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The Effects of the Novel Coronavirus Pandemic on Service Workers in New England

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The views expressed in this paper are those of the authors and do not necessarily represent those of the Federal Reserve Bank of Boston or the Federal Reserve System.

Abstract

As New England states scramble to adapt to the spread of the COVID-19, it is becoming increasingly clear that both the health and economic implications will affect certain industries and demographic groups disproportionately. Service workers in particular are at high risk of either job loss or being called upon to work under very difficult and sometimes risky conditions. Massive numbers of service workers are being laid off as restaurants and stores scale down and close. The loss of income for these workers and their families can be devastating. At the same time, service workers in jobs categorized as essential are asked to come to work and face possible exposure. This brief analyzes data from the American Community Survey to describe which New England service workers will be most impacted by the effects of the coronavirus: those working in food service, cleaning and building maintenance, retail and hospitality, and warehouse jobs. We find that about one in five New England workers has one of these jobs. Workers in these occupations are more likely to be Hispanic, and they experience poverty at higher rates than New England workers generally. Within these jobs, women and people of color earn significantly less than their non-Hispanic white counterparts. In other words, the challenges posed by the pandemic exacerbate existing and long-standing inequalities. Policy responses should support this population in order to promote equitable recovery.

Key Findings

- Due to the coronavirus pandemic, service workers in New England are at high risk of either job loss or being called upon to work under very difficult and sometimes risky conditions. Massive numbers of service workers are being laid off as restaurants and stores scale down and close. At the same time, service workers in jobs categorized as essential are asked to come to work and face possible exposure.
- In 2018, it is estimated that there were close to 2 million service workers in food service, cleaning and building maintenance, retail and hospitality, and warehouse work in New England, together representing about one in five workers across the region.
- Workers in these jobs disproportionately live in low-income families (36 percent), and 15 percent live in households that were receiving food assistance (SNAP) in 2018.
- Hispanic workers are overrepresented, particularly in the food service and cleaning and building maintenance categories. And within occupation groups, non-Hispanic black workers and female workers earn significantly less than do non-Hispanic whites.
- The pandemic has the potential to exacerbate existing inequalities. Current policy responses, in particular the Families First Coronavirus Response Act (March 18, 2020) and Coronavirus Aid, Relief, and Economic Security (CARES) Acts (March 27, 2020), may mitigate some of these effects, but more is needed to enable equitable recovery from this crisis.

Introduction

As New England states scramble to adapt to the spread of the novel coronavirus SARS-CoV2 and the illness it causes, COVID-19, it is increasingly clear that both the health and economic implications will affect certain industries and demographic groups disproportionately. Over the past several weeks, institutions, cities, and states have instituted increasingly strict social distancing policies. Schools and universities have shut down or limited on-campus access. On March 23, the governor of Massachusetts issued a stay-at-home advisory and closed all nonessential businesses. Restaurants in Massachusetts are closed for in-house dining. On March 25, Vermont followed suit, as did New Hampshire on March 27 and Rhode Island on March 28. New Englanders who can are working from home and stocking up on groceries as they plan for several more weeks of social distancing or, increasingly, quarantine.

Healthcare workers are at the frontlines of this situation, preparing for rapid and dramatic increases in patient loads while facing shortages of necessary equipment. Although they are the primary service workforce impacted by the pandemic, and are in closest contact with the infected, they are not the only service workers implicated. Non-healthcare service workers in food service, retail and building maintenance also face sudden and profound effects. Building off of recent research by the Brookings Institution, we provide details on this workforce for the New England region.¹ The effort to stock up on food, cleaning supplies, and other necessities has resulted in unprecedented demand at grocery stores. These stores require intense staffing to keep up with sanitizing, disinfection, and restocking products as they sell out.² Grocery stores are also offering delivery services—especially valuable for people with health vulnerabilities—which puts additional pressure on staff. Online retailers require additional warehouse and delivery staff to meet this demand.³ Firms in these industries are increasing their workforces.⁴

At the same time, service industries that are not supplying essential household needs—such as restaurants providing dining on premises, day care centers, building maintenance, and hospitality—are witnessing rapid and dramatic reductions in business. Many establishments have had to lay workers off with very little notice. Unemployment claims have already spiked, particularly in leisure and hospitality industries, and are expected to continue to rise rapidly.⁵ In the week ending March 22, more than 3 million people filed claims for unemployment insurance. This number is over five times the highest number of claims filed in one week since claims have been tracked, and over fifteen times the number of weekly claims filed just a month ago.⁶

Macroeconomist Gabriel Mathy suggests that unlike most previous recessions this downtown is driven by the loss of everyday consumer spending in the service industries, resulting in sudden and dramatic job loss.⁷ Mathy calls this a “service recession.” The service recession will require a new set of tools designed to maintain steady income flow for service workers—who historically have had little security in terms of access to decent wages, health insurance and paid leave—while also protecting their health. In other words, mitigating the effects of a service recession requires targeted

solutions that acknowledge the importance of this particular workforce to the overall health of the economy and provide them with the buffer needed to ride out this crisis.

