

RAMSEY COUNTY WORKFORCE SOLUTIONS

Youth Employment

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 youth employment over the past five years, with particular attention to 2020?
- What jobs accessible to youth are employers struggling most to fill, as evidenced by job posting data?
- What are the specific challenges for attracting youth talent to available careers?
- Which career paths present the most promising opportunities for youth in Ramsey County looking for well-paying, high-demand careers?

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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Overview of Youth-Friendly Careers in Ramsey County

Introduction

As 2020 started, Gen Z-ers entered one of the strongest global job markets seen in decades. That promising outlook was shattered quickly by the onset of the COVID-19 pandemic, with unemployment soaring and carrying along with it the youngest workers, who are over-represented in service industries, struck hardest by restrictions on movement, activities, and businesses.

Young people saw their share of the talent pool shrink in each of the last two recessions, with the drop-off during the COVID-19 pandemic being particularly sharp. Over the first twelve months of the pandemic, young people applied for unemployment insurance in Ramsey County at higher rates than expected based on the overall share of all workers they represent. According to the most recent American Community Survey, there were about 41,989 people between the ages of 16 and 24 employed in Ramsey County. In this age group, 18,490 people applied for unemployment insurance (UI) in Ramsey County during the pandemic. Therefore, the number of youth UI applicants represents about 44% of those employed in the County within the same age group as reported in the American Community Survey.¹

This impact is a critical disruption not only to youth who are launching what may be their first-ever job but also to their households. According to Reuters, 50% of Gen Z-ers said they or someone in their household lost work or pay in March 2020 when the pandemic first struck, in contrast to just 25% of Boomers.² Beyond the immediate damage of youth's first job loss prospects is the risk of "scarring," what economists refer to as the long-term harm to income levels, career growth, access to training, ability to pay off debt, or deal with the added mental and social burdens of instability. Scarring has been proven to impact women, people of color, and young people, particularly on the job market.³

While the unemployment rate for all workers rises during recessions, younger workers' unemployment rate often rises faster and higher than older workers. Both the short- and long-term impacts are well-studied.⁴ In the short term, this sharper rise in youth unemployment is due, in part, to employer hiring skewing away from less-experienced workers. Kahn (2010) identified that graduating from college during a recession also has long-term negative impacts on job opportunities and wages. As youth start their careers with more gaps in employment and take lower-wage options to make ends meet, they tend to get stuck in lower-paying, lower-quality jobs, even as the economy recovers.⁵ The 2010 college graduates in Kahn's study had employment rates two percentage points lower than predicted in a non-recession year even ten years later, and the author suggests that 2020 college graduates are likely to find this recession equally or even more scarring than the last.⁶

¹ MN Department of Employment and Economic Development. Unemployment Insurance Applications.

² Reuters, December 2020. <https://www.reuters.com/article/uk-health-coronavirus-gen-z-economy-grap/youth-unemployment-a-scourge-of-the-covid-19-economy-idUKKBN28Y0MU>

³ Schwandt, Hannes and Till and Von Wachter, 2018. "Unlucky Cohorts; estimating the Long-Term Effects of Entering the Labor Market in a Recession in Large Cross-Sectional Data Sets." National Bureau of Economic Research Working Paper no. 25141, October 2018. <https://doi.org/10.3386/w25141>.

⁴ Forsythe, Elizabeth Carla. 2019. "Why Don't Firms Hire Young Workers During Recessions?" Working paper, University of Illinois, March 2019.

⁵ Kahn, Lisa B. 2010. "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy." *Labour Economics* 17, no. 2: 303-316. <https://doi.org/10.1016/j.labeco.2009.09.002>.

⁶ Rothstein, Jesse. 2020. "The Lost Generation? Labor Market Outcomes for Post Great Recession Entrants." National Bureau of Economic Research Working Paper no. 27516, July 2020. <https://doi.org/10.3386/w27516>.

One in six people working in Ramsey County in 2020 was between the ages of 16 and 24. This young workforce faces unique challenges in securing stable, living-wage work that leads to a long-term career pathway, challenges that have been exacerbated even further during the pandemic. Bias against young people and inflated education and experience requirements may bar youth from success in careers that they may otherwise be a strong fit for. This report highlights the current state of employment—and unemployment—of youth in Ramsey County. In addition, this report examines the first-step occupations where youth are most likely to succeed when applying: the top 100 occupations in high demand during the first year of the COVID-19 pandemic that required only 0-2 years of experience and a high school diploma or less.

In the pages that follow, youth-friendly occupations are defined by the top 100 new job postings by volume advertised in Ramsey County in 2020 that required entry-level experience (just 0-2 years) and a high school diploma or less. It is important to recognize that not all workers in these roles are youth. In fact, among these top 100 youth-friendly occupations, only about 20% of those employed as of the third quarter of 2020 were youth between the ages of 16 and 24. The largest share of talent in these positions were adults between the ages of 25 and 64 with no postsecondary degree. Ensuring strong opportunities for youth also necessitates developing strong career advancement opportunities for adults ages 25 and older who have not yet obtained an advanced degree.

Key Issues for Youth in the Labor Force

The main findings of this report and related studies by other authors are summarized here.

- The already-high unemployment rates of young workers pre-pandemic have jumped even higher due to the pandemic-induced recession.
- Underemployment of young workers has also doubled between 2019 and 2020, with one-third of young workers being underemployed nationwide (unemployed, “marginally attached,” or part-timer seeking full-time work) in the COVID-19 labor market. Underemployment rates were highest for young Black and American Indian men.⁷
- Younger workers are more likely than other age demographics to have their jobs impacted by COVID-19 due to concentration in 1) vulnerable industry sectors, 2) occupations that were hardest hit, and 3) their lower levels of seniority and work experience.
- Younger workers are less likely to hold jobs that can be done remotely and more likely to hold high contact-intensity roles.
- The negative economic impacts of job loss and economic disruption on young workers will likely persist for years.
- Young workers have been excluded from some important COVID-19 economic assistance, such as unemployment insurance expansions.⁸
- The Business, Management, and Administration career field has the largest number of occupations in Ramsey County that may be accessible to youth. Still, these roles are not necessarily the highest-wage, best-paying, or highest-opportunity in the long-term.

⁷ Gould, Elise, and Melat Kassa. October 2020. “Young Workers Hit Hard by the COVID-19 Economy.” <https://www.epi.org/publication/young-workers-covid-recession/>

⁸ Gould, Elise, and Melat Kassa. October 2020. “Young Workers Hit Hard by the COVID-19 Economy.” <https://www.epi.org/publication/young-workers-covid-recession/>

- Health Science Technology, Human Services, and Agriculture, Food, and Natural Resources forecast higher than average forecasted growth in occupations that may be most accessible to youth in Ramsey County.
- Economic recovery would disproportionately help younger workers, who tend to see faster wage growth than other age cohorts of workers in a strong economy.⁹

Youth-Friendly Employment

HISTORICAL EMPLOYMENT AND WAGES

As of the third quarter of 2020, about 334,772 people work in Ramsey County, with nearly 42,000 being between the ages of 16 and 24. Nearly half (48.3%), or an estimated 161,579 people, work in one of the top 100 youth-friendly occupations (positions requiring 0-2 years of experience and a high school diploma or less).¹⁰ In all, 28,620 youth are employed in these top 100 youth-friendly occupations as of the third quarter of 2020. Unemployment in Ramsey County's top 100 youth-friendly roles is about 7.2%, compared to 6.0% across all positions.

The average wage in youth-friendly occupations is about \$42,800, ranging from \$25,600 for Dining Room and Cafeteria Attendants and Bartender Helpers up to \$135,900 for Personal Service Managers and Entertainment and Recreation Managers. Over the past five years, employment in youth-friendly roles has decreased by about 0.8% annually on average, with the greatest growth among Personal Care Aides (8.8% annual growth)—an occupation with high turnover and growth opportunities.

Top 20 Youth-Friendly⁴ Occupations in Ramsey County, Minnesota, 2020Q3

SOC	Occupation	Current						5-Year History	
		Empl 2020Q3	Mean Ann Wages ²	LQ	Unempl	Unempl Rate	Online Job Ads ³	Empl Change	Avg Ann % Growth
31-1122	Personal Care Aides	11,848	\$28,900	2.16	484	5.0%	174	4,094	8.8%
35-3023	Fast Food and Counter Workers	7,258	\$26,100	0.90	1,048	13.4%	366	-634	-1.7%
41-2031	Retail Salespersons	7,064	\$31,100	0.80	481	6.9%	606	-1,671	-4.2%
43-4051	Customer Service Representatives	6,613	\$43,000	1.05	317	5.3%	330	102	0.3%
43-9061	Office Clerks, General	6,539	\$41,900	1.01	273	5.2%	84	-423	-1.2%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,772	\$33,900	1.18	346	6.5%	200	-348	-1.2%
41-2011	Cashiers	5,523	\$27,300	0.72	557	9.5%	79	-677	-2.3%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	4,566	\$43,600	0.99	166	4.6%	195	-115	-0.5%
31-1121	Home Health Aides	4,193	\$28,900	2.18	165	4.7%	39	-931	-3.9%
31-1131	Nursing Assistants	4,026	\$37,700	1.27	165	5.1%	348	-209	-1.0%
35-3031	Waiters and Waitresses	4,024	\$30,600	0.86	491	11.5%	59	-824	-3.7%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3,967	\$37,600	0.62	458	9.5%	159	-352	-1.7%

⁹ Bivens, Josh, and Ben Zipperer. 2018. The Importance of Locking in Full Employment for the Long Haul. Economic Policy Institute, August 2018.

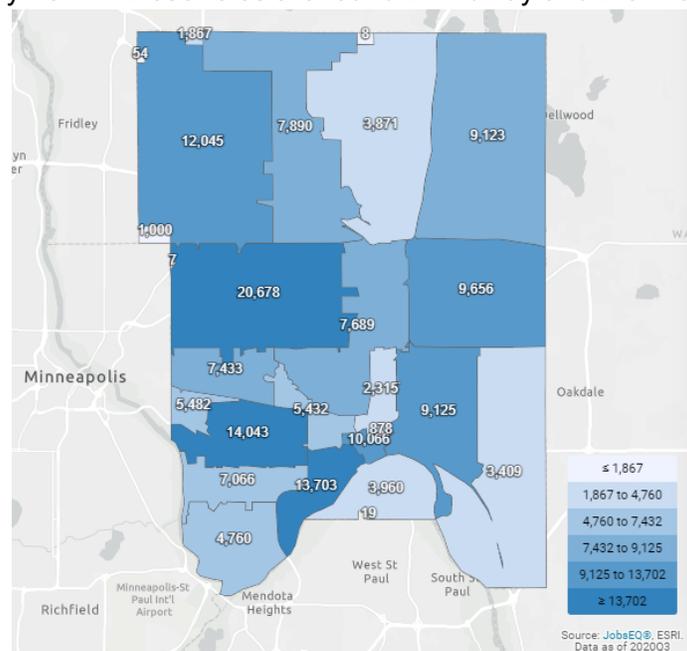
¹⁰ Youth-friendly occupations are defined by the top 100 new job postings by volume advertised in Ramsey County in 2020 that required entry-level experience (just 0-2 years) and a high school diploma or less. It is important to recognize that not all workers employed in these roles are youth.

