

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

February 2022

Produced by Let's Grow Kids

Advised by Building Bright Futures and the
Vermont Association for the Education of Young Children

Too many Vermont children don't have access to high-quality, affordable child care.



About Let's Grow Kids

Let's Grow Kids is a nonprofit organization on a mission to ensure affordable access to high-quality child care for all Vermont families by 2025. With nearly 40,000 supporters from all walks of life, Let's Grow Kids, in partnership with Let's Grow Kids Action Network, is empowering Vermonters to advocate for sustainable child care policy change. Working together, we can build a child care system that meets the needs of Vermont children and families and supports a brighter future for us all. Learn more at www.letsgrowkids.org.

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

www.letsgrowkids.org

About this Report

Authors:

Jen Horwitz, Policy & Research Director
Katie Salina, Policy & Research Analyst

Contributors:

Cathy Reitz, Data & Administrative Coordinator
Erin Roche, Director of Operations & Evaluation

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Executive Summary

Let's Grow Kids, in partnership with a number of advisory organizations, has been analyzing the supply of and demand for full-day, full-year, regulated child care, also referred to as early childhood education, for young children since the release of the first edition of the Stalled at the Start report in 2016. The last edition of Stalled at the Start, published in January 2020, was released just weeks before COVID-19 completely reshaped our world and the landscape of early childhood education in our state and across the nation. Since that time, the early childhood education system has weathered unprecedented challenges and has had to adapt rapidly to respond to child and family needs in the face of a global pandemic. While our state still lacks the necessary supply of regulated early childhood education programs to meet demand, the good news is that there was a small but statistically significant increase in the infant and toddler capacity of Vermont's full-day, full-year early childhood education programs, meaning that more infants and toddlers likely to need care have access to child care than they did before the pandemic – no small feat. This is likely thanks to strategic federal, state, and philanthropic investments made over the past several years, many of which focused on addressing the need for increased infant capacity. Unfortunately, our state's supply of full-day, full-year child care for preschoolers did not fare as well, and there was a documented statistically significant decrease in the percent of preschoolers likely to need care with access to regulated programs.

At the county level, strategic capacity development efforts to increase the supply of infant child care slots seem to be working, and many counties saw slight increases in the percent of infants likely to need child care with access to regulated programs. For toddlers and preschoolers, results varied from county to county.

Overall, Vermont still lacks a sufficient supply of regulated early childhood education programs to meet demand, but access has improved for infants and toddlers, and gains were also made in increased access to high-quality child care.

Introduction

Since Let's Grow Kids began analyzing the difference between the supply of and demand for regulated child care in Vermont, the state's supply of regulated child care has not met the demand.¹ In the time since the release of the last edition of *Stalled at the Start*, which was just a few weeks before COVID-19 completely reshaped our world, the landscape of child care in Vermont and throughout the country has changed significantly. The pandemic has impacted the availability of and demand for child care in Vermont and throughout the country. Many early childhood education programs have struggled to remain open due to rising costs and staffing shortages, and many families are still trying to determine how best to balance work, family, and health and safety needs. This edition of *Stalled at the Start* strives to reflect these new realities while also using the core components of the methodology used in past editions of this report. While not all families are currently seeking full-time child care due to pandemic-related changes, recent national research has shown that demand for child care, also referred to as early childhood education, is beginning to trend towards pre-pandemic patterns, and, in some cases, exceeds pre-pandemic behavior.² Access to data has also been impacted by pandemic-related challenges. While information on the current supply of regulated child care is readily available, information on the Vermont population is still emerging due to national delays processing data from the 2020 U.S. Census. As a result, this edition of *Stalled at the Start* relies on information about the Vermont child population from just before the pandemic. With these constraints in mind, the data in this year's report indicates a mixed outcome for Vermont's early childhood education system.

In the 2018 report, we standardized data collection dates to serve as a benchmark for future comparative evaluation. When the 2022 report findings were compared to those of the 2018 report, overall, more young children in our state now have access to regulated early childhood education programs thanks to strategic investments and programs to increase Vermont's supply of child care. However, the pandemic has still impacted the supply of child care, limiting the availability of full-day, full-year early childhood education programs in many counties, especially for preschool-aged children.

As the world continues to respond to COVID-19, it will be important to continue to monitor the availability of early childhood education programs for all young children and to continue to make strategic investments to address the persisting gap between the supply of early childhood education and the demand.

Overview of Vermont's Early Childhood 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.**³

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

Types of Regulated Early Childhood 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:⁴

- **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 early childhood educator's own home for children from more than two families. 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.⁵

STARS is designed to promote the strengths that early educators bring to their work every day at early childhood education programs like interactions with children and families, staff training, and administrative practices.⁶ 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."⁷ 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. In 2020, Let's Grow Kids released the first edition of *Access: The Need for More Early Childhood Educators*, a report that evaluated the gap between the demand for child care and the early childhood education workforce. Unfortunately, the 2020 edition of *Access* found that Vermont needed over 2,000 additional early childhood educators to meet demand. During the pandemic, data shows that Vermont's early childhood education workforce has only continued to shrink, further exacerbating the difference between demand for early childhood education and the availability of qualified early childhood educators. More information on the growing gap will be available in a new update to the *Access* report later in 2022.

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.⁸ 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.⁹ 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 an 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.¹⁰ However, the average annual salary for such a teacher is \$38,870 (or \$18.69 per hour), which is far lower than the average salary of \$55,580 for a Vermont kindergarten teacher.^{11,12} This can make it difficult for early childhood educators to remain in the field.

The following analysis does not include considerations related to affordability, but Let's Grow Kids 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 and the Vermont Association for the Education of Young Children, 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 [methodology](#) section of this report.

For 2022, it is important to acknowledge that the global pandemic has at least temporarily changed how families use early childhood education. Research has indicated that these changes are likely a combination of family preference as well as the result of further limitations on the availability of early childhood education (including reduction in the number of spaces at programs, hours of operation, etc.).¹³ Research has also shown that child care utilization is trending back towards pre-pandemic utilization rates, and, in some cases, exceeding prior demand, but it is still unknown if these changes are short-term or long-term changes in family choices.¹⁴ Therefore, the report team determined that the methodology used for prior editions of *Stalled at the Start* should be maintained for the 2022 edition.

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.¹⁵ Additionally, infants need significant physical support, such as diapering, feeding, and monitored nap time. To best meet these needs, caring for infants 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 developmental stage, children are rapidly discovering, learning, and absorbing new knowledge from their environments.¹⁶ 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—three- and four-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.¹⁷



Based on these age group definitions, the total population for each age group was calculated using data from the Vermont Department of Health.¹⁸ 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 aged five and under with all available parents in the labor force.¹⁹ More information on the validation of this approach can be found in the methodology section of this report.

Determining Supply

This study focuses on regulated early childhood education programs in 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 the program's quality recognition level (known as a program's STARS designation).²⁰ This data was used to determine which regulated programs in Vermont offer full-time (at least 8 hours per day), full-year (at least 48 weeks per 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

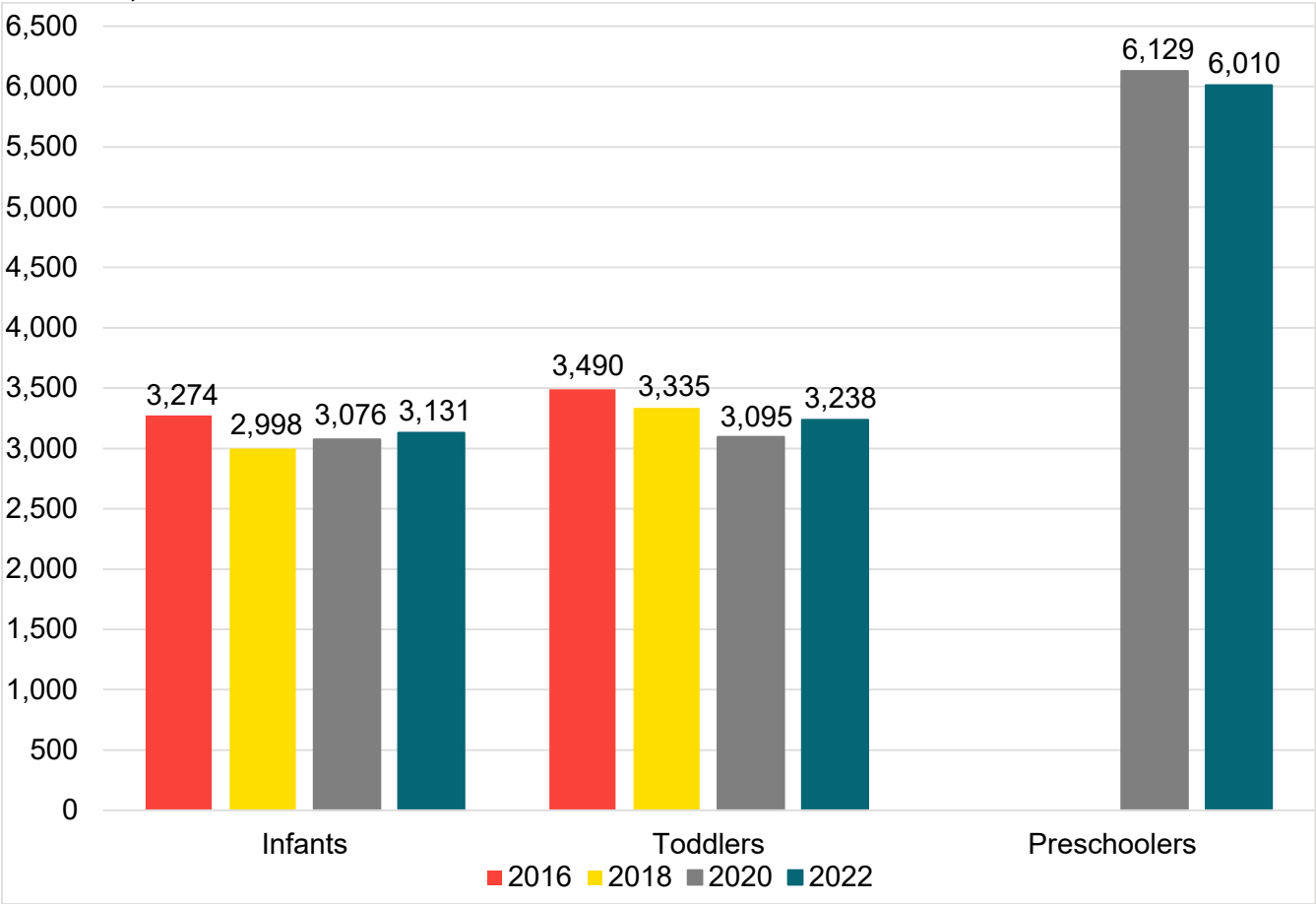
The Supply

Over the course of the first two editions of *Stalled at the Start*, full-day, full-year child care capacity generally declined. Since the 2020 report, capacity increased for infants and toddlers and remained unchanged for preschoolers, as shown in Figure 1.

While many things have changed since the publication of the 2020 report that could affect the supply of child care, including a global pandemic, increased inflation, and a decrease in the labor force, these trends suggest that it would be likely to observe a decrease rather than an increase in early childhood education program capacity. While a decrease was observed in preschool

capacity, the observed increase in infant and toddler capacity may be in part a result of increased, strategic state and philanthropic investment in early childhood education program capacity development through the *Make Way for Kids* program, administered by Let's Grow Kids. The program supports the development of new, high-quality early childhood education programs as well as the quality enhancement and expansion of existing programs. Additionally, federal investments targeted specifically at the early childhood education system through the Coronavirus Response and Relief Supplemental Appropriation Act and the American Rescue Plan Act may also have played a role in sustaining or expanding capacity since the release of the 2020 report.

