Federal Reserve Bank of Boston®

Regional & Community Outreach

Issue Brief | 2025-1 | October 2025

# Child-care usage and access challenges during COVID-19 and the economic recovery

Sarah Savage

# Contents

**Community Development Issue Briefs**

The Federal Reserve Bank of Boston, part of the U.S. central bank, works in a variety of ways to promote a strong, vibrant economy that works for all. The Boston Fed's regional and community outreach department gathers insights on the impacts of economic conditions in our New England district, conducts research to share externally, and convenes and connects interested parties. These activities contribute to fulfilling the Federal Reserve's dual mandate from Congress—price stability and maximum employment—so that people in every community have opportunities to participate, contribute, and prosper.

Our regional and community outreach publications address emerging and critical economic issues facing low- and moderate-income individuals, families, and communities. We strive to provide objective, data-backed information that is useful to those involved in community economic development, including governments, nonprofits, financial institutions, businesses, and communities themselves. Our work also seeks to demonstrate how residents from all walks of life are faring in the economy, in order to help inform our monetary policy deliberations.

## Abstract

The COVID-19 pandemic both highlighted and deepened constraints on the child-care market that make accessing child care challenging. Inaccessible child care can be a barrier to work, with implications for parents' labor force participation. While much is known about the impact of the pandemic on child-care providers and parents who suddenly lost access, less is known about the nuance of access challenges and how they varied. In this brief, I examine child-care demand and access at different stages of the pandemic to determine how the supply challenges induced by the pandemic affected families' ability to meet their care needs and whether this varied in meaningful ways. Using survey data collected from nearly 2,100 New England mothers with at least one child under the age of 6 between February 2022 and April 2022, I explore two types of child-care access challenges. The first includes instances of *foregoing needed care.* This is based on recollections, experiences, and expectations at different stages of the pandemic. The second type is limited to mothers who used care and includes *using less care than needed* at the time of the survey. I examine usage and access challenges by state of residence and demographics. At all stages, I find a greater tendency to *forego needed care* among mothers with fewer economic advantages, most notably among lower-income mothers and mothers who were unemployed or outside the labor force. A similar pattern emerges when looking at which mothers were more likely to report *using less care than needed*, though this was not linear by income: moderate-income mothers who used

care were more likely to use less care than needed than either lower- or higher-income mothers who used care.

## Key findings

- More mothers surveyed forewent needed care at the time of the survey than they reported doing in the months leading up to COVID-19 or expected to do in the subsequent three months.
- Forgoing needed care differed by demographics. For instance, lower-income mothers[1] were 24.3 percentage points more likely to forego needed care at the time of the survey than higher-income mothers. Similarly, mothers who were unemployed or outside the labor force were 20.9 percentage points more likely to forgo needed care than employed mothers at the time of the survey.
- Affordability was a top reason for foregoing needed care, with more than 64 percent of mothers who forewent needed care citing costs in the months leading up to COVID and at the time of the survey; this was followed by availability (concerns over hours, days, location, and space).
- Among mothers who used care, while a higher percentage of lower-income mothers *used less care than needed* than higher-income mothers at the time of the survey, mothers with moderate incomes were the most likely to report *using less care than needed*.

## Introduction

Mothers, and particularly mothers of young children (ages 0–2), have historically had lower labor force participation rates, averaging around 62 percent in the 2010s, than prime-age mothers of older children (U.S. BLS, 2022). Even lower rates are evident among lower-income and Hispanic mothers. Some of this may be attributable to child-care challenges, as unmet child-care needs interfere with participation in the workforce. In New England in particular, parents face significant affordability challenges. Single parents in the region may pay as much as 65 percent of family median income on child care for infants, while married couple families may pay 16 percent[2]—both well above the 7 percent affordability threshold (Office of Child Care, 2016). High costs may push parents to use free or cheaper informal unlicensed care by necessity rather than choice,[3] to work fewer hours, or to leave the labor force altogether. Child-care costs consume a higher percentage of family income across New England states than the rest of the country, on average (Child Care Aware of America, 2022). This holds true across different types of care, ages of children served, and different family compositions. In addition to cost, essential considerations that may have

[1] In this sample, “low income” is defined as household incomes less than $50K, “moderate income” is $50K to $99K, and “high income” is $100K or higher. Household income was asked for the year before COVID (January 2019 to December 2019) and the year since COVID (January 2020 to December 2020).
[2] These figures are for full-time, center-based care in Massachusetts (Child Care Aware of America, 2022).
[3] Unlicensed care is not necessarily inferior care, but there is no guarantee that it is developmentally appropriate or that it meets the same health and safety standards as compliant licensed care.

consequences for parents and their labor force participation are hours of operation, location, available space for the age(s) of child(ren) needed, and quality of care (Schilder et al., 2021; Savage & Robeson, 2025; Weber, 2011).

The COVID-19 pandemic further spotlighted child-care challenges when formal sources of care were not available. This led many parents to juggle their labor force activity with the care of children. Post pandemic, we have witnessed a change in how a portion of the labor force works (Parker et al., 2022). During the economic shutdown of the pandemic, many parents had unprecedented access to flexibility and remote work, potentially affecting how they met work and care needs. While access to these work conditions has typically benefited higher-wage and higher-skilled workers (U.S. Department of Labor, n.d., it marks a potential shift in how and when child care is needed.

Considering changes in both the child-care landscape and work conditions, this brief uses survey data collected from New England mothers between February 2022 to April 2022 to examine whether and how access challenges varied. I examine usage, as well as foregoing needed care, at different points in time (three months prior to COVID [based on recall], at the time of the survey in early 2022 [based on self-reported current experiences], and three months later [based on expectations]). Among mothers who use care, I also examine using less care than needed at the time of the survey. I address the following questions: 1) How did usage of nonparental child care compare across time? 2) How did foregoing needed child care vary across time? 3) What are the primary reasons for using less care than needed? For each of these, I explore differences by state of residence and demographics.

## Background

Access to high-quality[4] early care and education is highly variable in the United States. The options that exist operate in a mostly private market. This effectively makes the supply of high-quality child care a function of what parents can pay (Savage, 2019) rather than a public good accessible by all families. For instance, lower-income families are more likely to use care outside of the formal paid child-care market than higher-income families (NSECE, 2016). This may be due to affordability or preference, but in either case, informal care, while not necessarily inferior care, is not regulated for developmental appropriateness or health and safety. The mostly private child-care market consists primarily of small businesses with variable quality and tuition rates based on what the market can deliver in a given location.

Barriers exist that make accessing high-quality child care more difficult for many families (Malik et al., 2018; Henly & Adams, 2018; Halpin et al., 2018). Parents with advantages, such as having adequate financial resources, being married, working a traditional work schedule, and living in a

[4] The use of the term “high-quality” in this brief refers to care that is, at a minimum, licensed, but it should be noted that there is considerable debate about definitions of “high-quality” and much variability between licensed programs. This is exemplified by the existence of Quality Rating and Improvement Systems and national accreditation services, which aim to bring up the quality of licensed programs (Caronongan et al., 2011).

more populated area, face lower barriers, in general, than parents without those advantages. In contrast, living in economically depressed neighborhoods plays a role in barriers to access (Andolfatto & Spewak, 2017; Massey & Denton, 1993; Alexander & West, 2020). These factors may both directly and indirectly affect a family's ability to meet their child-care needs.

### Access challenges and COVID-19

There was an uncertain supply of and demand for child care during the recovery period from COVID-19. Child-care providers confronted lost revenues and the need to retain an early education and care workforce. This was especially important in the face of mass labor shortages (Birinci et al., 2024), which created more competition for workers across sectors. Federal relief funds did offer some stabilization support (King et al., 2024), but the child-care sector remained in a challenging place, since it had faced problems with attracting and retaining child-care staff even before the pandemic due to low wages (Grunewald et al., 2022; Haynie et al., 2023). Meanwhile, parents who could work remotely typically had unprecedented access to remote work and flexibility.

The post-pandemic context, marked by different experiences faced by working parents and a changed child-care landscape, presented an opportunity to examine child-care access under unique circumstances. This has the potential to yield insights that could be informative for closing access gaps. With the New England Parent Demand Survey data, I examine access challenges in a nuanced way by considering different moments in time centered around the pandemic. Additionally, I provide insight into reasons for access challenges and suggest implications for strategies for closing access gaps.

