Constraints on New Hampshire's Workforce Recovery

Impacts from COVID-19, Child Care and Benefit Program Design on Household Labor Market Decisions

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FINAL REPORT

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About Econsult Solutions, Inc. (ESI)

Econsult Solutions, Inc. (ESI) provides businesses and public policy makers with consulting services in urban economics, real estate economics, transportation, public infrastructure, development, public policy and finance, community and neighborhood development, planning, as well as expert witness services for litigation support. Staff members have outstanding professional and academic credentials, including active positions at the university level, wide experience at the highest levels of the public policy process and extensive consulting experience. Based in Philadelphia, ESI support clients nationwide.

ESI's government and public policy practice combines rigorous analytical capabilities with a depth of experience to help evaluate and design effective public policies and benchmark and recommend sound governance practices. ESI has assisted policy makers at multiple levels of government to design and evaluate programs that help citizens increase their economic security.

Ethan Conner-Ross, Rebecca DeJoseph, and Alix Sullivan were the primary ESI researchers on this study.

About the National Center for Children in Poverty (NCCP)

The National Center for Children in Poverty (NCCP), founded within Columbia University and beginning in July 2019 located at Bank Street Graduate School of Education, is a nonpartisan public policy research center dedicated to promoting the economic security, health, and well-being of America's low-income families and children. NCCP uses research to inform policy and practice with the goal of ensuring positive outcomes for the next generation. It conducts research and policy analysis and uses existing evidence to identify effective, innovative strategies that can improve the lives of children and families experiencing economic hardship. The center provides accessible information and recommendations about research-informed policies and initiatives that can help families and communities support children's success from infancy through young adulthood.

NCCP reaches a large audience with its reports, online data tools, policy resources, technical assistance, and partnerships. This audience includes state and local policymakers, advocates, community leaders, researchers, and administrators in government agencies that use NCCP's research and analyses to make informed decisions about policies and programs that promote secure, nurturing families and thriving children. NCCP often partners with government officials, advocates, and other stakeholders to plan and carry out policy research and analysis—an approach that fully engages decision-makers and helps ensure that results will be used to strengthen policies and programs.

Key areas of the center's work include safety net policies, immigrant families, paid family leave, disability policies, early childhood mental health, early intervention, early care and education policies, and two-generation approaches. NCCP's online resources include the Family Resource Simulator, the Young Child Risk Calculator, the 50-State Policy Tracker, the 50-State Demographic Data Generator, Early Childhood State Policy Profiles, and the Basic Needs Budget Calculator.

Seth Hartig and Suma Setty were the primary NCCP researchers on this study.

3. Child Care Workforce Constraints

While the availability of jobs has been the foremost concern in the initial stage of the economic recovery, potential workers may face substantial constraints in their ability to enter or reenter the workforce due to non-economic reasons. This section reviews the constraint presented by child care considerations, which have become more pressing for many families during the pandemic, while Section 4 reviews issues related to benefit program design, which tend to be longer-term in nature.

The child care system is foundational to enabling workers with children to contribute to the labor force. However, the lack of affordable, accessible, and quality care has the potential to create significant barriers to work, especially for women, single-parent households, and low-income families. Survey data shows that many low-income individuals cite family constraints as a reason for not entering the labor force.[53]

The COVID-19 pandemic has not caused these issues with child care, but has certainly exacerbated them, increasing disparities and forcing marginally attached workers out of the labor market. Moreover, the pandemic has created an unprecedented child care crisis for parents of school age children as well, with many schools in the nation switching from in-person classes to remote or hybrid learning. These constraints have a profound impact not only on individual workers and families but on the state's economy, impacting the productivity of workers while constraining the available workforce.

While many families are likely relying on family and friends to fulfill additional child care needs during the pandemic, this analysis primarily focuses on factors influencing the availability and use of licensed child care facilities for children under age 13.[54] Child care in this report is defined as a school or licensed child care setting that cares for children under age 13, thereby allowing parents to work. Children below school age are children under age six, and school age children needing care are children aged 6-12.[55] It is important to note that older children requiring child care typically are children with disabilities. Due to data limitations, this report does not analyze child care impacts for these children and their families. Using a mix of information on New Hampshire's evolving child care supply and demand, data on reasons for unemployment, and research on the economic implications, this analysis proceeds in the following sequence:

- **Section 3.1: The State of Child Care Pre-COVID** reviews the affordability, availability, and quality of child care for children under age six in New Hampshire prior to the pandemic;
- **Section 3.2: Child Care Implications from COVID** discusses changes in supply and demand for child care during the course of the pandemic, including impacts on parents of school age children in addition to the population of children below school age;

[53] Katharine B. Stevens. (2017). Workforce of Today, Workforce of Tomorrow: The Business Case for High-Quality Childcare. Center for Education and Workforce. US Chamber Foundation. https://www.uschamberfoundation.org/sites/default/files/Workforce%20of%20Today%2CWorkforce%20of%20Tomorrow%20Report_0.pdf
[54] (2020). Returning to Work and the Childcare Dilemma. U.S. Chamber of Commerce Foundation. Working Papers, Childcare, and Covid-19. https://www.uschamberfoundation.org/sites/default/files/media-uploads/EarlyEd_Minis_Report4_FINAL.pdf
[55] For the analysis on school age children, elementary (K-5) and middle (6-8) school closings were used to understand potential child care needs of parents in New Hampshire during the COVID-19 pandemic. Because eighth grade students are typically aged 12 to 13, some 13-year-old students may be included in this analysis.

- **Section 3.3: Potential Impacts on Labor Availability and Productivity** synthesizes information on the labor market impacts from child care constraints, including the disproportionate impacts on women, to understand the implications for New Hampshire's economic recovery; and
- **Section 3.4: Licensed Child Care Gap Analysis by Town Typology** takes a deeper look into the pre-COVID and COVID-era child care gaps for similar towns grouped by geography, density, income, industry concentration, and social vulnerability.

3.1. The State of Child Care Pre-COVID

Prior to the COVID-19 pandemic, New Hampshire's families with children below school age faced challenges in terms of availability, affordability, and quality. These issues are reviewed in detail below. Notably, the issues New Hampshire faces are not unique to the state, as discussed further in the section.

Affordability

The cost of child care for children below school age represents a significant constraint for many New Hampshire families in their employment decisions. The U.S Department of Health and Human Services (HHS) set a federal standard stating that affordable co-payments for low-income families receiving Child Care and Development Fund (CCDF) subsidies should not exceed 7 percent of household income.[56] The Child Care for Working Families Act utilizes this standard, proposing to limit child care expenses to 7 percent of income for low-income families.[57] New Hampshire is in the top half of states with the highest center-based infant care costs as a percentage of median income for a married couple, ranking 24th among fifty states and D.C. in 2018. Northeastern states have particularly high child care costs, accounting for up to 16.5 percent of median income for a married couple household in Maine and as low as 10.7 percent in Rhode Island. The majority of low-income working New Hampshire households with children under 6 do not receive CCDF subsidies, although the percentage of this population receiving subsidies is much higher than in the vast majority of states. In 2019, the annual cost of center-based child care for an infant in New Hampshire was approximately $13,000, roughly 12 percent of median household income with two earners, and over 40 percent of annual income for a single-parent household.[58] Nationally, center-based child care for infants can make up an average of 36 percent of a single-parent household's income.[59] To put this cost into perspective, the average cost of public university tuition in New Hampshire is only marginally higher, at $16,500 annually. The cost of child care for young children is also less affordable than child care for school age children.[60]

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[56] (n.d.). Child Care and Development Fund Final Rule Frequently Asked Questions. https://www.acf.hhs.gov/occ/faq/child-care-and-development-fund-final-rule-frequently-asked-questions
[57] Sen. Patty Murray. (2019). Child Care for Working Families Act. https://www.congress.gov/bill/116th-congress/senate-bill/568
[58] (n.d.) Price of Child Care in: New Hampshire. Child Care Aware of America. https://info.childcareaware.org/hubfs/2019%20Price%20of%20Care%20State%20Sheets/New%20Hampshire.pdf?utm_campaign=2019%20Cost%20of%20Care&utm_source=2019%20COC%20-%20NH
(2016). Child Care and Development Fund (CCDF) Program. Federal Register Vol. 81 No. 190. https://www.govinfo.gov/content/pkg/FR-2016-09-30/pdf/2016-22986.pdf
[59] (n.d.) Price of Child Care in: New Hampshire. Child Care Aware of America. https://info.childcareaware.org/hubfs/2019%20Price%20of%20Care%20State%20Sheets/New%20Hampshire.pdf?utm_campaign=2019%20Cost%20of%20Care&utm_source=2019%20COC%20-%20NH
[60] (2019). State Child Care Facts in the State of: New Hampshire. Child Care Aware of America. https://cdn2.hubspot.net/hubfs/3957809/State%20Fact%20Sheets%202019/New%20Hampshire%202019.pdf

Figure 3.1 below shows annual market rate child care costs by county for center-based care for one infant and for two children, based on data from Child Care Aware of America.[61] These costs are then shown as a proportion of median income for a two-parent household.[62]

- The statewide cost-to-income ratio for infant care is 12 percent and 22 percent for care for two children (one infant and one four-year-old).
- Costs and income ratios vary by county, with lower-income counties often featuring below average costs in absolute terms but higher than average cost-to-income ratios. The highest ratios are seen in Sullivan, Carroll, Coos, and Grafton Counties, despite each having an average cost below the state average.

Figure 3.1: Annual Cost of Child Care for Center-Based Care by County, 2019

County	One Infant	Percent Income (Two Parent)	Two Children (Infant & 4yo)	Percent Income (Two Parent)
Belknap	$10,192	11%	$18,858	20%
Carroll	$10,247	14%	$18,857	26%
Cheshire	$12,009	13%	$21,460	24%
Coos	$9,193	14%	$17,253	25%
Grafton	$12,955	14%	$22,808	25%
Hillsborough	$13,106	12%	$23,497	22%
Merrimack	$11,604	12%	$21,395	22%
Rockingham	$13,897	12%	$24,961	22%
Strafford	$10,024	11%	$20,173	22%
Sullivan	$12,434	15%	$21,534	27%
State Average	$13,044	12%	$23,647	22%

Source: Child Care Aware of America (2020)

By HHS's standard, the cost of child care for young children without subsidies is unaffordable for the median New Hampshire household. When considering low-income or single-parent households, these costs create a significant, and at times insurmountable, barrier to entering the workforce. For low-income New Hampshire residents, the cost of child care for two children in a two-parent household would account for approximately 94 percent of its total income. [63] For comparison, in Maine, this percentage would be 101.5, in Vermont it is 95.4, and in Rhode Island, it is nearly 83 percent.

Survey data confirms the relevance of child care costs to employment decisions for these households. In a U.S. Chamber of Commerce Foundation survey, a strong majority (71 percent) of non-working poor

[61] This analysis relies on data from Child Care Aware of America and Child Care Aware of New Hampshire. Two children in this analysis include an infant and a four-year-old child.
[62] (2019). The US and the High Price of Child Care: An Examination of a Broken System. Child Care Aware of America. https://www.childcareaware.org/our-issues/research/the-us-and-the-high-price-of-child-care-2019/2019-price-of-child-care-by-county-new-hampshire/
[63] (n.d.) Price of Child Care in: New Hampshire. Child Care Aware of America. https://info.childcareaware.org/hubfs/2019%20Price%20of%20Care%20State%20Sheets/New%20Hampshire.pdf?utm_campaign=2019%20Cost%20of%20Care&utm_source=2019%20COC%20-%20NH

cited "taking care of their family/home" as a reason for not entering the labor force,[64] while in RAND's 2019 family survey, 43 percent of parents reporting they could not find care cited the reason being as an inability to afford available options.[65]

Availability

In spite of the high costs of care in New Hampshire, child care providers often struggle to generate a profit due to high operating costs, in part due to facility-related expenses and staff benefits, which results in very slim margins.[66] The labor-intensive nature of child care coupled with child-to-adult ratio mandates and payment structures result in significant overall labor costs for operators, despite generally low wages for individual child care workers (average wage was $11.17 per hour in 2018).[67] In New Hampshire, the median hourly wage for a child care worker is $11.69, which amounts to roughly $23,850 per year; these earning levels often incentivize child care workers to look outside the industry for other opportunities.[68]

This combination of low wages for workers and small profits for operators tends to lead to an undersupply of child care centers and care capacity. Figure 3.2 below compares the need and availability of licensed, center-based child care slots in New Hampshire prior to the pandemic.

The below analysis begins by focusing on children under age six.[69] In total, there are approximately 75,500 children under the age of six in New Hampshire.[70] Of these children, roughly 54,000 live in two-parent households in which both parents are in the labor force or in a single-parent household in which the sole caretaker is in the labor force, defining a potential "need" of approximately 54,000 child care slots.

