

RAMSEY COUNTY WORKFORCE SOLUTIONS

Early Childhood Education and
Childcare Workforce Challenges and
Opportunities

RealTime Talent

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Ramsey County Rising Together

Report Overview

This report represents an ongoing partnership between RealTime Talent and Ramsey County Workforce Solutions to understand and address the workforce opportunities and challenges present in Ramsey County.

In 2021, RealTime Talent and Ramsey County Workforce Solutions will explore four main activity and outcome areas including:

- Opportunities for children & youth
- Ramsey County Local Plan Labor Market Report
- Opportunities in the IT and Hospitality/Services Sectors
- Opportunities and challenges in suburban Ramsey County and St. Paul's East Side

This report explores the following research questions:

- What employment, wage, and unemployment trends were observed in Early Childhood Education and Childcare Services over the past five years, with particular attention to 2020?
- What Early Childhood Education and Childcare Services jobs are employers struggling most to fill, as evidenced by job posting data?
- What skills, certifications, and experience are currently in demand for Early Childhood Education and Childcare Services talent in Ramsey County?
- What are the specific challenges for attracting Early Childhood Education and Childcare Services talent to available careers?
- What can job posting data tell us about how are employers responding to the childcare crisis?

Why this Report Matters

As we look to the future and work to build an economy that works for everyone, we must start with local insights and community voices. This report is a place to begin the conversations that will spark our collective next steps. To learn more about what Ramsey County Workforce Solutions is doing with these findings and to get involved in Reimagining Ramsey County, visit www.ramseycountymeansbusiness.com.

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Introduction

Ramsey County is leading the development of a comprehensive economic development strategy centered around equitable growth and strengthening economic competitiveness.¹ The Economic Competitiveness and Inclusion Plan indicates ways that COVID-19 has massively disrupted the Ramsey County economy and elaborates on how communities of color have been disproportionately impacted by the virus and economic loss - including job losses.

Although Early Childhood Education and Childcare Services occupations represent a small portion of the county's workforce, representing about 1% of all employment in the county, these roles have been essential during the pandemic and will be critical during the post-pandemic recovery. Access to stable childcare could be a potential barrier to return to work for many Ramsey County residents and workers. Economic researcher focused on getting unemployed people back to work found that "Childcare obligations will constrain many workers when reopening the US economy" (Dingel et al., 2020). The same study adds, "younger workers, who might be able to return to work earlier to the extent that they are less susceptible to the virus, are also more likely to require childcare arrangements in order to return to work" (Dingel et al., 2020). As highlighted in Ramsey County's Economic Competitiveness and Inclusion Plan, the County's age distribution "has relatively few 30-45-year-olds, and it has a lot of young people (15-29 years-old)."² Both in Ramsey County and nationwide, Early Childhood Education and Childcare Services is facing a supply problem—not necessarily a demand problem.

¹ <https://www.ramseycountymeansbusiness.com/about/ecip>

² https://www.ramseycountymeansbusiness.com/media/userfiles/subsite_133/files/ecip/RCBoardJobsandIndustry.pdf

Opportunities and Challenges in Early Childhood Education and Childcare Services

This section highlights key employment, wage, and unemployment trends were observed in Early Childhood Education and Childcare Services occupations in Ramsey County over the past five years, with attention to 2020Q3. Childcare Workers, Preschool Teachers, Except Special Education, Education and Childcare Administrators, Preschool and Daycare, Special Education Teachers, Preschool work in various settings including, but not limited to, nonprofit and private childcare centers, public schools, in-home daycares, and in private households.

Employment

HISTORICAL EMPLOYMENT AND WAGES

As of the third quarter of 2020, an estimated 3,441 people work in Ramsey County in Early Childhood Education and Childcare Services roles such as Childcare Workers, Preschool Teachers, Education and Childcare Administrators, and Special Education Teachers for preschools, representing about 1% of all employment in the county. Unemployment in Ramsey County early childhood roles sits at about 8.8%, compared to 6% across all positions as of the third quarter of 2020. The average wage for an Early Childhood Education and Childcare Services talent is about \$35,000 ranging from \$28,200 for Childcare Workers up to \$69,900 for Preschool Special Education Teachers.

Over the past five years, employment in Early Childhood Education and Childcare Services roles has increased by about 1.1% annually on average, with the greatest growth among Special Education Teachers in preschools (5.0% annual growth), though in small volumes and with low openings due to turnover.

Early Childhood Education and Childcare Service Employment in Ramsey County, 2020Q3

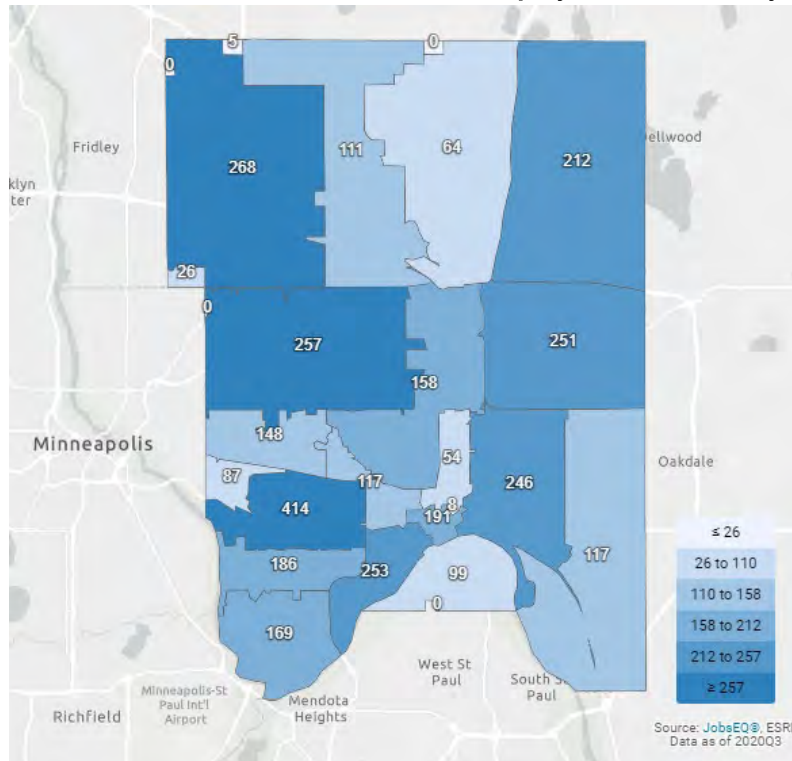
SOC	Occupation	Current						5-Year History	
		Empl 2020Q3	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %
39-9011	Childcare Workers	2,077	\$28,200	1.06	239	11.2%	62	80	0.8%
25-2011	Preschool Teachers, Except Special Education	1,147	\$41,000	1.13	46	5.1%	119	73	1.3%
11-9031	Education and Childcare Administrators, Preschool and Daycare	112	\$67,300	0.86	3	2.0%	12	7	1.2%
25-2051	Special Education Teachers, Preschool	105	\$69,900	2.24	4	2.5%	2	23	5.0%
	Early Childhood Education and Childcare Services	3,441	\$35,000	1.09	293	8.8%	196	183	1.1%
	Total - All Occupations	334,772	\$60,300	1.00	17,722	6.0%	15,057	-8,518	-0.5%

Source: JobsEQ® Data as of 2020Q3 unless noted otherwise. Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.
2. Wage data are as of 2019 and represent the average for all Covered Employment
3. Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe of postings. Ads lacking zip code information but designating a place (city, town, etc.) may be assigned to the zip code with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).

Employment in Early Childhood Education and Childcare roles is not equally spread out across the county. Higher concentrations of employment in these roles are found in the Midway and Southern regions of Ramsey County.

Early Childhood Education and Childcare Services Employment in Ramsey County, 2020Q3



INDUSTRY DISTRIBUTION OF OCCUPATIONAL EMPLOYMENT

By industry, nearly 42% of all Early Childhood and Childcare Services talent is employed in Child Day Care Services, with Elementary and Secondary Schools following second at 14% of all occupational employment. These two sub-industries also represent the largest share of future demand anticipated over the next ten years. The highest average wages are offered by Individual and Family Services (NAICS 6241) and Religious Organizations (NAICS 8131).

About 13% of all talent employed in Early Childhood and Childcare Services roles are self-employed (of those reporting taxable income), 77% work for private employers, and 10% work for local, state, or federal government.

Top Industry Employment of Early Childhood and Childcare Services Talent in Ramsey County, 2020Q3 with 10-Year Demand under a COVID-19 Forecast Model

NAICS Code	Industry Title	CURRENT			10-YEAR DEMAND			
		% of Occ Empl	Empl	Avg Ann Wages	Exits	Transfers	Empl Growth	Total Demand
6244	Child Day Care Services	41.8%	1,439	\$34,000	898	1,047	77	2,022
6111	Elementary and Secondary Schools	13.9%	479	\$38,100	285	339	65	689
8131	Religious Organizations	11.3%	390	\$41,800	216	263	6	486
6241	Individual and Family Services	6.7%	232	\$44,200	141	170	78	390
8141	Private Households	6.7%	230	\$28,100	189	192	18	399
8134	Civic and Social Organizations	4.0%	137	\$31,100	112	122	37	271
6239	Other Residential Care Facilities	3.9%	134	\$32,000	96	98	-5	188
7139	Other Amusement and Recreation Industries	2.8%	98	\$26,900	87	89	31	207
6116	Other Schools and Instruction	1.3%	46	\$34,200	31	35	9	75
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	0.8%	29	\$34,200	23	24	6	53
8129	Other Personal Services	0.7%	25	\$24,400	20	20	2	42
5511	Management of Companies and Enterprises	0.6%	22	\$47,300	11	15	1	27
6113	Colleges, Universities, and Professional Schools	0.6%	22	\$37,500	12	15	0	27
6117	Educational Support Services	0.6%	20	\$43,400	11	13	3	28
6242	Community Food and Housing, and Emergency and Other Relief Services	0.5%	18	\$33,800	13	13	1	27
n/a	All Others	3.6%	123	n/a	78	89	11	177

Source: JobsEQ®
 Data as of 2020Q3 except wages which are as of 2019. Note that occupation-by-industry wages represent adjusted national data and may not be consistent with regional, all-industry occupation wages shown elsewhere in JobsEQ.
 Note: Figures may not sum due to rounding.

UNEMPLOYMENT TRENDS

Childcare and school-age care providers are Tier 1 Essential Workers as they provide in-person instruction or caring for children of critical workers. Being designated as essential permitted Early Childhood Education and Childcare workers to work outside of the home, but it did not safeguard them from layoffs. From March 16, 2020, to January 15, 2020, 3,562 Early Childhood Education and Childcare workers applied for unemployment insurance in Ramsey County, representing about 3.5% of the county's unemployment insurance applications.³ A similar impact was observed across the MSP Metro, though Ramsey County ranks highest of the seven counties.

