



MEMORANDUM

To: Kristen Anderson, Child Care Coordinator, City of Redwood City

From: Joanne Brion and Michelle Nilsson, Brion Economics Team

Subject: Final Redwood City Child Care Needs Assessment – 2015 and 2025 – Supply and Demand Analysis; BE #2522 - RWC

Date: October 19, 2016

Brion Economics, Inc. (BEI) has been retained by the City of Redwood City to conduct a local city needs assessment for all age groups, building on the work prepared countywide by BEI. This information will be used to identify and evaluate up to three potential new child care sites or buildings for new child care supply in the City. This memorandum presents methodology, analysis, and results of the Child Care Needs Assessment for current conditions (2015) and future conditions (2025) for children from birth to 12 years old in Redwood City. Like the recent San Mateo County Child Care Needs Assessment completed earlier this year, preschool age children include children ages two to four years old; five-year-olds are included in school age care because it is assumed that the majority will be attending either transitional kindergarten or kindergarten.

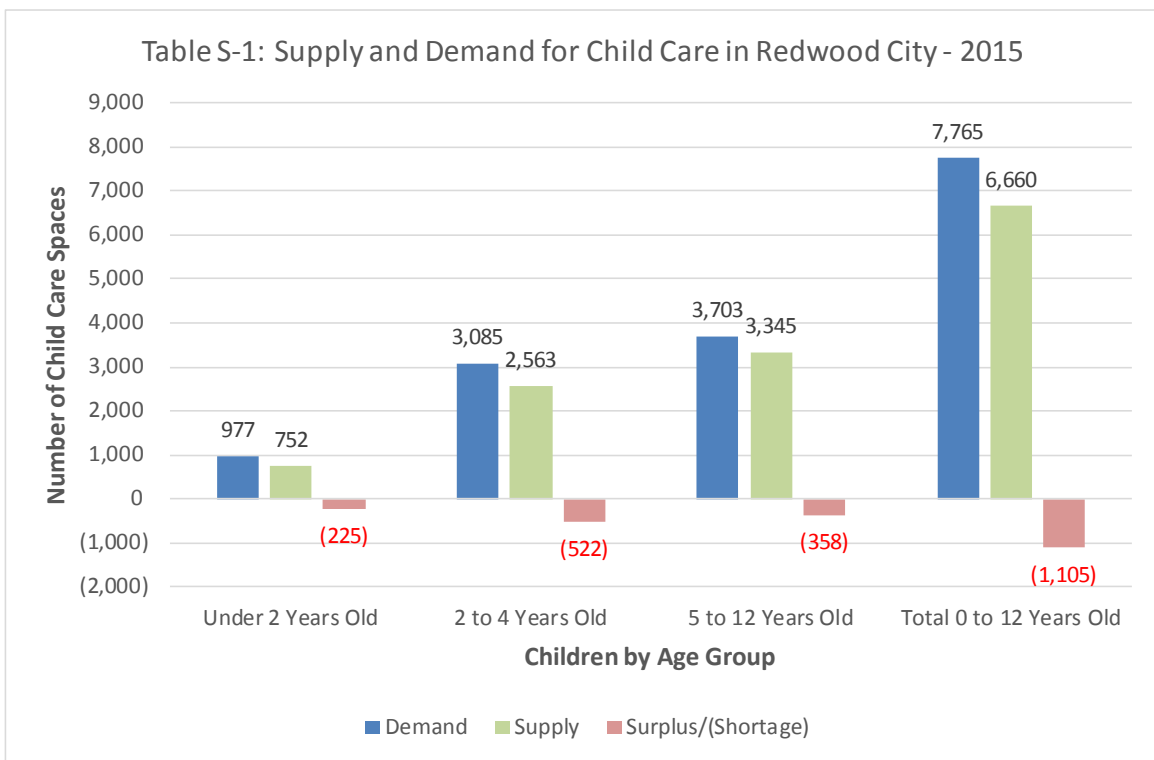
Summary of Findings

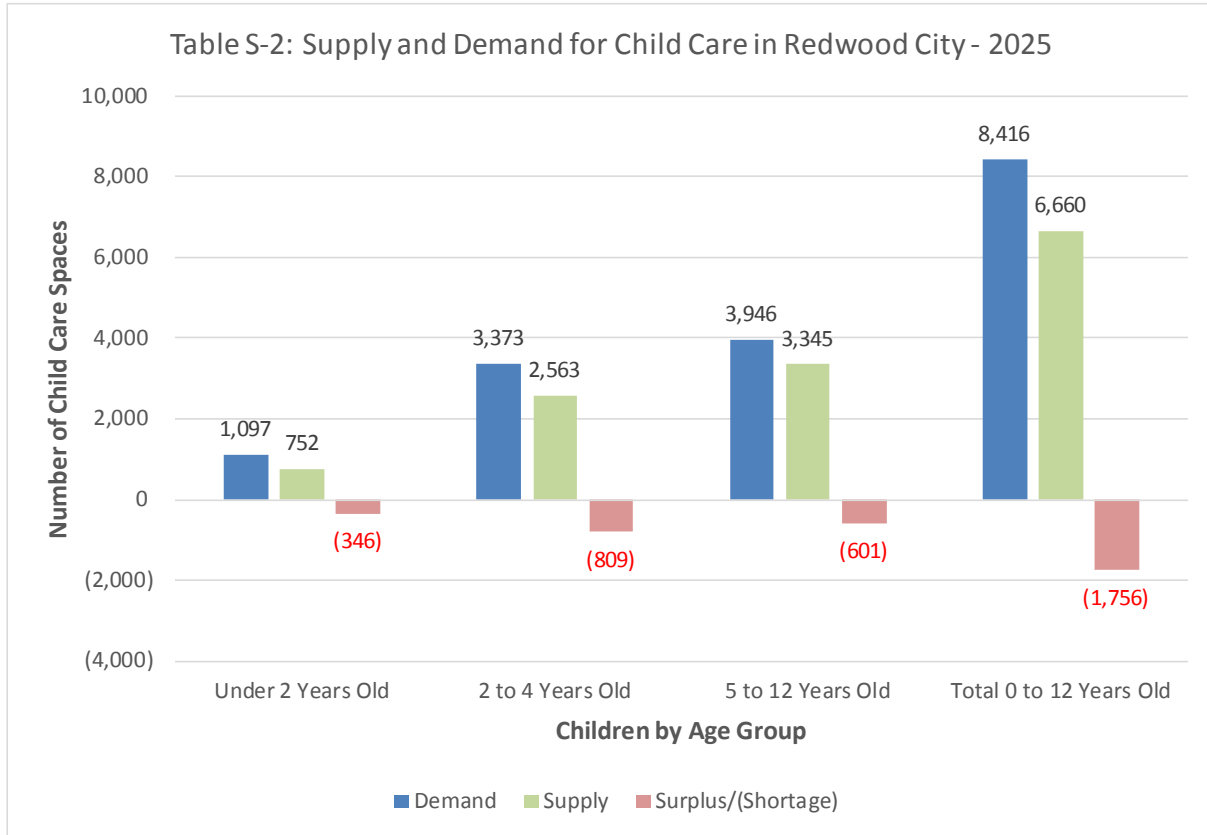
- **Demographics:** In 2015, there were an estimated 14,800 children ages birth to 12 years old in Redwood City.
- **Population Growth:** Redwood City will see an increase in population of 5,400 between 2015 and 2025 for a total of 88,400 residents in 2025. For children birth to 12 years old, there will be an increase of almost 1,000 (6.6%) for a total of 15,800 children.
- **Overall Demand:** 6,900 or 47% of those children require licensed or license-exempt care, based on labor force participation rates and demand factors (as discussed in more detail below; see **Table 4** and **Table 5**). For 2025, this demand will increase to around 7,400 children.

