# STALLED AT THE START VERMONT'S CHILD CARE CHALLENGE

An Analysis of the Supply of and Demand for Regulated Child Care for Children Birth through Five in Vermont

### January 2020

Produced by Let's Grow Kids

Advised by Building Bright Futures, the Vermont Association for the Education of Young Children, the Vermont Child Care Providers Association, and the Vermont Department for Children and Families Child Development Division



### **About Let's Grow Kids**

Let's Grow Kids is leading a movement for affordable access to high-quality child care for all Vermont families who need it by 2025. With its network of 30,000 supporters, LGK is strengthening today's early care and education system to create immediate impact for families with children birth to five while simultaneously mobilizing Vermonters from all walks of life to call for policy change and public investment in child care to build a better Vermont for generations to come.

Let's Grow Kids 19 Marble Ave, Ste 4 Burlington, VT 05401

www.letsgrowkids.org

### About this Report

Author: Jen Horwitz, Policy & Research Director

Editor: Seth F. Hibbert, Content Manager

Contributors: Cathy Reitz, Data & Administrative Coordinator Erin Roche, Director of Operations & Evaluation Anna Brouillette, Ed.M. Candidate, Harvard Graduate School of Education

### Table of Contents

Index of Figures & Tablesii	ii
Executive Summaryiv	V
Introduction1	1
Overview of Vermont's Early Care and Education System	1
Types of Early Care and Education Programs 1	1
Quality	2
Access	3
Affordability	3
Estimating the Supply of and Demand for Regulated Child Care in Vermont	4
Determining Demand	4
Infants	4
Toddlers	4
Preschoolers	5
Determining Supply	3
What We Learned: Statewide Information	7
The Supply7	7
The Demand	3
Comparing Supply vs Demand	9
Access to Care 11	1
Infants12	2
Toddlers 14	4
Preschoolers	3
What We Learned: County Information	3
Addison 19	9
Bennington 20	)
Caledonia21	1
Chittenden	2
Essex	3
Franklin 24	4
Grand Isle	5
Lamoille	3
Orange	7
Orleans	3
Rutland	9

Washington	30
Windham	31
Windsor	32
Methodology	33
Overview	34
Determining the Supply of Regulated Child Care	34
Determining the Supply of Regulated, High-Quality Child Care	35
Determining the Demand for Regulated Child Care	35
Determining Access to Child Care	35
Determining Significance of 2018–2020 Changes	35
Additional Assumptions, Caveats, and Definitions	36
Appendix	39
References	55

### Index of Figures & Tables

Figure 1.	Change in Capacity of Regulated Early Care and Education Programs in Vermont, 2016–2020
Figure 2.	Change in Capacity of Regulated, High-Quality (4- or 5-Star) Early Care and Education Programs in Vermont, 2016–2020
Figure 3.	LTNC Population (Demand) Compared to the Capacity of Regulated Programs (Supply), 2020
Figure 4.	LTNC Population (Demand) Compared to the Capacity of High-Quality (4- or 5- Star) Regulated Programs (High-Quality Supply), 2020
Figure 5.	Capacity (Supply) Needed to Meet Demand 10
Figure 6.	Infants LTNC Without Access to Regulated Care, 2018–2020
Figure 7.	Infants LTNC Without Access to High-Quality (4-or 5-Star), Regulated Programs,
<u>-</u>	2018–2020
Figure 8.	Toddlers LTNC Without Access to Regulated Care, 2018–2020 14
Figure 9.	Toddlers LTNC Without Access to High-Quality (4- or 5-Star) Regulated Care, 2018–2020
Figure 10.	
Figure 11.	
0	Care, 2020
Table 1.	Infant, Toddler, and Preschooler Population, 2016–2020
Table 1.	Count of Regulated Programs Serving Infants, Toddlers, and/or Preschoolers by
	County, 2020
Table 3.	Infant Capacity of Regulated Programs by County, 2020
Table 4.	Toddler Capacity of Regulated Programs by County, 2020
Table 5.	Preschool Child Care Capacity of Regulated Programs by County, 2020
Table 5.	Infant Population Information by County, 2020
Table 7.	Toddler Population Information by County, 2020
Table 8.	Preschool Population Information by County, 2020
Table 9.	Percent of Children LTNC Without Access to Regulated Child Care in Vermont,
Table 3.	2018–2020
Table 10.	Percent of Infants LTNC Without Access to Regulated Care by County, 2018–2020
Table TO.	48
Table 11.	Percent of Infants LTNC Without Access to High-Quality (4- or 5-Star), Regulated
Table IT.	Care by County, 2018–2020
Table 12.	Percent of Toddlers LTNC Without Access to Regulated Care by County, 2018–
Table 12.	2020
Table 13.	Percent of Toddlers LTNC Without Access to High-Quality (4- or 5-Star),
Table 15.	Regulated Care by County, 2018–2020
Table 14.	Percent of Preschoolers LTNC Without Access to Regulated Care by County, 2020
Table 15.	52 Percent of Preschoolers LTNC Without Access to High-Quality, Regulated Care by
	County, 2020
Table 16.	Hours of Operation of Regulated Programs Serving Infants, Toddlers, and/or
	Preschoolers by County, 2020
	······································

### **Executive Summary**

Since 2016, Let's Grow Kids, with advisement from a number of organizations, has issued biannual reports on the supply of and demand for regulated, full-time, full-year child care for infants and toddlers likely to need some form of child care. We would like to thank Building Bright Futures, the Vermont Association for the Education of Young Children, the Vermont Child Care Providers Association, and the Vermont Department for Children and Families Child Development Division for sharing their time, knowledge, and skills with us in advising this year's report.

The findings of this year's report show that there have been statistically significant changes in the percent of infants and toddlers likely to need care who do not have access to regulated child care programs. Statewide, more infants likely to need care have access to regulated child care programs, but fewer toddlers likely to need care have access. However, more infants and toddlers likely to need care have access to high-quality (4- or 5-star) child care programs. These statewide trends also generally occurred at the county level, although many counties experienced no statistically significant changes regarding general access to regulated child care.

In addition to the findings for infants and toddlers, this year's report has been expanded to also include full-time, full-year child care for preschool-age children (preschoolers). It's important to note that access to child care for preschoolers is different than access to Vermont's voluntary, publicly-funded, mixed-delivery universal pre-K (UPK) program. This report only analyzes the availability of full-work-day, full-calendar-year child care. It does not include an analysis of the supply of and demand for state-designated UPK programming, which may be offered at regulated early care and education programs but may also be offered as a stand-alone program or in public or private schools that do not provide child care. Because the supply of and demand for preschooler child care has not been evaluated in past years, the 2020 report findings are the only data reported for preschoolers.

### Introduction

In Vermont, 71.5% of children 5 and under live in families in which all available parents are in the labor force. **That's more than 2 out of 3 young children in our state.** For these families, especially those with infants and toddlers, balancing work and life means figuring out how children will be cared for during work hours.

### **Overview of Vermont's Early Care and Education System**

Science tells us that the first five years of a child's life are the most important for healthy brain development. It's a time when the brain is creating its foundation for learning and development, forming more than one million new neural connections every second.<sup>1</sup>

For families balancing work and children or for families seeking social, emotional, or cognitive development opportunities outside their home, early care and education programs can offer the nurturing care, quality early education experiences, and safe environment that support optimal healthy development for young children.

### **Types of Early Care and Education Programs**

Vermont families rely on different ways to care for their infants, toddlers, and preschoolers, and may use varying types of care and learning arrangements to meet the needs of their daily lives and schedules. Many families choose to use regulated early care and education programs as part of the care arrangements for their child or children. Regulated programs have gone through a licensing process with the Vermont Department for Children and Families Child Development Division (CDD). The licensing process requires programs to meet certain health and safety regulations and programming guidelines (such as developmentally appropriate play time and activities that promote healthy development). The licensing process also requires the state to inspect programs to make sure they provide a safe and age-appropriate space and meet other regulations and guidelines for child care and early education.

There are several different types of regulated programs in Vermont:<sup>2</sup>

- Registered Family Child Care Homes (Registered FCCHs): Also known as family providers or home-based providers, registered family child care homes provide early care and education programs in the provider's own home. These home-based providers have gone through a licensing process with CDD to certify that they meet specific regulations that promote children's health, safety, and development in order to care for a small group of children. Registered child care homes are the most common type of regulated, home-based child care in Vermont.
- Licensed Family Child Care Homes (Licensed FCCHs): As with registered child care homes, licensed child care homes offer a regulated home-based option for child care. The difference between registered child care homes and licensed child care homes is that licensed child care homes typically care for more than six children, with the support of an assistant. Like registered child care homes, licensed child care homes have received a license with CDD to certify that they meet specific regulations that promote children's health, safety, and development. Since licensed family child care homes care for more children than registered family child care homes, they must meet additional regulations.

 Licensed Center-Based Child Care and Preschool Programs (CBCCPPs): Licensed child care centers and preschool programs care for children in a dedicated space that is not located in a home. These programs are also regulated by the state and have two or more staff who have specific training or formal education in early childhood care and education. Licensed child care centers offer many different types of programs, and may focus on a particular age group, such as preschool.

### Quality

Vermont has worked to support early care and education programs to elevate their quality through a variety of efforts, including through the state's quality recognition and improvement system (QRIS) known as STARS (STep Ahead Recognition System). Through STARS, programs can receive a quality designation of 1 to 5 stars, with a 5-star designation being the highest quality recognition level a program can receive. A QRIS is considered to be a best practice for early care and education systems, providing a framework for communities to build strong early care and education programs for young children, and allowing states to provide families and policymakers with information that can be helpful in better understanding some of the data behind a state's early care and education programs.<sup>3</sup> Currently, only one state in the country is not planning for, piloting, or using some form of a QRIS.<sup>4</sup>

STARS is designed to promote the strengths that early educators bring to their work every day at child care and early education programs. This report focuses on 4- and 5-star designations as indicators of high-quality because these designation levels have been identified in legislation and by partner organizations as target quality recognition levels for child care and early education programs. This includes the legislation guiding Vermont's universal, publicly-funded prekindergarten program.

