



Childcare Data Update

Town of Breckenridge

REPORT

Report

September 13, 2018

Childcare Data Update

Prepared for

Town of Breckenridge
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Introduction

BBC Research & Consulting (BBC) has been contracted by the Town of Breckenridge to provide a data update to certain metrics in the 2016 Childcare Needs Assessment. This report documents demographic changes and BBC's update to the childcare demand model for the Town.

Demographic Update

The 2016 Childcare Needs Assessment relied primarily on data from the 2010 Census for quantification of total population, children, and households in Breckenridge and the Upper Blue Basin. The 2010 Census is still the most comprehensive data source for demographic data but supplemental demographic data from the 2016 5-year American Community Survey (ACS) are also included here to identify more recent demographic trends.

Population and households

Figure 1 displays trends in population and households for Breckenridge and the Upper Blue Basin between 2000 and 2016.¹ Note that the data for 2000 and 2010 reflect Census data from those years whereas the 2016 data are from the American Community Survey and reflect a five-year annual average (single-year data are not available from the ACS for the Town of Breckenridge and/or the Upper Blue Basin).

As shown in the figure, the Town of Breckenridge experienced substantial increases in both population and households between 2000 and 2010 but growth between 2010 and 2016 was much slower and actually shows a slight decline in the number of permanent resident households—particularly renters—between 2010 and 2016.

It should be noted that the five-year data for 2016 likely reflect residual impacts of the economic downturn and may undercount the current number of permanent resident households.

¹ The Upper Blue Basin is defined in the 2010 Census and 2016 ACS as Summit County, Colorado Census tracts 4.01 and 4.02. In the 2000 Census the same geographic area is listed as Summit County, Colorado Census tract 4. Data for 2000 and 2010 are based on the US Census Bureau's Decennial Census while the 2016 data are based on the US Census Bureau's American Community Survey, which is a sample-based data product and does contain some margin of error.

Figure 1.
Population and Households, Breckenridge and Upper Blue Basin, 2000 through 2016

	Population and Households			Percent Change	
	2000 Census	2010 Census	2012-2016 5-year ACS	2000- 2010	2000- 2016
Town of Breckenridge					
Resident population	2,408	4,540	4,732	89%	97%
Total housing units	4,270	6,911	7,029	62%	65%
Permanent resident households	1,081	1,946	1,511	80%	40%
Resident households as a percent of total housing units	25%	28%	21%		
Upper Blue Basin					
Resident population	7,449	9,627	9,847	29%	32%
Total housing units	8,267	11,169	11,157	35%	35%
Permanent resident households	2,998	4,064	3,230	36%	8%
Resident households as a percent of total housing units	36%	36%	29%		

Source: 2000 and 2010 Census, 2012-2016 American Community Survey and BBC Research & Consulting.

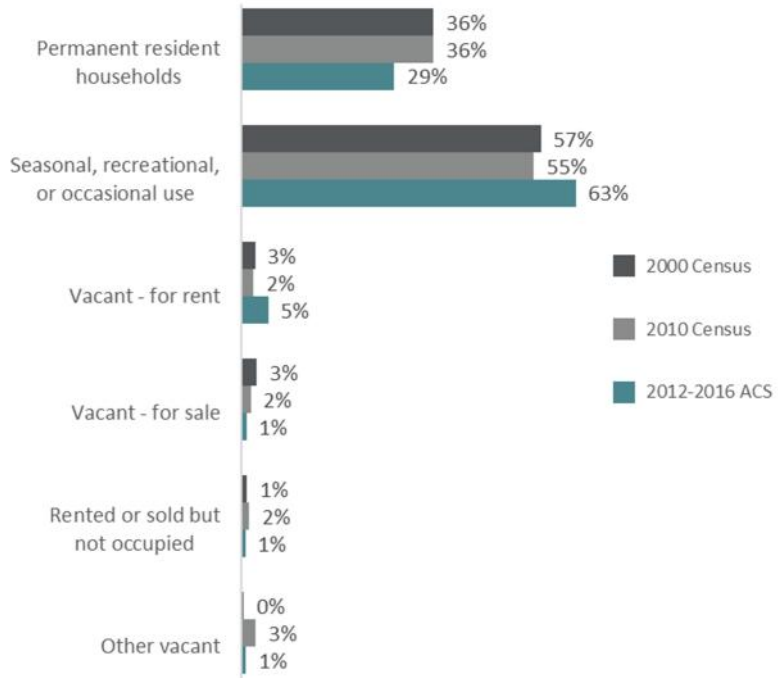
Though not shown in the figure, the decline in permanent resident households between 2010 and 2016 is driven primarily by a loss in renter-occupied households. Census and ACS data indicate that renter-occupied households in the Upper Blue decreased significantly over that period (from about 1,500 in 2010 to about 800 in 2016) while owner-occupied households dropped only slightly (from 2,500 in 2010 to 2,400 in 2016).²

