



The Impact of COVID-19 on Women in Workforce

October 1, 2021

Commonwealth of Massachusetts
Executive Office of Labor and Workforce Development



I. Executive Summary

As of August 2021, female employment rate remains 5.7% lower than pre-pandemic levels, compared to 1% for male workers. Total continued claims among females remain greater than the male total. Though the overall size of the female labor force appears to have returned to pre-pandemic levels, as of the time of writing, greater number of women are unemployed than before March 2020. Aggregate labor participation trends suggest the existence of distinct pandemic experiences for different segments of women. Research underscores the influence of economic structure, exacerbated by pandemic-response policy, on the disproportionate impact felt by women. A key barrier and gatekeeper to female workforce advancement is access to child care. Challenges in the child care model—in particular, worker shortages—affect cost and availability. Active partnerships across public and private sectors have the potential to bring innovation. The three-part recommendation is to:

- **Action 1:** Support continued reporting on changing landscape of women in workforce.
- **Action 2:** Do a deep dive into innovations around child care to understand segments of workforce most affected and identify levers of change.
- **Action 3:** Invest ARPA funding for upskilling.

II. Issue Scope and Motivation

Women make up a significant portion of our Massachusetts economy. There are roughly 1.8 million female workers (employed and unemployed) in the Massachusetts labor force, according to pre-pandemic U.S. census data. Composing roughly half of the workforce, female workers operate as critical enablers in all facets of the Commonwealth economy. During the pandemic, female workers dominated the front line of the health care sector, where 77% of the workforce are women.

Progress towards gender parity is a workforce priority—understanding the impact of COVID-19 on female workers is a necessity for ensuring broad-based economic advancement. Success in the advancement of women in the workforce is success for working families. As the impact of the pandemic was felt unevenly by segments of the population, it is imperative to understand the unique ways in which women in the Massachusetts workforce were impacted.

In the longer-term, COVID-19 will impact the trajectory of women in the workforce.

The [*Future of Work Report*](#)¹ underscores the need to address gender parity challenges to maintain competitiveness of the Massachusetts economy in a 5 to 10-year time horizon. The pandemic has accelerated key trends affecting the composition of the work force (e.g., automation, hybrid work, industry mix) such that women are more at risk of needing to make occupational transitions to remain competitive in the work force.

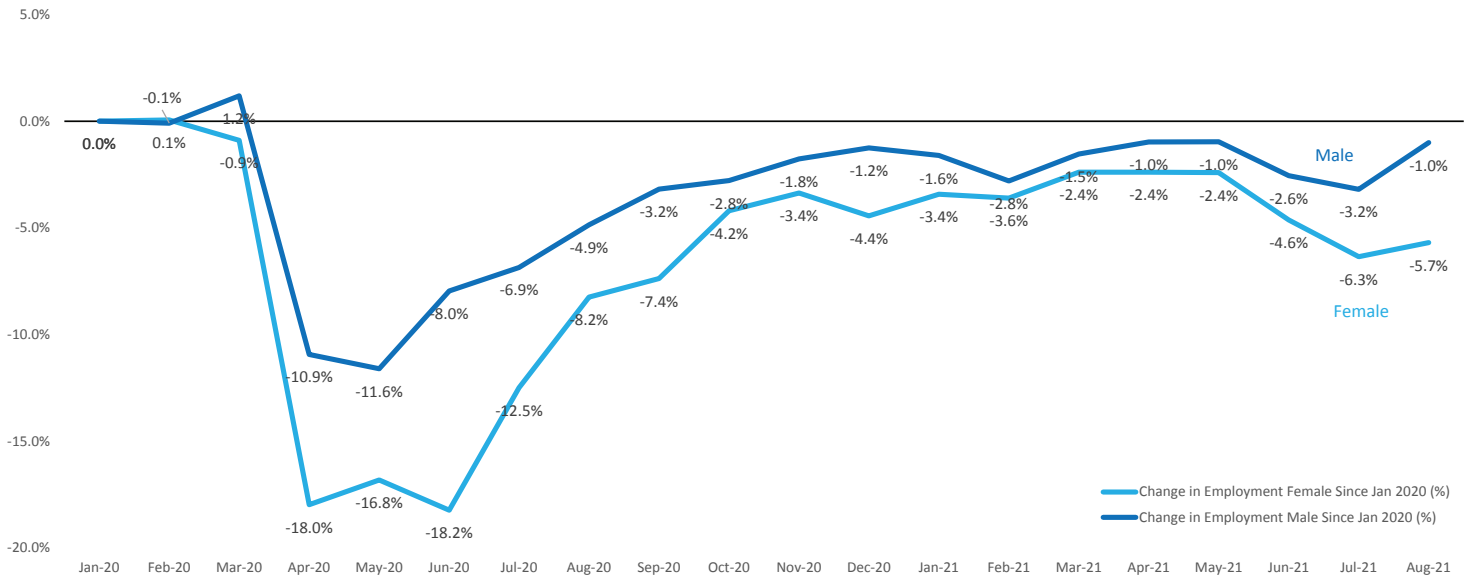
¹ McKinsey & Co. "Preparing for the Future of Work in the Commonwealth of Massachusetts." July 2021.

III. Trends in Female Workforce Participation during the Pandemic

The pandemic has disproportionately affected female workers in Massachusetts.

The initial job loss in reaction to pandemic closures led to a dramatic decline in female employment. Between April 2020 and July 2020, female employment level dropped 18% relative to pre-pandemic levels, compared to 11% for male. Throughout the recovery, employment rate among female workers remains lower than that of male workers.

Figure 1. Pandemic Loss: Percent Change in Employment by Gender Since 1/20
U.S. Census Current Population Survey, Massachusetts Subset Weighted Average



