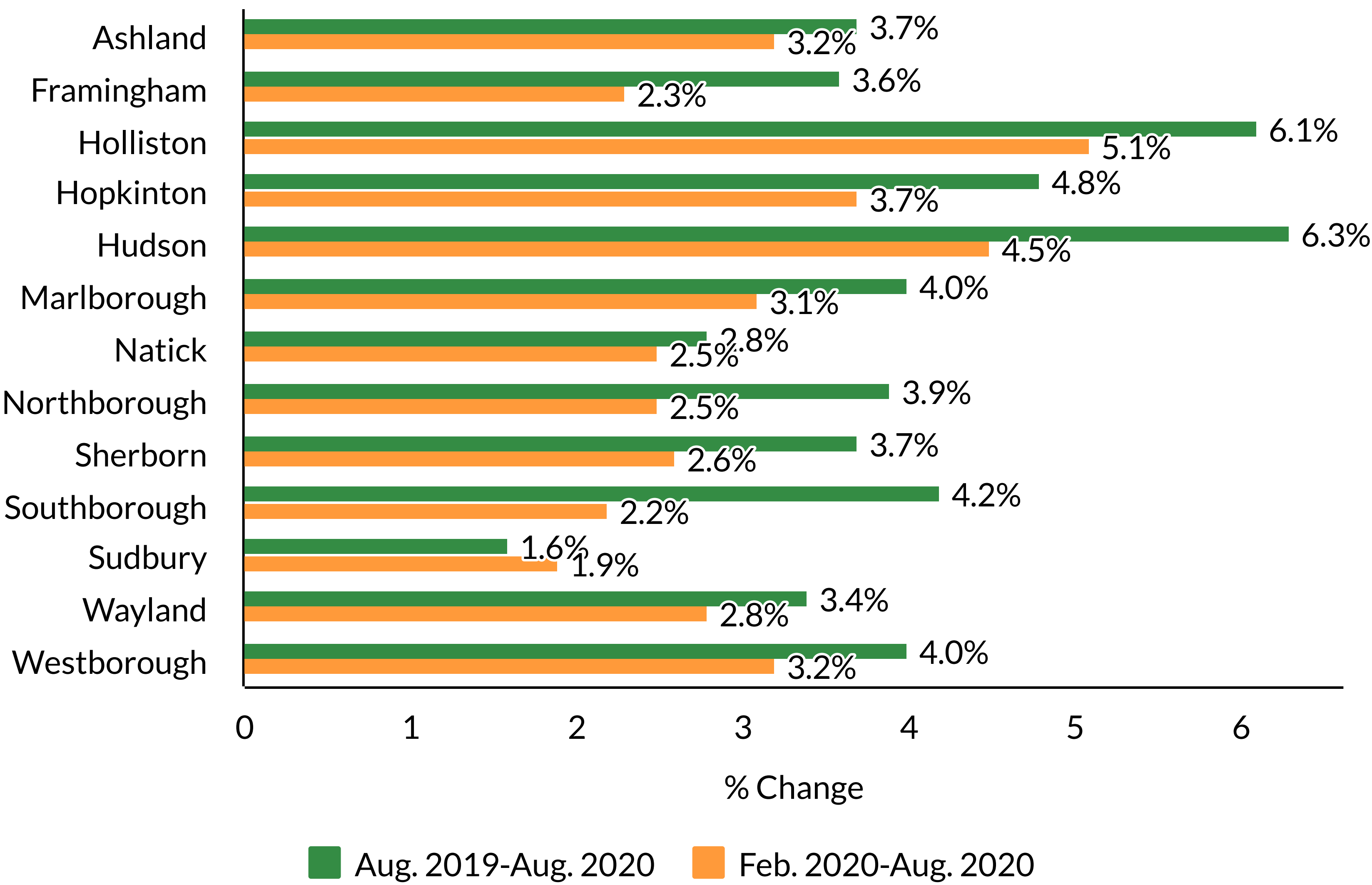
Hispanic/Latinos, African Americans, Multi-racial Households, Those with Children, and Those with Less than High School Educational Attainment

were most likely to have either experienced losses in employment income or expect to have loss over the next four weeks.



Source: U.S. Census Bureau Household Pulse Survey (2020). Boston-Cambridge-Newton-MA-NH Area. Employment Tables [Data File]. Retrieved from [https://www.census.gov/data/tables/2020/demo/hhp/hhp14.Week 14: \(9/2-9/14\).](https://www.census.gov/data/tables/2020/demo/hhp/hhp14.Week 14: (9/2-9/14).)
* Percent of Adults who Expect Someone in Their Household to have a loss in employment income in the next 4 weeks.