43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,583	\$47,600	1.02	106	3.6%	115	-615	-3.1%
33-9032	Security Guards	3,545	\$36,400	1.49	74	3.9%	144	749	4.9%
25-9045	Teaching Assistants, Except Postsecondary	3,375	\$34,600	1.20	174	5.8%	88	-83	-0.5%
53-7065	Stockers and Order Fillers	3,318	\$34,300	0.72	309	9.2%	399	-181	-1.1%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,002	\$82,900	1.02	66	2.7%	5	-546	-3.3%
53-3032	Heavy and Tractor-Trailer Truck Drivers	2,885	\$55,100	0.67	184	6.6%	198	-34	-0.2%
49-9071	Maintenance and Repair Workers, General	2,744	\$48,700	0.88	89	4.1%	285	-53	-0.4%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,718	\$66,700	0.84	71	3.4%	93	-74	-0.5%
	Youth Occupations - Top 100 - Refined	161,579	\$42,800	0.95	10,656	7.2%	8,305	-6,596	-0.8%
	Total - All Occupations	334,772	\$60,300	1.00	17,722	6.0%	16,256	-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).
4. Youth-friendly occupations are defined by the top 100 new jobs postings by volume in 2020 that required 0-2 years of experience and a high school diploma or less; not all workers in these roles are youth (16 – 24 years old).

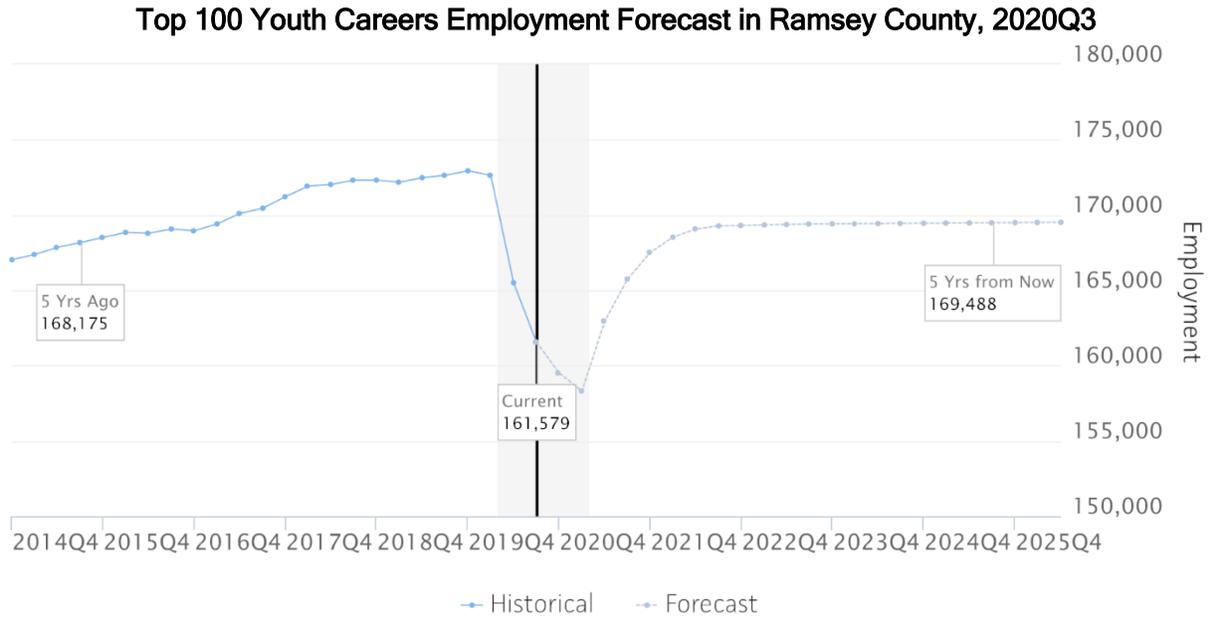
Employment in the top 100 youth-friendly roles is not equally spread out across the county. Higher concentrations of employment in these roles are found in Midway and the West 7th corridor.



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. The forecast curve below estimates the impacts of the pandemic on future employment in the top 100

youth-friendly occupations in Ramsey County based on the optimistic assumption that the general population will have widespread access to the COVID-19 vaccine in the second quarter of 2021. In this scenario, it is unlikely that local youth employment in Ramsey County will return to levels observed prior to the pandemic in the next three to five years. This finding reveals the urgency of identifying the most promising entry-level jobs in Ramsey County for youth to begin and grow their careers into high-demand, high-wage, and high-skill pathways.



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

Workforce Demographics

In Ramsey County, youth between the ages of 16 and 24 represent about 1 in 5 workers in the top 100 youth-friendly roles (requiring 0-2 years of experience and a high school diploma or less), compared to 1 in 6 across all employment. Among the four youth-friendly occupations with the highest percentage of youth employment, Hosts and Hostesses (Restaurant, Lounge, and Coffee Shops) have the highest share of youth, with 75% of workers being between the ages of 16 to 24 years old. Fast Food and Counter Workers have both a high share of youth talent (57.2%) and a high volume of workers (6,794).

Youth-friendly occupations require less educational attainment on average and, by demographics, have a greater share of workers with lower education than in employment across all occupations in the county. Despite youth-friendly occupations requiring less educational attainment on average, educational attainment varies among the four occupations with the highest share of youth talent in Ramsey County. Among Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers, 59.6% have a four-year degree or higher. In comparison, 21% of Fast Food and Counter Workers in Ramsey County have a four-year degree or higher.

Females assume slightly more youth-friendly roles than males, representing 52.8% of workers in these occupations--about three percentage points higher than in all occupations in the county. In Ramsey County, there are also higher numbers of Black/African American workers in youth-friendly occupations than expected by their local employment rate.

Among the top four youth-friendly positions in Ramsey County, Fast Food and Counter Workers and Waiter and Waitress roles have a higher concentration of BIPOC workers (33% and 31.9%, respectively), lower educational attainment (69% and 62.2% with no postsecondary degree), and more female workers. In contrast, Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers roles have a lower concentration of BIPOC workers (9.1%), a smaller percentage of females (48.6%), and a larger share of workers with higher educational attainment (70.9% have a postsecondary degree).

Top 100 Youth-Friendly Employment Demographics in Ramsey County, Minnesota, 2020Q3*

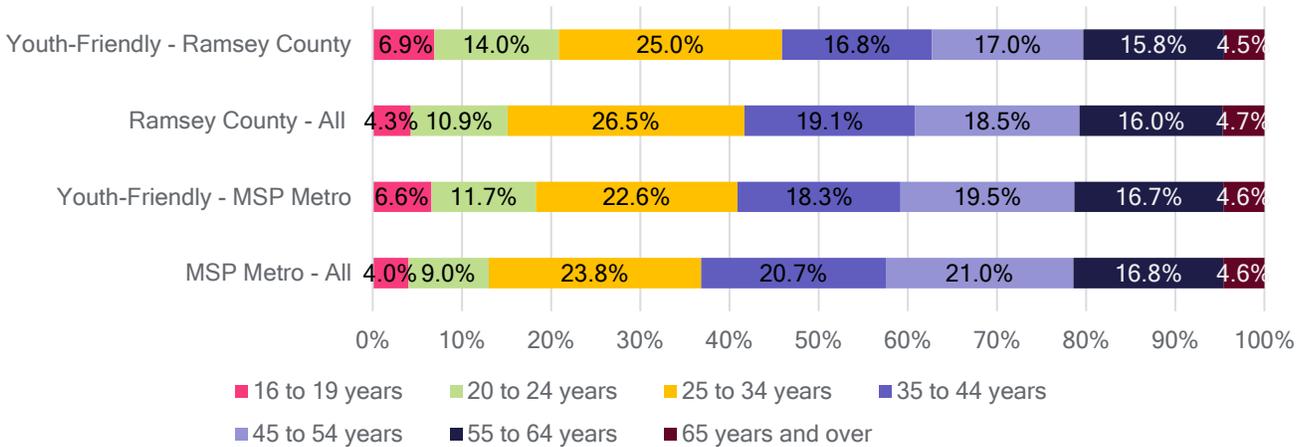
	Occupations					
	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop (35-9031)	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers (33-9092)	Fast Food and Counter Workers (35-3023)	Waiters and Waitresses (35-3031)	Youth-Friendly Occupations	Total - All Occupations
Average Annual Wage	\$25,700	\$27,200	\$26,100	\$30,600	\$42,800	\$60,300
Age Group						
65+	2.1%	2.0%	1.7%	1.4%	4.5%	4.7%
55-64	4.1%	4.1%	7.1%	6.2%	15.8%	16.0%
45-54	5.0%	6.0%	5.8%	7.9%	17.0%	18.5%
35-44	2.5%	4.1%	9.8%	10.1%	16.8%	19.1%
25-34	11.3%	9.5%	18.4%	27.2%	25.0%	26.5%
20-24	34.9%	20.7%	24.3%	31.3%	14.0%	10.9%
16-19	40.1%	53.5%	32.9%	15.8%	6.9%	4.3%
Education Attainment						
Advanced	4.7%	14.0%	4.8%	3.9%	6.2%	16.6%
4-year degree	27.1%	45.6%	16.2%	23.1%	23.6%	29.4%
2-year degree	13.5%	11.3%	10.1%	10.8%	11.3%	9.9%
Some college	23.2%	17.2%	22.4%	26.0%	21.9%	16.9%
HS	24.4%	10.7%	33.6%	26.0%	27.2%	19.7%
Less than HS	7.1%	1.2%	13.0%	10.2%	9.9%	7.4%
Gender						
Female	81.1%	46.8%	59.8%	69.8%	52.8%	49.8%
Male	18.9%	53.2%	40.2%	30.2%	47.2%	50.2%
Race and Ethnicity						
White	73.8%	90.9%	67.0%	68.1%	70.1%	73.2%
Black	7.3%	3.9%	13.5%	8.5%	13.1%	10.6%
American Indian	1.1%	0.5%	0.8%	0.6%	0.7%	0.6%
Asian	10.2%	0.9%	13.5%	16.9%	12.8%	12.7%
Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
Two or More Races	7.5%	3.8%	5.2%	5.9%	3.3%	2.9%
Hispanic	6.4%	4.4%	7.3%	8.8%	8.4%	7.0%
Non-Hispanic White	93.6%	95.6%	92.7%	91.2%	91.6%	93.0%
Total Employment	533	153	6,794	3,769	137,099	277,359

AGE

The top 100 youth-friendly occupations (requiring 0-2 years of experience and a high school diploma or less) in Ramsey County have a higher share of younger talent between the ages 16 and 24 years

old (20.9%) than the County’s total employed populations in same age group (15.2%). The share of younger workers (16 to 24 years of age) in Ramsey County youth-friendly occupations is comparable to the MSP Seven-County Metro youth-friendly roles (19.7%). However, the largest share of workers in youth-friendly occupations roles in the County are between the ages 25 to 34 years old, representing 25.0%, highlighting that not all workers in these roles requiring lower educational attainment and low experience are youth.

Age of Employed Talent

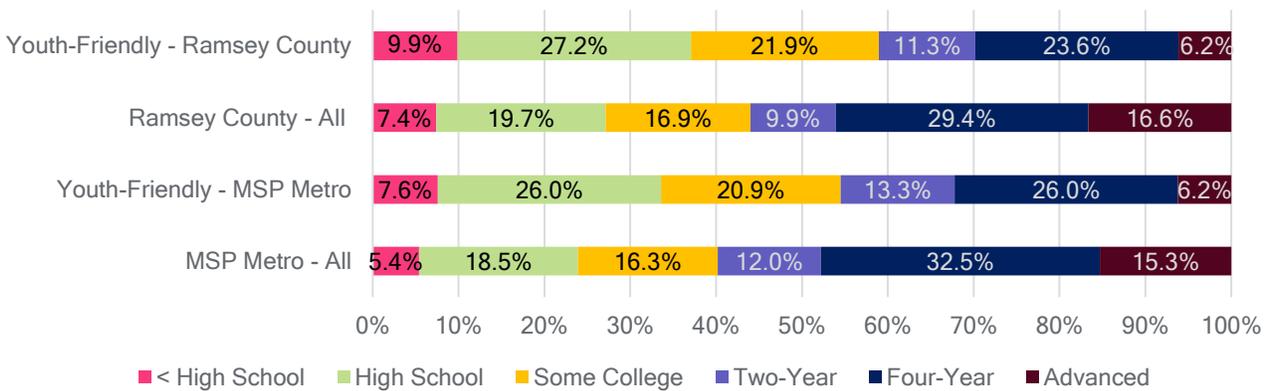


American Community Survey 2015-2019.