Additionally, Vermont's Blue Ribbon Commission on Financing High Quality, Affordable Child Care (BRC) developed a definition of high-quality that builds off the best practices currently expected of 5-star programs and even more advanced quality standards set by Head Start, the National Association for the Education of Young Children, and the National Association for Family Child Care. The BRC recommended that the state work toward this aspirational benchmark for quality, acknowledging that additional resources need to be allocated to ensure that providers have access to the supports necessary to implement the BRC's vision.

We recognize that there are many quality programs that are committed to a path of continuous quality improvement to achieve a high-quality (4- or 5-star) recognition level that do not yet have this designation. We want to acknowledge these experiences and note that this level of information is not captured by the data sets used for this analysis. More information on regulated child care and early learning programs can be found through the state's Bright Futures Child Care Information System at www.brightfutures.dcf.state.vt.us.

### Access

According to the U.S. Department of Health & Human Services Administration for Children and Families Office of Planning, Research, and Evaluation (OPRE), access to early care and education programs is defined as, "parents, with reasonable effort and affordability, can enroll their child in an arrangement that supports the child's development and meets the parents' need."<sup>5</sup> OPRE notes that this encompasses factors such as the geographic location of a program, program quality, hours and days care is available, transportation, and linkages to other services like speech therapy through the child care or early learning program. Ultimately, OPRE has defined access to early care and education through a holistic lens that looks at what works best for a child and the child's family.

In *Stalled at the Start*, we analyze the number of child care slots in regulated programs for given age groups as compared to the number of children in an age group who are likely to need access to child care and determine the slot gap between current supply and estimated demand. We also provide information on the time the first child care program opens, the time most programs open, the time most programs close, and the time the last program closes in each county.

An additional factor in thinking about access is the availability of qualified early childhood educators who staff child care and early learning programs. Access cannot be created without qualified early childhood educators. The advisory committee discussed the importance of understanding Vermont's current early childhood education workforce and what the workforce implications might be of a lack of supply. However, the advisory committee recommended to Let's Grow Kids to conduct this level of analysis separate from *Stalled at the Start*. Let's Grow Kids plans to follow up on this recommendation in 2020 and release a separate research whitepaper related to early childhood educators and the supply of child care and early learning programs in the state.

### Affordability

Another key piece of the OPRE research brief that defines access is the topic of affordability. Even with financial assistance, Vermont families can spend almost 30% of their annual income on child care.<sup>6</sup> In contrast, the U.S. Agency of Health and Human Services, Department for Children and Families recommends that families spend no more than 7% of their annual income on child care.<sup>7</sup> That leaves a significant gap between what the federal government considers to be affordable and what families are actually paying for child care in Vermont. Affordability is also an issue for early childhood educators. Vermont, like many other states, has been working to advance the quality of child care and early learning by supporting early childhood educators in advancing their skills and education. For example, a teacher in a center-based child care program must hold advanced training in early childhood education through a teaching license through the Vermont Agency of Education with endorsement in a field related to early childhood; or 12 months of experience working with young children combined with a bachelor's degree specifically relevant to early childhood or a bachelor's degree with extensive coursework in early childhood or school age education.<sup>8</sup> However, the median annual salary for such a teacher is \$34,410 (or \$16.54 per hour), which is far lower

than the median salary of \$59,560 for a Vermont kindergarten teacher, and less than what Vermont estimates is the basic wage needed for a single adult to live on their own (\$16.94 per hour), let alone to support a child (\$27.77 per hour).<sup>9,10,11</sup> This can make it difficult for early childhood educators to remain in the field.

This analysis does not include considerations related to affordability, but the advisory committee recognizes the important role that costs for both parents and early childhood educators play in Vermont's child care and early education system.

### Estimating the Supply of and Demand for Regulated Child Care in Vermont

In partnership with Building Bright Futures, the Vermont Association for the Education of Young Children, the Vermont Child Care Providers Association, and the Vermont Department for Children and Families Child Development Division, Let's Grow Kids updated its analysis of the supply of and demand for regulated child care in Vermont using a methodology that is detailed in the appendix of this report.

### **Determining Demand**

This report focuses on the supply of and demand for child care for three different age groups: infants, toddlers, and preschoolers. These age groups are defined by state and federal regulations that guide Vermont's early care and education system. Each of these age groups have different developmental and physical needs, which influence how many children in each age group a program is able to serve.

### Infants

Infants—children between 6 weeks and 23 months—require the most attention, support, and one-on-one care of all three age groups. They are experiencing rapid developmental and emotional growth, making things like one-on-one attention, physical closeness and nurturing, and caregiver continuity important in any program serving this age group.<sup>12</sup> Additionally, infants need significant physical support, such as diapering, feeding, and monitored nap time. To best meet these needs, caring for infants in care requires a low child-to-staff ratio, making them the most expensive early childhood age group to care for. Given the cost of providing quality infant care, many programs have capacity for only a few infants.

### Toddlers

Toddlers—children aged 24 through 35 months—like infants, also require a significant amount of physical care and support. During this development stage, children are rapidly discovering, learning, and absorbing new knowledge from their environments.<sup>13</sup> For toddlers, being read to, spoken to, and given engaging and safe care and learning environments are necessary features of an early care and education program. Toddlers also require a low staff-to-child ratio to support their developmental and physical needs.



#### **Preschoolers**

Preschoolers—3- and 4-year-olds—require less one-on-one attention than infants or toddlers. Their early care and education needs include developmentally appropriate play; open-ended and problem-solving activities; interaction and engagement with other peers for social and cooperative competence building; and environments that are rich in language, literacy, and mathematics modeling.<sup>14</sup>



Based on these age-group definitions, the total population for each age-group was calculated using data from the Vermont Department of Health.<sup>15</sup> However, we recognize that not every family in Vermont uses or wants to use regulated child care. In order to estimate the demand for child care, the analysis uses a proxy: children likely to need care (LTNC).

The LTNC population was identified using the population estimates for each age group and information from the U.S. Census Bureau on the percent of Vermont children 5 and under with all available parents in the labor force.<sup>16</sup>

In past years, the report's advisory committee interpreted this approach as providing a conservative estimate of actual demand. This year, the advisory committee was able to validate the LTNC proxy by comparing it to findings from *Young Children's Early Care and Learning in Vermont*, a report on the findings of a study of the early care and education needs and practices of Vermont families with young children (children under 5).<sup>17</sup> This research, conducted by NORC at the University of Chicago, the leading early care and education use and preferences research team in the country, found that 88% of families with all available parents working used some form of non-parental child care.<sup>18</sup> Furthermore, even in families where not all parents were working, non-parental care was still utilized 45% of the time.<sup>19</sup>

Based on this research, the advisory group determined that while the LTNC methodology may slightly overestimate the child care usage of families with all available parents in the labor force, it also underestimates the usage of early care and education programs by families with not all available parents in the labor force, and that the overall estimate is then very similar to the findings of the NORC research. Additionally, the advisory group considered the specificity of available data in determining whether to continue using the LTNC methodology or to create a new demand estimate methodology using the findings of NORC's research. The NORC data, while very important and useful, is available at the state-level only, whereas the LTNC methodology allows for county-specific analysis.

Therefore, given that the LTNC methodology closely mirrors the findings of NORC's research and the methodology's applicability to analyzing supply and demand at the county-level, the advisory group recommended that this report continue to use the LTNC proxy as an estimate for demand.

### **Determining Supply**

This study focuses on regulated early care and education programs in Vermont. The term "regulated" means that the program is licensed with the state of Vermont. Regulated programs that serve infants, toddlers, and/or preschoolers include registered family child care homes, licensed family child care homes, and center-based child care and preschool programs. CDD maintains information on all regulated programs in the state, including information on a program's desired capacity for children in each age group the program serves, the days of the week and usual hours a program is open, and information on a program's quality recognition level (known as a program's STARS designation).<sup>20</sup> This data was used to determine which regulated programs in Vermont offer full-time, full-year child care for infants, toddlers, and/or preschool-age children in order to analyze the supply of child care and the supply of high-quality child care.

### What We Learned: Statewide Information\*

### The Supply

Since the release of the 2016 report, the statewide supply of regulated infant and toddler care has continued to decrease, meaning that there are fewer slots, overall, for infants and toddlers likely to need care in the state.<sup>21</sup> Because this is the first year that we are including an analysis of child care for preschoolers, only 2020 report information is included for the preschool age group.

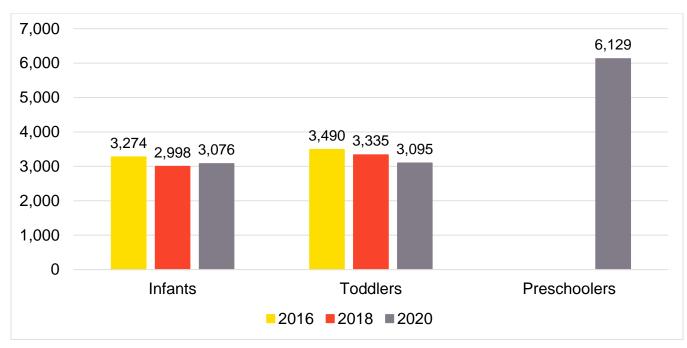
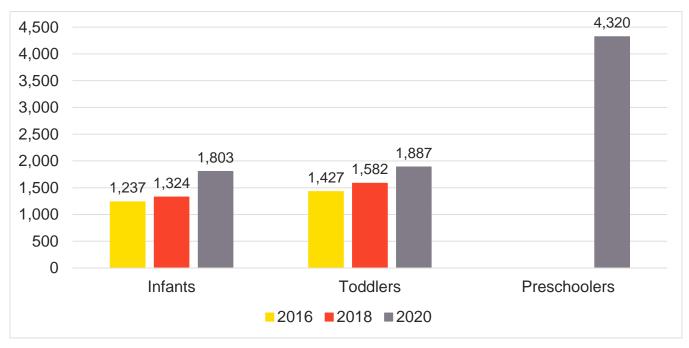


Figure 1. Change in Capacity of Regulated Early Care and Education Programs in Vermont, 2016–2020 <sup>22, 23</sup>

However, the supply of high-quality (4- or 5-star), regulated infant and toddler care has increased since the 2016 report was issued as shown in Figure 2. High-quality slots are a portion of the total number of regulated slots and are proxy for analyzing how quality is or is not increasing across the early care and education system. For infants, of the total 3,076 regulated slots, 59% were in high-quality programs in the most recent data set, compared to 38% of slots in the 2016 report; a statistically significant increase. For toddlers, of the total 3,095 slots, 61% were in high-quality programs in the most recent data set, compared to 41% of slots in the 2016 report; also a statistically significant increase. For preschoolers, of the total 6,129 slots, 70% were in high-quality programs in the most recent data set.

