



Breaking Down: The Economic Cost of Child Care Disruptions in Washington

▶ Prepared for Child Care Aware of Washington



Table of Contents

1. Executive Summary.....	1
2. Introduction	2
3. Child Care Disruptions Reported by Washington Parents.....	4
4. Economic Analysis.....	10
Appendix	16

1. Executive Summary

Parents rely on convenient, affordable child care to support their ability to work, and access to affordable, high-quality care for all families with children is therefore critical to a healthy, vibrant economy. Washington falls far short of this ideal – the state ranks as the 11th least affordable state for child care, child care workers struggle with low pay and difficult working conditions, and providers struggle with high turnover and recruitment challenges.

As a result, parents of children 12 or younger frequently struggle to find adequate care for their children:

- 74 percent report that at least one of cost, quality, or availability present significant challenges to their ability to work.
- These parents miss an estimated 5 working days per year due to child care disruptions.
- Nearly 40 percent report having quit or been fired from a job due to child care disruptions since their children were born.

Employment disruptions due to child care problems impose significant costs on parents who cannot work as much as desired, on the businesses that employ parents, and on the broader economy.

This report presents the results of a study on the magnitude of these costs – economic consequences attributable to Washington’s inadequate child care system. Modeled consequences include the costs child-care-related worker turnover, employee absenteeism, parents’ time spent out of work, and the aggregate economic effect of these disruptions.

The study finds that child care problems routinely affect parents’ ability to work. Because of child care problems, nearly 40 percent of parents report having quit or been fired since their children were born; the majority (62 percent) missed at least one day of work in the prior three months; one in ten parents had been out of work for at least a year since their children were born, 43 percent had been out for at least 3 months.

Child care disruptions create large economic costs. Turnover, absenteeism, and lost family income associated with child care issues totaled \$6.9 billion in 2023. If this total cost were to be distributed evenly across all 7.95 million Washington residents, the cost would equal \$870 per resident. The ultimate economic impact amounts to a reduction in Gross State Product (GSP) of \$6.0 billion, or \$758 when spread across all Washington residents. The impacts translate into a loss of federal, state, and local taxes of nearly \$1.5 billion.

This study considered only a part of the economic burden associated with an insufficient child care system—the total burden is likely to be somewhat higher due to impacts on the self-employed, the effect of lost work or school on future earnings of parents, and other factors outside the scope of this study.



2. Introduction

Parents rely on convenient, affordable child care to support their ability to work, and access to affordable, high-quality care for all families with children is therefore critical to a healthy, vibrant economy. By most accounts, child care in Washington falls far short of this ideal. Washington ranks as the 11th least affordable state for child care, according to the St. Louis Federal Reserve Bank, with per-child costs equal to 14 percent of the state median household income.¹ Costs are much higher for many families—single-parent households spend an average of 44 percent of income on child care.² At the same time, child care workers struggle with low pay, difficult working conditions, leading to high turnover and recruitment challenges for providers, particular since the COVID-19 pandemic.

In combination, the high cost of licensed child care, frequent disruptions in availability, and, for many parents the lack of any viable child care options outside of the home create significant challenges for working parents. Parents who cannot secure adequate child care may not be able to look for employment or participate in education and training to improve their skills and earnings. If employed, they may face reduced hours, miss out on opportunities for promotion, or be fired when child care options are limited or unavailable.

At any time, but particularly in the tight labor markets of recent years, employers also bear significant costs due to inadequate child care supply. Child care issues create costs in the form of worker absenteeism, the costs of staff turnover when employees quit or are fired, and loss of employee productivity while at work.

Rigorous research confirms the reality of these problems:

- ◆ Parents seek out quality care but face important constraints. Lower income families emphasize practicality while higher income families prioritize quality. However, all parents face limitations in the child care market that prevent universal access to preferred care.³
- ◆ The child care workforce is chronically undercompensated. Low wages and limited benefits lead to high turnover. Compensation is linked to retention, implying that wage increases may improve workforce stability and retention.⁴

Based largely on a recent survey of Washington parents, and drawing inspiration from several other, similar studies,⁵ this report quantifies some of the economic consequences resulting from an inadequate supply of high-quality child care for children age 0 to 12 in Washington. We calculate lost income to families associated with child care disruptions and the costs to employers associated with child-care-related absenteeism and turnover. These cost estimates serve as inputs to an economic impact analysis that identifies the effects of child care disruptions on the broader state economy.



We take a conservative approach to estimating the identified costs. We do not account for costs such as lost productivity due to worker distraction, or for future costs such as lost income associated with missed training or promotion opportunities. This study considered only a part of the economic burden associated with an insufficient child care system. The total burden is likely to be somewhat higher.

Due to data availability, the calculated burden reflects only a few well-defined impacts. In addition, the calculations provide only a “snapshot” circa 2023. As a result, study findings might understate the true cost of Washington’s inadequate child care options. This snapshot does not capture the long-term negative outcomes of these disruptions. Negative outcomes almost certainly include, for many parents, lower future employment and wages due to missed work and education during 2023, and potentially the long-term effects on children that result from inadequate care during their childhood.