While there are roughly 43,500 licensed slots in New Hampshire, in order to isolate openings particularly for young children (under six for the purposes of this report), slots that were available to children over the age of six or licensed as a "school age program" were excluded as well as those categorized as a "summer camp" and "parks and recreation" program (approximately 10,200 slots total). Additionally, it is important to note that, due to data availability, this count includes only those programs that are licensed by the State of New Hampshire.

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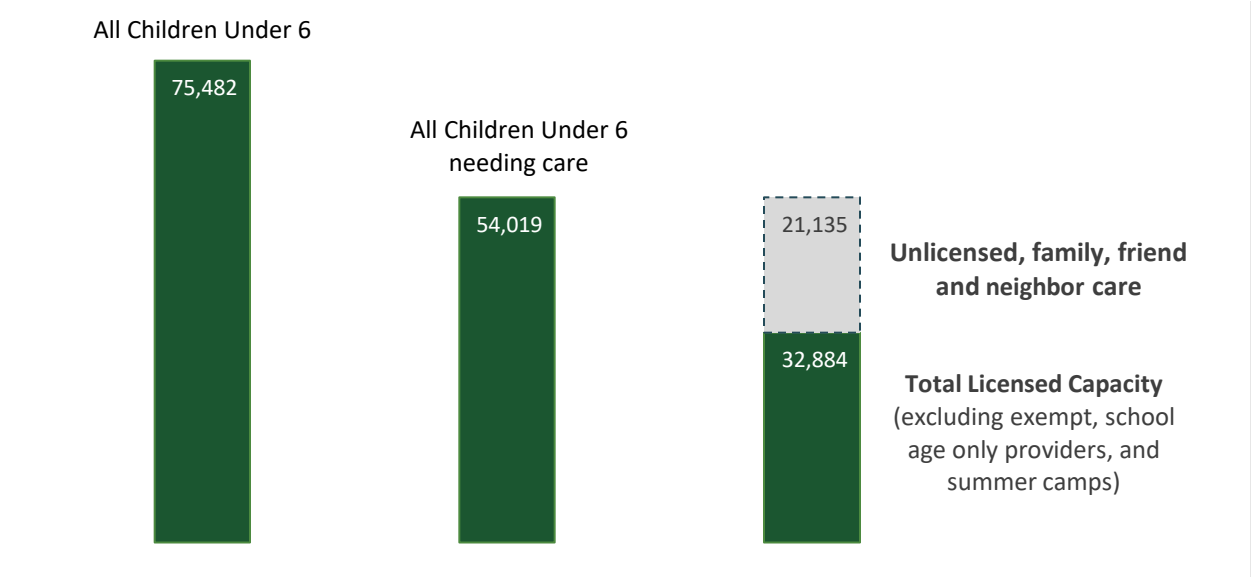
[64] Katharine B. Stevens. (2017). Workforce of Today, Workforce of Tomorrow: The Business Case for High-Quality Childcare. Center for Education and Workforce. US Chamber Foundation. https://www.uschamberfoundation.org/sites/default/files/Workforce%20of%20Today%2CWorkforce%20of%20Tomorrow%20Report_0.pdf
[65] Lynn Karoly and Elizabeth Steiner et al. (2020). Understanding the New Hampshire Birth through Five System. https://mypages.unh.edu/sites/default/files/pdg/files/nh_b-5_needs_assessment_pdg.pdf
[66] Jess Carson and Marybeth Mattingly. (2020). COVID-19 Didn't Create a Child Care Crisis, But Hastened and Inflamed It. Carsey School of Public Policy. https://carsey.unh.edu/publication/child-care-crisis-COVID-19
[67] (2019). The US and the High Price of Child Care: An Examination of a Broken System. Child Care Aware of America. https://info.childcareaware.org/hubfs/2019%20Price%20of%20Care%20State%20Sheets/Final-TheUSandtheHighPriceofChildCare-AnExaminationofaBrokenSystem.pdf
[68] (2019). May 2019 State Occupational Employment and Wage Estimates. Bureau of Labor Statistics. https://www.bls.gov/oes/current/oes_nh.htm#39-0000
[69] Because some children aged 5 may be enrolled in kindergarten full-time, there is a possible double count of five-year-olds in this analysis as both needing child care and also enrolled in kindergarten. Due to lack of necessary data, all children under six were included in this analysis regardless of kindergarten enrollment.
[70] Based on data from the U.S. Census https://data.census.gov/cedsci/table?t=Age%20and%20Sex&g=0400000US33&tid=ACSST1Y2019.S0101&hidePreview=false

With these exclusions applied, there are currently approximately 33,000 licensed child care slots in New Hampshire, leaving a gap of approximately 21,000 children (nearly 40 percent) whose child care needs are currently addressed without formal child care but instead served by unlicensed friend, family, or informal care.[71]

Figure 3.2: Licensed Child Care Capacity in New Hampshire (Pre-COVID)



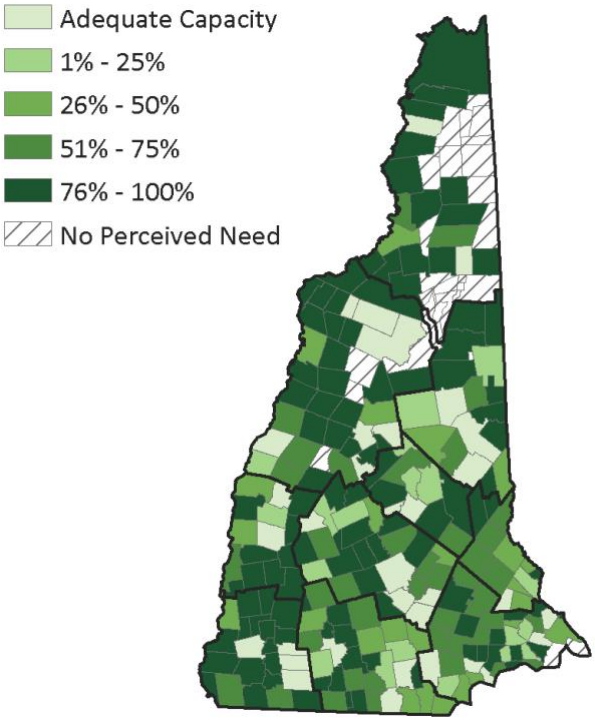
Source: Child Care Aware of America (2020); U.S. Census Bureau (2018)

Supply challenges also vary by location, often mismatched with demand. It is estimated that approximately half of Americans live in areas defined by Child Care Aware of America as "child care deserts," where access to formal, quality child care is effectively nonexistent.[72]

[71] Data on licensed slots is current as of October 2020. Subsequent analysis in this chapter details the extent to which these slots have been available over the course of the pandemic.
[72] Rashid Malid and Katie Hamm et al. (2018). America's Child Care Deserts in 2018. Center for American Progress. https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/
(n.d.). Child Care Deserts. childcaredeserts.org.
(n.d) 2019 New Hampshire Child Care Desert Map. https://www.nh-connections.org/communities/nh-child-care-desert-map/

In New Hampshire, 44 percent of the state's infants and toddlers (ages 0-2) live in rural areas, far higher than the 9 percent of infants and toddlers living in rural areas nationwide.[73] Seven of New Hampshire's 10 counties are considered non-metropolitan. Figure 3.3 shows the share of unmet need (based on the gap between children needing care and licensed capacity) by town, while Figure 3.4 below aggregates these results by county.

Figure 3.3: Unmet Need by Town (Pre-COVID)



Source: Child Care Aware of New Hampshire (2020), U.S. Census Bureau (2018)

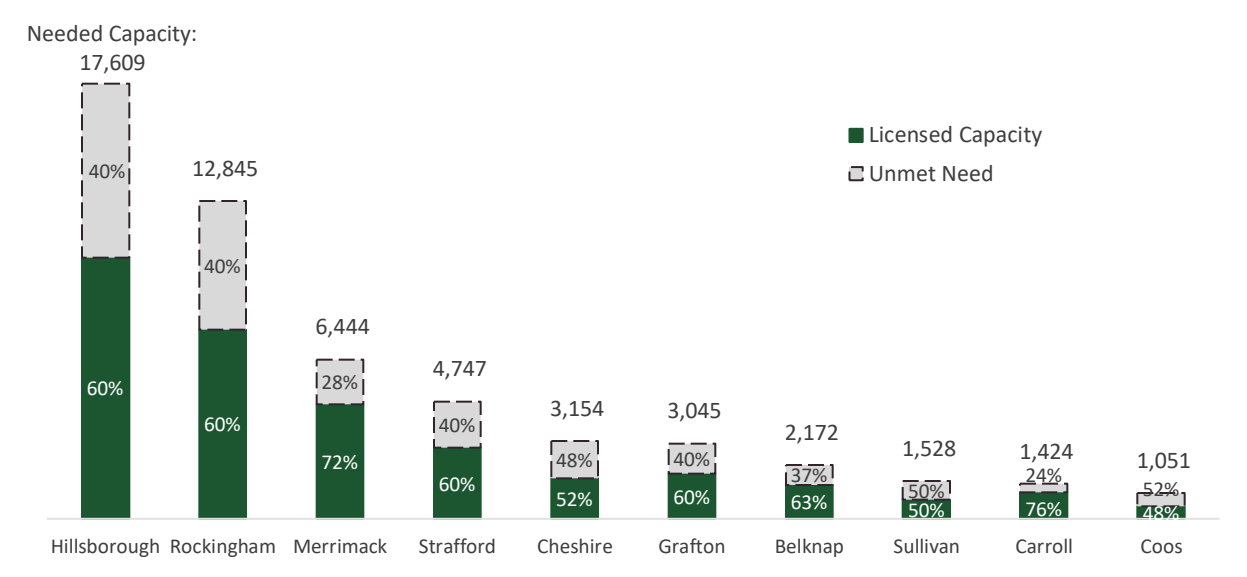
Based on analysis by county:

- The largest absolute needs are in the most populous counties of Hillsborough (7,000 slots) and Rockingham (5,200 slots), which have an unmet need close to the state average of 40 percent.
- On a proportional basis, the highest share of unmet need is found in Coos (52 percent), Sullivan (50 percent), and Cheshire (48 percent) Counties.

These statistical measures of availability align with the experience reported by New Hampshire families. In a family survey conducted in 2019 as part of New Hampshire's Preschool Development Grant, one in four parents responded that they do not have sufficient early care and childhood education choices where they live.[74]

[73] State of New Hampshire's Babies. (2020). State of Babies Yearbook 2020. https://stateofbabies.org/wp-content/uploads/2017/07/New_Hampshire.pdf
[74] Lynn Karoly and Elizabeth Steiner et al. (2020). Understanding the New Hampshire Birth through Five System. https://mypages.unh.edu/sites/default/files/pdg/files/nh_b-5_needs_assessment_pdg.pdf

Figure 3.4: Pre-COVID Unmet Need and Licensed Capacity, Children Under Six, by County



Source: Child Care Aware of America (2020)

Quality

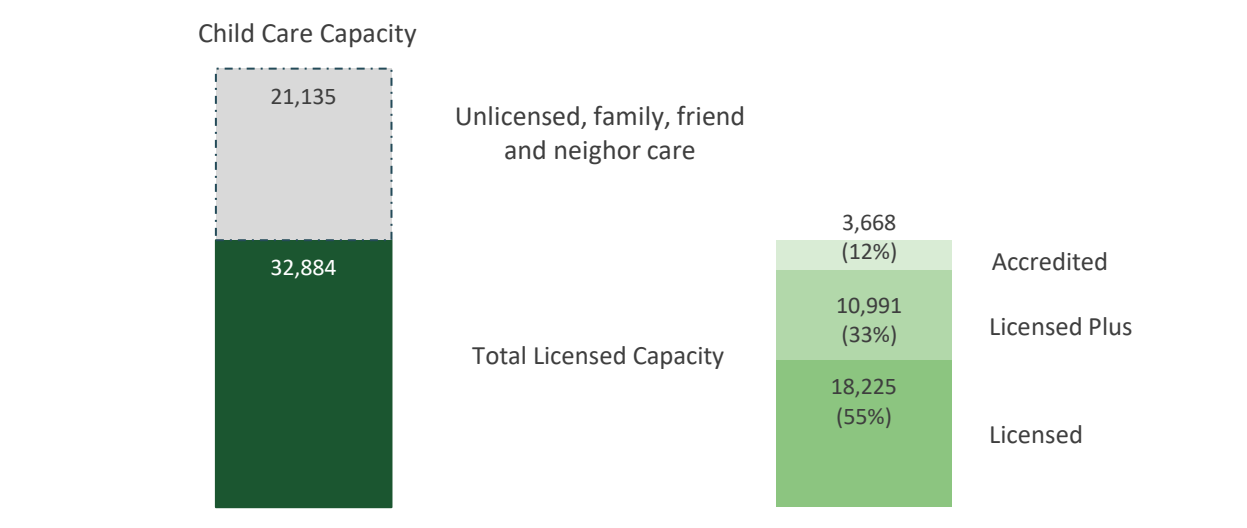
The quality of the care provided is also a crucial metric when assessing New Hampshire's child care system. The National Association for the Education of Young Children (NAEYC), a national accrediting association for child care centers, evaluates quality through ten standards: curriculum; relationships; teaching; assessment of child progress; health; teachers; families; community; physical environment; and leadership and management.[75] States are required to use a portion of their Child Care and Development Fund (CCDF) budget for quality improvement activities and to increase options and access to quality child care. However, the state's quality rating and improvement system (QRIS) is currently under revision, and has limited information on the quality of child care for children beyond licensing at this time.[76] Currently, the state's Child Care Licensing Unit regulates quality based on ratio, group size, health, safety, and the training, education, and experiences of the provider, and licenses several types of child care programs that include family child care homes, group child care centers, and school age programs, among others.[77]

In New Hampshire, formal child care providers are designated as either Licensed, Licensed Plus, or (nationally) Accredited. Figure 3.5 below shows the distribution of slots by designation.