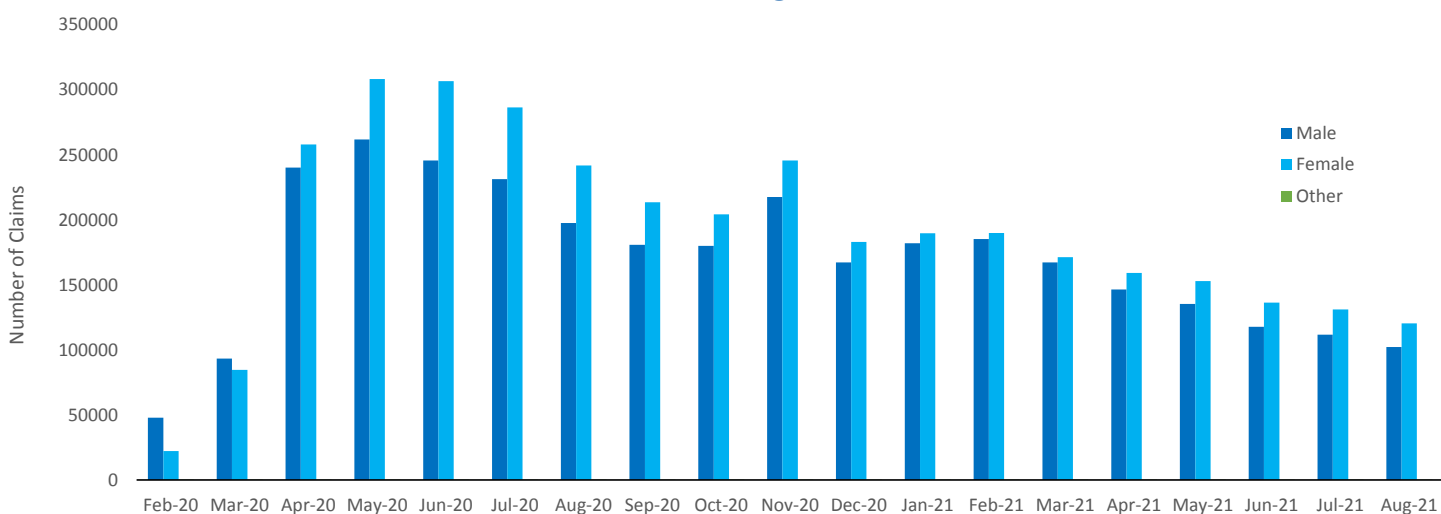
Note: Monthly sample sizes range 972 to 2799 (female) and 968 to 2868 (male), with margins of error $\pm 0.8\text{pp}$ - 2.5pp (female) and $\pm 0.7\text{pp}$ - 2.3pp (male). Source: U.S. Census Current Population Survey; IPUMS University of Minnesota.

The negative impact on female employment has not subsided. At no point during the pandemic did female employment rate in Massachusetts rise higher than male employment. Census data tracking female employment levels among those active in the workforce show that—as of August 2021—female employment rate dropped by 5.7% relative to pre-pandemic levels, compared to 1% for male workers [Figure 1]. While overall unemployment rate improved in 2021, over the past few months, the gap between female and male employment rates is widening. This suggests that women today continue to face the impact of the pandemic.

Continued claims on unemployment benefits suggest women continue to face hardships.

The Massachusetts Department of Unemployment Assistance provides weekly unemployment support to workers throughout the pandemic. Female claimant count has been consistently higher than men from the beginning of the pandemic to today, despite a roughly equal gender split within the Massachusetts workforce [Figure 2]². Female claimants increased sharply during the beginning of the pandemic, relative to men—continued claims between February to May 2020 increased by 14 times for women, whereas total claims for men increased by 5 times during the same period. This mirrors the trend in unemployment rate, adding support to the disproportionate impact of pandemic response on women.

Figure 2. Massachusetts Unemployment by Continued Claims from February 2020 to August 2021 by Gender



Note: Includes regular UI and long-term unemployment (PEUC + EB), excluding PUA. Source: Department of Economic Research, Executive Office of Labor and Workforce Development, Commonwealth of Massachusetts.

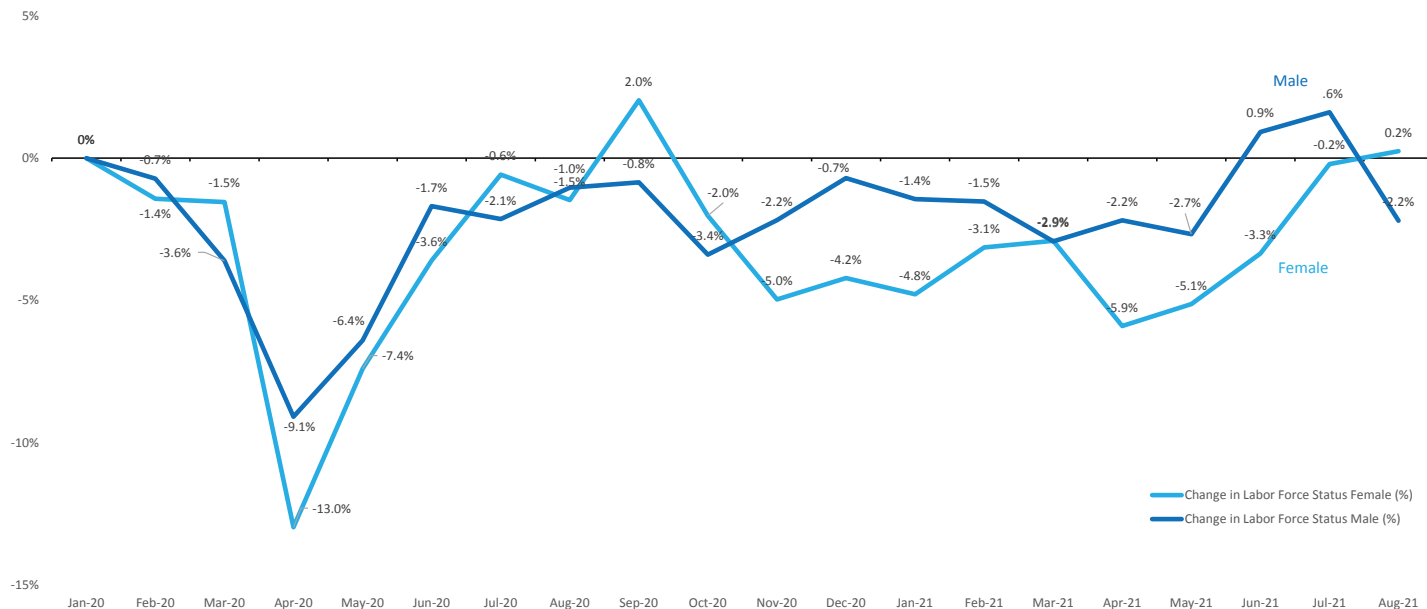
Though the overall size of the female labor force appears to have returned to pre-pandemic levels—greater number of women are unemployed than before March 2020³. Labor force participation rate among women in August 2021 is at 62%, the same as January 2020³. This implies that the count of female workers in the universe of the Massachusetts labor force is back to pre-pandemic levels [Figure 3a]. However, “participation” does not equal to “having a job”. In August 2021, there are more unemployed woman than before the pandemic. Unemployed women make up a greater share of the workforce than before [Figure 3b].

² Unemployment claims data should be viewed as a proxy for unemployment rate. It likely understates the degree of need.

³ Unemployed individuals are considered part of the labor force. Definitions of employment and labor force participation are distinct. Among those eligible (e.g., excluding children), an individual decides to participate in the labor force, or not. Those who do not are considered “out of the labor force”, for reasons including, retired, not interested in work. Data from U.S. Census, CPS survey.