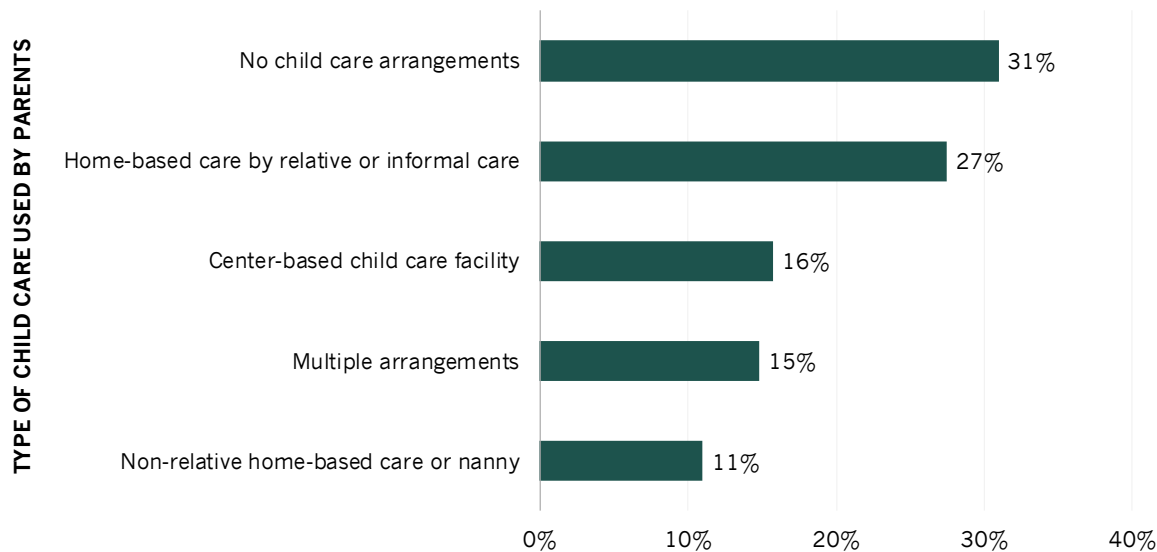


3. Child Care Disruptions Reported by Washington Parents

About 1.5 million parents care for Washington’s 1.1 million children ages 0 to 12. About two-thirds (64 percent) were employed in 2023. A recent survey, administered by Zogby Analytics, sampled 606 parents with children 0 to 12 years old across the state of Washington. The survey was designed to identify the extent to which Washington’s working parents rely on, and struggle with, available child care options. Applying survey findings to the 1.5 million parents (nearly 1.0 million of them working) suggests the large economic burden placed child care disruptions place on families.

Most parents – 69 percent – rely on some form of child care arrangement (see Figure 1). Current care arrangements likely stray far from parents’ ideal, as most parents cite significant challenges finding adequate care to support their ability to work (see Figure 2). A share of the 31 percent of parents who do not have formal child care arrangements would likely prefer some form of regularly available child care if adequate options were available.

Figure 1. Types of child care used by Washington parents

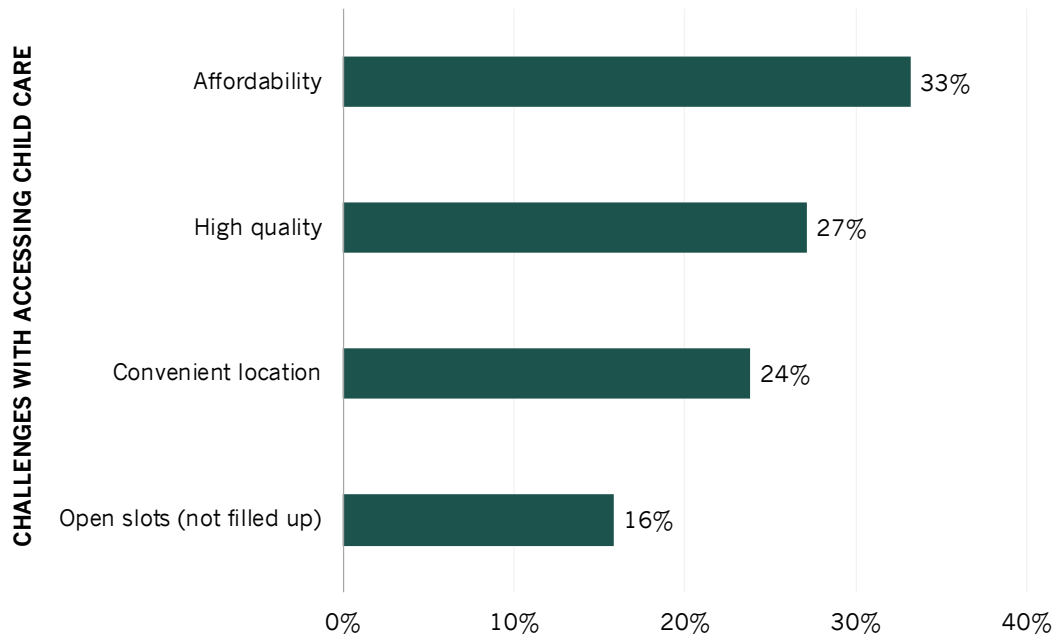


Data note: “No child care arrangements” includes responses to “I am at home with my child/children”, “My significant other stays home with me child/children”, and “No child care arrangements on a regular basis”. Source: Analysis by ECONorthwest; survey data from Zogby Analytics.

Overall, **one-third of parents reported that affordability is a significant challenge** to accessing child care, **27 percent reported that finding high quality care is a significant challenge**, and **nearly a quarter identified location of available care as a challenge**. Nearly three quarters (74 percent) reported facing at least one of the challenges listed in Figure 2.