- **Infant Demand:** In 2015 there was demand for 977 infant spaces from residents and employees. With only 752 infant spaces available in the City, there was a shortage of 225 infant spaces; 77% of total infant demand was met.
- **Preschool Demand:** There was demand for an estimated 3,085 preschool spaces in 2015 and only 2,563 spaces available, resulting in a shortage of 522 spaces. Overall, 83% of preschool demand was met.
- **School Age Demand:** In 2015, there was a shortage of 358 school age spaces in Redwood City, meeting 90% of demand. The supply includes license-exempt programs in the City, such as ASES (After School Education and Safety) and private school after care.
- **Number of Providers:** In 2015, there were 157 providers in Redwood City, including 111 family child care homes and 46 child care centers. (See **Table 4**).
 - For Infants, there were 356 spaces in child care centers and 396 spaces in family child care homes for a total of 752 spaces.
 - For Preschool, there were 2,066 child care center spaces and 497 family child care home spaces for a total of 2,563 spaces in 2015.
 - For School Age, there were 3,108 center or license-exempt spaces and 237 family child care home spaces for a total of 3,345 spaces in 2015.
- **Subsidized Spaces:** Data on subsidized spaces shows 44 subsidized infant spaces, 782 subsidized preschool spaces, and 1,216 school age spaces. See **Table 3**.
- **Future Demand:** By 2025, it is estimated that there will be a demand for almost 1,100 infant spaces, almost 3,400 preschool spaces, and 3,900 school age spaces, as shown in **Table S-2** and **Table 5**.
- **Future Surplus/Shortage:** Based on the current supply of spaces, there will be a shortfall of almost 350 infant spaces, 800 preschool spaces, and 600 school age spaces.
- **Projection Data:** This current needs assessment uses projections provided by the City's Community Development Department and not ABAG estimates, which were used in the larger San Mateo County study. Therefore, the number of children by age group is different in this study. The demand factors for preschool children are also different, as discussed in the report. **Figure F-1** highlights the differences between the figures in this study and the County-wide study.

Figure F-1: Comparison of Current Redwood City Needs Assessment to Countywide Needs Assessment - 2015

Figure F-1: Comparison of Current Redwood City Needs Assessment to Countywide Needs Assessment - 2015			
Item	Redwood City Study	Countywide Study	% Difference
Total RWC Population - 2015	82,935	109,350	131.9%
Total RWC Employees - 2015	57,412	71,460	124.5%
Total Children 0 to 4 Years - 2015	6,221	7,966	128.0%
Total Demand for Infant Care - 2015	977	1,241	127.0%
Total Demand for Preschool Care - 2015	3,085	4,567	148.0%
Total RWC Population - 2025	88,381	121,350	137.3%
Total RWC Employees - 2025	70,960	80,430	113.3%
Total Children 0 to 4 Years - 2025	6,630	9,103	137.3%
Total Demand for Infant Care - 2025	1,097	1,411	128.6%
Total Demand for Preschool Care - 2025	3,373	5,208	154.4%





The Needs Assessment begins with collecting demographic data; then growth projections are incorporated into the analysis. Child care supply and demand analysis for the City is estimated at 2015 and 2025.

Tables 1 to 6 comprise the population, employment, summary of supply and demand estimates, and any unmet demand in the City. **Table 7** includes the endnotes for **Tables 4** and **5**.

This study focuses on children ages 0 to 12, with the following breakdown:

- Infants – children under age 2
- Preschool – children ages 2 to 4
- School Age – children ages 5 to 12

It is assumed that most five-year-olds will be enrolled in kindergarten or transitional kindergarten and will not be generating demand for preschool age child care spaces. This is consistent with the County-wide study mentioned above but not generally consistent with other child care studies BEI has prepared.

Demographic Tables

Table 1 shows population estimates for the City at 2015 and 2025, based on population projections from the City of Redwood City's Community Development Department. As shown, total population is estimated at 82,900 for 2015 and is expected to increase to 88,400 at 2025, or by 6.6%. **Table 1** also calculates 2015 population by age group for all children from birth to 12 years old. The breakdown of children by age is calculated based on data from the 2010 U.S. Census, which breaks down population by age. The percentage of children by age from the U.S. Census 2010 was applied to current 2015 and 2025 population figures to estimate the current and future number of children by age group.

Citywide, there are approximately 2,500 children under the age of two years, 3,700 children between the ages of two and four years old, and 8,600 children between the ages of five and 12 years, for a total of 14,800 in 2015. Children ages 12 and under make up approximately 17.9% of the total City population. For 2025, it is estimated that there will be 2,700 children under the age of two years, 3,900 children between the ages of two and four years old, and 9,100 children between the ages of five to 12 years, for a total of 15,800.

Employment

Current and future employment projections in Redwood City were provided by the City's Community Development Department and are summarized in **Table 2**. As of 2015, there are approximately 57,400 employees, or jobs, in Redwood City. Total employment is expected to increase significantly: by 23.6% to 71,000 by 2025.