[75] (n.d.).
[76] Lynn Karoly and Elizabeth Steiner et al. (2020). Understanding the New Hampshire Birth through Five System. https://mypages.unh.edu/sites/default/files/pdg/files/nh_b-5_needs_assessment_pdg.pdf
(n.d.). Quality Rating and Improvement System (QRIS). New Hampshire Department of Health and Human Services. https://www.dhhs.nh.gov/dcyf/cdb/quality.htm
[77] (n.d.). Quality Rating and Improvement System (QRIS). New Hampshire Department of Health and Human Services. https://www.dhhs.nh.gov/dcyf/cdb/quality.htm
(n.d.). Child Care Licensing Unit. New Hampshire Department of Health and Human Services. https://www.dhhs.nh.gov/oos/cclu/index.htm

- **Licensed**: Licensed establishments meet the minimum requirements to become a formal child care provider by adhering to rules regarding capacity, child-to-provider ratios, and physical requirements. More than 18,000 of the roughly 33,000 slots (55 percent) fall into this category.
- **Licensed Plus**: Licensed establishments can apply to be recognized as a Licensed Plus provider by meeting sixteen quality standards around learning, regulations, family involvement, professional development, and staff requirements, among others. Around 11,000 slots in New Hampshire (33 percent) are at Licensed Plus providers.
- **Accredited**: Establishments that apply for national accreditation through the NAEYC, National Association for Family Child Care, or the National After School Association are deemed to have the highest quality standards based on national best practice metrics. Approximately 3,700 slots in New Hampshire (12 percent) have this accreditation.

Figure 3.5: Licensed Child Care Capacity in New Hampshire, by Quality of Care, 2020



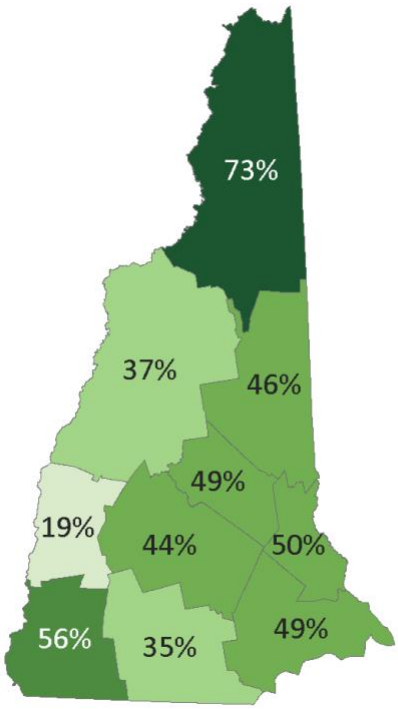
Source: Child Care Aware of America (2020)

Collectively, around 45 percent of New Hampshire's licensed child care slots are located in Accredited centers or Licensed Plus centers reflecting quality designations beyond the basic requirements.

Figure 3.6 shows variation in these proportions by county. The proportion of high-quality providers (as measured by licensing levels) is highest in Coos County (73 percent), followed by Cheshire (56 percent) and Stratford (50 percent) Counties.

Among the most populous counties with the highest demand for child care, quality levels are above average by this metric in Rockingham County (49 percent) but below average in Merrimack (44 percent) and Hillsborough (35 percent) Counties.

Figure 3.6: Percent of Capacity Designated "Accredited" or "Licensed Plus", by County, 2020



Source: Child Care Aware of New Hampshire (2020)

Importantly, each of the aspects reviewed in this section cannot truly be considered independent of each other. Affordability concerns dictate in part the degree to which parents enter the workforce, meaning that the calculated need would be higher without this constraint. Quality of care also provides another lens through which to view availability, as thirty-five percent of parent respondents in RAND's New Hampshire family survey who had trouble finding child care reported that their reason was because they could not find providers with the level of quality they wanted.[78] Finally, other considerations limit the availability of child care, such as care during nonstandard hours. Thirty-three percent of parent respondents in RAND's New Hampshire family survey who could not find child care cited the reason being that they could not find care at the hours and locations that met their needs. Parents from rural areas more often reported an inability to find care and providers offering care at nonstandard hours.[79]

3.2. Child Care Implications from COVID

Finding high quality, affordable, and accessible child care was challenging for many New Hampshire families prior to COVID. The pandemic exacerbated and created new challenges for parents and providers alike. Facing a combination of decreased revenues due to public health-necessitated enrollment limits, increased cleaning expenses, decreased demand by parents due to changes in employment, and increased expenses to provide personal protective equipment (PPE) for child care workers, many providers have struggled to remain open. Detailed analyses of child care supply nationwide show that providers in low- and middle-income neighborhoods are most at risk of experiencing permanent closures, due to the industry's reliance on parent fees.[80]

The analysis that follows reviews how the pandemic has influenced the supply of child care in New Hampshire through temporary and permanent closings, and the implications for families, including the varied impacts on demand for child care as the health and economic situation has evolved. In addition,

[78] *Ibid*
[79] *Ibid*
[80] Rasheed Malik and Katie Hamm et al. (2020). The Coronavirus Will Make Child Care Deserts Worse and Exacerbate Inequality. Center for American Progress. ttps://www.americanprogress.org/issues/early-childhood/reports/2020/06/22/486433/coronavirus-will-make-child-care-deserts-worse-exacerbate-inequality/

analysis is undertaken on impacts of remote school for school age children, which has created a new constraint for working parents.

Children Below School Age

Child care supply

On March 26, 2020, Governor Sununu signed an emergency order requiring all non-essential businesses to close and residents to stay at home.[81] While the executive order guidance designated staff supporting emergency childcare programs as essential, many centers closed due to low attendance, school closings, and worker health and safety concerns.[82] During the first week of April, approximately 96 percent of licensed child care slots were closed. However, New Hampshire was able to support child care providers using the federal CARES act and the Child Care Recovery and Stabilization Program grants through the Governor's Office for Emergency Relief and Recovery (GOFERR). The CARES Act included $3.5 billion in supplemental appropriations to states through the Child Care and Development Block Grant (CCDBG), which many states used to sustain their child care systems. In New Hampshire, the state primarily used the $6.999 million in supplemental CCDBG funding via the CARES Act to establish Emergency Child Care Programs (ECCPs) to ensure sufficient child care coverage for children whose parents were deemed essential workers. Centers approved under the program are eligible for incentive payments to cover staff salaries, operations, and supplies. Through the ECCP, approximately 490 centers were able to stay open or reopen. Supplemental CCDBG funding also went to child care providers to help them retain employees and to cover parent copayments and subsidies to child care programs, regardless of operating status.[83]

These supplemental funds, however, could not sustain the child care industry through the summer. In May 2020, Governor Sununu authorized an additional $25 million, $16.6 million of which GOFERR distributed to providers through Child Care Recovery and Stabilization Program grants. All but 1 of 419 applicants (5 providers did not apply) received funding. [84] An additional $10 million was added to the program in Fall 2020 for a total of $35 million in grants and a total of $45.7 million invested in child care.

In addition to establishing ECCPs and disbursing GOFERR funds, New Hampshire took other measures to support parents with young children during COVID. For example, the State temporarily froze child care scholarship eligibility redetermination for months; in other words, they did not count temporary fluctuations in reported income so that no family would lose support for child care during this time, and temporarily allowed for enrollment-based payments to providers in certain situations (as opposed to attendance-based payments).[85,86] In addition, New Hampshire paid full-time subsidy rates to CCDF-enrolled providers who cared for school age children during remote learning hours between September

[81] Christopher Sununu. (2020). Emergency Order #17 Pursuant to Executive Order 2020-04. Office of the Governor. https://www.governor.nh.gov/sites/g/files/ehbemt336/files/documents/emergency-order-17.pdf
[82] Christopher Sununu. (2020). Exhibit A to Emergency Order #17. Office of the Governor. https://www.governor.nh.gov/sites/g/files/ehbemt336/files/documents/emergency-order-17-ex-a.pdf
[83] Linda Smith et al. (2020). September Update: State-by-State Use of CARES Act Funds to Support Child Care Through the Fall. https://bipartisanpolicy.org/blog/september-update-state-by-state-use-of-cares-act-funds-to-support-child-care-through-the-fall/
[84]Linda Smith et al. (2020). September Update: State-by-State Use of CARES Act Funds to Support Child Care Through the Fall. https://bipartisanpolicy.org/blog/september-update-state-by-state-use-of-cares-act-funds-to-support-child-care-through-the-fall/ l
[85] Email correspondence from DEHS, 10 December 2020 and virtual communication on 12 December 2020.
[86] Lori Sibinette and Christine Santaniello. (2020). Information Regarding Payment for COVID-19 Pandemic Related Absences. Department of Health and Human Services. https://files.constantcontact.com/49b439d5301/c32f01b8-137d-4c4c-a066-efe6dbaaef97.pdf

7, 2020 and January 3, 2021.[87] The federal appropriations act passed December 2020 included another $10 billion in emergency relief funds for the child care sector through CCDBG and $250 million for Head Start programs.[88]

Figures 3.7 and 3.8 below show the progression in the share of open programs and number of slots available by provider type as conditions evolved through October 2020.[89]

- The proportion of open child care centers, which represent the large majority of capacity in the state, dipped below 50 percent in May. Capacity returned over the course of the summer, with more than three-quarters open as of October, representing 87 percent of typical slots.
- Head Start and pre-school programs were nearly all closed in April and over the course of the summer of 2020. These programs began to return in the fall, but the majority remained closed as of October 2020.[90]
- As of October 2020, around 26,900 of the 32,900 typical slots were available (82 percent), a proportion that increased steadily over time. This share is attributable to the importance of child care centers to the overall provider mix.

[87] [87] Lori Sibinette and Christine Santaniello. (2020). NH Child Care Scholarship Payment for School-age Care. Department of Health and Human Services. https://files.constantcontact.com/49b439d5301/f568116d-e878-43c9-8af9-ccab2cdf08a3.pdf
[88] (2020). COVID-19 Emergency Relief Package – Detailed Summary of New Legislation. https://www.nh-connections.org/uploads/2020/12/COVID-19-Emergency-Relief-Package-Detailed-Summary-of-New-Legislation.pdf
[89] For consistency, "slots" includes licensed capacity in child care centers, family child care, pre-school programs, and Head Start programs in which the minimum age is less than six years old.
[90] Early Head Start and Head Start are parenting and school readiness programs for families with children ages birth to five. While formally not considered a child care program, some programs often provide a form of child care, allowing parents to work. Three grantees do offer child care programs in addition to Head Start programming. Some of these remained open throughout the pandemic. Head Start programs, however, closed their centers on March 16, but offered services remotely. NH Head Start grantees often align their programs with school districts, so summer closures were not a COVID artifact. In the fall, all Head Start resumed their services with a hybrid of classroom and remote learning/services, along with school districts (Email correspondence, 01/13/2021).