This trend may reflect long-term rental units being converted to short term and vacation-oriented rental units. Figure 2 shows the distribution of housing units in the Upper Blue Basin by occupancy/vacancy between 2000 and 2016. Over that period, the proportion of homes that are vacant for seasonal, recreational, or occasional use increased from 57 percent to 63 percent; and the proportion that are vacant for rent increased from 3 percent to 5 percent.

² Projections discussed later in this report rely primarily on trends in population by age and are not directly affected by fluctuations in renter- and owner-occupancy. Even so, the Town should continue to vet and monitor this number in the event it will impact any ongoing programs.

Figure 2.
Occupancy and Vacancy of Housing Units in the Upper Blue Basin, 2000-2016

Source:
 2000 and 2010 Census, 2012-2016 American Community Survey and BBC Research & Consulting.



Presence of Children

The 2010 Census reports 637 children (under 18) living in Breckenridge and 1,476 children in the Upper Blue Basin as a whole. The 2012-2016 ACS indicates a decline in the population of children in Breckenridge (475) and the upper Blue (1,310). Similar trends are evident in the population of children under the age of six which show strong increases between 2000 and 2010 but a drop in the under six population between 2010 and 2016.

Figure 3.
Presence of Children, Breckenridge and Upper Blue Basin, 2000 and 2010

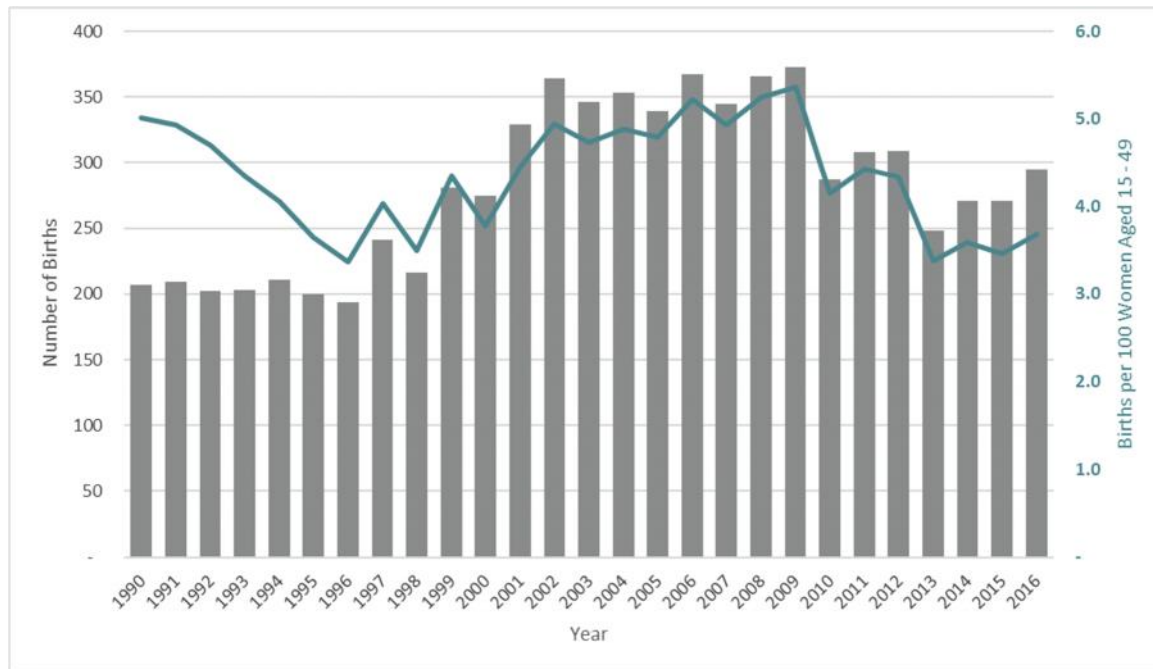
	Population			Percent Change	
	2000 Census	2010 Census	2012-2016 5-year ACS	2000-2010	2000-2016
Town of Breckenridge					
Total population	2,408	4,540	4,732	89%	97%
Under 18	177	637	475	260%	168%
Under 6	61	238	147	290%	141%
<i>Percent of population under 18</i>	7%	14%	10%		
<i>Percent of population under 6</i>	3%	5%	3%		
Upper Blue Basin					
Total population	7,449	9,627	9,847	29%	32%
Under 18	1,127	1,476	1,310	31%	16%
Under 6	417	540	404	29%	-3%
<i>Percent of population under 18</i>	15%	15%	13%		
<i>Percent of population under 6</i>	6%	6%	4%		