Also shown in **Table 2** is the percent and number of employees that work in Redwood City but live outside of San Mateo County, based on data from the U.S. Census Journey-to-Work data.¹ These numbers are calculated for 2015 and the 2015 assumptions are applied to 2025 total employment estimates. Overall, approximately 48% of employees that work in Redwood City reside outside of the County. It is assumed that 3% of employees require licensed care in the City, based on other studies that have looked at employee demand. The analysis assumes one child (age birth to four years old) per employee, on average, of those employees that are assumed to demand care (or 3% of those that work in the City but live outside the County). Of those children, it is assumed that 40% require infant spaces and 60% require preschool spaces. This breakdown is based on the current ratio of infants and preschool age children in San Mateo County.

For 2015, it is estimated that employees who work in the City but reside outside of the County have a total of 827 children between the ages of birth and four years old. These children are estimated to generate demand for 331 infant spaces and 496 preschool spaces. In 2025, the

¹ The Journey-to-Work data is from 2006-2008 (most current available). Data was provided by Shimon Israel at MTC in March 2016.

number of employee children is estimated to increase to 1,022, generating demand for 409 infant spaces and 613 preschool spaces.

Subsidized Care

The number of children by age group who qualify for subsidized care in 2015 is calculated in **Table 3**, based on data from the Early Learning Needs Assessment Tool by the American Institutes for Research (AIR) and based on 2014 American Community Survey 5-year data at the ZIP code level.² For infants, 25.9% or 660 qualify for subsidized care. For preschool age children, 24.6% or 905 qualify for subsidized care. And for school age children, 25.7% or 2,206 qualify for subsidized care. In total, 25.5% or 3,771 children ages birth to 12 are eligible for subsidized care.

The current number of subsidized spaces was provided by the Child Care Partnership Council of San Mateo County. It is estimated that there are 44 subsidized spaces for infants, 782 for preschool, and 1,216 for school age care (school age care includes ASES programs). Overall, 54% of demand for subsidized care for children 0 to 12 years old is met. For infants, only 7% of demand is met. For preschool it is much higher at 86%, and for school age, 55% of demand is met.

² The Early Learning Needs Assessment Tool can be found at <http://www.elneedsassessment.org/>. AIR data for this study was provided by Sarah Kinahan, San Mateo County Office of Education, on August 1, 2016.

Table 1
Children by Age, 0-12 Years Old at 2015 and 2025
Redwood City Child Care Study - 2016

Age in Years (1)	2015 Population	% of Children 0-12 Years	% of Total Population	2025 Population	Growth 2015-2025	% Change in Population 2015 to 2025
0	1,284	8.67%	1.55%	1,368	84	
1	1,262	8.53%	1.52%	1,345	83	
2	1,229	8.30%	1.48%	1,309	81	
3	1,207	8.15%	1.46%	1,286	79	
4	1,239	8.37%	1.49%	1,321	81	
5	1,178	7.96%	1.42%	1,255	77	
6	1,131	7.64%	1.36%	1,206	74	
7	1,097	7.41%	1.32%	1,169	72	
8	1,086	7.34%	1.31%	1,157	71	
9	1,090	7.37%	1.31%	1,162	72	
10	1,025	6.92%	1.24%	1,092	67	
11	1,004	6.78%	1.21%	1,070	66	
12	972	6.56%	1.17%	1,036	64	
Total Ages 0-12	14,804	100.00%	17.85%	15,777	972	6.57%
Total Redwood City Population	82,935			88,381	5,446	6.57%
Total Infants (0-1 years)	2,546	17.20%	3.07%	2,713	167	6.57%
Total Preschool (2-4 years)	3,675	24.82%	4.43%	3,917	241	6.57%
Total School Age (5-12 years)	8,583	57.98%	10.35%	9,147	564	6.57%

(1) Total population estimates for 2015 and 2025 from the City of Redwood City Community Development Department. Population by age is based on the percentage breakdown from the 2010 U.S. Census and applied to population estimates for 2015 and 2025. Sources: Redwood City Community Development Department; U.S. Census; Brion Economics, Inc.