EDUCATIONAL ATTAINMENT

Jobs that may be more accessible to youth also employ adults with lower levels of educational attainment. Ramsey County’s top 100 youth-friendly roles have a higher percentage of adult workers (ages 25 to 64) without a postsecondary degree; 58.9% have some college or less compared to the 44% of workers in all occupations in Ramsey County.

Educational Attainment of Employed Talent, Ages 25 - 64

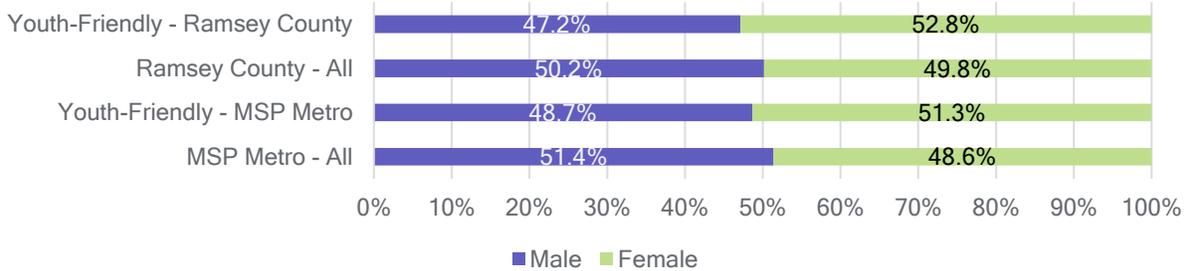


American Community Survey 2015-2019.

GENDER

Gender divisions in the top 100 youth-friendly workforce demographics are comparable across geographies.

Gender of Employed Talent

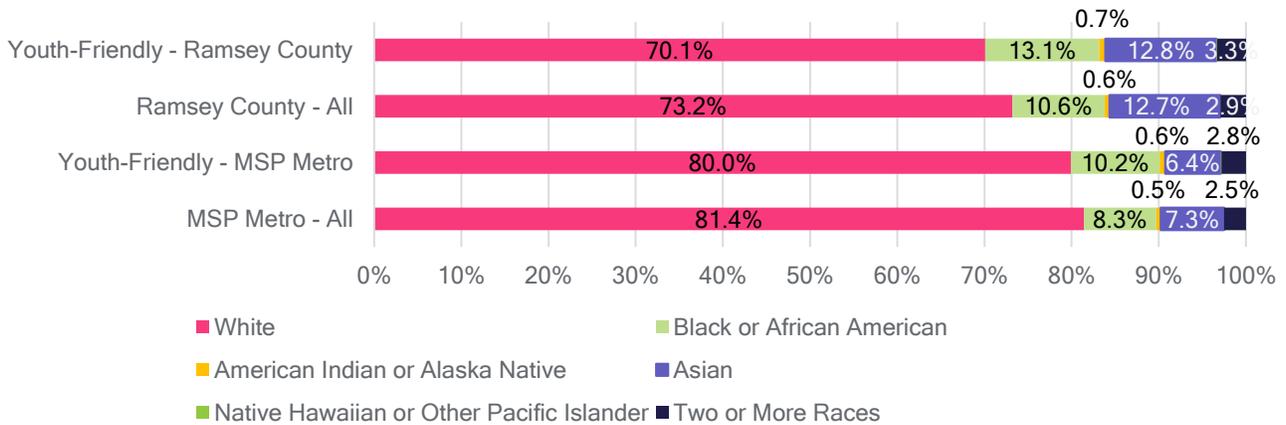


American Community Survey 2015-2019.

RACE AND ETHNICITY

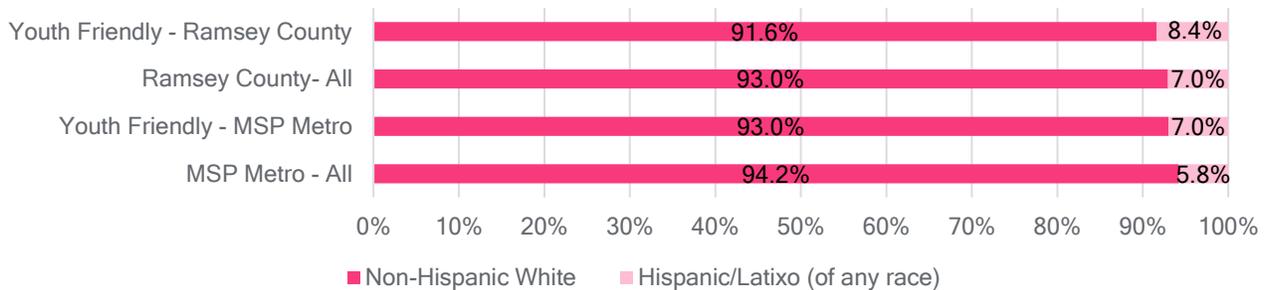
The distribution of race and ethnicity in the top 100 youth-friendly occupations is comparable to all occupations in Ramsey County and in MSP Metro. However, more diverse talent is found in youth-friendly roles, which have lower educational attainment requirements and lower annual wages on average.

Race of Employed Talent, All Ages



American Community Survey 2015-2019.

Ethnicity of Employed Talent, All Ages



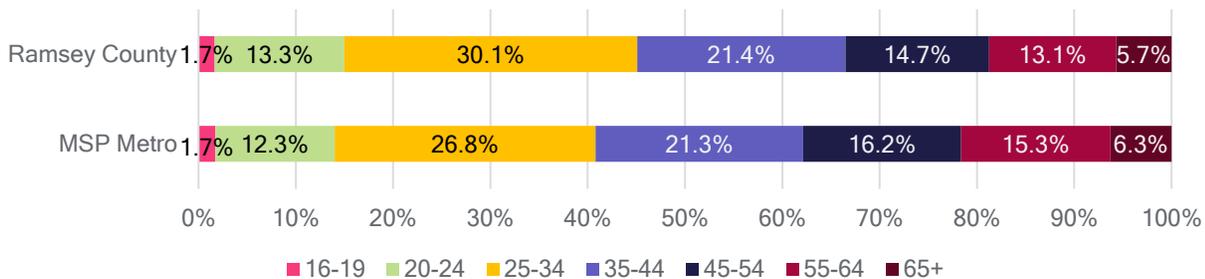
American Community Survey 2015-2019.

Workforce Impacts of COVID-19

From March 16, 2020, to February 23, 2021, 18,490 workers between the ages of 16 and 24 applied for unemployment insurance in Ramsey County, representing about 15% of the County's unemployment insurance applications.¹¹ A similar impact was observed across the MSP Metro, though Ramsey County ranks highest of the seven counties.

Ramsey County has a higher share of Unemployment Insurance (UI) applicants between the ages of 16 to 24 years old cumulatively since March 2020 than observed in the MSP Metro Area as a whole. Among the counties in the MSP Metro Area, Ramsey County has the highest percentage of youth UI applicants with 15%, followed by Washington County with 14.2% and Hennepin County with 13.9%. Ramsey County's young people had their careers disproportionately negatively impacted by COVID-19, applying for unemployment insurance at higher rates than expected based on the overall share of all workers they represent. According to the most recent American Community Survey, there were about 41,989 people between the ages of 16 and 24 employed in Ramsey County. In this age group, 18,490 people applied for unemployment insurance (UI) in Ramsey County during the pandemic. Therefore, the number of youth UI applicants represents about 44% of those employed in the County within the same age group as reported in the American Community Survey.

Percentage of Cumulative UI Applications by Age, Ramsey County and MSP Metro, March 16, 2020 - February 23, 2021



Age Group	Ramsey County			MSP 7-County Metro		
	UI Application Counts	% of Applicants ¹	% of Total Employed ²	UI Application Counts	% of Applicants ¹	% of Total Employed ²
16 to 19 years	2,042	1.7%	4.3%	11,997	1.7%	4.0%
20 to 24 years	16,448	13.3%	10.9%	86,053	12.3%	9.0%
25 to 34 years	37,124	30.1%	26.5%	187,798	26.8%	23.8%
35 to 44 years	26,391	21.4%	19.1%	149,264	21.3%	20.7%
45 to 54 years	18,186	14.7%	18.5%	113,746	16.2%	21.0%
55 to 64 years	16,112	13.1%	16.0%	107,356	15.3%	16.8%
65+	7,024	5.7%	4.7%	44,078	6.3%	4.6%
All ages	123,327	100%	277,359	700,292	100%	1,657,175

SOURCE: 1. DEED Unemployment Insurance Claims Statistics, updated February 3rd 2. 2015-2019 American Community Survey (ACS) 5-Year Estimates

The occupations most significantly impacted by job loss during the COVID-19 pandemic are typically those roles that are more youth-friendly (requiring 0-2 years of experience and a high school diploma or less). Twenty-two of the top 25 occupations by volume of unemployment insurance applicants are youth-friendly occupations. Food and Beverage Serving Workers and Retail Sales Workers had the most applicants for unemployment in Ramsey County since the beginning of the COVID-19 pandemic,

¹¹ 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.

representing over 15% of all applications. Both occupation groups have high concentrations of workers between the ages of 16 and 24, together representing about 26% of all local jobs for this age group.

**Unemployment Insurance Applicants by Top 25 Occupations Requesting Insurance by Volume in Ramsey County
from March 16, 2020 - February 23, 2021**

SOC	Occupation Group	Unempl. Insurance Applicants in Ramsey County	% of Total Applicants in Ramsey County ¹	% of Workers Ages 16-24 in Occupations in Ramsey County	Youth (Ages 16-24) Empl in Ramsey County ²	Total Empl in Ramsey County ²
353	Food and Beverage Serving Workers	7.9%	8,560	49.8%	6,219	12,497
412	Retail Sales Workers	7.3%	7,852	36.1%	4,543	12,569
472	Construction Trades Workers	6.2%	6,719	10.9%	995	9,147
352	Cooks and Food Preparation Workers	4.6%	4,993	29.7%	1,765	5,933
533	Motor Vehicle Operators	4.1%	4,456	7.7%	564	7,346
434	Information and Record Clerks	3.7%	3,977	20.5%	2,087	10,174
319	Other Healthcare Support Occupations	3.7%	3,976	16.0%	296	1,846
519	Other Production Occupations	3.4%	3,677	11.8%	603	5,128
359	Other Food Preparation and Serving Related Workers	3.4%	3,649	49.2%	1,096	2,226
291	Health Diagnosing and Treating Practitioners*	2.7%	2,881	4.2%	492	11,818
311	Nursing, Psychiatric, and Home Health Aides	2.6%	2,848	15.6%	2,444	15,646
395	Personal Appearance Workers*	2.3%	2,444	11.6%	154	1,329
439	Other Office and Administrative Support Workers	2.0%	2,192	17.2%	1,079	6,274
372	Building Cleaning and Pest Control Workers	2.0%	2,178	11.5%	824	7,182
399	Other Personal Care and Service Workers	2.0%	2,178	27.5%	1,026	3,728
259	Other Education, Training, and Library Occupations	1.9%	2,037	14.5%	598	4,127
119	Other Management Occupations	1.9%	2,029	3.7%	267	7,168
292	Health Technologists and Technicians	1.7%	1,813	13.7%	548	3,993
151	Computer Occupations	1.6%	1,691	8.6%	775	8,989
252	Preschool, Primary, Secondary, and Special Education*	1.5%	1,585	7.8%	576	7,356
419	Other Sales and Related Workers	1.4%	1,511	10.4%	110	1,058
413	Sales Representatives, Services	1.4%	1,503	9.7%	385	3,983
514	Metal Workers and Plastic Workers	1.3%	1,425	11.4%	391	3,412
351	Supervisors of Food Preparation and Serving Worker	1.3%	1,381	21.3%	362	1,697
493	Vehicle and Mobile Equipment Mechanics, Installers	1.2%	1,340	14.2%	403	2,842
	Total - All Occupations		107,852	15.1%	41,989	277,359

SOURCE: 1. DEED Unemployment Insurance Claims Statistics, updated February 23rd 2. 2015-2019 American Community Survey (ACS) 5-Year Estimates
Fields marked in green have a high concentration of youth employment. *The three occupation groups highlighted in yellow are not considered to have youth-friendly occupations.