GMW HOME VALUE INDEX (SINGLE FAMILY & CONDO/COOP UNITS):
% Change by Community



GMW home values increased robustly in August 2020

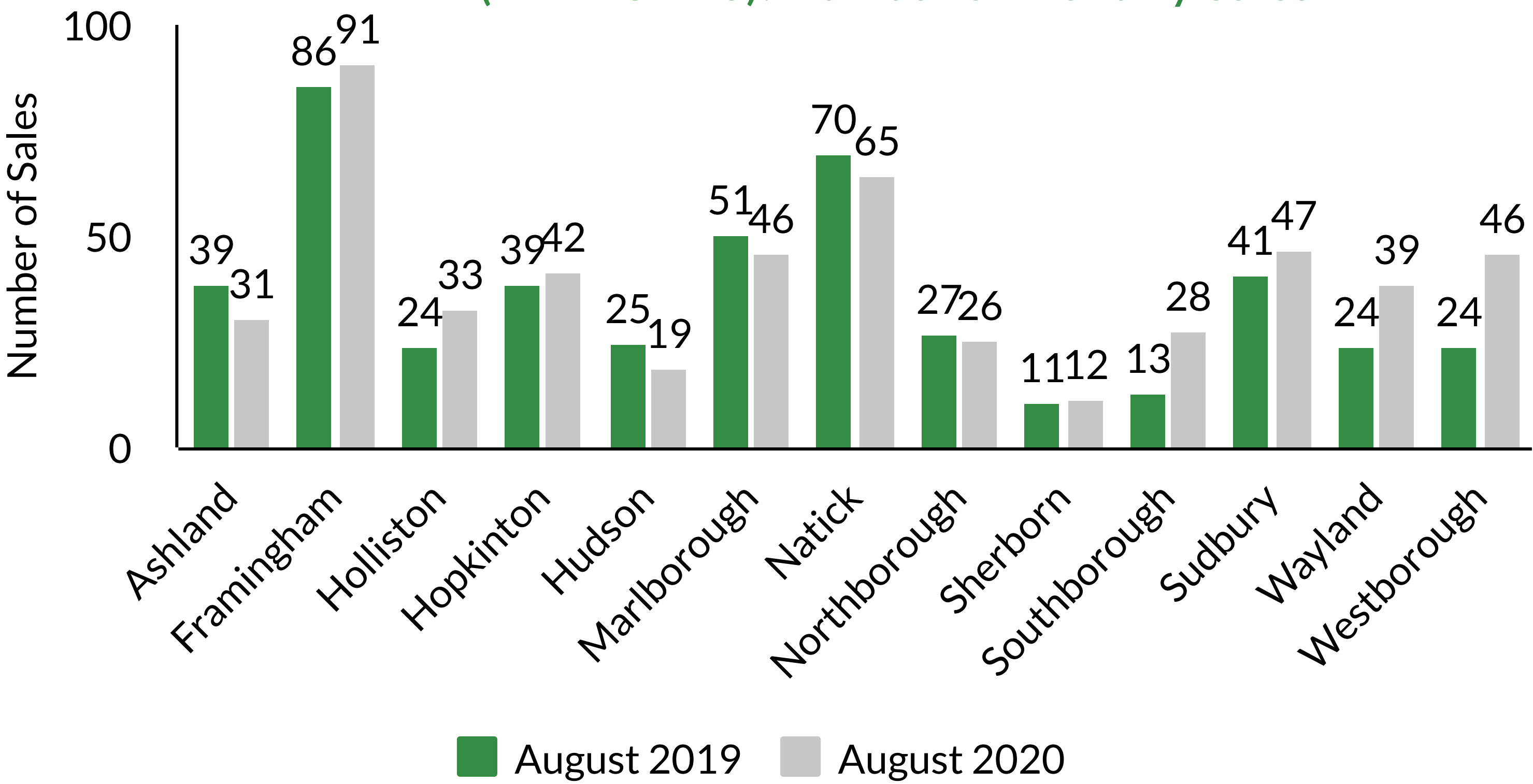
relative to both August 2019 and February 2020. The year on year increases for GMW communities ranged from about 1.6% in Sudbury to about 6.3% in Hudson.

The majority of the annual increase in value has occurred since the onset of COVID-19.

GMW overall single family and condo home sales were up by more than 10% in August 2020

relative to August 2019, with an approximate doubling in both Southborough and Westborough. Though not shown here, inventories have fallen sharply during the last year.

HOME SALES IN GMW COMMUNITIES (ALL HOMES): Number of Monthly Sales



12.0%

of adults in owner-occupied housing reported they were NOT caught up with last month's mortgage payment. This value for week 14 of the U.S. Census Pulse survey compares to 10.7% reported in week 4 for a similar question.

Some sectors of the population were especially affected in week 14: Non-Hispanic Blacks (23.8%), individuals in households with incomes less than \$100,000 (24.6%), and individuals in large (6 or more people) households (33.3%)

16.5%

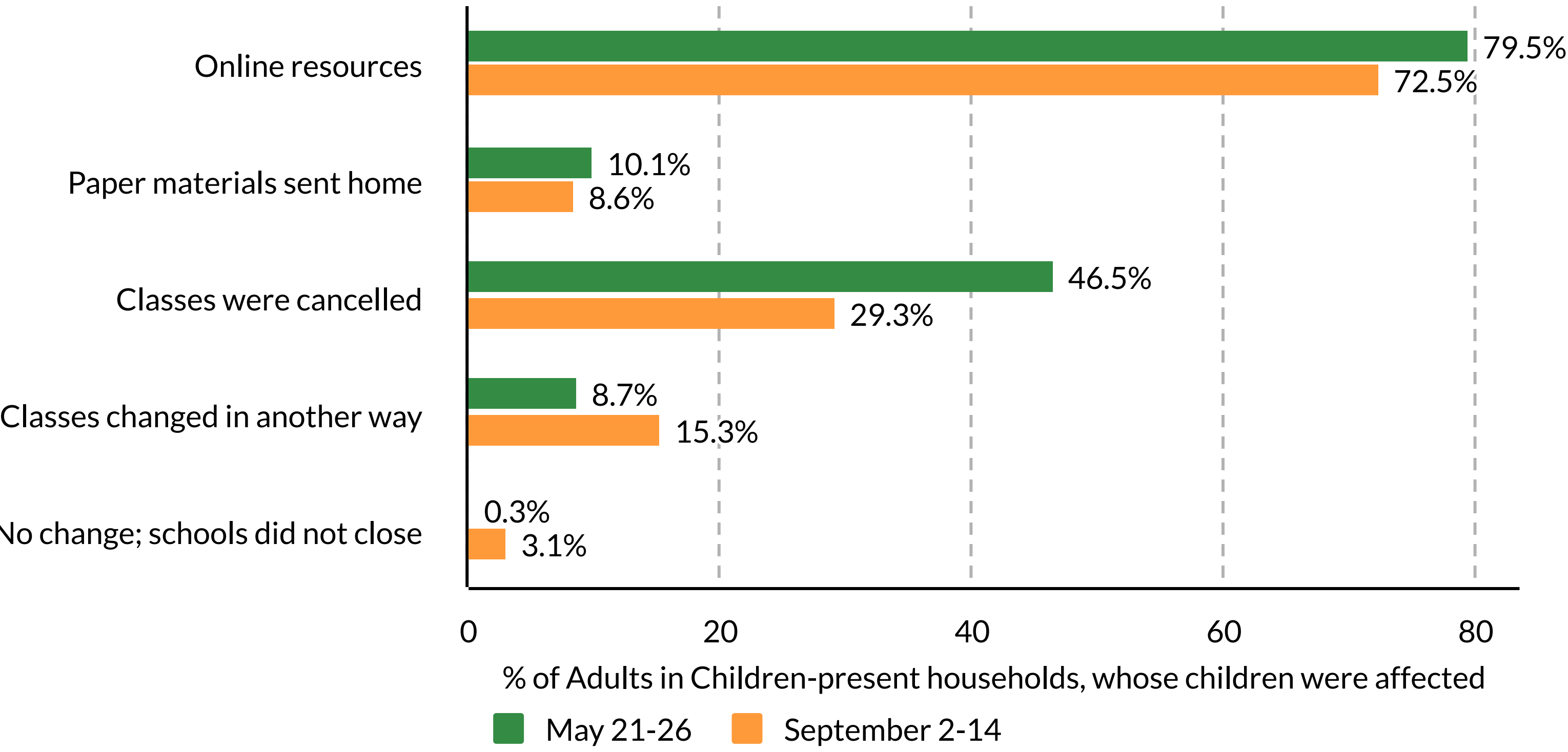
of adults in renter-occupied housing reported they were NOT caught up with last month's rent payment. This value for week 14 of the U.S. Census Pulse survey compares to 13.1% reported in week 4 for a similar question.