³ Unemployment Insurance Application counts are collected by the Minnesota Department of Employment and Economic Development and aggregated at the minor group level or three-digit level. The four Early Childhood Education and Child Care Service occupations in this report are classified under three different minor groups. We have excluded Other Management Occupations (11-9000) from this section because the minor group includes a wide variety of management positions unrelated to Early Childhood Education or Childcare Services. The three minor SOC groups analyzed here include 39-9000 Other Personal Care and Service Workers (includes Childcare Workers) and 25-2000 Preschool, Primary, Secondary, and Special Education (includes Preschool Teachers, Except Special Education and Special Education Teachers, Preschool).

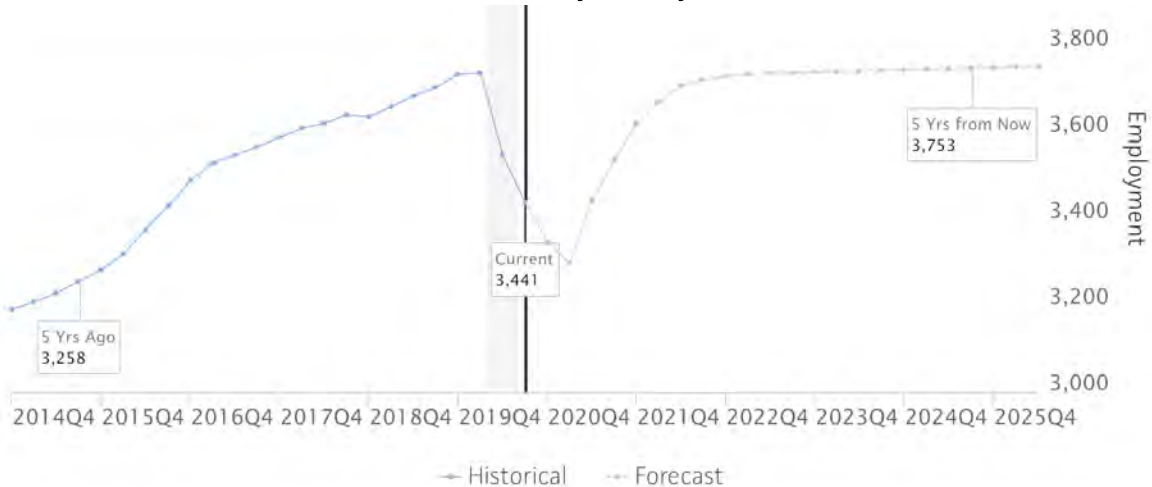
Unemployment Insurance Applicants by Occupations Requesting Insurance in Ramsey County and the MSP Metro from March 16, 2020 - January 15, 2021

Occupation Group	Unempl. Insurance Applicants in Ramsey County	% of Total Applicants in Ramsey County	Unempl. Insurance Applicants in MSP Metro	% of Total Applicants in MSP Metro
Other Personal Care and Service Workers	2,042	2.0%	10,700	1.8%
Preschool, Primary, Secondary, and Special Education	1,520	1.5%	8,800	1.5%
Early Childhood Education and Childcare Services	3,562	3.5%	19,500	3.3%
Total - All Occupations	102,873		591,575	

EMPLOYMENT FORECAST

As Ramsey County looks to future recovery from the pandemic's heavy blow to its economy and public health, forecasts made today may look very different from realities seen in years to come. Early Childhood Education and Childcare careers anticipate a 1.8% annual growth overall for the next five years, one percentage point higher than all occupational growth forecasted in the county. The largest expansions in employment are for Childcare Workers roles (1.9% annual growth) and Special Education Teachers, Preschool (1.9% annual growth) roles.

Early Childhood Education and Childcare Services Employment Forecast, COVID-19 Impacts, Ramsey County



Source: JobsEQ®, Data as of 2020Q3, The shaded areas of the graph represent national recessions.

Early Childhood Education and Childcare Service Employment in Ramsey County - COVID Forecast, 2020Q3

SOC	Occupation	Current						5-Year History		5-Year Forecast				
		Empl 2020Q3	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Ann %	Total Demand	Exits	Transfers	Empl Growth	Ann% Growth
39-9011	Childcare Workers	2,077	\$28,200	1.06	239	11.2%	62	80	0.8%	1,861	824	836	202	1.9%
25-2011	Preschool Teachers, Except Special Education	1,147	\$41,000	1.13	46	5.1%	119	73	1.3%	705	243	370	92	1.5%
11-9031	Education and Childcare Administrators, Preschool and Daycare	112	\$67,300	0.86	3	2.0%	12	7	1.2%	54	15	31	8	1.5%
25-2051	Special Education Teachers, Preschool	105	\$69,900	2.24	4	2.5%	2	23	5.0%	53	19	24	10	1.9%
	Early Childhood Education and Childcare Services	3,441	\$35,000	1.09	293	8.8%	196	183	1.1%	2,674	1,101	1,260	312	1.8%
	Total - All Occupations	334,772	\$60,300	1.00	17,722	6.0%	15,057	-8,518	-0.5%	204,662	73,587	117,369	13,706	0.8%

Source: JobsEQ® Data as of 2020Q3 unless noted otherwise. Note: Figures may not sum due to rounding.

1. Data based on a four-quarter moving average unless noted otherwise.

2. Wage data are as of 2019 and represent the average for all Covered Employment

3. Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe of postings. Ads lacking zip code information but designating a place (city, town, etc.) may be assigned to the zip code with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).

Workforce Demographics

In Ramsey County, there is a greater share of people between the ages of 20 and 24 working in Early Childhood Education and Childcare Services than in overall employment across all occupations. Early Childhood Education and Childcare occupations have a greater share of workers with either a 2-year degree or 4-year degree than in employment across all occupations in the county, despite these occupations requiring less educational attainment on average. Females assume the majority of Early Childhood Education and Childcare roles, representing 92.6% of workers in these occupations--about 43 percentage points higher than in all occupations in the county. In Ramsey County, there are higher numbers of Black/African American workers in Early Childhood Education and Childcare occupations than expected by their local employment rate.

Among the Early Childhood and Childcare Education positions in Ramsey County, occupations that have a higher concentration of younger female workers, lower educational attainment, and are more diverse all tend to have lower average annual wages. For instance, Childcare Worker roles have the lowest average annual wage (\$28,200), highest concentration of younger workers (31% between ages 16 to 24), high concentration of female employees (93.0%) and larger share of workers with lower educational attainment (32% with a high school diploma or less). In addition, Childcare Worker roles have a higher share of Black/African American (14.7%) and Hispanic workers (9.5%) than expected by their local employment rate (10.6% and 7.0% respectively).

In contrast, Education and Childcare Administrator roles have the higher average annual wage (\$67,300), a higher concentration of older workers (55% are 45 years of age and older), smaller percentage of females (64.0%) and larger share of workers with higher educational attainment (62% have an Advanced degree). Education and Childcare Administrator roles have a higher share of White workers (84.1%) than expected by their local employment rate (73.2%).

Early Childhood Education and Childcare Services Demographics in Ramsey County, Minnesota, 2020Q3*

	Occupations					
	Childcare Workers (39-9011)	Preschool Teachers, Except Special Education (25-2011)	Education and Childcare Administrators, Preschool and Daycare (11-9031)	Special Education Teachers, Preschool (25-2051)	EDU - Early Childhood and Childcare Education (8947)	Total - All Occupations (00-0000)
Average Annual Wage	\$28,200	\$41,000	\$67,300	\$69,900	\$35,000	\$60,300
Age Group						
65+	4.7%	2.8%	4.7%	3.8%	4.1%	4.7%
55-64	13.6%	12.1%	19.1%	17.5%	13.7%	16.0%
45-54	15.1%	19.1%	30.8%	24.2%	17.5%	18.5%
35-44	13.8%	21.7%	23.8%	22.0%	16.9%	19.1%
25-34	22.0%	29.1%	17.2%	25.5%	23.9%	26.5%
20-24	19.9%	13.5%	3.4%	6.4%	16.6%	10.9%
16-19	10.8%	1.8%	0.9%	0.6%	7.3%	4.3%
Education Attainment						
Advanced	6.0%	16.7%	61.7%	52.6%	14.2%	16.6%
4-year degree	25.4%	44.8%	27.9%	37.5%	31.5%	29.4%
2-year degree	13.4%	14.0%	3.4%	3.6%	12.6%	9.9%
Some college	22.6%	15.3%	4.1%	3.8%	18.7%	16.9%
HS	24.1%	8.2%	2.6%	2.4%	17.5%	19.7%
Less than HS	8.3%	0.9%	0.3%	0.1%	5.4%	7.4%
Gender						
Female	93.0%	98.5%	64.0%	84.5%	92.6%	49.8%
Male	7.0%	1.5%	36.0%	15.5%	7.4%	50.2%
Race and Ethnicity						
White	72.2%	76.8%	84.1%	89.2%	74.9%	73.2%
Black	14.7%	10.3%	9.0%	5.3%	12.7%	10.6%
American Indian	0.6%	0.5%	0.3%	0.1%	0.5%	0.6%
Asian	9.0%	8.4%	3.9%	3.6%	8.3%	12.7%
Pacific Islander	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Two or More Races	3.5%	4.1%	2.7%	1.7%	3.5%	2.9%
Hispanic	9.5%	4.7%	3.2%	1.7%	7.5%	7.0%
Non-Hispanic White	90.5%	95.3%	96.8%	98.3%	92.5%	93.0%
Total Employment	1,890	858	168	136	3,052	277,359

Source: JobsEQ®, Data as of 2020Q3 unless noted otherwise

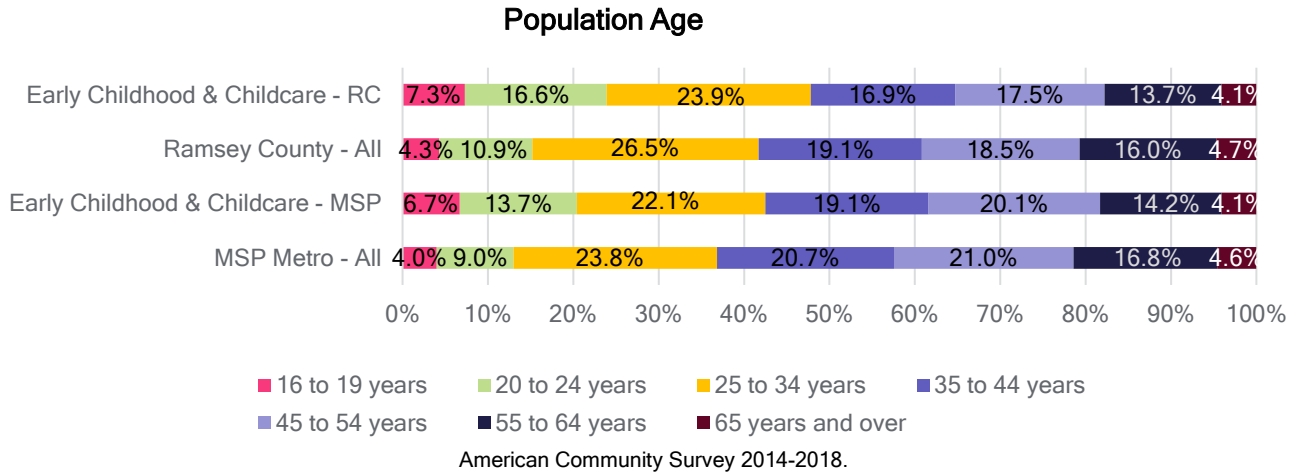
Note: Figures may not sum due to rounding

1. "Overall occupation" characteristics refer to attributes across all individuals in those occupations, not just those limited to the demographic categories shown in this table.