Source: 2000 and 2010 Census, 2012-2016 American Community Survey and BBC Research & Consulting.

The decline in the under six population in the region is largely explained by declining birth rates and number of births coinciding with the economic recession which impacted most Colorado mountain resort communities with a slightly delayed effect from the nation as a whole.

Figure 4 shows the number of births (gray bars) along with the birth rate (red line) for Summit County between 1990 and 2016.³ As shown in the figure, both the number of births and the birth rate declined in the wake of the recession, most notably in 2010 and 2013. However, the most recent three years of data indicate an increase in the number of births and in the birth rate.

Figure 4.
Number of Births and Birth Rate, Summit County, 1990-2016



Note: Birth rate is measured as the number of births per 100 women aged 15 to 49.

Source: Colorado Department of Local Affairs and BBC Research & Consulting.

In summary, the available demographic data for the region show declines in young children since 2010 for the Upper Blue Basin and Breckenridge but emerging trends in births and birth rate are a signal that the population of very young children is likely to rise in the near future. Indeed, the number of very young children living in the Upper Blue today may already be higher than is indicated by the most recent ACS data for the area. As discussed in the Demand Analysis (starting on page 6), BBC estimates there are currently about 526 children under the age of six living in the Upper Blue Basin, based on recent demographic and household trends.

³ Birth rate is measured as the number of births per 100 women aged 15 to 49.

Childcare Options and Children in Care

There are four non-profit childcare facilities located within the Town of Breckenridge: Breckenridge Montessori, Carriage House Early Learning Center, Little Red Schoolhouse and Timberline Learning Center. Collectively, these Centers account for 71 percent of the Upper Blue Basin’s licensed childcare capacity, or 199 childcare spots per day.

In addition to these centers, there are:

- Four licensed family childcare providers with a collective capacity of 36 spots daily (note that one provider is exiting the market in June 2018 reducing the number of providers to three and the daily capacity to 24 spots);
- A full-day early childhood education program at Upper Blue Elementary with a daily capacity of 30; and
- Open Arms early childhood development program with a daily capacity of 15.

Figure 5 shows these licensed childcare options in the Upper Blue Basin by provider type. It includes the collective daily capacity by provider type along with the total number of children currently being served. Note that the number of individual children actually served exceeds daily capacity because not all children are in care every day of the week. On average, children in licensed care attend 3.7 days per week.

At the time this data update was conducted, 245 children were accessing regular care in one of Breckenridge’s program partner facilities, 61 children were accessing care in another childcare center (Upper Blue Elementary or Open Arms), and 32 children were accessing care with a licensed family provider. Overall, 19 percent of children in care are under the age of two. Licensed family childcare providers have the lowest overall capacity but the highest proportion of children under two years old.

Figure 5.
Childcare Capacity and Usage, Upper Blue Basin, 2018

Provider Type	Num. of Providers	Daily Capacity	Children in Care			
			Total Children	% Under 2	% 2 years and older	Avg Days per Week
Breckenridge Non-Profit Centers	4	199	245	22%	78%	3.5
Other Childcare Centers	2	61	61	0%	100%	4.7
Licensed Family Childcare Providers	3*	24*	32	28%	72%	3.7
Total	9	284	338	19%	81%	3.7

Notes: Total Children exceeds daily capacity because some individual children attend fewer than 5 days per week. Other Childcare Centers includes Upper Blue Elementary and Open Arms Childcare and Preschool.