Some sectors of the population were especially affected in week 14: Non-Hispanic Blacks (28.6%), individuals in households with incomes between \$25,000 and \$50,000 (34.7%), and households with children under 18 years old (34.8%)



Sources: Zillow Research. (10/05/2020). Housing Data [Data file]. Retrieved from <https://www.zillow.com/research/data/>; The Warren Group, Town Stats. Retrieved 10/07/20; U.S. Census Bureau Household Pulse Survey (2020). Boston-Cambridge-Newton-MA-NH Area. Housing Tables [Data File]. Retrieved from <https://www.census.gov/data/tables/2020/demo/hhp/hhp14>. Week 14: (9/2-9/14).

IMPACT ON HOW CHILDREN RECEIVED EDUCATION
Boston-MSA: By Presence of Children under 18 Years Old



72.5%

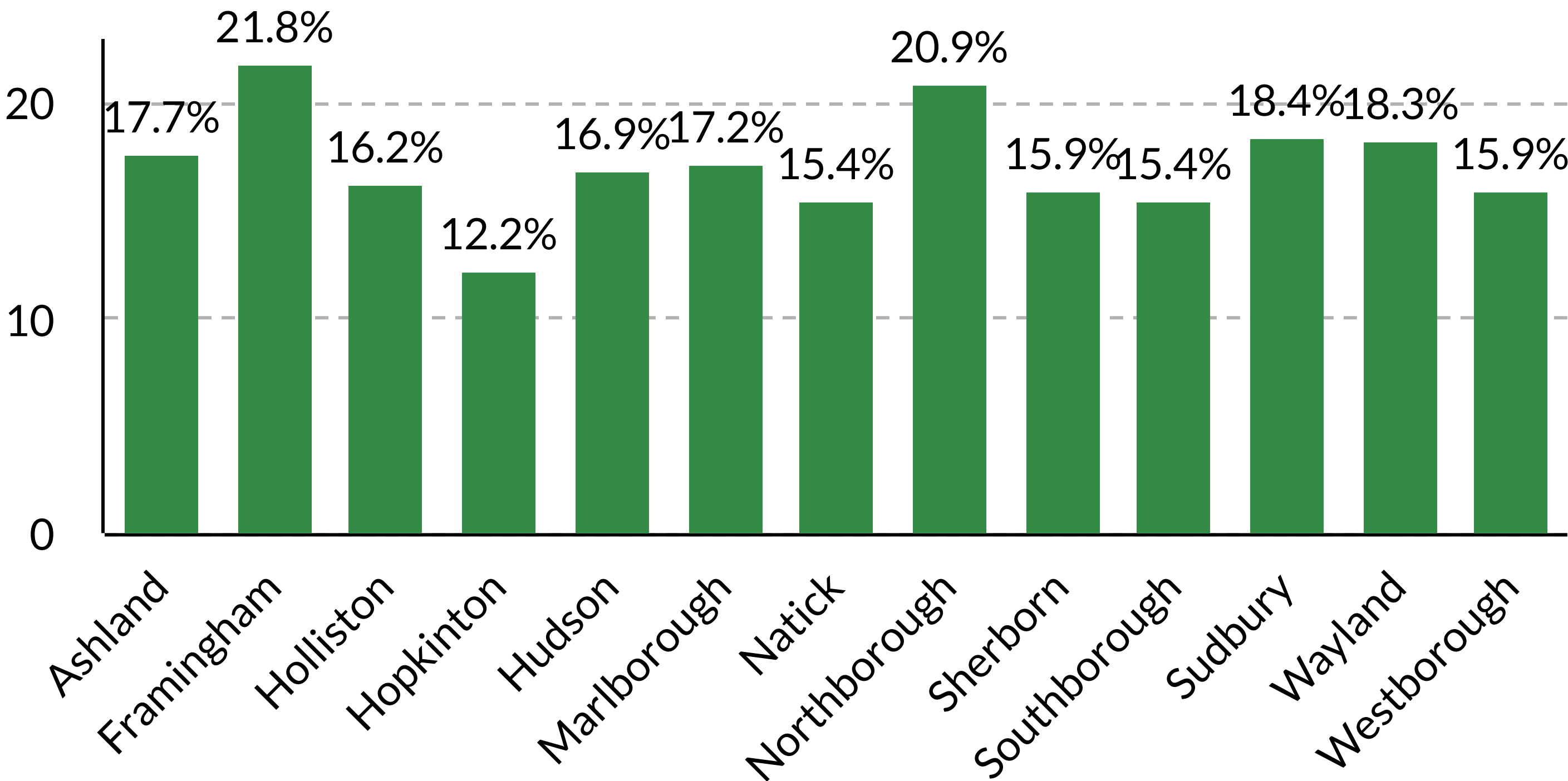
of adults in households with the presence of children enrolled in school, reported in September 2020 that children were receiving education through **Online Resources**

This represents a slight decrease relative to the end of May 2020.