*Green highlighting indicates an overrepresentation of 2% or more compared to all occupations in Ramsey County.

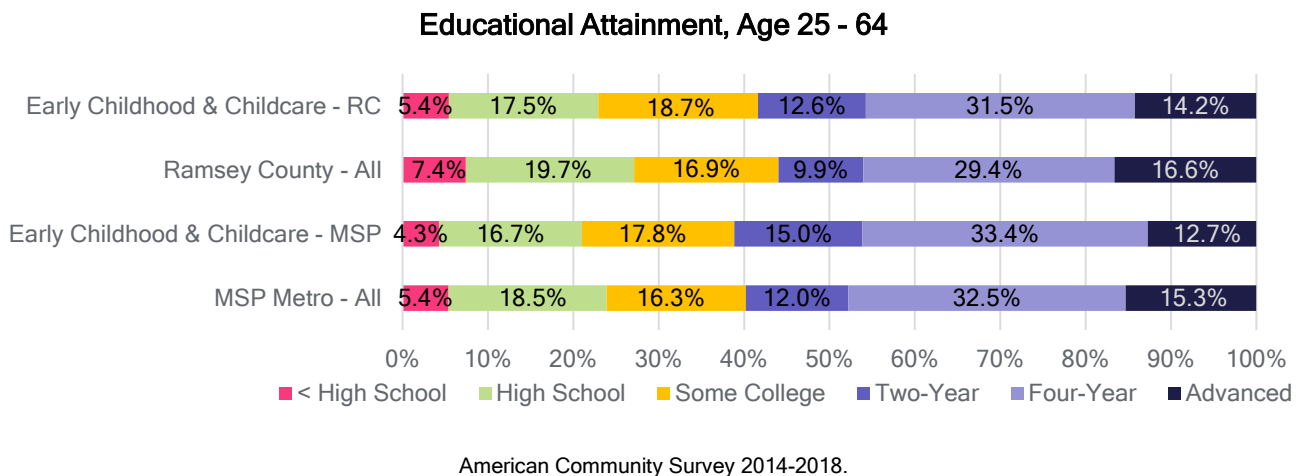
AGE

Early Childhood Education and Childcare talent in Ramsey County have a higher share of younger workers between the ages 16 to 24 years old (23.9%) than the County’s total employed population in the same age group (15.2%). The share of younger workers (16 to 24 years of age) in Ramsey County Early Childhood Education and Childcare occupations is about four percentage points higher than the share found in MSP Seven-County Metro Early Childhood Education and Childcare roles (20.4%).



EDUCATIONAL ATTAINMENT

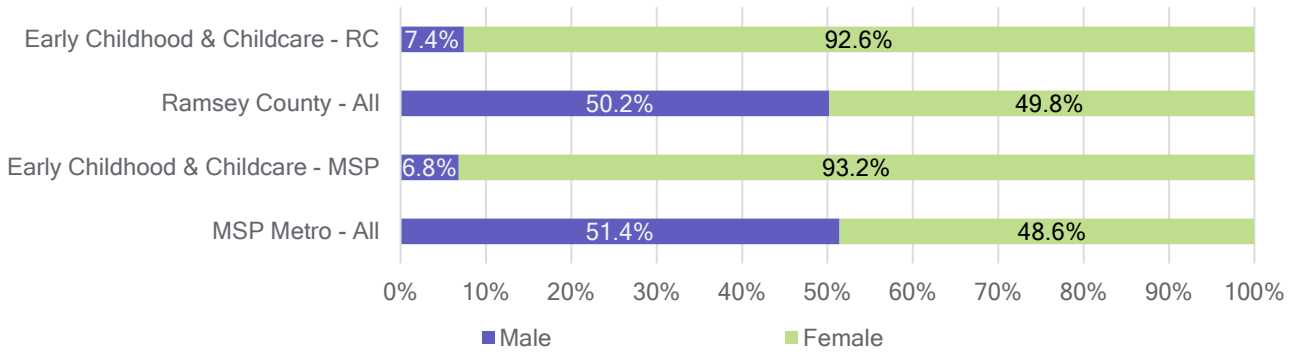
Ramsey County Early Childhood and Childcare roles have a higher percentage of workers (ages 25 to 64) with higher educational attainment; 58.6% have a two-year degree or higher compared to the 55.9% of workers in all occupations in Ramsey County. Early Childhood Education and Childcare talent in the MSP Metro have a higher percentage of workers with a two-year degree of higher (61.1%) than those employed in the same roles in Ramsey County (58.6%).



GENDER

Females assume the majority of Early Childhood Education and Childcare roles in Ramsey County and the MSP Metro, representing 92.6% and 93.2% of workers in these occupations, respectively.

Population Gender

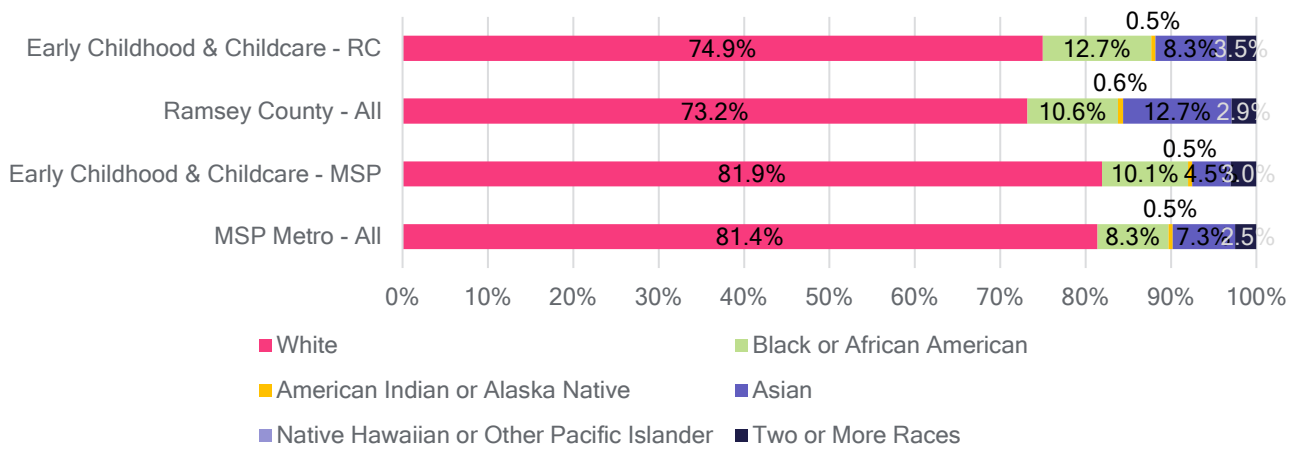


American Community Survey 2014-2018.

RACE AND ETHNICITY

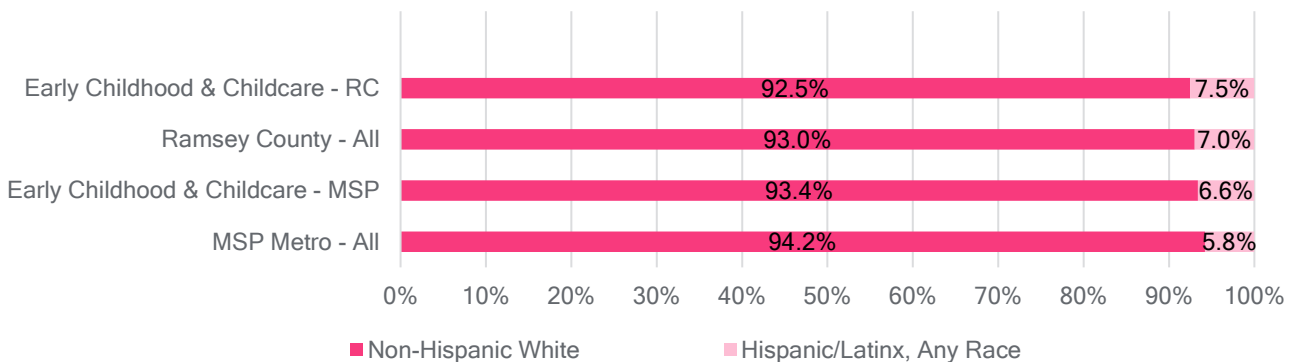
The distribution of race and ethnicity in Early Childhood Education and Childcare occupations are comparable to the distribution of all occupations in both Ramsey County and in MSP Metro, but with most diversity found in Childcare Worker roles, which are typically the most entry-level of positions.

Population Race, All Ages



American Community Survey 2014-2018.

Population Ethnicity, All Ages



American Community Survey 2014-2018.

Employer Demand for Talent

The four Early Childhood Education and Childcare Service occupations analyzed in this report have varying entry-level education requirements, but do not build on one another into a well-defined career path. In Ramsey County, Early Childhood Education and Childcare Service occupations positions pay an average annual salary of \$35,000 compared to \$60,300 across all local employment. Overall, Early Childhood Education and Childcare Services positions in Ramsey County are forecast to grow by an average of 0.2% annually over the next five years, only about 0.1 percentage point higher than overall expected employment growth in the community.