**Figure 3a. Percent Change in Labor Force Participation
by Gender Since January 2020**

U.S. Census Current Population Survey, Massachusetts Subset Weighted Average

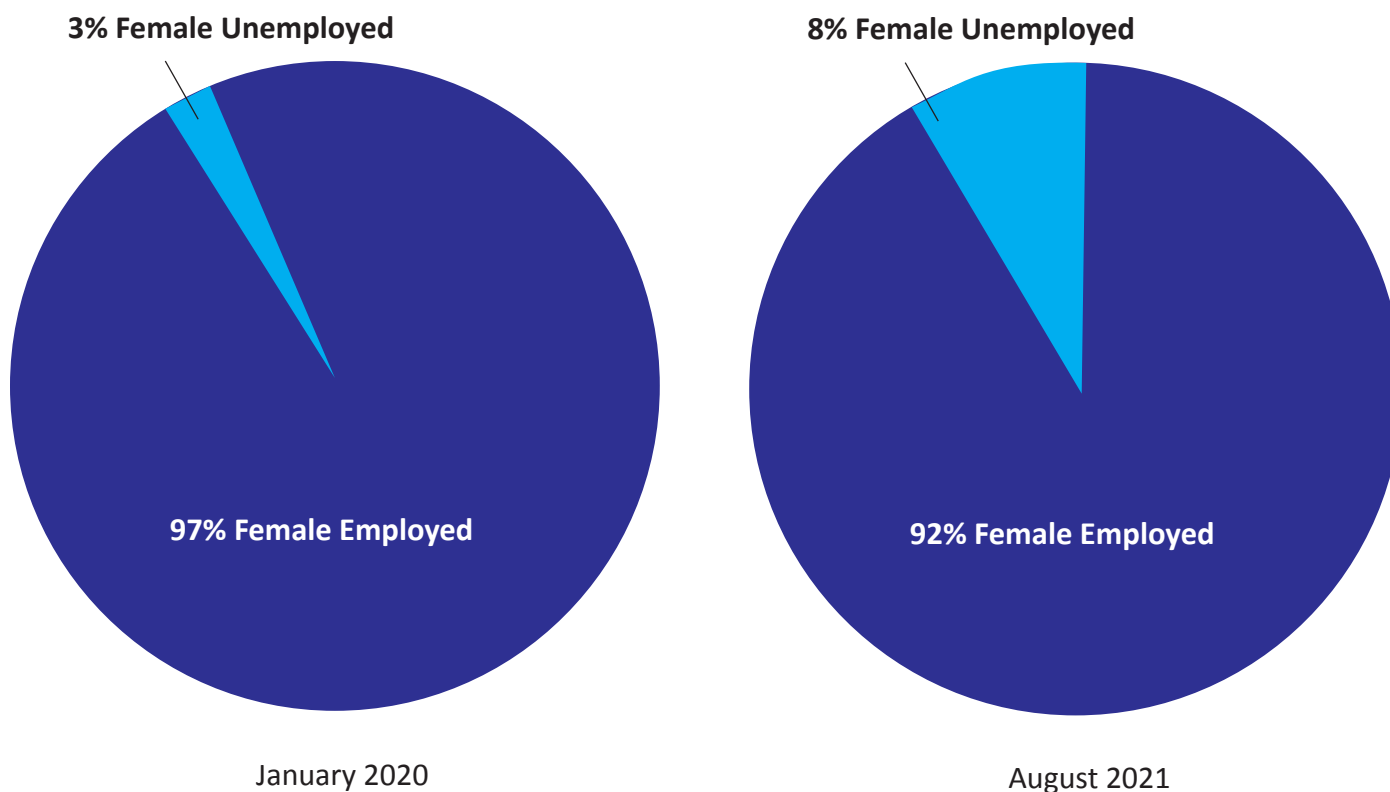


Note: Monthly sample sizes range 972 to 2799 (female) and 968 to 2868 (male), with margins of error between $\pm 0.9\text{pp}$ – 1.5pp . Source: U.S. Census Current Population Survey; IPUMS University of Minnesota.

“As the pandemic took hold, sectors where female workers concentrate more were greatly affected.”



Figure 3b. Breakdown of Employed vs. Unemployed Female Workers in Massachusetts



Note: The graphic shows the employment status of women considered “active” in the Massachusetts labor force. Source: U.S. Census Current Population Survey; IPUMS University of Minnesota.

Furthermore, aggregate trends in labor force participation may hide different underlying narratives—vulnerabilities exist, and continued support is needed. The “average” working female in Massachusetts, as often pinpointed by data, does not exist in real life—the female workforce is composed of distinct narratives that warrant deeper investigation, such as marital status, family composition, etc. Those women who gained jobs during the pandemic may be off setting those who lost jobs. There may be some wins: for example, women who previously were constrained by family duties may now work a remote job. However, in a different scenario, within a household, if a husband as the primary wage-earner loses his job, the wife may be forced to re-enter the labor force. Additionally, some women, such as single mothers, cannot afford to leave the work force. All these factors contribute to the composition of the workforce—and therefore there is continued need to understand and support vulnerable subsets of the employment base.