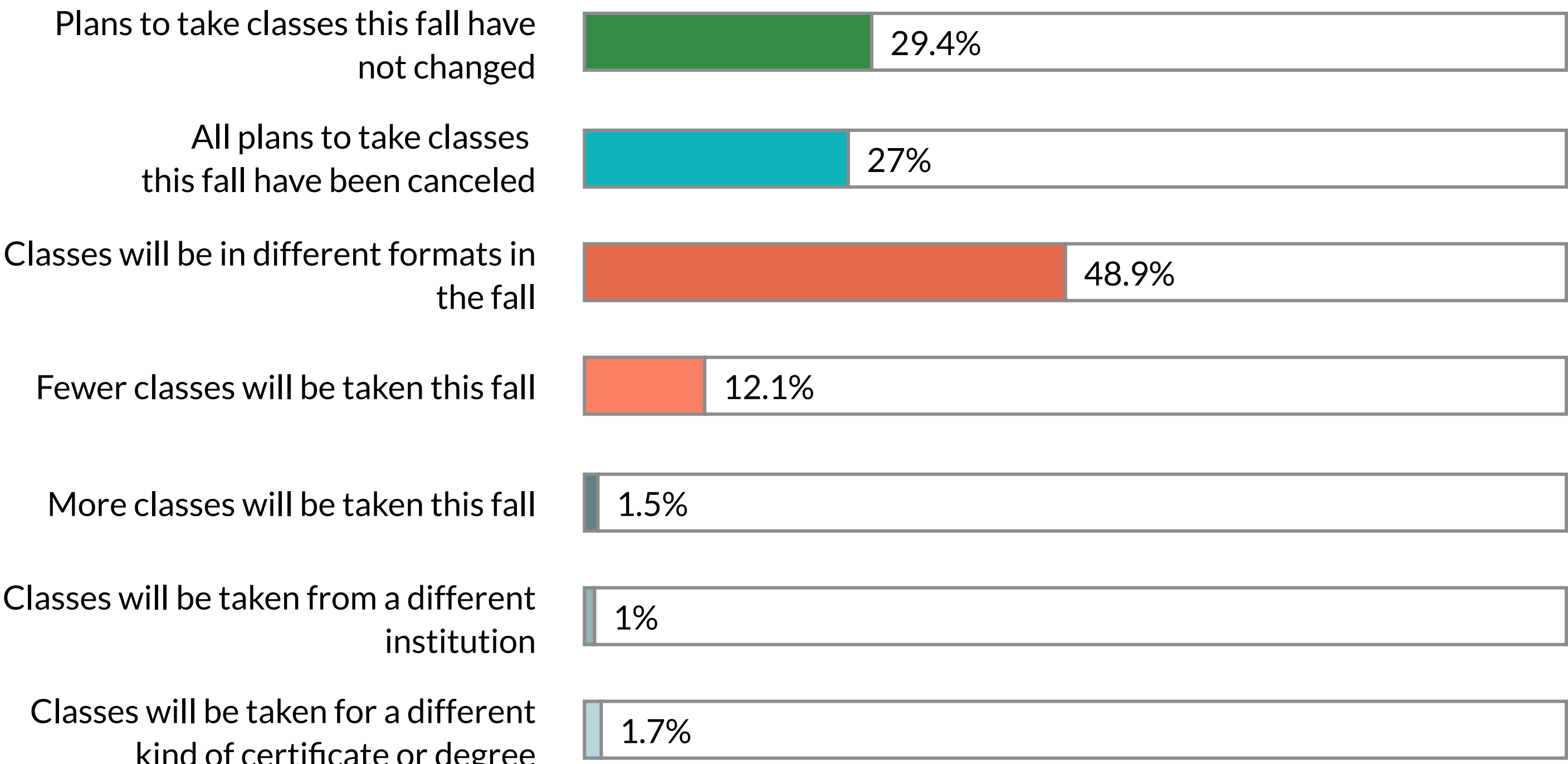
COVID-19 & STUDENTS WITH DISABILITIES

Special need students have been affected hard from the disruption of services provided by schools. Accommodation plans have been dramatically modified, limiting students' access to services necessary for their educational development.

STUDENT ENROLLMENT % OF STUDENTS WITH DISABILITIES:
By GMW Communities, Fall 2019



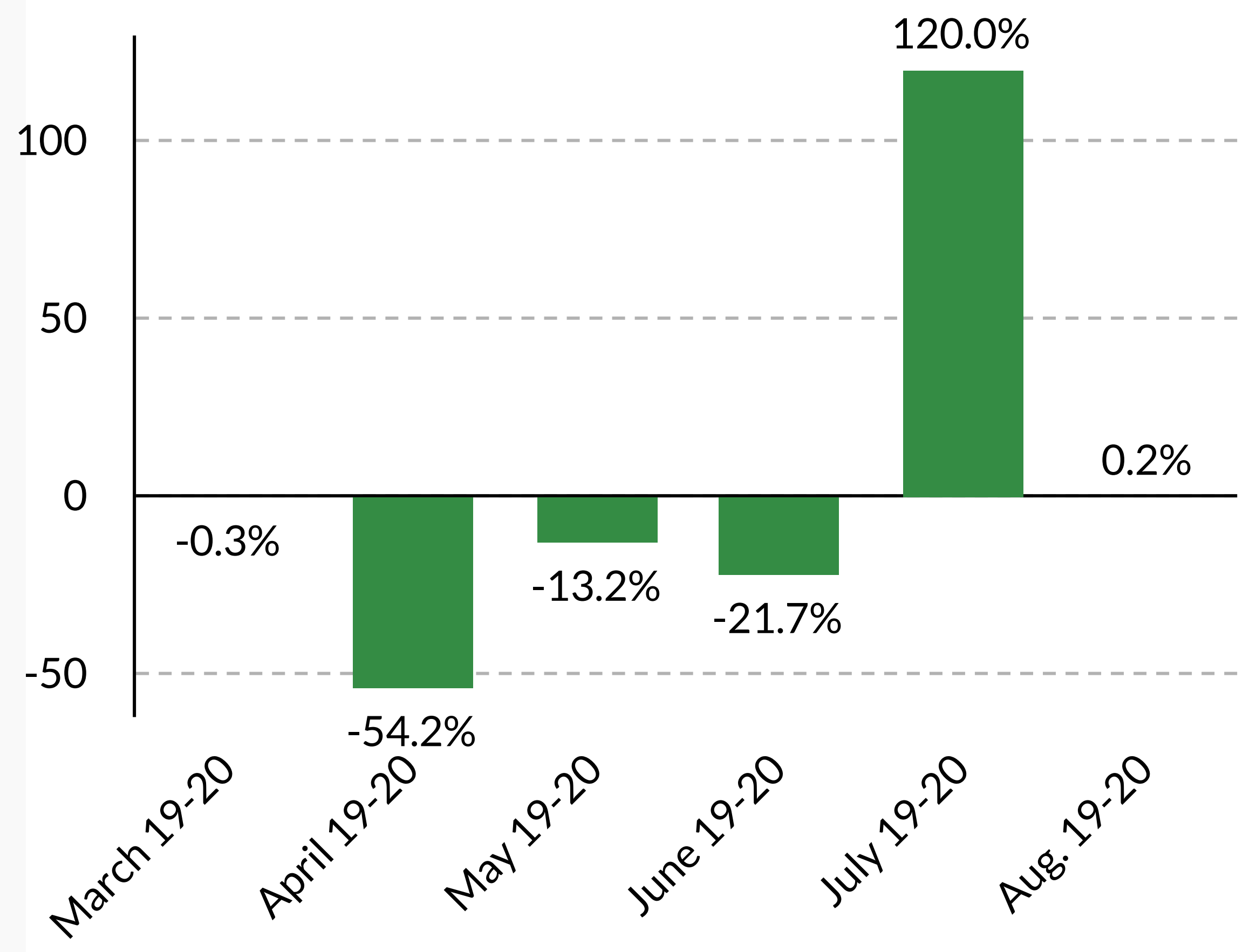
IMPACTS OF PANDEMIC ON POST-SECONDARY EDUCATIONAL PLANS*:
Boston-MSA (September 2-14)