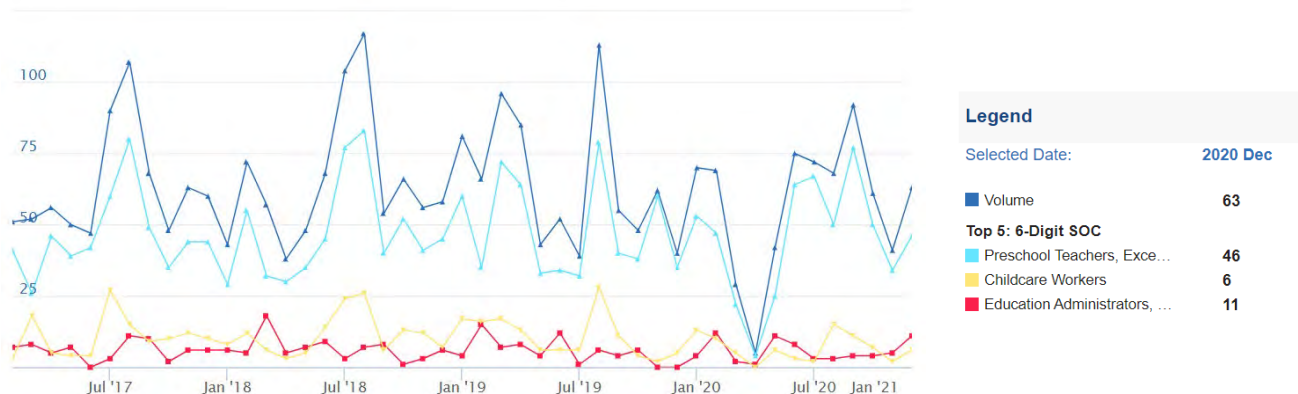
Wages, Forecast, and Experience Requirements of Early Childhood Education and Childcare Services Occupations and Place of Residence in Ramsey County, 2020Q3

SOC	Occupation	Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
39-9011	Childcare Workers	\$28,200	0.1%	High school diploma or equivalent	None	Short-term on-the-job training
25-2011	Preschool Teachers, Except Special Education	\$41,000	0.3%	Associate's degree	None	None
11-9031	Education and Childcare Administrators, Preschool and Daycare	\$67,300	0.0%	Bachelor's degree	Less than 5 years	None
25-2051	Special Education Teachers, Preschool	\$69,900	1.4%	Bachelor's degree	None	None
	Early Childhood Education and Childcare Services	\$35,000	0.2%			
	Total - All Occupations	\$60,300	0.1%			

Online job posting data can reveal a lot about employer demand for certain skills, certifications, qualifications, and occupational competencies. There is rich data available by city, county, and even by a specific employer. Data in this section focuses on jobs newly advertised between January 1, 2020, and December 31, 2020, in Early Childhood Education and Childcare Service roles across Ramsey County. All data in this section comes from Gartner TalentNeuron. Overall, there were 739 new jobs advertised in Early Childhood Education and Childcare Service careers during this time frame, a decrease of about 15.4% from the prior 12-month period.

Annual new job posting trends for Early Childhood Education and Childcare Service roles that show peaks in August in 2017, 2018, and 2019 were disrupted in 2020. Amidst government stay home orders, new job postings for early childhood education occupations decreased to 5 postings in April 2020. New job postings for these roles peaked in September 2020.

New Early Childhood Education and Childcare Services Job Postings Advertised in Ramsey County, 2020



The majority of the new job ads were directly posted by employers, while staffing agencies post few new jobs. Smaller childcare centers tended to post anonymous job ads and, therefore, were included in the report counts. Preschool Teachers are in particularly high demand in Ramsey County, with a cross-posting rate of 5 posts per job opening.

New Early Childhood Education and Childcare Services Job Postings Advertised in Ramsey County by Employer Type (includes anonymous postings), 2020



Occupations by Volume of Job Postings in 2020, with Change from Prior Year

Occupations (6-digit SOC)	Direct and Anonymous (% change prior year)	Direct, Staffing, and Anonymous (% change prior year)	Direct, Staffing and Anonymous with Duplicates (% change prior year)
Preschool Teachers, Except Special Education	567 (-10.4%)	576 (-9.4%)	2,798 (+4.1%)
Childcare Workers	83 (-36.2%)	95 (-44.4%)	225 (-42.3%)
Education Administrators, Preschool and Childcare Center Program	68 (+3.0%)	68 (+1.5%)	158 (+10.5%)
Total	718 (-13.4%)	739 (-15.4%)	3,181 (-1.3%)

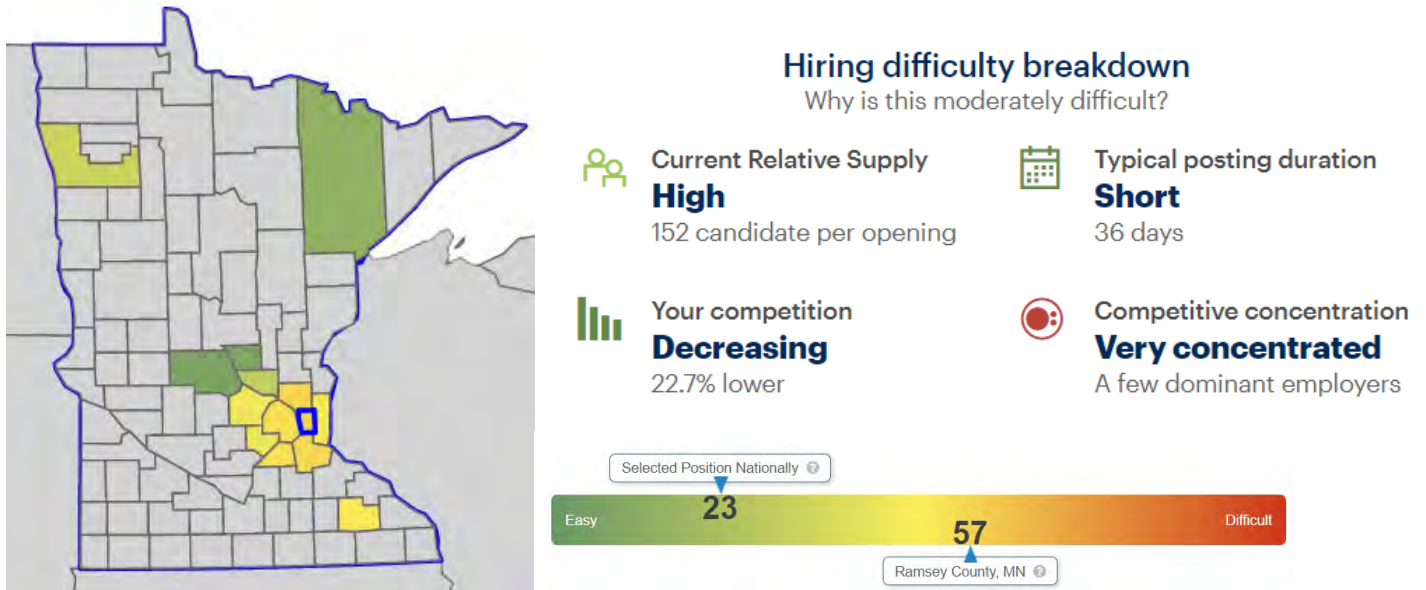
Median Wages Across Early Childhood Education and Childcare Services Job Postings Advertised in Ramsey County, February 2021



Childcare Workers: \$31,800 (\$29,750 nationally)
 Preschool Teachers: \$36,000 (\$33,700 nationally)
 Education Administrators, Preschool/Childcare: \$48,850 (\$46,700 nationally)

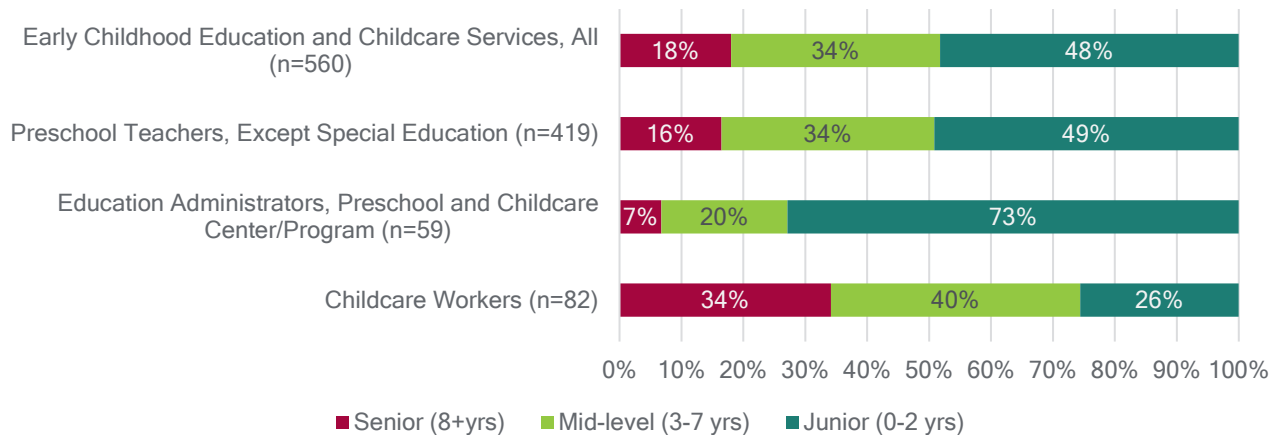
Based on local recruitment patterns and an estimated potential candidate pool of about 15,000 trained or experienced in working in the Early Childhood Education and Childcare Services sector, it is more difficult to find and hire talent in these occupations than generally experienced nationally. MSP Metro and Rochester area counties are struggling more than Greater Minnesota in recruitment and hiring, according to an analysis of candidate pool volumes and job posting data.

Hiring Difficulty for Early Childhood Education and Childcare Services Talent, February 2021



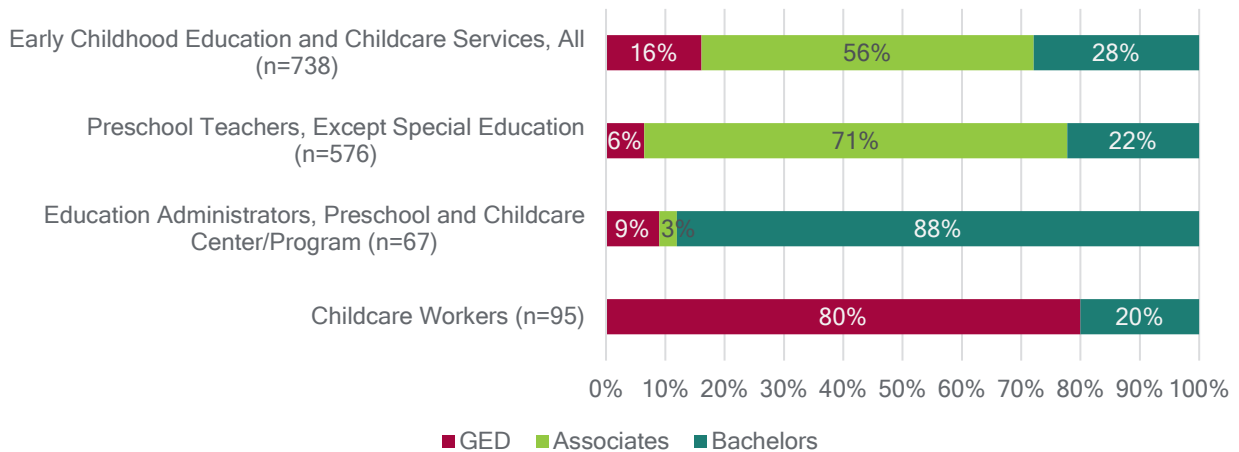
Junior experience level (0 to 2 years) job postings for Early Childhood Education and Childcare Services roles had the highest volume of new job ads, representing 48% of new job ads within these occupations. The percent change of junior experience level job postings decreased across all Early Childhood Education and Childcare Services roles by 24.9% from the prior year. The mid-level (3-7 years) new job ads represents 34% of all new jobs posted. At this level, Education Administrators, Preschool and Childcare Center program new job ads increased by 100% while posting for all other roles at this level decreased. Jobs requiring the most advanced experience (8+ years) account for 18% of new job ads. Senior-level Childcare Workers postings increased by 133%, or 100% specifically for Preschool and Childcare Education Administrators. Employers may be inflated their requested experience level with the idea that there is a large pool of candidates due to increased unemployment.