## Methodology

Data for this study were collected in two ways. First, I recruited respondents to complete an online Qualtrics survey through Facebook advertisements. The ads targeted parents living in New England with at least one child under the age of 6 and offered, as an incentive, a chance to win one of thirty $100 Visa gift cards. Second, I shared the survey for further dissemination with state administrators of the child-care subsidy system across New England with access to agencies that interact directly with parents. The hope was that partner outreach would help include hard-to-reach parents that may not use Facebook. Data are weighted[5] to a New England subsample of mothers of children under the age of 6 from the American Community Survey (ACS) on age, state, race, number of adults in the household, number of children under 18 in the household, and income.

[5] The author used a raking technique that uses a process of iterative proportional fitting. By using a set of variables where the population distribution was known, the procedure iteratively adjusted the weights for each case until the sample distribution aligned with the population for the known variables.

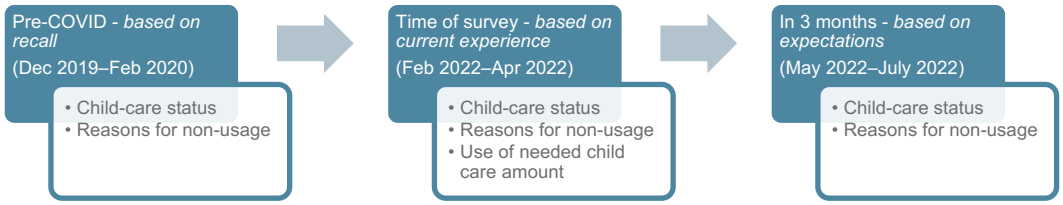
While the survey was open to all caregivers of young children, the vast majority of respondents identified as female, so analyses focus on these nearly 2,100 respondents.[6]

## Sample characteristics[7]

Among the mothers included in the analysis, slightly more than half were recruited through partner outreach and just less than half through Facebook advertisements (see Appendix for more unweighted sample characteristics). Due to the screening question, all mothers had at least one child in the household under age 6. Eighteen percent of the mothers were nonwhite,[8] compared to 35 percent of New England mothers[9] with at least one child under age 6 in the ASC data (Ruggles et al., 2023), and 32 percent had household incomes less than $50,000, compared to 24 percent in comparable ACS data. Nearly 90 percent of the mothers lived in households consisting of two or more adults, compared to 88 percent in the ACS data. Forty percent of the mothers had less than a bachelor's degree, compared to 50 percent in the ACS data.

## The survey

The Parent Demand Survey was designed to capture child-care utilization and employment based on recollections, experiences, and expectations at three reference points. My aim was to capture patterns of utilization of child care and access challenges, as follows, where the shaded boxes indicate the period in question and the white boxes list key measures:




[6] Additionally, detection of fraudulent responses was more common among respondents identifying as "male." See Appendix – Limitations for more details.
[7] Unweighted estimates are reported given the negligible difference between the sample and ACS when weights are applied.
[8] Due to low Ns per race/ethnicity, I grouped non-Hispanic white mothers into a single group, referred to as "white" in the brief. "Nonwhite" is defined here as any race/ethnicity except non-Hispanic white. This includes American Indian or Alaska Native, Asian, Black or African American, more than one race, and Native Hawaiian or other Pacific Islander.
[9] Unweighted counts of New England states are as follows: Connecticut: 218, Maine: 413, Massachusetts: 724, New Hampshire: 246, Rhode Island: 220, and Vermont: 273.

### Access measures

To arrive at child-care status, two measures are used throughout this analysis: *using child care* and *foregoing needed care*.[10] A third measure limited to mothers who used care is *using less care than needed*.

## Analysis

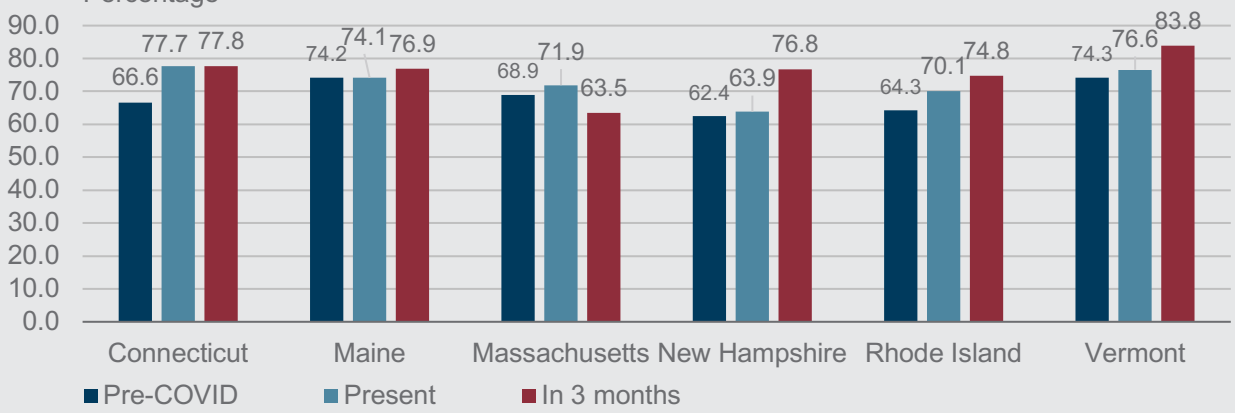
In this section, I include nearly 2,100 mothers who completed the survey and use simple bivariate comparisons to examine how usage of nonparental care compared by time period, how foregoing needed care compared by time period and subgroup, and how reasons for using less care than needed at the time of the survey compared by subgroup.

### Care usage from recollections to expectations

Figure 1[11] shows care usage by New England state as recollected before COVID, at the time of the survey, and as expected in three months. When reflecting on pre-COVID care usage and usage at the time of the survey, care usage appears to be the lowest among New Hampshire mothers, with the expectation that it would increase in three months. In the states of New Hampshire, Rhode Island and Vermont, there is a clear pattern of mothers reporting an increase in usage of care at each subsequent time period. The only state expecting less care usage in three months than at both the pre-COVID reflection period and at the time of the survey is Massachusetts.

[10] Respondents who used care from someone other than another parent at a time in question were coded as “using care.” Those who did not but who needed care were coded as “foregoing needed care.” Respondents who used care but indicated using less than needed were coded as “using less care than needed.” See Appendix for more details on definitions.
[11] Within and between group differences are statistically significant at the $p<.05$ level unless otherwise stated.

## Figure 1 | Use of care by reference period and state

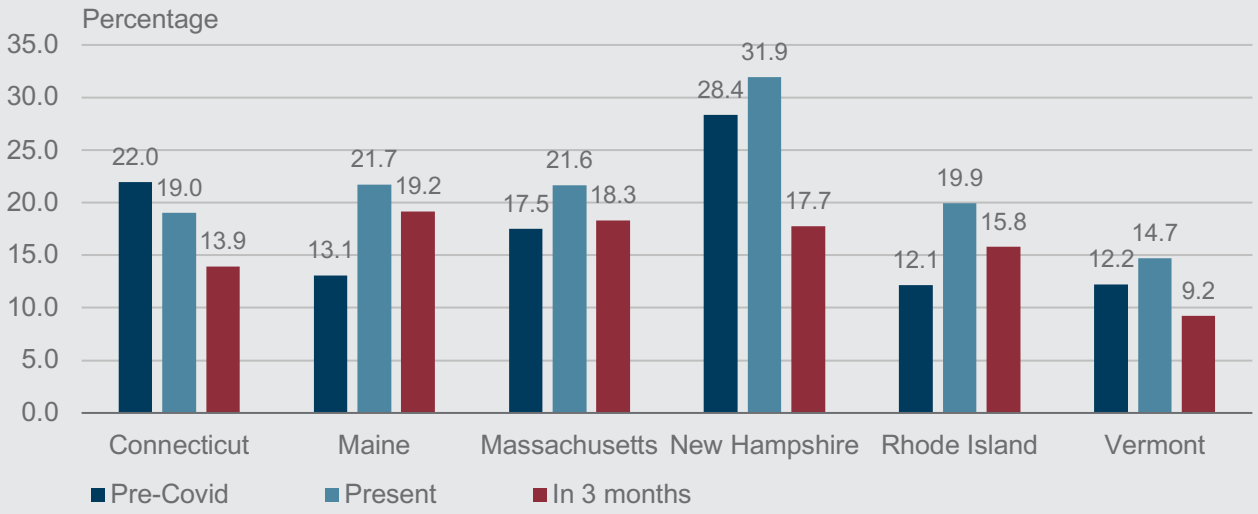



*Note: Percentages are weighted. Within group differences are statistically significant at the p<.05 level unless otherwise stated. See Appendix – Statistical Testing for more details. No significant difference between present and expectations for Connecticut or between pre-COVID and present for Maine (p>.05). Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

As shown in Figure 2, the percentage of mothers foregoing needed care[12] is in the reverse direction seen in Figure 1, with Vermont mothers reporting the lowest levels of foregoing needed care. This analysis excludes mothers who did not need care. With the exception of Connecticut, all mothers were more likely to report foregoing needed care in early 2022 than they recalled prior to COVID or expected in three months. Despite notable variation in foregoing needed care between the pre-COVID period and at the time of the survey, there appeared to be a leveling off according to expectations in three months.