This brief analyzes data from the American Community Survey to describe New England service workers whose jobs will be most impacted by the effects of the coronavirus: those working in food service, cleaning and building maintenance, retail and hospitality, and warehouse jobs.⁸ Service jobs have historically been low-wage jobs with little job security and few benefits.⁹ Workers in the industries covered in this brief tend to be among the lowest-paid, least likely to have benefits, less likely to have health insurance, and, for the lowest-paying, least secure jobs, they are disproportionately people of color.¹⁰ This landscape is the result of a confluence of policies past and present that have systematically denied certain groups opportunities for economic mobility through education and career and wealth building—most obviously, people of color—while providing these opportunities to other groups, especially non-Hispanic whites.¹¹

During the pandemic, these service workers are facing challenges that exacerbate existing and long-standing inequalities of race-ethnicity, gender, age, socioeconomic status, and family structure. While workers in nonessential businesses face layoffs, workers in essential businesses (which include shipping, media, warehouses, grocery and food production, pharmacies, healthcare provision, utilities, banks and financial institutions, and other industries critical to the supply chain¹²) may be required to work in potentially hazardous conditions, putting themselves and their families at greater risk of infection due to public exposure.¹³

One in five employed New Englanders works in one of these impacted service occupations.¹⁴ Among retail workers, 33 percent (authors' calculation) work for businesses considered essential.¹⁵ Walmart recently announced 150,000 open temporary positions, which may or may not turn into permanent posts.¹⁶ While opportunities such as this may help some of the service workers being laid off to stave off immediate financial peril, they provide little economic security, may not offer health insurance or paid leave, and, as noted above, put workers at risk. The fact that these workers, who are already in financially unstable positions, are the most likely to suffer either job loss or dangerous, low-wage, unbefitted, and insecure work is of great concern.¹⁷

Following the Great Recession, the United States has seen a decade of steady economic growth. However, research has shown that even more than five years later, all the benefits of the recovery went to the top of the income spectrum.¹⁸ Even nine years later, low-wage workers saw no wage growth, and they continue to live with financial uncertainty throughout to the present crisis.¹⁹ Over the past weeks, the nation has shown signs of entering a sudden and dramatic recession, one that is predicted to surpass the Great Recession in size and scope.²⁰ It cannot be emphasized strongly enough that in contemplating policy solutions to bring New England through this crisis, the vulnerable low-wage service-worker population must be given special attention.

The Service Workforce in New England

In 2018 (the most recent year for which data are available) there were close to 2 million workers in New England in food service, cleaning and building maintenance, retail and hospitality, and warehouse and related jobs. As noted above, these workers account for close to one in five New England workers (Table 1; for a detailed list of occupations, see Appendix A). About 40 percent of these workers are in Massachusetts, where four of nine employed New Englanders work. In every New England state, the share of workers in these occupations living in low-income families is much larger than the share of workers overall: about one in five workers in New England is in a family with income below 200 percent of the federal poverty line, but over one-third (35 percent) of workers in these service occupations is in a low-income family. Less than half (46 percent) of this workforce works full-time. The lack of full-time hours most likely contributes to low incomes. And, notably, 15 percent of New England workers in these occupations already rely on the Supplemental Nutrition Assistance Program (SNAP) to make ends meet (19 percent in Rhode Island, which has a higher rate of SNAP receipt overall).

Across New England, Hispanic workers are represented at much higher rates in these service occupations than in the economy overall (15 percent in these occupations versus 9 percent overall). This pattern is driven primarily by the high share of Hispanic workers in service jobs in Connecticut (23 percent of service workers in Connecticut are Hispanic). The bulk of Hispanic service workers hold food service and cleaning and building maintenance jobs (32 percent and 31 percent, respectively; authors' calculation). Hispanic workers in the Northeast are less likely than non-Hispanic workers in all racial groups to have health insurance or paid sick leave,²¹ and therefore would face increased hardship if a family member falls ill with COVID-19. (Note: the recently passed Families First Coronavirus Response Act expands paid leave to many workers, but only if their employer has fewer than 500 employees—a stipulation that exempts many of the employers of these workers.²²)

Non-Hispanic blacks are not overrepresented in these occupations,²³ but they experience disadvantage within the occupations and may face more severe impacts than non-Hispanic whites. Among service workers in New England, non-Hispanic white workers earn higher incomes than members of all other race/ethnicity groups. Annual income differences are particularly dramatic within the retail sector, where non-Hispanic white workers earn on average over \$27,000/year, while non-Hispanic black retail workers earn an average of almost \$10,000 less at just \$17,770 yearly. Similarly, in this sample of service workers, while the share of *all* workers receiving SNAP is 9 percent, over a quarter of non-Hispanic black (27 percent) and Hispanic (28 percent) workers rely on SNAP benefits, suggesting black and Hispanic workers in these service occupations face lower wages and greater insecurity. This finding is supported by a wealth of research showing that within occupation groups, people of color are more often represented in low-wage jobs as a result of structural barriers to opportunity and discrimination.²⁴

Women also face disproportionately low wages in these service jobs: men's average annual income is over \$25,000, whereas for women that figure is only \$15,000. The difference in full-time work likely contributes to much of this discrepancy (60 percent of the men in this workforce work full-time, whereas only 39 percent of women do); the greater percentage of women in part-time work may reflect women's greater likelihood to have responsibilities for the care of a child,²⁵ as 59 percent of the women in this workforce have a child under the age of five at home, while only 41 percent of the men do.

It is worth noting that service workers are not evenly distributed throughout the New England states, and their locations reflect larger differences between the southern and northern states in this region. A large share of New England's service workers live and work in cities (Table 2), primarily in cities in Massachusetts, Connecticut, and Rhode Island. In Massachusetts, about one in six service workers lives in Boston, Cambridge, Lowell, Springfield, or Worcester. Service workers in cities are much more likely to earn low incomes: in eight of New England's 11 major cities, at least half of service workers live in low-income families (income levels below 200 percent of the federal poverty level). Service workers living in cities also receive SNAP benefits for their families at much higher rates than they do in the New England states as a whole. For instance, one-third of service workers (33 percent) in Springfield, MA, receive SNAP, and in Bridgeport, CT, over a quarter (27 percent) receive SNAP. Furthermore, Hispanic workers are concentrated in cities, particularly in Connecticut. In Bridgeport and Hartford, around half of all service workers are Hispanic.