Percent of Job Postings by Experience Level, 2020



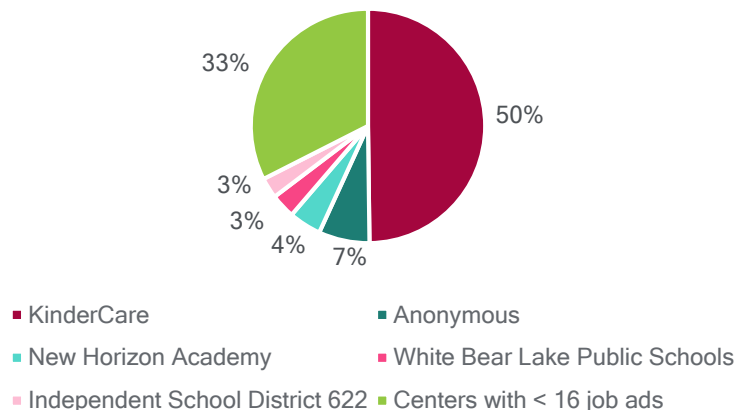
The largest volume of Early Childhood Education and Childcare job postings by education level are those that require an Associate’s degree, representing 56% of new job ads during 2020. Childcare Worker talent, in particular, tend to hold higher educational credentials than required by the position. While the majority of Childcare Workers employed in Ramsey County as of 2020Q3 have at least some college experience (67.5%), 80% of job postings require a high school diploma or less. This may be due, in part, to the nature of Childcare Worker roles as a transitional occupation for students while pursuing their education. Most other occupations within Early Childhood Education and Childcare Services are more closely aligned to employer demand for prior education experience.

Percent of Job Postings by Education Level, 2020



KinderCare’s 368 new job post in 2020 represented 50% of jobs ads in Early Childhood Education and Childcare occupations, which influences the top skills. Although KinderCare accounts for half postings, 33% the new postings were from employers with fewer than 16 new job ads; of these, 14% had fewer than five job ads. This illustrates the small business identity of Early Childhood Education and Childcare Services in Ramsey County, and therefore the potential danger of generalizing extensively based on the needs of a few larger employers. This assessment also fails to capture the demand for nannies and other private household childcare employment, which typically does not appear on public job boards.

**Top Employers by Volume of New Job Postings in Ramsey County, 2020
n=739**



Top Employers by Volume of New Job Postings in Ramsey County in 2020, Change from Prior Year

1. KinderCare: 368 (+2.8%)
2. New Horizon Academy: 33 (-40.0%)
3. White Bear Lake Public Schools: 25 (+47.1%)
4. Independent School District 622: 21 (-55.3%)
5. YMCA: 16 (+23.1%)
6. Saint Paul Public Schools: 16 (-20.0%)
7. YWCA: 11 (+120.0%)
8. Tutor Time: 10 (+11.1%)
9. Learning Care Group: 9 (-18.2%)
10. Community Action Partnership of Ramsey & Washington Co.: 9 (+28.6%)

Teaching, dedication, and first aid are among the top skills by volume of new Early Childhood Education and Childcare job postings. The top certifications by volume of job postings in these occupations by far is a First Aid Certification (451), followed by CPR certification (38). Only 2% of job postings (18) required a teaching license.

Top Skills by Volume of New Job Postings in Ramsey County in 2020, Change from Prior Year (Hard and Soft Skills)

1. Teaching: 634 (-6.4%)
2. Dedication: 498 (-8.1%)
3. First aid: 454 (-10.3%)
4. Relationships: 447 (-15.5%)
5. Writing: 426 (-6.6%)
6. Child development: 388 (+26.0%)
7. Early childhood education: 385 (-32.8%)
8. Nurturing: 383 (-19.4%)
9. Computer usage (basic): 377 (-11.3%)
10. Cognitive development: 350 (-8.4%)

Top Certifications by Volume of New Job Postings in Ramsey County in 2020, Change from Prior Year

1. First Aid Certification: 451 (-10.0%)
2. Certification in Cardiopulmonary Resuscitation: 38 (-44.9%)
3. Driver's License: 23 (-17.9%)
4. Teaching License: 18 (-18.2%)
5. National Administrator Credential: 5 (-68.8%)

Top Sites Used by Volume of New Job Postings in Ramsey County in 2020, Change from Prior Year

1. The Job Network (-25.9%)
2. Snag (+15.7%)
3. Corporate Site (+10.9%)
4. US.jobs (+41.4%)
5. JobsHQ (+1045.2%)

Retooling and Reimagining Work

Childcare and COVID-19

With nearly one-in-three U.S. workers having children and about 75% of those workers relying on childcare services, demand for childcare and the challenges of delivering quality and safe childcare services during a global pandemic are heightened. According to a survey of 2,557 working parents administered by Northeastern University, 13% of U.S. parents had to quit a job or reduce their hours during the first four months of the pandemic due to lack of access to childcare, losing an average of 8 hours of work per week (Washington Post, 2020). During these same months, most childcare centers still open were working at limited capacity, and sometimes only open to the children of essential workers.

The burden of childcare is falling disproportionately on women. Even prior to the pandemic, research suggested that childcare deserts—where there aren't enough daycare openings for local demand—are correlated with an average 12% drop in mothers' labor force participation (there was no observable impact on fathers in this study) (Center for American Progress, 2019). With approximately 93% of the Early Childhood Education and Childcare Service workforce being female, job instability and furloughs due to reduced childcare center capacity has disproportionately impacted women.

Cost is an important third factor, in addition to availability and quality which have been strained during the pandemic. According to Care.com's recent study on "The State of Child Care in the U.S.," the MSP Metro costs slightly higher than the national average for both full-time in-home (\$29,884/year) and in-center (\$11,064/year) childcare. At the statewide level, Minnesota ranks fifth out of all fifty states when balancing cost, quality, and availability of care. This does not necessarily mean that care is affordable to those who need it most. Even at \$11,064 per year, this comes in at nearly 40% of the average Childcare Worker's annual salary, or about 1/6 of the total cost of living for a single adult with a child. Achievement gaps can be measured as early as age 1 and are often linked to early learning opportunity gaps, like the 35,000 children under 5 years of age in low-income families who cannot afford quality early learning programs (Krucoski, 2020).

Looking forward to reimagining childcare opportunities for households and building out new talent pipelines to grow the future workforce will require consideration of cost, quality, and access from all perspectives. The sections that follow provide opportunities to explore new potential sources of talent and address workforce stressors in order to grow talent diversity and stability.

Skill Transferability and Talent Attraction

When advising individuals who have recently lost their jobs or are facing work instability, identifying jobs that they would be willing to take (meaning that it pays equally well or better than their prior role) and able to take (meaning they possess the skill set and educational background necessary for success) is one of the first steps. A "willing and able" matrix simplifies this process, which utilizes skill competencies outlined in O*NET and estimated local future talent supply gaps to allow us to create meaningful career and education decisions.

Talent attraction to Early Childhood Education and Childcare Services positions might be targeted at positions that have experienced high unemployment during the pandemic, are expected to experience a local surplus of talent over the next five years, and share related skill sets. Below is a preliminary

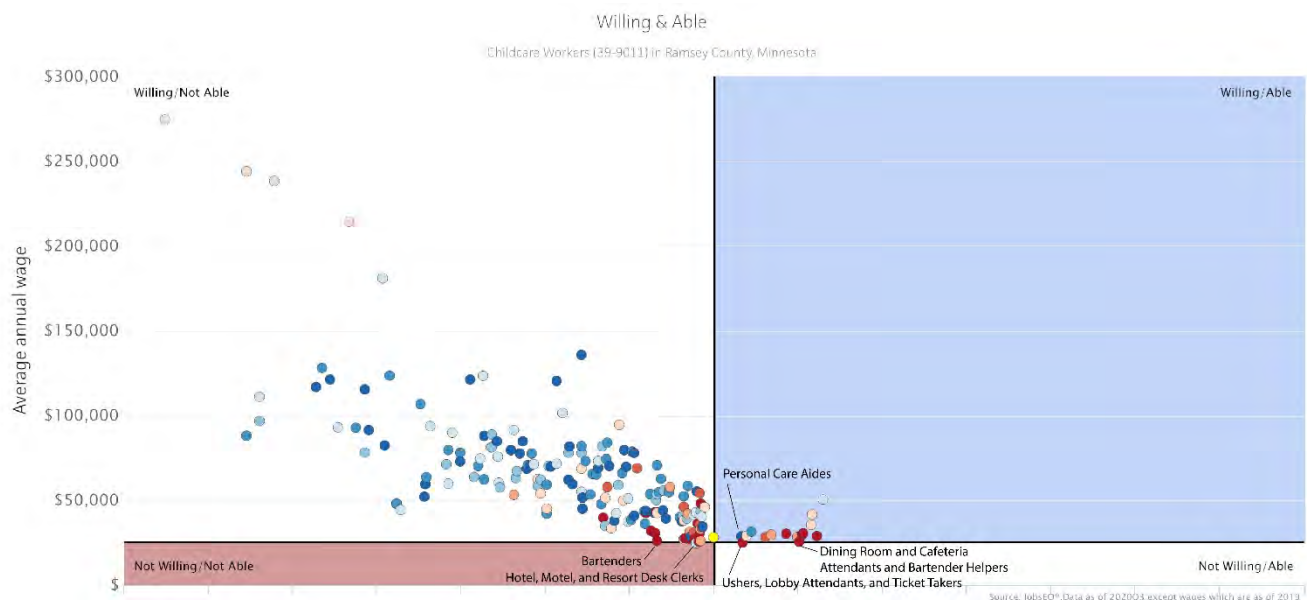
analysis of some of the principal source occupations for attracting talent, and some of the other occupations locally that could be competing for similarly skilled talent.

CHILDCARE WORKERS

Although currently found in relatively high volume and local concentration across Ramsey County, Childcare Workers were hit hard during the pandemic. Annual demand for new talent is estimated at 312 openings per year under baseline forecasts. As a role that employs primarily younger workers with a high school diploma or less, these positions offer an average annual wage of about \$29,200 for those who work full-time. Very few other positions locally pay less than this rate and are anticipating significant future excess of talent. The few occupations with related skill sets that average lower wages are Bartenders (\$27,600 annually), Waiters/Waitresses, and Hotel, Motel, Resort, and Desk Clerks (\$27,200 annually), occupations where tips play a crucial role in total income benefits. Accounting for tipping, these comparable positions may well pay significantly more than Childcare Worker positions. However, given the impacts of the COVID-19 pandemic on the Hospitality and Tourism industries, redirecting talent recently out of work in these fields toward entry-level childcare positions may be an effective strategy to fill current needs. Employers looking to recruit talent from the Hospitality and Tourism or Service Industries will be most successful if they can offer flexible scheduling and attractive benefits.