[12] See Appendix for definitions.

## Figure 2 | Foregoing needed care by reference period and state

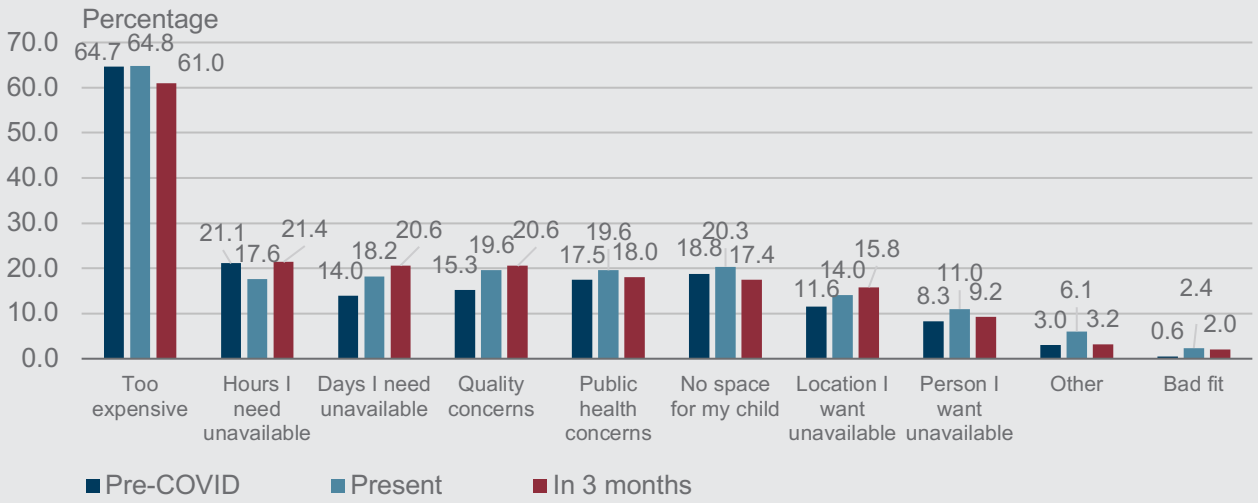



*Note: Percentages are weighted.*
*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

Figure 3 offers reasons why mothers did not use care from someone other than their child(ren)'s parents at the three reference points. The highest percentage of mothers did not use care due to the expense, with the percentage citing this reason dropping slightly in the next three months. Unlike with affordability, reasons for not using care relating to its availability were expected to increase. These include "hours I need," "days I need," and "location I need" being unavailable. A higher percentage of mothers expected these to be reasons to not use care in three months than at previous reference points.

Distinct from reasons of affordability and availability, the percentage of mothers expecting not to use care in three months due to quality concerns increased slightly. As shown in Figure 3, both the percentage citing quality concerns and public health concerns increased from pre-COVID recollections to the time of the survey. When framed as public health concerns, this reason for not using care abated by 2 percentage points according to expectations. Meanwhile, the percentage of mothers expecting not to use care in the coming three months due to quality concerns more generally increased slightly.

# Figure 3 | Reasons for foregoing needed care by reference period




*Note: Percentages are weighted. No significant difference between pre-COVID and present time periods for "too expensive" category, between pre-COVID and expectations for "hours I need" category, or between pre-COVID and expectations for "other" category (p>.05).*
*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

## Care usage by subgroup

Mothers with more economic advantages less often forewent needed care than mothers with fewer advantages. As shown in Table 1, nonwhite mothers were more likely than white mothers to forego needed care in all three time periods. Similarly, having a low to moderate income was associated with a greater likelihood of foregoing needed care. Across the reference points, on average, married mothers were 11.0 percentage points less likely to forego needed care than mothers who were never married or not with their spouse. Mothers with a bachelor's degree or higher are at least 2 times less likely to report foregoing needed care than those with less than a bachelor's. Similarly, employed mothers were at least 2 times less likely to forego needed care than unemployed mothers or those outside the labor force across all three time periods. Of course, care usage may enable employment.[13] At the time of the survey, 36.9 percent of mothers who were unemployed or outside the labor force forewent care, relative to 16.0 percent of employed mothers. The percentage of mothers who were employed or outside the labor force expecting to forego care

[13] The employment implications of access challenges are covered in another brief using the Parent Demand Survey data (Savage, forthcoming).

in three months decreased by nearly 10 percentage points but still exceeded employed mothers by 14.0 percentage points.

## Table 1 | Percentage of mothers foregoing needed care by reference period and subgroup

| Demographic | Pre-COVID | Present | In 3 months |
|---|---|---|---|
| **Overall** | **18.3** | **21.3** | **16.7** |
| **Race/ethnicity** | | | |
| White | 15.9 | 19.2 | 16.0 |
| Nonwhite | 22.7 | 25.2 | 17.9 |
| **Income** | | | |
| Less than $50K | 34.3 | 37.9 | 24.8 |
| $50K to $100K | 18.1 | 20.4 | 18.4 |
| $100K or greater | 10.4 | 13.6 | 11.8 |
| **Marital Status** | | | |
| Married | 15.0 | 18.3 | 15.5 |
| Never married/apart from spouse | 29.3 | 31.8 | 20.8 |
| **Education** | | | |
| Less than a bachelor's | 26.4 | 29.8 | 22.7 |
| Bachelor's or higher | 9.6 | 12.2 | 10.3 |
| **Employment** | | | |
| Employed | 14.7 | 16.0 | 13.8 |
| Unemployed/not in the labor force | 30.6 | 36.9 | 27.8 |

*Note: Federal Reserve Bank of Boston Parent Demand Survey, 2022. Percentages are weighted. No significant difference between pre-COVID and expectations for white and $50K to $100K (p>.05).*
*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

The survey also asked mothers who used care to rate their agreement with reasons for potentially using less care than needed at the time of the survey. In Table 2, I show the percentage of mothers who agreed or strongly agreed with each reason by state of residence. I do the same in Figures 4–8 by demographics. Note that the other response choices for this item included disagreeing/strongly disagreeing, as well as "neither" or "don't know."

For five out of the eight reasons provided, mothers residing in the state of Massachusetts were most likely to report using less care than needed (although for the cost reason, the percentages reporting for Massachusetts and Rhode Island are not statistically different). Among the states, mothers in Connecticut were most likely to report using less care than needed due to quality. Those in Vermont were most likely to cite being unable to find space for their child and also most likely to report limited hours as the reason they use less care than needed relative to mothers in other states.