Figure 1. Change in Capacity of Regulated Early Care and Education Programs in Vermont, 2016–2022* 21, 22, 23, 24

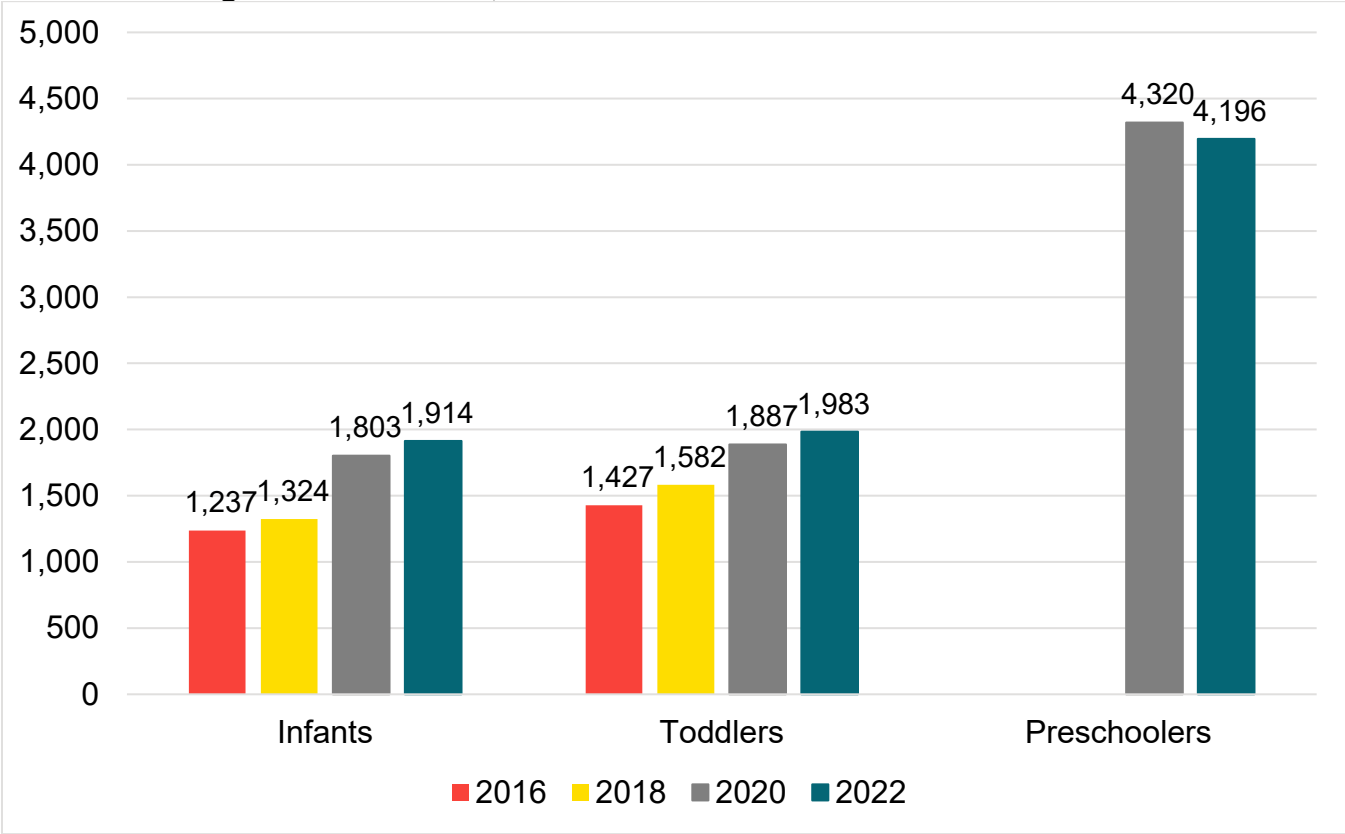


* The data in the tables and figures in this report are reported in relation to the year the report was released and not in terms of the data set used for the analysis. More information on the data and the methodology can be found in the methodology section of this report. References to the previous three editions of *Stalled at the Start* are noted in Figure 1, but all figures and tables that cite 2016, 2018, or 2020 report data are also based on these references. Additionally, because this is only the second year that we are including an analysis of child care for preschoolers, only two years' worth of data are included for the preschool age group.

Since the release of the 2016 report, the supply of high-quality (4- or 5-star) regulated infant and toddler care has continued to increase, but there was a slight decrease in the supply of high-quality regulated preschool care 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 childhood education system. For infants, of the total 3,131 regulated slots, 61% were in high-quality programs in the most recent data set, compared to 38% of slots in the 2016 report, demonstrating a statistically significant increase. For toddlers, of the total 3,238 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 6,010 slots, 70% were in high-quality programs, which is the same as in the 2020 report (the first year preschool-aged child care was included in the report).

As noted previously, extenuating circumstances since the release of the 2020 report would likely indicate that there may be a decrease in capacity. It is important to note that in recent years, *Make Way for Kids* investments have been targeted towards capacity creation for Vermont's youngest children, which may explain the increase observed in high-quality capacity for infants and toddlers.

Figure 2. Change in Capacity of Regulated, High-Quality (4- or 5-Star) Early Care and Education Programs in Vermont, 2016–2022



The Demand

According to the latest population estimates from the Vermont Department of Health, there are 29,043 children under the age of five in Vermont (infants, toddlers, and preschoolers).²⁵ 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 aged five and under who have all available parents in the labor force (if a child lives in a family with two parents, this means that 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, 72.8% of Vermont children ages five and under have all available parents in the labor force.²⁶ This means that 21,131 children under the age of five are likely to need some form of regular child care (LTNC) while a parent works.

Figures 3, 4, and 5 show how the total population and LTNC population for each age group has changed since the first edition of this report.

Figure 3. Vermont's Infant Population, 2016-2022

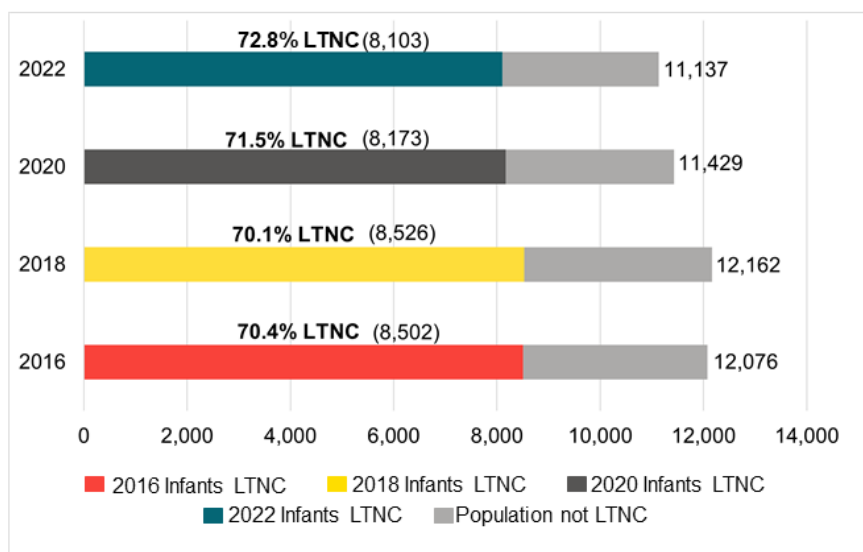


Figure 4. Vermont's Toddler Population, 2016-2022

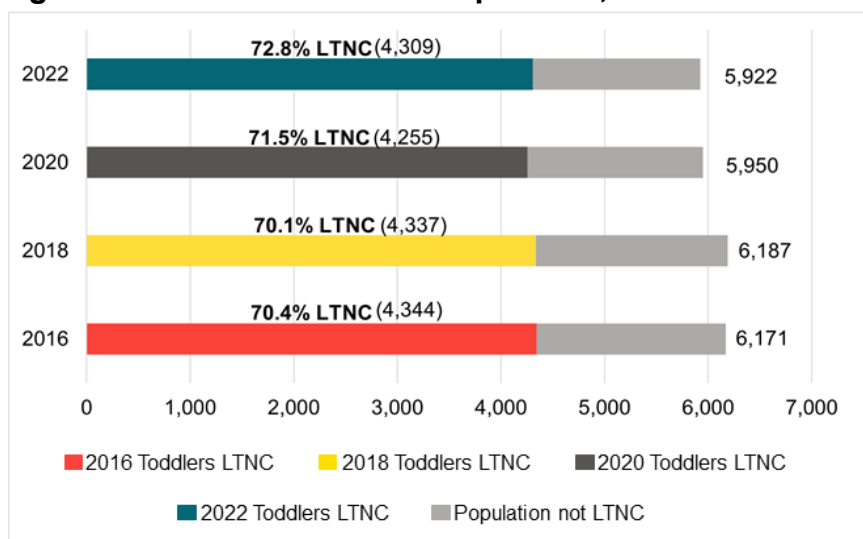
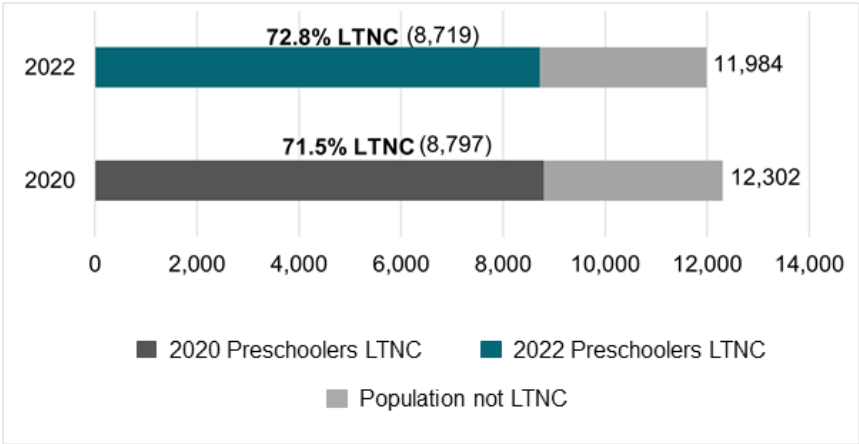