As shown in the willing-and-able chart below, a large number of higher-paying, high-shortage occupations (in the top left quadrant) may be of interest to individuals with a background as a Childcare Worker but requiring more advanced education. Most of the roles likely to experience future shortages found in the Willing/Not Able quadrant below (top left) typically require a Bachelor's degree. With the right added mix of professional interests, someone working as a Childcare Worker could leverage communication skills, caregiving expertise, and customer service skills in a role as a Personal Care Aide or Aesthetician (blue quadrant), making a slightly higher salary and opening doors into the healthcare or service industries where talent shortages are likely. However, wage rates are so similar to Childcare Worker roles that these same occupations could just as reasonably be used as talent sourcing occupations for a competitive hire.

Childcare Worker Skill Transferability in Ramsey County

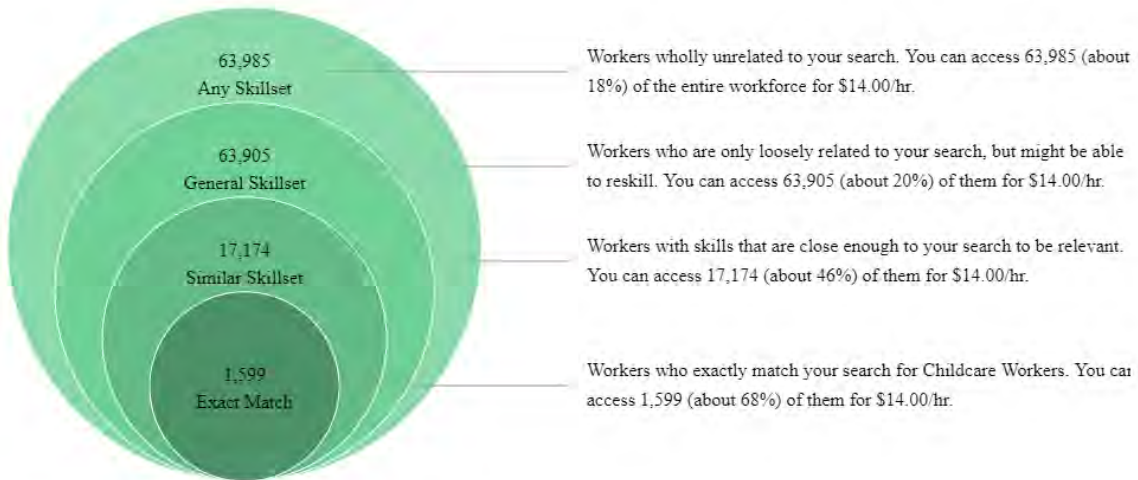


Color Key:

Dark Blue = large positive gap (projected demand exceeds projected supply), Light Blue = small positive gap
 Light Red = small negative gap (projected demand is less than projected supply), Dark Red = large negative gap

For a Childcare Worker position advertising a \$14 an hour salary, there is an estimated local Childcare Worker talent pool of about 1,599 people with the exact skills needed to be successful in the role, and the offer should be competitive to attract about 68% of the total local workforce specifically skilled in this occupation area, meaning, they currently make \$14/hour or less). There are about 17,174 people that might have skills close enough to the demands of the job to be relevant—largely talent experienced in the occupations detailed above. Focusing on these occupations with related skills rapidly expands the potential available talent pool.

Workforce Availability of Talent to Enter Childcare Worker Roles in Ramsey County at \$14/hour

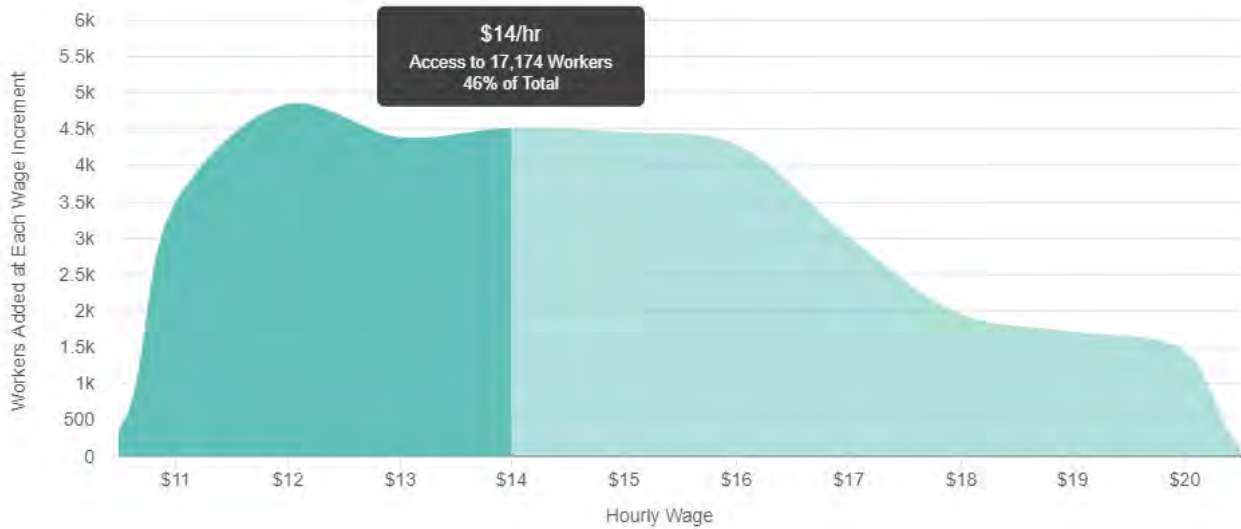


Note: Each layer is inclusive of the layers above it. E.g. "Exact Match" workers are included in the set of "Similar Skillset" workers. Similar Skillset includes workers whose occupations have an O*NET compatibility score of 95 or greater with your selected occupations, General Skillset includes scores of 75 or greater, and Any Skillset includes the entire workforce.

Total Estimated Talent Pool of Childcare Workers in Ramsey County Available at \$14/hour



Total Estimated Talent Pool of Individuals with Closely-Related Skills to Childcare Workers in Ramsey County Available at \$14/hour

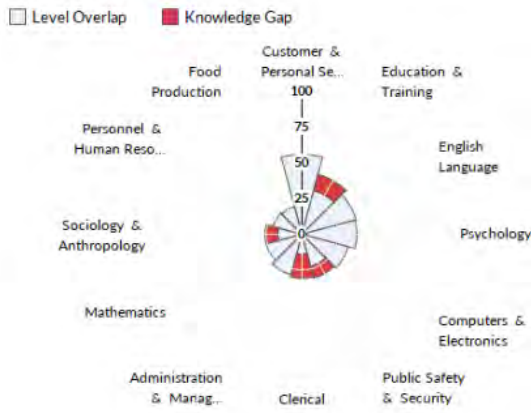


Occupation	Workers Making ≤ \$14.00/hr
Home Health and Personal Care Aides	7,831
Retail Salespersons	5,365
Childcare Workers	1,599
Bartenders	1,349
Teaching Assistants, Except Postsecondary	722
Library Assistants, Clerical	69
Preschool Teachers, Except Special Education	68
Psychiatric Aides	56
Cooks, Short Order	30
Demonstrators and Product Promoters	21

EMSI, 2021Q1 Datarun.

Focusing a talent attraction strategy on Waiters and Waitresses recently unemployed during the pandemic, there is significant overlap in the education backgrounds, skills, and abilities required between the two positions (95% overlap based on ONet). Variation between the roles exists primarily in childcare, safety, and clerical knowledge areas that would need to be the focus of retraining and further development of core skill areas. Additionally, the salary offering in a Childcare Worker role would need to begin around \$15 an hour at a minimum to account for lost tips and other income.

Most Important Knowledge Levels



Most Important Skill Levels



Knowledge	Source Level	Target Level	Gap
56	60	56	0
43	32	43	-11
39	42	39	0
38	39	38	0
33	34	33	0
32	23	32	-9
31	14	31	-17

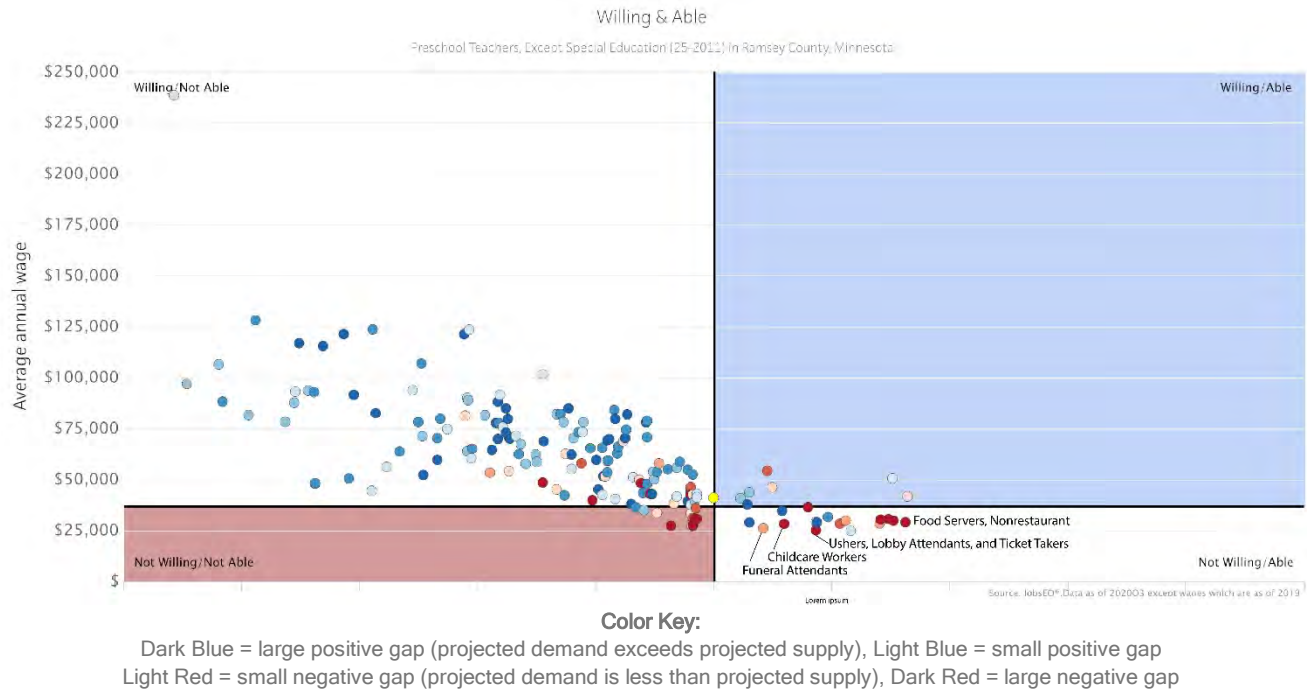
Skill	Source Level	Target Level	Gap
46	41	46	-5
46	39	46	-7
45	30	45	-15
45	39	45	-6
43	34	43	-9
43	39	43	-4
43	30	43	-13
43	36	43	-7
43	41	43	-2

PRESCHOOL TEACHERS

Preschool Teachers “instruct preschool-aged students, following curricula or lesson plans, in activities designed to promote social, physical, and intellectual growth” according to the Occupational Information Network (ONet). Sources of possible talent to be attracted into preschool education include Childcare Workers and talent attraction roles and the same positions listed above, such as Ushers, Lobby Attendants, and Bartenders. In addition, Funeral Attendants and non-restaurant Food Service Workers are other roles that have experienced high unemployment recently and are forecast to have higher talent supply than local demand in Ramsey County over the next five years. With some additional training and appropriate interest in Early Childhood Education and Childcare Services, teaching preschool might be an option for those exiting positions in Service, Hospitality, and Tourism Industries.