## Table 2 | Mothers who use care agreeing or strongly agreeing that "I use less care than I need due to..." by state of residence

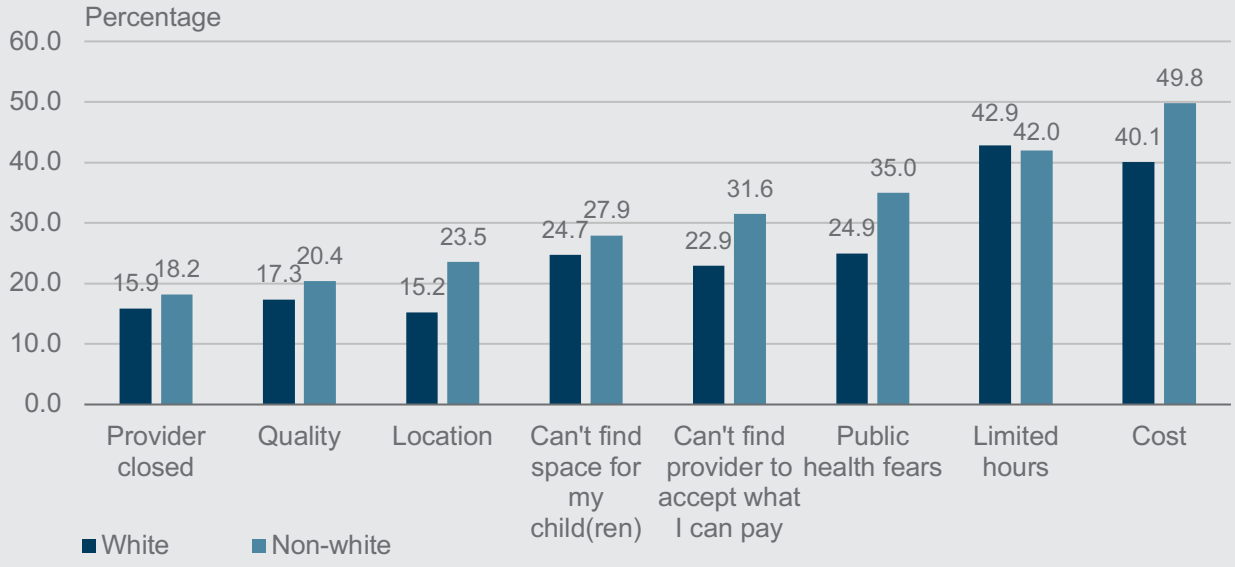
| Reason | CT | ME | MA | NH | RI | VT |
|---|---|---|---|---|---|---|
| Provider closed | 15.0 | 14.3 | **20.7** | 6.7 | 11.5 | 9.0 |
| Quality | **22.1** | 16.9* | 18.1 | 16.1* | 13.7† | 13.3† |
| Location | 10.0 | 21.3 | **22.5** | 14.2* | 15.9 | 14.2* |
| Can't find space | 16.3 | 28.3 | 30.2 | 22.1* | 21.3* | **33.6** |
| Cannot find a provider to accept what I can pay | 23.8 | 25.4 | **29.6** | 15.9* | 21.1 | 16.2* |
| Public health fears | 24.8 | 27.1 | **32.6** | 18.8 | 23.1 | 21.4 |
| Limited hours | 39.9 | 43.1* | 43.8* | 34.3 | 43.3* | **51.0** |
| Cost | 43.6 | 38.7 | **45.9*** | 33.9 | **46.2*** | 32.3 |

*Note: Percentages are weighted. Bolding indicates the highest percentage per reason. Tests for significance were conducted among states by reason. *† Indicates no significant difference between or among states for the reason given at the time of the survey (p>.05).*

*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

When looking at care usage amount by race/ethnicity (Figure 4), for nearly all reasons provided, nonwhite mothers who used care were more likely to agree with using less care than needed for any reason than white mothers who used care, with cost being the top reason for nonwhite mothers. Limited hours was cited as a reason for using less care than needed by at least 42 percent of mothers regardless of race/ethnicity.

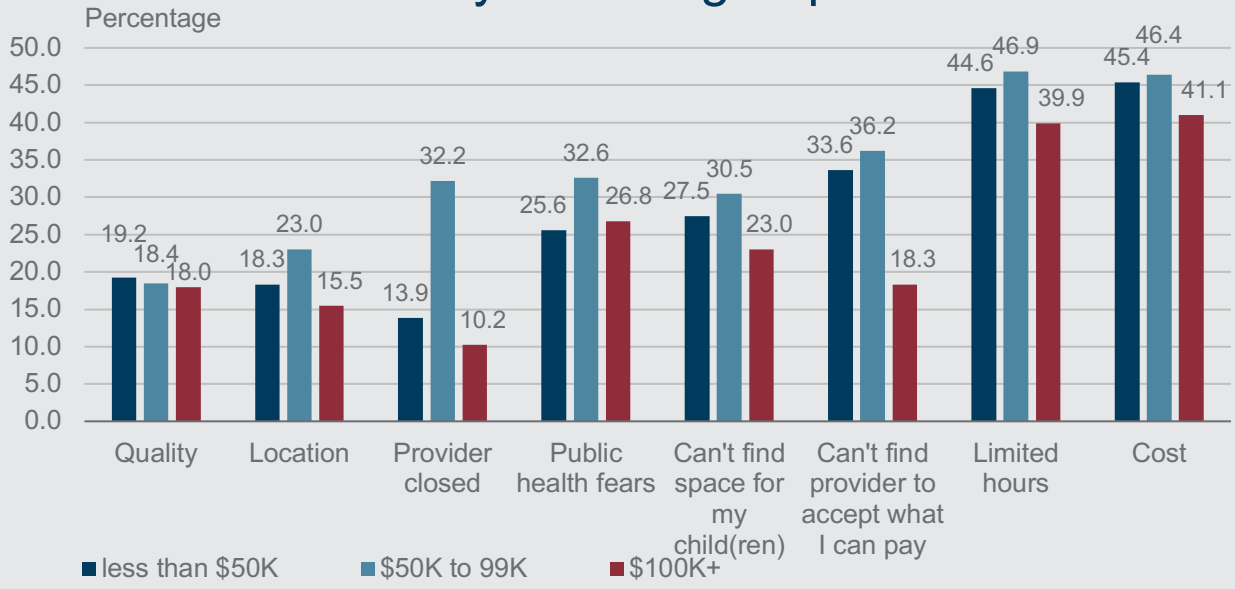
## Figure 4 | Agreeing or strongly agreeing that "I use less care than I need due to..." by race/ethnicity




*Note: Percentages are weighted.*
*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

Consistent with care usage by race/ethnicity, cost and limited hours were the top reasons mothers who used care reported using less care than needed across income groups (Figure 5). The lower-income group was more likely to use less care than needed for almost all reasons than the higher-income group but less likely than the moderate-income group. In nearly all instances, mothers in the moderate-income group who used care were more likely to agree with all reasons for using less care than either the lower- or higher-income groups, with the most notable difference in the "provider closed" reason.

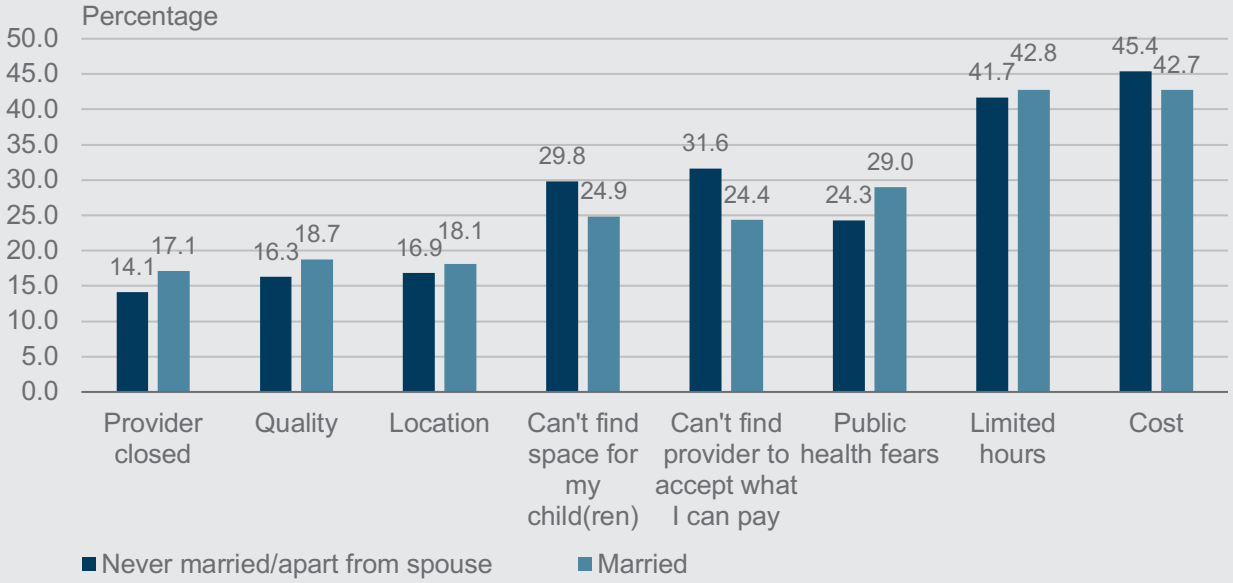
## Figure 5 | Mothers who use care agreeing or strongly agreeing that "I use less care than I need due to..." by income group




*Note: Percentages are weighted.*
*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

In Figure 6, viewing usage of amount of care needed by marital status reveals that married mothers who used care were slightly more likely to report using less care than needed for reasons related to aspects of care arrangements than mothers who had never been married or were no longer with a spouse were. These mothers were more likely to report using less care than needed due to reasons more directly related to barriers to accessing care. For instance, married mothers who used care were more likely to cite reasons indicative that they had access to a formal provider, such as “provider closed” or aspects of quality or the whereabouts of a care arrangement. Mothers who used care who had never been married or were no longer with a spouse were more likely to cite reasons indicative of barriers, such as being unable to find space or a provider who would accept what the mother could pay. Consistent with the previous two figures, limited hours and costs were the top reasons for using less care than needed for mothers who used care regardless of marital status.