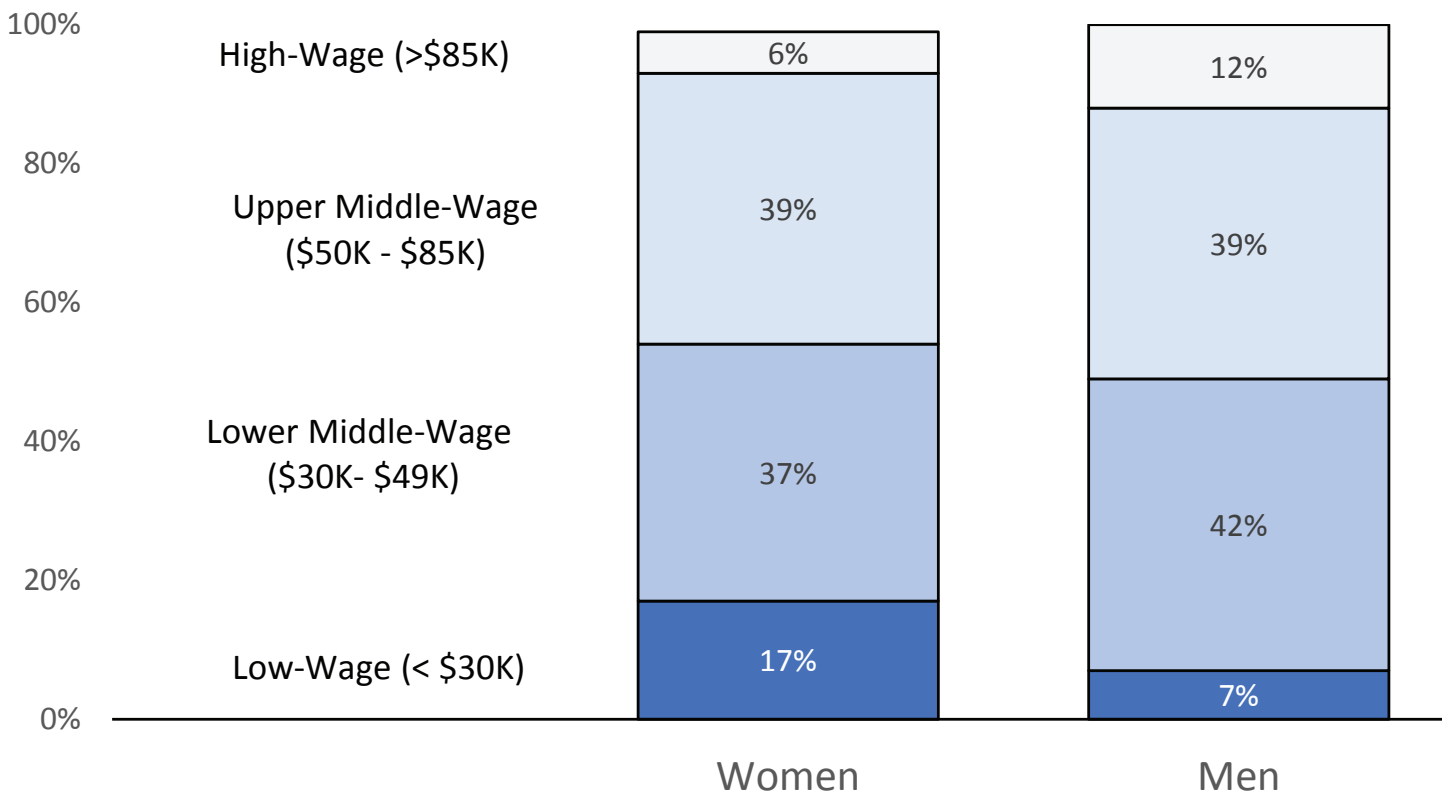


IV. Pandemic Impact on Women

A dominant narrative emerging from research pinpoints an imbalanced economic structure, exacerbated by pandemic response policy, as driving the hardship faced by female workers. Data shows us that women tend to work in lower-wage sectors that were prone to shut-down, and less likely to afford remote work. Furthermore, policy response choice to close schools further increased the burden on women at home. The below breaks down this narrative in greater detail.

- **Female and male workers faced different starting points—as women tend to work in lower wage sectors.** National data from the Census estimate that 17% of female workers are working in low wage (< \$30K) jobs, compared to 7% of men. These jobs include food servers, cashiers, home health aides, and child care workers. Therefore, at the starting line entering the pandemic, female workers have lower income, compared to men.

Figure 4. Share of Jobs by Gender and Wage Group
Pre-Pandemic Averages – National

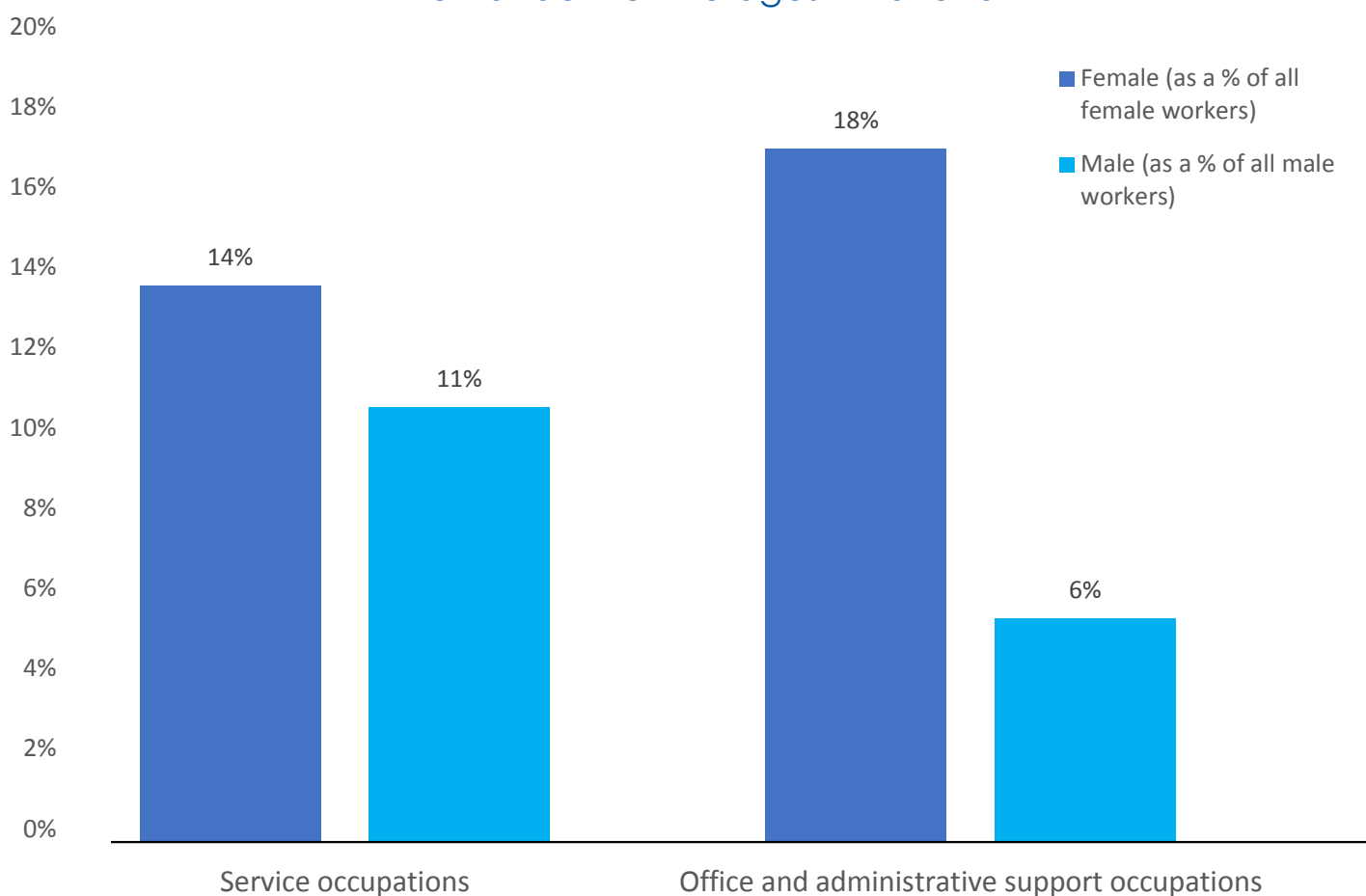


Source: Federal Reserve Bank of New York, Economic Inequality Policy Series, March 2021.