Figure 3.7: Share of Open Programs, by Type of Program, April-October 2020

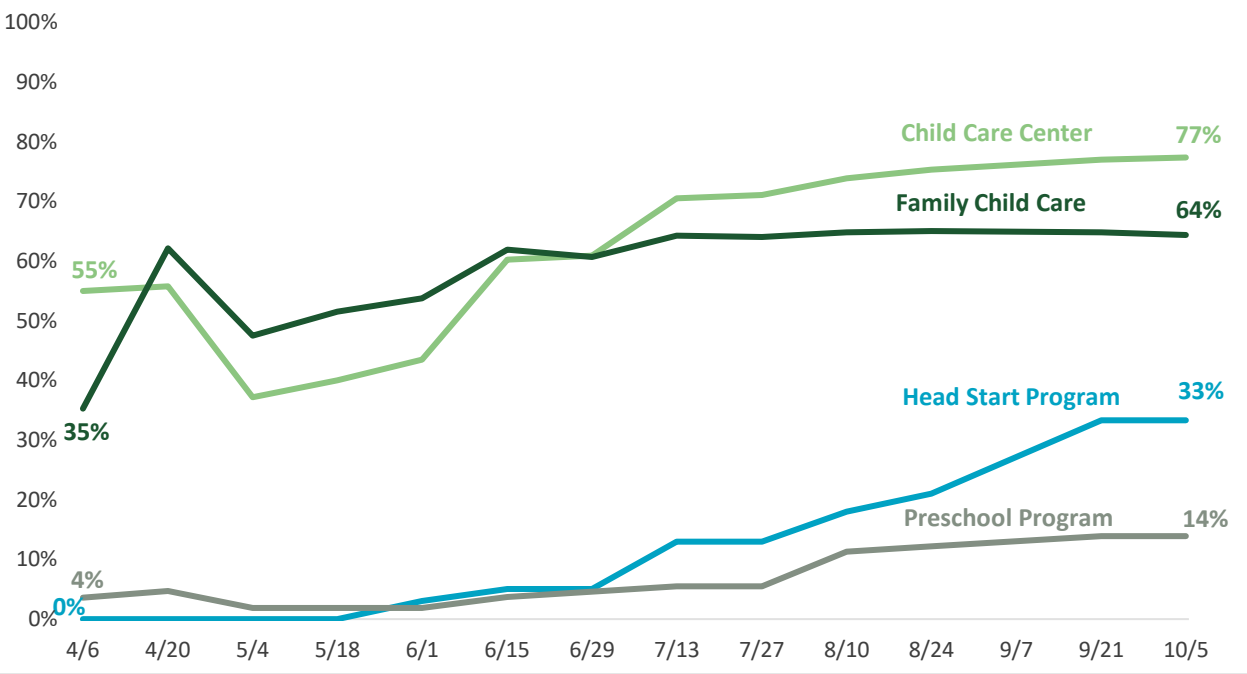
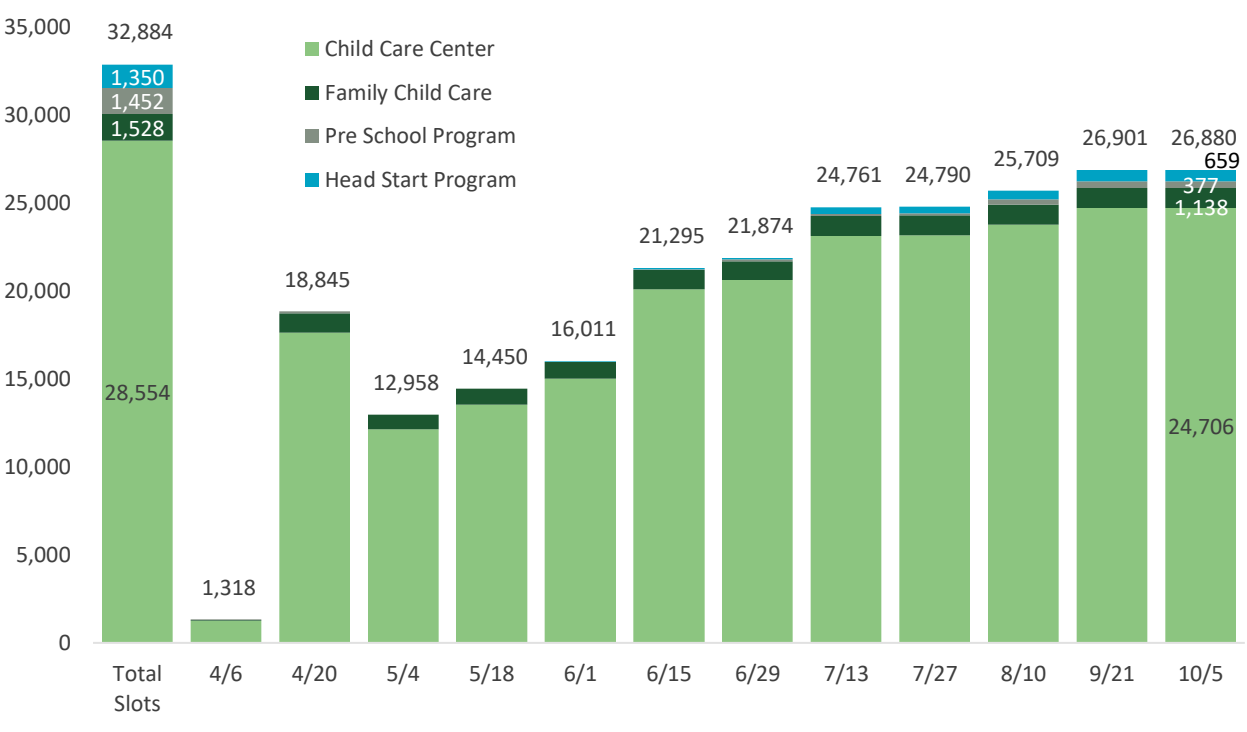


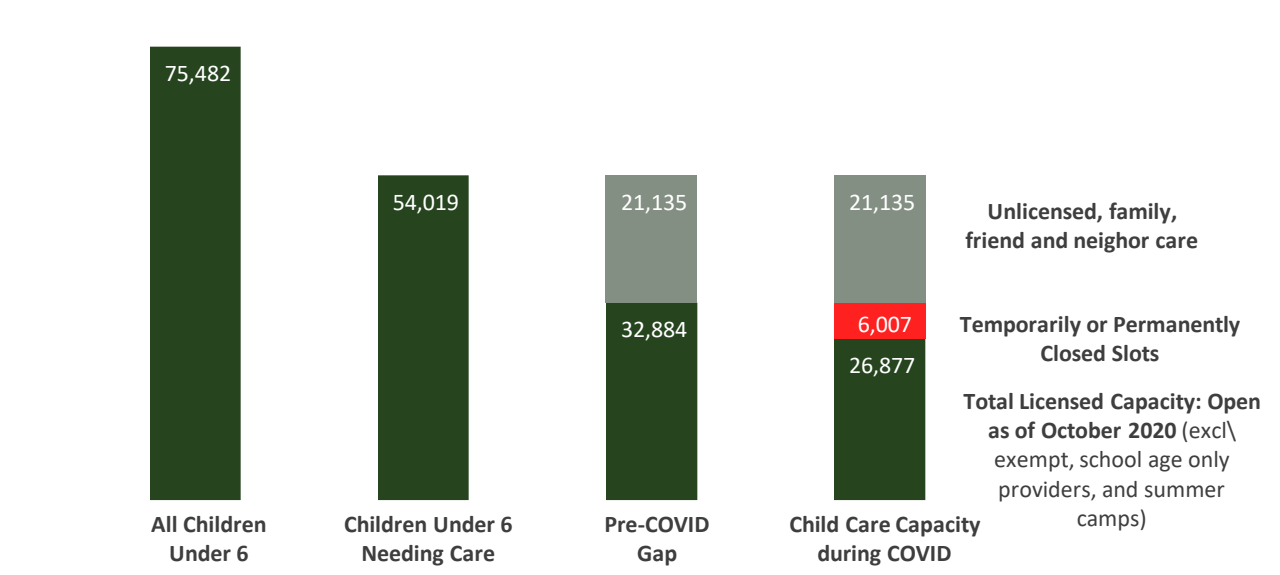
Figure 3.8: Number of Open Slots, by Type of Program, April-October 2020



Source: Child Care Aware of America (2020)

While the majority of slots had re-opened as of October, roughly 182 centers were temporarily or permanently closed, accounting for up to 6,000 slots (see Figure 3.9).[91] It is important to note that 50 locations had surrendered their licenses and permanently closed due to the pandemic. Combined with the pre-existing capacity gap, the unmet need was more than 27,000, slightly greater than the available licensed capacity.

Figure 3.9: Licensed Child Care Capacity in New Hampshire, October 2020



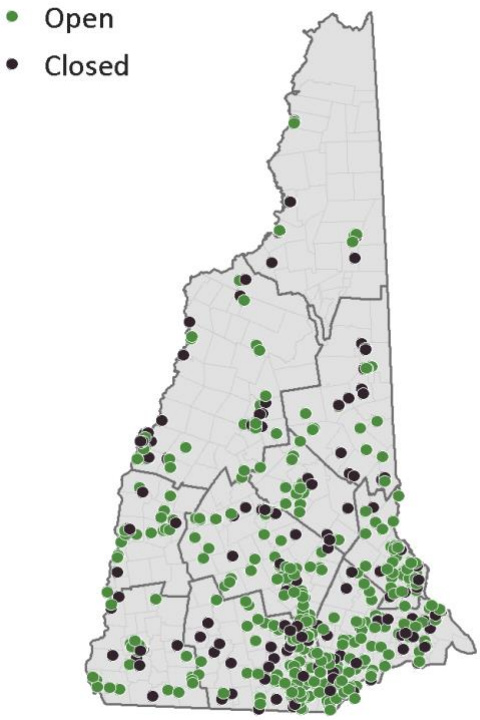
Source: Child Care Aware of America (2020)

[91] During the point-in-time of analysis of October 2020 data, there were 182 centers that were either "closed" or "unknown" status, totaling up to 6,000 child care slots. These slots are the upper bound of the additional need for New Hampshire families as it is possible that those centers with unknown status were operating. There were only 50 centers in New Hampshire that have been confirmed as permanently closed.

Reductions in capacity can be viewed geographically in order to see differential effects across the state:

- Figure 3.10 displays slots that were temporarily or permanently closed as a result of COVID-19 as of October 2020.
- Figure 3.11 again displays unmet child care need by town prior to COVID-19, while Figure 3.12 shows the increase in percentage points in unmet need as a result of closures as of October 2020 in order to isolate the locations where the unmet child care need has increased by the greatest amount.

Figure 3.10: Licensed Child Care Facility Operating Status, October 2020



Source: Child Care Aware of New Hampshire (2020)

Figure 3.11: Unmet Need by Town (Pre-COVID)

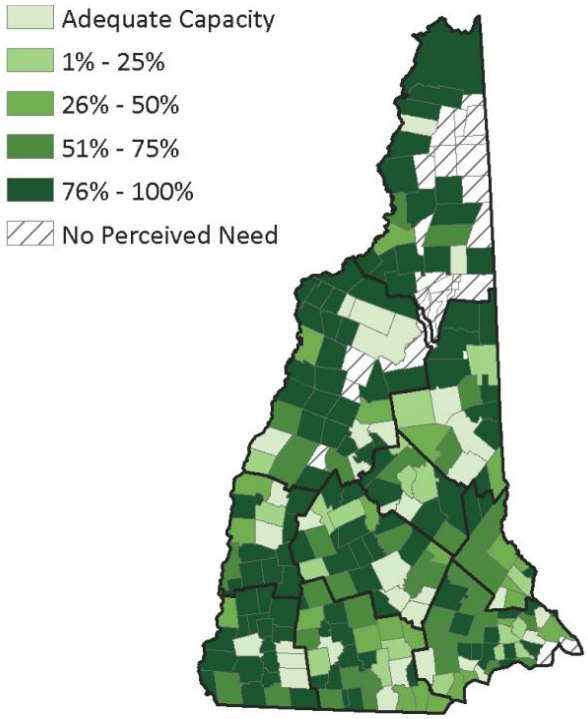
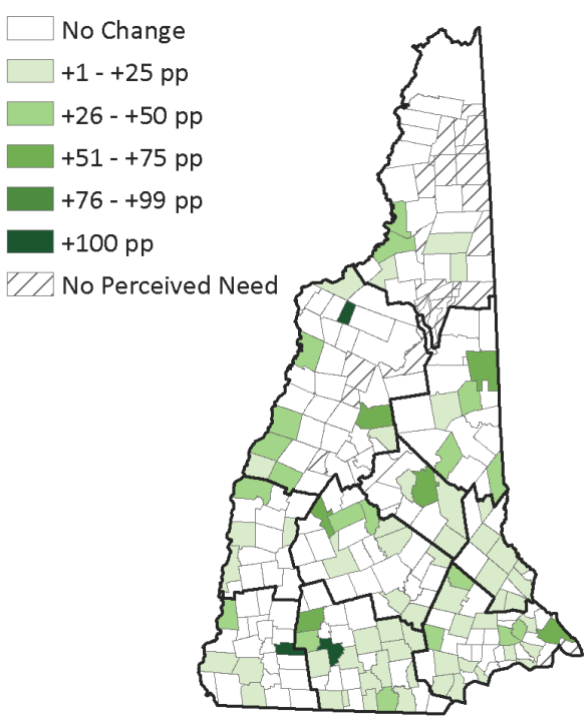