Protecting Service Workers

As schools and businesses close, service workers across New England face impossible dilemmas. Working from home is rarely an option due to the nature of these jobs. Parents make up 29 percent of this workforce across the region, and these parents face the additional challenge of arranging and paying for child care because schools and day cares are now closed. Although many school districts are making packaged meals available for pickup, the times can conflict with the schedules of parents working in essential-services jobs, and families outside the city might face an additional transportation hurdle. As a result, financially stretched families may find themselves having to spend more on food.

Policy targeted at supporting service workers and service industries is critical for two important reasons. First, if this recession is, in fact, a "service recession," then creating a resilient service industry is essential to turning the recession around. Second, workers in service industries disproportionately come from historically disadvantaged populations whose vulnerability is a product of inequitable policies and practices. By acknowledging past and present barriers, targeted policy can promote equitable recovery.

Current policy solutions address some of the disadvantages that service workers face right now. Most notably, the Families First Coronavirus Response Act puts some measures in place to protect vulnerable workers. First, as noted earlier, it requires

companies that employ up to 500 people to provide 10 days of paid sick leave to workers. Larger firms tend to offer more robust employee benefits, yet 11 percent of workers in large firms still do not have paid sick leave available to them.²⁶ Additionally, workers who are classified as independent contractors are not covered by the law's provisions, which means many delivery workers are not covered, as many delivery workers are independent contractors.²⁷ Furthermore, although 10 paid days will cover the mandated quarantine period for those who have been exposed to the virus, it might not cover the full period of time for recovery, given the severity of symptoms that some experience.²⁸

Second, under the Families First Coronavirus Response Act, workers caring for children due to school closures may be eligible for 12 weeks of paid leave at two-thirds their normal pay rate in order to provide care for their children.²⁹ Third, funds are being provided to states to expand unemployment insurance eligibility and benefits. At the state level, Massachusetts opened several emergency childcare centers for drop-in care for the children of essential workers.³⁰ Finally, the federal stimulus bill currently under debate (the Keeping American Workers Paid and Employed Act)³¹ includes mechanisms to expand lending to small businesses in the hope that they might stay afloat through this crisis period.

Conclusion

While the recent relief packages will take some of the immediate strain off of service workers in New England, they do not address the longstanding labor market structures that have resulted in disparate employment outcomes. More importantly, they may not provide enough support to meet the immediate needs of these workers in the face of what could be six weeks or longer of school closure, job loss, and/or potential exposure to the virus at work. Protecting the financial stability and health of this particular population of service workers is necessary to prevent further job loss and possible consequences including working while sick and spreading the virus, as well as, taking on debt, which could have larger impacts on the nation's economy and healthcare systems. Solutions that support businesses in order to keep workers on payroll and that attempt to spark consumer spending in service industries may fail while social distancing remains a priority. As New England progresses through this crisis, it is critical that federal, state, and local policy focus on supporting the health and financial stability of service workers by continuing and further developing the benefits provided in sections of the CARES act including Unemployment Insurance expansion,³² small business support that requires workers to be kept on payroll even when demand for services is low,³³ and strict enforcement of workplace health and safety guidance, in order to facilitate full and equitable recovery for us all.

About the Authors

The Regional & Community Outreach Department at the Federal Reserve Bank of Boston aims to strengthen the prospects of smaller cities, promote household financial stability, and expand employment opportunities for low- and moderate-income residents in the region. The authors are part of the Community Development Research and Communications arm of the Regional & Community Outreach department.



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**Table 1. Service Workers and Their Characteristics
in the New England Region and States**

Region/State	Occupation Group	Number of Workers	% in families <200% pov level	% full time (35+ hours)	% w/Children	% Age 60+	% NH Black	% Hispanic	% Female	% with SNAP	% Metro
New England	Food Service Workers	545,758	39.79%	39.32%	25.09%	6.75%	6.07%	15.56%	54.10%	15.95%	84.73%
	Cleaning & Building Maintenance Workers	370,587	37.72%	54.56%	36.52%	16.38%	7.45%	22.42%	37.07%	17.12%	82.67%
	Retail Workers	621,011	30.45%	46.26%	29.19%	14.00%	6.60%	10.78%	56.58%	13.78%	84.22%
	Other Hospitality & Recreation Workers	80,836	36.27%	38.54%	18.99%	13.20%	7.30%	8.03%	53.05%	7.89%	84.81%
	Warehouse Workers	144,666	33.59%	50.31%	26.67%	12.14%	10.35%	17.86%	37.40%	19.20%	85.85%
	Total	1,762,858	35.44%	45.78%	28.76%	12.05%	6.96%	15.18%	49.98%	15.35%	84.21%
	<i>Total New England Workers</i>	9,311,538	19.87%	66.02%	37.49%	16.41%	5.93%	9.26%	49.36%	8.77%	85.21%
Connecticut	Food Service Workers	116,479	38.01%	38.83%	27.71%	6.99%	9.80%	23.19%	53.50%	17.70%	95.09%
	Cleaning & Building Maintenance Workers	93,951	37.72%	55.99%	38.72%	15.02%	11.21%	34.69%	35.77%	17.14%	94.18%
	Retail Workers	144,415	28.80%	45.87%	30.52%	13.61%	11.38%	17.77%	56.73%	15.46%	94.18%
	Other Hospitality & Recreation Workers	20,764	32.29%	41.02%	23.26%	10.66%	11.94%	12.12%	50.57%	8.01%	96.15%
	Warehouse Workers	36,152	33.15%	50.46%	26.70%	9.47%	17.71%	24.27%	35.64%	22.59%	95.89%
	Total	411,761	34.07%	46.30%	30.87%	11.53%	11.49%	23.47%	48.85%	16.73%	94.95%
	<i>Total Connecticut Workers</i>	2,208,482	18.59%	66.40%	38.98%	16.56%	9.56%	13.75%	49.08%	9.16%	94.66%
Maine	Food Service Workers	51,998	46.50%	35.71%	21.26%	7.94%	1.13%	2.84%	56.07%	18.07%	63.91%
	Cleaning & Building Maintenance Workers	38,368	44.39%	44.80%	28.78%	20.06%	2.38%	1.59%	43.23%	20.46%	56.95%
	Retail Workers	62,274	34.37%	51.84%	30.10%	17.02%	8.30%	1.78%	56.07%	14.93%	63.51%
	Other Hospitality & Recreation Workers	7,013	42.65%	33.78%	20.03%	16.30%	1.98%	2.62%	57.85%	11.11%	68.12%
	Warehouse Workers	14,545	32.08%	46.78%	25.25%	19.06%	2.21%	1.04%	42.00%	11.25%	64.86%
	Total	174,198	40.35%	44.20%	26.24%	14.76%	1.43%	2.04%	52.12%	16.64%	62.47%
	<i>Total Maine Workers</i>	835,191	25.06%	64.40%	34.52%	19.00%	1.03%	1.55%	49.06%	10.25%	60.84%