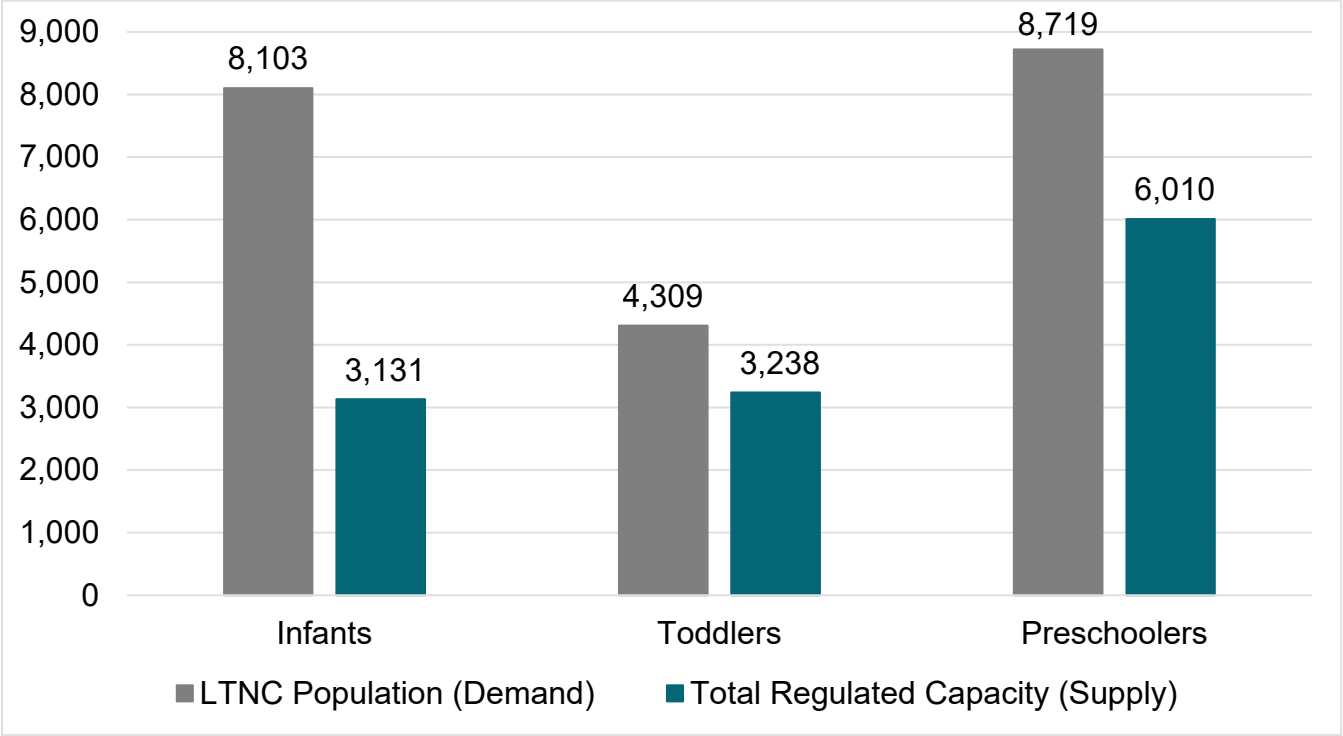
Figure 5. Vermont's Preschool Population, 2020-2022



Comparing Supply vs Demand

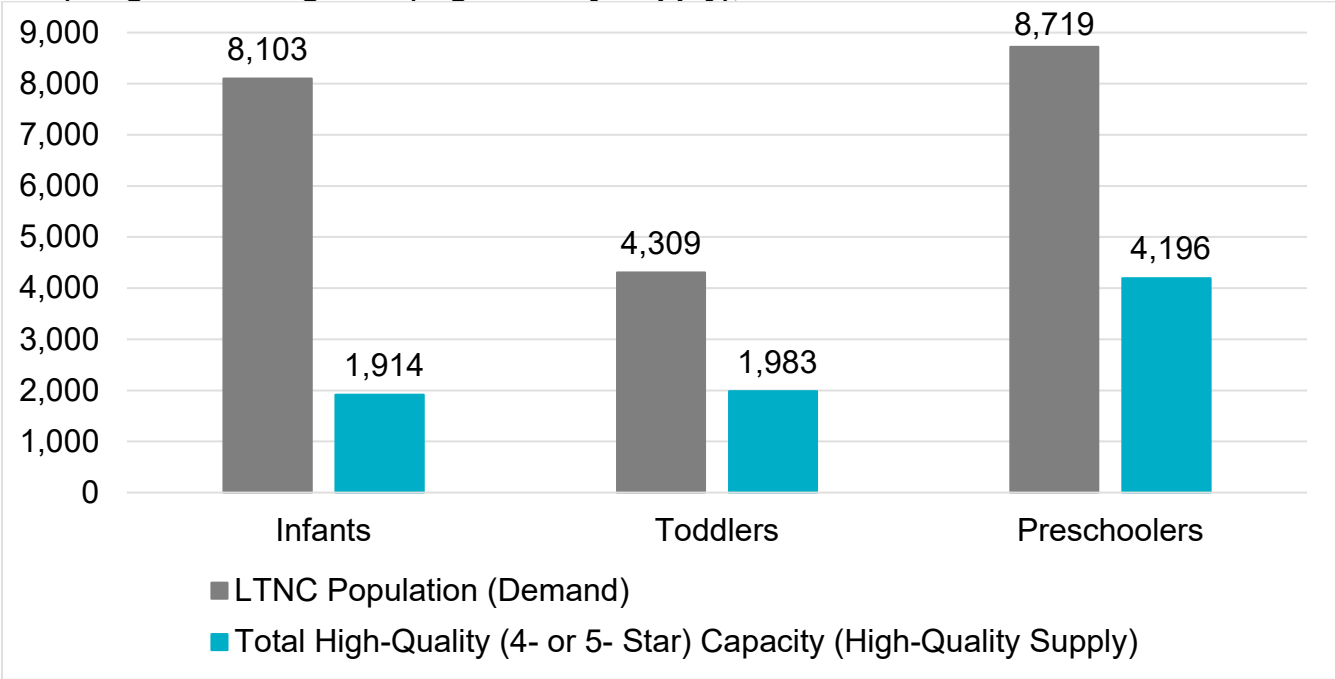
When the supply and demand information is compared, the difference between the two values is stark. While capacity has increased since the 2020 report was issued, Vermont does not have sufficient regulated early childhood education options statewide to meet the needs of infants, toddlers, or preschoolers LTNC, as shown in Figure 6.

Figure 6. LTNC Population (Demand) Compared to the Capacity of Regulated Programs (Supply), 2022



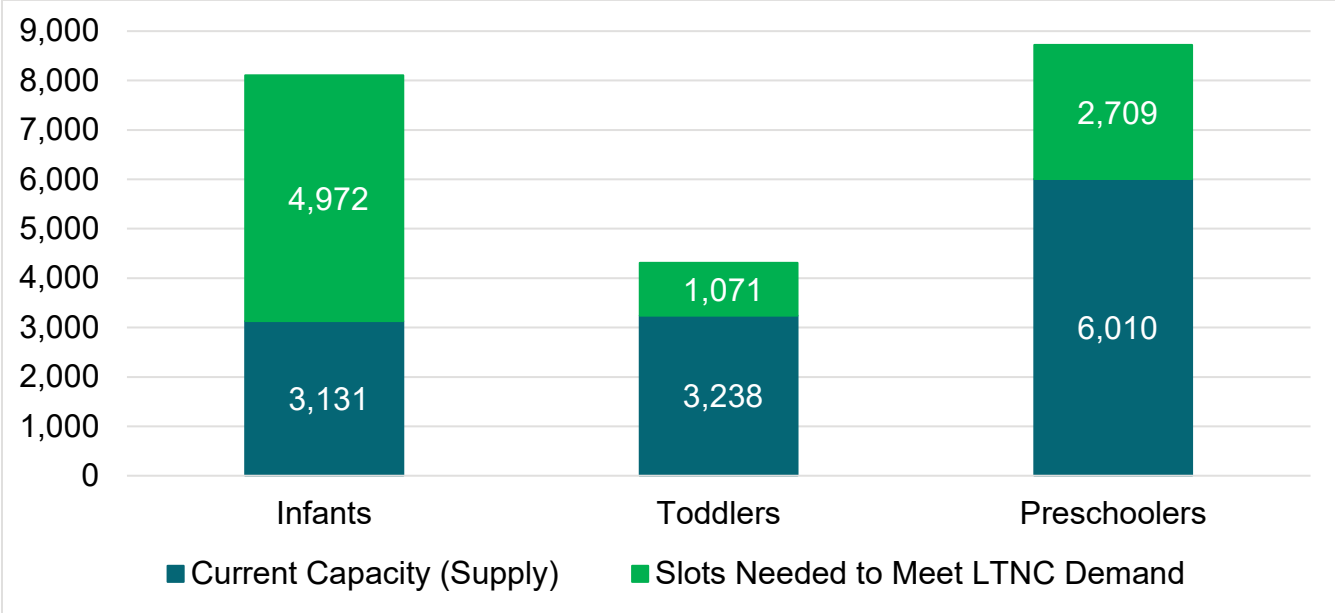
When focusing just on the supply of high-quality slots, the difference is even greater, as shown in Figure 7.

Figure 7. LTNC Population (Demand) Compared to the Capacity of High-Quality (4- or 5-Star) Regulated Programs (High-Quality Supply), 2022



In order to meet demand, it would require the system to add approximately 8,752 slots, of which nearly 5,000 would need to be for infants, as shown in Figure 8.

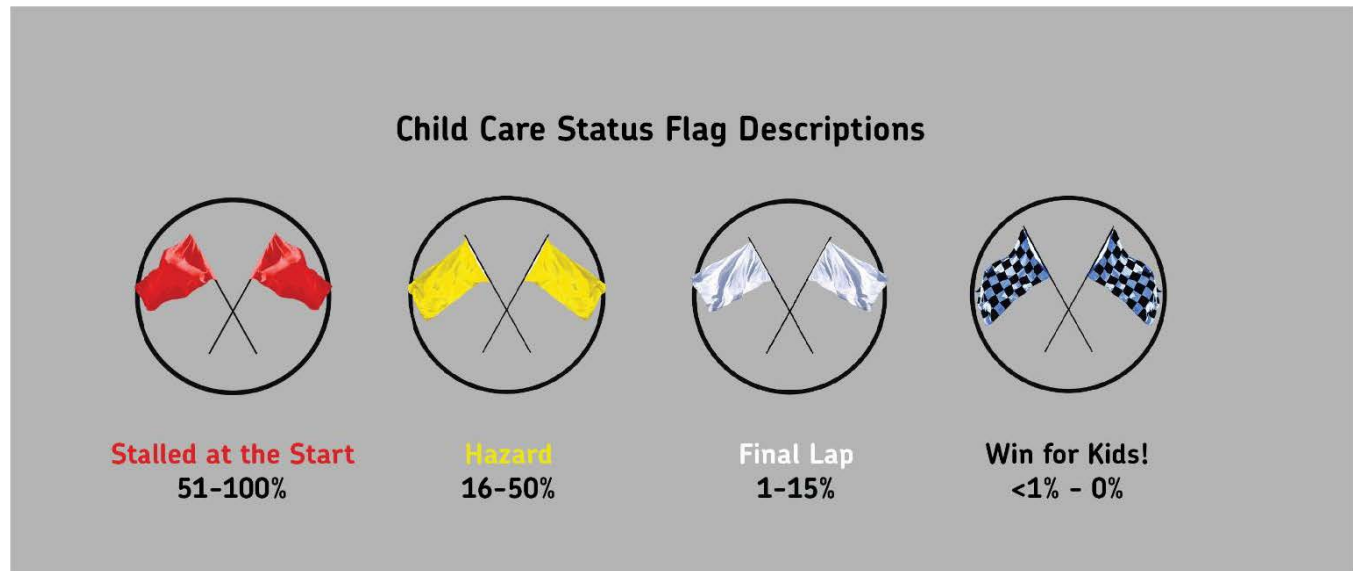
Figure 8. Capacity (Supply) Needed to Meet Demand, 2022



As noted in the [methodology](#) section, this estimate is likely to be an overestimation of the capacity needed to sufficiently meet demand, but it provides a guide point for early childhood education capacity development in Vermont.

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 several 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 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 2022 report findings was statistically significant (meaning that it was not likely 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 that a change between the 2018 and 2022 report findings was not statistically significant (meaning that it was likely the change could have happened by chance), the change is marked as no significant change.