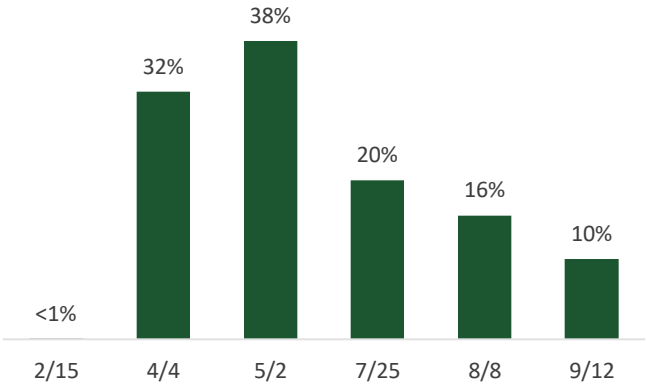
Figure 3.12: Change in Unmet Need by Town due to COVID-19 Closures



Source: Child Care Aware of New Hampshire (2020), U.S. Census Bureau (2018)

These closings also impact child care workers within the state. Nationally, only six percent of child care providers were able to access funds through the federal Paycheck Protection Program, with the industry receiving less than five percent of the distributed total funds.[92] As of March 2020, there were approximately 5,700 employees working in child care centers in New Hampshire, and the unemployment rate was near zero (reflecting structural workforce shortage). As closures impacted the industry, the estimated unemployment rate in the child day care services sector grew as high as 38

Figure 3.13: Child Day Care Services Unemployment Rate, Feb - Sep 2020



Source: NHES (2020), BLS (2020)

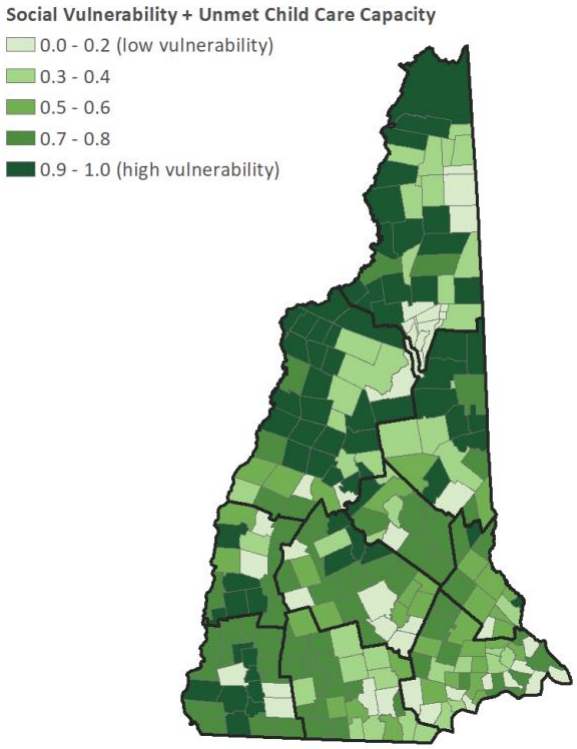
[92] Simon Workman and Steven Jessen-Howard. (2020). The True Cost of Providing Safe Child Care During the Coronavirus Pandemic. Center for American Progress. https://www.americanprogress.org/issues/early-childhood/reports/2020/09/03/489900/true-cost-providing-safe-child-care-coronavirus-pandemic/

percent based on analysis of unemployment claims (see Figure 3.13).[93] By September 2020, that rate had fallen to 10 percent. In New Hampshire, the unemployment rate may have stabilized due to Child Care Recovery and Stabilization Program grants disbursed to child care providers via GOFERR.

Child care demand

The reduction in available slots means that alternative care arrangements may be needed for up to 6,000 children under six. While some parents will be able to coordinate care through flexible work schedules, informal family/friend networks, in-home care, or some alternative arrangement, numerous families may need to leave the workforce or reduce hours in order to care for children.

Figure 3.14: Social Vulnerability with Unmet Child Care Capacity (Oct 2020) by Town



Source: ESI (2020), NH DHHS (2019), Child Care Aware of New Hampshire (2020)

Areas with greater social vulnerability may also struggle to respond to reduced child care capacity as a result of the COVID-19 pandemic. Single parent households and low-income households with inadequate child care options may have limited financial or work flexibility to attain care. Towns in Carroll and Belknap Counties appear to have elevated levels of social vulnerability interacting with child care needs, along with communities across multiple counties along the western edge of the state.

Employed caregivers may have also seen disruptions to their work life and availability on a short- or long-term basis due to the disruptions in the availability of child care. A national survey from Morning Consult conducted in June 2020 among households with children under five asked families to describe the way in which they were providing care for children previously enrolled in formal child care.[94] While a majority had found some type of informal or alternative care arrangement, more than one-third indicated that they were addressing child care through a means that impacted their availability for work. These approaches, highlighted in Figure 3.15, include alternating or shifting work hours, reducing hours, or taking paid or unpaid leave, represent 34 percent of responses.

[93] The unemployment claims analysis to estimate child day care services unemployment rates over time is based on the same methods of analysis detailed in Section 2 for labor market impacts.
[94] Linda Smith and Sara Tracey. (2020). Child Care in COVID-19: Another Look at What Parents Want. Bipartisan Policy Center. https://bipartisanpolicy.org/blog/child-care-in-covid-another-look/

Figure 3.15: Alternative Family Approaches to Providing Child Care

	Percent
A family member or relative is caring for my child at this time	32%
Continuing to use previous care arrangement	17%
Alternating work hours with someone in my household to provide child care	13%
Working fewer hours to provide child care	8%
Other	8%
Working outside of normal business hours to provide child care	5%
Hired informal care (such as a nanny or babysitter)	5%
Taking unpaid leave to provide child care	4%
Taking paid leave to provide child care	4%
A friend or neighbor is caring for my child at this time	3%

Source: Morning Consult National Survey (2020)

While supply impacts from the pandemic are relatively straightforward (reflected in provider closures and their impact on available capacity), the impacts on child care demand are more complex. Various factors such as unemployment, stay-at-home orders, health concerns, and new economic constraints could contribute to a potential decrease in overall demand for formal child care, at least on a short-term basis. On the other hand, factors like center closings, reduced reliance on informal caregivers, and desired re-entry into the labor force could potentially increase demand for formal care, of which there may be fewer options.

When families with children under five were asked by Morning Consult about their level of concern with various scenarios surrounding child care, the largest proportion expressed concern about exposure to the virus, suggesting a potential reduction in demand due to health concerns. However, around 50 percent cited concerns about availability (highlighted in gray in Figure 3.16 below), such as limited hours, closures, availability for all children, and affordability.

Figure 3.16: Level of Concern with Potential Issues Surrounding Child Care

	Very or somewhat	Not very or at all
My family will be more likely to be exposed to COVID-19	77%	17%
My child care arrangement will have limited hours	53%	38%
My child care arrangement will close	52%	38%
I will not be able to afford child care	51%	41%
I will not be able to find care for all of my children	48%	42%
My child's teacher will not be the same	45%	44%

Source: Morning Consult National Survey (2020)

The nuance of these competing and compounding factors, and their potential to shift over time as health, economic conditions, and household preferences change, makes analyzing the impact of the

pandemic on child care demand as a whole challenging. The Carsey School of Public Policy at the University of New Hampshire provided an analysis of the range of potential factors increasing or decreasing child care demand during the pandemic, which is reproduced as Figure 3.17 below.[95]

Figure 3.17: Factors Influencing Child Care Demand during COVID-19

Factors Increasing Demand	Factors Decreasing Demand
Parents re-employed	Parents unemployed
Reduced reliance on at-risk informal caregivers	Increased working from home and flexibility
School age children out of school	Domino effect of remote learning
Concerns about socioemotional development	Increased preference for in-home care
	Health concerns
	Family economic constraints

Source: University of New Hampshire, Carsey School of Public Policy (2020)

School Age Children

In addition to the traditional population of young children in need of child care, school closures and remote schooling associated with the pandemic have created a new set of challenges for parents of school age children aged 6-12 and their ability to participate in the labor force. For the purposes of this report, the below analysis focuses on school closures as a significant barrier to work for New Hampshire families.[96]

On March 15, 2020, Governor Sununu signed an emergency order closing all in-person public school instruction starting March 16. This order was ultimately carried through the end of the 2019-2020 school year. In August, the Governor extended and amended the order— permitting public schools to operate through in-person, remote, or hybrid schedules—for the 2020-2021 school year.

This approach enabled individual districts to define their approach to schooling for Fall 2020. While district-level plans evolved as conditions changed, analysis of the various approaches in different parts of the state (based on research into publicly-posted district plans) helped to shed light on the extent to which parents in the workforce may have been impacted by school closures and remote learning. This analysis focused on students at the elementary and middle school level, as children above 12 are assumed to require limited parental involvement with remote schooling.

Figure 3.18 shows the reopening status for districts across the state as of September 2020. Thirty-five percent of schools were classified as fully in-person while 13 percent were fully remote, and 46 percent had a hybrid schedule in place with a mix of in-person and remote learning.[97] As a result, parents in the

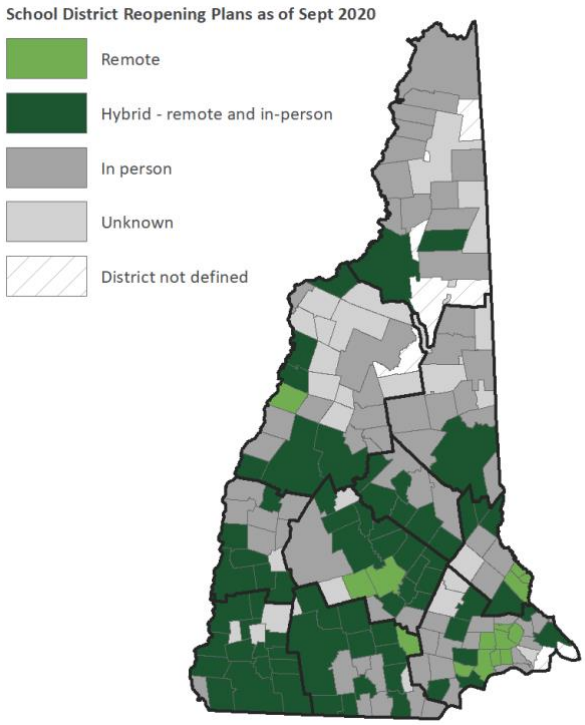
[95] Jess Carson and Marybeth Mattingly. (2020). COVID-19 Didn't Create a Child Care Crisis, But Hastened and Inflamed It. Carsey School of Public Policy. https://carsey.unh.edu/publication/child-care-crisis-COVID-19
[96] However, it is important to note that there are approximately 10,200 licensed "School Age Children" slots to care for children outside of school hours. As of October 2020, roughly 87 percent of licensed slots were temporarily or permanently closed.
[97] Status for the remaining districts could not be defined based on publicly available information at the time of the analysis.

majority of districts (at least 59 percent) were dealing with the implications of partial or full-time remote learning at the start of the school year.

Next, enrollment data for elementary and middle school students within each of the remote or hybrid schools were combined with data on parental employment status within each school district to estimate which workers may be impacted by remote learning.[98]

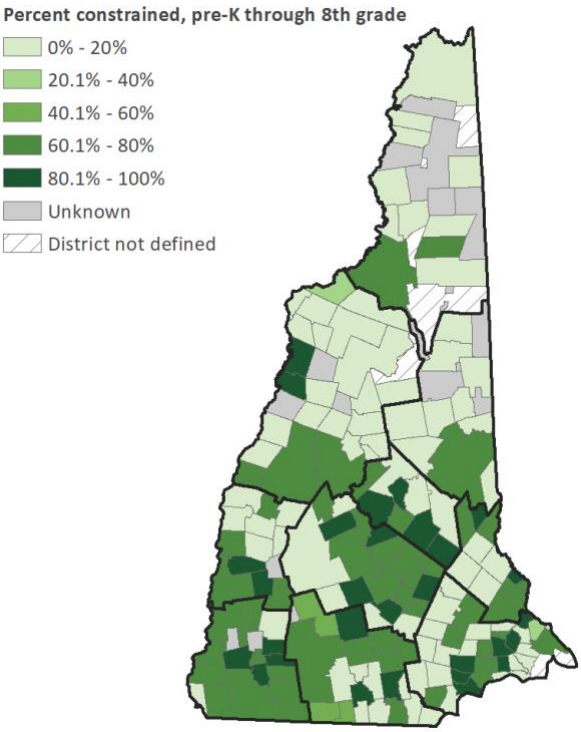
Figure 3.19 displays the proportion of households with K-8 children that are estimated to be constrained using this approach, while Figure 3.20 below aggregates this analysis by county. Across the state, it is estimated that nearly 58,000 students (49 percent), in an estimated 34,000 households, would need care during the time typically spent at school based on the remote or hybrid status of their school.