<sup>&</sup>lt;sup>\*</sup> The data in the tables and figures in this report are reported in relation to the year the report was released and not in terms of the data set used for the analysis. More information on the data and the methodology can be found in the Methodology section of this report. References to the previous two editions of *Stalled at the Start* are noted in Figure 1, but all figures and tables that cite 2016 report data or 2018 report data are also based on these references.



### Figure 2. Change in Capacity of Regulated, High-Quality (4- or 5-Star) Early Care and Education Programs in Vermont, 2016–2020

### The Demand

According to the latest population estimates from the Vermont Department of Health, there are 29,681 children under the age of 5 in Vermont (infants, toddlers, and preschoolers). However, we know that not all of these children are likely to need full-time child care. The U.S. Census Bureau collects information on children 5 and under who have all available parents in the labor force (if a child lives in a family with two parents, this would mean both parents work; if a child lives in a single-parent household, it means that the child's parent works). According to the latest information, 71.5% of Vermont children 5 and under have all available parents in the labor force. This means that 21,225 children under the age of 5 are likely to need some form of regular child care while a parent works.

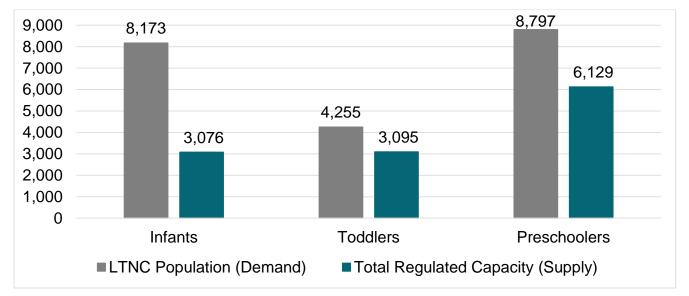
Table 1. Infant, Toddler, and Preschooler Population, 2016–202
--

Age Group	2016 Report Estimated Population	2016 Report Number of Children LTNC	2018 Report Estimated Population	2018 Report Number of Children LTNC	2020 Report Estimated Population	2020 Report Number of Children LTNC
Infants	12,076	8,502	12,162	8,526	11,429	8,173
Toddlers	6,171	4,344	6,187	4,337	5,950	4,255
Preschoolers					12,302	8,797

### **Comparing Supply vs Demand**

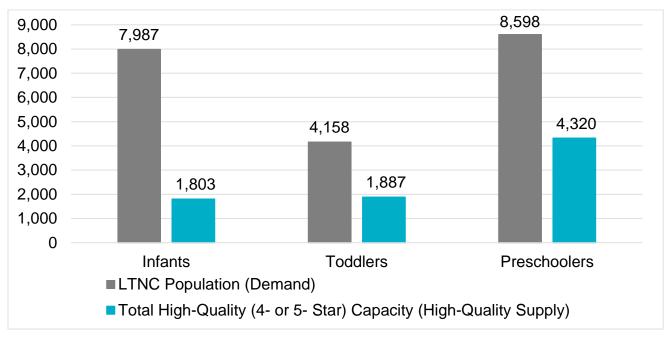
When the supply and demand information is compared, the difference between the two values is stark. Statewide, Vermont does not have sufficient regulated early care and education options to meet the needs of infants, toddlers, or preschoolers LTNC, as shown in Figure 3.





When focusing just on the supply of high-quality slots, the difference is even greater.





In order to meet demand, it would require the system to add approximately 8,925 slots, more than half of which would be needed for infants, as shown in Figure 5.

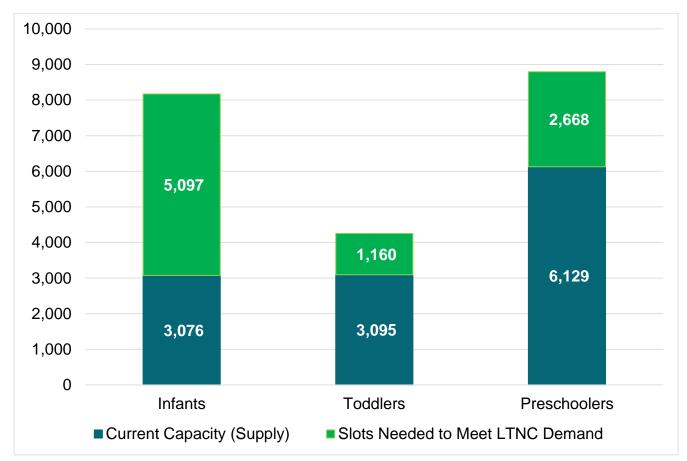
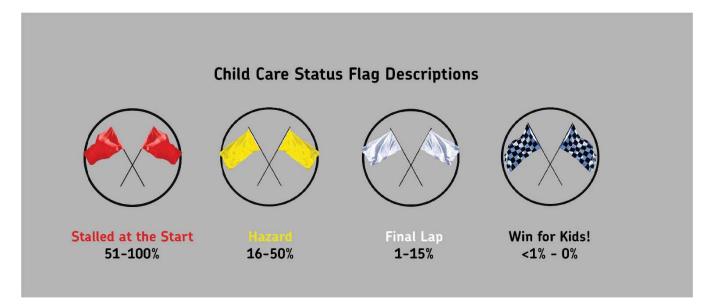


Figure 5. Capacity (Supply) Needed to Meet Demand

As noted in the methodology section, this estimate is likely to be an overestimation of the capacity needed to sufficiently meet demand, but this estimate provides a guide point for the additional capacity needed in Vermont's early care and education system.

### Access to Care

When LGK developed the first *Stalled at the Start* report in 2016, the report included a visual indicator, a set of racing flags, to track changes in the percent of young children LTNC without access to regulated programs. These flags are based on those used in a number of different sporting fields to indicate important information to participants and spectators. For the purposes of *Stalled at the Start*, the flag and color symbols used provide a quick visual indicator of whether the state or a given county faces a shortage of regulated child care to meet the needs of young children LTNC.



In this section, maps are color coded based on colors of the flags. In the county profile sheets, flag symbols are used to indicate whether a given county faces a shortage of regulated child care to meet the needs of the LTNC population.

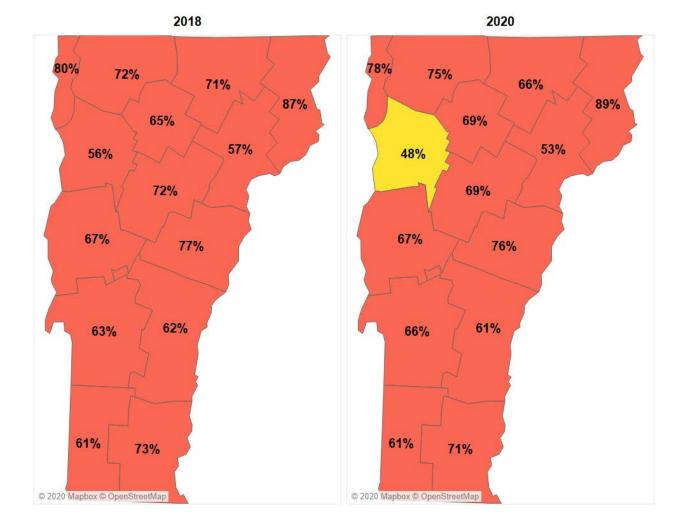
Additionally, this report also includes information on whether changes in data between the release of the 2018 report and this report were statistically significant (whether the change was or was not likely to have happened by chance). If it was found that a change between 2018 report findings and 2020 report findings was statistically significant (meaning that it was <u>not likely</u> the change could have happened by chance), the change is marked either as more children having access or fewer children having access. If it was found a change between the 2018 and 2020 report findings was not statistically significant (meaning that it <u>was</u> likely the change could have happened by chance), the change is marked as no significant change.

Detailed information on supply and demand and the statistical significance of changes between the 2018 report and 2020 report findings for all age groups can be found in the appendix.

### Infants

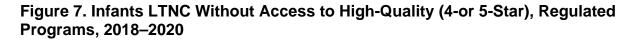
This year's analysis showed that, statewide, **62% of infants LTNC do not have access to regulated early care and education programs**. That's approximately 3 out of every 5 infants LTNC in Vermont. Comparatively, in 2018, 65% of infants LTNC did not have access to regulated programs. This is a significant change and suggests that, statewide, more infants have access to regulated programs than they did previously.

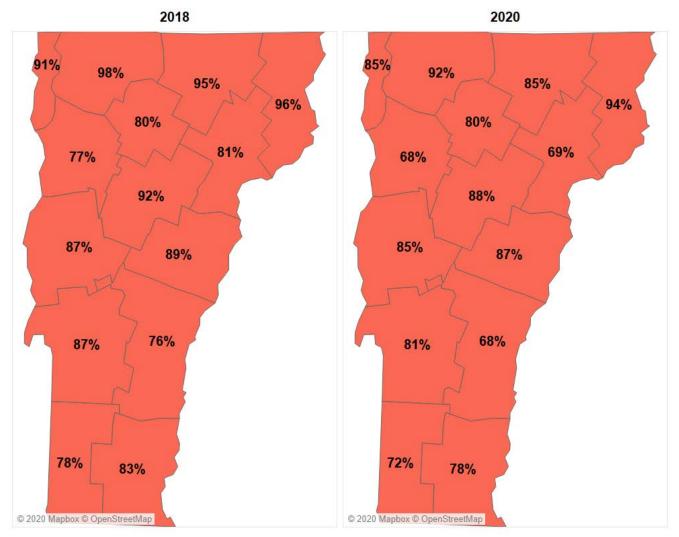
At the county level, the percent of infants LTNC without access to a slot in a regulated program ranged from 48% to 89% as shown in Figure 6. Despite statewide progress, most counties did not experience a statistically significant change in the percent of infants LTNC without access to any regulated programs except for Chittenden. In Chittenden, the percent of infants LTNC without access to regulated programs significantly decreased, meaning more infants have access to regulated programs than as noted in the 2018 report.