**Table 2
 Employment Growth and Non-Resident Employee Demand, 2015
 and 2025**

Redwood City Child Care Study - 2016

REDWOOD CITY	Estimates
Jobs at 2015 (1)	57,412
Jobs at 2025 (1)	70,960
Job Growth 2015-2025	13,548
% Increase	23.6%
Percent of Employees that Work in City and Live Outside County (2)	48.0%
Employee Demand for Child Care (3)	3%
2015 Total Employee Demand (4)	827
Demand 0-1 Years	331
Demand 2-4 Years	496
2025 Total Employee Demand (4)	1,022
Demand 0-1 Years	409
Demand 2-4 Years	613

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- (1) Jobs projections provided by Redwood City Community Development Department.
 - (2) Based on Journey-to-Work data from 2006-2008 (most current available). Data was provided by Shimon Israel at MTC in March 2016.
 - (3) We are assuming 3% of employees' children require licensed care: the breakdown of demand for infant and preschool spaces is based on the percentage of infants and preschoolers who currently reside in San Mateo County.
 - (4) Assumes that demand from employees is split 40% for infants and 60% for preschool. School age children are expected to demand care near their place of residence.

Sources: Redwood City Community Development Department; MTC; Brion Economics, Inc.

Table 3
Subsidized Spaces for Income Eligible Children - 2015
Redwood City Child Care Study - 2016

	0-1 Years	2-4 Years	5-12 Years	Total, 0 to 12 Years
Total Children	2,546	3,675	8,583	14,804
% Income Eligible Children (1)	25.9%	24.6%	25.7%	25.5%
Children at or Below 70% SMI	660	905	2,206	3,771
Supply of Subsidized Spaces (2)				
Number of Subsidized Spaces	44	782	1,216	2,042
Surplus/(Shortage) of Subsidized Care	(616)	(123)	(990)	(1,729)
% of Subsidized Demand Met	7%	86%	55%	54%

(1) The Early Learning Needs Assessment Tool from the American Institutes for Research (AIR) is found at <http://www.elneedsassessment.org/>. Data used is for 2014 (5 year averages).

(2) Data on subsidized slots was provided by the Child Care Partnership Council of San Mateo County. For school age care, ASES programs are also included in the total number of subsidized spaces.

Sources: American Institutes for Research; Child Care Partnership Council of San Mateo County; Brion Economics, Inc.

Supply and Demand

Child care demand is calculated using the number of children with working parents by age group, derived from applying labor force participation rates (LFPRs) for parents with children under age six (from the 2014 5-Year American Community Survey) to the number of infants and the number of two-year-olds. This method estimates the number of children in each of those age groups who have working parents for Redwood City. Three- and four-year-old children are not adjusted by LFPRs because the City has chosen not to do this, as a policy decision for this age group. Labor force participation rates include families with two working parents or a single parent who works.

Additional demand factors for licensed care are then applied to the number of children with working parents³ to determine the number of those children requiring licensed care, as discussed above. It is assumed that a percentage of children with working parents do not require licensed care because some parents choose to have nannies, extended family, friends, or other arrangements for their children and are therefore not looking for a licensed child care space.

³ Demand factors are also applied to three- and four-year-old children even though labor force participation rates are not applied to them.

For infants, a demand factor of 37% is applied. This is the demand factor recommended by the California Child Care Coordinators Association for needs assessments and agreed upon by the data committee for this project.

For preschool children, demand factors typically vary between 75% and 100% of children with working parents. For two-year-olds, a 75% licensed care demand factor is applied after LFPRs are applied. For three- and four-year-olds, an 80% licensed care demand factor is applied, meaning that 80% of all three- and four-year-olds (not adjusted with LFPRs) in the City require a licensed child care space.

For school age children, it is estimated that 60% of children ages 5 to 12 with working parents demand some type of licensed or license-exempt after school care, including after school programs at school sites, ASES programs, private school after care, and other similar programs.

Once demand is calculated, the percent distribution of total demand for spaces by age group is presented as well as the percent of total children requiring licensed care.

Current child care demand from employees that work in Redwood City but reside outside of the county is included in **Table 4**, based on the employment numbers calculated in **Table 2**. It is estimated that there are approximately 800 children of employees who work in the City that require some form of licensed child care. Of this total, approximately 300 are estimated to be infants and 500 are estimated to be preschool age. School age children are expected to generate demand near their place of residence and are not included in employee demand factors for this study.

Taking the total demand from residents and employees, demand by age group is then calculated. There is demand for almost 1,000 infant spaces, 3,100 preschool spaces, and 3,700 school age spaces, totaling 7,800 across all age groups.