Figure 2. Access to child care poses significant challenges to working parents

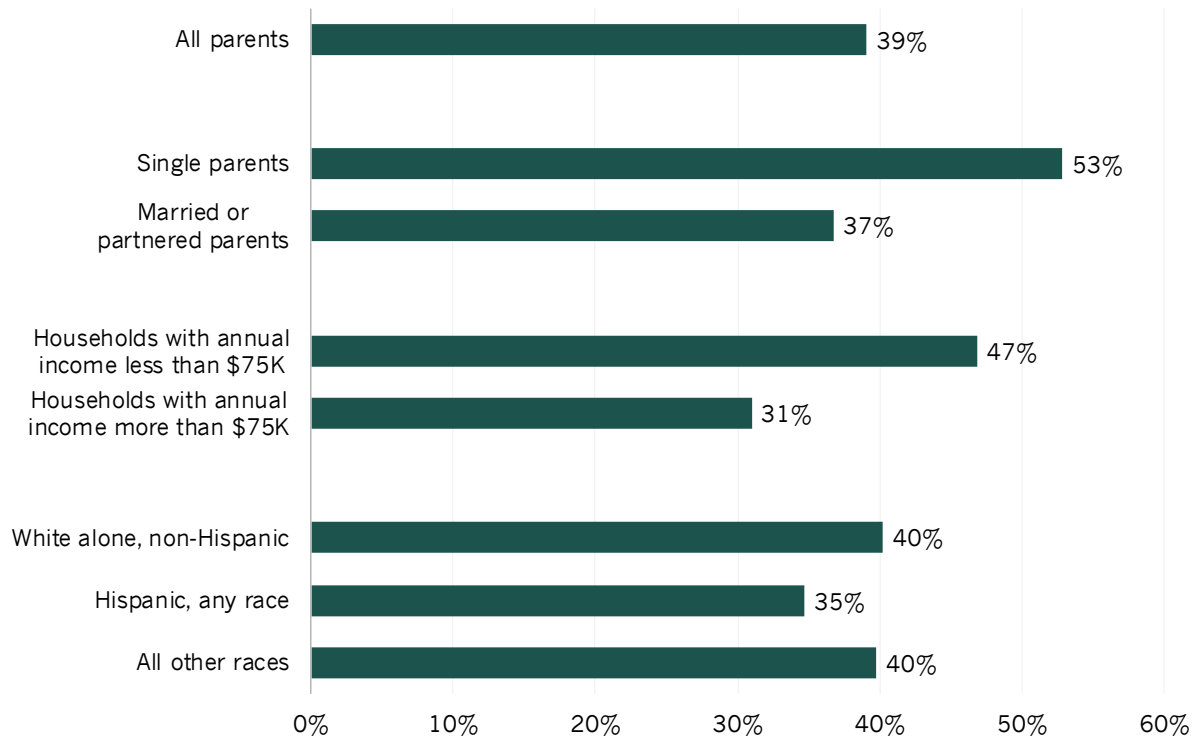


Source: Analysis by ECONorthwest; survey data from Zogby Analytics.

Parents not only face challenges finding adequate care for their children, they frequently bear serious economic consequences as a result of child care issues. **Nearly two in five parents (39 percent) reported having quit or been fired as a result of child care disruptions** since their children 12 or younger were born. These disruptions also affect vulnerable populations more frequently than the average. **Single parents reported job separation at a rate 1.4 times that of other parents; those in household with household income below \$75,000 reported job separation at a rate 1.5 times that of parents in higher-income households** (see Figure 3).



Figure 3. Share of parents that quit or were fired from a job because of child care issues

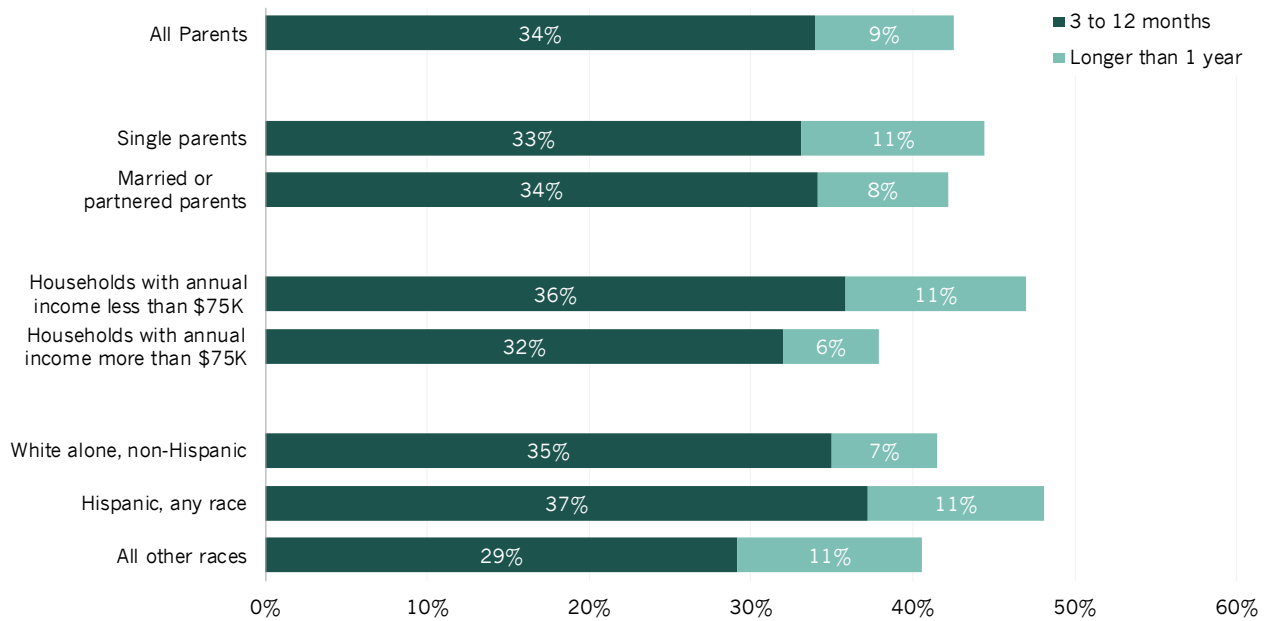


Source: Analysis by ECONorthwest; survey data from Zogby Analytics.

In aggregate, parents report being out of work because of child care issues for significant periods of time over the course of their children’s lives (see Figure 4). **Nearly one in ten parents (9 percent) had been out of work for at least a year, another third (34 percent) had been out of work for between 3 and 12 months** since their children were born. Some of this time results from voluntary or involuntary job separations, some from an inability to look for work.



Figure 4. Months of work missed since children were born



Source: Analysis by ECONorthwest; survey data from Zogby Analytics.

In either case, parents who are not working because of child care disruptions have fewer economic resources and miss opportunities for training, education, and better paying jobs. We identified seven survey questions that likely reduced family income due to child care disruptions (see Figure 5). Over 40 percent of parents reported that they had to reduce their regular working hours due to issues with child care. Over one-third (35 percent) of parents reported they had to turn down a new job offer, and 35 percent of parents changed from full-time work to part-time work.