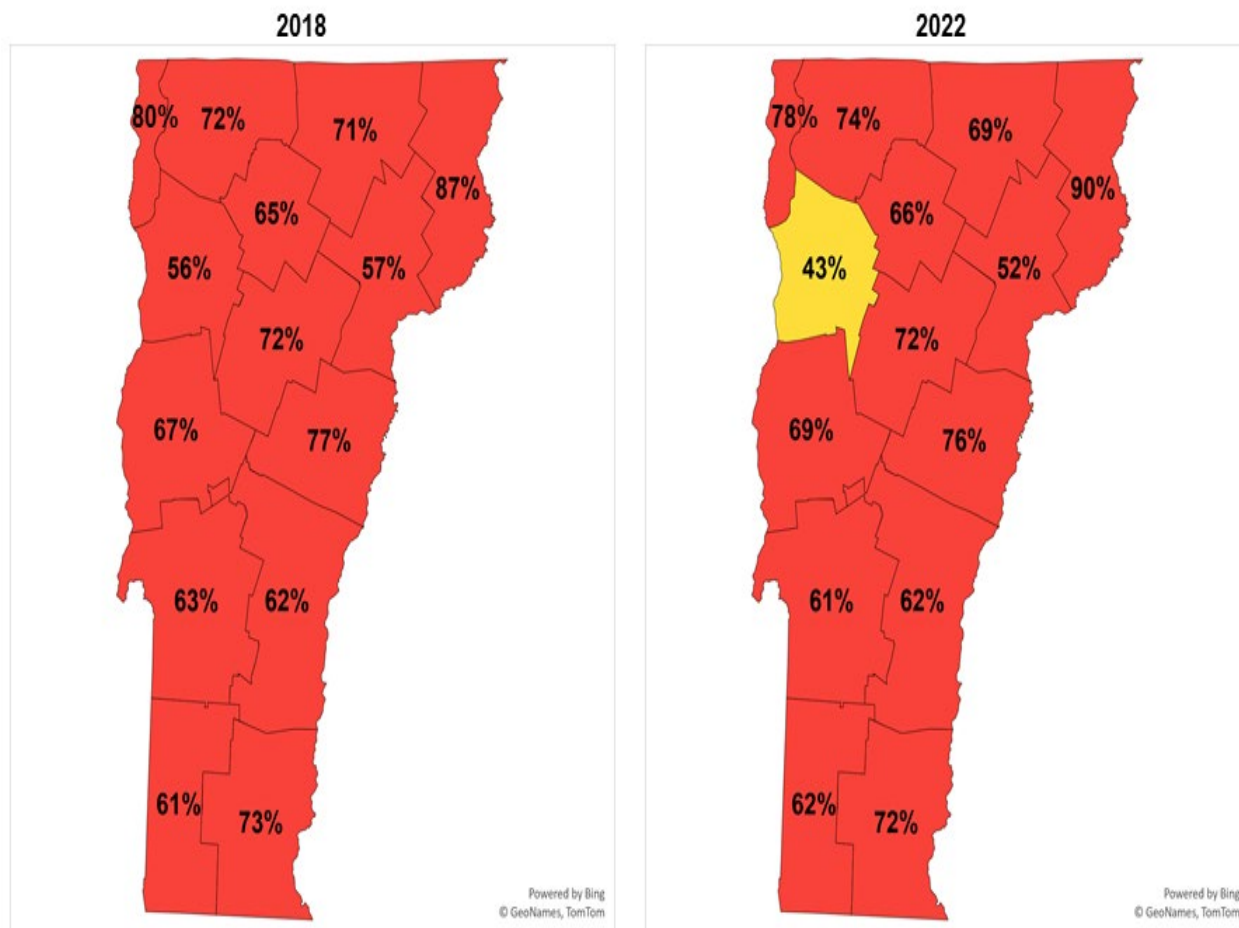
Detailed information on supply and demand and the statistical significance of changes between the 2018 report and 2022 report findings for all age groups can be found in the [appendix](#).

Infants

This year's analysis showed that statewide, **61% of infants LTNC do not have access to regulated early care and education programs**. That's approximately three out of every five 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 early childhood education than they did previously.

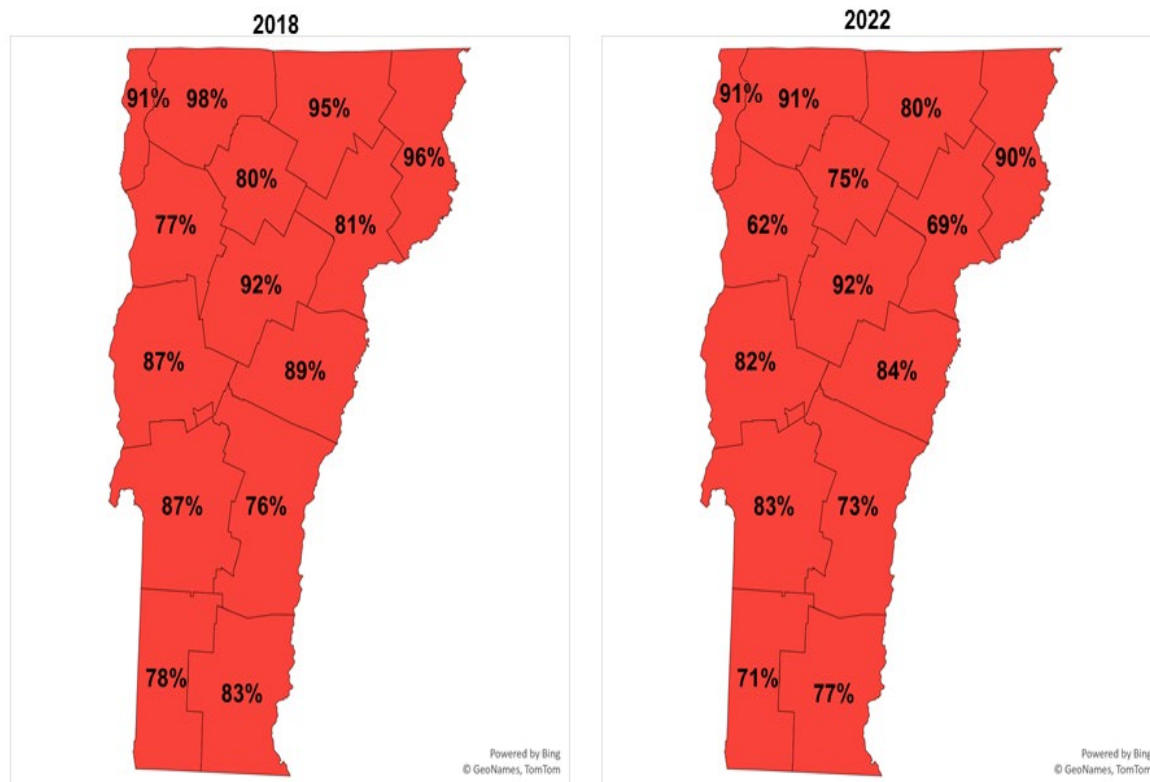
At the county level, the percent of infants LTNC without access to a slot in a regulated program ranged from 43% to 90% as shown in Figure 9. Despite statewide progress, most counties did not experience a statistically significant change in the percent of infants LTNC without access to any regulated programs, except for Chittenden. In Chittenden, the percent of infants LTNC without access to regulated programs significantly decreased from 56% in the 2018 report to 43%, meaning more infants have access to regulated programs.

Figure 9. Infants LTNC Without Access to Regulated Care, 2018–2022



When looking specifically at access to high-quality (4- or 5-star), regulated programs, the analysis showed that **76% 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.

Figure 10. Infants LTNC Without Access to High-Quality (4-or 5-Star), Regulated Programs, 2018–2022



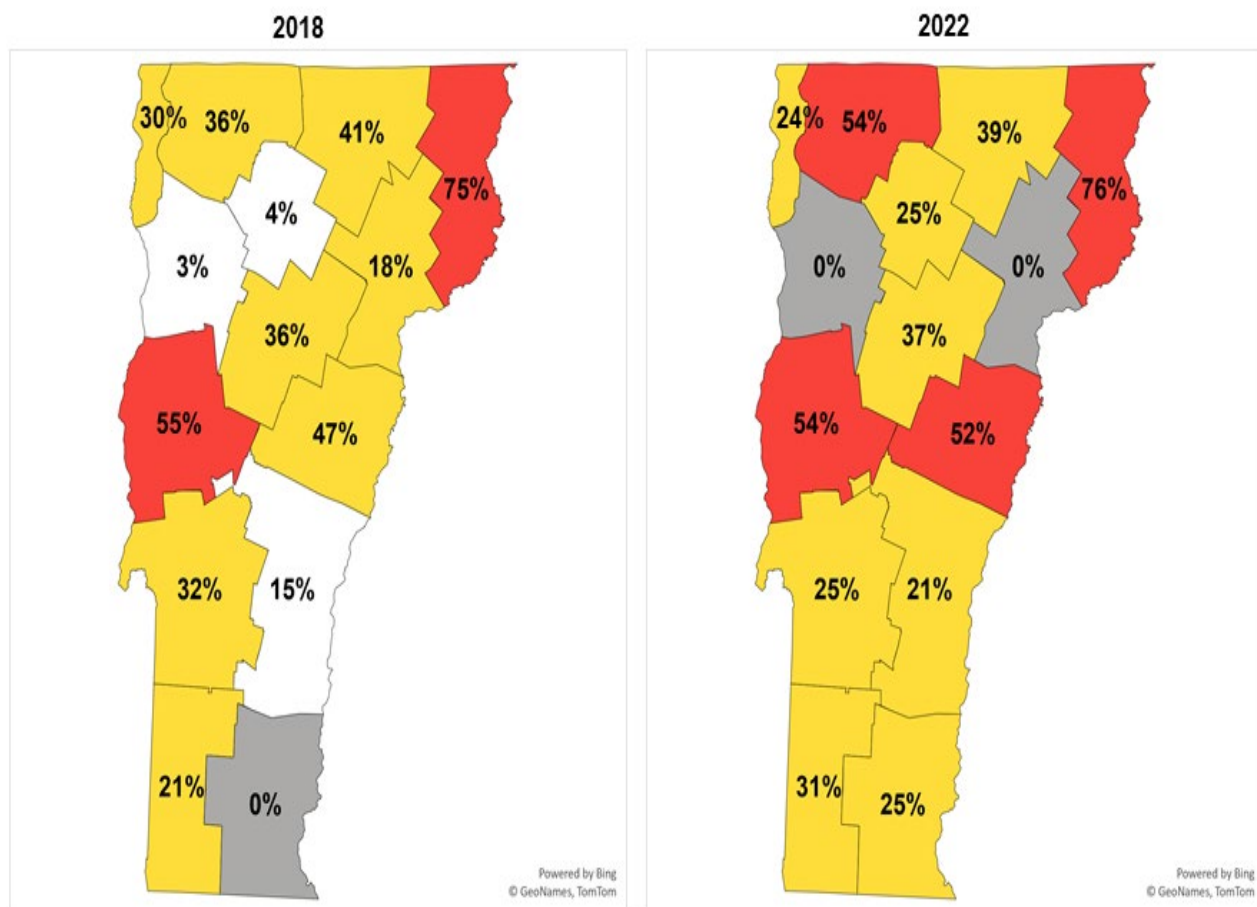
At the county level, as shown in Figure 10, percentages ranged from 62% to 92%. Eight of the 14 counties, including Addison, Bennington, Caledonia, Chittenden, Franklin, Orleans, Rutland, and Windham, had significant decreases in the percent of infants LTNC without access to high-quality programs, meaning that more infants have access to high-quality programs in those areas.

Toddlers

The 2022 analysis found that **25% of toddlers LTNC do not have access to regulated programs**. This is not a statistically significant change from the finding of 23% in the 2018 report.

At the county level, the percent of toddlers LTNC without access to a regulated program ranged from 0% to 76%, as shown in Figure 11. The analysis showed that seven counties experienced statistically significant changes since the 2018 analysis. In Bennington, Franklin, Lamoille, and Windham counties, there was a significant increase in the percent of toddlers LTNC without access to a slot in a regulated program, meaning fewer children had access. In Caledonia, Chittenden, and Rutland counties there was a significant decrease in the percent of toddlers LTNC without access to a regulated program, meaning that more toddlers have access to slots in regulated programs in those areas.