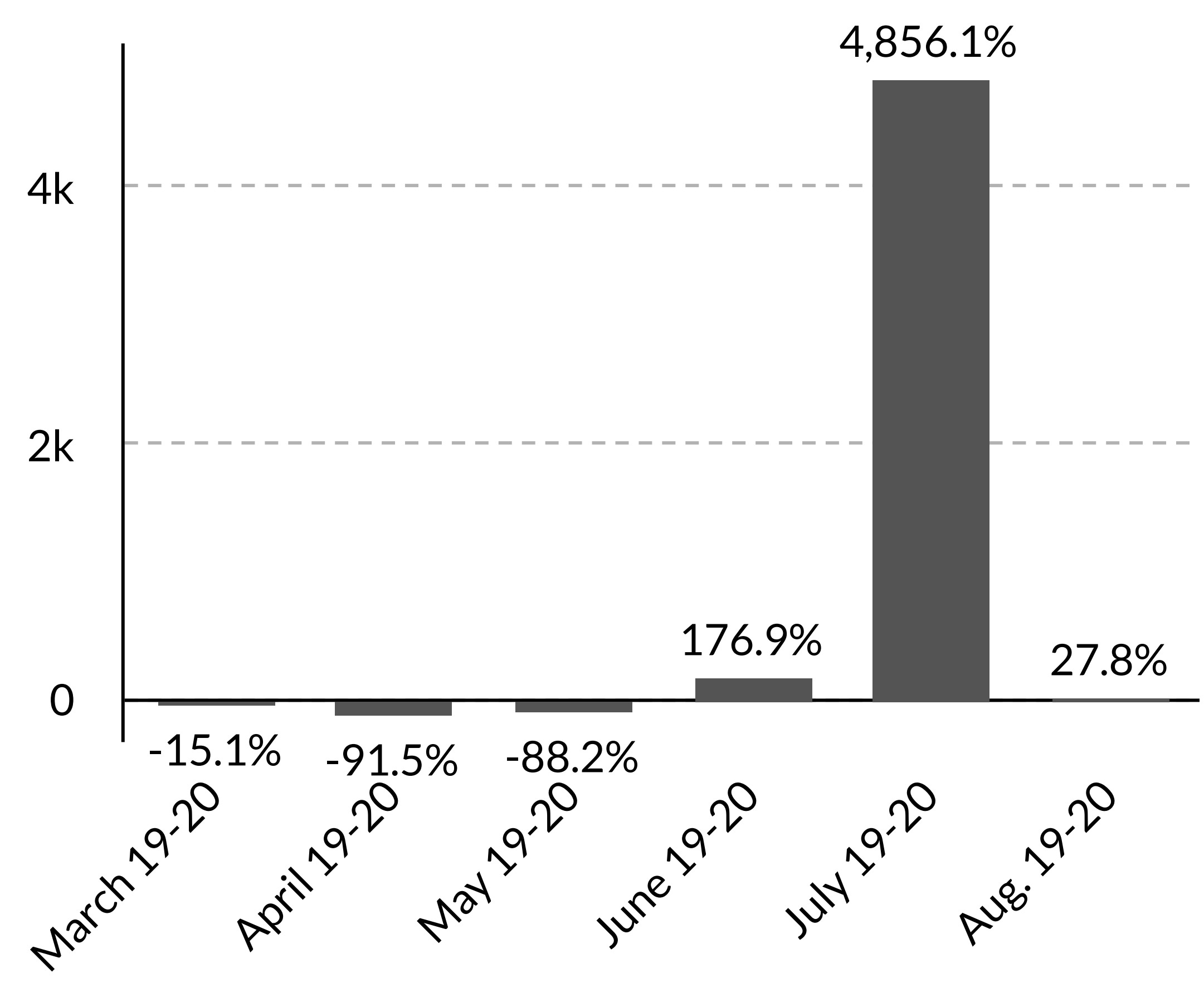
*Percentages based on responses by adults in households where at least one adult was planning on taking classes this fall from a post high school institution.

27% of adults reported someone in their household having **canceled their plans to take post-secondary classes** due to the pandemic. These disruptions have especially affected **Black (41.3%)** and **Hispanic/Latino (30.5%)** individuals.