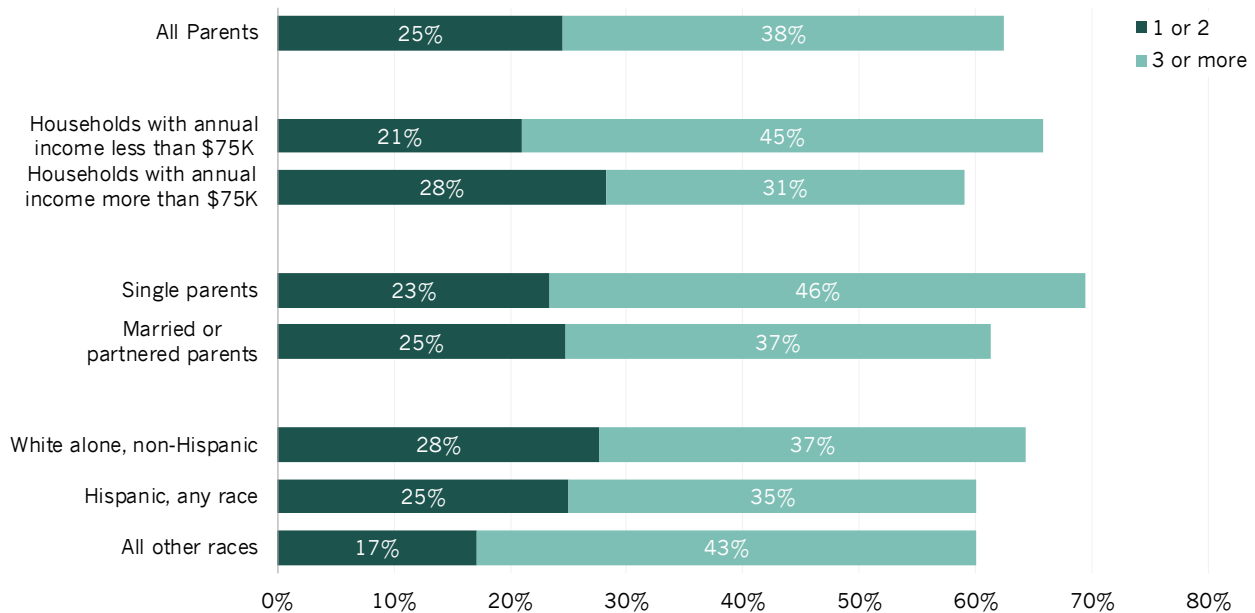
Figure 5. Share of respondents reporting income reducing issues due to child care



Source: Analysis by ECONorthwest; survey data from Zogby Analytics.

Almost two-thirds (63 percent) of parents reported experiencing at least one of seven problems likely to reduce income (see Figure 6).

Figure 6. Share of parents reporting child care issues that likely reduced their income



Note: The data in Figure 5 reflects parents who reported one or more of the following since their children were born: demoted/transferred to less desirable position, pay or hours reduced, turn down new job offer,

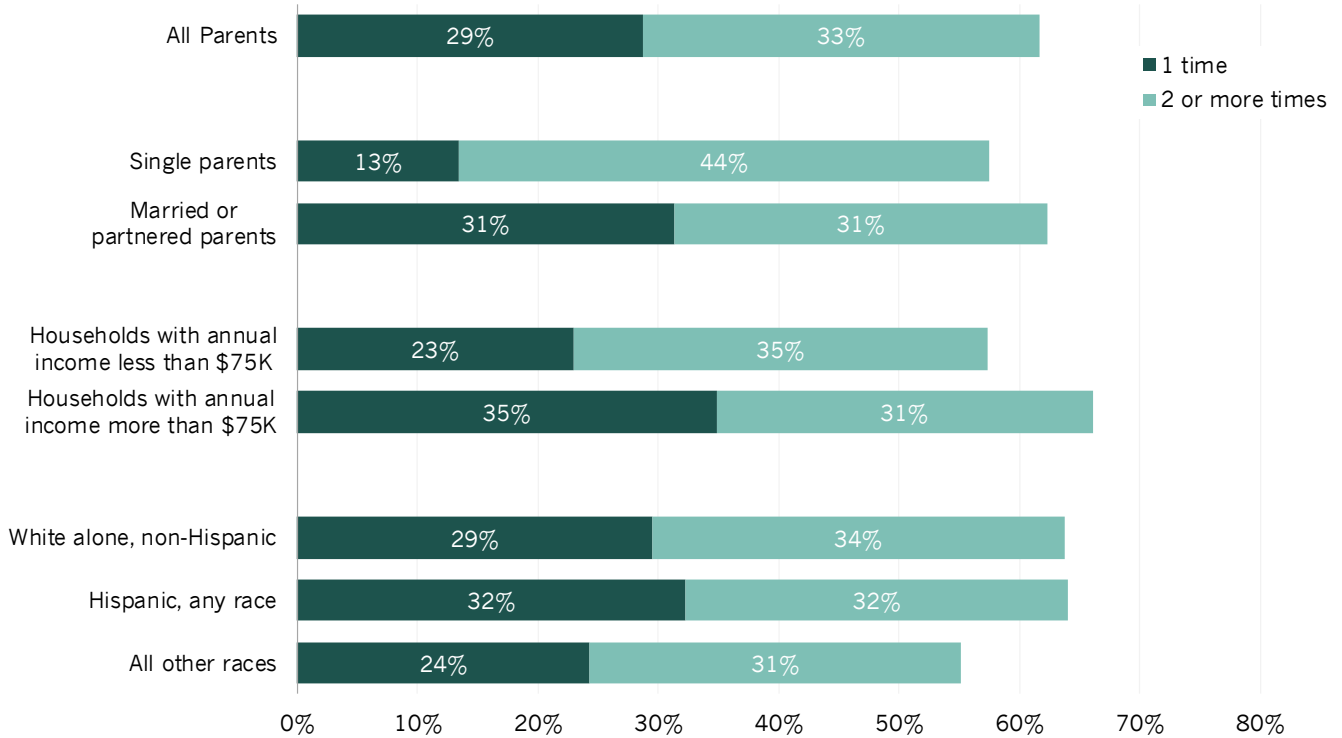


turn down promotion/new job assignment, change from full-time to part-time, reduce regular work hours, and changed to a less demanding job.

Source: Analysis by ECONorthwest; survey data from Zogby Analytics.

While many working parents can rely on paid leave to mitigate the consequences of child care disruptions, the corresponding lost productivity still has an effect on their employers and the broader economy (see Section 3). Figure 7 shows the number of work days parents reported missing in the three months prior to the survey. **Almost two-thirds (63 percent)** reported missing at least one day; about one-third (33 percent) reported missing 2 or more days.

Figure 7. Full days of work missed in the past three months



Source: Analysis by ECONorthwest; survey data from Zogby Analytics.



4. Economic Analysis

The child care disruptions described above have important economic consequences for families, for employers of working parents, and for the broader economy. We calculate the magnitude of these consequences for selected child-care-related disruptions: employer costs associated with employee turnover, employer costs associated with absenteeism, and family income lost due to parents' time out of work. The results serve as inputs to an analysis of the corresponding effects on the state's economy.

Across the three types of disruption considered, the calculations **identify total direct costs of \$6.9 billion in 2023**, equal to \$870 for every Washington resident. While not all of these costs translate directly into a loss of state output, **our modeling nonetheless identifies a large reduction in Gross State Product (GSP) associated with child care disruptions of \$6.0 billion**, \$758 per resident, or 0.75 percent of Washington's 2023 GSP.