- **As the pandemic took hold, sectors where female workers concentrate more were greatly affected.** Jobs in the service sector, including “sales and office occupations” and “service occupations” felt great impacts. Many workers lost their work as a direct result of closure (e.g., restaurant industry), others lost their work because their clientele no longer existed (e.g., service provider to office-based work). More share of women (14%) than men (11%) work in service occupations. The sales and office occupations host an even greater share of female workers (18%) across all occupations, compared to male workers (6%) **[Figure 5]**. The distribution of workers by gender meant that women were likely hit harder than men by shut-down policies.

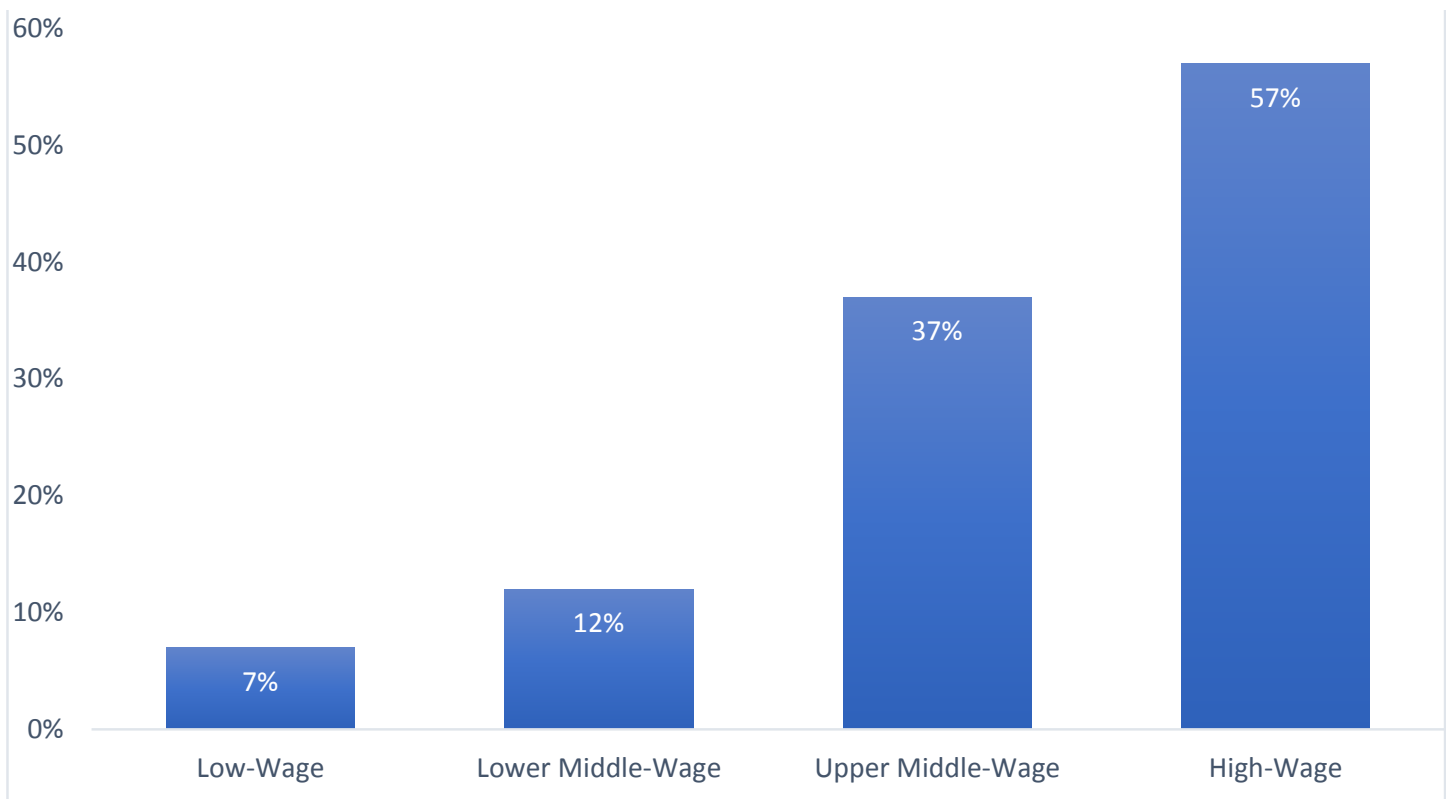
**Figure 5. Share of Female and Male Workforce
in Two Sectors Experiencing Shutdown**
Pre-Pandemic Averages – National



Source: Current Population Survey 2020, U.S. Bureau of Labor Statistics.

- These sectors where women concentrate also were less likely to afford remote work. Among those who can work remotely, only 7% of those reporting work in low-wage jobs **[Figure 6]**. These are jobs where women work disproportionately more than men. On the other end, workers in high-wage jobs (57% of all workers) are most able to work remotely—these are the jobs that are least accessible to women. In combination, female workers tend to concentrate in jobs that offered least amount of flexibility, reducing their ability to adapt and retain income.

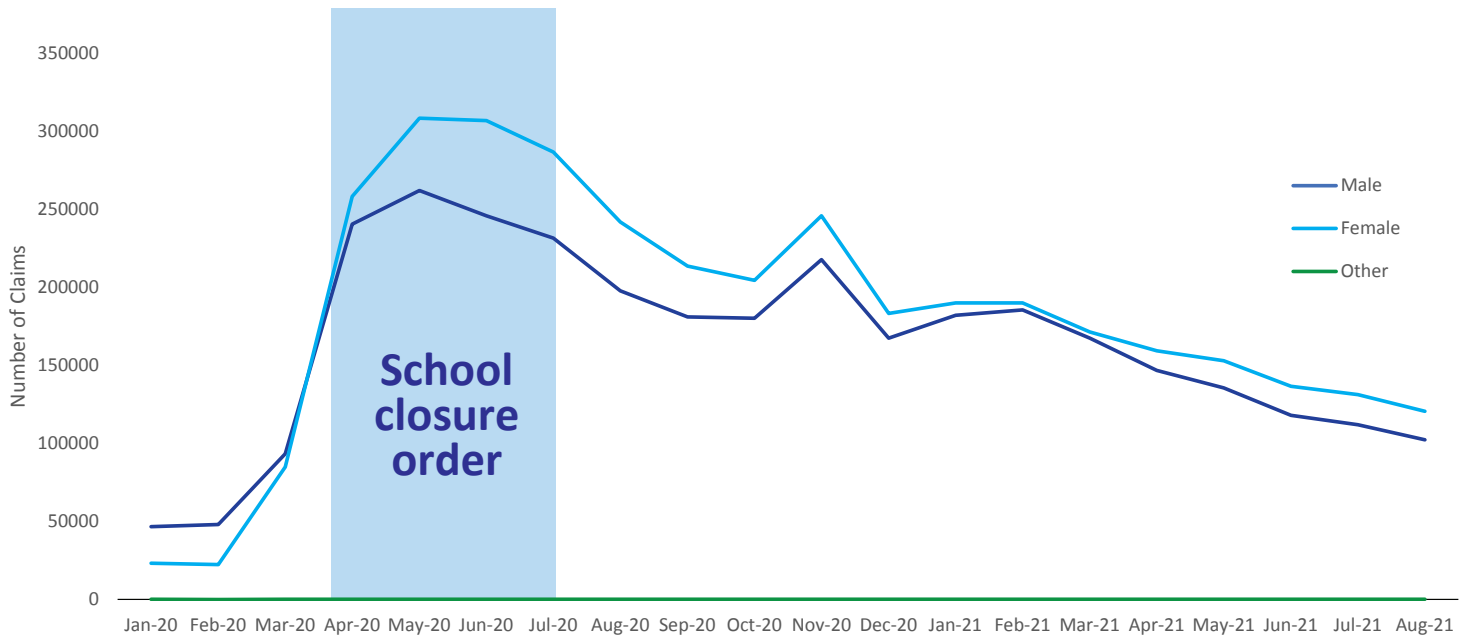
Figure 6. Share Reporting Remote Work by Wage Group
National Averages, 2020