Figure 3.18: School District Reopening Status (Sep 2020)



Source: ESI (2020)

Figure 3.19: Est. School Age Children Needing Care by School District (Sep 2020)



Source: U.S. Census Bureau (2018), New Hampshire Department of Education (2019), ESI (2020)

Significant variation is seen in these proportions across different areas of the state, with districts in northern New Hampshire, where schools were more likely to be open for in-person learning, tending to have the lowest proportion of constrained families.

Districts in the southern portion of the state tended to have the highest proportion of constrained families, with the highest proportions seen in Cheshire (70 percent), Merrimack (66 percent), and

[98] The number of school age children was based on enrollment in elementary and middle schools as of October 2019. Parents were considered to be "constrained" if both parents were in the workforce in two-parent households, or one parent in the case of a single parent household.

Hillsborough (59 percent) Counties. Rockingham County, while located in the southeastern portion of the state, had a significant number of districts utilizing in-person learning as of September, as well as one of the lowest proportions of constrained families in the state (33 percent).

Figure 3.20: Estimated School Age Children Needing Care by County, 2020

County	Elementary & Middle School Students	Est. Students Needing Care	Percent Needing Care
Hillsborough	36,414	21,472	59%
Rockingham	28,354	9,398	33%
Merrimack	12,938	8,584	66%
Cheshire	7,224	5,051	70%
Strafford	10,359	4,371	42%
Grafton	7,150	2,592	36%
Sullivan	5,159	2,085	40%
Belknap	3,407	1,931	57%
Carroll	4,639	1,191	26%
Coos	2,502	1,040	42%
Total	118,146	57,717	49%

Source: U.S. Census Bureau (2018), New Hampshire Department of Education (2019), ESI (2020)

Implications for Families

These alternate school schedules add new constraints to families around the country who are now faced with finding care for their school age children. Nationwide, 45 percent of families indicated that one of the parents within the household would provide care for their school age children while 38 percent of families reported they would need outside care should schools not open for full-time, in-person instruction. Of these families needing outside care, 75 percent noted that they would not be able to afford to pay for additional care.[99] The burden of caregiving falls disproportionately on women, highlighted by job gains over the summer that mostly benefited men.[100]

Reasons for unemployment cited in the claims data reviewed in Section 2 indicate that approximately six percent of total New Hampshire unemployment across the course of the pandemic has been attributable to school closings. Nearly four-fifths of these claimants (79 percent) were women.

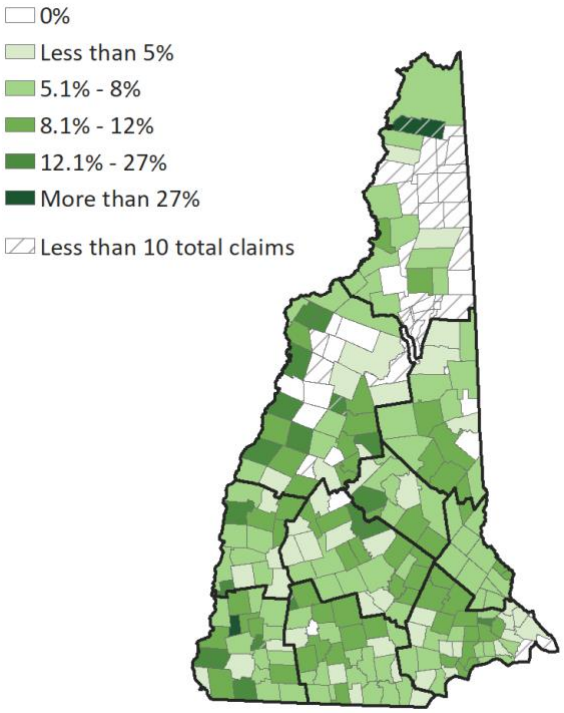
[99] Linda Smith and Sara Tracey. (2020). Child Care in COVID-19: Another Look at What Parents Want. Bipartisan Policy Center. https://bipartisanpolicy.org/blog/child-care-in-covid-another-look/

[100] Michael Madowitz and Diana Boesch. (2020). The Shambolic Response to the Public Health and Economic Crisis has Women on the Brink as the Job Recovery Stalls. Center for American Progress. https://www.americanprogress.org/issues/economy/reports/2020/10/22/492179/shambolic-response-public-health-economic-crisis-women-brink-job-recovery-stalls/

Figure 3.21 maps the proportion of unemployment claims attributable to school closings by town as of September 2020. Patterns are generally consistent with the analysis of school status undertaken above, with higher concentrations in the southern, western, and south-central portions of the state.

Finally, it is important note that single parents face a near-impossible choice balancing the need to care for their children while also needing to generate income to support their families. While the Families First Coronavirus Recovery Act (FFCRA) requires certain employers to allow their employees up to 12 weeks of partially paid leave to care for a child whose school or child care provider has closed, up to 106 million private sector workers do not qualify for this leave, and the provision expired on December 31, 2020.[101] As health challenges continue, and are likely to stretch well into 2021, temporary leave may be insufficient for working families whose children need care, and women could continue to be re-employed at lower rates than men.

Figure 3.21: "School Closing" as Reason for Unemployment by Town (Sep 2020)



Source: NHES (2020), ESI (2020)

3.3. Potential Impacts on Labor Availability and Productivity

The issues surrounding child care are not isolated to New Hampshire. Across the country, the lack of adequate care has been shown to reduce productivity, decrease hours of work, and diminish career opportunities for parents.[102,103] Expanding access to affordable child care is essential for maintaining parental workforce attachment, especially for mothers. While estimates of the size of the relationship between child care costs and employment vary across studies, the research literature is clear that decreasing child care costs results in increased employment, with larger effects evident for low-income and single mothers. [104] It also important to sustain and increase supports to child care providers to

[101] Diana Boesch. (2020). The Urgent Case for Permanent Paid Leave. Center for American Progress. https://www.americanprogress.org/issues/women/reports/2020/09/01/489914/urgent-case-permanent-paid-leave/
[102] Clive Belfield. (2018). The Economic Impacts of Insufficient Child Care on Working Families. Ready Nation. https://strongnation.s3.amazonaws.com/documents/522/3c5cdb46-eda2-4723-9e8e-f20511cc9f0f.pdf?1542205790&inline;%20filename=%22The%20Economic%20Impacts%20of%20Insufficient%20Child%20Care%20on%20Working%20Families.pdf%22
[103] Forry, N.D., & Hofferth, S.L. (2011). Maintaining Work: The Influence of Child Care Subsidies on Child Care—Related Work Disruptions. Journal of Family Issues, 32(3), 346-368
[104] Han and Waldfogel. (2001). https://onlinelibrary.wiley.com/doi/abs/10.1111/0038-4941.00042
Morrissey, T. W. (2017). Child care and parent labor force participation: a review of the research literature. Review of Economics of the Household, 15(1), 1-24. https://link.springer.com/article/10.1007/s11150-016-9331-3

ensure an adequate supply of high-quality child care options. Since improved productivity and increased hours of work are the two primary ways in which economies experience growth, access to affordable child care has important implications for the economy as a whole.

Child care challenges translate into real costs for working parents, businesses, and taxpayers. A 2019 national study estimated that working parents lose an average of $3,350 in earnings annually, while businesses lose $1,150 through recruitment and lost revenue costs.[105] Through this reduced activity, the tax base is lowered by $630 per working parent through reduced income tax. In sum, it is estimated that the United States' child care crisis costs roughly $57 billion annually due to lost earnings, productivity, and revenue.

Conversely, investments in early learning have been shown to improve local businesses, create jobs, and grow the overall economy. One study found that for every $1 invested in pre-K in Pennsylvania, there is a $1.79 increase in new spending in the state.[106] The return on investment can be even higher, estimated in one study as between $4-$9 and $7-$12 in another study for each dollar spent on high quality early childhood programs.[107] In addition, the availability of affordable child care may attract and retain skilled workers for businesses in a region or state. In a survey conducted prior to the pandemic, nearly one in five parents reported that they quit a job, school, or training activity or that they were unable to take a job or participate in education or training because of problems arranging for child care.[108]

These national benchmarks can inform order of magnitude estimates of the economic loss in New Hampshire associated with the child care constraints from COVID-19 reviewed above.

Potential Economic Impact of COVID-Related Child Care Issues

As illustrated, child care constraints already present in New Hampshire have been further exacerbated by the pandemic. While the most impactful scenarios resulted in a complete exit of the labor market, numerous families have also reduced or altered their participation in the workforce. Even for those families that are able to retain employment and work from home, reduced productivity resulting from balancing work and home responsibilities can have negative impacts on the state economy. The potential economic magnitude of these issues is explored in turn below.

Marcia Meyes et al. (2002). Child care subsidies and the employment of welfare recipients. https://link.springer.com/article/10.1353/dem.2002.0008
Ruppanner, Moller, & Sayer. 2019. <https://journals.sagepub.com/doi/10.1177/2378023119860277>
[105] (2018). Want to Grow the Economy? Fix the Child Care Crisis. Ready Nation. https://strongnation.s3.amazonaws.com/documents/602/83bb2275-ce07-4d74-bcee-ff6178daf6bd.pdf?1547054862&inline;%20filename=%22Want%20to%20Grow%20the%20Economy?%20Fix%20the%20Child%20Care%20Crisis.pdf%22
[106] (2014). Strengthening Pennsylvania Businesses through Investments in Pre-Kindergarten. ReadyNation. http://www.prekforpa.org/wp-content/uploads/2014/04/PA-Multiplier-Report-4-25-14.pdf
[107] https://www.impact.upenn.edu/early-childhood-toolkit/why-invest/what-is-the-return-on-investment/
[108] Karoly, L. & Steiner, E., et al. (2020). Understanding the New Hampshire Birth through Five System. https://mypages.unh.edu/sites/default/files/pdg/files/nh_b-5_needs_assessment_pdg.pdf

CARES Unemployment due to School Closure

Throughout the course of the pandemic, nearly 8,500 New Hampshire individuals have listed their reason for unemployment as a school closure. During the peak of the pandemic, roughly 6,300 of these individuals were unemployed.

In income terms, these individuals were temporarily better off due to the $600 weekly federal unemployment supplement through the CARES Act, which increased their total weekly take-home pay from roughly $2.3 million to $5.3 million. However, as the supplemental pandemic payments sunsetted, 3,300 individuals remained unemployed due to school closures. Since the expiration of the supplemental payments in July, these individuals are worse off in aggregate, with an estimated aggregate income of $735,000 through state unemployment payments rather than the $1.1 million they would have earned, a 33 percent reduction. This weekly reduction of $375,000 in take home pay affects more than the families unemployed because of closures, as it reduces the disposable income that these households have to spend, which spills over to reductions in demand for New Hampshire businesses.

School closure-related unemployment also has a substantial impact on New Hampshire's GDP. While state unemployment payments help households meet their basic needs, from a measurement standpoint they are internal transfers within the New Hampshire economy. From an economic productivity standpoint, the full salary loss from these unemployed workers (which totals $1.34 million per week on a pre-tax basis) represents lost productivity from labor that is not taking place, reducing New Hampshire's overall GDP. Extrapolating these weekly impacts across the course of the fall semester (15 weeks) produces a total GDP loss of about $20 million, which would grow to $56 million across the full school year (assuming 42 weeks), from the unavailability of these unemployed workers.

Reduced participation / productivity due to remote learning

Beyond the individuals that left the workforce at some point due to school closures, numerous families are finding ways to continue their participation in the labor force while simultaneously caring for their school age children. However, these households may not be able to sustain the same number of hours or overall productivity as before the pandemic due to their child care responsibilities. Like unemployment associated with school closures, gender disparities are evident in the impact of these care responsibilities on availability for work. A June 2020 survey found that for households with school age children (6-12) in which both parents were able to telework, women reduced their hours by an average of 1.8 hours per week, while men reduced their hours by 0.2 hours per week.[109]

Analysis of school district plans as of September 2020 undertaken above estimate that the parents of nearly 58,000 elementary and middle-school students faced workforce constraints due to remote or hybrid schooling. Based on the average of 1.73 students per household, an estimated 34,000 households are potentially impacted, only a small portion of which are captured in the 3,300 workers unemployed due to schooling constraints. Conservatively assuming that all of these households are able to telework and suffer only combined loss of 2 hours per week suggested by the survey data above, the productivity

[109] Caitlyn Collins et al. (2020). COVID-19 and the gender gap in work hours. Feminist Frontiers. https://onlinelibrary.wiley.com/doi/epdf/10.1111/gwao.12506

loss from this lost time (based on new Hampshire's median wage of around $20) totals around $1 million per week.