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Region/State	Occupation Group	Number of Workers	% in families <200% pov level	% full time (35+ hours)	% w/Children	% Age 60+	% NH Black	% Hispanic	% Female	% with SNAP	% Metro
Massachusetts	Food Service Workers	256,437	38.81%	40.28%	26.32%	6.81%	6.87%	18.27%	53.40%	15.36%	95.52%
	Cleaning & Building Maintenance Workers	159,622	35.85%	56.21%	39.43%	15.64%	8.09%	24.85%	36.47%	15.95%	95.42%
	Retail Workers	273,094	30.40%	44.20%	28.85%	12.99%	7.76%	11.15%	56.35%	13.72%	95.87%
	Other Hospitality & Recreation Workers	36,109	34.07%	37.12%	16.85%	12.78%	7.56%	8.01%	52.96%	7.57%	94.41%
	Warehouse Workers	62,108	33.08%	50.56%	28.18%	11.80%	10.77%	20.78%	37.69%	14.89%	95.89%
	Total	725,262	34.68%	45.47%	29.64%	11.42%	7.78%	16.88%	49.71%	14.89%	95.60%
	<i>Total Massachusetts Workers</i>	4,328,484	19.04%	66.06%	37.89%	15.59%	6.55%	9.85%	49.74%	8.42%	96.38%
New Hampshire	Food Service Workers	49,349	38.89%	39.38%	20.93%	5.82%	1.47%	4.68%	56.11%	12.64%	39.16%
	Cleaning & Building Maintenance Workers	33,776	34.62%	53.90%	28.28%	17.51%	2.22%	5.27%	35.63%	12.45%	36.00%
	Retail Workers	66,364	25.87%	47.92%	28.54%	17.65%	0.54%	3.34%	57.81%	8.67%	41.22%
	Other Hospitality & Recreation Workers	6,851	38.42%	44.85%	21.11%	16.95%	2.00%	3.30%	56.81%	7.49%	27.92%
	Warehouse Workers	14,043	31.08%	50.97%	19.58%	14.31%	3.60%	5.02%	34.02%	12.28%	44.88%
	Total	156,340	32.37%	46.70%	25.21%	13.88%	1.45%	4.25%	50.89%	10.83%	39.35%
	<i>Total New Hampshire Workers</i>	880,279	17.86%	67.00%	36.64%	17.19%	1.27%	3.17%	48.44%	5.88%	41.45%
Rhode Island	Food Service Workers	45,910	41.10%	39.29%	23.23%	5.18%	5.37%	14.47%	53.24%	17.47%	100.00%
	Cleaning & Building Maintenance Workers	25949	40.20%	55.94%	36.83%	16.55%	7.65%	31.11%	33.28%	23.95%	100.00%
	Retail Workers	46,902	34.77%	46.99%	28.48%	11.44%	4.90%	14.62%	56.36%	17.69%	100.00%
	Other Hospitality & Recreation Workers	5,939	36.93%	37.11%	19.06%	15.73%	5.87%	6.70%	52.97%	7.39%	100.00%
	Warehouse Workers	11,298	31.08%	52.87%	35.62%	9.84%	8.39%	28.07%	41.19%	24.91%	100.00%
	Total	124,700	37.39%	46.17%	28.45%	10.31%	5.93%	18.52%	49.48%	18.95%	100.00%
	<i>Total Rhode Island Workers</i>	650,691	23.00%	65.81%	37.61%	15.51%	5.21%	12.89%	49.27%	12.02%	100.00%
Vermont	Food Service Workers	25,585	43.40%	39.21%	19.91%	7.25%	1.39%	2.51%	57.46%	13.28%	32.22%
	Cleaning & Building Maintenance Workers	18921	42.05%	52.58%	31.09%	19.61%	3.02%	1.94%	43.82%	19.07%	29.78%
	Retail Workers	27,962	34.33%	50.83%	26.38%	14.69%	0.82%	1.90%	58.40%	9.67%	36.19%
	Other Hospitality & Recreation Workers	4,160	59.98%	38.17%	10.94%	14.54%	1.80%	6.51%	52.12%	5.89%	44.98%
	Warehouse Workers	6,520	43.11%	49.08%	15.00%	13.97%	1.73%	1.95%	34.83%	19.17%	45.15%
	Total	76,628	40.71%	46.69%	23.84%	13.43%	1.62%	2.33%	52.60%	13.49%	34.65%
	<i>Total Vermont Workers</i>	408,411	24.58%	65.15%	32.80%	18.88%	1.14%	1.74%	49.46%	8.22%	36.25%

Note: All estimates are weighted.