Source: Federal Reserve Bank of New York, Economic Inequality Policy Series, March 2021 analysis of U.S. Census Current Population Survey; IPUMS University of Minnesota.

- **Furthermore, school closures increased burden on women at home.** The closure of all public and private elementary and secondary (K-12) schools in the Commonwealth began on March 15, 2020. Overlaying the school closure period with the change in unemployment claimant data shows a widening gender gap, particularly during the period of school closure **[Figure 7]**. Differences in economic composition by gender and industry alone cannot explain the gap. Therefore, there is reason to believe that, as closures began, women were forced to pick between work and home more than men.

Figure 7. Massachusetts Unemployment Continued Claims by Gender with School Closure Overlay



Note: Same unemployment claim data as shown in Figure 2. Source: Department of Economic Research, Executive Office of Labor and Workforce Development, Commonwealth of Massachusetts.

More work can be done to understand the different experiences faced by different segments of female workers—in particular, women in color. Though on average women felt a stronger negative pandemic impact, the experience of women at the lower end of the wage scale is very different than those at the top of the wage scale. White collar professionals largely retained their earning potential. Beyond wages, a multitude of vulnerabilities exist for female workers, such as language ability, family responsibilities, and health conditions. The [Future of Work Report](#) finds that women from communities of color tend to hold low-wage jobs—the ones that do not easily allow remote work, and therefore add additional burden to manage the home, including child care. The more we can segment the distinct experience of the female labor force, the better we can provide targeted support to improve economic wellbeing for all.

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V. Key Barriers to Women Participation in Workforce – the Role of Child Care

Women face a multitude of barriers on the path to gender parity—all of which continue to exist as the pandemic evolves. Women's labor force participation consistently lags behind men; and among the working population, a wage gap between men and women persists. Discrimination aside, research shows that women and men operate on unequal playing fields⁴. Women tend to have smaller networks and lower endowment of education/skills, compounded by greater constraints within the household where additional duties fall disproportionately on women. This leads to lower workforce participation among women, and slower advancement for those who choose to work. The pandemic has not lessened these barriers; instead, it has stalled progress towards greater gender parity.

Child care emerges from COVID-19 as the gatekeeper to women's advancement in workforce. This is a unifying challenge touching all segments of female workers. Survey of Commonwealth employers (n = 420) and families (n = ~500) conducted by the Massachusetts Business Coalition for Early Education reveals that:

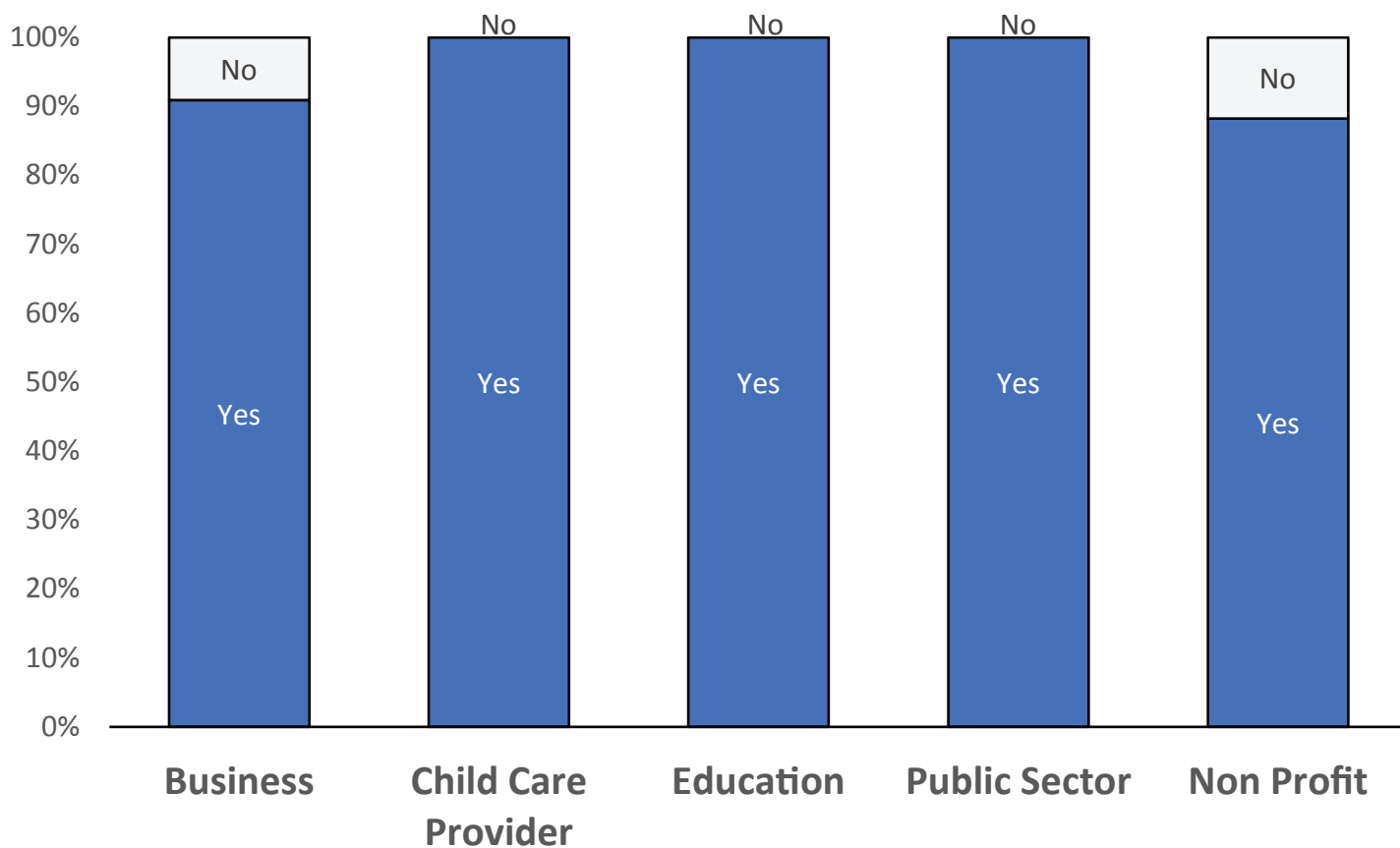


⁴ Relevant readings include McKinsey Global Institute's Report, "The Power of Parity: advancing women's equality in the United States", and the Report "Women in the Workplace 2021."

In a series of Business Dialogues held by the Department for Early Education and Care (EEC) in collaboration with the Commonwealth Corporation, and the Massachusetts Business Coalition for Early Education, participating employers further express child care as a top priority for their workforce.

Child care is at once a barrier and an enabler of workforce development. Child care has a multiplier effect on the health of the workforce in all parts of the Commonwealth economy. Challenge in accessing care means workers may have to forgo wage earnings, highlighting the high opportunity cost associated with child care. Furthermore, the stress induced by the search for child care negatively impacts worker productivity.

Figure 8. Share of Business Dialogue Participants Expressing Employee Concern about Child Care
By Employer Type, September 14, 2021 Webinar



Source: Commonwealth Corporation analysis of participant data (n = 90) for Business Dialogue held virtually on September 14, 2021.

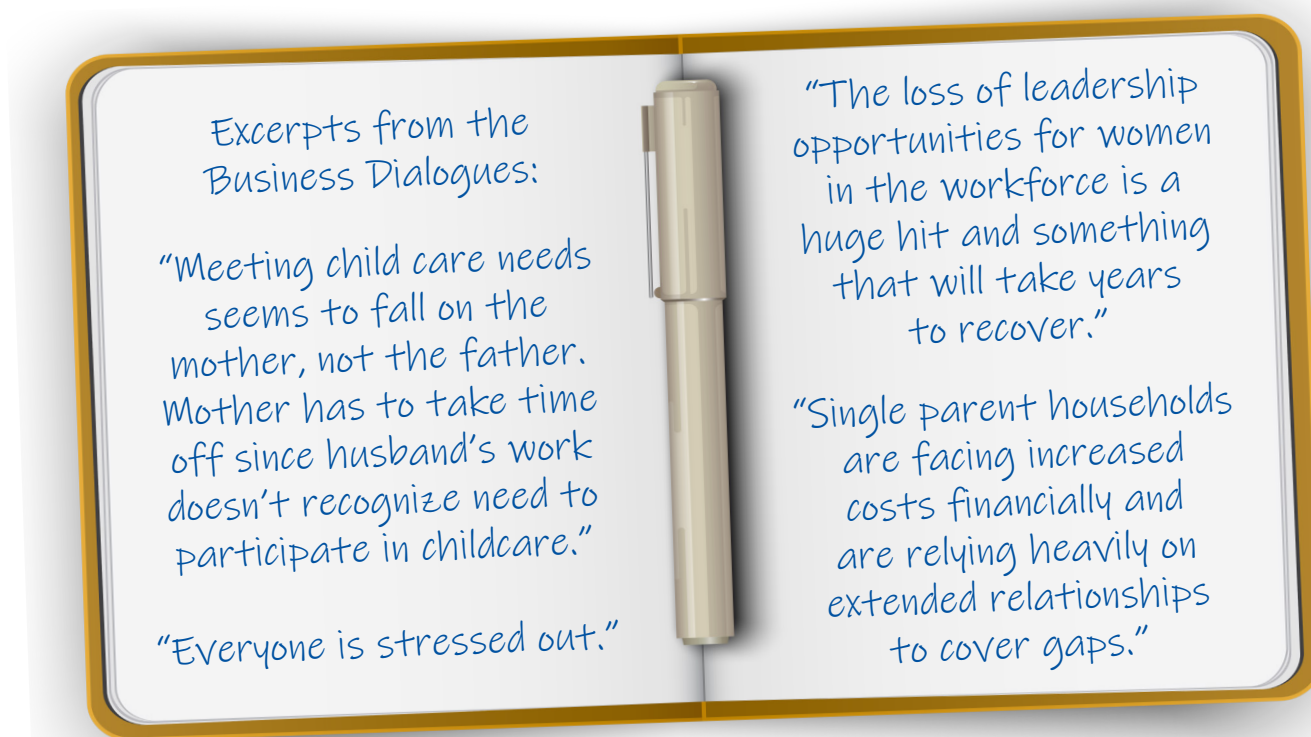
A key barrier to child care affordability and accessibility is the lack of supply of child care providers—whose capacity was hit hard by the pandemic and has yet to recover fully.

The child care industry in Massachusetts is estimated at \$4 billion, according to the Department of Early Education and Care. Pre-pandemic, the child care system had capacity to support up to 250,000 children⁵. During the pandemic, the industry saw an estimated loss of \$250 million per month from forgone private pay fees due to closures. As of June 2021, child care centers are estimated to be back at 90% capacity, relative to pre-pandemic. However, even today, many child care centers continue to experience staffing shortages. This has been an on-going issue, worsened by the pandemic. The [Future of Work Report](#) estimates a shortage of 25,000- 30,000 workers by 2030.

Figure 9. Average Annual Family Fees in Massachusetts by Age Group

Average Annual Family Fees	Center Average	Center Maximum	FCC Average	FCC Maximum
Infant	\$25,924.08	\$43,188.00	\$12,330.96	\$25,200.00
Toddler	\$22,434.60	\$90,001.00	\$12,534.36	\$25,200.00
Preschool	\$16,506.24	\$113,760.00	\$11,209.08	\$24,600.00

For most center-based programs; infant/toddler care is subsidized by preschool classroom revenue. Source: Department of Early Education and Care, 2018 Market Rate Survey.