Exploring Youth Career Pathways

Trends in Youth-Friendly Careers

An estimated 41,989 youth were employed in Ramsey County as of the third quarter of 2020, representing about 15.1% of all local employment. By career field, Business, Management, and Administration careers have the greatest share of youth talent, representing 18.5% of all employment in this field and approximately one in four of all employment in youth-friendly occupations of this field. Despite lower forecasted average annual growth rates than other fields and fewer occupations paying livable wages for entry-level talent, the volume of opportunities available in this field due to retirements and replacement demand continues to make this field a promising start for many Ramsey County youth.

Although volumes of youth-friendly careers are less in number in the Arts, Communications, and Information Systems career field, opportunities in this field typically pay higher entry-level wages—particularly in Information Technology career pathways. Health Science Technology, Human Services, and Agriculture, Food, and Natural Resources do not have the highest wages or current openings for youth-friendly careers. Still, these sectors are forecasting much higher than the average forecasted growth in those occupations that may be most accessible to youth. The sections that follow detail specific opportunities for youth in each of these six career fields.

Top Youth-Friendly Occupation Profile by Career Field

Career Field	% of Youth (16-24) Working	Share of Total Youth-Friendly Employment	Youth-Friendly Occupations with Entry-Level Living Wage ¹²	Youth-Friendly Average Annual Forecasted Growth Rate through 2025	Openings Accessible to Youth (job postings, rounded)
Arts, Communications, and Information Systems	In Field: 9.5% In Youth-Friendly Occupation: 8.7%	1%	1 out of 1	0.3%	Low (170)
Health Science Technology	In Field: 10.9% In Top Youth-Friendly Occupations: 15.9%	16%	4 out of 10	2.2%	Moderate (2,650)
Human Services	In Field: 9.7% In Top Youth-Friendly Occupations: 14.6%	7%	0 out of 5	1.3%	Moderate (1,000)
Business, Management, and Administration	In Field: 18.5% In Top Youth-Friendly Occupations: 25.1%	55%	17 out of 47	0.7%	High (8,500)
Engineering, Manufacturing and Technology	In Field: 11.3% In Top Youth-Friendly Occupations: 15.6%	21%	10 out of 26	0.4%	High (3,990)
Agriculture, Food, and Natural Resources*	In Field: 12.6% In Top Youth-Friendly Occupations: 39.1%	0.3%	3 out of 11	1.6%	Low (760)

*Agriculture, Food, and Natural resources Career Field overlaps with other fields and includes Food Products and Processing Systems, Animal Systems, Plant Systems, Biotechnology, Environmental Systems, Natural Resources Systems, and Agribusiness. The 11 youth-friendly occupations identified are only those that made the top 100 by job posting volume in 2020 out of many opportunities in this field. Numbers may not sum due to rounding.

¹² Entry-level hourly wages highlighted in green meet or surpass the criteria for a living wage for one adult without children for Ramsey County, which is \$15.94. DEED Cost of Living Tool, <https://mn.gov/deed/data/data-tools/col/>

Youth-Friendly Opportunities by Career Field

ARTS, COMMUNICATIONS, AND INFORMATION SYSTEMS

The Arts, Communications, and Information Systems career field intertwines arts, entertainment, information technology, print, social media, and digital networking. This field continues to grow as our world develops new ways to communicate and do work. This career field has one of the lowest volumes of youth-friendly employment in Ramsey County, representing less than 1% of all employment in roles requiring a high school diploma or less and two or fewer years of experience. Of the top 100 occupations that could be most accessible to youth (requiring 0-2 years of experience and a high school diploma or less), only one of them falls into the Arts, Communications, and Information Systems career field.

Computer User Support Specialists are not considered high-growth, at only 0.3% forecasted annual growth through 2025, which is 0.5 percentage points lower than all Ramsey County occupations and 0.6 percentage points lower than the top 100 youth-friendly occupations.

Arts, Communications, and Information Systems in the Top 100 Youth Careers in Ramsey County, Minnesota - COVID, 2020Q3

SOC	Occupation	Empl 2020Q3	Median Ann Wages ²	Unempl	Unempl Rate	Total 5-Year Demand	5-Year Avg Ann % Growth	5-Year Avg Ann Supply Gap
15-1232	Computer User Support Specialists	1,568	\$56,300	41	3.6%	673	0.3%	0
	Top Arts, Communications, and Information Systems Youth Careers	1,568	\$56,300	41	3.6%	673	0.3%	0
	Youth Occupations - Top 100 - Refined	161,579	\$40,400	10,656	7.2%	116,457	0.9%	
	Total – All Arts, Communications, & Information Systems Occupations	17,972	\$79,000	583	4.1%	8,281	0.4%	
	Total - All Occupations	334,772	\$48,200	17,722	6.0%	204,662	0.8%	

Source: JobsEQ®

Data as of 2020Q3 unless noted otherwise

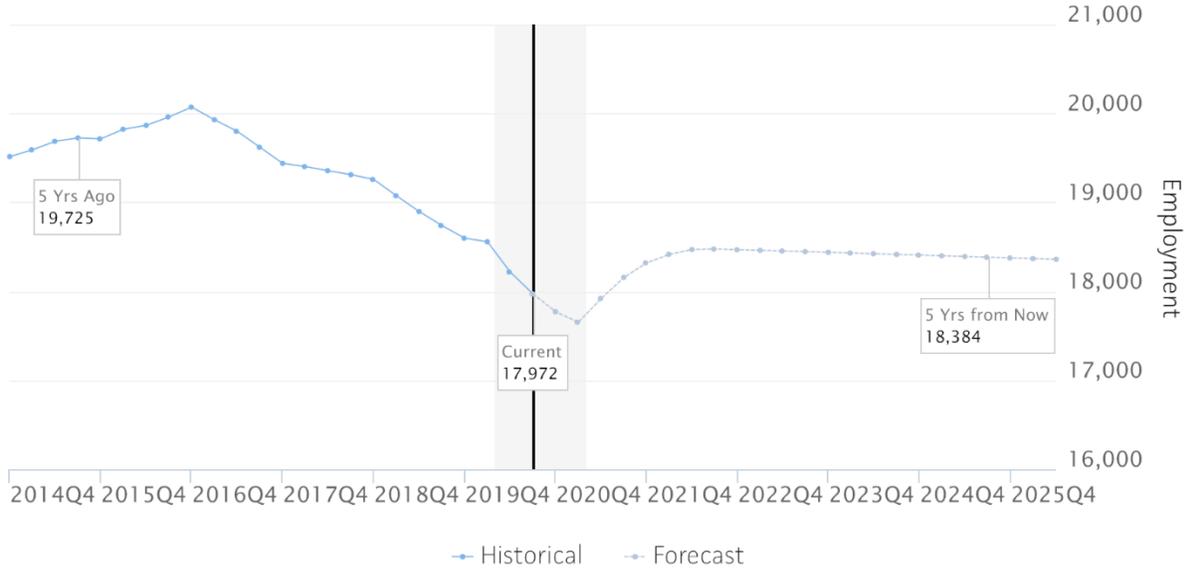
Note: Figures may not sum due to rounding.

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).

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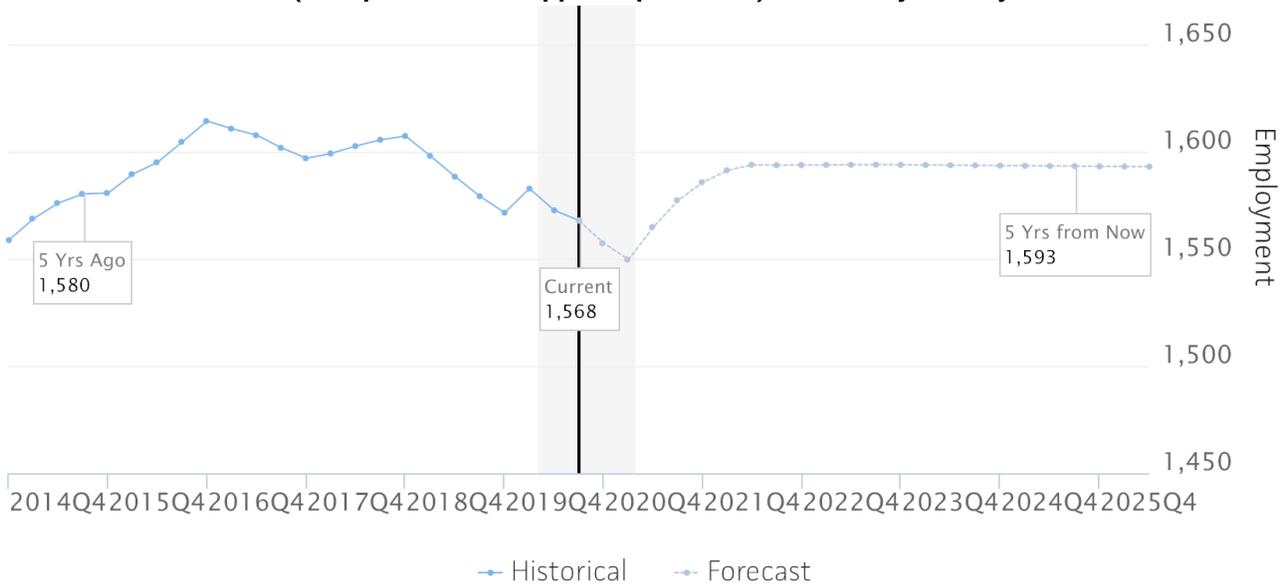
In Ramsey County, it is anticipated that local employment in all occupations in the Arts, Communications, & Information Systems field will reach the lowest point in the first quarter of 2021, dropping from 17,972 workers in the third quarter of 2020 to 17,654. Starting the second quarter of 2021 and continuing through the third quarter of 2022, employment in this field is forecast to rise sharply and then remain relatively stable through 2025. Computer User Specialist forecasts follow a similar trend, with employment rebounding by the third quarter of 2022 and remaining flat through 2025.