% CHANGE IN MONTHLY MA TOTAL TAX REVENUE:
2019 vs. 2020



% CHANGE IN MONTHLY MA INCOME TAX RETURNS AND BILLS (FILINGS): 2019 vs. 2020



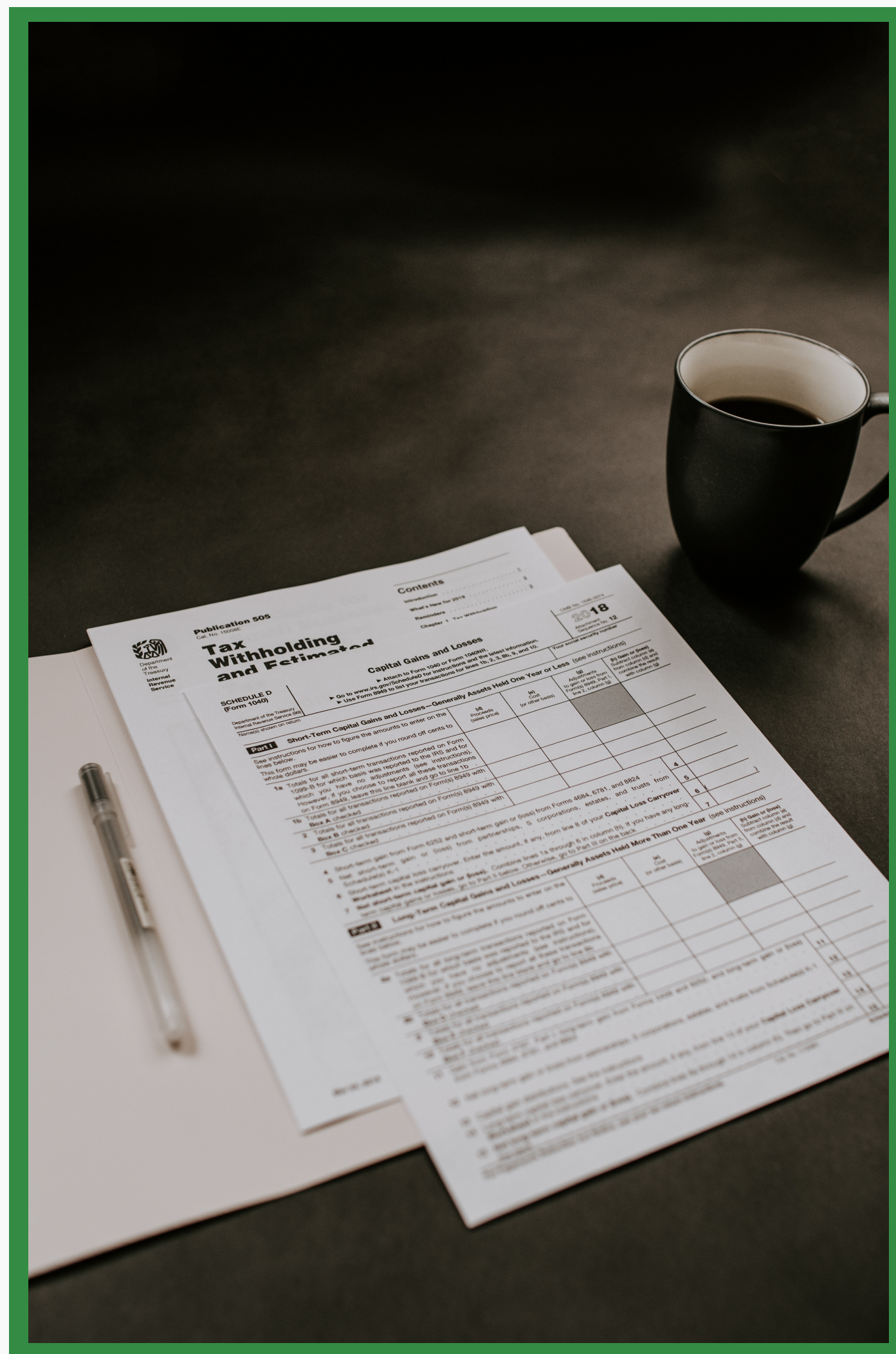
Overall Decrease in Annual State Tax Revenue

(ending August 31st)

2019 ▼ 2020

\$30.0 billion \$29.7 billion

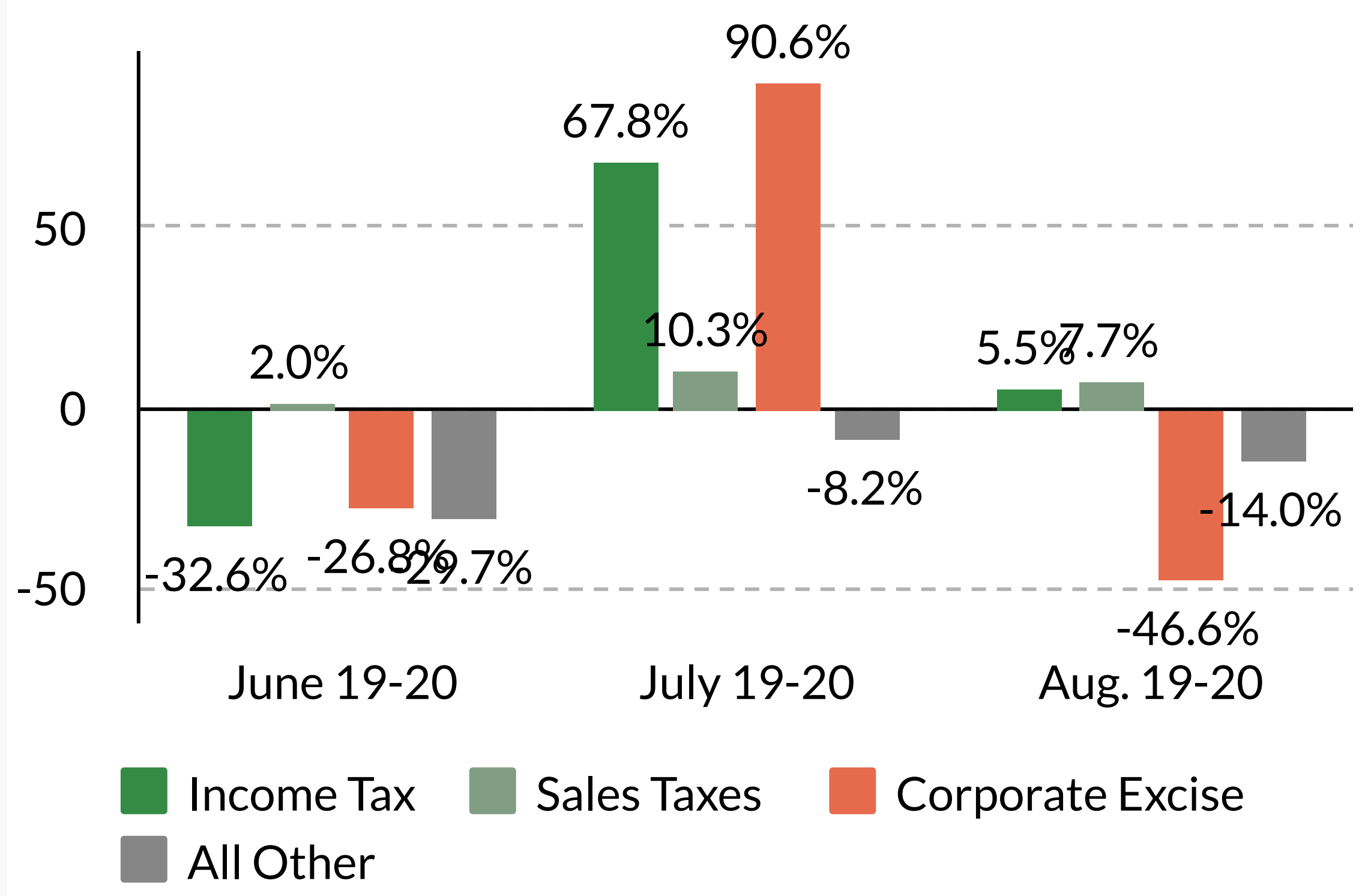
a **0.8% decrease** in total state tax revenue