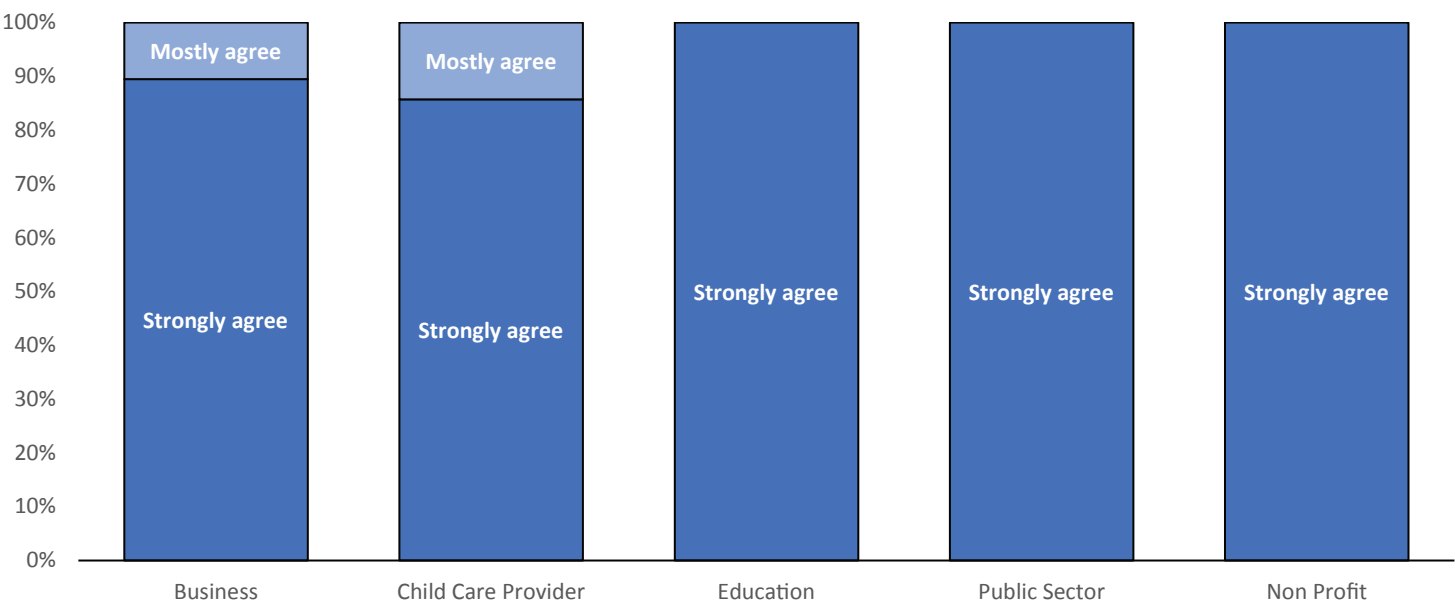


⁵ Of the 1 million children ages 0-12 in the Commonwealth at the time, 76% lived in homes in which all adults were working full time.

Pandemic aside, the business model used within the child care sector does not appear sustainable. The business model currently used by the private businesses licensed by EEC requires full enrollment for most businesses to break even. However, increasing enrollment is very challenging as programs cite workforce shortages as the biggest barrier to their opening new classrooms and care. Therefore, excluding the impact of the pandemic, the child care system appears under-stress and in need of adaptation. Preliminary interviews suggest a mix of low wage and poor pathways as contributing to the workforce shortage.

Figure 10. Share of Business Dialogue Participants Expressing Agreement with Statement:

Strengthening the Massachusetts child care system is an economic priority and would benefit from the sustained partnership and coordination between the public and private sectors, by Employer Type, September 14, 2021 Webinar



Partnership between the public and private sector will allow for greater insights into the levers of change. In the Business Dialogues, participants widely expressed sentiment that child care is an economic priority, shared by the public and private sector [Figure 10]. A growing network of public and private actors within the Commonwealth are dedicated to addressing child care challenges.



VI. Recommendations

- **Action 1: Support continued reporting on changing landscape of women in workforce.** The impact of the pandemic on female workers is on-going. We recommend continued monitoring of headline trends in employment and labor force participation rates. The initial results underscore a need to understand movements “under the hood.” As needed, investment in data sources and data collection/visualization tools (e.g., dashboard) can provide the necessary infrastructure for research. Future reporting should target granular insights, and address segmentation of the female workforce by worker profile and industry. The Executive Office of Labor and Workforce Development will produce future briefs in follow up to this baseline report.
- **Action 2: Deep dive into innovations around child care to understand segments of workforce most affected and identify levers of change.** Enabling the return and advancement of female workers requires system-level change to the child care service model. A partnership between businesses, non-profits, and the public sector can work to develop experimental pilots to address key components of the service provision model (e.g., recruitment pipeline). Resources can be dedicated to:
 - Understanding constraints faced by workers entering the child care sector.
 - Building an evidence-based case on the impact of wage compensation as a constraint to worker recruitment among center-based child care providers.
 - Identify new channels of care provision, engaging the business/employer community.

- **Action 3: Invest American Rescue Plan Act (ARPA) Funding for Upskilling.** Women impacted by the pandemic who were laid-off from the entry-level, low-wage job market need access to education and training pathways to reach higher-wage jobs. The Commonwealth should respond to the upskilling needs of unemployed, entry-level workers most impacted by the pandemic. The impact of COVID-19 and changing nature of work will shift the concentration of future job opportunities to favor technical skills and work credentials—underscoring the need to scale up education and training. The Administration's [Future of Work Report](#) estimates the need to reskill 30,000-40,000 per year to year, over a decade, respond to shifts in job availability.

The Administration recommends an investment of \$240M of ARPA funding through proven, existing models to provide retraining pathways for 52,000 unemployed individuals over three years, in occupations with current and projected hiring gaps in healthcare, manufacturing, trades, finance, and regional growth areas (identified by Workforce Skills Cabinet (WSC) regional planning teams). The Administration's ARPA workforce plan calls for expansion of existing programs in the following "tiers" along a skill continuum:

- \$60M for basic work readiness, including high school diploma and English to Speakers of Other Languages (ESOL)
- \$115M for certifications for entry-level technician jobs (300 hours training or less)
- \$35M for credentialing for mid-wage employment (300 hours+ but less than a 4-year program)



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In addition, the Administration's Plan calls for ARPA investments of \$30M to expand capacity of systems to "dial up" the number of adults for re-training that can be handled by existing systems and models:

- Accountability: Investments in streamlined contracting, data tracking, and reporting to meet ARPA requirements for organizations managing grants.
- Business outreach: Investments in new regional staff to fill "Market Maker" roles to engage with companies who need skilled workers and want to build education and training partnerships with ARPA funding.
- Career Navigator Staffing: Investments for staffing in the MassHire system to recruit and enroll unemployed.

This report was produced by the Executive Office of Labor and Workforce Development (EOLWD), Commonwealth of Massachusetts. EOLWD manages the Commonwealth's workforce development and labor departments to ensure that workers, employers, and the unemployed have the tools and training needed to succeed in the Massachusetts economy.

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