#### Figure 6. Infants LTNC Without Access to Regulated Care, 2018–2020

When looking specifically at access to high-quality (4- or 5-star), regulated programs, the analysis showed that **78% of infants LTNC do not have access to high-quality, regulated programs**. When comparing these findings to the 2018 report, in which it was found that 84% of infants LTNC did not have access to high-quality programs, there was a statistically significant decrease in the percent of infants LTNC without access to a high-quality, regulated program, meaning that more infants have access.



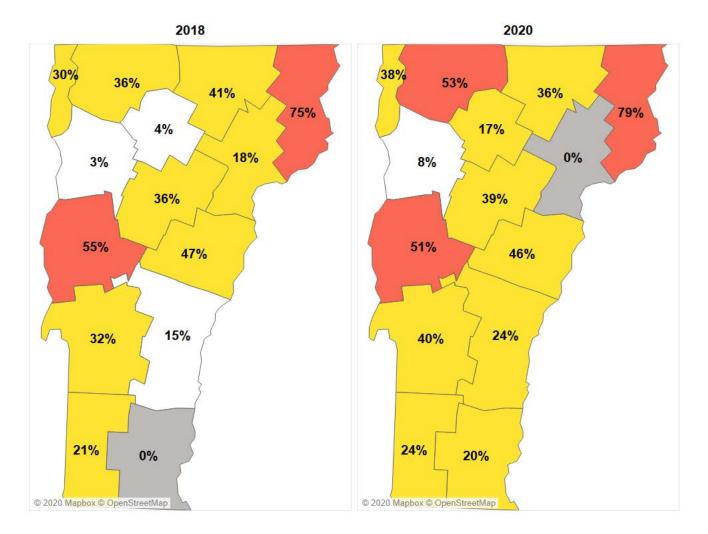


At the county level, as shown in Figure 7, percentages ranged from 68% to 94%. Eight of the 14 counties, including Bennington, Caledonia, Chittenden, Franklin, Orleans, Rutland, Washington, and Windsor, had significant decreases in percent of infants LTNC without access to high-quality programs, meaning that more infants have access to high-quality programs in those areas.

### **Toddlers**

As in previous analyses, this year's data suggests that, statewide, more toddlers have access to regulated or high-quality early care and education programs than infants, with **27% of toddlers LTNC lacking access to regulated programs**. In 2018, however, the proportion of toddlers LTNC care without access was only 23%. This increase is a statistically significant one, suggesting that, statewide, fewer toddlers have access to regulated care.

At the county level, the percent of toddlers LTNC without access to a regulated program ranged from 0% to 79%, as shown in Figure 8. The analysis showed that seven counties experienced statistically significant changes since the 2018 analysis. In Chittenden, Franklin, Lamoille, Rutland, Windham, and Windsor counties, there was a significant increase in percent of toddlers LTNC without access to a slot in a regulated program, meaning fewer children had access. Only in Caledonia County was there a significant decrease in the percent of toddlers LTNC without access to a regulated program, meaning that more toddlers having access to slots in regulated programs.





When limiting the analysis to high-quality (4- or 5-star), regulated programs, **56% of toddlers LTNC don't have access to high-quality programs**. This indicates that more toddlers LTNC have access to high-quality child care since the 2018 report, which found that 64% of toddlers LTNC did not have access to high-quality, regulated programs. This is a statistically significant decrease in the percent of toddlers LTNC without access to high-quality, regulated programs, meaning that more toddlers have access to high-quality care.

As illustrated in Figure 9, at the county level, percentages ranged from 21% to 90% of toddlers LTNC without access to high-quality, regulated programs. In Caledonia, Chittenden, Franklin, and Orleans counties, the change in findings from the 2018 report to the current report were statistically significant, indicating that more toddlers have access to high-quality care than they did in 2018 in those counties.

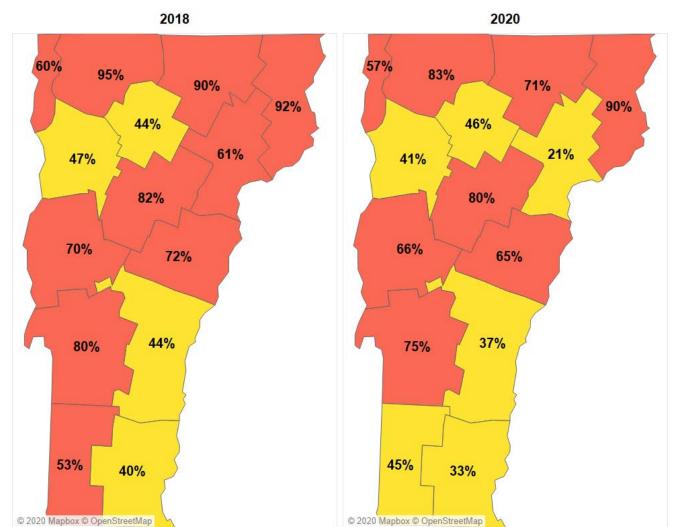
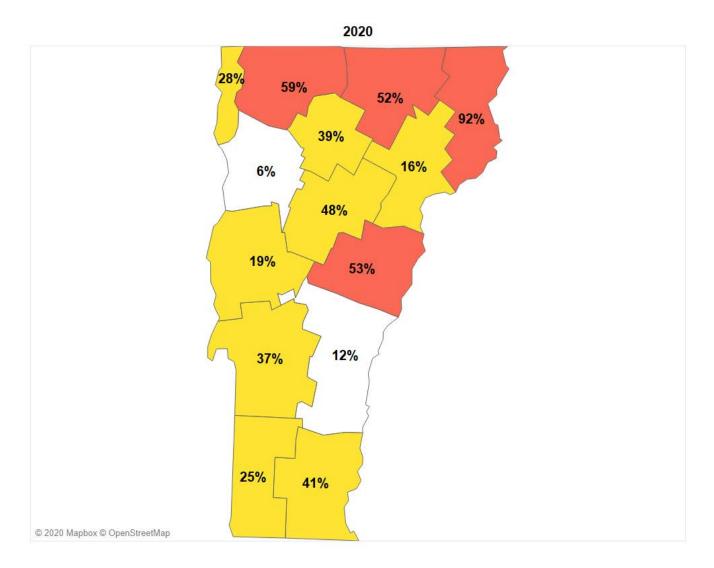


Figure 9. Toddlers LTNC Without Access to High-Quality (4- or 5-Star) Regulated Care, 2018–2020

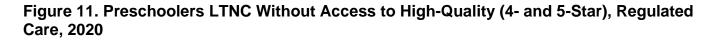
### **Preschoolers**

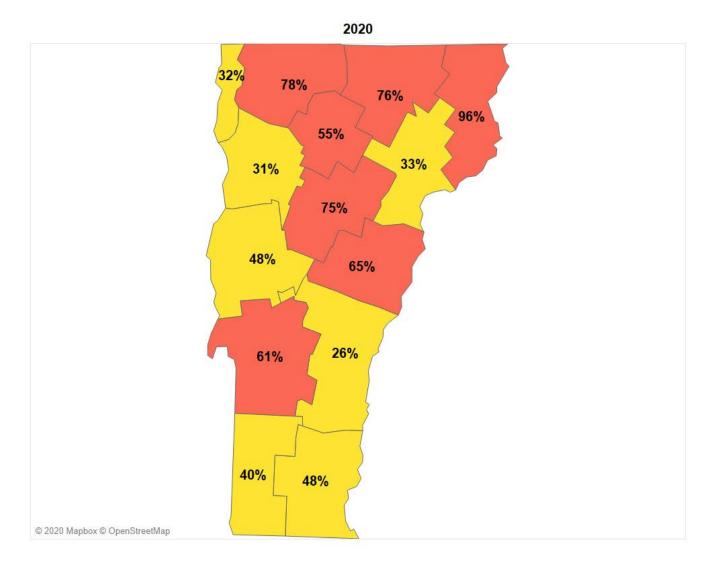
As noted earlier in this report, the preschool analysis focuses specifically on preschool-age children (3- and 4-year-olds) LTNC who do not have access to full-day, full-year child care. The analysis found that, statewide, **30% of preschoolers LTNC do not have access to regulated programs**. Access varies significantly by county, ranging from 6% of preschoolers LTNC without access in Chittenden County to 92% without access in Essex County.





Turning specifically to high-quality (4- and 5-star), regulated programs, statewide, **51% of preschoolers LTNC do not have access to high-quality, regulated child care programs**. Again, notable variation exists between counties, ranging from 26% to 96% of preschoolers LTNC without access to high-quality, regulated programs.





### What We Learned: County Information

Overall, Vermont families with young children face challenges finding regulated child care due to lack of access, quality, and affordability. These obstacles stall many children at the starting line. The supply of regulated child care in comparison to the demand for care was evaluated for each Vermont county, as county-specific information highlights the unique circumstances of families with young children across the state.

Each of the following county profile sheets includes information on:

- The LTNC population for infants, toddlers, and preschoolers;
- County-specific information on the percent of infants, toddlers, and preschoolers LTNC without access to regulated or high-quality (4- or 5-star), regulated child care programs;
- County-specific information on the hours of operation for regulated providers serving infants, toddlers, and/or preschoolers (the time the first program opens, the time most programs open, the time most programs close, and the time the last program closes); and
- County-specific information on the gap between the current supply of regulated child care and the estimated demand (number of slots needed to meet estimated demand).

In addition to the following county profile sheets, information on the supply of and demand for child care for each Vermont county can be found in the appendix.

## **County Analysis | Addison**



### Number of Young Children Likely to Need Care:

- 467 infants
- 231 toddlers
- 475 preschoolers

### Number of Programs:

- 14 CBCCPPs, of which 11 are high-quality
- 1 Licensed FCCH, which is also high-quality
- 30 Registered FCCHs, of which 4 are high-quality

### Number of Slots:

- 155 infant slots, of which 68 are high-quality
- 114 toddler slots, of which 78 are high-quality
- 386 preschooler slots, of which 245 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 312 infant slots
- 117 toddler slots
- 89 preschooler slots

### Infant Access



67% of infants likely to need care don't have access to any regulated programs.



85% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



51% of toddlers likely to need care don't have access to any regulated programs.



66% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



19% of preschoolers likely to need care don't have access to any regulated programs.



48% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 6:00 AM
- Most programs open 7:30 AM
- Most programs close 5:30 PM
- Last program closes 6:00 PM

## **County Analysis | Bennington**



### Number of Young Children Likely to Need Care:

- 542 infants
- 291 toddlers
- 608 preschoolers

### Number of Programs:

- 20 CBCCPPs, of which 17 are high-quality
- 2 Licensed FCCH, of which 1 is also high-quality
- 26 Registered FCCHs, of which 5 are high-quality

### Number of Slots:

- 211 infant slots, of which 149 are high-quality
- 220 toddler slots, of which 159 are high-quality
- 455 preschooler slots, of which 362 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 331 infant slots
- 71 toddler slots
- 153 preschooler slots

### Infant Access



61% of infants likely to need care don't have access to any regulated programs.



72% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



24% of toddlers likely to need care don't have access to any regulated programs.



45% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



25% of preschoolers likely to need care don't have access to any regulated programs.



40% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 6:00 AM
- Most programs open 7:30 AM
- Most programs close 5:30 PM
- Last program closes 6:00 PM

## **County Analysis | Caledonia**



### Number of Young Children Likely to Need Care:

- 378 infants
- 181 toddlers
- 392 preschoolers

### Number of Programs:

- 14 CBCCPPs, of which 13 are high-quality
- 1 Licensed FCCH, which is also high-quality
- 35 Registered FCCHs, of which 5 are high-quality

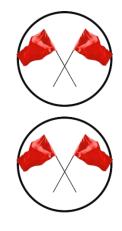
### Number of Slots:

- 178 infant slots, of which 117 are high-quality
- 206 toddler slots, of which 143 are high-quality
- 329 preschooler slots, of which 263 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 200 infant slots
- 0 toddler slots
- 63 preschooler slots

### Infant Access



53% of infants likely to need care don't have access to any regulated programs.

69% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



0% of toddlers likely to need care don't have access to any regulated programs.



21% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



16% of preschoolers likely to need care don't have access to any regulated programs.



33% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 5:00 AM
- Most programs open 7:00 AM
- Most programs close 5:30 PM
- Last program closes 10:00 PM

## **County Analysis | Chittenden**



### Number of Young Children Likely to Need Care:

- 2,173 infants
- 1,080 toddlers
- 2,204 preschoolers

### Number of Programs:

- 73 CBCCPPs, of which 48 are high-quality
- 3 Licensed FCCH, of which 0 are high-quality
- 69 Registered FCCHs, of which 10 are high-quality

### Number of Slots:

- 1,131 infant slots, of which 699 are high-quality
- 999 toddler slots, of which 639 are high-quality
- 2,069 preschooler slots, of which 1,512 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 1,042 infant slots
- 81 toddler slots
- 135 preschooler slots

#### Infant Access



48% of infants likely to need care don't have access to any regulated programs.



68% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



8% of toddlers likely to need care don't have access to any regulated programs.



41% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### Preschooler Access



6% of preschoolers likely to need care don't have access to any regulated programs.

31% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 6:00 AM
- Most programs open 7:30 AM
- Most programs close 5:30 PM
- Last program closes 6:00 PM

# County Analysis | Essex



### Number of Young Children Likely to Need Care:

- 72 infants
- 39 toddlers
- 97 preschoolers

### Number of Programs:

- 0 CBCCPPs
- 0 Licensed FCCH
- 4 Registered FCCHs, of which 2 are high-quality

### Number of Slots:

- 8 infant slots, of which 4 are high-quality
- 8 toddler slots, of which 4 are high-quality
- 8 preschooler slots, of which 4 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 64 infant slots
- 31 toddler slots
- 89 preschooler slots

### Infant Access



89% of infants likely to need care don't have access to any regulated programs.



94% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



79% of toddlers likely to need care don't have access to any regulated programs.



90% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



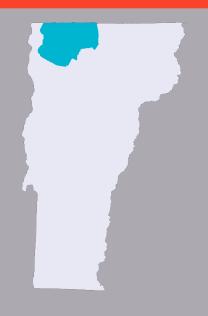
92% of preschoolers likely to need care don't have access to any regulated programs.



96% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 6:00 AM
- Most programs open 7:30 AM
- Most programs close 5:30 PM
- Last program closes 6:00 PM

## **County Analysis | Franklin**



### Number of Young Children Likely to Need Care:

- 857 infants
- 453 toddlers
- 923 preschoolers

### Number of Programs:

- 10 CBCCPPs, of which 7 are high-quality
- 0 Licensed FCCHs
- 71 Registered FCCHs, of which 12 are high-quality

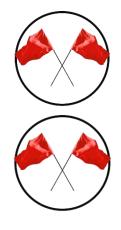
### Number of Slots:

- 210 infant slots, of which 71 are high-quality
- 211 toddler slots, of which 75 are high-quality
- 381 preschooler slots, of which 202 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 647 infant slots
- 242 toddler slots
- 542 preschooler slots

### Infant Access



75% of infants likely to need care don't have access to any regulated programs.

92% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



53% of toddlers likely to need care don't have access to any regulated programs.



83% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



59% of preschoolers likely to need care don't have access to any regulated programs.



78% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 5:30 AM
- Most programs open 7:00 AM
- Most programs close 5:30 PM
- Last program closes 11:59 PM

# **County Analysis | Grand Isle**



### Number of Young Children Likely to Need Care:

- 68 infants
- 42 toddlers
- 79 preschoolers

### Number of Programs:

- 3 CBCCPPs, of which 3 are high-quality
- 0 Licensed FCCHs
- 4 Registered FCCHs, of which 1 is high-quality

### Number of Slots:

- 15 infant slots, of which 10 are high-quality
- 26 toddler slots, of which 18 are high-quality
- 57 preschooler slots, of which 54 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 53 infant slots
- 16 toddler slots
- 22 preschooler slots

#### Infant Access



78% of infants likely to need care don't have access to any regulated programs.



85% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



38% of toddlers likely to need care don't have access to any regulated programs.



57% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



28% of preschoolers likely to need care don't have access to any regulated programs.



32% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 6:30 AM
- Most programs open 7:00 AM
- Most programs close 5:30 PM
- Last program closes 5:30 PM

## **County Analysis | Lamoille**



### Number of Young Children Likely to Need Care:

- 321 infants
- 186 toddlers
- 367 preschoolers

### Number of Programs:

- 10 CBCCPPs, of which 9 are high-quality
- 1 Licensed FCCH, of which 0 are high-quality
- 22 Registered FCCHs, of which 6 are high-quality

### Number of Slots:

- 100 infant slots, of which 64 are high-quality
- 155 toddler slots, of which 101 are high-quality
- 223 preschooler slots, of which 166 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 221 infant slots
- 31 toddler slots
- 144 preschooler slots

### Infant Access



69% of infants likely to need care don't have access to any regulated programs.



80% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



17% of toddlers likely to need care don't have access to any regulated programs.



46% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



39% of preschoolers likely to need care don't have access to any regulated programs.



55% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 6:00 AM
- Most programs open 7:00 AM
- Most programs close 5:30 PM
- Last program closes 6:00 PM

# **County Analysis | Orange**



### Number of Young Children Likely to Need Care:

- 379 infants
- 201 toddlers
- 404 preschoolers

### Number of Programs:

- 9 CBCCPPs, of which 7 are high-quality
- 1 Licensed FCCH, which is high-quality
- 16 Registered FCCHs, of which 5 are high-quality

### Number of Slots:

- 91 infant slots, of which 50 are high-quality
- 108 toddler slots, of which 70 are high-quality
- 191 preschooler slots, of which 142 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 288 infant slots
- 93 toddler slots
- 213 preschooler slots

### Infant Access



76% of infants likely to need care don't have access to any regulated programs.



87% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



46% of toddlers likely to need care don't have access to any regulated programs.



65% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



53% of preschoolers likely to need care don't have access to any regulated programs.



65% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 6:30 AM
- Most programs open 7:00 AM
- Most programs close 5:30 PM
- Last program closes 6:30 PM

## **County Analysis | Orleans**



### Number of Young Children Likely to Need Care:

- 354 infants
- 200 toddlers
- 398 preschoolers

### Number of Programs:

- 5 CBCCPPs, of which 3 are high-quality
- 2 Licensed FCCHs, of which both are high-quality
- 40 Registered FCCHs, of which 18 are high-quality

### Number of Slots:

- 120 infant slots, of which 54 are high-quality
- 128 toddler slots, of which 58 are high-quality
- 191 preschooler slots, of which 94 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 234 infant slots
- 72 toddler slots
- 207 preschooler slots

### Infant Access



66% of infants likely to need care don't have access to any regulated programs.



85% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



36% of toddlers likely to need care don't have access to any regulated programs.



71% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



52% of preschoolers likely to need care don't have access to any regulated programs.



76% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 12:00 AM
- Most programs open 6:00 AM
- Most programs close 5:00 PM
- Last program closes 11:45 PM

## **County Analysis | Rutland**



### Number of Young Children Likely to Need Care:

- 713 infants
- 377 toddlers
- 832 preschoolers

### Number of Programs:

- 18 CBCCPPs, of which 12 are high-quality
- 4 Licensed FCCHs, of which 2 are high-quality
- 42 Registered FCCHs, of which 4 are high-quality

### Number of Slots:

- 246 infant slots, of which 134 are high-quality
- 227 toddler slots, of which 93 are high-quality
- 528 preschooler slots, of which 324 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 467 infant slots
- 150 toddler slots
- 304 preschooler slots

### Infant Access



66% of infants likely to need care don't have access to any regulated programs.



81% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



40% of toddlers likely to need care don't have access to any regulated programs.



75% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



37% of preschoolers likely to need care don't have access to any regulated programs.



61% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 5:00 AM
- Most programs open 7:00 AM
- Most programs close 5:30 PM
- Last program closes 11:59 PM

## **County Analysis | Washington**



### Number of Young Children Likely to Need Care:

- 772 infants
- 410 toddlers
- 860 preschoolers

### Number of Programs:

- 19 CBCCPPs, of which 9 are high-quality
- 3 Licensed FCCHs, of which 0 are high-quality
- 51 Registered FCCHs, of which 2 are high-quality

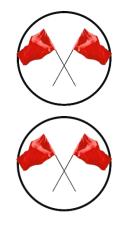
### Number of Slots:

- 241 infant slots, of which 94 are high-quality
- 251 toddler slots, of which 82 are high-quality
- 433 preschooler slots, of which 211 are high-quality

### Number of Additional Slots Needed to Meet Demand:

- 531 infant slots
- 159 toddler slots
- 417 preschooler slots

### Infant Access



69% of infants likely to need care don't have access to any regulated programs.

88% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Toddler Access**



39% of toddlers likely to need care don't have access to any regulated programs.



80% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

### **Preschooler Access**



48% of preschoolers likely to need care don't have access to any regulated programs.



75% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

- First program opens 6:30 AM
- Most programs open 7:00 AM
- Most programs close 5:00 PM
- Last program closes 5:45 PM

# **County Analysis | Windham**



#### Number of Young Children Likely to Need Care:

- 529 infants
- 267 toddlers
- 550 preschoolers

#### Number of Programs:

- 20 CBCCPPs, of which 17 are high-quality
- 2 Licensed FCCHs, of which both are high-quality
- 12 Registered FCCHs, of which 3 are high-quality

#### Number of Slots:

- 152 infant slots, of which 114 are high-quality
- 215 toddler slots, of which 179 are high-quality
- 325 preschooler slots, of which 285 are high-quality

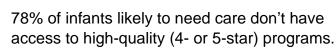
#### Number of Additional Slots Needed to Meet Demand:

- 377 infant slots
- 52 toddler slots
- 225 preschooler slots

#### Infant Access



71% of infants likely to need care don't have access to any regulated programs.



#### **Toddler Access**



20% of toddlers likely to need care don't have access to any regulated programs.



33% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

#### **Preschooler Access**



41% of preschoolers likely to need care don't have access to any regulated programs.



48% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

#### Hours of Operation:

- First program opens 6:30 AM
- Most programs open 7:30 AM
- Most programs close 5:30 PM
- Last program closes 11:00 PM

# **County Analysis | Windsor**



#### Number of Young Children Likely to Need Care:

- 554 infants
- 299 toddlers
- 616 preschoolers

#### Number of Programs:

- 24 CBCCPPs, of which 20 are high-quality
- 0 Licensed FCCHs
- 33 Registered FCCHs, of which 23 are high-quality

#### Number of Slots:

- 218 infant slots, of which 175 are high-quality
- 227 toddler slots, of which 188 are high-quality
- 543 preschooler slots, of which 456 are high-quality

#### Number of Additional Slots Needed to Meet Demand:

- 336 infant slots
- 72 toddler slots
- 73 preschooler slots

#### Infant Access



61% of infants likely to need care don't have access to any regulated programs.

68% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

#### **Toddler Access**



24% of toddlers likely to need care don't have access to any regulated programs.



37% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

#### **Preschooler Access**



12% of preschoolers likely to need care don't have access to any regulated programs.



26% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

#### Hours of Operation:

- First program opens 5:30 AM
- Most programs open 7:00 AM
- Most programs close 5:30 PM
- Last program closes 6:00 PM

Methodology

#### **Overview**

Data from regulated early care and education programs was analyzed in conjunction with population estimate data to determine how closely current child care capacity matches the estimated needs for regulated child care for infants, toddlers, and preschoolers in Vermont. This information was then used to determine the number of slots that would need to be created in order to meet the estimated demand for child care. This information was then compared to teacher-to-child ratios for each age group to develop an estimate of the number of early childhood educators that would be needed to meet demand.

#### **Determining the Supply of Regulated Child Care**

Data on all active, regulated early care and education programs was obtained from the Vermont Department for Children and Families Child Development Division (CDD). For the 2020 analysis, the data set reflects point-in-time information from CDD's database as of the end of the day on September 30, 2019; for the 2018 report, the data is point-in-time data from the end of the day on September 30, 2017; and for the 2016 report, the data is point-in-time information from the end of the day on December 31, 2015.

The data set was limited to only those programs serving infants, toddlers, and/or preschoolage children. The group of programs was identified using information in the data set related to capacity. The data set included information on two measures of capacity: licensed capacity (the maximum number of slots regulated programs are allowed to offer) and reported desired capacity (the number of slots a program self-reports offering for each age group). The advisory group for the project established that reported desired capacity was the most accurate measure of capacity for the purposes of the project. Given this, the data set was sorted by reported desired capacity, and programs that do not offer at least one slot for at least one of the age groups of interest (infants, toddlers, or preschoolers) were removed from the data set.

Once the data set was limited to those serving at least one infant, toddler, and/or preschoolage child, programs that do not offer full-day, full-year child care were removed from the data set. The data set included fields providing information on a program's operating schedule (school-year-only, in-service days, or other arrangements) and typical hours of operation. For programs that did not have this information updated in CDD's database, staff reached out to programs to verify their operating schedule and typical hours of operation.

Once the programs not offering full-year, full-day were removed from the data set, the remaining provider entries were used to calculate supply at the county and state levels.

#### Determining the Supply of Regulated, High-Quality Child Care

To determine the supply of regulated, high-quality child care, the reported desired capacity data from the data set described above was calculated for all programs in the data set with a 4- or 5-star program quality designation. As described in the introduction of the report, high-quality was defined as programs having a quality designation of 4- or 5-stars in the state's quality recognition and improvement system based on a number of factors.

#### **Determining the Demand for Regulated Child Care**

To determine the potential demand for child care, the work group developed a proxy measure: children likely to need care (LTNC). The LTNC population was determined using information from the U.S. Census Bureau on the percent of children 5 and under in Vermont with all available parents in the labor force, Vermont population estimates from the Vermont Department of Health, and age group definitions from CDD.

The Vermont Department of Health population estimate data set is organized by county and year of age. For all three reports, the most current population estimate data sets were used to conduct the analysis. For the 2020 report, the analysis used the 2018 population estimate data set; for the 2018 report, the analysis used the 2016 population estimate data set; and for the 2016 report, the analysis used the 2014 population estimate data set.

Data on the percent of Vermont children 5 and under with all available parents in the labor force was obtained from the U.S. Census Bureau via data.census.gov. This data set included the statewide percentage as well as county-specific percentages.

The analysis to determine LTNC populations for infants, toddlers, and preschoolers was determined by summating year-of-age fields from the Vermont Department of Health's population estimates based on CDD's age group definitions (infants = children under 2 years of age, toddlers = 2-year-olds, preschoolers = 3-year-olds and 4-year-olds). U.S. Census Bureau percentages were then applied to age group population totals at the state level and county level.

#### **Determining Access to Child Care**

The LTNC populations for the three age-groups of interest were compared to the final supply data set to determine what percentage of each LTNC population did not have access to child care.

If it was found that there was excess supply compared to demand, any resulting negative percentage was set to zero to indicate that all children LTNC have access when compared to supply.

#### **Determining Significance of 2018–2020 Changes**

Findings from the 2020 report were compared to the findings from the 2018 report using a twotailed t-test at  $\alpha$ =0.05 to determine whether changes were statistically significant. If the analysis found that the change was not statistically significant, the change is listed as "no significant change." If the change was found to be statistically significant, the change is listed as either "fewer children LTNC have access" or "more children LTNC have access," depending on whether there was an increase or decrease in the percentage of children LTNC without access to care.

#### Additional Assumptions, Caveats, and Definitions

In addition to the assumptions and caveats stated above, there are several additional caveats that should be accounted for when reviewing this report.

- Determining supply
  - Reported desired capacity
    - As noted earlier in the methodology discussion, the data that was used to determine supply was reported desired capacity. This field requires programs to enter information into CDD's database. However, not all FCCHs had data entered in this field.
    - If desired capacity was not reported, it was assumed that the FCCH had the capacity to care for 2 infants, 2 toddlers, and 2 preschoolers.
- Determining demand
  - Age group populations
    - It was assumed that Vermont's current population is similar to the most recent population estimates available from the Vermont Department of Health and that this information is the best available resource for determining the number of children, by year of age.
  - o Infant population
    - The Vermont Department of Health's population estimate information is broken out by year of age, with age 0 representing all children birth through 11 months. However, CDD's definition of an infant eligible for child care is 6 weeks through 23 months. For children 12 months through 23 months, the population estimate for children age 1 was used. For children 6 weeks through 11 months, the population estimate for children age 0 was used, as the advisory group noted that there was no reliable way to accurately project the number of children in the population estimate who were less than 6 weeks old.
  - o LTNC population
    - For the purposes of this analysis, it was assumed that the U.S. Census Bureau's American Community Survey estimates of children 5 and under with all available parents in the labor force applied evenly across all age groups within Vermont's 5 and under population.
    - For the statewide analysis, the LTNC population was based on the statewide percent of children 5 and under with all available parents in the labor force, as reported in the most recent U.S. Census Bureau American Community Survey 5-year estimates.
      - For the 2020 report, the LTNC population is assumed to be 71.5% of the total age group population. This is based on the U.S. Census Bureau's American Community Survey 2014-2018 estimate that 71.51% of children 5 and under in Vermont have all available parents in the labor force.