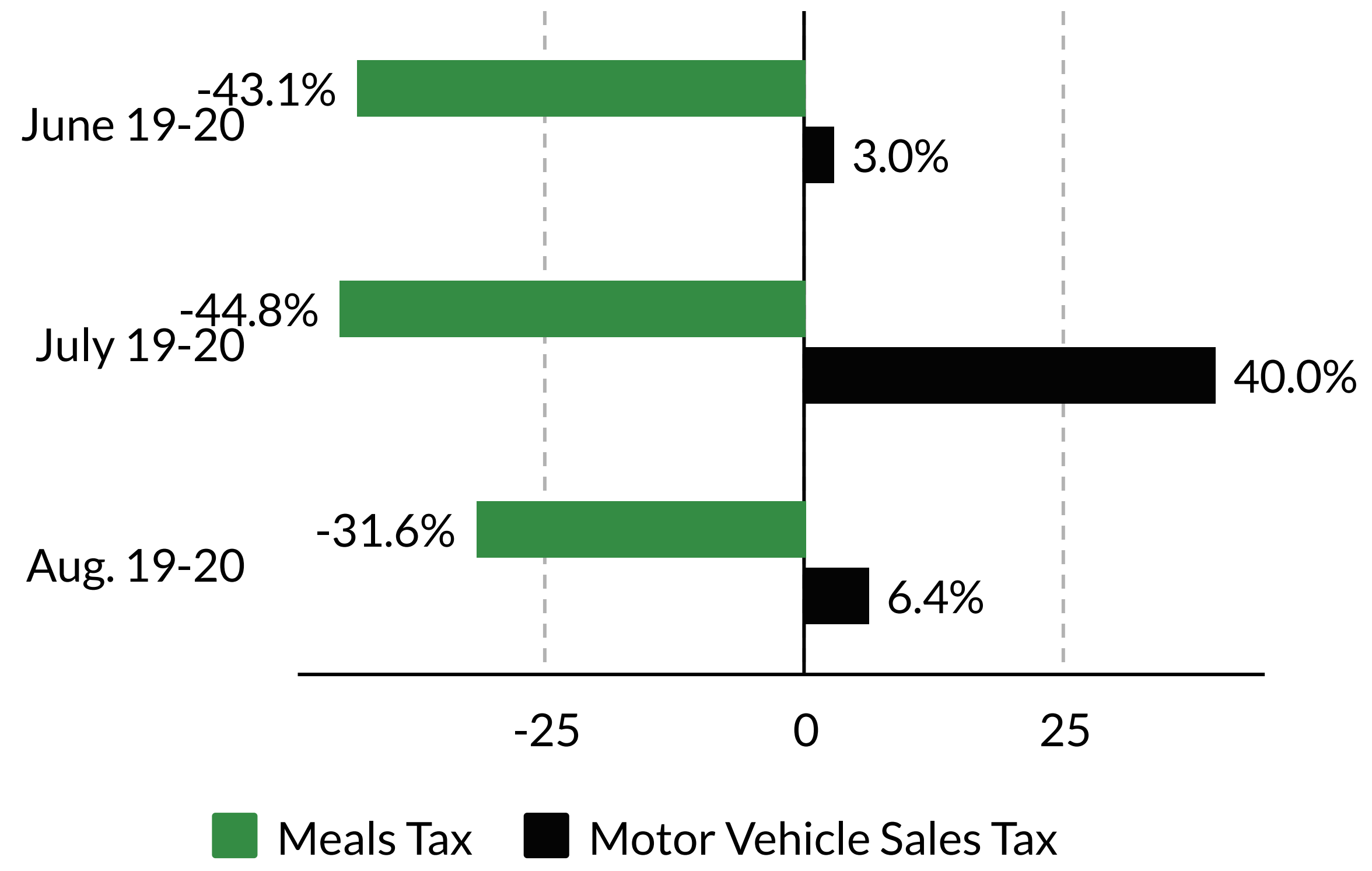
Monthly change in tax revenue was **substantial in July** and **flat in August**.
Income tax losses in April were recovered in July. The increase in July occurred as income tax returns filings originally due in April were deferred until July.
Changes in the tax revenue components varied with both increases and decreases over this 2020 three-month period compared to 2019:

- The % change in **corporate excise** taxes was negative in June and August.
- **Sales Tax Revenue** has consistently increased. However, most of this increase can be attributed to **Motor Vehicle Sales** taxes.