Employer costs associated with child-care-related employee turnover

The Zogby survey indicates that 39 percent of parents had been fired or quit at least once due to problems with child care since their children 12 or younger were born. On average, this amounts to an annual rate of job separation for working parents of 5.7 percent—representing about 82,000 of Washington's working parents in 2023. A commonly cited study of staff turnover indicates that replacing an employee costs employers an average of 20.7 percent of the employee's total compensation.⁶ Based on these numbers and working parents' share of compensation paid in Washington, we calculate **total 2023 employer costs of turnover due to child care disruption as \$1.5 billion**.

Employer costs associated with child-care-related absenteeism

Many parents reported missing work for both full and partial days due to child care issues. Our analysis focuses on the 64 percent of parents who reported missing at least one full day of work during the three months prior to the survey. We extrapolated from the survey responses to estimate the number of days missed per year. Averaging across the entire sample indicates that **working parents of children 12 or under miss an average of 1.9 percent of work days, almost five full days for a full-time worker, per year** because of child care issues.

Assuming this missed work is compensated through paid time off, costs fall primarily on businesses paying workers who are not working, we calculate the cost to employers of this **absenteeism as \$2.5 billion in 2023**. In reality, some workers would have to take unpaid time



off, in which case the calculations overstate employer costs, but at the same time, the family income loss calculations below similarly understated.

Lost family income due to child-care-related time out of work

Many parents are out of work because of child care issues for substantial amounts of time due to child care disruptions – **34 percent of parents had been out of work for between 3 and 12 months** since their children 12 or younger were born and **another 9 percent reported being out of work for more than a year** according to the Zogby poll results. This amounts to being out of work for an estimated average of 2.3 percent of any given year, or six days for a full-time worker, while a parent has a child 12 years of age or younger.

In contrast to employer costs of absenteeism, time out of work most directly affects families by reducing the income of parents who would have been working if suitable child care options had been available. Taking into account working parents’ share of employee compensation in Washington, we calculate the **income lost due to child-care-related time out of work amounted to \$2.9 billion in 2023.**

Impact of child care disruptions on the state economy

Our customized model of the Washington economy indicates that the economic impact of the modeled child care disruptions amounted to \$6,025 billion state GSP in 2023 (see Table 1). This amount represents 0.75 percent of Washington’s total 2023 GSP, or \$758 per Washington resident per year.

Table 1. Economic impacts of child care disruptions, 2023 dollars (in millions)

EFFECT TYPE	EMPLOYEE COMPENSATION	VALUE ADDED (GSP)
Direct	\$1,610	\$2,291
Secondary	\$1,960	\$3,734
Total	\$3,570	\$6,025

Source: Data analysis by ECONorthwest, using IMPLAN modeling software, 2022 economic data.

Child care disruptions also have implications beyond the economic impacts shown in Table 1. Each year these disruptions, by reducing income, purchases, and other taxed activities, reduce state and local taxes by nearly \$527 million and federal taxes by \$922 million for a total of \$1,449 billion.



Table 2. Tax impacts of child care disruptions, 2023 dollars (in millions)

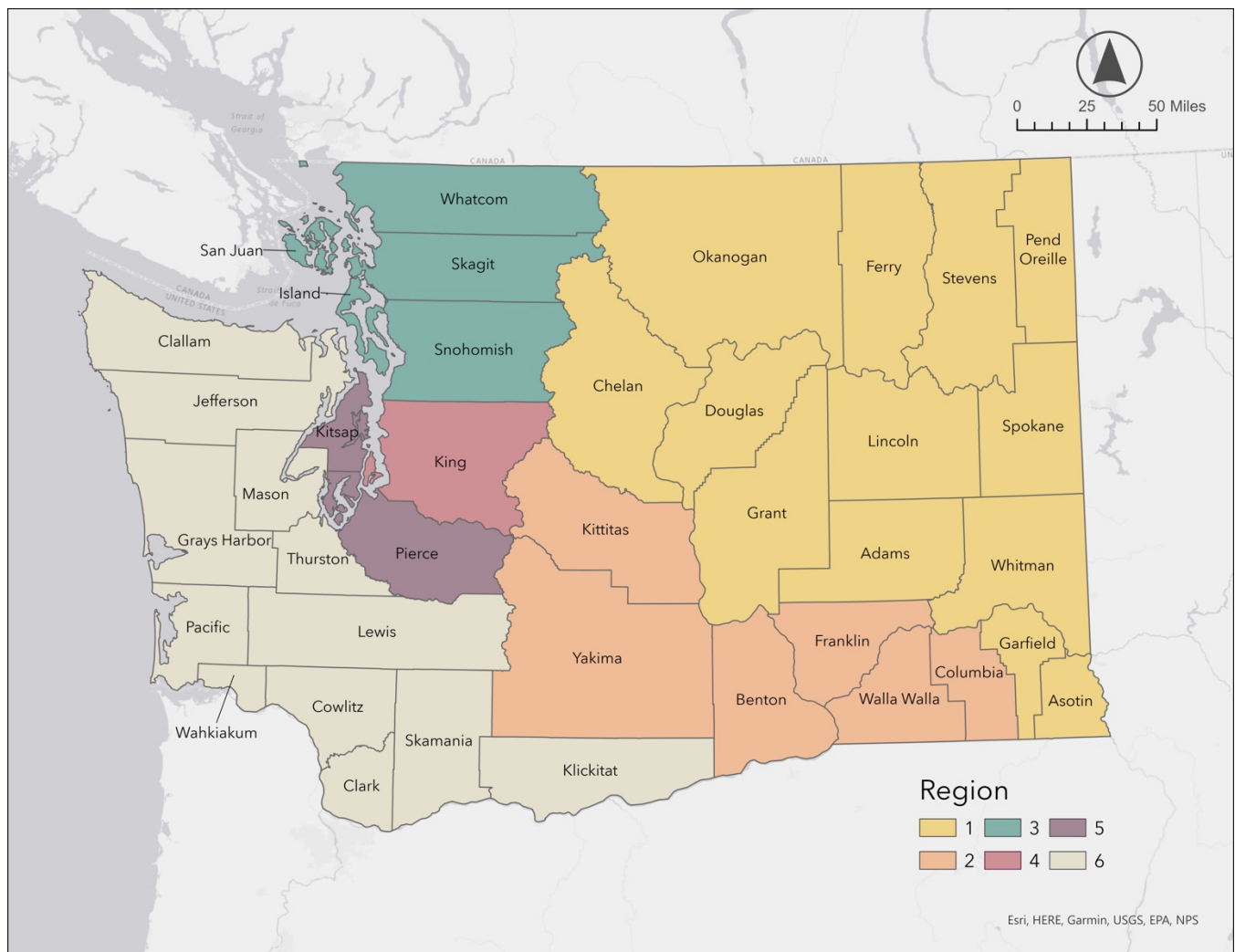
TAX TYPE	TAX AMOUNT
State & Local	\$526.7
Federal	\$922.3
Total	\$1,449

Source: Data analysis by ECONorthwest, using IMPLAN modeling software, 2022 economic data.