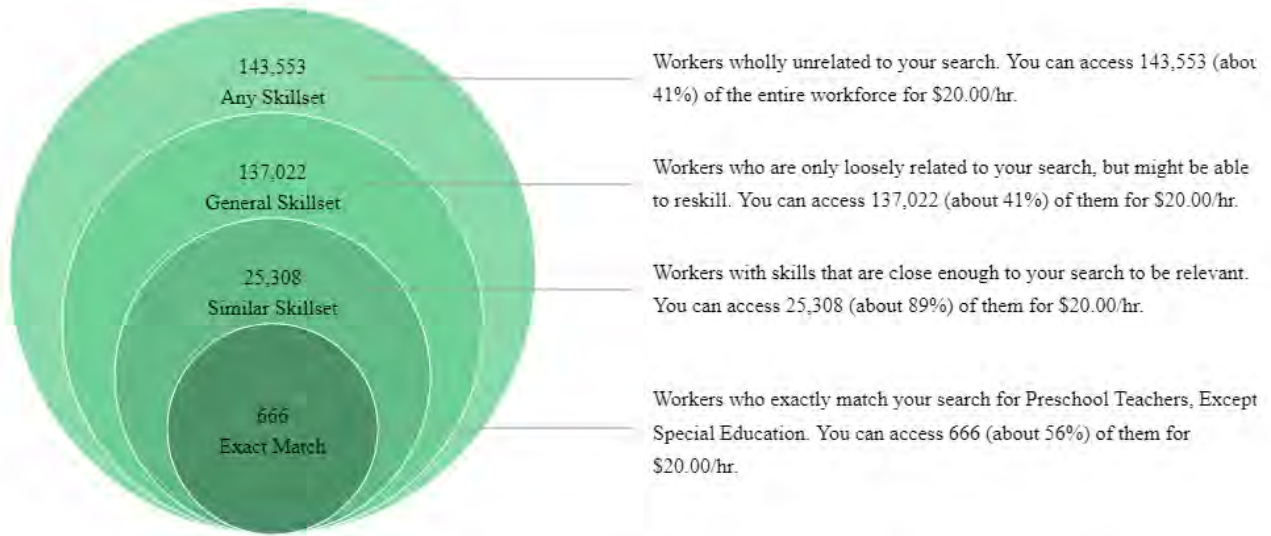
There are few similar-paying, similar-skill, entry-level roles that may see shortages in talent in Ramsey County over the next five years, with most of the other higher wage occupations sharing skillsets requiring a fundamental shift in industry career direction (i.e. to barbering, skincare specialties, or communications work). Occupations that would have related skillsets but require a bit more training to be accessible to a former Preschool Teacher are largely in government service delivery and healthcare delivery.

Preschool Teacher Skill Transferability in Ramsey County



For a Preschool Teacher position advertising a \$20 an hour salary, there is an estimated local related talent pool of about 666 people with the exact skills needed to be successful in the role and with the interest in being attracted into a position paying at least \$20 an hour (56% of the total local workforce specifically skilled in this occupation area, meaning, they currently make \$20/hour or less). There are about 25,308 people that might have skills close enough to the demands of the job to be relevant—largely talent experienced in the occupations detailed above (notably, Childcare Worker is one of the best-aligned talent sourcing occupations). Focusing on these occupations with related skills rapidly expands the potential available talent pool dramatically. In fact, offering \$20 an hour and recruiting beyond the core occupation to include positions that have related skill sets opens up about 89% of the total workforce with closely-related skills.

Workforce Availability of Talent to Enter Preschool Teacher Roles in Ramsey County at \$20/hour

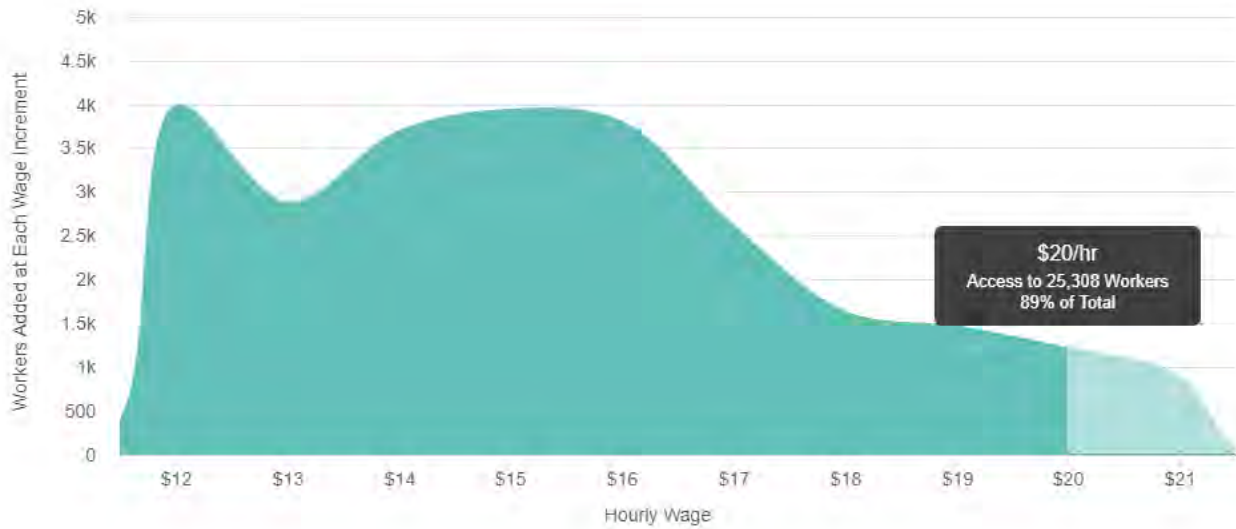


Note: Each layer is inclusive of the layers above it. E.g. "Exact Match" workers are included in the set of "Similar Skillset" workers. Similar Skillset includes workers whose occupations have an O*NET compatibility score of 95 or greater with your selected occupations, General Skillset includes scores of 75 or greater, and Any Skillset includes the entire workforce.

Total Estimated Talent Pool of Preschool Teachers in Ramsey County Available at \$20/hour



Total Estimated Talent Pool of Individuals with Closely-Related Skills to Preschool Teachers in Ramsey County Available at \$20/hour



Occupation	Workers Making ≤ \$20.00/hr
Home Health and Personal Care Aides	19,124
Teaching Assistants, Except Postsecondary	2,449
Childcare Workers	2,289
Self-Enrichment Teachers	707
Preschool Teachers, Except Special Education	666

EMSI, 2021Q1 Datarun.

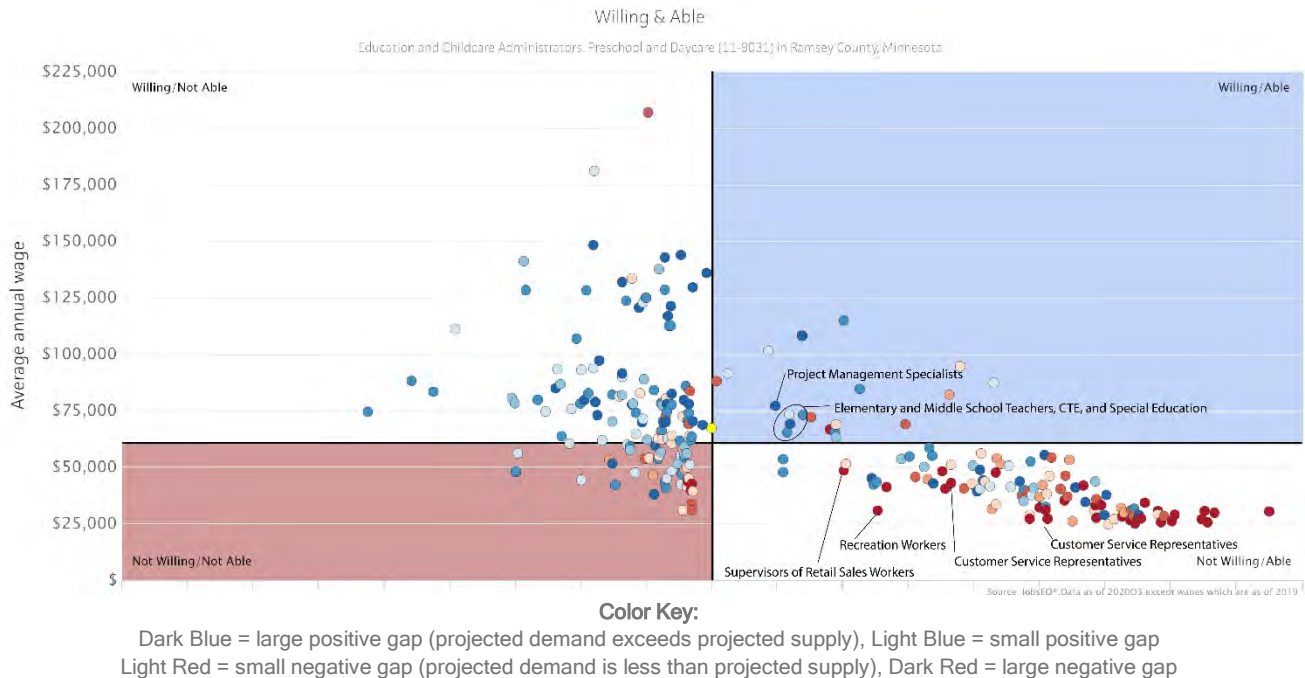
PRESCHOOL ADMINISTRATORS

Employment of Preschool Administrators from earlier section. Wouldn't have to be this long.

Preschool Administrators “plan, direct, and coordinate academic or nonacademic activities of preschools or childcare centers and programs, including before- and after-school care” (ONet). There were about 122 people employed in Ramsey County as Preschool Administrators in the first quarter of 2020, dropping about 5% to 116 in the second quarter due to impacts of the pandemic. Over the past five years, Preschool Administrators employment has steadily increased in Ramsey County. Over the next five years, about 54 positions were estimated to be re-filled due to turnover and job changes, but this number may be higher or lower than initially forecast due to fluctuations dependent on public health and economic recovery. Other occupations anticipating shortages over the next five years that pay even higher wages on average and value similar baseline skillsets are in elementary and middle school teaching roles, special education, Career and Technical Education teacher positions, project management, and facilities management.