Table 4 summarizes current licensed and legally license-exempt⁴ child care supply by age group for infants, preschool, and school age children in Redwood City as of June 2015 (with some updates with 2016 data), based on information provided by the Child Care Coordinating Council of San Mateo County (4Cs) and Child Care Licensing. Supply data includes the number of providers by type (either Family Child Care Homes or Licensed Centers), and breaks down the number of spaces by age group, i.e., either Infants, Preschool, or School Age. Total child care supply and the distribution of spaces by age group is also calculated.⁵ School age care includes after school care on school sites, ACES programs, and other license-exempt care.

⁴ Legally license-exempt programs include City Park & Recreation programs, Co-operative/Parent Participation programs, school district programs, and federal migrant programs.

⁵ One center with an Atherton address and five centers with Menlo Park addresses are included in the Redwood City supply count because they are within the school district attendance area and city's Sphere of Influence.

Citywide, there are approximately 750 infant spaces, 2,600 preschool spaces, and 3,300 school age spaces, for a total of almost 6,700 spaces.

Based on the current supply and demand in the City in 2015, there is a shortage of 225 infant spaces and 522 preschool spaces, with 77% and 83% of demand met, respectively. School age care currently shows a shortage of 358 spaces or 90% of demand. Overall, there is a shortage of 1,105 spaces citywide, and 86% of total demand is met by existing spaces/facilities. The current demand for and surplus/shortage of subsidized care by age is also included at the bottom of **Table 4**.

Table 5 presents the same data as **Table 4**, but for 2025 conditions. It is estimated there will be a total demand for 7,400 spaces for resident children ages birth to 12. It is estimated that 1,022 infants and preschool age children of employees will demand licensed care in the City in 2025, of which 409 spaces will be for infants and 613 spaces will be for preschool. Demand including non-resident employees at 2025 is for 1,100 infant spaces, 3,400 preschool spaces, and 3,900 school age spaces, for a total demand of 8,400 for children birth to 12.

Based on current supply, as future supply is not known at this time, there will be a shortage of 346 infant spaces, 809 preschool spaces, and 601 school age spaces. Overall, at 2025, there will be an estimated shortage of almost 1,800 child care spaces across all age groups.

The demand for universal preschool in Redwood City at 2015 and 2025 is calculated in **Table 6**. This assumes that every three- and four-year-old child in Redwood City demands a preschool space, regardless of the employment status of parents or other types of care.⁶ Based on these assumptions, it is assumed that there is a need for 3,675 preschool spaces in 2015 and 3,917 spaces in 2025. Based on current supply, this is a shortage of 1,112 spaces in 2015 and 1,353 spaces in 2025.

Table 7 provides the endnotes and data sources for **Tables 4** and **5**.

⁶ Preschool demand in Table 5 discounts the total number of three- and four-year-old children, assuming that 80% require licensed spaces. The demand for universal preschool calculated in Table 6 does not adjust demand; it assumes every single three- and four-year-old child in the City requires a licensed child care space.

Table 4
Existing Child Care Demand and Supply in 2015
Redwood City Child Care Study - 2016

REDWOOD CITY	No. of Facilities	Child Care at 2015			
		Infants	Preschool	School Age	Total
		0-1 Years	2-4 Years	5-12 Years	0 to 12 Years
EXISTING DEMAND		Child Care Demand			
Estimated Total Children	(1)	2,546	3,675	8,583	14,804
Average LFPR/Adjustment Factor	(2)	68.6%		71.9%	75.7%
Children With Working Parents		1,746	3,289	6,171	11,207
Licensed Care Demand Factor	(3)	37%		60%	
Resident Children Needing Licensed Care		646	2,589	3,703	6,938
% of Total Resident Children Needing Licensed Care		25%	70%	43%	47%
Children from Non-Resident Employees Needing Licensed Care		331	496	0	827
Total Demand for Child Care Spaces		977	3,085	3,703	7,765
% Distribution		13%	40%	48%	100%
EXISTING SUPPLY		Child Care Spaces			
Family Child Care Home Supply	(4)	111			
Child Care Center Supply		46			
Current Child Care Supply		157			
% Distribution		11%	38%	50%	100%
EXISTING SURPLUS/(SHORTAGE)					
Percentage of Demand Met by Existing Facilities/Spaces	(5)				
		(225)	(522)	(358)	(1,105)
		77%	83%	90%	86%
DEMAND FOR SUBSIDIZED CARE					
Children at or Below 70% of SMI with Working Parents		660	905	2,206	3,771
Surplus (or shortage) of Subsidized Care		(616)	(123)	(990)	(1,729)
Percent of Subsidized Demand Met		7%	86%	55%	54%

See Table 7 for footnote references.