Child care disruptions by geographic region

In addition to statewide impacts, the survey allows analysis of disruptions and impacts by geographic region. As illustrated below, child care disruptions affect a large number of parents across all regions of the state. Figure 8 displays a map of the six regions used in this analysis.

Figure 8. Map of Washington regions

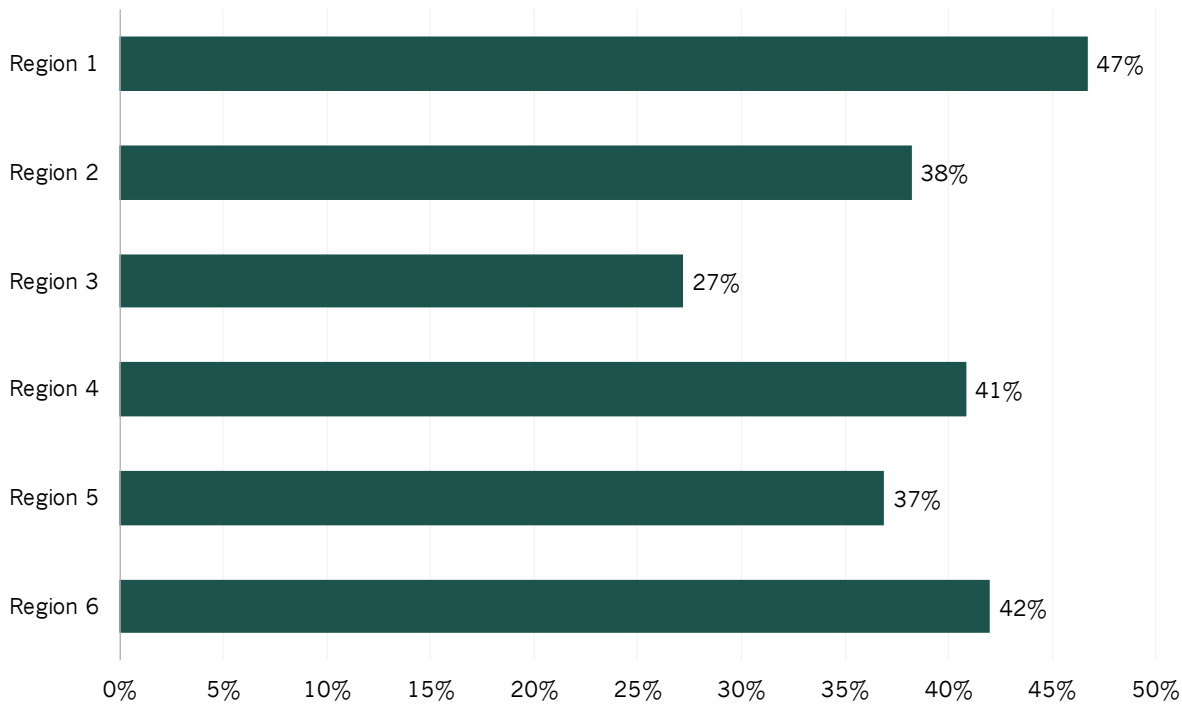


Source: Map produced by ECONorthwest; regions defined by Washington State Department of Children, Youth, and Families (DCYF).



Nearly half (47 percent) of parents living in Region 1 reported having quit or been fired as a result of child care disruptions since their children 12 or under were born. About **two in five parents in Region 5 (37 percent), Region 4 (41 percent), and Region 6 (42 percent) reported having quit or been fired**, and about one-quarter (25 percent) of parents in Region 3 reported having quit or been fired (see Figure 9).

Figure 9. Share of parents that quit or were fired from a job because of child care issues, by Washington region

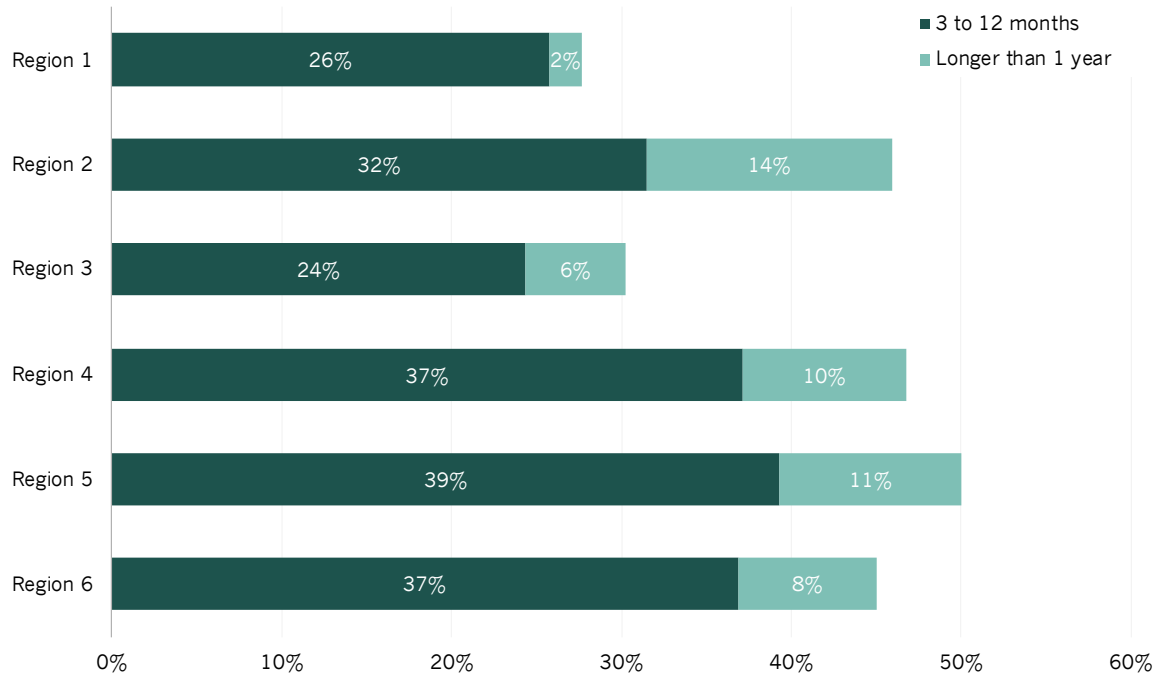


Source: Data analysis by ECONorthwest; survey data from Zogby Analytics.