Of the Early Childhood Education and Childcare Services roles reviewed in this report, Preschool Administrators has the most possible talent sourcing occupations associated with the skills and qualifications required to do the job. Supervisory and customer service background in retail, business, management, or government administration are relevant to a career in Preschool Administration, are anticipating talent surplus over the next five years, and pay average wages lower than wages observed in Preschool Administration.

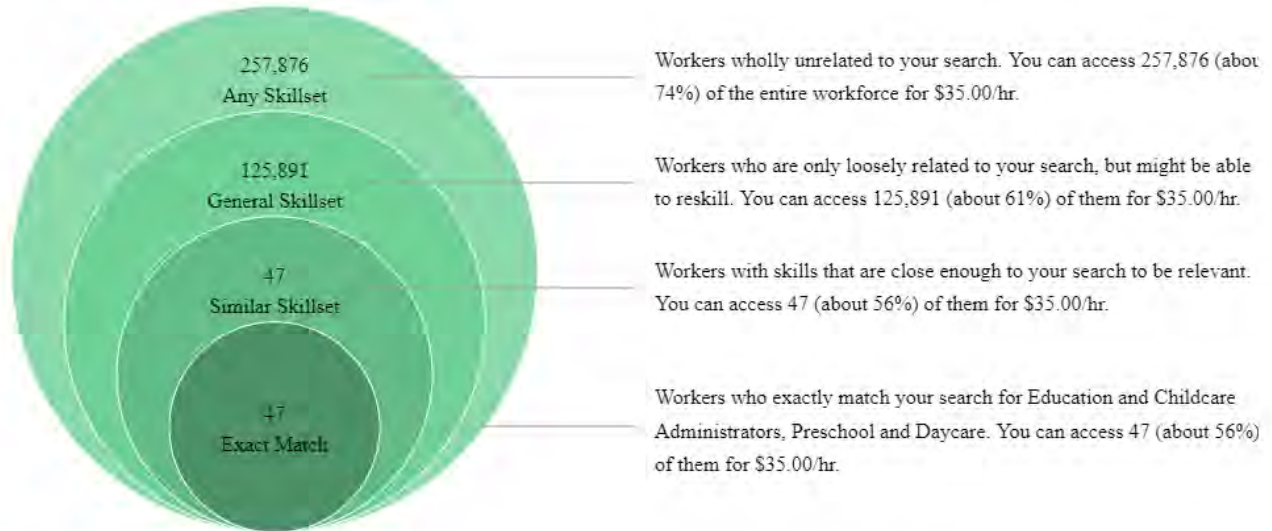
Preschool Administrators Skill Transferability in Ramsey County



Preschool and Early Childhood Administrator positions are smaller in number across Ramsey County, and require additional skillsets beyond those core to Childcare Worker and Preschool Teacher positions. For roles advertising \$35 an hour, there is an estimated local related talent pool of about 47 people with the exact occupational skills and that could be attracted into a role at this wage (56% of the total local workforce specifically skilled in this occupation area, meaning, they currently make \$35/hour or less). Given how specific these roles are and the fact that many positions with similar skill

requirements pay significantly more, there are no closely-related skill occupations to draw talent from. Looking slightly further afield, to the occupations highlighted above in the bottom right hand quadrant—where reskilling and retraining may be required, there are an estimated 125,891 people that could be attracted into the profession.

Workforce Availability of Talent to Enter Preschool Administrator Roles in Ramsey County at \$35/hour



Note: Each layer is inclusive of the layers above it. E.g. "Exact Match" workers are included in the set of "Similar Skillset" workers. Similar Skillset includes workers whose occupations have an O*NET compatibility score of 95 or greater with your selected occupations, General Skillset includes scores of 75 or greater, and Any Skillset includes the entire workforce.

Total Estimated Talent Pool of Preschool Administrators in Ramsey County Available at \$35/hour



Total Estimated Talent Pool of Individuals that could be Reskilled into Preschool Administrator Roles in Ramsey County, Available at \$35/hour



Occupation	Workers Making ≤ \$35.00/hr
Home Health and Personal Care Aides	20,072
Retail Salespersons	8,207
Customer Service Representatives	6,922
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	4,702
Postsecondary Teachers	3,626
Registered Nurses	2,633
Social and Human Service Assistants	2,277
Project Management Specialists and Business Operations Specialists, All Other	2,089
First-Line Supervisors of Food Preparation and Serving Workers	2,024
First-Line Supervisors of Office and Administrative Support Workers	1,889

EMSI, 2021Q1 Datarun.

Conclusions: The Challenge of Talent Attraction

The Informal Market in Childcare Services

Quantifying talent attraction and need for Early Childhood Education and Childcare Services can be challenging because there is a large informal and hidden, yet essential workforce. In-home nannies are a mostly unseen and often temporary part of the Early Childhood Education and Childcare Services workforce. Still, they serve a critical role in supporting our society's function. Households who employ a nanny are not required to withhold state or federal income tax, and many do not pay the required Medicare or Social Security tax for qualifying household employees to avoid the complicated process of setting up a business and reporting taxes for a temporary employee. In addition, babysitters, nannies, health aides, private nurses, maids, caretakers, yard workers, and similar domestic workers are all included under the state and federal definition of “household employee,” which complicate the ability to identify specific demand for nannies in private households (MN Department of Revenue). Grandparents, aunts, uncles, cousins, and any other type of blood relative may provide care to children on a part-time or full-time basis. Family member care is generally unlicensed, and the cash wages paid to some family members, a sibling of the child receiving care (under the age of 21) or a grandparent, are not required to be counted in employment taxes and may not be reported (IRS, 2021). In-home daycares can function as a legal non-licensed (LNL) provider, per the Minnesota Department of Human Services, meaning they can provide care to related children or care to one unrelated family at a time. Any of these cases may leave a household employee without a verifiable income and a legal employment history, which are essential for understanding both the supply and demand of Early Childhood Education and Childcare Services talent.

The Shortage of Early Childhood and Childcare Centers

Even pre-pandemic, the shortage of education and care providers for children from 0-5 was a pressing issue statewide. A March 2020 survey uncovered that even the vulnerability of those centers that do exist was severely at risk; about 55% of Minnesota childcare programs indicated that they would not be able to survive a more than two-week shutdown without public supports (NAEYC, 2020). Tight teacher-student ratios even pre-pandemic challenged the sustainability of institutions, and COVID-reduced group sizes have further impacted local childcare providers who have seen profit margins further deteriorate.

In order to drive economic growth, meeting the need for more childcare centers and worker could require increased investment [or coordination] in new childcare centers and workers. In a 2013 multinational study on childcare, Bonoli found that more government spending in childcare encourages more women to enter the labor market (Bonoli, 2013). The researcher found a direct causal relationship: “As new childcare places are made available as a result of additional spending, these can be quickly taken up by working parents.”

The Domino Effect of the Talent Supply Problem

Early Childhood Education and Childcare Services does not face a demand problem; it faces a supply problem. Although some of the key challenges in Early Childhood Education and Childcare are similar to problems faced in the K-12 education system—such as low compensation, overwork, and stress—others such as student-teacher ratios, varying workforce training requirements, lack of a clear career growth trajectory, lack of prestige, turnover, and planning time are particular to the early childhood sphere, either unique or made more intense than that experienced in K-12 education.

The need to maintain specific student-teacher ratios—sometimes federally-required for programs like Head Start or to maintain certification under NAEYC—can also domino into childcare centers not being able to approve educator requests for paid time off, affecting staff morale (EdSurge, 2020). In fact, every educator interviewed by EdSurge across 15 states in 2019 and 2020 raised this issue, which at its core is based in a severe talent shortage. In Minnesota, ratios for centers range from one adult to four infants to one adult to twelve preschoolers. These regulations have an important basis in science and are in place to foster safety and a quality learning environment for children (Barnett et. al, 2004), though they can also create a somewhat “demoralizing” environment for educators who find it difficult to even find an opportunity to take a bathroom break—let alone take a sick day (EdSurge, 2020). In the majority of interviews in this recent study, Early Childhood Educators expressed their passion for their work, but willingness to explore other sectors for “better compensated and less stressful work” (EdSurge, 2020), echoing findings of a 2015 NAEYC study that found that less than half of early childhood educators in 44 states (including Minnesota) expect they “definitely will continue” in the field (NAEYC, 2015). With approximately 80% of the workforce turning over within five years in Ramsey County, Early Childhood Education and Childcare Services roles are largely temporary and require constant cultivation of new talent pipelines.

In fact, the immediate need for Early Childhood and Childcare talent is pressing; an estimated 14% of all Childcare Worker talent employed in Ramsey County as of 2020Q3 will need to be replaced due to turnover, retirements, and other job changes or exits, plus an additional 3.5% growth possible as the region looks toward economic recovery. In all, this is about 381 total new Childcare Workers needed to meet local demand by 2021Q3 alone. A significant share of the existing workforce sees the career as temporary; a notable number of educators entering the field temporarily until their own children reach kindergarten age, and a share of younger Childcare Workers are attracted by the flexible hours while pursuing other education.

When it comes to training and education for Early Childhood Educators, there is disagreement nationally as to how much and what kind of training is necessary. Very few states nationwide require teachers or administrators to have an Associate’s degree (though some have a preference), and none require a Bachelor’s degree. This inconsistency exacerbates the challenge of how to increase requirements for credentialing and regulation while maintaining the diversity of the Early Childhood Education and Childcare Services workforce, both to maintain consistency in teaching staff for students, and to continue to expose students to teachers of many different racial and ethnic backgrounds. Interestingly, the workforce in entry-level Childcare Worker positions tends to have higher educational background than required by the position, though their area of education may or may not be related to the Early Childhood Education or Childcare fields. Licensure requirements for programs themselves also vary at the national level—except for Head Start programs. In Minnesota, DHS controls the standards for licensing of private programs.

Finally, it is worth emphasizing again the importance of wages and benefits in the retention of Early Childhood Education and Childcare Services talent. The average annual wage for Childcare Workers in Ramsey County is \$28,200 per year for those employed based on 2019 data (RTT, Chmura based on BLS). The median advertised wage for Childcare Workers in Ramsey County as of February 2021 was about \$31,800 per year—about \$2,000 higher than the national average (Gartner). These wages fall well below MN DEED’s cost of living for a single person living alone in Ramsey County (\$33,156/year), let alone an adult with one child (\$60,996/year). Almost no local housing stock would be considered affordable to an individual on a Childcare Workers’ average salary (\$700 or less per

month at 30% of \$28,200). Fair market rent (FMR) rates for a one-bedroom apartment in the Metro area sat at \$915 in 2019 (\$763 for a studio; rentdata.org). The crux of the issue is that Early Childhood Education is a public good that cannot be sustained solely by the private market. “Except for the highest-income earners, most people can’t afford quality care for their children full-time,” says Jonathan May, VP of Innovation and Development for Think Small, “Even though it’s expensive for families who can pay out of pocket, it is not enough to pay educators a living wage without additional public support.”

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