*At the time the study was conducted there were 4 licensed family childcare providers in the Upper Blue with a collective daily capacity of 36; however, one provider was exiting the market in June 2018, reducing the number of providers to 3 and the daily capacity to 24. Total children in care includes the 7 children currently being served by this provider at the time data were collected.

Source: BBC Research & Consulting.

Outside the structure of licensed childcare, families employ a number of strategies to provide care for their children including arranging work hours to accommodate care options, relying on friends, neighbors and family for care and using a nanny or participating in a nanny-share. Data on these options are not available, though their use among local residents was evaluated through resident surveys in the 2016 Childcare Needs Assessment.

Demand Analysis

The demand model used in this study (as well as previous demand studies conducted by BBC for the Town of Breckenridge) focuses on the program participant facility-based childcare centers—Breckenridge Montessori, Carriage House Early Learning Center, Little Red Schoolhouse and Timberline Learning Center—as opposed to other types of licensed or unlicensed childcare options.

Trends in Childcare Usage

Figure 6 displays the number of children in care by facility in 2018 (at the time this study was conducted) and in 2015. Data are displayed for the number of individual children in care (“Total Children”) as well as the number of child days per week (individual children times days per week they attend) and the average number of days per week children are in care. In total, there are 245 children in care in the four facilities and on average these children attend 3.5 days per week.

The number of children in care in 2018 is similar to the number in care in 2015, but the average days per week increased from 3.2 to 3.5 resulting in an increase in the total child days per week. As such, the facilities are serving roughly the same number of children as in 2015 but they are caring for them with greater frequency and thus operating at a higher daily capacity.

BBC also obtained waitlist information for each facility. In 2015, the unduplicated waitlist count was 32 children. At that time the primary waitlist need was for infant spots, though some facilities also had waitlisted toddlers. According to data from providers in 2018, there are now 154 unduplicated children on waitlists for care in Breckenridge. This substantial increase in waitlisted children indicates a significant change in demand between 2015 to 2018.

Some of this increase in demand may be related to an increase in children under six in the Upper Blue and/or among in-commuters. As discussed earlier in this report, demographic data are only available through 2016 and may undercount the full census of young children. Even so, it is very likely that the increase in demand also includes—and may be driven by—an increase in childcare usage among existing families and in-commuters in the Upper Blue. That increase in usage could be explained by several factors: 1) Improved economic conditions resulting in parents working more jobs or more hours at existing jobs leading to an increase in the need for childcare; and/or 2) Improved access to childcare for Upper Blue families through awareness and/or use of the Tuition Assistance Program.

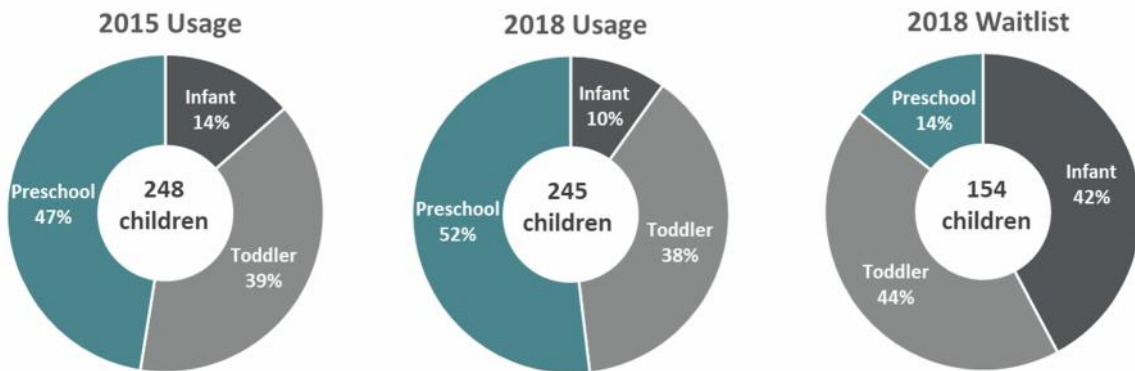
Figure 6.
Children in Care
at Breckenridge
Childcare Centers

Source:
2016 Provider data, 2018
Provider data and BBC
Research & Consulting.