Parents missing more than 3 months of work since their children were born ranged from a low of 28 percent (Region 1) to a high of 50 percent (Region 5). **More than 1 in 10 parents missed at least one year of work in regions 2, 4, and 5** (see Figure 10).



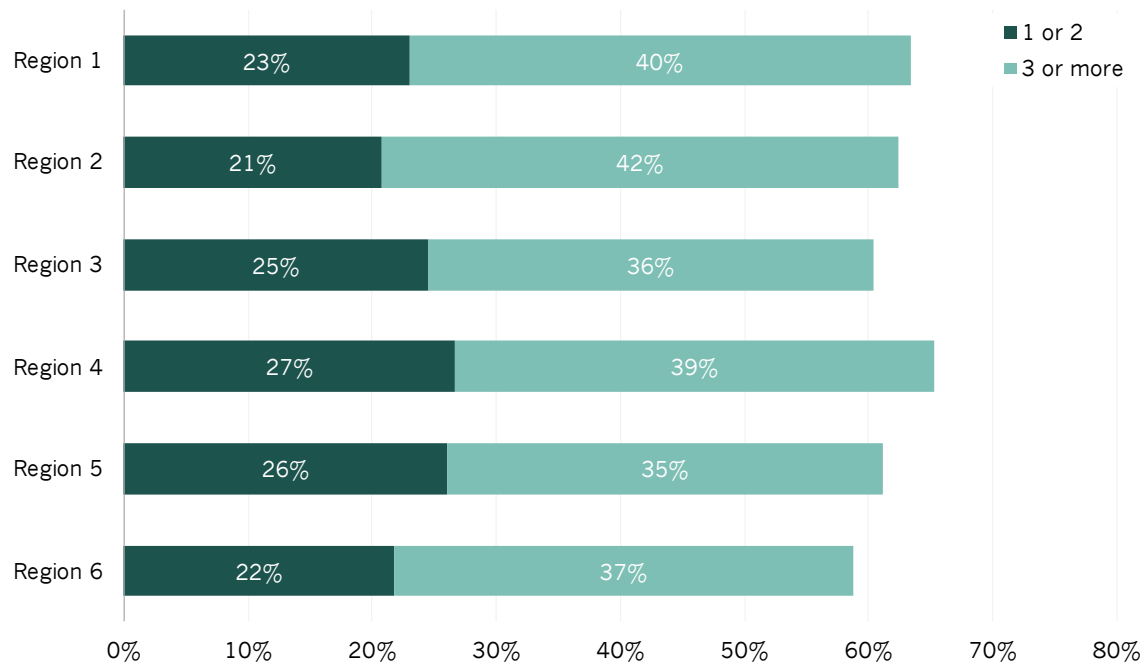
Figure 10. Months of work missed since children were born, by Washington region



Source: Data analysis by ECONorthwest; survey data from Zogby Analytics.

About six in ten parents for each region reported experiencing at least one of seven problems likely to reduce income (see Figure 11).

Figure 11. Share of parents reporting child care issues that likely reduced their income, by Washington region



Source: Data analysis by ECONorthwest; survey data from Zogby Analytics.



Impact of child care disruptions by geographic region

Our statewide model identifies the economic impact of child care disruptions as \$6.0 billion in Washington GSP per year. We apportioned the GSP impacts by the number of children 0 to 12 in each Washington region to arrive at regional impact estimates displayed in Table 3.¹

Table 3. Economic impacts of child care disruptions by Washington region, 2023 dollars (in millions)

REGION	VALUE ADDED (GSP)		
	DIRECT	SECONDARY	TOTAL
1	\$285.9	\$466.0	\$752.0
2	\$257.1	\$419.0	\$676.2
3	\$381.9	\$622.5	\$1,004.4
4	\$613.0	\$999.2	\$1,612.2
5	\$381.1	\$621.1	\$1,002.2
6	\$371.9	\$606.2	\$978.1
Total	\$2,291	\$3,734	\$6,025

Note: Totals may not sum due to rounding.

Source: Data analysis by ECONorthwest, using IMPLAN modeling software, 2022 economic data.

Child care disruptions reduce statewide taxes (state, local, and federal) by \$1,449 billion per year. The regional tax impacts are shown in Table 4, which is based on the same allocation method described above.

Table 4. Tax impacts of child care disruptions, 2023 dollars (in millions)

REGION	TAX TYPE		
	STATE & LOCAL	FEDERAL	TOTAL
1	\$65.7	\$115.1	\$180.8
2	\$59.1	\$103.5	\$162.6
3	\$87.8	\$153.8	\$241.6
4	\$140.9	\$246.8	\$387.7
5	\$87.6	\$153.4	\$241.0
6	\$85.5	\$149.7	\$235.2
Total	\$526.7	\$922.3	\$1,449

Note: Totals may not sum due to rounding.

Source: Data analysis by ECONorthwest, using IMPLAN modeling software, 2022 economic data.

¹ This allocation method provides a sense of scale of economic impact but is not based on explicit modeling of each individual region. The survey sample size was insufficient for a detailed regional analysis.



Appendix

Survey Methodology and Sample Characteristics

The survey data used in this report comes from a survey administered by Zogby Analytics. The sample consists of Washington adult (18 years or older) residents who care for at least one child 12 years of age or younger. Survey data were collected over the span of six days, from February 26, 2024 to March 2, 2024. The final sample size includes 606 respondents, all of whom were contacted via a web survey.

Zogby Analytics randomly sampled adult Washington residents for this survey to obtain responses from 606 adults with at least one child 12 or younger. Zogby reports a margin of error of +/- 4.0 percentage points for statistics based on the full sample, representing a 95 percent confidence interval.