- For the 2018 report, the LTNC population was assumed to be 70.4% of the total age group population. This is based on the U.S. Census Bureau's American Community Survey 2012-2016 estimate that 70.38% of children 5 and under in Vermont had all available parents in the labor force.
- For the 2016 report, the LTNC population was assumed to be 70.1% of the total age group population. This is based on the U.S. Census Bureau's American Community Survey 2010–2014 estimate that 70.14% of children 5 and under in Vermont had all available parents in the labor force.
- For county-level analyses, the LTNC population was based on the countyspecific percent of children 5 and under in a given county with all available parents in the labor force, as reported in the data sets, noted above, for statewide information.
- Determining access to child care
  - o Statewide analysis
    - For the statewide analysis, it was assumed that all infants, toddlers, and preschoolers LTNC had equal access to every program serving their given age group in the state.
    - The analysis does not account for considerations such as some regulated programs being limited to a particular population (e.g., Head Start), or some programs not having the resources necessary to serve children with advanced specialized needs (e.g., programs that do not have a specialized child care designation).
    - Additionally, the analysis does not account for other limiting factors such as cost, geographic access (families living in the northern part of a county not wanting to drive to the southern part of the county to access a child care slot), or transportation access (a family's ability to use personal or public transit to access a child care program).
  - o County-level analysis
    - The analysis assumed that all children LTNC in a given county had equal access to programs in that same county and does not account for families seeking care outside of their county of residence.
    - Like the statewide analysis, the county-level analysis did not account for other limiting factors such as cost, geographic access, or transportation access.
- Program closures and openings
  - Through the operating schedule and typical hours of operation data collection process, the team learned that several programs had closed since the supply data set was provided. The advisory group determined that these programs should not be removed from the data set, as the data set represents point-in-time information.
  - The same approach was used in the operating schedule and typical hours of operation data collection process for the 2018 report.

**A**ppendix

# Table 2. Count of Regulated Programs Serving Infants, Toddlers, and/or Preschoolersby County, 2020

County	Count of All 1-, 2-, or 3- Star Programs Serving Infants, Toddlers and/or Preschoolers	Count of All 4- or 5-Star Providers Serving Infants, Toddlers and/or Preschoolers	Total
Addison	29	16	45
Bennington	25	23	48
Caledonia	31	19	50
Chittenden	87	58	145
Essex	2	2	4
Franklin	62	19	81
Grand Isle	3	4	7
Lamoille	18	16	34
Orange	13	13	26
Orleans	24	23	47
Rutland	46	18	64
Washington	62	11	73
Windham	12	22	34
Windsor	14	43	57

### Table 3. Infant Capacity of Regulated Programs by County, 2020

County	Capacity of All 1-, 2-, or 3- Star Programs Serving Infants	Capacity of All 4- or 5-Star Providers Serving Infants	Total Infant Capacity
Addison	87	68	155
Bennington	62	149	211
Caledonia	61	117	178
Chittenden	432	699	1131
Essex	4	4	8
Franklin	139	71	210
Grand Isle	5	10	15
Lamoille	36	64	100
Orange	41 50		91
Orleans	66	54	120
Rutland	112	134	246
Washington	147	94	241
Windham	38	114	152
Windsor	43	175	218

### Table 4. Toddler Capacity of Regulated Programs by County, 2020

County	Capacity of All 1-, 2- , or 3-Star Programs Serving Toddlers	Capacity of All 4- or 5-Star Providers Serving Toddlers	Total Toddler Capacity
Addison	36	36 78	
Bennington	61	159	220
Caledonia	63	143	206
Chittenden	360	639	999
Essex	4	4	8
Franklin	136	75	211
Grand Isle	8	18	26
Lamoille	54	101	155
Orange	38	70	108
Orleans	70	58	128
Rutland	134	93	227
Washington	169	82	251
Windham	36	179	215
Windsor	39	188	227

### Table 5. Preschool Child Care Capacity of Regulated Programs by County, 2020

County	Capacity of 1-, 2-, or 3- Star Programs Serving Preschoolers	Capacity of All 4- or 5- Star Providers Serving Preschoolers	Total Preschool Child Care Capacity
Addison	141	245	386
Bennington	93	362	455
Caledonia	66	263	329
Chittenden	557	1512	2069
Essex	4	4	8
Franklin	179	202	381
Grand Isle	3	54	57
Lamoille	57	166	223
Orange	49	142	191
Orleans	97	94	191
Rutland	204	324	528
Washington	232	211	443
Windham	40	285	325
Windsor	87	456	543

### Table 6. Infant Population Information by County, 2020

County	Percent of Children 5 and Under with All Available Parents in Labor Force	Total Infant Population	LTNC Infant Population
Addison	74.67%	626	467
Bennington	86.24%	628	542
Caledonia	65.54%	577	378
Chittenden	70.75%	3072	2173
Essex	68.97%	104	72
Franklin	77.21%	1110	857
Grand Isle	64.53%	105	68
Lamoille	66.77%	480	321
Orange	72.09%	526	379
Orleans	72.75%	487	354
Rutland	71.84%	993	713
Washington	73.47%	1051	772
Windham	71.29%	742	529
Windsor	59.66%	928	554

### Table 7. Toddler Population Information by County, 2020

County	Percent of Children 5 and Under with All Available Parents in Labor Force	Total Toddler Population	LTNC Toddler Population
Addison	74.67%	310	231
Bennington	86.24%	337	291
Caledonia	65.54%	276	181
Chittenden	70.75%	1527	1080
Essex	68.97%	56	39
Franklin	77.21%	587	453
Grand Isle	64.53%	65	42
Lamoille	66.77%	279	186
Orange	72.09%	279	201
Orleans	72.75%	275	200
Rutland	71.84%	525	377
Washington	73.47%	558	410
Windham	71.29%	375	267
Windsor	59.66%	501	299

### Table 8. Preschool Population Information by County, 2020

County	Percent of Children 5 and Under with All Available Parents in Labor Force	d Under with All Total Preschool ilable Parents in Population	
Addison	74.67%	636	475
Bennington	86.24%	705	608
Caledonia	65.54%	598	392
Chittenden	70.75%	70.75% 3115	
Essex	68.97%	140	97
Franklin	77.21%	1195	923
Grand Isle	64.53%	123	79
Lamoille	66.77%	550	367
Orange	72.09%	561	404
Orleans	72.75%	547	398
Rutland	71.84%	1158	832
Washington	73.47%	1170	860
Windham	71.29%	772	550
Windsor	59.66%	1032	616

## Table 9. Percent of Children LTNC Without Access to Regulated Child Care in Vermont,2018–2020

LTNC Population	2018 Percent	2018 Report Status Flag	2020 Percent	2020 Report Status Flag	2018–2020 Change
Infants LTNC without access to regulated care	64%	Red Flag	62%	Red Flag	More children have access
Infants LTNC without access to high-quality, regulated care	84%	Red Flag	78%	Red Flag	More children have access
Toddlers LTNC without access to regulated care	23%	Yellow Flag	27%	Yellow Flag	Fewer children have access
Toddlers LTNC without access to high-quality, regulated care	64%	Red Flag	56%	Red Flag	More children have access
Preschoolers LTNC without access to regulated care			30%	Yellow Flag	
Preschoolers LTNC without access to high- quality, regulated care			51%	Red Flag	

## Table 10. Percent of Infants LTNC Without Access to Regulated Care by County, 2018–2020

County	2018 Percent of Infants LTNC Without Access	2018 Report Status Flag	2020 Percent of Infants LTNC Without Access	2020 Report Status Flag	2018–2020 Change
Addison	67%	Red Flag	67%	Red Flag	No significant change
Bennington	61%	Red Flag	61%	Red Flag	No significant change
Caledonia	57%	Red Flag	53%	Red Flag	No significant change
Chittenden	56%	Red Flag	48%	Yellow Flag	More children have access
Essex	87%	Red Flag	89%	Red Flag	No significant change
Franklin	72%	Red Flag	75%	Red Flag	No significant change
Grand Isle	80%	Red Flag	78%	Red Flag	No significant change
Lamoille	65%	Red Flag	69%	Red Flag	No significant change
Orange	77%	Red Flag	76%	Red Flag	No significant change
Orleans	71%	Red Flag	66%	Red Flag	No significant change
Rutland	63%	Red Flag	66%	Red Flag	No significant change
Washington	72%	Red Flag	69%	Red Flag	No significant change
Windham	73%	Red Flag	71%	Red Flag	No significant change
Windsor	62%	Red Flag	61%	Red Flag	No significant change

# Table 11. Percent of Infants LTNC Without Access to High-Quality (4- or 5-Star),Regulated Care by County, 2018–2020

County	2018 Percent of Infants LTNC Without Access	2018 Report Status Flag	2020 Percent of Infants LTNC Without Access	2020 Report Status Flag	2018–2020 Change
Addison	87%	Red Flag	85%	Red Flag	No significant change
Bennington	78%	Red Flag	72%	Red Flag	More children have access
Caledonia	81%	Red Flag	69%	Red Flag	More children have access
Chittenden	77%	Red Flag	68%	Red Flag	More children have access
Essex	96%	Red Flag	94%	Red Flag	No significant change
Franklin	98%	Red Flag	92%	Red Flag	More children have access
Grand Isle	91%	Red Flag	85%	Red Flag	No significant change
Lamoille	80%	Red Flag	80%	Red Flag	No significant change
Orange	89%	Red Flag	87%	Red Flag	No significant change
Orleans	95%	Red Flag	85%	Red Flag	More children have access
Rutland	87%	Red Flag	81%	Red Flag	More children have access
Washington	92%	Red Flag	88%	Red Flag	More children have access
Windham	83%	Red Flag	78%	Red Flag	No significant change
Windsor	76%	Red Flag	68%	Red Flag	More children have access

## Table 12. Percent of Toddlers LTNC Without Access to Regulated Care by County,2018–2020

County	2018 Percent of Toddlers LTNC Without Access	2018 Report Status Flag	2020 Percent of Toddlers LTNC Without Access	2020 Report Status Flag	2018–2020 Change
Addison	55%	Red Flag	51%	Red Flag	No significant change
Bennington	21%	Yellow Flag	24%	Yellow Flag	No significant change
Caledonia	18%	Yellow Flag	0%	Checkered Flag	More children have access
Chittenden	3%	White Flag	8%	White Flag	Fewer children have access
Essex	75%	Red Flag	79%	Red Flag	No significant change
Franklin	36%	Yellow Flag	53%	Red Flag	Fewer children have access
Grand Isle	30%	Yellow Flag	38%	Yellow Flag	No significant change
Lamoille	4%	White Flag	17%	Yellow Flag	Fewer children have access
Orange	47%	Yellow Flag	46%	Yellow Flag	No significant change
Orleans	41%	Yellow Flag	36%	Yellow Flag	No significant change
Rutland	32%	Yellow Flag	40%	Yellow Flag	Fewer children have access
Washington	36%	Yellow Flag	39%	Yellow Flag	No significant change
Windham	0%	Checkered Flag	20%	Yellow Flag	Fewer children have access
Windsor	15%	White Flag	24%	Yellow Flag	Fewer children have access