Facility	2015			2018		
	Total Children	Child Days per Week	Avg Days per Week	Total Children	Child Days per Week	Avg Days per Week
Breck Montessori	19	69	3.6	18	65	3.6
Carriage House	60	193	3.2	57	208	3.6
Little Red	84	259	3.1	88	286	3.3
Timberline	85	273	3.2	82	297	3.6
Current Usage	248	794	3.2	245	856	3.5
Unduplicated waitlist	32	102	3.2	154	517	3.4
Potential Demand	280	896	3.2	399	1,373	3.4

The age distribution of children in care shifted somewhat older between 2015 and 2018, as illustrated by Figure 7. Age distribution of individual children is driven in large part by capacity (based on child to teacher ratios) and by frequency. For example, 2015 infants may have been in care fewer days per week and therefore centers were able to serve a larger number of infants overall.

Figure 7.
Age of Children in Care and on Waitlists, 2015 and 2018



Note: Infants are less than 12 months, toddlers are 12 to 35 months and preschoolers are 36 months and older.
Source: 2016 Provider data, 2018 Provider data and BBC Research & Consulting.

The age profile of the current waitlist for center-based care skews heavily toward infants. Indeed 42 percent (65 children) on the waitlist are younger than 12 months old. Forty-three percent are toddlers and 14 percent are preschoolers. The high proportion of infants and toddlers on the waitlist is a reflection of the broader childcare market, which has relatively low capacity for children under three years old.

Future Demand

As part of the 2016 Childcare Needs Assessment, BBC developed a custom childcare demand model to quantify growth in demand for facility-based childcare in Breckenridge through 2025. The following analysis updates that model with current data inputs to refine the projections of demand through 2025.

The demand model accounts for two primary components or drivers of demand in the childcare demand model: residents and in-commuters. The demand forecasts are based on partner facilities within the town of Breckenridge but the relevant population and economic base includes the entire Upper Blue Basin as the functioning economic/residential area. This maintains consistency with the town's other long-term planning efforts which are conducted for the Upper Blue as a whole.

Forecast model structure. Upper Blue residents account for about 77 percent of current childcare facility use in Breckenridge. As such, they are the key component to determining future demand. To determine future childcare needs among residents, BBC first examined the current number and proportion of non-seasonal Upper Blue residents that are children under six years old and the number and proportion of those that are currently using facility-based care. BBC then evaluated estimates from the town's planning staff about the number of homes expected to be built through 2025 and the number of homes that will be restricted to permanent residents. Combining those occupancy forecasts with the proportion of households with children and the proportion of children in facility-based care, provided a baseline demand projection for future childcare capacity needs. If housing continues to be priority for the Town, capacity and support around child care will continue to be a need for the Town to address.

Childcare users that work in Breckenridge or the Upper Blue but do not live in the Upper Blue Basin (in-commuters) are the second key driver of demand for facilities in Breckenridge. In 2018 in-commuters' children accounted for 23 percent of the facility-based childcare population, up from 17 percent in 2015. In order to forecast demand from this segment BBC followed a similar methodology as discussed for residents, beginning with the current number of in-commuters, the proportion with children and the proportion with children currently in facility-based care in Breckenridge. BBC compared job growth forecasts through 2025 to the forecasted housing growth to predict the change in in-commuters and then evaluated the proportion of those in-commuters expected to use Breckenridge childcare facilities.⁴

BBC did not have information on whether children on the waitlist are living in resident or in-commuter families. For the purposes of modeling future demand, waitlisted children were assumed to have the same geographic distribution as children currently in care: 77 percent residents and 23 percent in-commuters.

There may also be a very small proportion of future childcare users that neither live nor work in the Upper Blue Basin. Demand from these families is modeled as non-resident demand and is assumed to follow similar growth patterns as in-commuter demand.

BBC also evaluated recent trends in demographics and childcare usage to frame the results and provide upper and lower bounds for the baseline projection. Baseline demand projections are discussed under the following "demand projections" heading and the upper and lower bounds are discussed under the subsequent "sensitivity analysis" heading.

⁴ Job growth forecasts are based on Countywide employment projections published by the Colorado Department of Local Affairs office (DOLA).