Methodology

The calculations described in this report were based on Washington 2022 1-year American Community Survey (ACS) Public Use Microdata Sample (PUMS)⁷ published by the U.S. Census Bureau, and the Zogby survey. We used a post-stratification raking method to fit the Zogby survey sample to reflect the statewide population by controlling for respondents' sex, marital status, age, and race/ethnicity. This process generated sample weights for the Zogby survey, which were used to extrapolate to a statewide sample that represents all adults caring for children 12 years or younger in Washington. Table 5 compares the demographic characteristics of the raked survey sample to the ACS PUMS data.

Table 5. Demographic characteristics of survey respondents

RESPONDENT CHARACTERISTIC	SHARE OF ZOGBY SURVEY RESPONDENTS (RAKED SAMPLE)	ACS PUMS 2022 SAMPLE
Share that identifies as female	53%	52%
Share that are married or living with a partner	86%	86%
Share by race and ethnicity		
White alone, not Hispanic	56%	56%
Hispanic, any race	19%	19%
Other race, not Hispanic	10%	8%
Asian alone, not Hispanic	8%	12%
Black alone, not Hispanic	7%	5%

Source: Analysis by ECONorthwest; survey data from Zogby Analytics.

Additional data sources informed parameters for the cost estimates:



- ◆ Bureau of Economic Analysis' (BEA) Personal Income by major component and earnings table, 2023
- ◆ BLS Employer Cost for Employee Compensation survey (ECEC), 2023

These newly created sample weights were used to calculate the total direct costs for each of the three child care disruptions: employer costs associated with employee turnover, employer costs associated with absenteeism, and family income lost due to parents' time out of work.

- ◆ **Employer costs associated with employee turnover.** We calculated this cost as follows: First, using the Zogby survey data we calculated an annualized rate of job loss due child-care-related job separations – being fired, quitting – for parents with at least one child 12 or under. Second, calculate these parents' share of total wage and salary income (from ACS data), adjusting for the fact that parents reporting child-care-related employment disruptions report lower-than-average educational attainment and income. Third, apply the results of the first two steps to total compensation derived from the sources listed above. Fourth, apply the assumed turnover cost ratio of 20.7 percent.⁸
- ◆ **Employer costs associated with absenteeism.** We calculated this cost as follows: First, estimate an annualized average amount of work missed by parents with a child 12 or younger based on Zogby survey responses regarding days missed due to child care disruptions in the prior three months. To do so, we use the mid-point of each response category in the survey (1 day, 2-3 days) or the lower bound (4 or more days). Second, multiply the result by employ compensation derived from the sources listed above.
- ◆ **Family income lost due to parents' time out of work.** We calculated this cost as follows: First, estimate an annualized average amount of time out of work missed by parents with a child 12 or under based on Zogby survey responses regarding months out of work due to child care disruptions since the respondent's children 12 or under were born. To do so, we use the mid-point of each response category for parents reporting 3 to 6 months, 6 to 12 months, or 12 to 24 months out of work. We use 24 months for parents reporting being out of work for 24 months or more. Second, subtract from this average the amount of time out of work reported by parents who had never been fired or quit due to child care disruption. Third, apply the result to parents' compensation as in the calculations for the costs of child-care-related absenteeism.
- ◆ **Per state resident estimates.** Report costs per state resident are calculated based on the 2023 Office of Financial Management (OFM) state population estimate of 7,951,150.

We estimated the impact of child care disruptions on Washington GSP using IMPLAN, an input-output modeling framework that is well-regarded by government agencies, policymakers, universities, and private entities alike.



First, we built a custom model in IMPLAN for the state of Washington. We summed the two direct effects pertaining to businesses, employee turnover and absenteeism, which resulted in about \$4.0 billion of total decreased economic output for the state. These dollars were then distributed by the share of sector-level (2-digit NAICS) employment calculated from the Washington 2022 ACS PUMS data. The dollar amounts were entered into IMPLAN as industry output events for each sector. An additional model constraint was then applied to estimate the impacts at the state's current levels of economic production. We then modeled the lost family income (\$2.9 billion) as an additional change in household income—which only produces induced impacts—for households earning between \$70K and \$100K per year, which contains the estimated income of families experiencing the modeled disruptions.

- ¹ Federal Reserve Bank of St. Louis, “The Economic Impact of Child Care by State” (2022), Accessible on April 23, 2024. <https://www.stlouisfed.org/community-development/child-care-economic-impact>.
- ² “Washington CADC.” n.d. Child Care Aware® of America. Accessed January 24, 2024. <https://www.childcareaware.org/child-care-data-center/>.
- ³ Rachel A. Gordon et al., “Who's Minding the Kids? Experimental Evidence on the Demand for Childcare Quality,” *National Bureau of Economic Research* (2020); Nicole D. Forry et al., “Child Care Decision-Making Literature Review,” *US Department of Health & Human Services* (2013).
- ⁴ Charlotte V. Farewell et al., “Job Demands and Resources Experienced by the Early Childhood Education Workforce Serving High-Need Populations,” *Early Childhood Education Journal* 50, no. 2 (2022): 197–206; Sara Gable et al., “Childcare Centers and the Economic Stimulus Package: The Case for Investing in Teacher Education and Compensation,” *Policy, Politics, & Nursing Practice* 8, no. 3 (August 2007): 193–201.
- ⁵ Elizabeth M. Talbert, et al., “Counting Our Losses: The Hidden Cost to Marylanders of an Inadequate Child Care System,” *Maryland Family Network*, <https://www.marylandfamilynetwork.org/early-years-matter/counting-our-losses>; Belinda Davis, et al., “Losing Ground: How Child Care Impacts Louisiana’s Workforce Productivity and the State Economy,” *Louisiana State University Public Policy Research Lab*, May 2017, <https://policyinstitutela.org/research/economic-case/>; Sandra Bishop and Tamar Lieberman, “The Economic Impacts of Insufficient Child Care Cost Arizona \$4.7 Billion Annually,” *Council for a Strong America*, December 2023, <https://www.strongnation.org/articles/2290-the-economic-impacts-of-insufficient-child-care-cost-arizona-4-7-billion-annually>.
- ⁶ Heather Boushey and Sarah J. Glynn, “There Are Significant Business Costs to Replacing Employees,” Center for American Progress, November 16, 2012.
- ⁷ U.S. Census Bureau, American Community Survey PUMS Data. Accessible at <https://www.census.gov/programs-surveys/acs/microdata/access.html>.
- ⁸ Boushey and Glynn (2012).