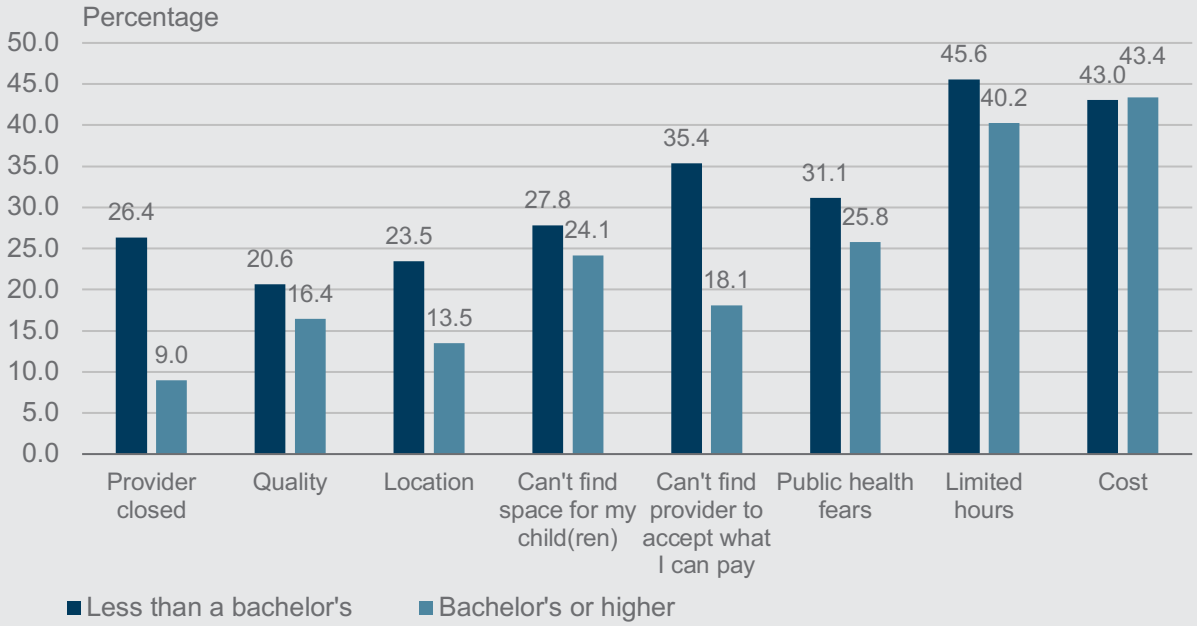
## Figure 6 | Mothers who use care agreeing or strongly agreeing that "I use less care than I need due to..." by marital status




*Note: Percentages are weighted.*
*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

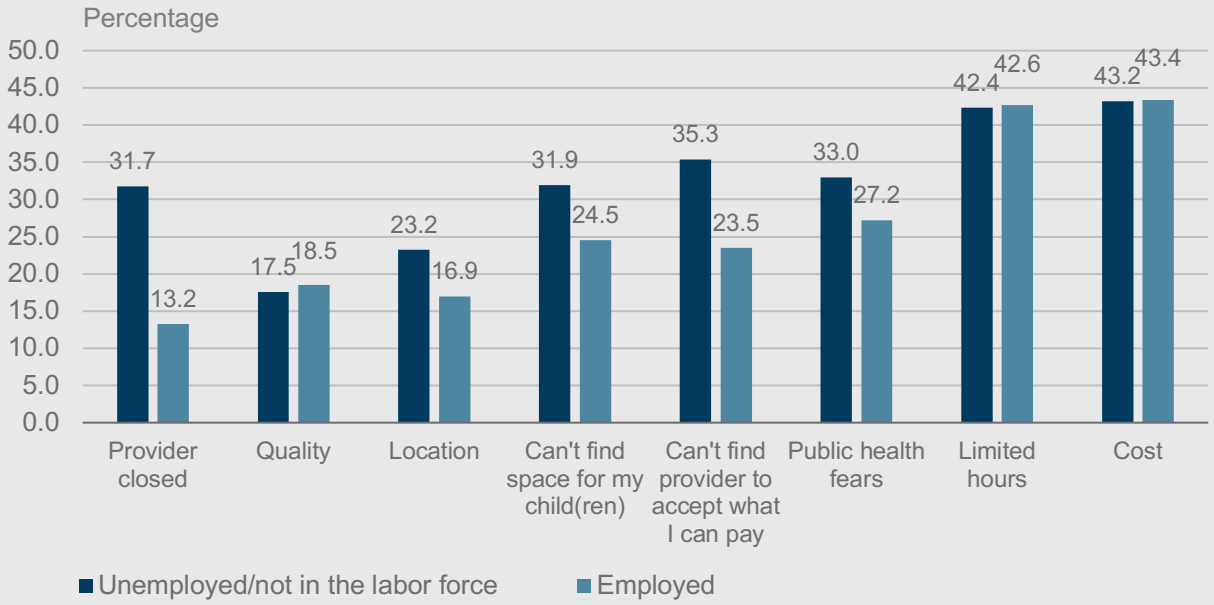
Among mothers who use care, usage of amount of care needed by educational attainment (Figure 7) and employment status (Figure 8) show similar patterns of greater access challenges by mothers who reported having less than a bachelor's degree and being unemployed/outside the labor market at the time of the survey. The exception is around quality, which more employed mothers who used care cited as a reason for using less care than needed than mothers who were unemployed/outside the labor market. Cost and hours were the most commonly cited reasons by mothers who used care regardless of employment status or educational attainment. The employment implications of access challenges are explored in more detail in a subsequent brief (Savage, forthcoming).

## Figure 7 | Mothers who use care agreeing or strongly agreeing that "I use less care than I need due to..." by educational attainment




*Note: Percentages are weighted. Tests for significance were conducted between education levels. There was no significant difference between mothers citing cost by marital status at the time of the survey (p>.05).*
*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

## Figure 8 | Mothers who use care agreeing or strongly agreeing that "I use less care than I need due to..." by employment status




*Note: Percentages are weighted.*
*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

## Discussion

There are a number of possible reasons for the patterns observed in the analysis. With regard to the state comparisons of care usage and foregoing needed care, the higher care usage in the states of Maine and Vermont could be explained by the fact that these states had the highest percentage of mothers reporting experience with subsidy receipt since the onset of COVID. At least 37 percent of mothers in these states had experience with subsidies—7 percentage points greater than the state with the next largest subsidy receipt (Connecticut). In Massachusetts, there was a distinct pattern of expecting less care usage in three months than at the prior reference points. Massachusetts mothers skewed more advantaged in terms of income, education, and marital status than the other states in the region, which we might expect to be indicative of more resources for paid care and thus precipitate higher usage. However, Massachusetts mothers in our sample

reported the lowest employment rates retrospectively, at the time of the survey and based on expectations. Among mothers who were not employed, Massachusetts mothers were most likely to report a preference for caring for their child(ren) themselves. Whether this is a preference partly driven by the high cost of care in the state is unknown. There is also the timing challenge such that "in three months" could have signaled summer vacation for some respondents, approaches to which may vary.

When looking at foregoing needed care by state of residence, we see a distinct spike at the time of the survey, with the exception of Connecticut. However, across all six states, the percentage of mothers expecting to forego needed care declined notably from the peak at the time of the survey.