Arts, Communications, & Information Systems 5-Year Employment Forecast in Ramsey County



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

Youth-Friendly Arts, Communications, & Information Systems 5-Year Employment Forecast (Computer User Support Specialists) in Ramsey County



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

The median annual wage for Computer User Support Specialists is \$56,300, about \$15,900 more than the median wage across all top 100 youth occupations and \$8,100 more than the median wage for all occupations in Ramsey County. With an entry-level hourly wage of \$19.19, more than half of Computer User Support Specialists make a living wage for one adult without children (\$15.94/hour).¹³

¹³Living Wage Calculation for Ramsey County, Minnesota, updated 2019 <https://mn.gov/deed/data/data-tools/col/>

SOC	Occupation	Median Ann Wage	Entry Level Wage	Entry Level Hourly Wage	Empl 2020Q3	% of Empl (Ages 16 – 24)
15-1232	Computer User Support Specialists	\$56,300	\$39,900	\$19.19	1,568	7.5%
	Top Arts, Communications, and Information Systems Youth Careers	\$56,300	\$39,900	\$19.19	1,568	7.5%
	Youth Occupations - Top 100 - Refined	\$40,400	\$30,100	\$14.49	161,579	19.7%
	Total – All Arts, Communications, & Information Systems Occupations	\$79,000	\$51,200	\$24.68	17,972	9.5%
	Total - All Occupations	\$48,200	\$28,300	\$13.62	334,772	15.1%

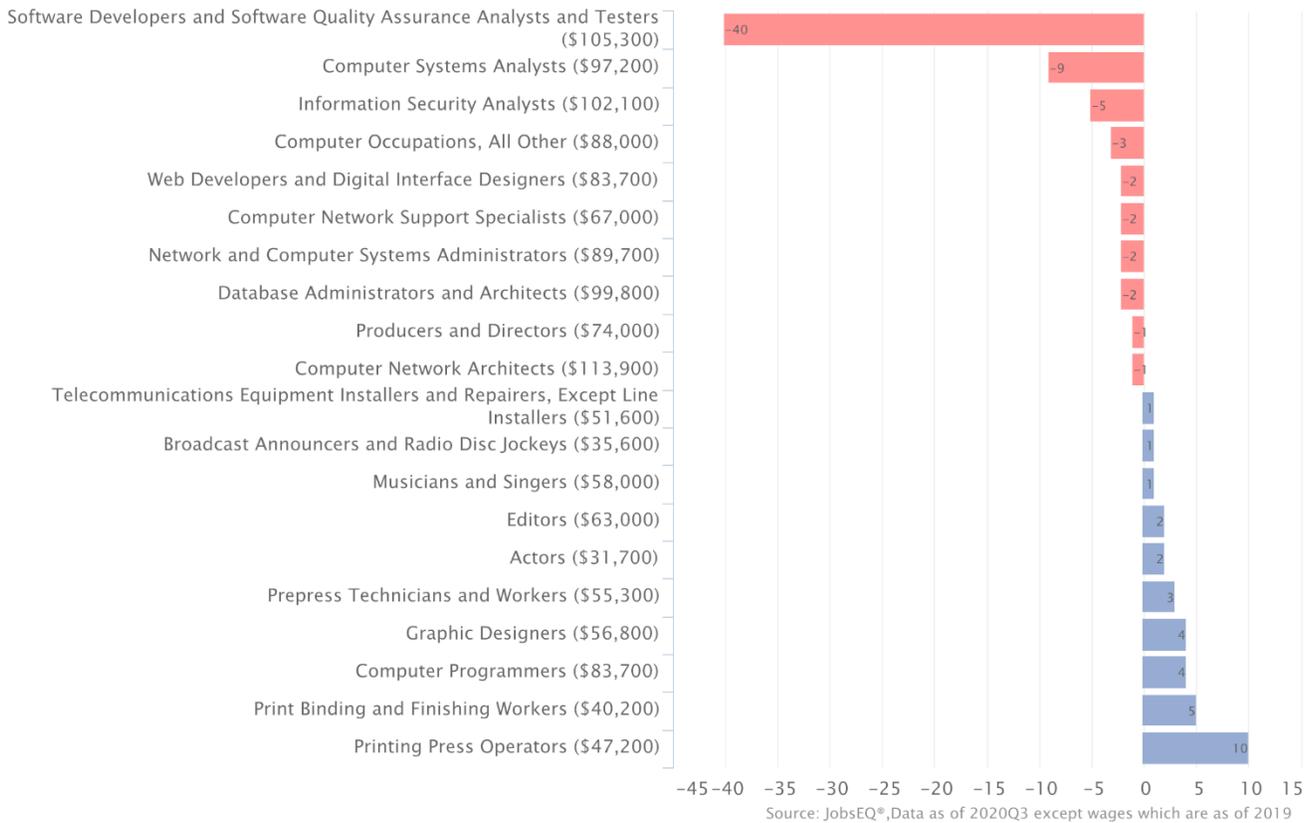
Source: [JobsEQ®](#). Wage data are as of 2019 and represent the average for all Covered Employment

*Entry level hourly wages highlighted in green meet or surpass the criteria for a living wage for a single adult without children in Ramsey County, which is \$15.94.

Occupation gap estimates are based on our most reasonable hypothesis given current conditions. In Ramsey County, an analysis of local Arts, Communications, & Information Systems occupational gaps as of the third quarter of 2020 showed that there was a shortage of local Software Developers, Computer Systems Analysts, Information Security Analysts, Web Developers, Computer Network Support Specialists, Database Administrators, and Producers and Directors. Based on the forecasted growing demand for information systems positions, these occupations of shortage are likely to rebound and grow in demand as the pandemic subsides, possibly beyond initial forecasts. All of the top ten positions of highest forecasted talent shortage over the next five years pay wages of \$67,000 or over per year and require an Associate's Degree or higher. Computer User Support Specialists are estimated to have neither a shortage nor a surplus of talent; however, based on the estimations below, youth starting in these roles could pivot to an area of talent shortage with additional training.

Conversely, the four out of the ten positions forecast to have the highest surplus of talent as of the third quarter of 2020 require less than a high school diploma on average and pay under \$63,000 per year. Given the impacts of the COVID-19 pandemic on local industry, these occupations of anticipated high talent excess will likely decline in overall local demand and shift dramatically in how work is done daily.

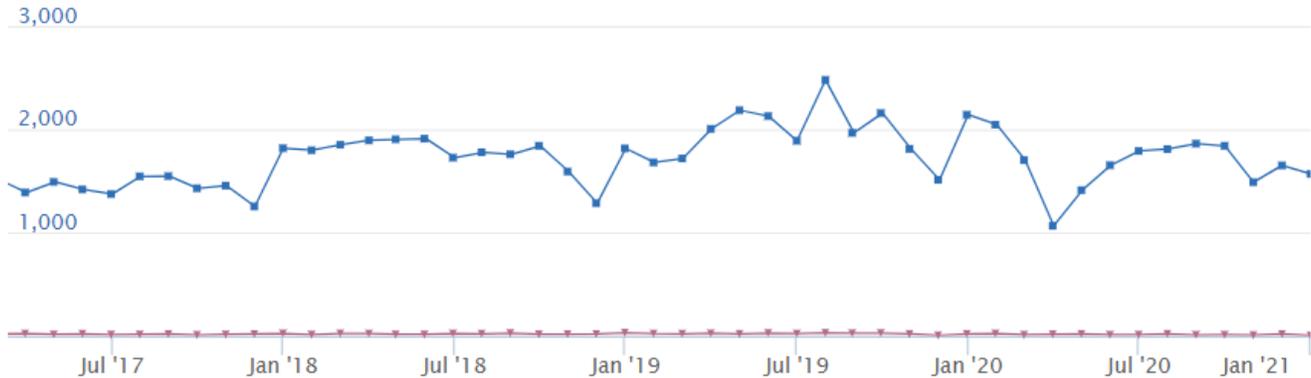
Arts, Communications, & Information Systems Potential Average Annual Occupation Gaps over 5 Years in Ramsey County



YOUTH-FRIENDLY JOB POSTING TRENDS

Arts, Communications, & Information Systems job opportunities accessible to youth declined since the pandemic by about 40%, a greater degree than seen in youth-friendly occupations overall (-19% from the pre-pandemic period). Overall, about 19,444 jobs advertised in Ramsey County required two or fewer years of experience and a high school diploma or less between the beginning of March 1, 2020, and the end of February 2021. About 1% of these opportunities were in Arts, Communications, & Information Systems (including the one occupation of the top 100 local youth opportunities). There were nearly 167 Arts, Communications, & Information Systems new jobs posted that were potentially accessible to youth in Ramsey County since the start of the pandemic—though youth were not the only demographic seeking these opportunities. Fifty-six of these postings were for the youth-friendly occupation highlighted in this report—Computer User Support Specialists—which was down 33% from the prior 12-month period.

Volume of Deduplicated Youth-Friendly Arts, Communications, & Information Systems Field Jobs Posted Online in Ramsey County, March 2020 - February 2021



Blue: All jobs advertised requiring a high school diploma or less and 0-2 years of experience

Purple: Arts, Communications, & Information Systems jobs requiring a high school diploma or less and 0-2 years of experience

A total of 90 direct employers and staffing agencies advertised openings in youth-friendly Arts, Communications, & Information Systems since the start of the pandemic, using 45 different job boards to advertise their positions. Several employers in utilities, telecommunications, manufacturing, and information technology saw increases in volumes of new postings for youth-friendly Arts, Communications, & Information Systems positions. Youth-friendly Arts, Communications, and Information Systems positions advertised in publishing, security, and finance declined.

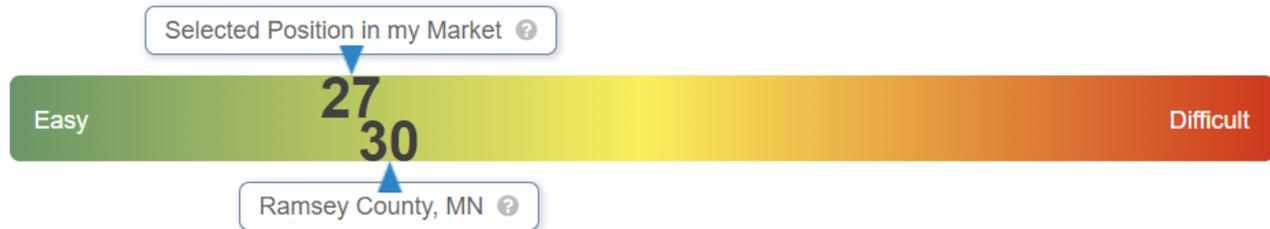
Volume of Youth-Friendly Arts, Communications, & Information Systems Jobs Advertised by Employers, March 2020 - February 2021

Employer	Job Postings (and % change pre-pandemic)
1) Pearson	8 (-33%)
2) Army	6 (0%)
3) ADT Security Services	5 (-17%)
4) TAK Communications	5 (+150%)
5) Aerotek	4 (+100%)
6) Kelly Services	3 (-50%)
7) US Bank	3 (-84%)
8) Manpower	3 (-25%)
9) CTG Computer Task Group	3 (+200%)
10) USIC	3 (+200%)

It is slightly more difficult to hire talent for these entry-level Arts, Communications, & Information Systems positions in Ramsey County compared to nationally as of March 2021, due in part to the comparatively strong industry mix of the MSP Metro and more favorable overall unemployment trends broadly in the MSP Metro compared to other communities nationwide. The median salary offered for these positions in Ramsey County is about \$42,200 as of March 2021, about \$3,350 higher than the national median for these same positions.