Source: Federal Reserve Bank of Boston analysis of 2014–2018 American Community Survey Five-Year Sample (IPUMS USA, University of Minnesota, www.ipums.org).

**Table 2a. Service Workers and Their Characteristics in Major New England Cities:
Massachusetts and New Hampshire**

City	Occupation Group	Number of Workers	% in families <200% pov level	% full time (35+ hours)	% w/Children	% Age 60+	% NH Black	% Hispanic	% Female	% with SNAP
Boston, MA	Food Service Workers	32,016	56%	51%	26%	7%	21%	34%	46%	20%
	Cleaning & Building Maintenance Workers	21,691	50%	52%	47%	12%	25%	50%	47%	26%
	Retail Workers	26,084	53%	42%	21%	6%	27%	21%	57%	21%
	Other Hospitality & Recreation Workers	5,447	54%	39%	9%	6%	21%	17%	51%	11%
	Warehouse Workers	5,532	50%	54%	20%	6%	34%	27%	34%	24%
	Total	90,770	53%	48%	48%	8%	24%	33%	49%	21%
	Total Boston Workers	458,449	31%	68%	25%	9%	20%	17%	49%	12%
Cambridge, MA	Food Service Workers	2,643	64%	39%	11%	11%	10%	19%	52%	10%
	Cleaning & Building Maintenance Workers*	-	-	-	-	-	-	-	-	-
	Retail Workers	3,495	57%	37%	18%	6%	18%	9%	63%	15%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers*	-	-	-	-	-	-	-	-	-
	Total	6,138	61%	40%	15%	9%	16%	13%	53%	12%
	Total Cambridge Workers	85,666	30%	68%	18%	10%	9%	8%	50%	4%
Lowell, MA	Food Service Workers	4,656	47%	46%	33%	5%	5%	22%	49%	22%
	Cleaning & Building Maintenance Workers	3,056	48%	54%	52%	11%	5%	29%	47%	30%
	Retail Workers	4,517	49%	36%	30%	6%	8%	18%	62%	28%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers	-	-	-	-	-	-	-	-	-
	Total	12,229	48%	45%	37%	7%	6%	22%	53%	26%
	Total Lowell Workers	65,351	30%	66%	38%	10%	8%	15%	48%	16%

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City	Occupation Group	Number of Workers	% in families <200% pov level	% full time (35+ hours)	% w/Children	% Age 60+	% NH Black	% Hispanic	% Female	% with SNAP
Springfield, MA	Food Service Workers	5,254	68%	38%	34%	9%	13%	49%	58%	38%
	Cleaning & Building Maintenance Workers	4,197	58%	52%	45%	14%	18%	47%	35%	38%
	Retail Workers	5,190	41%	39%	32%	7%	17%	35%	57%	24%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers*	-	-	-	-	-	-	-	-	-
	Total	14,641	56%	42%	36%	10%	16%	43%	51%	33%
	Total Springfield Workers	78,108	39%	60%	41%	11%	21%	36%	52%	26%
Worcester, MA	Food Service Workers	7,625	60%	43%	21%	6%	8%	21%	57%	17%
	Cleaning & Building Maintenance Workers	4,073	47%	57%	35%	15%	6%	34%	32%	23%
	Retail Workers	7,991	54%	43%	21%	5%	12%	13%	52%	14%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers*	2,213	45%	44%	25%	10%	14%	28%	48%	24%
	Total	21,902	53%	46%	24%	8%	10%	21%	49%	18%
	Total Worcester Workers	105,712	34%	64%	33%	11%	12%	18%	50%	14%
	Total	725,262	35%	45%	30%	11%	8%	17%	50%	15%
	Total Massachusetts Workers	4,328,484	19%	66%	38%	16%	7%	10%	50%	8%
Manchester, NH	Food Service Workers	4,811	48%	49%	29%	3%	3%	9%	58%	20%
	Cleaning & Building Maintenance Workers	3,431	44%	55%	39%	13%	3%	13%	32%	17%
	Retail Workers	6,324	41%	54%	28%	10%	2%	11%	59%	19%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers*	-	-	-	-	-	-	-	-	-
	Total	14,566	44%	52%	30%	8%	3%	11%	52%	19%
	Total Manchester Workers	72,371	26%	71%	36%	13%	5%	9%	47%	13%
	Total	156,340	32%	47%	25%	14%	1%	4%	51%	11%
	Total New Hampshire Workers	880,279	18%	67%	37%	17%	1%	3%	48%	6%

*indicates sample too small to generate a reliable estimate

Note: All estimates are weighted.

Source: Federal Reserve Bank of Boston analysis of 2014–2018 American Community Survey Five-Year Sample (IPUMS USA, University of Minnesota, www.ipums.org).