The state differences could also be due to different contexts. For instance, when looking at the percentage of mothers reporting using less care than needed in Table 2, Massachusetts stood out as having the highest percentage of mothers reporting using less care than needed for more than half of the reasons provided. Massachusetts was one of two states in the region that closed more than 75 percent of child-care facilities during the pandemic (the other state was Rhode Island) (Grimm, 2020). This could help explain why the largest percentage of mothers using less care than needed due to provider closures was in Massachusetts. Massachusetts is also one of the most expensive states in the country for child care (Child Care Aware of America, 2023a), which aligns with having the highest percentage of mothers citing child-care costs as the reason for using less care than needed (note: there was no significant difference between the percentages of mothers citing costs in Massachusetts and Rhode Island; both were the states with the highest percentages). In contrast, mothers in Vermont who used care were least likely to cite cost as a reason for using less care than needed but the most likely to cite being unable to find space. Vermont is a state with a generous subsidy system, which might help explain the slightly lower percentage of mothers citing cost. Vermont had one of the highest income eligibility level in the region at the time of the survey (Londono Gomez, 2022) and has a high rate of provider participation in the subsidy system.[14] More generous subsidies could result in more competition for spaces, which might explain the larger percentage of mothers citing using less care than needed due to being unable to find space.

The declining expectation that mothers across all six states would need to forgo care in the subsequent three months could partially be explained by the decreased expectation that care would be too expensive, as shown in Figure 3. At the same time, the percentage of mothers expecting not to use care due to public health concerns and there being no space for their child also declined, which may help explain the leveling off of the percent of mothers expecting to forego needed care in Figure 2. The increase in the percentage of mothers expecting to forego needed care due to hours, location and days being unavailable may be capturing a change in the child-care supply induced by the pandemic. While not all providers closed, there were required changes in allowable group sizes and capacity (Child Care Aware of America, n.d.) that could have had

[14] Based on author's calculations comparing FY 2022 CCDF Data Tables (Preliminary) to Vermont Child Care Provider Data available through the Department for Children and Families (DCF), Child Development Division.

implications for mothers' expectations about space availability. Also, though labor shortages are common in the child-care sector, they may have been exacerbated at the time of the survey, which could have affected mothers' perceptions of the future. The increased percentage of mothers expecting to forego needed care in three months due to quality could be capturing lingering concerns about COVID and providers' approaches to safeguarding against it.

There are clear patterns of disparities in foregoing needed care in Table 1. Particularly in the months leading up to COVID and at the time of the survey, mothers with more economic advantages were much less likely to forego needed care than mothers with fewer economic advantages. Mothers who forwent needed care were less likely to be employed or in the labor market, but we cannot determine causality. It is possible that some mothers were not working because of access challenges. Also, those outside the labor market could be in school/training and still need care. This brief only shows bivariate comparisons that do not account for other factors related to care usage. For instance, nonwhite mothers were also less likely to have high incomes, have a bachelor's degree, or be married than white mothers. Socioeconomic disparities align with expectations given the expense of paid child care (Child Care Aware of America, 2023b) combined with the fact that not all eligible families receive public subsidies (Chien, 2021) to help with the cost of child care.

Similar patterns emerged when looking at whether mothers who used care reported using the amount of care needed. White mothers and/or those with higher incomes, with a bachelor's degree or higher, or who were employed were less likely to report using less care than they needed than nonwhite mothers, lower-income mothers, those with less than a bachelor's degree, or those who were unemployed or not in the labor force at the time of the survey. This could be capturing mothers who are looking for work as well as mothers participating in school/training who need care to perform these tasks. It could also capture mothers who have unpaid responsibilities who still need care.

Having a lower income, which is associated with race/ethnicity, marital status, educational attainment and employment status, can make accessing child care more difficult, which might help explain the patterns. For instance, Figure 5 shows that lower-income mothers who used care were more likely than higher-income mothers who used care to use less care than needed, possibly indicative of the higher barriers facing lower-income mothers. However, an interesting departure from this pattern in Figure 5 is that moderate-income mothers who used care were the most likely to use less care than needed for almost all possible reasons. This could be partly explained by the fact that moderate-income mothers were less likely to have experience with subsidies than lower-income mothers but also have less resources than higher-income mothers to cover care costs.

The much larger percentage of moderate-income mothers who used care reporting using less care than needed due to provider closures might be explained by the types of providers used by income group. For instance, a question asking about expectations for care usage in three months revealed that mothers in the moderate-income group were more likely to use formal care options such as centers, preschools and family child care than either the lower- or higher-income groups. The lower-income group was most likely to use informal family, friend, and neighbor care out of the

three groups, and the higher-income group was most likely to use babysitters and nannies out of the three groups. Thus, the moderate-income group may have been more vulnerable to provider closures. Overall, the agreement with the multiple reasons for using less care than needed suggests that even mothers who were not foregoing needed care entirely may have been foregoing a portion of the care they needed.

## Conclusion

Access to high-quality child care is a persistent problem for many families. This was the case before the pandemic and continued to be the case as the pandemic receded. The findings in this brief offer insight into the ways in which and reasons for which the problem persists. They reaffirm that access challenges are more nuanced than simply using or not using care (Savage & Robeson, 2025). This is important because access to this needed work support is critical to the economy. The prevailing approach of relying on parents to finance the sector, child-care workers to subsize it through their low wages, and below-market-rate public subsidies to fill gaps for eligible families heightens the overall complexity. How child care is financed fuels access challenges. To ensure groups with different levels and types of challenges have access to high-quality child care, strategies will need to consider the unique starting points.

The following are recommendations that give intentional consideration to addressing access challenges within the mostly private system currently in place.

**Parent-centered approaches.** There is an opportunity to incorporate a parent-centered approach into the design of current and future efforts. Ways of centering design around parents could include a thoughtful and possibly data-driven approach to understanding what tradeoffs parents may face to leverage a new program or service. Perhaps parents struggling to access child care could be asked to rate different child-care options under consideration on the dimensions of affordability, quality, and availability. This could illuminate potential consequential tradeoffs that could undermine efforts.

**Needs assessments.** To inform efforts, it is likely that needs assessments at local levels could have much utility, as demonstrated by Boston (White et al., 2021). This includes quantifying the need for child care and the need for supports in accessing care. A census of child-care needs alone compared to available slots may mask the inaccessibility of the child-care capacity that does exist. It might also be beneficial if assessments could quantify the extent to which barriers include quality concerns, costs, transportation, hours of operation, subsidy system participation, and whether and how these vary.

**Expanding definition of need.** When conceptualizing efforts, it may be worthwhile to include the full pool of parents with young children as possible users of child care. As shown by the data in Table 1, mothers outside the labor force were much more likely to forego needed care. This means that access challenges could be salient to their labor force status, which I explore in another brief using these data (Savage, forthcoming). A narrow pool of employed parents may exclude parents who would be employed if they had access to high-quality care.

**Engaging employers.** Opportunities may exist with employers as part of solutions (U.S. Chamber of Commerce Foundation, 2023). For instance, there could be ways to incentivize employers to offer more family-supportive policies. This could include more generous paid leave to eliminate the need for expensive infant care (Workman & Jessen-Howard, 2018), flexible schedules, remote work, and predictable schedules. Some employers have the ability and discretion to offer benefits that better support families, while others are constrained by industries and occupations that conflict with some family-supportive policies. Examples include those that require on-site presence at certain times without question, such as in advanced manufacturing and healthcare jobs. To the extent that discretion is the barrier, there may be ways to incentivize employers, through tax incentives or otherwise, to choose and expand family-supportive policies. To the extent that employers are constrained from offering certain family-supportive policies, there may be ways to offset some of the barriers to enacting family-supportive policies through tax credits or otherwise.

The complexity of this problem is largely due to the way child care is financed in this country. Additional funds would help parents access this costly but critical service while also ensuring that the quality of services parents can access meets high-quality standards. However, another piece of the access equation is how parents work. Access to job benefits, such as greater flexibility, can mitigate access challenges. Our bifurcated child-care market—where access to high-quality care varies and is out of reach for many families—exists alongside a bifurcated job market, where access to job benefits varies.

Needless to say, child care is critical for work for many parents, but aspects of the care alone cannot fully determine its accessibility. There are mitigating factors worthy of consideration, as they may have additional implications for solutions that a focus on child care alone may miss.