% CHANGE IN MONTHLY MA TAX REVENUE: By Components
2019 vs. 2020

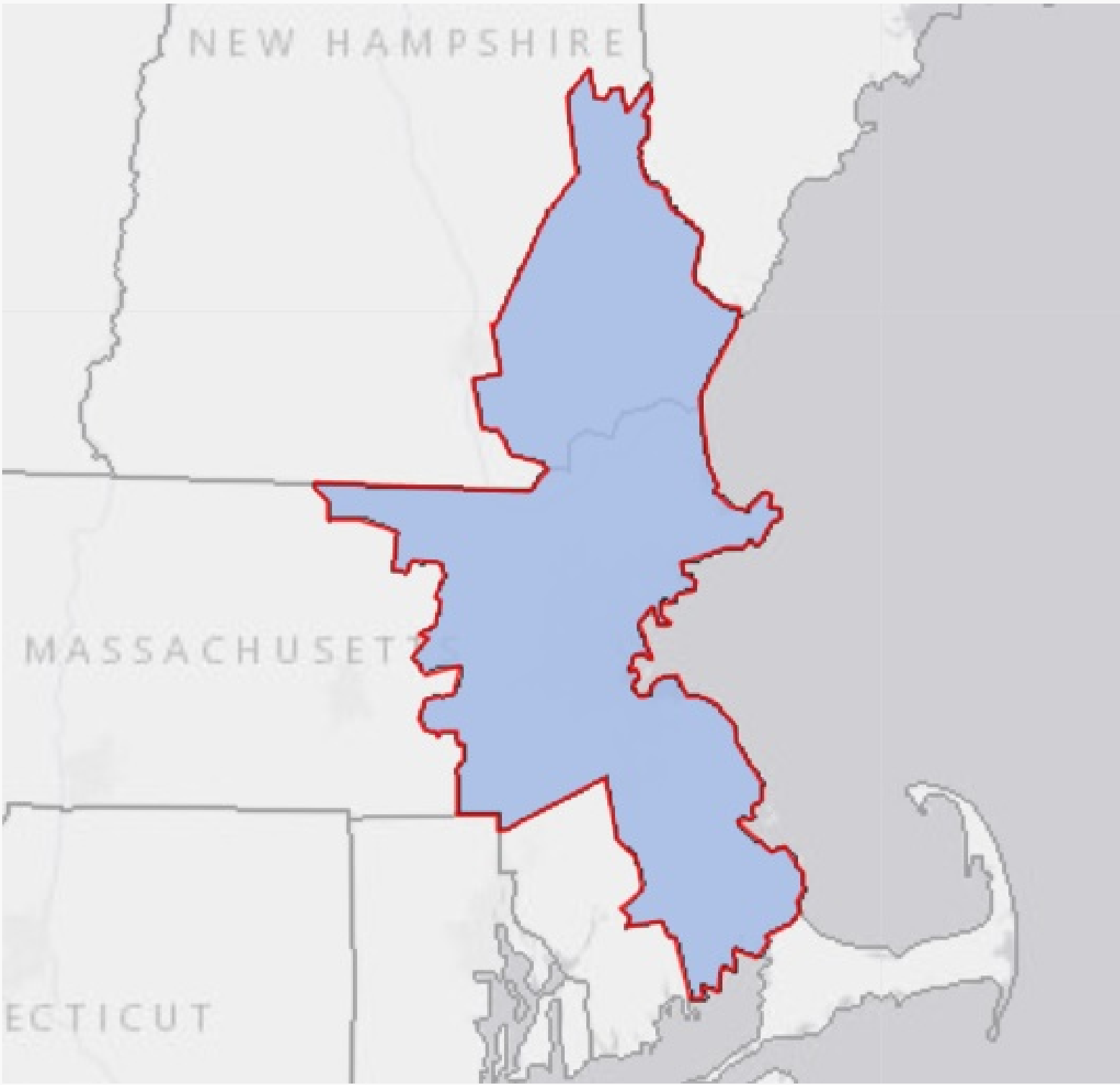


% CHANGE IN MONTHLY MEALS TAX AND MOTOR VEHICLE TAX REVENUE: 2019 vs. 2020



The Boston Metropolitan Statistical Area (MSA)

used throughout this publication for the purposes of the U.S. Census Household Pulse Survey is depicted on this map. It is made up of the following metropolitan divisions: Boston-Quincy, MA Metropolitan Division, Cambridge-Newton-Framingham, MA Metropolitan Division, Peabody, MA Metropolitan Division, Rockingham County-Strafford County, NH Metropolitan Division



Map Source: U.S. Census Bureau

There are several categories of unemployment rates. U-1 through U-6, not seasonally adjusted, are reported below for the U.S. period rates in August 2020. MERC uses the U-3 rate, which is the official unemployment rate.

Measures: U.S. August 2020

| | | |
|------------|--|--------------|
| U-1 | Persons unemployed 15 weeks or longer, as a percentage of the civilian labor force | 5.0% |
| U-2 | Job losers and persons who completed temporary jobs, as a percentage of the civilian labor force | 6.4% |
| U-3 | Total unemployed persons, as a percentage of the civilian labor force (the official unemployment rate) | 8.5% |
| U-4 | Total unemployed persons plus discouraged workers, as a percentage of the civilian labor force plus discourage workers | 8.8% |
| U-5 | (U-4) plus all other “marginal attached” workers, as a percentage of the civilian labor force plus all “marginally attached” workers | 9.7% |
| U-6 | Total unemployed persons, plus all “marginally attached” workers, plus all persons employed part time for economic reasons, as a percentage of the civilian labor force plus all “marginally attached” workers | 14.3% |

August 2020
UNEMPLOYMENT RATES
Not Seasonally Adjusted
(Preliminary Data)

| | |
|----------------------------|--------------|
| 495/MW | 8.8% |
| Blackstone Valley | 9.3% |
| Blackstone | 10.0% |
| Douglas | 8.7% |
| Grafton | 9.0% |
| Hopedale | 10.6% |
| Mendon | 9.8% |
| Millbury | 9.7% |
| Millville | 10.6% |
| Northbridge | 9.8% |
| Sutton | 8.1% |
| Upton | 8.6% |
| Uxbridge | 9.2% |
| Greater Franklin | 9.4% |
| Bellingham | 9.7% |
| Blackstone | 10.0% |
| Foxborough | 10.4% |
| Franklin | 9.4% |
| Medfield | 7.8% |
| Medway | 8.8% |
| Millis | 10.1% |
| Norfolk | 8.8% |
| Wrentham | 9.4% |
| Greater Marlborough | 9.2% |
| Hudson | 9.9% |
| Marlborough | 9.8% |
| Northborough | 8.8% |
| Westborough | 7.4% |
| MetroWest | 8.6% |
| Ashland | 8.8% |
| Framingham | 9.7% |
| Holliston | 8.3% |
| Hopkinton | 7.9% |
| Natick | 8.5% |
| Sherborn | 6.5% |
| Southborough | 8.0% |
| Sudbury | 6.9% |
| Wayland | 7.0% |
| South Shore | 12.4% |
| Abington | 11.2% |
| Braintree | 11.5% |
| Cohasset | 7.5% |
| Hanover | 9.9% |
| Hingham | 7.6% |
| Milton | 9.8% |
| Norwell | 8.7% |
| Quincy | 14.5% |
| Randolph | 16.1% |
| Rockland | 11.9% |
| Weymouth | 11.8% |
| MA | 11.2% |
| US | 8.5% |