**Table 2b. Service Workers and Their Characteristics in Major New England Cities:
Connecticut and Rhode Island**

City	Occupation Group	Number of Workers	% in families <200% pov level	% full time (35+ hours)	% w/Children	% Age 60+	% NH Black	% Hispanic	% Female	% with SNAP
Bridgeport, CT	Food Service Workers	7,091	47%	52%	36%	5%	25%	51%	46%	24%
	Cleaning & Building Maintenance Workers	7,332	49%	52%	55%	13%	19%	62%	49%	27%
	Retail Workers	7,155	54%	37%	34%	7%	37%	36%	60%	30%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers	2,675	34%	50%	36%	12%	39%	46%	39%	30%
	Total	24,253	50%	47%	41%	9%	28%	49%	50%	27%
	Total Bridgeport Workers	86,229	36%	62%	42%	11%	34%	37%	51%	22%
Hartford, CT	Food Service Workers	4,262	59%	46%	28%	6%	36%	44%	52%	41%
	Cleaning & Building Maintenance Workers	5,674	57%	56%	44%	13%	23%	64%	39%	33%
	Retail Workers	4,367	56%	43%	40%	2%	37%	49%	67%	44%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers	2,855	57%	52%	21%	3%	43%	50%	31%	41%
	Total	17,158	57%	50%	35%	8%	33%	53%	48%	39%
	Total Hartford Workers	64,758	44%	61%	39%	9%	38%	40%	52%	31%
New Haven, CT	Food Service Workers	5,209	61%	43%	25%	2%	24%	38%	47%	29%
	Cleaning & Building Maintenance Workers	3,944	56%	58%	42%	12%	29%	52%	45%	30%
	Retail Workers	5,088	59%	32%	32%	4%	39%	23%	70%	34%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers*	-	-	-	-	-	-	-	-	-
	Total	14,241	59%	43%	32%	6%	31%	37%	55%	21%
	Total New Haven Workers	76,969	41%	62%	31%	10%	29%	26%	53%	19%

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City	Occupation Group	Number of Workers	% in families <200% pov level	% full time (35+ hours)	% w/Children	% Age 60+	% NH Black	% Hispanic	% Female	% with SNAP
Waterbury, CT	Food Service Workers	3,499	41%	42%	40%	6%	11%	40%	54%	39%
	Cleaning & Building Maintenance Workers	3,023	54%	53%	39%	14%	22%	43%	39%	29%
	Retail Workers	4,776	37%	44%	35%	11%	17%	29%	60%	31%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers*	-	-	-	-	-	-	-	-	-
	Total	11,298	43%	46%	37%	10%	17%	36%	52%	33%
Total Waterbury Workers		56,120	32%	63%	41%	12%	19%	32%	50%	27%
		411,761	34%	46%	31%	12%	11%	23%	49%	17%
		2,208,482	19%	66%	39%	17%	10%	14%	49%	9%
Providence, RI	Food Service Workers	7,460	70%	43%	18%	3%	14%	32%	50%	20%
	Cleaning & Building Maintenance Workers	6,613	49%	66%	46%	10%	12%	73%	31%	40%
	Retail Workers	8,041	57%	43%	22%	4%	11%	44%	61%	32%
	Other Hospitality & Recreation Workers*	-	-	-	-	-	-	-	-	-
	Warehouse Workers*	-	-	-	-	-	-	-	-	-
	Total	22,114	59%	50%	28%	6%	12%	49%	48%	31%
Total Providence Workers		103,248	43%	64%	34%	8%	13%	38%	49%	23%
		124,700	37%	46%	28%	10%	6%	19%	49%	19%
		650,691	38%	66%	38%	16%	5%	13%	49%	12%

Note: All estimates are weighted.

Source: Federal Reserve Bank of Boston analysis of 2014–2018 American Community Survey Five-Year Sample (IPUMS USA, University of Minnesota).

Appendix A

**Table A1. Occupations and American
Community Survey Codes**

Food Service Workers	
4000	Chefs and head cooks
4010	First-line supervisors of food preparation and serving workers
4020	Cooks
4030	Food preparation workers
4040	Bartenders
4055	Fast-food and counter workers
4110	Waiters and waitresses
4120	Food servers, nonrestaurant
4130	Dining room and cafeteria attendants and bartender helpers
4140	Dishwashers
4150	Hosts and hostesses, restaurant, lounge, and coffee shop
4160	Food preparation and serving-related workers, all other
Cleaning and Building Maintenance Workers	
4200	First-line supervisors of housekeeping and janitorial workers
4210	First-line supervisors of landscaping, lawn service, and groundskeeping workers
4220	Janitors and building cleaners
4230	Maids and housekeeping cleaners
4240	Pest control workers
4251	Landscaping and groundskeeping workers
4252	Tree trimmers and pruners
4255	Other grounds maintenance workers
Retail Workers³⁴	
4700	First-line supervisors of retail sales workers
4720	Cashiers
4740	Counter and rental clerks
4750	Parts salespersons
4760	Retail salespersons
Other Hospitality and Recreation Workers	
4400	Gambling-services workers
4420	Ushers, lobby attendants, and ticket takers
4435	Other entertainment attendants and related workers
4530	Baggage porters, bellhops, and concierges
4540	Tour and travel guides
4622	Recreation workers
4830	Travel agents
5300	Hotel, motel, and resort desk clerks
Warehouse Workers	
The universe of warehouse workers is comprised of all "packers and packagers, hand" (occupation code 9640), all "stockers and order fillers" (occupation code 9645), and all occupation codes 4700+ that are within the "Warehousing and Shipping" Industry (2017 Census code 6390) and "Electronic Shopping and Mail-Order Houses" Industry (2017 Census code 5593).	

Source: Federal Reserve Bank of Boston analysis of 2014–2018 American Community Survey Five-Year Sample (IPUMS USA, University of Minnesota).