## About the author

**Sarah Savage**

Sarah is a senior policy analyst & advisor at the Boston Fed. As part of the Bank's work to increase employment opportunities, Sarah is conducting research on barriers to positive labor force engagement of low- and moderate-income (LMI) parents in the region, with an intensive examination of the role of child-care needs. Sarah's efforts have also focused on issues related to household economic security and prosperity. Sarah earned her B.S. from Babson College and her Ph.D. from the University of New Hampshire.

sarah.savage@bos.frb.org

## Acknowledgements

The author would like to thank Marybeth Mattingly, Michael Evangelist, Gracie Griffin, Colleen Dawicki, Bo Zhao, and Kim Lucas for their thoughtful insight and feedback, along with Prabal Chakrabarti and Anna Steiger. Production help by Suzanne Cummings, graphics assistance by

Peter Davis, and editing by Gracie Griffin were greatly appreciated. All errors or omissions are the sole responsibility of the author.

# Appendix

## Definitions

Access variables

The analysis includes the variables *child-care usage* and *foregoing needed care*. At times, I refer to the latter more generally as "access challenges." To arrive at usage, I asked respondents, "Were you using child care for any child(ren) under the age of 6 from someone other than you or your child's other parent?" during a time in question (e.g., during December 2019 to February 2020). The responses were "yes" and "no," so the "yes" responses are coded as *using child care*. Respondents who answered "no" were then asked, "Which of the following reason(s) best explain why you did not use caregiving help for any child(ren) under the age of 6?" A number of reasons were offered relating to affordability, quality, and availability, and respondents could select all that applied. The only responses coded as *did not need care* included "I didn't need it" and "my child aged out of child care." A response of "other" could be coded more specifically if respondents offered an optional text response. Respondents who selected reasons other than those indicative of not needed care were coded as *needed but did not use care*, also referred to as "foregoing needed care" or "access challenges," more generally. As an example of another way access challenge variables were operationalized, *use less care than need* is based on a Likert scale question asking respondents how much they agreed with statements at the time of the survey. Items asked if respondents used less care than needed due to a number of reasons relating to affordability, availability, and quality. Respondents who agreed or strongly agreed with at least one of the items were coded as *used less care than needed*. This indicator of access challenges among mothers who used care was used in the analysis also. It should be noted that different measures of child-care access have been offered by other scholars and include "Access to early care and education means that parents, with reasonable effort and affordability, can enroll their child in an arrangement that supports the child's development and meets the parents' needs" (Friese et al., 2017). My operationalization of access and access challenges is narrower, since I do not ask about reasonable effort. I could be overstating "accessible" care by operationalizing it as *use care* or *use amount of care needed* alone. *Use amount of care needed* may get closer to the access definition offered by Friese et al.

Demographic variables

Race/ethnicity: "Nonwhite" includes any race/ethnicity except non-Hispanic white. "White" includes a race of white and an ethnicity of non-Hispanic.

Income: “Low income” is defined as household incomes less than $50K, “moderate income” is $50K to $99K, and “high income” is $100K or higher. Household income was asked for the year before COVID and the year since COVID, defined as January 2020 through December 2020.

Marital status: “Married” includes a status of married. “Non-married/apart from spouse” includes cohabitating, divorced, separated, single, or widowed.

Education: “Bachelor’s or higher” includes a selection of a bachelor’s degree or higher (e.g., Master’s, PhD, MD, etc.). “Less than bachelor’s” includes anything below the completion of a bachelor’s (e.g., GED/high school diploma, some college, Associate’s, etc.).

Employment status: Respondents were asked to report on employment status at the pre-COVID period based on recollections, at the time of the survey, and in three months based on expectations. At the pre-COVID period, “employed” includes employed, employed and attending school/training, laid off but returned to work, and was working but laid off. “Unemployed/not in the labor force” includes in school/training, not working, and not looking for work. At the time of the survey, “employed” includes employed and employed and attending school/training. “Unemployed/not in the labor force” includes in school/training, not working and not looking for work, and laid off. In three months, “employed” includes employed and employed and attending school/training. “Unemployed/not in the labor force” includes in school/training, not working and not looking for work, and being laid off.

## Limitations

The convenience sample methods used for this study present limitations. Without randomization, I cannot generalize findings beyond the sample. While the intention of advertising through Facebook was to simulate a random exposure, Facebook usage itself includes some degree of bias with users tending to be more educated than the general public (Schaeffer, 2024). To compensate for this, I asked partners across the region to disseminate the survey through their networks in hopes that state agencies would be better positioned to have networks with connections to economically diverse groups. However, I did encounter more fraudulent responses[15] to surveys disseminated through partners, likely due to broader dissemination strategies as compared to those sourced through Facebook. I also noted that fraud was much more common among survey respondents indicating a “male” gender response, which, along with the literature on the shouldering of child care by mothers, led me to limit the analysis to females. Because I was asking about three points in time—the past, the present (at the time of survey completion), and three months into the future—I need to be cautious about the validity of responses, as there could be error in both recall and prediction.

Needs and experiences are not monolithic among nonwhite mothers. Because white mothers are least likely to belong to economically excluded groups, and due to sample size constraints, I

[15] Fraudulent responses were identified using Qualtrics RecaptchaScores (values<0.5 are likely to be bots) along with a scanning of duplicative, wordy text responses.

grouped mothers other than white mothers into a single group and recognize the limitation in doing so.

Another important limitation to note is that the intention of the survey was to understand the perspectives of parents with young children across three points in time, but I do not control for the age of children. For instance, infant care tends to be the most expensive and least available. Mothers with infants are more likely to experience access challenges than mothers of preschool-aged children. As a result, I cannot fully attribute supply-side constraints to patterns of usage and access challenges. Due to the screening question, respondents were likely to share a common situation of needing to navigate care options on their own, though licensed care options were likely to vary by child age. On the flipside, while important, child age may have less relevance to the availability of informal care options. Since children aged across each time point, access challenges could have also changed due to the children's age alone, limiting what I can discern about child-care options.

Finally, by the time I administered the survey in early 2022, too much time had elapsed since pre-COVID-19 to capture enough parents who could answer comprehensively about a young child at the three reference points. Some were first-time parents in early 2022 or had a child about to age out of early care. A portion of the first-time parents were still expecting in the three months leading up to COVID-19. While I could not ascertain for certain how many mothers did not yet have a child at the pre-COVID period, at least 201 respondents indicated this as a reason for not needing care in the three months leading up to COVID. I excluded these mothers from the analysis. Questions asking about expectations in the next three months also captured some degree of parents who did not expect to use care during the summer given the timing of the survey. While I screened survey respondents as to whether they had a child under the age of 6 and discontinued the survey if they did not, at the outset, I did not ask about the age of all children in the household to reduce the survey feeling invasive. It should be noted that the aim was to study the challenges around early child care. The way the questions were worded may miss the challenges of parents of young school-aged children (e.g., kindergarteners or first graders).

## Table A1 | Unweighted sample counts

| | N | % |
|---|---|---|
| **Recruitment method** | | |
| **Facebook** | 998 | 47.66 |
| **Partner outreach** | 1,096 | 52.34 |
| **Race/ethnicity** | | |
| **White** | 1,710 | 81.78 |

| | | |
|---|---|---|
| **Nonwhite** | 381 | 18.22 |
| **Income** | | |
| **Income at or above $50,000** | 1,415 | 67.8 |
| **Income below $50,000** | 672 | 32.2 |
| **Household composition** | | |
| **One adult** | 231 | 11.04 |
| **Two or more adults** | 1,861 | 88.96 |
| **Education** | | |
| **Less than bachelor's** | 834 | 39.92 |
| **Bachelor's or higher** | 1,255 | 60.08 |
| **State** | | |
| **Connecticut** | 218 | 10.41 |
| **Maine** | 413 | 19.72 |
| **Massachusetts** | 724 | 34.57 |
| **New Hampshire** | 246 | 11.75 |
| **Rhode Island** | 220 | 10.51 |
| **Vermont** | 273 | 13.04 |

*Source: Federal Reserve Bank of Boston Parent Demand Survey, 2022.*

## Statistical testing

It should be acknowledged that the Parent Demand Survey data were gathered through a convenience sample. The data are weighted, and differences are tested for statistical significance. However, given the nature of the non-probability sample, readers should consult the magnitude of differences rather than relying on statistical testing alone. Larger differences that are statistically significant are likely to be more reliable than very small differences that are statistically significant. I tested for significance as a caution so as not to imply that differences that would not be significant in a random sample were significant in this case.