Extrapolating these weekly impacts across the course of the fall semester produces a GDP loss of about $15 million, which would grow to $42 million across the full school year, from the reduced availability of these workers due to remote schooling. This estimate is conservative in that it accounts only for the number of hours lost assuming a two-parent household. For the 32 percent of households with a single adult in the labor market, it is expected that the number of hours lost would be greater.

Reduced participation / productivity due to child care (children under six)

As of October 2020, there were up to 6,000 child care slots either temporarily or permanently closed requiring parents to find alternative care arrangements for their children.[110] Survey data reviewed above indicates that 42 percent of households unable to use their previous care arrangement compensated by altering their workforce participation (through fewer hours, alternating work hours with another household member, working outside normal hours, or taking paid or unpaid leave to provide care). Applying this share to the reduction in slots indicates that approximately 2,500 households would need to provide care for their young children while working. Productivity losses for guardians of children under five during the pandemic are estimated at 2.3 hours per week, with women again bearing the majority of that average loss (1.8 hours).[111]

Applying this loss to each of the households suggests an economic loss of about $115,000 per week to the state economy (down from more than $600,000 per week using the same assumptions during the height of the pandemic when only roughly 5 percent of licensed capacity was open). This approach is highly conservative, since it assumes only a modest loss of availability for each household, when, as indicated by unemployment data, some parents have had to take leave entirely. In addition, as discussed throughout this report, the lack of available and affordable child care is a major constraint to workforce participation overall, with the reduction in slots exacerbating the problems of families who did not have satisfactory care arrangements prior to COVID.

[110] During the point-in-time of analysis of October 2020 data, there were 182 centers that were either "closed" or "unknown" status, totaling up to 6,000 child care slots. These slots were the upper bound of the additional need for New Hampshire families as it is possible that those centers with unknown status were operating. There were only 50 centers in New Hampshire that have been confirmed as permanently closed.
[111] *Ibid*

3.4. Licensed Child Care Gap Analysis by Town Typology

Prior to the pandemic, New Hampshire had an unmet need for licensed child care for children under six of 39 percent (approximately 21,000 slots). By October, the potential addition of 6,000 temporarily or permanently closed licensed slots increased the statewide unmet need to roughly 50 percent.

Figure 3.22 below calculates by town typology the average proportion of child care need for children under six that is unmet by licensed capacity pre-COVID and as of October 2020. Differentials at both points in time are evident by geographic, economic, and social characteristics. The strongest correlate is a negative relationship between population density and unmet need.

- Unmet need was highest in communities with lower population density, approaching 80 percent in the lowest density communities pre-COVID and in all communities below the median density as of October 2020.
- At the county level, the highest rate of unmet need was seen in Coos County, while the largest increases from pre-COVID levels were seen in Carroll, Coos, and Grafton Counties.
- Communities reliant on the Leisure and Hospitality industry had the highest levels of unmet need, both pre-COVID and as of October 2020, with levels also elevated in goods-producing communities.
- Social vulnerability was only modestly correlated with the unmet need, while median income did not show a clear relationship.

Figure 3.22: Percent of Unmet Child Care Need, by Typology, 2020

	Pre-COVID	October 2020	Net Increase
New Hampshire	39%	50%	11%
County			
Belknap	37%	47%	10%
Carroll	24%	52%	27%
Cheshire	48%	56%	8%
Coos	52%	71%	20%
Grafton	40%	59%	19%
Hillsborough	40%	51%	11%
Merrimack	28%	39%	11%
Rockingham	40%	51%	11%
Strafford	40%	45%	5%
Sullivan	50%	56%	6%
Density			
Low	78%	82%	4%
Mid-Low	61%	77%	16%
Mid-High	59%	69%	10%
High	30%	41%	11%
Income			
Low	35%	46%	11%
Mid-Low	42%	49%	7%
Mid-High	43%	57%	14%
High	36%	48%	12%
Social Vulnerability Index			
Low	39%	50%	11%
Mid-Low	37%	48%	11%
Mid-High	38%	50%	11%
High	43%	55%	12%
Industry Concentration			
Education & Health Services	33%	45%	11%
Goods-producing	49%	59%	10%
Leisure & Hospitality	61%	69%	7%
Trade, Transport, Utilities	43%	57%	14%
Other	8%	13%	6%

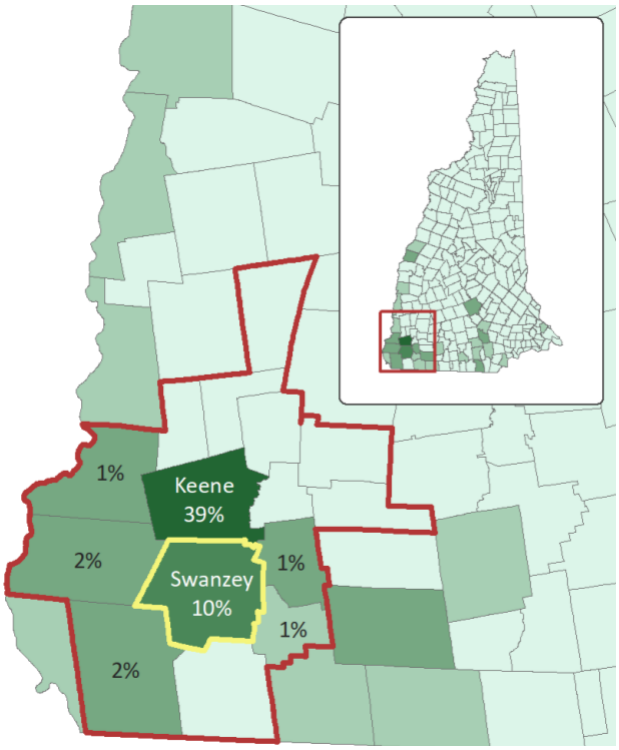
Source: ESI (2020), Child Care Aware of America (2020)

Analyzing Unmet Need for Child Care by Town and Labor Market Areas

The spatial analysis of child care need becomes more nuanced to interpret at each subsequent level of geography. State and county level analyses provide fairly reliable estimates of child care need relative to supply, though families near state and county borders may be using providers outside of their home geographies. This potential outflow across geographical borders may reduce the unmet need in practice (or increase it where an inflow is present). When analyzing this metric at the town level, these cross-border issues increase, particularly for smaller communities, where scale may dictate that providers can serve the needs of multiple communities. Therefore, it is important to look more closely at the relationships between jurisdictions to understand if needs are being met within neighboring communities.

A logical link between communities to consider in the analysis of child care need is the labor market area (LMA), which is "an economically integrated area within which individuals can reside and find employment within a reasonable distance or can readily change jobs without changing their place of residence."[112] If an LMA represents the reasonable distance a resident is likely to commute for work, then it is likely similar to the reasonable distance (and direction) that one might travel for child care while working. Therefore, the child care capacity of a town's corresponding LMA should also be considered when analyzing each town's unmet child care need.

Figure 3.23: Employment Location for Swanzey Residents, Keene Micropolitan LMA



Source: U.S. Census Bureau (2018), ESI (2020)

For example, Swanzey in Cheshire County has approximately 82 percent unmet need for its nearly 400 children under the age of six. However, approximately 39 percent of working residents of Swanzey, which is located in the Keene Micropolitan LMA, work in adjacent Keene. Just 10 percent of working residents live and work in Swanzey, while nearly half work in a different town within the LMA (see Figure 3.23). The child care capacity for the entire LMA (approximately 46 percent) is thus another relevant measure of Swanzey's unmet need for care.

Each town in New Hampshire belongs to one LMA, meaning the LMA-level unmet child care need can be calculated by aggregating the number of licensed slots and number of children needing care by town within each LMA. Figure 3.24 displays the unmet need prior to COVID-19 for each LMA.

[112] (n.d.). Local Area Unemployment Statistics FAQs. https://www.bls.gov/lau/laufaq.htm#Q06

Figure 3.24: Child Care Need by Labor Market Area, Pre-COVID and as of October 2020

Labor Market Area	# Towns	Children Needing Care	Pre-COVID Unmet Need	Oct 2020 Unmet Need
Haverhill NH	4	217	68%	87%
Raymond NH	4	1,118	79%	85%
Littleton NH-VT	17	1,052	67%	83%
Charlestown NH	5	416	56%	74%
Belmont NH	4	694	67%	73%
Berlin NH Micro NECTA	7	470	51%	73%
Hillsborough NH	6	673	72%	72%
Conway NH-ME	25	731	32%	72%
Franklin NH	5	1,000	51%	69%
Peterborough NH	11	848	55%	66%
Newport NH	4	487	55%	58%
Claremont NH Micro NECTA	2	627	51%	58%
Haverhill-Newburyport-Amesbury MA-NH NECTA Div	13	2,431	49%	55%
Keene NH Micro Brattleboro VT-NH[113]	16	2,516	46%	54%
Meredith NH	4	548	53%	53%
Plymouth NH	17	843	37%	51%
Portsmouth NH-ME Metro NECTA	13	4,010	35%	49%
Nashua NH-MA NECTA Div Lowell-Billerica-Chelmsford MA-NH NECTA Div Lawrence-Methuen-Salem MA-NH NECTA Div[114]	21	13,710	37%	48%
Lebanon NH-VT Micro NECTA	14	1,578	24%	47%
Manchester NH Metro NECTA	11	9,640	36%	46%
Dover-Durham NH-ME Metro NECTA	13	4,747	40%	45%
Laconia NH Micro NECTA	2	847	17%	38%
New London NH	8	449	24%	35%
Concord NH Micro NECTA	12	3,740	20%	31%
Wolfeboro NH	6	543	12%	30%
Colebrook NH-VT	15	84	0%	0%

Source: U.S. Census Bureau (2018), Child Care Aware of America (2020), NHES (2020)

[113] Due to interstate crossovers, three LMAs contained only one town each from New Hampshire. For the purposes of the child care gap analysis by town, these LMAs and their corresponding towns were combined with adjacent, larger LMAs. Brattleboro VT-NH LMA was combined with Keene NH Micropolitan LMA, while Lowell-Billerica-Chelmsford MA-NH and Lawrence-Methuen-Salem MA-NH NECTA Divisions were combined with Nashua NH-MA NECTA Division.
[114] See above.

To incorporate both the individual town-level unmet need and the broader LMA unmet need, the two metrics were multiplied to produce a weighted unmet need percentage per town. Then, the measure was normalized by calculating each town's share of its LMA's total children in need of care, which was then multiplied by the weighted unmet need. This calculation produced a normalized measure by which towns were sorted from most in need of care to least. Figure 3.25 displays the top 50 towns in terms of child care need prior to the pandemic, as well as each town's typology detail.

When analyzing the top towns in need of child care by their typologies, a few insights emerge:

- 23 of the top towns in need of child care (46 percent) were located in one of three counties:
    - Cheshire County (16 percent);
    - Rockingham County (16 percent); or
    - Grafton County (14 percent);
- 31 towns (62 percent) had low or mid-low median household income levels; and
- 20 towns (40 percent) relied heavily on the Education and Health Services industry for employment.