Endnotes

¹ Martha Ross and Nicole Bateman, "Coronavirus Makes It Impossible to Ignore the Economic Insecurity Built Into Our Labor Market," Brookings The Avenue, March 13, 2020, https://www.brookings.edu/blog/the-avenue/2020/03/13/coronavirus-makes-it-impossible-to-ignore-the-economic-insecurity-built-into-our-labor-market/?utm_campaign=Brookings%20Brief&utm_source=hs_email&utm_medium=email&utm_content=84809588.

² Michael Corkery, David Yaffe-Bellany, and Rachel Wharton, "When Stocking Grocery Shelves Turns Dangerous," *New York Times*, March 20, 2020, <https://www.nytimes.com/2020/03/20/business/coronavirus-grocery-stores-workers.html>.

³ Dana Mattioli, "Amazon to Hire 100,000 Warehouse and Delivery Workers amid Coronavirus Shutdowns," *Wall Street Journal*, March 17, 2020, <https://www.wsj.com/articles/amazon-to-hire-100-000-warehouse-and-delivery-workers-amid-coronavirus-shutdowns-11584387833>.

⁴ See, for instance, Janelle Nanos, "The Economy Is in Free Fall, but These Businesses Are Still Hiring," *Boston Globe*, March 26, 2020, <https://www.bostonglobe.com/2020/03/26/nation/economy-is-free-fall-these-businesses-are-hiring/>; "Here's Who's Hiring Right Now," *LinkedIn*, accessed March 27, 2020, <https://www.linkedin.com/feed/news/heres-whos-hiring-right-now-5161074/>.

⁵ Sarah Chaney and Amara Omeokwe, "Coronavirus Triggers Wave of US Workers Filing for Jobless Benefits," *Wall Street Journal*, March 18, 2020, https://www.wsj.com/articles/coronavirus-triggers-wave-of-u-s-workers-filing-for-jobless-benefits-11584566808?mod=article_inline.

⁶ Ben Casselman, Patricia Cohen, and Tiffany Hsu, "'It's a Wreck': 3.3 Million File Jobless Claims as Economy Comes Apart," *New York Times*, March 26, 2020, <https://www.nytimes.com/2020/03/26/business/economy/coronavirus-unemployment-claims.html>.

⁷ Quoted in Kuehn, Daniel. (March 17, 2020). *The COVID-19 recession will be different*. UrbanWire: Economic Growth and Productivity, the blog of the Urban Institute. <https://www.urban.org/urban-wire/covid-19-recession-will-be-different>.

⁸ For a detailed list of occupations, see Table A1 in Appendix A.

⁹ Arne Kalleberg, *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s–2000s* (New York: Russell Sage Foundation, 2011); Laura Sullivan et al., "Not Only Unequal Paychecks: Occupational Segregation, Benefits, and the Racial Wealth Gap," Institute on Assets and Social Policy, Heller School for Social Policy and Management, Brandeis University, April 2019, https://heller.brandeis.edu/iasp/pdfs/racial-wealth-equity/asset-integration/occupational_segregation_report_40219.pdf.

¹⁰ Federal Reserve Bank of Boston analysis of data from the 2018 National Health Information Survey, weighted analysis for Region 1 Northeast (includes ME, NH, VT, MA, CT, RI, NY, NJ, MD, DE, DC). Analysis not shown.

¹¹ See, for instance, Edward Humes, "How the GI Bill Shunted Blacks into Vocational Training," *Journal of Blacks in Higher Education*, no. 53 (Autumn 2006), 92–104; Devah Pager, Bruce Western, and Bart Bonikowski, "Discrimination in a Low-Wage Labor Market: A Field Experiment," *American Sociological Review* 74, no. 5 (2009), 777–799; Andrew M. Penner, "Race and Gender Differences in Wages: The Role of Occupational Sorting at the Point of Hire," *Sociological Quarterly* 49, no. 3 (2008), 597–614; Richard Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated America* (New York: W.W. Norton & Co., 2017); Thomas Shapiro, *The Hidden Cost of Being African American: How Wealth Perpetuates Inequality* (New York: Oxford University Press, 2004); Leslie Williams Reid and Beth A. Rubin, "Integrating Economic Dualism and Labor Market Segmentation: The Effects of Race, Gender, and Structural Location on Earnings, 1974–2000," *Sociological Quarterly* 44, no. 3 (2003), 405–432.

¹² Office of Governor Charlie Baker and Lt. Governor. Karyn Polito, "Governor Charlie Baker Orders All Non-Essential Businesses to Cease In Person Operation, Directs the Department of Public Health to Issue Stay at Home Advisory for Two Weeks," news release, March 23, 2020, <https://www.mass.gov/news/governor-charlie-baker-orders-all-non-essential-businesses-to-cease-in-person-operation>.

¹³ Emma Bubola, "Death of Store Clerk in Italy Highlights Contagion's New Front Line," *New York Times*, March 25, 2020, <https://www.nytimes.com/2020/03/25/world/europe/coronavirus-italy-supermarkets.html>; Katie Johnston, "Grocery Stores a Lifeline but Also a Place of Anxiety, Especially for Workers," *Boston Globe*, March 25, 2020,

<https://www.bostonglobe.com/2020/03/25/business/grocery-stores-lifeline-also-place-anxiety-especially-workers/>; Hanna Krueger, "Custodians and Cleaners Fear for Their Lives and Their Livelihoods During the Coronavirus Pandemic," *Boston Globe*, March 26, 2020, <https://www.bostonglobe.com/2020/03/26/nation/custodians-cleaners-fear-their-lives-their-livelihoods-during-coronavirus-pandemic/>.

¹⁴ All statistics refer to weighted estimates of American Community Survey five-year data, 2014–2018, for New England.