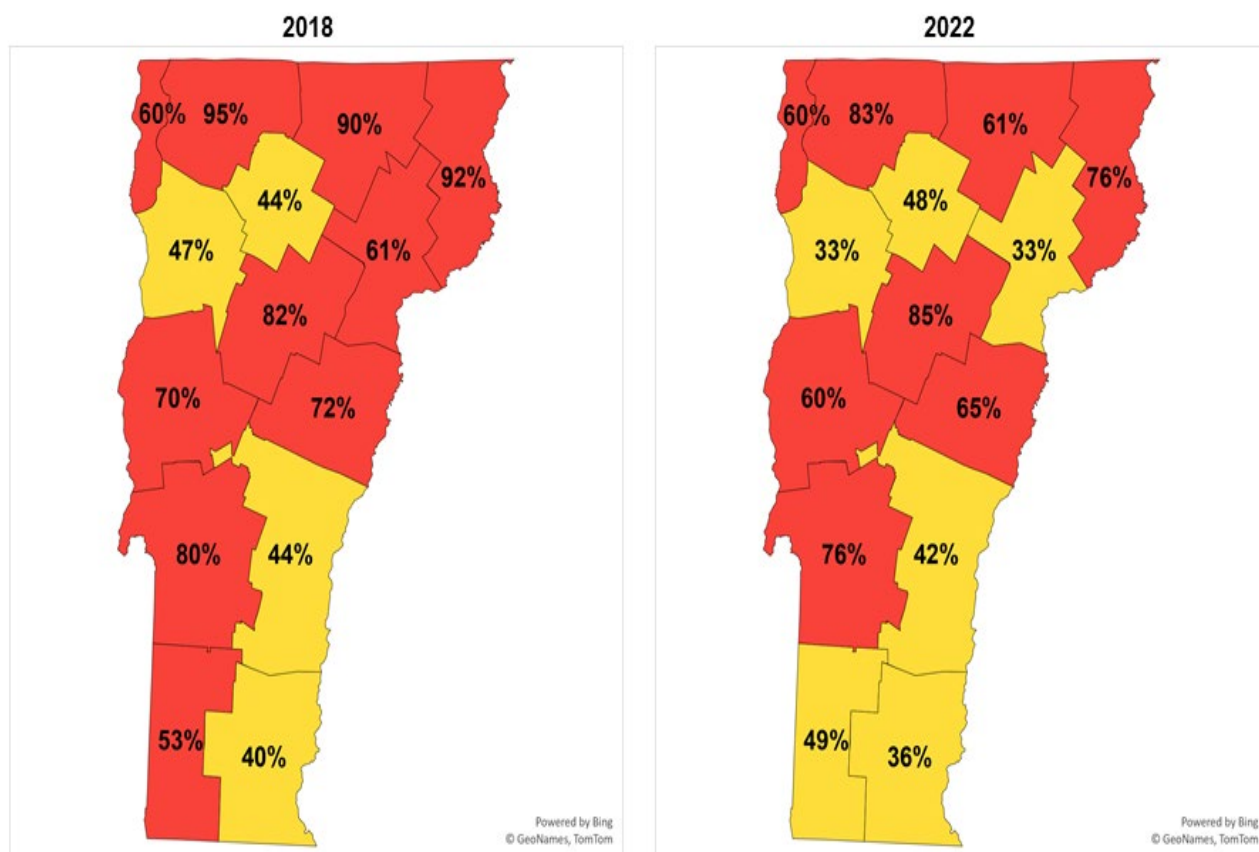
Figure 11. Toddlers LTNC Without Access to Regulated Care, 2018–2022



When limiting the analysis to high-quality (4- or 5-star), regulated programs, **54% 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 12, at the county level, percentages ranged from 33% to 85% of toddlers LTNC without access to high-quality, regulated programs. In Addison, 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 12. Toddlers LTNC Without Access to High-Quality (4- or 5-Star) Regulated Care, 2018–2022

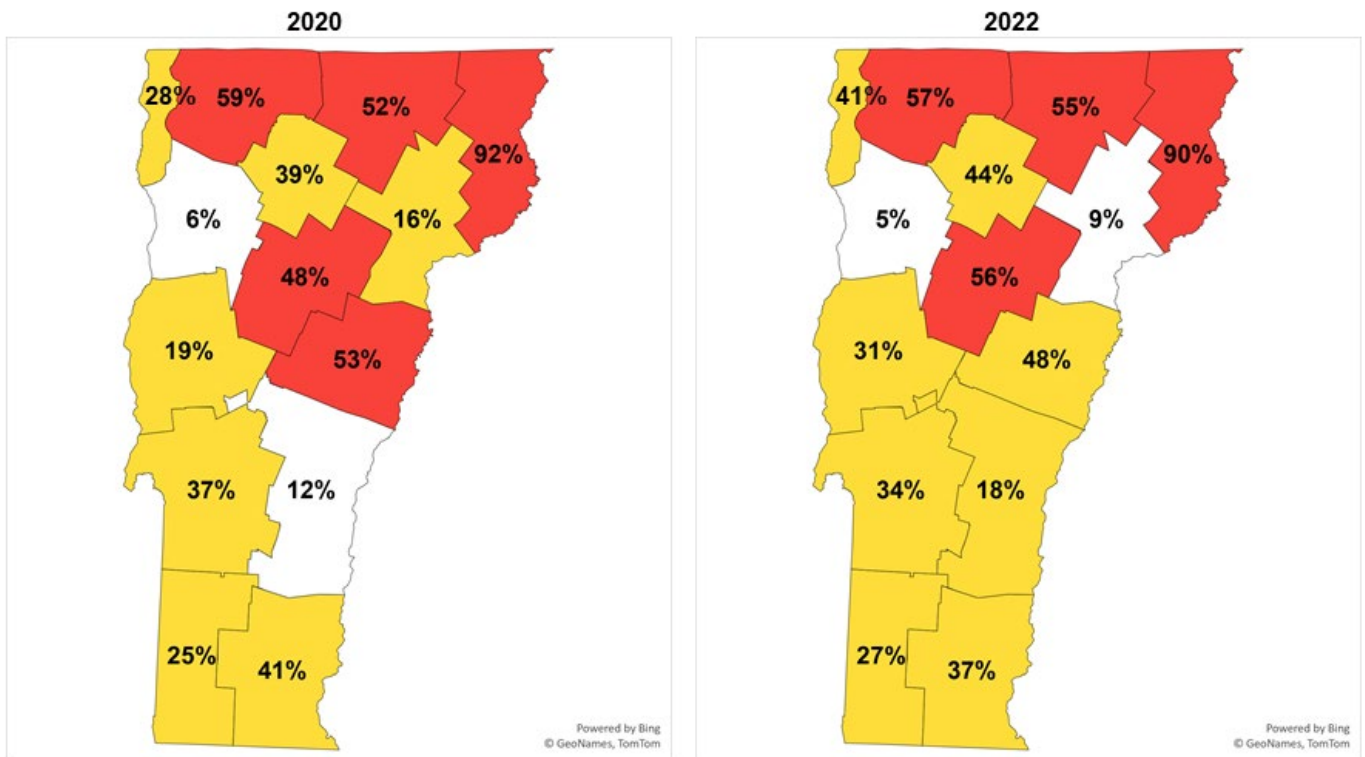


Preschoolers

As noted earlier in this report, the preschool analysis was introduced in the 2020 report and 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, **31% of preschoolers LTNC do not have access to regulated programs**, as compared to 29% in 2020. This is a statistically significant increase, meaning that fewer preschoolers have access to regulated programs.

As shown in Figure 13, percentages of preschoolers LTNC without access to a regulated program ranged from 5% to 90%. In Addison, Bennington, Washington, and Windsor counties, the change in findings from the 2020 report showed a statistically significant increase, indicating that fewer preschoolers have access to regulated care than they did in 2020 in those counties.

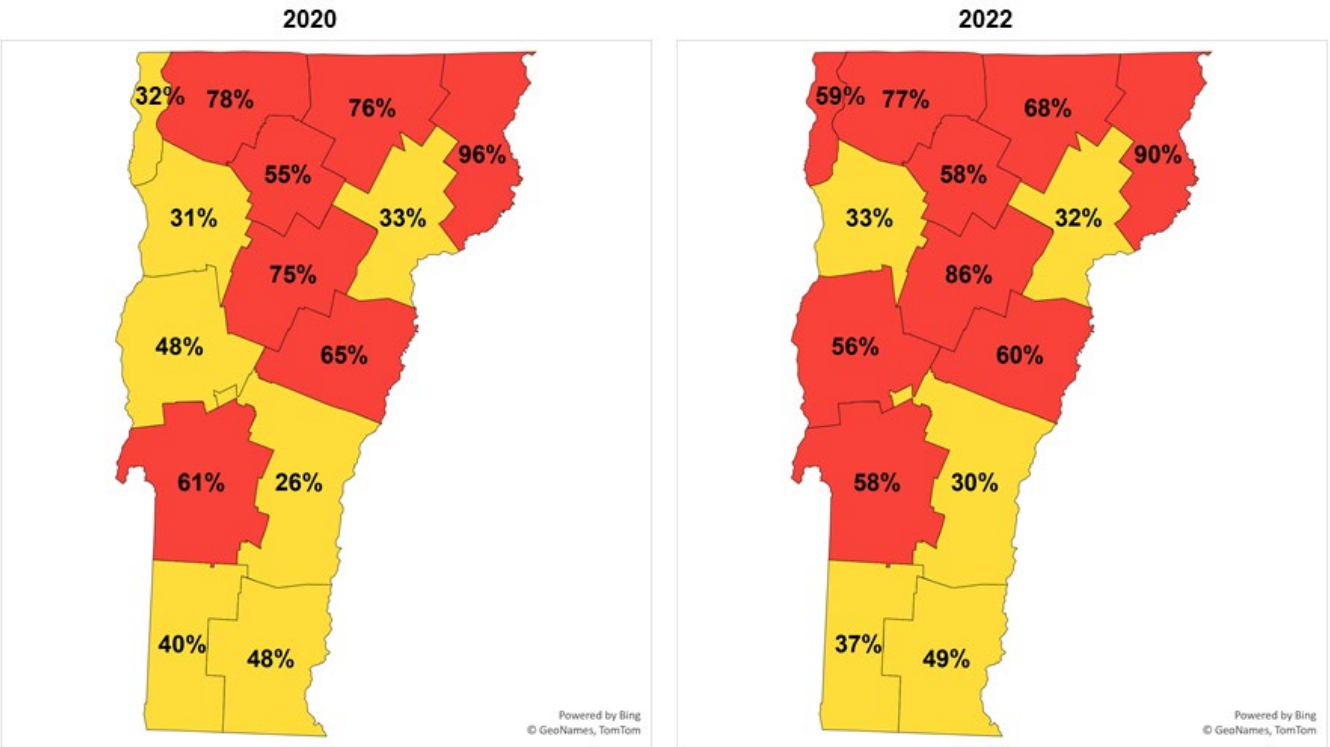
Figure 13. Preschoolers LTNC Without Access to Regulated Care, 2020-2022



Turning specifically to high-quality (4- and 5-star), regulated programs, statewide, **52% of preschoolers LTNC do not have access to high-quality, regulated child care programs**, as compared to 50% in the 2020 report.

As shown in Figure 14, notable variation exists between counties, ranging from 30% to 90% of preschoolers LTNC without access to high-quality, regulated programs. In Addison, Grand Isle, Washington and Windsor counties, significantly fewer preschoolers LTNC had access to high-quality, regulated programs, as compared to the findings from the 2020 report. Only in Orleans county were there significantly more children LTNC with access to regulated programs.