# Table 13. Percent of Toddlers LTNC Without Access to High-Quality (4- or 5-Star),Regulated Care by County, 2018–2020

County	2018 Percent of Toddlers LTNC Without Access	2018 Report Status Flag	2020 Percent of Toddlers LTNC Without Access	2020 Report Status Flag	2018–2020 Change
Addison	70%	Red Flag	66%	Red Flag	No significant change
Bennington	53%	Red Flag	45%	Yellow Flag	No significant change
Caledonia	61%	Red Flag	21%	Yellow Flag	More children have access
Chittenden	47%	Yellow Flag	41%	Yellow Flag	More children have access
Essex	92%	Red Flag	90%	Red Flag	No significant change
Franklin	95%	Red Flag	83%	Red Flag	More children have access
Grand Isle	60%	Red Flag	57%	Red Flag	No significant change
Lamoille	44%	Yellow Flag	46%	Yellow Flag	No significant change
Orange	72%	Red Flag	65%	Red Flag	No significant change
Orleans	90%	Red Flag	71%	Red Flag	More children have access
Rutland	80%	Red Flag	75%	Red Flag	No significant change
Washington	82%	Red Flag	80%	Red Flag	No significant change
Windham	40%	Yellow Flag	33%	Yellow Flag	No significant change
Windsor	44%	Yellow Flag	37%	Yellow Flag	No significant change

## Table 14. Percent of Preschoolers LTNC Without Access to Regulated Care by County,2020

County	2020 Percent of Preschoolers LTNC Without Access	2020 Report Status Flag	
Addison	19%	Yellow Flag	
Bennington	25%	Yellow Flag	
Caledonia	16%	Yellow Flag	
Chittenden	6%	White Flag	
Essex	92%	Red Flag	
Franklin	59%	Red Flag	
Grand Isle	28%	Yellow Flag	
Lamoille	39%	Yellow Flag	
Orange	53%	Red Flag	
Orleans	52%	Red Flag	
Rutland	37%	Yellow Flag	
Washington	48%	Yellow Flag	
Windham	41%	Yellow Flag	
Windsor	12%	White Flag	

# Table 15. Percent of Preschoolers LTNC Without Access to High-Quality, RegulatedCare by County, 2020

County	2020 Percent of Preschoolers LTNC Without Access	2020 Report Status Flag	
Addison	48%	Yellow Flag	
Bennington	40%	Yellow Flag	
Caledonia	33%	Yellow Flag	
Chittenden	31%	Yellow Flag	
Essex	96%	Red Flag	
Franklin	78%	Red Flag	
Grand Isle	32%	Yellow Flag	
Lamoille	55%	Red Flag	
Orange	65%	Red Flag	
Orleans	76%	Red Flag	
Rutland	61%	Red Flag	
Washington	75%	Red Flag	
Windham	48%	Yellow Flag	
Windsor	26%	Yellow Flag	

## Table 16. Hours of Operation of Regulated Programs Serving Infants, Toddlers, and/orPreschoolers by County, 2020

County	Time First Infant, Toddler, or Preschool Slot Becomes Available	Most Common Time Infant, Toddler, or Preschool Slots Become Available	Most Common Time Infant, Toddler, or Preschool Slots Become Unavailable	Time Last Infant, Toddler, or Preschool Slot Becomes Unavailable
Addison	6:00 AM	7:30 AM	5:30 PM	6:00 PM
Bennington	6:00 AM	7:30 AM	5:30 PM	6:00 PM
Caledonia	5:00 AM	7:00 AM	5:30 PM	10:00 PM
Chittenden	6:00 AM	7:30 AM	5:30 PM	6:00 PM
Essex	6:30 AM	6:30 AM; 7:00 AM	5:00 PM	5:15 PM
Franklin	5:30 AM	7:00 AM	5:30 PM	11:59 PM
Grand Isle	6:30 AM	7:00 AM	5:30 PM	5:30 PM
Lamoille	6:00 AM	7:00 AM	5:30 PM	6:00 PM
Orange	6:30 AM	7:00 AM	5:30 PM	6:30 PM
Orleans	12:00 AM	6:00 AM	5:00 PM	11:45 PM
Rutland	5:00 AM	7:00 AM	5:30 PM	11:59 PM
Washington	6:30 AM	7:00 AM	5:00 PM	5:45 PM
Windham	6:30 AM	7:30 AM	5:30 PM	11:00 PM
Windsor	5:30 AM	7:00 AM	5:30 PM	6:00 PM

## References

- <sup>1</sup> Harvard University Center on the Developing Child. (2017). *Key Concepts: Brain Architecture*. Retrieved form http://developingchild.harvard.edu/science/key-concepts/brain-architecture/.
- <sup>2</sup> Brouillette, A., Horwitz, J. (June 2018). Who's Who and What's What in Vermont's Early Care and Learning System: An Overview. (S. F. Hibbert, Ed.) (pp. 11–12). Burlington, VT: Let's Grow Kids. Retrieved from https://www.letsgrowkids.org/client\_media/files/pdf/Whos%20Who%20Whats%20What.pdf.
- <sup>3</sup> BUILD Initiative. (n.d.). *Quality Rating and Improvement Systems*. Retrieved from https://www.buildinitiative.org/The-Issues/Early-Learning/Quality-QRIS.
- <sup>4</sup> BUILD Initiative. (2020). *Quality Compendium State Profiles*. Retrieved from https://qualitycompendium.org/view-state-profiles.
- <sup>5</sup> Freise, S., Lin, V., Forry, N., & Tout, K. (2017). Defining and Measuring Access to High Quality Early Care and Education: A Guidebook for Policymakers and Researchers. OPRE Report #2017-08. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. p. 4. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/cceepra\_access\_ guidebook\_final\_508\_22417\_b508.pdf.
- <sup>6</sup> Analysis conducted by Let's Grow Kids based on income guidelines for Vermont's Child Care Financial Assistance Program (CCFAP), CCFAP benefits, and findings from the 2017 Vermont Child Care Market Rate Survey.
- <sup>7</sup> U.S. Department of Health and Human Services Administration for Children and Families, Child Care and Development Fund Program (CCDF); Proposed Rule, 80 Fed. Reg. 80466-80582 (December 24, 2015). Retrieved from https://www.govinfo.gov/content/pkg/FR-2015-12-24/pdf/2015-31883.pdf.
- <sup>8</sup> Vermont Agency of Human Services Department for Children and Families. (2016). Child Care Licensing Regulations for Center-Based Child Care and Preschool Programs. Retrieved from https://dcf.vermont.gov/ sites/dcf/files/CDD/Docs/Licensing/CBCCPP\_Regulations\_FINAL.pdf.
- <sup>9</sup> United States Department of Labor Bureau of Labor Statistics. (April 2, 2019). May 2018 State Occupational Employment and Wage Estimates Vermont: Preschool Teacher Except Special Education. Retrieved from https://www.bls.gov/oes/current/oes252011.htm.
- <sup>10</sup> United States Department of Labor Bureau of Labor Statistics. (April 2, 2019). May 2018 State Occupational Employment and Wage Estimates Vermont: Kindergarten Teacher Except Special Education. Retrieved from https://www.bls.gov/oes/current/oes\_vt.htm#25-2012.
- <sup>11</sup> Vermont Legislative Joint Fiscal Office. (January 15, 2019). Vermont Basic Needs Budgets And Livable Wage. Montpelier, VT: Vermont Legislative Joint Fiscal Office. Retrieved from https://ljfo.vermont.gov/assets/ Subjects/Basic-Needs-Budgets/2c974b591b/2019-Basic-Needs-Budget-and-Livable-Wage-report-FINAL-1-15-2019-v2.pdf.
- <sup>12</sup> Zero to Three. (n.d.) Your Child's Development: Age Based Tips From Birth to 36 Months. Retrieved from https://www.zerotothree.org/resources/series/your-child-s-development-age-based-tips-from-birth-to-36months.
- 13 Ibid

14 Ibid

- <sup>15</sup> Vermont Department of Health. (December 17, 2019). Population of Vermont Counties By Single Year of Age and Sex, 2018. Retrieved from https://www.healthvermont.gov/sites/default/files/documents/xls/HS\_STAT\_ Population\_of\_Vermont\_Counties\_by\_single\_year\_of\_age\_and\_sex\_2018.xls.
- <sup>16</sup> U.S. Census Bureau. (2019). American Community Survey 5-Year Estimates Table B23008 Own children under 18 years in families and subfamilies (2014-2018). Retrieved from https://data.census.gov/cedsci/table? q=&lastDisplayedRow=26&table=B23008&tid=ACSDT5Y2018.B23008&hidePreview=true&g=0400000US50, 50.050000&d=ACS%205-Year%20Estimates%20Detailed%20Tables.
- <sup>17</sup> A. Rupa Datta, Joshua Borton, Anne Shapiro, Lekha Venkataraman. (February 2019). Young Children's Early Care and Learning in Vermont. NORC on behalf of the Vermont Department for Children and Families Child Development Division. Retrieved from https://477I7snyayj49hh0r38uhcqo-wpengine.netdna-ssl.com/wpcontent/uploads/2019/02/Child-Care-Demand-Study-Final.pdf.

<sup>18</sup> Ibid

<sup>19</sup> Ibid

- <sup>20</sup> Vermont Department for Children and Families Child Development Division. (2019). Data on regulated child care and early education programs in Vermont as of September 30, 2019.
- <sup>21</sup> Horwitz, J. (June 2016). Stalled at the Start Vermont's Child Care Challenge. (S. F. Hibbert, Ed.). Burlington, VT: Let's Grow Kids. Retrieved from https://www.letsgrowkids.org/client\_media/files/pdf/Stalledat Start2016.pdf.

22 Ibid

<sup>23</sup> Brouillette, A., Horwitz, J. (February 2018). Stalled at the Start Vermont's Child Care Challenge. (S. F. Hibbert, Ed.). Burlington, VT: Let's Grow Kids. Retrieved from https://www.letsgrowkids.org/client\_media/files/pdf/ StalledatStart2018.pdf.





Let's Grow Kids 19 Marble Avenue, Suite 4 Burlington, VT 05401 www.letsgrowkids.org