Demand projections. Figure 8 displays current and future childcare demand among residents and in-commuters; data from 2015 are also included for reference. As shown in the figure, in 2015 there were 280 children using or needing facility-based childcare in Breckenridge—248 in care and 32 on waitlists. Between 2015 and 2018 demand increased substantially to 399 children using or needing facility-based childcare in Breckenridge—245 in care and 154 on the waitlist. This shift in demand is largely driven by higher usage rates among Upper Blue Residents but is also impacted by an increase in in-commuters and their use of childcare in Breckenridge.

Applying the current usage rates to demographic projections through 2025 yields an estimate of 437 individual children who may desire childcare in Breckenridge in 2025 (334 resident children and 103 in-commuter children), a 38-child increase from 2018.

Figure 8.
Number of Children Needing Childcare in 2015, 2018, and 2025

	2015	2018	2025	2018 to 2025 Difference
Upper Blue Residents				
Resident Households	4,272	4,358	4,757	399
Resident population	10,614	10,828	11,819	991
Number of children under 6	595	526	574	48
Children under 6 in facility-based care	205	188	205	17
Children under 6 on waitlist for care	27	118	129	11
In-commuters and non-residents				
Upper Blue workers	8,054	8,979	9,647	669
In-commuters to the Upper Blue	1,081	1,205	1,339	134
Non-resident children in care in Breckenridge	43	57	63	6
Non-resident children on waitlist for care	6	36	40	4
Total children using/needing facility-based childcare	280	399	437	38

Note: Workers reflects total number of workers; not jobs. On average Summit County workers have 1.2 jobs.

Source: BBC Research & Consulting.

Childcare capacity is not determined strictly by number of children but also by frequency of use. Not all of these children will occupy childcare slots five days per week. The number of childcare slots per day or week can be a more helpful measure of use and demand than the number of children. If we convert the number of children needing care in 2025 to spaces in childcare facilities based on the days of the week families currently use care, we project that as many as 1,528 weekly childcare slots (or child-days) could be needed by 2025—an increase of about 134 child-days per week.

As shown in Figure 9, this estimate reflects a total of 223 children needing care 4 to 5 days per week, another 111 children using care 3 days per week and 104 children needing care 1 to 2 days per week in 2025.

Figure 9.
Number of Children
by Days per Week
and Total Childcare
Slots Needed in
2025

Source:
 BBC Research & Consulting.

	2015	2018	2025	2018 to 2025 Difference
Demand: Number of Children	280	399	437	38
Number of days per week				
1 day	10%	7%	30	
2 days	20%	17%	73	
3 days	26%	25%	111	
4 days	25%	22%	96	
5 days	19%	29%	127	
Demand: Childcare Slots per Week	909	1,394	1,528	134
Average Days per Week per Child	3.2	3.5	3.5	

Sensitivity analysis. The forecasts shown in the previous two figures represent a best estimate of demand but do include some margin of error. In order to provide a range of results, BBC examined two additional demographic scenarios that could impact future demand:

1. A future usage rate that more closely resembles 2015 than 2018 (lower proportion of resident and in-commuter children needing care and lower frequency of use); and
2. An increase in the proportion of the population aged six or under beyond what currently available demographic data indicate.

The first scenario results in a lower projection, which matches the forecasted demand calculated as the baseline the 2016 Childcare Needs Assessment. The second scenario assumes higher population growth of young children in the Upper Blue and applies the same higher usage rates from 2018 to yield an upper bound estimate of demand.⁵

Figure 10 displays these upper and lower bound estimates along with the baseline projection by number of children and number of slots per week. The demand projection by number of children ranges from 318 to 469 and the projection by childcare slots per week ranges from 1,032 to 1,639 (equates to 206-328 slots per day).

⁵ The higher population growth among children aged six and under is modeled by assuming the population under age six accounts for 5.6 percent of the total population in 2025—the same proportion as in the 2010 Census but higher than the 2016 ACS data indicate (4.9%). This adjustment results in an estimated 663 children under 6 in the Upper Blue in 2025.

**Figure 10.
Baseline Projections and Upper and Lower Bound Estimates for 2025
Childcare Demand**

Note:

*Max capacity is based on daily capacity by age reported by providers. As discussed earlier in this report, perfect allocation of the max capacity is not realistic and should not be the primary measure of availability.

Source:

BBC Research & Consulting.