Figure 3.25: Highest Unmet Child Care Need with Typology Detail, Pre-COVID

Town	County	Density	Income	SVI	Emp Comp	Children Needing Care	% LMA Children	Pre-COVID Town Unmet Need	Pre-COVID LMA Unmet Need
Raymond	**Rockingham**	High	Mid-High	Low	Trade, Transport, Utilities	606	54%	87%	79%
Claremont	Sullivan	High	**Low**	Mid-High	Trade, Transport, Utilities	614	98%	50%	51%
Henniker	Merrimack	Mid-High	High	Low	**Educ & Health Services**	336	50%	66%	72%
Sunapee	Sullivan	Mid-High	**Mid-Low**	Mid-Low	**Educ & Health Services**	217	45%	85%	55%
Berlin	Coos	Mid-High	**Low**	High	**Educ & Health Services**	309	66%	62%	51%
Gilmanton	Belknap	Mid-Low	**Mid-Low**	Mid-Low	**Educ & Health Services**	212	31%	100%	67%
Littleton	**Grafton**	Mid-High	**Low**	High	Trade, Transport, Utilities	383	36%	78%	67%
Bath	**Grafton**	Low	**Low**	High	**Educ & Health Services**	59	27%	100%	68%
Northfield	Merrimack	Mid-High	**Mid-Low**	Mid-High	Goods-producing	350	35%	97%	51%
Meredith	Belknap	Mid-High	**Mid-Low**	Mid-High	Leisure & Hospitality	292	53%	51%	53%
Charlestown	Sullivan	Mid-High	**Low**	Mid-High	Goods-producing	183	44%	57%	56%
Alton	Belknap	Mid-High	Mid-High	Mid-Low	Trade, Transport, Utilities	161	23%	87%	67%
Monroe	**Grafton**	Mid-Low	**Mid-Low**	High	Goods-producing	43	20%	100%	68%
Haverhill	**Grafton**	Mid-High	**Low**	High	**Educ & Health Services**	113	52%	38%	68%
Rindge	**Cheshire**	Mid-High	Mid-High	Mid-Low	Trade, Transport, Utilities	196	23%	95%	55%
Hillsborough	Hillsborough	Mid-High	Mid-High	Mid-Low	Goods-producing	185	27%	59%	72%
Nottingham	**Rockingham**	Mid-High	High	Low	**Educ & Health Services**	269	24%	61%	79%
Barnstead	Belknap	Mid-High	Mid-High	Mid-Low	**Educ & Health Services**	175	25%	65%	67%
Deerfield	**Rockingham**	Mid-High	High	Mid-Low	Goods-producing	159	14%	90%	79%
Franklin	Merrimack	High	**Low**	Mid-High	Goods-producing	374	37%	48%	51%
New Hampton	Belknap	Mid-Low	**Mid-Low**	Mid-High	**Educ & Health Services**	91	17%	100%	53%
Stoddard	**Cheshire**	Low	Mid-High	Mid-Low	Other	78	12%	100%	72%
Manchester	Hillsborough	High	**Low**	High	**Educ & Health Services**	5,180	54%	40%	36%
Lempster	Sullivan	Mid-Low	**Mid-Low**	Mid-High	Goods-producing	66	14%	100%	55%
Walpole	**Cheshire**	Mid-High	Mid-High	Mid-Low	Goods-producing	147	35%	31%	56%
Swanzey	**Cheshire**	Mid-High	**Mid-Low**	Mid-High	Trade, Transport, Utilities	397	16%	82%	46%
Kingston	**Rockingham**	High	High	Low	**Educ & Health Services**	348	14%	80%	49%
Fitzwilliam	**Cheshire**	Mid-Low	**Mid-Low**	Mid-High	Trade, Transport, Utilities	117	14%	71%	55%
Thornton	**Grafton**	Mid-Low	**Mid-Low**	High	**Educ & Health Services**	131	16%	93%	37%
Sandown	**Rockingham**	High	High	Low	Goods-producing	337	14%	78%	49%
Northumberland	Coos	Mid-Low	**Low**	High	**Educ & Health Services**	152	14%	54%	67%
Bethlehem	**Grafton**	Low	**Low**	High	**Educ & Health Services**	79	8%	100%	67%
Deering	Hillsborough	Mid-Low	**Mid-Low**	Low	**Educ & Health Services**	46	7%	100%	72%
Ashland	**Grafton**	Mid-High	**Low**	High	**Educ & Health Services**	108	13%	100%	37%
Milan	Coos	Low	**Low**	High	Goods-producing	43	9%	100%	51%
Whitefield	Coos	Mid-Low	**Low**	High	**Educ & Health Services**	91	9%	80%	67%
Moultonborough	Carroll	Mid-Low	**Mid-Low**	Mid-High	Leisure & Hospitality	150	27%	32%	53%
Alstead	**Cheshire**	Mid-Low	**Low**	Mid-Low	**Educ & Health Services**	34	8%	100%	56%
New Ipswich	Hillsborough	Mid-High	Mid-High	Mid-Low	Goods-producing	107	13%	65%	55%
Bennington	Hillsborough	Mid-High	**Mid-Low**	Mid-Low	Goods-producing	69	8%	100%	55%
Nashua	Hillsborough	High	Mid-High	Mid-High	Trade, Transport, Utilities	3,820	28%	42%	37%
Winchester	**Cheshire**	Mid-High	**Low**	Mid-High	Goods-producing	313	12%	73%	46%
Sanbornton	Belknap	Mid-Low	Mid-High	Mid-High	Leisure & Hospitality	101	10%	78%	51%
Hampton	**Rockingham**	High	Mid-High	Low	Leisure & Hospitality	485	12%	91%	35%
Goshen	Sullivan	Mid-Low	**Mid-Low**	Mid-Low	Other	34	7%	100%	55%
Langdon	Sullivan	Mid-Low	Mid-High	Mid-High	**Educ & Health Services**	28	7%	100%	56%
Chesterfield	**Cheshire**	Mid-High	**Mid-Low**	Mid-High	Trade, Transport, Utilities	221	9%	91%	46%
Northwood	**Rockingham**	Mid-High	High	Low	**Educ & Health Services**	84	8%	61%	79%
Carroll	Coos	Low	**Low**	High	Leisure & Hospitality	55	5%	100%	67%
Newton	**Rockingham**	High	High	Low	Goods-producing	228	9%	75%	49%

Source: ESI (2020), U.S. Census Bureau (2018), Child Care Aware of America (2020)

As previously stated, New Hampshire's unmet child care need changed from 39 percent to roughly 50 percent by October 2020, due to the temporary or permanent loss of up to 6,000 licensed slots statewide. Analyzing unmet child care need as of October 2020 by town can both reinforce existing findings from the pre-COVID unmet need analysis, as well as reveal new findings, suggesting that the pandemic may have contributed to worsening unmet needs for child care in certain areas. Figure 3.26 displays the top 50 towns in terms of child care need as of October 2020, as well as each town's typology detail.

Of the top 50 towns with unmet need as of October 2020, some insights persisted from the pre-COVID analysis:

- 25 towns (50 percent) were located in one of three counties:
    - Grafton County (increased from 14 to 20 percent);
    - Belknap County (16 percent); or
    - Rockingham County (decreased from 16 to 14 percent);
- 31 towns (62 percent) had low or mid-low median household income levels; and
- 23 towns (46 percent, increased from 40 percent pre-COVID) relied heavily on the Education and Health Services industry for employment.

Additional insights regarding the top 50 towns with unmet child care need as of October 2020 include:

- 16 towns (32 percent) had high social vulnerability, whereas the pre-COVID social vulnerability distribution was more evenly represented among the top 50 towns; and
- 8 towns (16 percent) appeared among the top 50 towns with unmet child care need as of October 2020 but not during the pre-COVID period of analysis. These towns are highlighted in Figure 3.26.
- Perhaps the most noteworthy newcomer to the list is Conway, which rose from a ranking of 53 before COVID to five in the October 2020 period, with unmet need in the town increasing from 21 percent to 83 percent for its approximately 360 children in need of care.

Figure 3.26: Highest Unmet Child Care Need with Typology Detail, October 2020

Town	County	Density	Income	SVI	Emp Comp	Children Needing Care	% LMA Children	Oct 2020 Town Unmet Need	Oct 2020 LMA Unmet Need
Raymond	**Rockingham**	High	Mid-High	Low	Trade, Transport, Utilities	606	54%	90%	85%
Berlin	Coos	Mid-High	**Low**	**High**	**Educ & Health Services**	309	66%	82%	73%
Haverhill	**Grafton**	Mid-High	**Low**	**High**	**Educ & Health Services**	113	52%	74%	87%
Claremont	Sullivan	High	**Low**	Mid-High	Trade, Transport, Utilities	614	98%	57%	58%
Conway	Carroll	Mid-High	**Low**	**High**	Trade, Transport, Utilities	357	49%	83%	72%
Littleton	**Grafton**	Mid-High	**Low**	**High**	Trade, Transport, Utilities	383	36%	93%	83%
Northfield	Merrimack	Mid-High	**Mid-Low**	Mid-High	Goods-producing	350	35%	100%	69%
Franklin	Merrimack	High	**Low**	Mid-High	Goods-producing	374	37%	93%	69%
Henniker	Merrimack	Mid-High	High	Low	**Educ & Health Services**	336	50%	66%	72%
Bath	**Grafton**	Low	**Low**	**High**	**Educ & Health Services**	59	27%	100%	87%
Sunapee	Sullivan	Mid-High	**Mid-Low**	Mid-Low	**Educ & Health Services**	217	45%	91%	58%
Gilmanton	**Belknap**	Mid-Low	**Mid-Low**	Mid-Low	**Educ & Health Services**	212	31%	100%	73%
Charlestown	Sullivan	Mid-High	**Low**	Mid-High	Goods-producing	183	44%	64%	74%
Walpole	Cheshire	Mid-High	Mid-High	Mid-Low	Goods-producing	147	35%	71%	74%
Monroe	**Grafton**	Mid-Low	**Mid-Low**	**High**	Goods-producing	43	20%	100%	87%
Alton	**Belknap**	Mid-High	Mid-High	Mid-Low	Trade, Transport, Utilities	161	23%	100%	73%
Barnstead	**Belknap**	Mid-High	Mid-High	Mid-Low	**Educ & Health Services**	175	25%	80%	73%
Rindge	Cheshire	Mid-High	Mid-High	Mid-Low	Trade, Transport, Utilities	196	23%	95%	66%
Meredith	**Belknap**	Mid-High	**Mid-Low**	Mid-High	Leisure & Hospitality	292	53%	51%	53%
Nottingham	**Rockingham**	Mid-High	High	Low	**Educ & Health Services**	269	24%	61%	85%
Deerfield	**Rockingham**	Mid-High	High	Mid-Low	Goods-producing	159	14%	100%	85%
Hillsborough	Hillsborough	Mid-High	Mid-High	Mid-Low	Goods-producing	185	27%	59%	72%
Manchester	Hillsborough	High	**Low**	**High**	**Educ & Health Services**	5,180	54%	46%	46%
Madison	Carroll	Mid-Low	**Mid-Low**	**High**	**Educ & Health Services**	107	15%	100%	72%
Northumberland	Coos	Mid-Low	**Low**	**High**	**Educ & Health Services**	152	14%	80%	83%
New Hampton	**Belknap**	Mid-Low	**Mid-Low**	Mid-High	**Educ & Health Services**	91	17%	100%	53%
Stoddard	Cheshire	Low	Mid-High	Mid-Low	Other	78	12%	100%	72%
Swanzey	Cheshire	Mid-High	**Mid-Low**	Mid-High	Trade, Transport, Utilities	397	16%	95%	54%
Nashua	Hillsborough	High	Mid-High	Mid-High	Trade, Transport, Utilities	3,820	28%	60%	48%
Lempster	Sullivan	Mid-Low	**Mid-Low**	Mid-High	Goods-producing	66	14%	100%	58%
Gilford	**Belknap**	Mid-High	Mid-High	Mid-High	Trade, Transport, Utilities	236	28%	72%	38%
Thornton	**Grafton**	Mid-Low	**Mid-Low**	**High**	**Educ & Health Services**	131	16%	93%	51%
Whitefield	Coos	Mid-Low	**Low**	**High**	**Educ & Health Services**	91	9%	100%	83%
New Ipswich	Hillsborough	Mid-High	Mid-High	Mid-Low	Goods-producing	107	13%	84%	66%
Campton	**Grafton**	Mid-Low	**Mid-Low**	**High**	Leisure & Hospitality	130	15%	87%	51%
Milan	Coos	Low	**Low**	**High**	Goods-producing	43	9%	100%	73%
Laconia	**Belknap**	High	**Low**	Mid-High	**Educ & Health Services**	611	72%	24%	38%
Ashland	**Grafton**	Mid-High	**Low**	**High**	**Educ & Health Services**	108	13%	100%	51%
Fitzwilliam	Cheshire	Mid-Low	**Mid-Low**	Mid-High	Trade, Transport, Utilities	117	14%	71%	66%
Kingston	**Rockingham**	High	High	Low	**Educ & Health Services**	348	14%	80%	55%
Bethlehem	**Grafton**	Low	**Low**	**High**	**Educ & Health Services**	79	8%	100%	83%
Alstead	Cheshire	Mid-Low	**Low**	Mid-Low	**Educ & Health Services**	34	8%	100%	74%
Enfield	**Grafton**	Mid-High	Mid-High	Mid-Low	**Educ & Health Services**	253	16%	80%	47%
Sandown	**Rockingham**	High	High	Low	Goods-producing	337	14%	78%	55%
Lebanon	**Grafton**	High	**Mid-Low**	Mid-Low	**Educ & Health Services**	709	45%	28%	47%
Northwood	**Rockingham**	Mid-High	High	Low	**Educ & Health Services**	84	8%	89%	85%
Hampton	**Rockingham**	High	Mid-High	Low	Leisure & Hospitality	485	12%	95%	49%
Sanbornton	**Belknap**	Mid-Low	Mid-High	Mid-High	Leisure & Hospitality	101	10%	78%	69%
Bennington	Hillsborough	Mid-High	**Mid-Low**	Mid-Low	Goods-producing	69	8%	100%	66%
Lancaster	Coos	Mid-Low	**Low**	**High**	**Educ & Health Services**	117	11%	58%	83%

Source: ESI (2020), U.S. Census Bureau (2018), Child Care Aware of America (2020)