Youth-Friendly Arts, Communications, & Information Systems Talent Pool, Direct Employer Competition, and Hiring Difficulty as of March 2021

Potential Candidates in the workforce: 27,000
 Direct Employers currently competing: 14
 Open Jobs posted by Direct Employers: 21



The most in-demand skills required by employers seeking talent in these youth-friendly Arts, Communications, & Information Systems roles include basic skills needed to communicate with the public and troubleshoot technology.

Top Employability Skills and Characteristics Sought by Employers Advertising Youth-Friendly Arts, Communications, & Information Systems Jobs, March 2020 - February 2021

- 1) Communication
- 2) Dedication
- 3) Verbal Communication
- 4) Written Communication
- 5) Troubleshooting

HEALTH SCIENCE TECHNOLOGY

Health Science Technology is a robust and versatile career field that expands the interdisciplinary health care industry. Talent in this field may work in hospitals, long-term care, schools, government agencies, public health, or non-profits. This career field has a moderate volume of youth-friendly employment in Ramsey County, representing about 16% of all employment in roles requiring a high school diploma or less and two or fewer years of experience. Of the top 100 occupations that could be most accessible to youth (requiring 0-2 years of experience and a high school diploma or less), ten of them fall into the Health Science Technology career field.

Of the ten of Health Science Technology roles that among the top 100 occupations most accessible to youth, five are high growth careers with annual growth rates at least 0.1 percentage points higher than the growth rate of all Ramsey County occupations.

Health Science Technology Opportunities in the Top 100 Youth Careers in Ramsey County, Minnesota - COVID, 2020Q31

SOC	Occupation	Empl 2020Q3	Median Ann Wages ²	Unempl	Unempl Rate	Total 5-Year Demand	5-Year Avg Ann % Growth	5-Year Avg Ann Supply Gap
31-1122	Personal Care Aides	11,848	\$28,600	484	5.0%	11,042	2.8%	0
31-1121	Home Health Aides	4,193	\$28,600	165	4.7%	3,271	2.8%	0
31-1131	Nursing Assistants	4,026	\$37,500	165	5.1%	2,479	0.8%	2
43-6013	Medical Secretaries and Administrative Assistants	1,413	\$43,800	40	3.9%	883	0.9%	(4)
31-9092	Medical Assistants	1,197	\$42,500	27	3.0%	810	1.7%	(8)
29-2052	Pharmacy Technicians	789	\$39,000	19	3.6%	349	0.6%	(1)
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	788	\$52,900	14	2.7%	292	0.7%	(6)
39-9031	Exercise Trainers and Group Fitness Instructors	758	\$43,300	142	19.0%	913	4.2%	12
31-9099	Healthcare Support Workers, All Other	234	\$39,700	3	3.2%	149	1.0%	0
31-9093	Medical Equipment Preparers	151	\$45,700	2	3.1%	90	0.5%	0
	Top Health Science Technology Youth Careers	25,397	\$33,200	1,060	5.2%	20,279	2.2%	
	Youth Occupations - Top 100 - Refined	161,579	\$40,400	10,656	7.2%	116,457	0.9%	
	Total – All Health Science Technology Occupations	51,286	\$60,700	1,289	3.2%	29,984	1.6%	
	Total - All Occupations	334,772	\$48,200	17,722	6.0%	204,662	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.

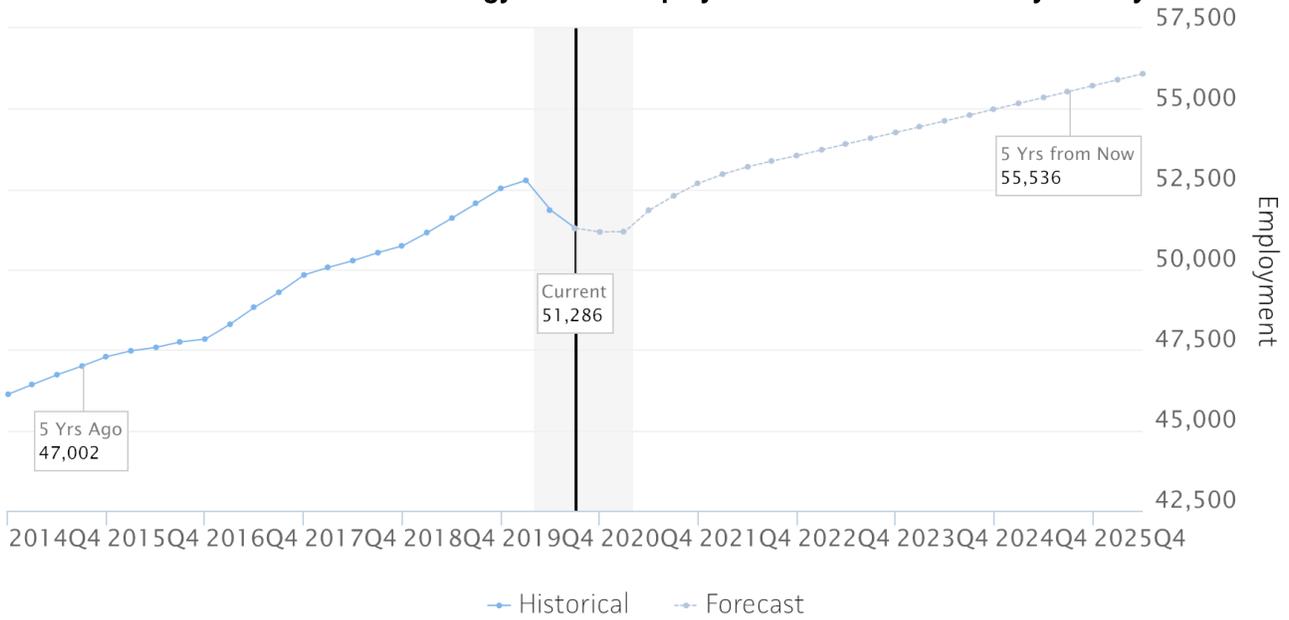
2. Wage data are as of 2019 and represent the average for all Covered Employment

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).

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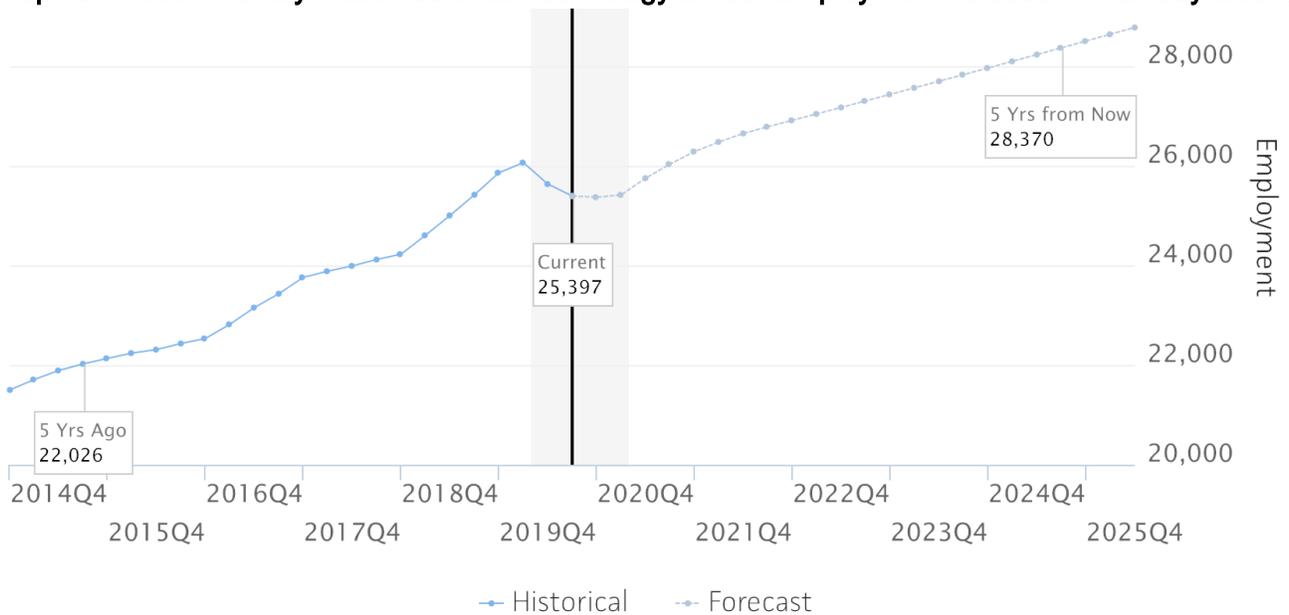
In Ramsey County, it is estimated that local employment in Health Science Technology already reached the lowest point in the fourth quarter of 2020, dropping from 51,286 workers in the third quarter of 2020 to 51,171. By the first quarter of 2021, employment will gradually increase through 2025. Health Science Technology occupations that are also among the top 100 youth occupations, like Personal Care Aides and Home Health Aides, are forecast to follow a similar trajectory. Personal Care Aides, however, did not have a low point of employment during the COVID-19 pandemic, only growth, and is anticipated to have continuous growth through 2025.

Health Science Technology 5-Year Employment Forecast in Ramsey County



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

Top Ten Youth-Friendly Health Science Technology 5-Year Employment Forecast in Ramsey County



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

Median annual wages for occupations accessible to youth in Health Science Technology range from \$28,600 to \$52,900 in Ramsey County, with entry-level wages coming in about \$4,000 to \$13,000 below these median wages. Four out of the ten youth-friendly Health Science Technology roles have an entry-level hourly wage that is considered a living wage for one adult without children (\$15.94/hour).¹⁴

¹⁴Living Wage Calculation for Ramsey County, Minnesota, updated 2019. <https://mn.gov/deed/data/data-tools/col/>

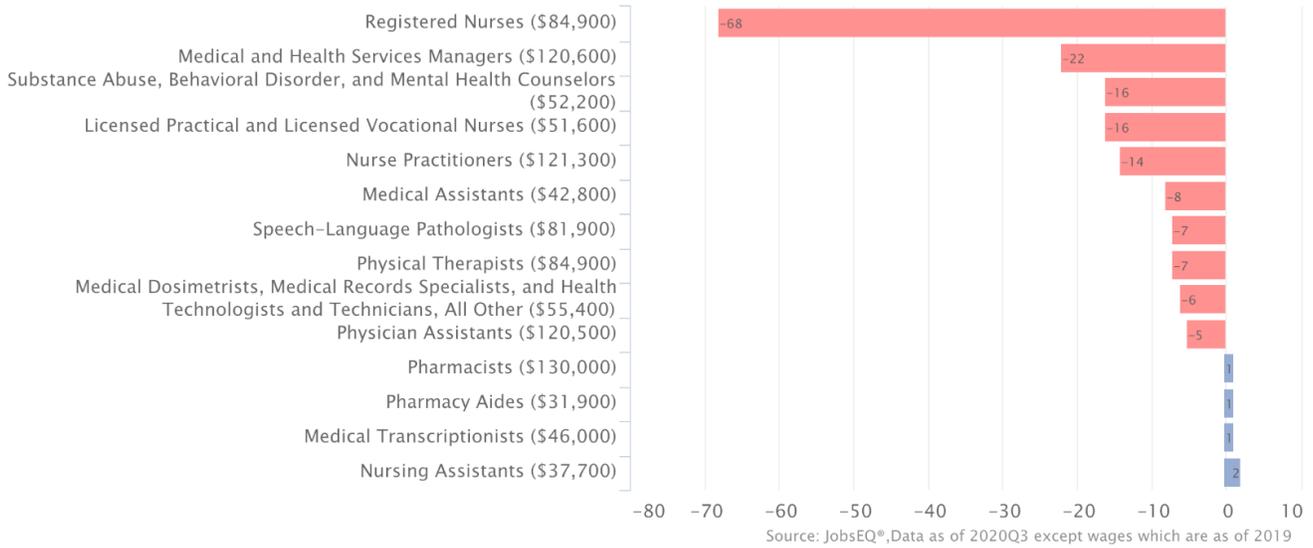
SOC	Occupation	Median Ann Wage	Entry Level Wage	Entry Level Hourly Wage	Empl 2020Q3	% of Empl (Ages 16 – 24)
31-1122	Personal Care Aides	\$28,600	\$24,000	\$11.53	11,848	14.8%
31-1121	Home Health Aides	\$28,600	\$24,000	\$11.52	4,193	16.9%
31-1131	Nursing Assistants	\$37,500	\$30,700	\$14.76	4,026	16.6%
43-6013	Medical Secretaries and Administrative Assistants	\$43,800	\$34,600	\$16.65	1,413	7.6%
31-9092	Medical Assistants	\$42,500	\$35,300	\$16.95	1,197	16.0%
29-2052	Pharmacy Technicians	\$39,000	\$29,600	\$14.24	789	20.8%
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	\$52,900	\$39,700	\$19.07	788	19.1%
39-9031	Exercise Trainers and Group Fitness Instructors	\$43,300	\$30,000	\$14.41	758	26.6%
31-9099	Healthcare Support Workers, All Other	\$39,700	\$29,600	\$14.24	234	20.6%
31-9093	Medical Equipment Preparers	\$45,700	\$37,300	\$17.94	151	20.7%
	Top Health Science Technology Youth Careers	\$33,200	\$27,100	\$13.05	25,397	15.9%
	Youth Occupations - Top 100 - Refined	\$40,400	\$30,100	\$14.49	161,579	19.7%
	Total – All Health Science Technology Occupations	\$60,700	\$44,700	\$21.51	51,286	10.9%
	Total - All Occupations	\$48,200	\$28,300	\$13.62	334,772	15.1%