	Demand Projection Scenarios		
	Low	Baseline	High
Demand: Number of Children	318	437	469
Number of days per week			
1 day	31	30	33
2 days	63	73	79
3 days	82	111	119
4 days	80	96	103
5 days	62	127	136
Demand: Childcare Slots per Week	1,032	1,528	1,639
Demand: Childcare Slots per Day	206	306	328
Current Maximum Daily Capacity*	199	199	199

The figure above also displays the maximum capacity of each facility. Children per day capacity is determined by the daily capacity by classroom reported by providers. In reality, capacity is not static as centers may be able to reallocate space or classrooms for different ages (which have different capacity and ratio requirements) in response to market demand.

In addition, it is critical to note that perfect allocation of the max child days per week is not a realistic goal. A number of factors impact a facility’s utilized capacity and a family’s ability to access the care they need, including number of days per week needed, specific days needed and age of child. For these reasons, it is important to use caution when evaluating the childcare needs of a community through a simple comparison of current use and maximum capacity.

At the time this report was written, the Summit County government had proposed Ballot Measure 1A which includes funding for preschool tuition credits for four-year-olds county-wide.⁶ These tuition credits would be available to parents/guardians who live or work in Summit county and would ensure (on average) that families pay no more than 7-10 percent of their income on childcare. The tuition credits could be used in licensed childcare centers, family childcare homes and preschool classrooms. The impact of this initiative is not included in the demand analysis but it should be noted that the introduction of an additional funding source for four-year-old care likely means that Breckenridge childcare centers could expect full enrollment for that age group regardless of typical economic and employment fluctuations. It should also be noted that the program is not likely to shift children from facility-based care into Elementary ECE care due to the differences in schedule and childcare needs (school-based programs end at 3:00 pm and are not offered during the summer months).

⁶ The ballot measure is a 4.7 mill property tax levy for ten years and, in addition to childcare, provides funding for wildfire prevention/mitigation, mental health services, and recycling.

Summary of Top Findings and Changes Since the 2016 Needs Assessment

This report utilizes the best data available to project future demand for childcare. However, unknown variables—economic fluctuations, choices of Millennials (continuing to work/reside in Breckenridge, form families) and housing availability and affordability—will all influence future demand for childcare to some extent. To achieve greater certainty in meeting childcare demand, the Town should continue monitoring indicators of changes in demand for care, particularly in regard to waitlists for care which are currently indicating very high demand.

The Town should also continue its remarkable efforts to enable families and permanent residents to reside in Breckenridge to support the exceptional infrastructure it has put in place to support quality childcare.

The most significant change identified in this Data Update is the increase in the number of waitlisted children at the four primary childcare facilities in Breckenridge. In 2015, providers reported just 32 unduplicated children on their collective waitlists; by 2018 that number was up to 154. This increase indicates an immediate need for additional childcare capacity in the Upper Blue—particularly for infants who comprise 42 percent of waitlisted children—and results in higher projected demand through 2025 than was calculated in the previous needs assessment.

The updated demand model estimates demand will be between 318 and 469 children by 2025, when the Town of Breckenridge reaches buildout. Seventy six percent of those children are likely to need care three or more days per week; 24 percent will need care one to two days per week. As discussed in the previous section, Ballot Measure 1A, if passed, could increase childcare demand, particularly for four-year-olds in Summit County as a whole and in Breckenridge.

The projected demand of 318 to 469 children translates into 206 to 328 daily spots (see Figure 10), which exceeds the current capacity of 199 spots. Based on these projects, the Town of Breckenridge needs an additional 7 to 129 spots per day to accommodate future demand.

This mismatch in supply and demand indicates an immediate need for additional childcare capacity in Breckenridge. In considering future actions to accommodate demand the Town should:

- 1) Interview current partner providers to evaluate the reliability of waitlist counts and assess existing providers' willingness and/or ability to expand services to more children;
- 2) Assess county-wide demand and the potential impact of a county-wide childcare subsidy on Breckenridge providers and families;
- 3) Work with the school district to evaluate projected capacity and enrollment in ECE programs affiliated with elementary schools; and
- 4) Begin evaluating the feasibility and cost of an additional childcare facility and/or expanding existing facility capacity in Breckenridge while tracking changes in childcare demand over the next 12 months.