¹⁵ Essential industries are defined as Supermarket and other grocery stores, convenience stores, specialty food stores, pharmacies and drug stores, gasoline stations and general merchandise stores, including warehouse clubs and supercenters.

¹⁶ Kelly Tyko, "Need a Job Amid Coronavirus Crisis? Walmart Announces Plan to Add 150,000 Employees to Meet 'Demand in Our Stores,'" *USA Today*, March 20, 2020, <https://www.usatoday.com/story/money/2020/03/19/walmart-coronavirus-jobs-cash-bonuses/2881716001/>.

¹⁷ Martha Ross and Nicole Bateman, "COVID-19 Puts America's Low-Wage Workforce in an Even Worse Position," *Avenue* (blog), March 19, 2020, https://www.brookings.edu/blog/the-avenue/2020/03/19/covid-19-puts-americas-low-wage-workforce-in-an-even-worse-position/?utm_campaign=brookings-comm&utm_source=hs_email&utm_medium=email&utm_content=85039455. Federal Reserve Bank of Boston analysis of data from the 2018 National Health Information Survey, weighted analysis for Region 1 Northeast (includes ME, NH, VT, MA, CT, RI, NY, NJ, MD, DE, DC). Analysis not shown.

¹⁸ Lawrence Mishel, Elise Gould, and Josh Bivens, "Wage Stagnation in Nine Charts," Economic Policy Institute, January 6, 2015, Retrieved from <https://www.epi.org/publication/charting-wage-stagnation/>.

¹⁹ Jonathan Morduch and Rachel Schneider, *The Financial Diaries: How American Families Cope in a World of Uncertainty* (Princeton, NJ: Princeton University Press, 2017).

²⁰ Harriet Torry, Paul Hannon, Megumi Fujikawa, "Coronavirus Triggers Record Drops in U.S., European Business Activity," *Wall Street Journal*, March 24, 2020, <https://www.wsj.com/articles/coronavirus-could-trigger-global-recession-says-imf-11585046688>.

²¹ See our forthcoming brief.

²² "Families First Coronavirus Response Act: Employer Paid Leave Requirements," U.S. Department of Labor, accessed March 27, 2020, <https://www.dol.gov/agencies/whd/pandemic/ffcra-employer-paid-leave>.

²³ This finding might reflect the small number of non-Hispanic blacks in the New England workforce more generally. Non-Hispanic blacks make up only about 7% of the New England population, compared to 14% of the population nationally. "ACS Demographic and Housing Estimates" (2018 ACS five-year estimates data profiles), U.S. Census, accessed March 27, 2020, <https://data.census.gov/cedsci/table?d=ACS%205-Year%20Estimates%20Data%20Profiles&table=DP05&tid=ACSDP5Y2018.DP05>.

²⁴ Pager et al., "Discrimination in a Low-Wage Labor Market: A Field Experiment,"; Darrick Hamilton, Algernon Austin, and William Darity Jr., "Whiter Jobs, Higher Wages: Occupational Segregation and the Lower Wages of Black Men," EPI Briefing Paper No. 288, February 28, 2011, <https://www.epi.org/files/page/-/BriefingPaper288.pdf>.

²⁵ See, for instance, Claudia Goldin, "A Grand Gender Convergence: Its Last Chapter," *American Economic Review* 104, no. 4 (2014), 1091–1119.

²⁶ Luhby, T. (March 17, 2020). *House pares back paid sick and family leave benefits in coronavirus bill*. CNN Politics. <https://www.cnn.com/2020/03/17/politics/paid-sick-leave-house-bill/index.html>

²⁷ Delivery drivers for firms such as Grubhub, Instacart, DoorDash, and Uber Eats are all classified as independent contractors. See, for instance, Dani Blum and Laura Vanderkam, "The Gig Economy Offers Parents Options and Obstacles," *New York Times*, February 18, 2020, <https://www.nytimes.com/2020/02/18/parenting/gig-economy-part-time-work.html>; Patricia Callahan, "Amazon Pushes Fast Shipping but Avoids Responsibility for the Human Cost," *New York Times*, September 5, 2019, <https://www.nytimes.com/2019/09/05/us/amazon-delivery-drivers-accidents.html>.

²⁸ In late February, the World Health Organization stated that recovery time for those with mild symptoms is about two weeks, but those with more severe symptoms could require up to six weeks to recuperate. Tedros Adhanom Ghebreyesus, "WHO Director-General's Opening Remarks at the Media Briefing on COVID-19" (speech, Geneva, Switzerland, February 24, 2020),

<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---24-february-2020>.

²⁹ Tami Luhby, "House Pares Back Paid Sick and Family Leave Benefits in Coronavirus Bill," CNN politics, March 17, 2020, <https://www.cnn.com/2020/03/17/politics/paid-sick-leave-house-bill/index.html>.

³⁰ "EEC Coronavirus Update: For Parents and Guardians," Mass.gov, March 26, 2020, https://eecdlead.force.com/apex/EEC_ChildCareEmergencyParents.

³¹ The website of Sen. Marco Rubio, one of the cosponsors of the Keeping American Workers Paid and Employed Act, provides a step-by-step look at the bill's provisions (accessed March 28, 2020): https://www.rubio.senate.gov/public/_cache/files/ef2d5d75-82b2-4de8-9e4e-89e1cdc2b758/EA7D2DA06BB292AB5903710F77D02485.final-section-by-section---keeping-american-workers-employed-and-paid-act.pdf.

³² Families First

³³ Keeping American Workers Paid

³⁴ The sample of retail workers includes all available American Community Survey occupation codes for retail workers in New England. There may be other occupation codes for retail workers outside of the region.