Sources: U.S. Census; American Community Survey 2014 5-Year Estimates; Redwood City Community Development Department; Child Care Partnership Council of San Mateo County; Community Care Licensing Division of the California Department of Social Services (CCLD); Brion Economics, Inc.

Table 5
Future Child Care Demand and Supply in 2025
Redwood City Child Care Study - 2016

REDWOOD CITY	No. of Facilities	Child Care at 2025			
		Infants	Preschool	School Age	Total
		0-1 Years	2-4 Years	5-12 Years	0 to 12 Years
EXISTING DEMAND		Child Care Demand			
Estimated Total Children	(1)	2,713	3,917	9,147	15,777
Average LFPR/Adjustment Factor	(2)	68.6%		71.9%	75.7%
Children With Working Parents		1,861	3,505	6,577	11,943
Licensed Care Demand Factor	(3)	37%		60%	
Resident Children Needing Licensed Care		689	2,759	3,946	7,394
% of Total Resident Children Needing Licensed Care		25%	70%	43%	47%
Children from Non-Resident Employees Needing Licensed Care		409	613	0	1,022
Total Demand for Child Care Spaces		1,097	3,373	3,946	8,416
% Distribution		13%	40%	47%	100%
EXISTING SUPPLY		Child Care Spaces			
Family Child Care Home Supply	(4)	111	396	497	237
Child Care Center Supply		46	356	2,066	3,108
Current Child Care Supply		157	752	2,563	3,345
% Distribution		11%	38%	50%	100%
EXISTING SURPLUS/(SHORTAGE)			(346)	(809)	(601)
% Distribution			20%	46%	34%
Percentage of Demand Met by Existing Facilities/Spaces	(5)		68%	76%	85%

See Table 7 for footnote references.

Sources: U.S. Census; American Community Survey 2014 5-Year Estimates; Redwood City Community Development Department; Child Care Partnership Council of San Mateo County; Community Care Licensing Division of the California Department of Social Services (CCLD); Brion Economics, Inc.

Table 6
Demand for Universal Preschool - 2015 and 2025
Redwood City Child Care Study - 2016

REDWOOD CITY	2015	2025
DEMAND		
All Preschool Age Children (1)	3,675	3,917
SUPPLY		
Family Child Care Home Supply	497	497
Child Care Center Supply	<u>2,066</u>	<u>2,066</u>
Current Child Care Supply	2,563	2,563
Child Care Shortage at 100% Demand	(1,112)	(1,353)
% of Demand Met	70%	65%

(1) Universal Preschool refers to having a preschool space for all 3-4-year-olds, regardless of employment status of parents.

Sources: Redwood City Community Development Department; Child Care Partnership Council of San Mateo County; Community Care Licensing Division of the California Department of Social Services (CCLD); Brion Economics, Inc.

Table 7

Endnotes for Tables

Redwood City Child Care Study - 2016

- (1) Population by age is based on the percentage breakdown from the 2010 U.S. Census and applied to population estimates for 2015 and 2025 from the Redwood City Community Development Department.
- (2) Labor force participation rates are from the 5-Year American Community Survey 2014 and include children under six years old with two working parents or a single working parent. For the 2- to 4-year olds, the labor force participation rate is applied to 2 year olds; for 3- and 4-year olds, it is assumed that 80% need licensed care, so the number of 3- and 4-year olds is not discounted by labor force participation rates. Non-working parents also enroll children in preschool for school readiness.
- (3) Not all children with working parents are assumed to need licensed care: percentage assumptions are used to calculate the number of children requiring licensed care under each age category. The remaining children are assumed to be cared for in alternate arrangements, such as by family members, nannies, friends, and other unlicensed care. For children ages 3- and 4-years old, it is assumed that 80% need care in the form of preschool since many are enrolled for school readiness reasons, and not because the parents require care due to work.
- (4) Data on child care supply provided by the Child Care Partnership Council of San Mateo County and Community Care Licensing Division of the California Department of Social Services (CCLD). Data is for June 2015.
- (5) Demand that calculates as less than 100% means that there is greater demand than supply; percent of demand that is over 100% means supply exceeds demand.

Source: Brion Economics, Inc.