# References

Alexander, M., & West, C. (2020). T*he new Jim Crow: Mass incarceration in the age of colorblindness* (10th ed.). The New Press.

Andolfatto, D. & Spewak, A. (2017). Why Do Unemployment Rates Vary by Race and Ethnicity? *Federal Reserve Bank of St. Louis On the Economy Blog*. https://fraser.stlouisfed.org/title/economy-9397/unemployment-rates-vary-race-ethnicity-686539

Birinci, S., Mercan, Y., & See, K. (2024). Mismatch Unemployment During COVID-19 and the Post-Pandemic Labor Shortages. *Federal Reserve Bank of Kansas City*. https://www.kansascityfed.org/research/research-working-papers/mismatch-unemployment-during-covid-19-and-the-post-pandemic-labor-shortages/

Caronongan, P., Kirby, G., Malone, L., & Boller, K. (2011). *Defining and Measuring Quality: An In-Depth Study of Five Child Care Quality Rating and Improvement Systems* (OPRE Report #2011-29). Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Chien, N. (2021). Factsheet: Estimates of Child Care Eligibility & Receipt for Fiscal Year 2018. *Office of the Assistant Secretary for Planning & Evaluation | U.S. Department of Health & Human Services*. https://aspe.hhs.gov/sites/default/files/2021-08/cy-2018-child-care-subsidy-eligibility.pdf

Child Care Aware of America. (n.d.). *State Group Size and Ratio Policy Changes during COVID-19* [Table]. https://www.childcareaware.org/coronavirus-hub/coronavirus-landing-page/state-policies-and-ratio-changes-during-covid-19/

Child Care Aware of America. (2022). Catalyzing Growth: Using Data to Change Child Care. Annual Price of Care (2022). https://www.childcareaware.org/catalyzing-growth-using-data-to-change-child-care

Child Care Aware of America. (2023a). *Price of Care: 2023*. https://info.child careaware.org/hubfs/2023_Affordability_Analysis.pdf

Child Care Aware of America. (2023b). *Child Care at a Standstill: Price and Landscape Analysis*. https://www.childcareaware.org/thechildcarestandstill/

Friese, S., Lin, V., Forry, N. & Tout, K. (2017). *Defining and Measuring Access to High Quality Early Care and Education: A Guidebook for Policymakers and Researchers* (OPRE Report #2017-08). Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://acf.gov/opre/report/defining-and-measuring-access-high-quality-early-care-and-education-ece-guidebook

Grimm, C.A. (2020). *National Snapshot of State Agency Approaches to Child Care During the COVID-19 Pandemic* (Report No. A-07-20-06092). Department of Health and Human Services, Office of Inspector General. https://oig.hhs.gov/oas/reports/region7/72006092RIB.pdf

Grunewald, R., Nunn, R., & Palmer, V. (2022). Examining teacher turnover in early care and education. *Federal Reserve Bank of Minneapolis*. https://www.minneapolisfed.org/article/2022/examining-teacher-turnover-in-early-care-and-education

Halpin, J., Agne, K., & Omero, M. (2018). Affordable Child Care and Early Learning for All Families: A National Public Opinion Study. *Center for American Progess*. https://www.americanprogress.org/article/affordable-child-care-early-learning-families/

Haynie, K., Waterman, C., & Ritter, J. (2023). The Year in Child Care: 2021 Data, Analysis and Recommendations. *Child Care Aware® of America*. https://info.childcareaware.org/hubfs/Fall%20Report%2023%20-%20Catalyzing%20Growth%20-%20Using%20Data%20to%20Change%20Child%20Care%20(FINAL).pdf

Henly, J.R., & Adams, G. (2018). Increasing Access to Quality Child Care for Four Priority Populations: Challenges and Opportunities with CCDBG Reauthorization. *Urban Institute*. https://www.urban.org/research/publication/increasing-access-quality-child-care-four-priority-populations

King, C., Banghart, P., Hackett, S.E., Guerra, G., & Appel, S. (2024). Future Directions for Child Care Stabilization: Insights from State and Territory Uses of COVID-19 Relief Funds. *Child Trends*. https://doi.org/10.56417/1169b4422y

Londono Gomez, A. (2022). *Build Back Better Immediately Increases Eligibility for Child Care Assistance* [Fact Sheet]. The Center for Law and Social Policy. https://www.clasp.org/publications/fact-sheet/build-back-better-immediately-increases-eligibility-child-care-assistance/

Malik, R., Hamm, K., Schochet, L., Novoa, C., Workman, S., & Jessen-Howard, S. (2018). America's Child Care Deserts in 2018. *Center for American Progress*. https://www.americanprogress.org/article/americas-child-care-deserts-2018/

Massey, D.S., & Denton, N.A. (1993). *American apartheid: Segregation and the making of the underclass*. Harvard University Press.

National Survey of Early Care and Education Project Team (NSECE). (2016). *Early Care and Education Usage and Households' Out-of-Pocket Costs: Tabulations from the National Survey of Early Care and Education (NSECE)* [OPRE Report #2016-09]. Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://acf.gov/opre/report/early-care-and-education-usage-and-households-out-pocket-costs-tabulations-national

Office of Child Care. (2016). *Child Care and Development Fund Final Rule Frequently Asked Questions*. U.S. Department of Health and Human Services (U.S. DHHS), Administration for Children and Families. https://www.acf.hhs.gov/occ/faq/child-care-and-development-fund-final-rule-frequently-asked-questions#Equal%20Access

Parker, K., Horowitz, J.M., & Minkin, R. (2022). COVID-19 Pandemic Continues To Reshape Work in America. *Pew Research Center*. https://www.pewresearch.org/social-trends/2022/02/16/covid-19-pandemic-continues-to-reshape-work-in-america/

Ruggles, S., Flood, S., Sobek, M., Brockman, D., Cooper, G., Richards, S., and M. Schouweiler. (2023). *IPUMS USA: Version 13.0* [Dataset]. IPUMS. https://doi.org/10.18128/D010.V13.0

Savage, S.A., & Robeson, W.W. (2025). Child care tradeoffs among Massachusetts mothers. *Early Childhood Research Quarterly*, *71*, 104–113. https://doi.org/10.1016/j.ecresq.2024.12.005

Savage, S.A. (2019). High-Quality Early Child Care: A Critical Piece of the Workforce Infrastructure. *Federal Reserve Bank of Boston*. https://www.bostonfed.org/publications/one-time-pubs/high-quality-early-child-care.aspx

Schaeffer, K. (2024). 5 facts about how Americans use Facebook, two decades after its launch. *Pew Research Center*. https://www.pewresearch.org/short-reads/2024/02/02/5-facts-about-how-americans-use-facebook-two-decades-after-its-launch/

Schilder, D., Willenborg, P., Lou, C., Knowles, S., & Jaramillo, J. (2021). Comparing Potential Demand for Nontraditional-Hour Child Care and Planned Policies across States. *Urban Institute*. https://www.urban.org/research/publication/comparing-potential-demand-nontraditional-hour-child-care-and-planned-policies-across-states

U.S. Bureau of Labor Statistics (BLS). (2022). Women in the labor force: a databook. *BLS Reports*. https://www.bls.gov/opub/reports/womens-databook/2021/

U.S. Chamber of Commerce Foundation. (2023). *Employer Roadmap. Child Care Solutions for Working Parents*. https://www.uschamberfoundation.org/solutions/early-childhood-and-k-12-education/employer-roadmap

U.S. Department of Labor. (n.d.,) Access to Leave and Job Flexibilities. *Women's Bureau*. https://www.dol.gov/agencies/wb/data/leave-job-flexibilities

Weber, R. (2011). *Understanding Parents' Child Care Decision-Making: A Foundation for Child Care Policy Making* [Brief OPRE 2011-12]. Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://acf.gov/opre/report/understanding-parents-child-care-decision-making-foundation-child-care-policy-making

White, A., Jones, A., & Khalid, S. (2021). Making Child Care Work: Results from the 2021 Child Care Census Survey. *City of Boston*. https://www.boston.gov/sites/default/files/file/2024/07/Childcare%20Report%202021%20FINAL_0.pdf

Workman, S. & Jessen-Howard, S. (2018). Understanding the True Cost of Child Care for Infants and Toddlers. *Center for American Progress*. https://cdn.americanprogress.org/content/uploads/2018/11/14133754/TrueCostITChildCare-report.pdf