Source: JobsEQ®. Wage data are as of 2019 and represent the average for all Covered Employment. *Entry level hourly wages highlighted in green meet or surpass the criteria for a living wage for a single adult without children in Ramsey County, which is \$15.94.

Occupation gaps estimations are based on our most reasonable hypothesis given current conditions. In Ramsey County, an analysis of local Health Science Technology occupational gaps as of the third quarter of 2020 showed that there was a shortage of local Registered Nurses, Health Services Managers, Mental Health Counselors, Licensed Practical Nurses, Nurse Practitioners, Medical Assistants, Speech Pathologists, Physical Therapists, Medical Records Specialists, and Physician Assistants. Based on the forecasted growing demand for Health Science Technology positions, these occupations of shortage are likely to rebound and grow in demand as the pandemic subsides, possibly beyond initial forecasts.

All the top ten positions of highest forecasted talent shortage over the next five years pay wages of \$42,800 or more per year, and eight out of ten require an Associate's Degree or higher. Medical Assistants and Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians are among the top 100 occupations that could be most accessible to youth (requiring 0-2 years of experience and a high school diploma or less) and estimated to have a shortage of talent over the next five years in Ramsey County. Based on the estimations below, youth starting in these roles could pivot to areas of talent shortage with some additional training.

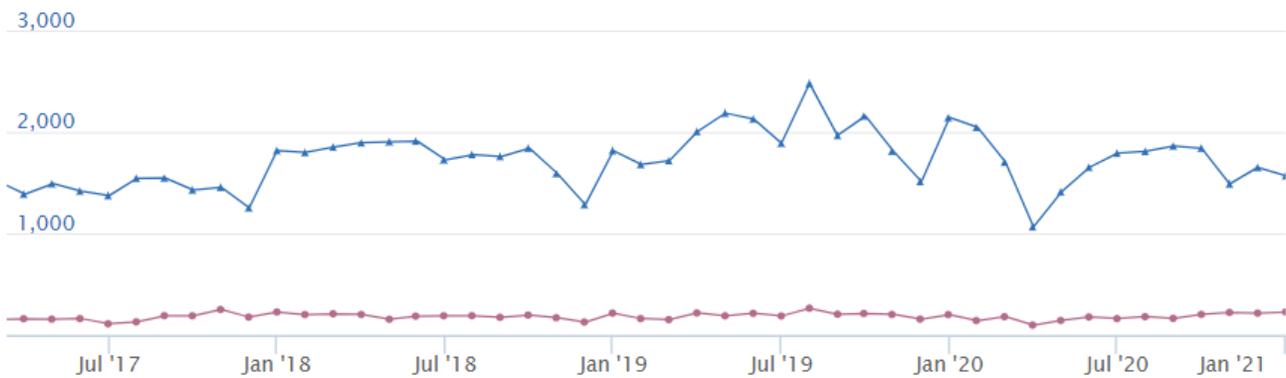
Health Science Technology Potential Average Annual Occupation Gaps over 5 Years in Ramsey County, Minnesota



YOUTH-FRIENDLY JOB POSTING TRENDS

Health Science Technology job opportunities accessible to youth declined since the pandemic by about 7%, a lesser degree than seen in youth-friendly occupations overall (-19% from the pre-pandemic period). Overall, there were about 19,444 jobs advertised in Ramsey County that required two or fewer years of experience and a high school diploma or less between the beginning of March 1, 2020, and the end of February 2021. About 11% of these opportunities were in the Health Science Technology field (including the ten occupations of the top 100 local youth opportunities). There were nearly 2,200 Health Science Technology jobs posted that were potentially accessible to youth in Ramsey County since the start of the pandemic—though youth were not the only demographic seeking these opportunities.

Volume of Deduplicated Youth-Friendly Health Science Technology Jobs Posted Online in Ramsey County, March 2020 - February 2021



Blue: All jobs advertised requiring a high school diploma or less and 0-2 years of experience
Purple: Arts, Communications, & Information Systems jobs requiring a high school diploma or less and 0-2 years of experience

A total of 269 direct employers and staffing agencies advertised open Health Science Technology positions since the start of the pandemic, using 73 different job boards to advertise their positions. Several employers in clinics, hospitals, pharmacies, and senior care saw increases in volumes of new postings for youth-friendly Health Science Technology positions. Youth-friendly positions advertised in health services, clinics, and staffing declined.

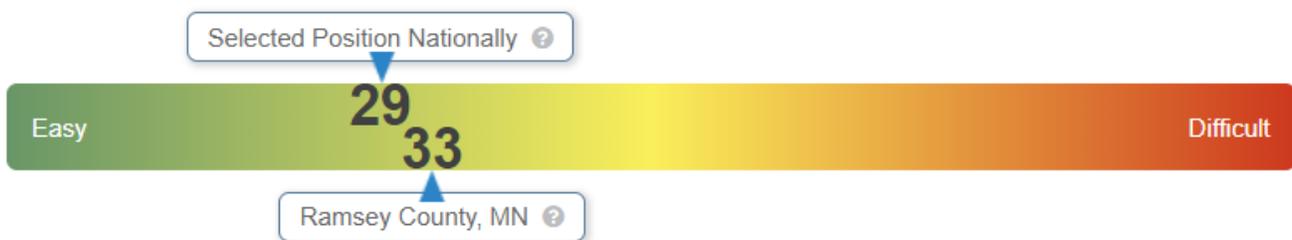
Volume of Youth-Friendly Health Science Technology Jobs Advertised by Employers, March 2020 - February 2021

Employer	Job Postings (and % change pre-pandemic)
1) Allina Health	230 (-61%)
2) Fairview Health Services	199 (-9%)
3) HealthPartners	163 (+196%)
4) Regions Hospital	95 (+12%)
5) Walgreens	89 (+218%)
6) Sunrise Senior Living Inc.	85 (+9%)
7) REM Hennepin Inc.	64 (-24%)
8) Interim Healthcare	63 (+80%)
9) Sholom	61 (+1,120%)
10) HealthEast Care System	49 (-37%)

It is slightly more difficult to hire talent for these ten entry-level Health Science Technology positions in Ramsey County compared to nationally as of March 2021. The median salary offered for these positions in Ramsey County is about \$34,000 as of March 2021, about \$2,000 higher than the national median for these same positions.

Youth-Friendly Health Science Technology Talent Pool, Direct Employer Competition, and Hiring Difficulty as of March 2021

Potential Candidates in the workforce: **82,000**
 Direct Employers currently competing: **77**
 Open Jobs posted by Direct Employers: **280**



The most in-demand skills required by employers seeking talent in these ten youth-friendly Health Science Technology roles include basic skills needed to communicate with the public, manage operations, and caregiving.

Top Employability Skills and Characteristics Sought by Employers Advertising Youth-Friendly Health Science Technology Jobs, March 2020 - February 2021

- 1) Scheduling
- 2) Communication
- 3) Customer service
- 4) Dedication
- 5) Nursing

HUMAN SERVICES

The Human Services field combines careers related to families and human needs, including law, public safety, public administration, and education. This career field has a moderate supply of youth-friendly employment in Ramsey County, representing about 7% of all employment in roles requiring a high school diploma or less and two or fewer years of experience. Of the top 100 occupations that could be most accessible to youth (requiring 0-2 years of experience and a high school diploma or less), five of them fall into the Human Services career field.

Of the five Human Services roles that fall among the top 100 occupations most accessible to youth, four are high-growth careers with forecasted average annual growth rates at least 0.6 percentage points higher than the growth rate of all Ramsey County occupations.

Human Services Occupations in the Top 100 Youth Careers in Ramsey County, 2021Q3

SOC	Occupation	Empl 2020Q3	Median Ann Wages ²	Unempl	Unempl Rate	Total 5-Year Demand	5-Year Avg Ann % Growth	5-Year Avg Ann Supply Gap
33-9032	Security Guards	3,545	\$34,800	74	3.9%	2,474	0.7%	15
25-9045	Teaching Assistants, Except Postsecondary	3,375	\$34,300	174	5.8%	2,115	1.4%	0
21-1093	Social and Human Service Assistants	2,189	\$36,400	52	3.6%	1,587	1.7%	0
37-2012	Maids and Housekeeping Cleaners	2,020	\$29,200	169	7.4%	1,614	1.6%	16
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	305	\$25,300	23	13.2%	461	3.0%	11
	Top Human Services Youth Careers	11,434	\$33,700	491	5.6%	8,250	1.3%	
	Youth Occupations - Top 100 - Refined	161,579	\$40,400	10,656	7.2%	116,457	0.9%	
	Total – All Human Services Occupations	46,342	\$61,300	1,516	4.1%	24,499	0.8%	
	Total - All Occupations	334,772	\$48,200	17,722	6.0%	204,662	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.