Figure 14. Preschoolers LTNC Without Access to High-Quality (4- and 5-Star), Regulated Care, 2020-2022



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 following:

- The likely to need care (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:

- 471 infants
- 240 toddlers
- 475 preschoolers

Number of Programs:

- 13 CBCCPPs, of which 10 are high-quality
- 3 Licensed FCCHs, of which 2 are also high-quality
- 23 Registered FCCHs, of which 6 are high-quality

Number of Slots:

- 148 infant slots, of which 84 are high-quality
- 111 toddler slots, of which 95 are high-quality
- 327 preschooler slots, of which 209 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 323 infant slots
- 129 toddler slots
- 148 preschooler slots

Infant Access



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



82% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access



54% of toddlers likely to need care don't have access to any regulated programs.



60% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



31% of preschoolers likely to need care don't have access to any regulated programs.



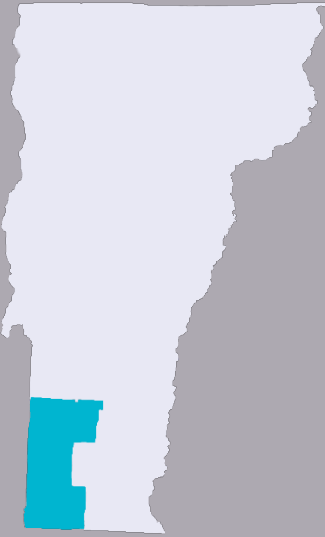
56% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

Hours of Operation:

- First program opens 6:00 AM
- Most programs open 8:00 AM

- Most programs close 5:00 PM
- Last program closes 5:30 PM

County Analysis | Bennington



Number of Young Children Likely to Need Care:

- 549 infants
- 296 toddlers
- 579 preschoolers

Number of Programs:

- 17 CBCCPPs, of which 15 are high-quality
- 1 Licensed FCCH, which is high-quality
- 24 Registered FCCHs, of which 7 are high-quality

Number of Slots:

- 211 infant slots, of which 158 are high-quality
- 205 toddler slots, of which 152 are high-quality
- 422 preschooler slots, of which 364 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 338 infant slots
- 91 toddler slots
- 157 preschooler slots

Infant Access



62% of infants likely to need care don't have access to any regulated programs.



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

Toddler Access



31% of toddlers likely to need care don't have access to any regulated programs.



49% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



27% of preschoolers likely to need care don't have access to any regulated programs.



37% 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 6:00 PM

County Analysis | Caledonia



Number of Young Children Likely to Need Care:

- 362 infants
- 188 toddlers
- 371 preschoolers

Number of Programs:

- 14 CBCCPPs, of which 12 are high-quality
- 1 Licensed FCCH, which is also high-quality
- 34 Registered FCCHs, of which 5 are high-quality

Number of Slots:

- 174 infant slots, of which 113 are high-quality
- 206 toddler slots, of which 127 are high-quality
- 337 preschooler slots, of which 251 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 188 infant slots
- 0 toddler slots
- 34 preschooler slots

Infant Access



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

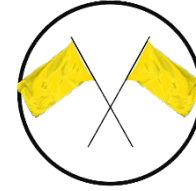


69% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access



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



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

Preschooler Access



9% 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.

Hours of Operation:

- First program opens 5:00 AM
- Most programs open 6:30 AM

- Most programs close 5:30 PM
- Last program closes 10:00 PM

County Analysis | Chittenden



Number of Young Children Likely to Need Care:

- 2,069 infants
- 1,129 toddlers
- 2,245 preschoolers

Number of Programs:

- 78 CBCCPPs, of which 49 are high-quality
- 2 Licensed FCCH
- 64 Registered FCCHs, of which 13 are high-quality

Number of Slots:

- 1,172 infant slots, of which 794 are high-quality
- 1,141 toddler slots, of which 762 are high-quality
- 2,128 preschooler slots, of which 1,506 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 897 infant slots
- 0 toddler slots
- 117 preschooler slots

Infant Access



43% of infants likely to need care don't have access to any regulated programs.



62% 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.



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

Preschooler Access



5% 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.

Hours of Operation:

- First program opens 12:00 AM
- Most programs open 7:30 AM
- Most programs close 5:30 PM
- Last program closes 11:45 PM



Number of Young Children Likely to Need Care:

- 62 infants
- 33 toddlers
- 81 preschoolers

Number of Programs:

- 0 CBCCPPs
- 0 Licensed FCCH
- 3 Registered FCCHs, of which 3 are high-quality

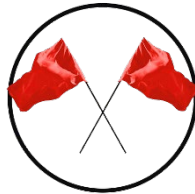
Number of Slots:

- 6 infant slots, of which 6 are high-quality
- 8 toddler slots, of which 8 are high-quality
- 8 preschooler slots, of which 8 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 56 infant slots
- 25 toddler slots
- 73 preschooler slots

Infant Access



90% of infants likely to need care don't have access to any regulated programs.

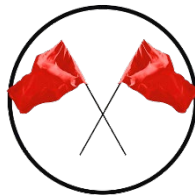


90% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access

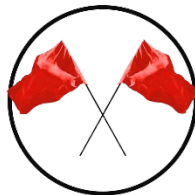


76% of toddlers likely to need care don't have access to any regulated programs.



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

Preschooler Access



90% of preschoolers likely to need care don't have access to any regulated programs.



90% 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 7:00 AM
- Most programs close 5:00 PM
- Last program closes 5:00 PM

County Analysis | Franklin



Number of Young Children Likely to Need Care:

- 843 infants
- 466 toddlers
- 892 preschoolers

Number of Programs:

- 12 CBCCPPs, of which 8 are high-quality
- 0 Licensed FCCHs
- 66 Registered FCCHs, of which 12 are high-quality

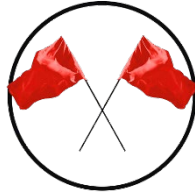
Number of Slots:

- 218 infant slots, of which 75 are high-quality
- 216 toddler slots, of which 81 are high-quality
- 381 preschooler slots, of which 206 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 625 infant slots
- 250 toddler slots
- 511 preschooler slots

Infant Access

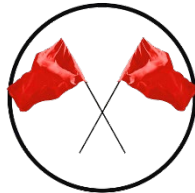


74% of infants likely to need care don't have access to any regulated programs.



91% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access



54% 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



57% of preschoolers likely to need care don't have access to any regulated programs.



77% 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 5:00 PM
- Last program closes 11:59 PM

County Analysis | Grand Isle



Number of Young Children Likely to Need Care:

- 90 infants
- 40 toddlers
- 89 preschoolers

Number of Programs:

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

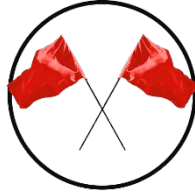
Number of Slots:

- 20 infant slots, of which 8 are high-quality
- 30 toddler slots, of which 16 are high-quality
- 52 preschooler slots, of which 36 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 70 infant slots
- 10 toddler slots
- 37 preschooler slots

Infant Access



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

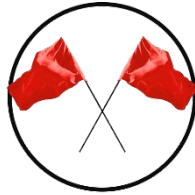


91% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access



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

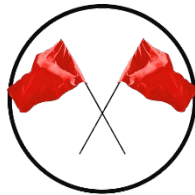


60% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



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



59% 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 7:00 AM
- Most programs close 5:30 PM
- Last program closes 5:30 PM

County Analysis | Lamoille



Number of Young Children Likely to Need Care:

- 332 infants
- 166 toddlers
- 401 preschoolers

Number of Programs:

- 9 CBCCPPs, of which 8 are high-quality
- 1 Licensed FCCH
- 18 Registered FCCHs, of which 5 are high-quality

Number of Slots:

- 114 infant slots, of which 82 are high-quality
- 125 toddler slots, of which 86 are high-quality
- 225 preschooler slots, of which 168 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 218 infant slots
- 41 toddler slots
- 176 preschooler slots

Infant Access

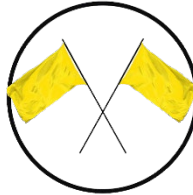


66% of infants likely to need care don't have access to any regulated programs.



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

Toddler Access



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

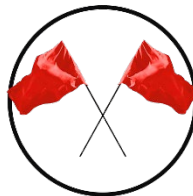


48% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



44% of preschoolers likely to need care don't have access to any regulated programs.

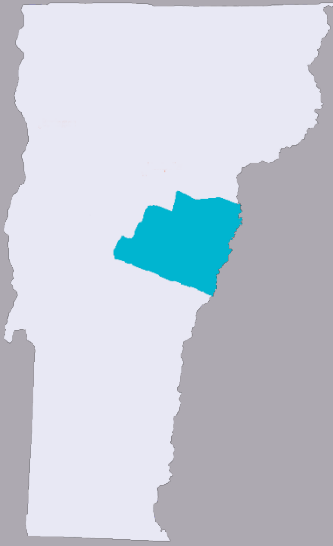


58% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

Hours of Operation:

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

County Analysis | Orange



Number of Young Children Likely to Need Care:

- 357 infants
- 215 toddlers
- 420 preschoolers

Number of Programs:

- 10 CBCCPPs, of which 8 are high-quality
- 1 Licensed FCCH, which is high-quality
- 13 Registered FCCHs, of which 7 are high-quality

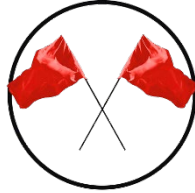
Number of Slots:

- 86 infant slots, of which 56 are high-quality
- 104 toddler slots, of which 76 are high-quality
- 220 preschooler slots, of which 170 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 271 infant slots
- 111 toddler slots
- 200 preschooler slots

Infant Access



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

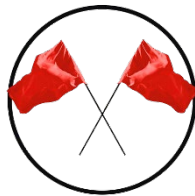


84% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access

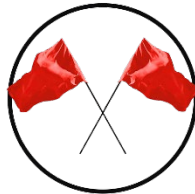


52% of toddlers likely to need care don't have access to any regulated programs.

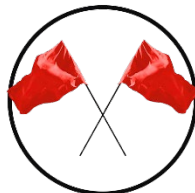


65% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



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



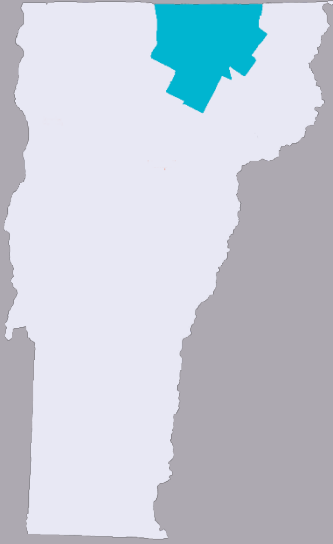
60% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

Hours of Operation:

- First program opens 6:30 AM
- Most programs open 7:00 AM

- Most programs close 5:00 PM
- Last program closes 6:30 PM

County Analysis | Orleans



Number of Young Children Likely to Need Care:

- 354 infants
- 188 toddlers
- 385 preschoolers

Number of Programs:

- 5 CBCCPPs, of which 4 are high-quality
- 2 Licensed FCCHs, of which both are high-quality
- 37 Registered FCCHs, of which 20 are high-quality

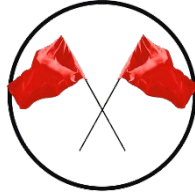
Number of Slots:

- 110 infant slots, of which 72 are high-quality
- 115 toddler slots, of which 73 are high-quality
- 172 preschooler slots, of which 122 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 244 infant slots
- 73 toddler slots
- 213 preschooler slots

Infant Access



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

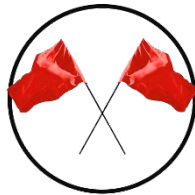


80% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access

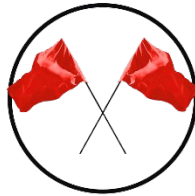


39% of toddlers likely to need care don't have access to any regulated programs.

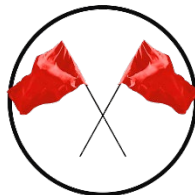


61% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



55% of preschoolers likely to need care don't have access to any regulated programs.



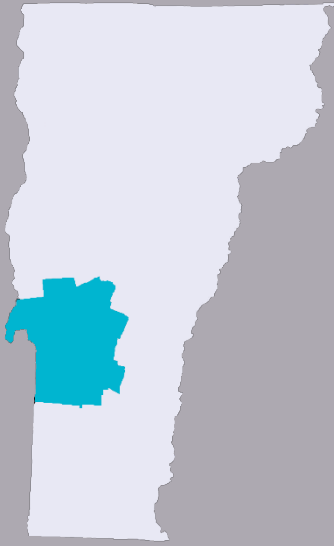
68% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

Hours of Operation:

- 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:

- 718 infants
- 361 toddlers
- 792 preschoolers

Number of Programs:

- 20 CBCCPPs, of which 12 are high-quality
- 3 Licensed FCCHs, which are high-quality
- 37 Registered FCCHs, of which 4 are high-quality

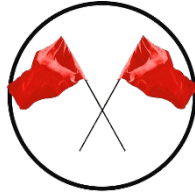
Number of Slots:

- 282 infant slots, of which 121 are high-quality
- 270 toddler slots, of which 86 are high-quality
- 521 preschooler slots, of which 330 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 436 infant slots
- 91 toddler slots
- 271 preschooler slots

Infant Access



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

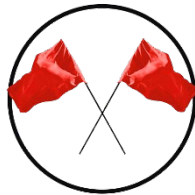


83% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access



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

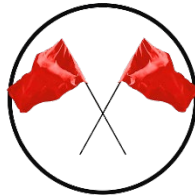


76% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



34% of preschoolers likely to need care don't have access to any regulated programs.



58% 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 6:00 PM
- Last program closes 11:59 PM

County Analysis | Washington



Number of Young Children Likely to Need Care:

- 805 infants
- 396 toddlers
- 810 preschoolers

Number of Programs:

- 16 CBCCPPs, of which 6 are high-quality
- 4 Licensed FCCHs, of which 0 are high-quality
- 47 Registered FCCHs, of which 1 is high-quality

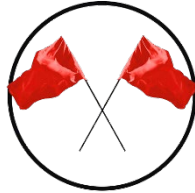
Number of Slots:

- 224 infant slots, of which 68 are high-quality
- 249 toddler slots, of which 59 are high-quality
- 360 preschooler slots, of which 117 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 581 infant slots
- 147 toddler slots
- 450 preschooler slots

Infant Access



72% of infants likely to need care don't have access to any regulated programs.

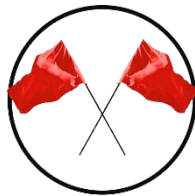


92% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access



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

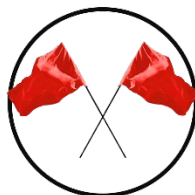


85% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



56% of preschoolers likely to need care don't have access to any regulated programs.



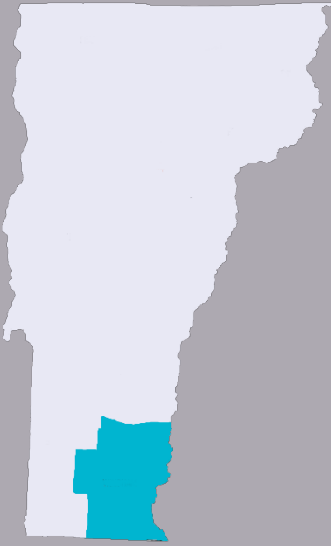
86% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

Hours of Operation:

- First program opens 6:00 AM
- Most programs open 7:00 AM

- Most programs close 5:00 PM
- Last program closes 9:00 PM

County Analysis | Windham



Number of Young Children Likely to Need Care:

- 521 infants
- 298 toddlers
- 538 preschoolers

Number of Programs:

- 20 CBCCPPs, of which 16 are high-quality
- 2 Licensed FCCHs, of which both are high-quality
- 10 Registered FCCHs, of which 3 are high-quality

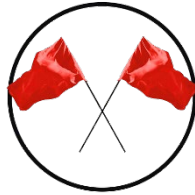
Number of Slots:

- 148 infant slots, of which 121 are high-quality
- 223 toddler slots, of which 191 are high-quality
- 341 preschooler slots, of which 272 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 373 infant slots
- 75 toddler slots
- 197 preschooler slots

Infant Access



72% of infants likely to need care don't have access to any regulated programs.



77% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access



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



36% 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.



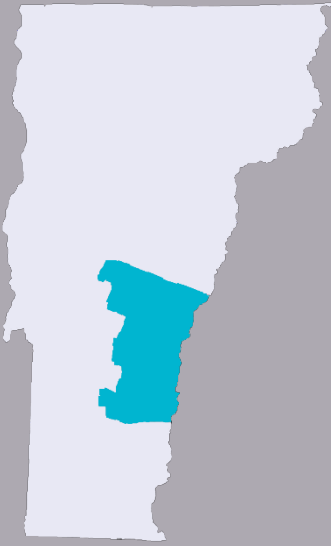
49% of preschoolers likely to need care don't have access to high-quality (4- or 5-star) programs.

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:

- 568 infants
- 295 toddlers
- 628 preschoolers

Number of Programs:

- 22 CBCCPPs, of which 19 are high-quality
- 0 Licensed FCCHs
- 30 Registered FCCHs, of which 19 are high-quality

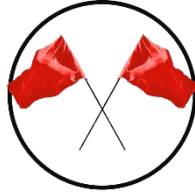
Number of Slots:

- 216 infant slots, of which 156 are high-quality
- 233 toddler slots, of which 171 are high-quality
- 514 preschooler slots, of which 437 are high-quality

Number of Additional Slots Needed to Meet Demand:

- 352 infant slots
- 62 toddler slots
- 114 preschooler slots

Infant Access



62% of infants likely to need care don't have access to any regulated programs.



73% of infants likely to need care don't have access to high-quality (4- or 5-star) programs.

Toddler Access



21% of toddlers likely to need care don't have access to any regulated programs.



42% of toddlers likely to need care don't have access to high-quality (4- or 5-star) programs.

Preschooler Access



18% of preschoolers likely to need care don't have access to any regulated programs.



30% 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 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). All data is point-in-time as follows:

- For the 2022 analysis, the data is from September 30, 2021;
- For the 2020 report, the data is from September 30, 2019;
- For the 2018 report, the data is from September 30, 2017; and
- For the 2016 report, the data is from December 31, 2015.

The original data file included all regulated early care and education programs and afterschool programs in the state. For the purposes of this analysis, the file was then limited to only those programs serving infants, toddlers, and/or preschool-age children. These programs were 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). In the initial edition of *Stalled at the Start*, the advisory group for the project established that reported desired capacity was the most accurate measure of capacity for the purposes of the project. Advisors concurred with retaining this method of program identification for the 2022 edition of the report, with the acknowledgement that some program data in the CDD database may be slightly out-of-date given the constraints of the pandemic. 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 preschool-age 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 verify their operating schedule and typical hours of operation.

Once the programs not offering full-year, full-day child care 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 this 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 advisory group for the first edition of *Stalled at the Start* 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 age five 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 the first 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.

For the 2022 report, due to delays at the U.S. Census Bureau in releasing population information from the 2020 Census to state partners, the most current population data set available from the Vermont Department of Health was from 2019. Given that supply information was obtained during the COVID-19 pandemic, the research team considered multiple options to adjust the 2019 population data set to try to reflect the impact of the pandemic on population, including several different forecast models. However, the team ultimately decided to use the 2019 population data set as presented, as forecasting projections for county-specific population data had significant margins of errors.

Data on the percent of Vermont children age five 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 summing year-of-age fields from the Vermont Department of Health's population estimates based on CDD's age group definitions (infants = children under two years of age, toddlers = two-year-olds, preschoolers = three-year-olds and four-year-olds). U.S. Census Bureau percentages were then applied to age group population totals at the state level and county level.

For the first two editions of *Stalled at the Start*, the report's advisory committee interpreted this approach as providing a conservative estimate of actual demand, and for the 2020 edition of the

report, 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 five).²⁷

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 without 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 the report continue to use the LTNC proxy as an estimate for demand.

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 2018–2022 or 2020-2022 Changes

Findings from the 2022 report were compared to the findings from the 2018 report for infants and toddlers and the 2020 report for preschoolers using a two-tailed 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 two infants, two toddlers, and two 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.
 - Infant population
 - The Vermont Department of Health's population estimate information is broken out by year of age, with age zero representing all children birth through 11 months. However, CDD's definition of an infant eligible for child care is six weeks through 23 months. For children 12 months through 23 months, the population estimate for children age one was used. For children six weeks through 11 months, the population estimate for children age zero 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 six weeks old.
 - LTNC population
 - For the purposes of this analysis, it was assumed that the U.S. Census Bureau's American Community Survey estimates of children five and under with all available parents in the labor force applied evenly across all age groups within Vermont's five and under population.
 - For the statewide analysis, the LTNC population was based on the statewide percent of children five and under with all available parents in the labor force, as reported in the most recent U.S. Census Bureau American Community Survey's five-year estimates.
 - For the 2022 report, the LTNC population is assumed to be 72.8% of the total age group population. This is based on the U.S. Census Bureau's American Community Survey 2015-2019 estimate that 72.8% of children five and under in Vermont have all available parents in the labor force.
 - For the 2020 report, the LTNC population was 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 five 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 five 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 five and under in Vermont had all available parents in the labor force.
 - For county-level analyses, the LTNC population was based on the county-specific percent of children five 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
 - 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 (e.g., 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).
 - 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 and 2020 reports.

Appendix

Table 1. Count of Regulated Programs Serving Infants, Toddlers, and/or Preschoolers by County, 2022

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	21	18	39
Bennington	19	23	42
Caledonia	31	18	49
Chittenden	83	62	145
Essex	0	3	3
Franklin	58	20	78
Grand Isle	5	2	7
Lamoille	15	13	28
Orange	8	16	24
Orleans	18	26	44
Rutland	41	19	60
Washington	60	7	67
Windham	11	22	33
Windsor	14	38	52

Table 2. Infant Capacity of Regulated Programs by County, 2022

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	64	84	148
Bennington	53	158	211
Caledonia	61	113	174
Chittenden	378	794	1172
Essex	0	6	6
Franklin	143	75	218
Grand Isle	12	8	20
Lamoille	32	82	114
Orange	30	56	86
Orleans	38	72	110
Rutland	161	121	282
Washington	156	68	224
Windham	27	121	148
Windsor	60	156	216

Table 3. Toddler Capacity of Regulated Programs by County, 2022

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	16	95	111
Bennington	53	152	205
Caledonia	79	127	206
Chittenden	379	762	1141
Essex	0	8	8
Franklin	135	81	216
Grand Isle	14	16	30
Lamoille	39	86	125
Orange	28	76	104
Orleans	42	73	115
Rutland	184	86	270
Washington	190	59	249
Windham	32	191	223
Windsor	62	171	233

Table 4. Preschool Child Care Capacity of Regulated Programs by County, 2022

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	118	209	327
Bennington	58	364	422
Caledonia	86	251	337
Chittenden	622	1506	2128
Essex	0	8	8
Franklin	175	206	381
Grand Isle	16	36	52
Lamoille	57	168	225
Orange	50	170	220
Orleans	50	122	172
Rutland	191	330	521
Washington	243	117	360
Windham	69	272	341
Windsor	77	437	514

Table 5. Infant Population Information by County, 2022

County	Percent of Children 5 and Under with All Available Parents in Labor Force	Total Infant Population	LTNC Infant Population
Addison	75.84%	621	471
Bennington	86.72%	633	549
Caledonia	64.76%	559	362
Chittenden	73.00%	2834	2069
Essex	63.72%	97	62
Franklin	76.24%	1106	843
Grand Isle	65.12%	138	90
Lamoille	69.91%	475	332
Orange	73.48%	486	357
Orleans	71.57%	494	354
Rutland	72.93%	984	718
Washington	73.68%	1092	805
Windham	73.55%	708	521
Windsor	62.44%	910	568

Table 6. Toddler Population Information by County, 2022

County	Percent of Children 5 and Under with All Available Parents in Labor Force	Total Toddler Population	LTNC Toddler Population
Addison	75.84%	316	240
Bennington	86.72%	341	296
Caledonia	64.76%	291	188
Chittenden	73.00%	1547	1129
Essex	63.72%	52	33
Franklin	76.24%	611	466
Grand Isle	65.12%	61	40
Lamoille	69.91%	238	166
Orange	73.48%	292	215
Orleans	71.57%	263	188
Rutland	72.93%	495	361
Washington	73.68%	537	396
Windham	73.55%	405	298
Windsor	62.44%	473	295

Table 7. Preschool Population Information by County, 2022

County	Percent of Children 5 and Under with All Available Parents in Labor Force	Total Preschool Population	LTNC Preschool Population
Addison	75.84%	626	475
Bennington	86.72%	668	579
Caledonia	64.76%	573	371
Chittenden	73.00%	3076	2245
Essex	63.72%	127	81
Franklin	76.24%	1170	892
Grand Isle	65.12%	136	89
Lamoille	69.91%	574	401
Orange	73.48%	572	420
Orleans	71.57%	538	385
Rutland	72.93%	1086	792
Washington	73.68%	1100	810
Windham	73.55%	732	538
Windsor	62.44%	1006	628

Table 8. Percent of Children LTNC Without Access to Regulated Child Care in Vermont, 2018–2022

LTNC Population	2018 Percent	2018 Report Status Flag	2022 Percent	2022 Report Status Flag	2018–2022 Change
Infants LTNC without access to regulated care	64%	Red Flag	61%	Red Flag	More children have access
Infants LTNC without access to high-quality, regulated care	84%	Red Flag	76%	Red Flag	More children have access
Toddlers LTNC without access to regulated care	23%	Yellow Flag	25%	Yellow Flag	No significant change
Toddlers LTNC without access to high-quality, regulated care	64%	Red Flag	54%	Red Flag	More children have access

Table 9. Percent of Preschoolers LTNC Without Access to Regulated Child Care in Vermont, 2020-2022

LTNC Population	2020 Percent	2020 Report Status Flag	2022 Percent	2022 Report Status Flag	2020–2022 Change
Preschoolers LTNC without access to regulated care	30%	Yellow Flag	31%	Yellow Flag	No significant change
Preschoolers LTNC without access to high-quality, regulated care	51%	Red Flag	52%	Red Flag	No significant change

Table 10. Percent of Infants LTNC Without Access to Regulated Care by County, 2018–2022

County	2018 Percent of Infants LTNC Without Access	2018 Report Status Flag	2022 Percent of Infants LTNC Without Access	2022 Report Status Flag	2018–2022 Change
Addison	67%	Red Flag	69%	Red Flag	No significant change
Bennington	61%	Red Flag	62%	Red Flag	No significant change
Caledonia	57%	Red Flag	52%	Red Flag	No significant change
Chittenden	56%	Red Flag	43%	Yellow Flag	More children have access
Essex	87%	Red Flag	90%	Red Flag	No significant change
Franklin	72%	Red Flag	74%	Red Flag	No significant change
Grand Isle	80%	Red Flag	78%	Red Flag	No significant change
Lamoille	65%	Red Flag	66%	Red Flag	No significant change
Orange	77%	Red Flag	76%	Red Flag	No significant change
Orleans	71%	Red Flag	69%	Red Flag	No significant change
Rutland	63%	Red Flag	61%	Red Flag	No significant change
Washington	72%	Red Flag	72%	Red Flag	No significant change
Windham	73%	Red Flag	72%	Red Flag	No significant change
Windsor	62%	Red Flag	62%	Red Flag	No significant change

Table 11. Percent of Infants LTNC Without Access to High-Quality (4- or 5-Star), Regulated Care by County, 2018–2022

County	2018 Percent of Infants LTNC Without Access	2018 Report Status Flag	2022 Percent of Infants LTNC Without Access	2022 Report Status Flag	2018–2022 Change
Addison	87%	Red Flag	82%	Red Flag	More children have access
Bennington	78%	Red Flag	71%	Red Flag	More children have access
Caledonia	81%	Red Flag	69%	Red Flag	More children have access
Chittenden	77%	Red Flag	62%	Red Flag	More children have access
Essex	96%	Red Flag	90%	Red Flag	No significant change
Franklin	98%	Red Flag	91%	Red Flag	More children have access
Grand Isle	91%	Red Flag	91%	Red Flag	No significant change
Lamoille	80%	Red Flag	75%	Red Flag	No significant change
Orange	89%	Red Flag	84%	Red Flag	No significant change
Orleans	95%	Red Flag	80%	Red Flag	More children have access
Rutland	87%	Red Flag	83%	Red Flag	More children have access
Washington	92%	Red Flag	92%	Red Flag	No significant change
Windham	83%	Red Flag	77%	Red Flag	More children have access
Windsor	76%	Red Flag	73%	Red Flag	No significant change

Table 12. Percent of Toddlers LTNC Without Access to Regulated Care by County, 2018–2022

County	2018 Percent of Toddlers LTNC Without Access	2018 Report Status Flag	2022 Percent of Toddlers LTNC Without Access	2022 Report Status Flag	2018–2022 Change
Addison	55%	Red Flag	54%	Red Flag	No significant change
Bennington	21%	Yellow Flag	31%	Yellow Flag	Fewer children have access
Caledonia	18%	Yellow Flag	0%	Checkered Flag	More children have access
Chittenden	3%	White Flag	0%	Checkered Flag	More children have access
Essex	75%	Red Flag	76%	Red Flag	No significant change
Franklin	36%	Yellow Flag	54%	Red Flag	Fewer children have access
Grand Isle	30%	Yellow Flag	24%	Yellow Flag	No significant change
Lamoille	4%	White Flag	25%	Yellow Flag	Fewer children have access
Orange	47%	Yellow Flag	52%	Red Flag	No significant change
Orleans	41%	Yellow Flag	39%	Yellow Flag	No significant change
Rutland	32%	Yellow Flag	25%	Yellow Flag	More children have access
Washington	36%	Yellow Flag	37%	Yellow Flag	No significant change
Windham	0%	Checkered Flag	25%	Yellow Flag	Fewer children have access
Windsor	15%	White Flag	21%	Yellow Flag	No significant change

Table 13. Percent of Toddlers LTNC Without Access to High-Quality (4- or 5-Star), Regulated Care by County, 2018–2022

County	2018 Percent of Toddlers LTNC Without Access	2018 Report Status Flag	2022 Percent of Toddlers LTNC Without Access	2022 Report Status Flag	2018–2022 Change
Addison	70%	Red Flag	60%	Red Flag	More children have access
Bennington	53%	Red Flag	49%	Yellow Flag	No significant change
Caledonia	61%	Red Flag	33%	Yellow Flag	More children have access
Chittenden	47%	Yellow Flag	33%	Yellow Flag	More children have access
Essex	92%	Red Flag	76%	Red Flag	No significant change
Franklin	95%	Red Flag	83%	Red Flag	More children have access
Grand Isle	60%	Red Flag	60%	Red Flag	No significant change
Lamoille	44%	Yellow Flag	48%	Yellow Flag	No significant change
Orange	72%	Red Flag	65%	Red Flag	No significant change
Orleans	90%	Red Flag	61%	Red Flag	More children have access
Rutland	80%	Red Flag	76%	Red Flag	No significant change
Washington	82%	Red Flag	85%	Red Flag	No significant change
Windham	40%	Yellow Flag	36%	Yellow Flag	No significant change
Windsor	44%	Yellow Flag	42%	Yellow Flag	No significant change

Table 14. Percent of Preschoolers LTNC Without Access to Regulated Care by County, 2020-2022

County	2020 Percent of Preschoolers LTNC Without Access	2020 Report Status Flag	2022 Percent of Preschoolers LTNC Without Access	2022 Report Status Flag	2020-2022 Change
Addison	19%	Yellow Flag	31%	Yellow Flag	Fewer children have access
Bennington	25%	Yellow Flag	27%	Yellow Flag	Fewer children have access
Caledonia	16%	Yellow Flag	9%	White Flag	No significant change
Chittenden	6%	White Flag	5%	White Flag	No significant change
Essex	92%	Red Flag	90%	Red Flag	No significant change
Franklin	59%	Red Flag	57%	Red Flag	No significant change
Grand Isle	28%	Yellow Flag	41%	Yellow Flag	No significant change
Lamoille	39%	Yellow Flag	44%	Yellow Flag	No significant change
Orange	53%	Red Flag	48%	Yellow Flag	No significant change
Orleans	52%	Red Flag	55%	Red Flag	No significant change
Rutland	37%	Yellow Flag	34%	Yellow Flag	No significant change
Washington	48%	Yellow Flag	56%	Red Flag	Fewer children have access
Windham	41%	Yellow Flag	37%	Yellow Flag	No significant change
Windsor	12%	White Flag	18%	Yellow Flag	Fewer children have access

Table 15. Percent of Preschoolers LTNC Without Access to High-Quality, Regulated Care by County, 2020-2022

County	2020 Percent of Preschoolers LTNC Without Access	2020 Report Status Flag	2022 Percent of Preschoolers LTNC Without Access	2022 Report Status Flag	2020-2022 Change
Addison	48%	Yellow Flag	56%	Red Flag	Fewer children have access
Bennington	40%	Yellow Flag	37%	Yellow Flag	No significant change
Caledonia	33%	Yellow Flag	32%	Yellow Flag	No significant change
Chittenden	31%	Yellow Flag	33%	Yellow Flag	No significant change
Essex	96%	Red Flag	90%	Red Flag	No significant change
Franklin	78%	Red Flag	77%	Red Flag	No significant change
Grand Isle	32%	Yellow Flag	59%	Red Flag	Fewer children have access
Lamoille	55%	Red Flag	58%	Red Flag	No significant change
Orange	65%	Red Flag	60%	Red Flag	No significant change
Orleans	76%	Red Flag	68%	Red Flag	More children have access
Rutland	61%	Red Flag	58%	Red Flag	No significant change
Washington	75%	Red Flag	86%	Red Flag	Fewer children have access
Windham	48%	Yellow Flag	49%	Yellow Flag	No significant change
Windsor	26%	Yellow Flag	30%	Yellow Flag	Fewer children have access

Table 16. Hours of Operation of Regulated Programs Serving Infants, Toddlers, and/or Preschoolers by County, 2022

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	8:00 AM	5:00 PM	5:30 PM
Bennington	6:30 AM	7:30 AM	4:30 PM	6:00 PM
Caledonia	5:00 AM	6:30 AM	5:30 PM	10:00 PM
Chittenden	12:00 AM	7:30 AM	5:30 PM	11:45 PM
Essex	6:30 AM	7:00 AM	5:00 PM	5:00 PM
Franklin	5:30 AM	7:00 AM	5:00 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	5:30 PM
Orange	6:30 AM	7:00 AM	5:00 PM	6:30 PM
Orleans	12:00 AM	6:00 AM	5:00 PM	11:45 PM
Rutland	5:30 AM	7:00 AM	6:00 PM	11:59 PM
Washington	6:00 AM	7:00 AM	5:00 PM	9:00 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

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