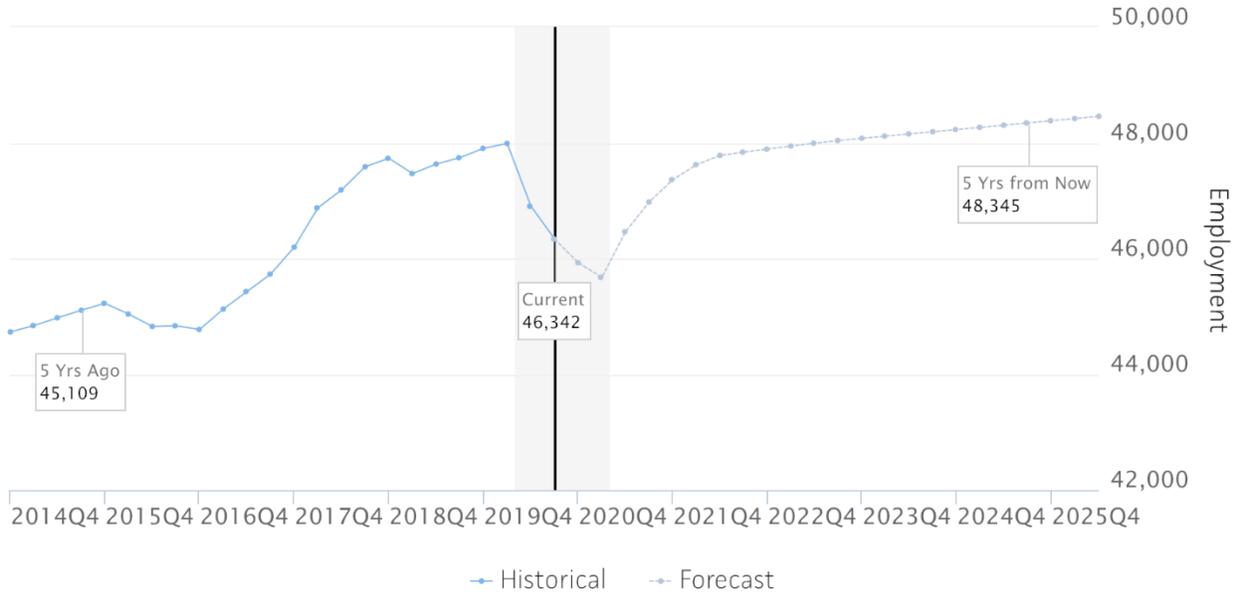
2. Wage data are as of 2019 and represent the average for all Covered Employment

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).

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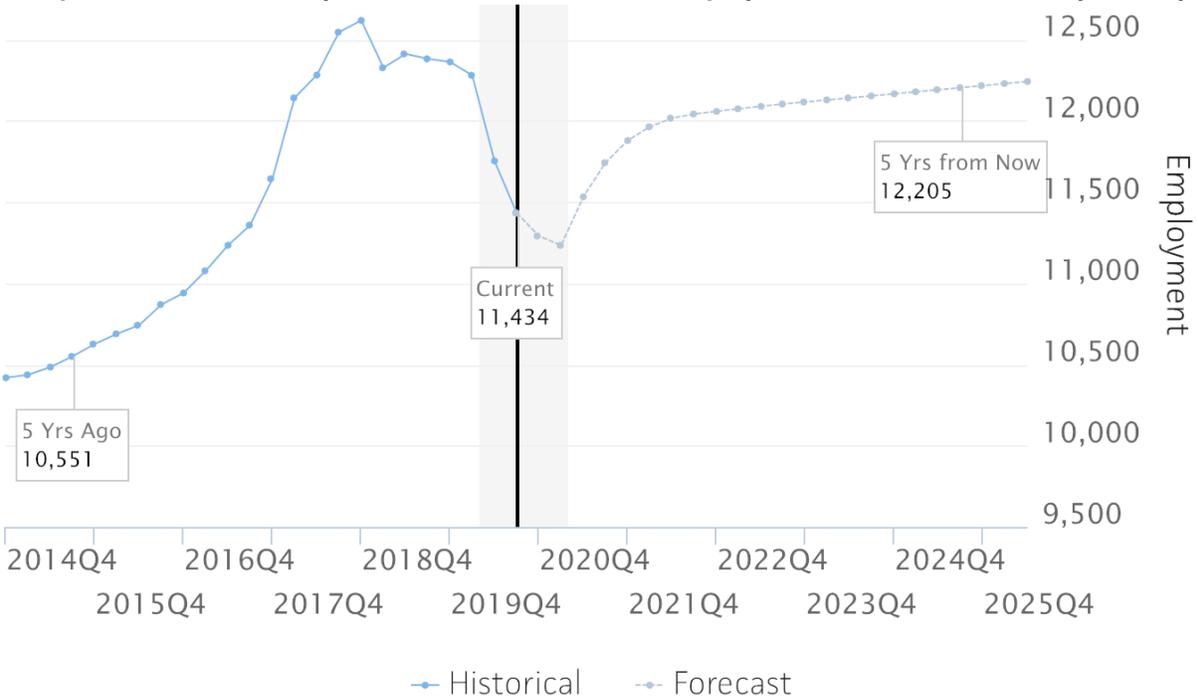
In Ramsey County, it is anticipated that local employment in Human Services roles hit their lowest point in the first quarter of 2021, dropping from 46,342 workers in 2020Q3 to 45,677. The forecast for youth-friendly Human Services roles follows a similar trend, with employment rebounding by the second quarter of 2021 and increasing through 2025.

Human Services 5-Year Employment Forecast in Ramsey County



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

Top Five Youth-Friendly Human Services 5-Year Employment Forecast in Ramsey County



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

Median annual wages for occupations accessible to youth in Human Services range from \$28,600 to \$52,900 in Ramsey County. None of the five youth-friendly Human Services roles have an entry-level hourly wage that is considered a living wage for one adult without children (\$15.94/hour).¹⁵

SOC	Occupation	Median Ann Wage	Entry Level Wage	Entry Level Hourly Wage	Empl 2020Q3	% of Empl (Ages 16 – 24)
33-9032	Security Guards	\$34,800	\$26,000	\$12.52	3,545	15.2%
25-9045	Teaching Assistants, Except Postsecondary	\$34,300	\$25,400	\$12.23	3,375	15.8%
21-1093	Social and Human Service Assistants	\$36,400	\$28,100	\$13.52	2,189	15.5%
37-2012	Maids and Housekeeping Cleaners	\$29,200	\$23,700	\$11.41	2,020	7.6%
33-9092	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	\$25,300	\$22,500	\$10.81	305	74.2%
	Top Human Services Youth Careers	\$33,700	\$25,800	\$12.38	11,434	14.6%
	Youth Occupations - Top 100 - Refined	\$40,400	\$30,100	\$14.49	161,579	19.7%
	Total – All Human Services Occupations	\$61,300	\$42,400	\$20.40	46,342	9.0%
	Total - All Occupations	\$48,200	\$28,300	\$13.62	334,772	15.1%

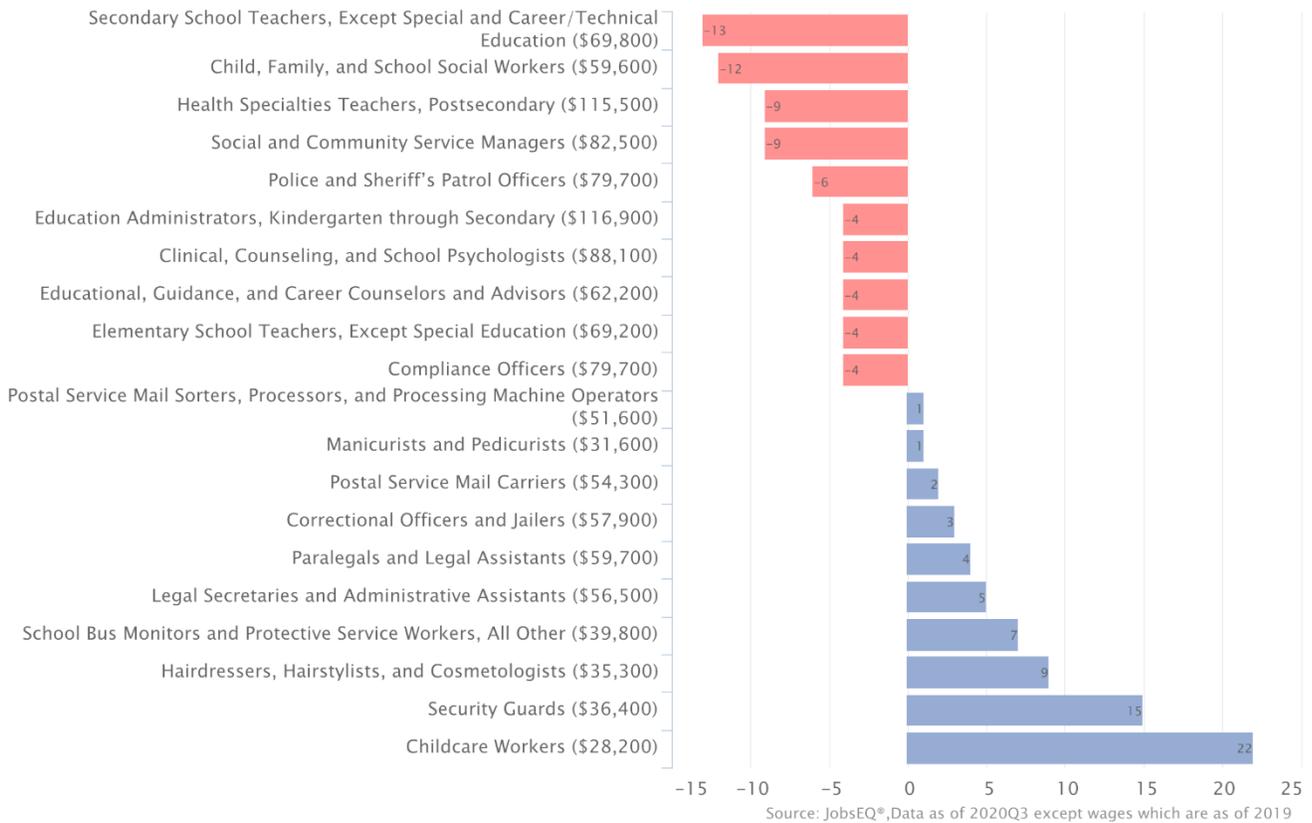
Source: JobsEQ®. Wage data are as of 2019 and represent the average for all Covered Employment. * Entry level hourly wages highlighted in green meet or surpass the criteria for a living wage for a single adult without children in Ramsey County, which is \$15.94.

An analysis of local Human Services occupational gaps in Ramsey County as of the third quarter of 2020 shows that there was a shortage of local Secondary School Teachers, Social Workers, Health Teachers, Social Service Managers, Police Officers, Education Administrators, Psychologists, Career Counselors, Elementary School Teachers, and Compliance Officers. All the top ten positions of highest forecasted talent shortage over the next five years pay wages of \$62,200 or over per year and require an Associate's Degree or higher. None of the identified Human Services youth careers are estimated to have a shortage of talent; however, based on the estimations below, youth starting one of these roles could pivot to an area of talent shortage with some additional training.

Conversely, only one out of the ten positions forecast to have the highest surplus of talent as of the third quarter of 2020 requires less than an Associate's Degree. Given the impacts of the COVID-19 pandemic on local industry, these occupations of anticipated high talent excess will likely decline in overall local demand.

¹⁵Living Wage Calculation for Ramsey County, Minnesota, updated 2019. <https://mn.gov/deed/data/data-tools/col/>

Human Services Potential Average Annual Occupation Gaps over 5 Years in Ramsey County, Minnesota



YOUTH-FRIENDLY JOB POSTING TRENDS

Human Services job opportunities accessible to youth declined since the pandemic by about -19%, the same rate seen across youth-friendly careers in Ramsey County overall. At the same time, there were a total of 19,444 jobs advertised in Ramsey County that required two or fewer years of experience and a high school diploma or less between the beginning of March 1, 2020 and the end of February 2021. About 5% of these opportunities were in the Human Services field (which includes the five Human Services occupations found among the top 100 local youth opportunities). There were just over 1,000 Human Services jobs posted that were potentially accessible to youth in Ramsey County since the start of the pandemic (940 specifically in the five occupations identified in the prior section)—though youth were not the only demographic seeking these opportunities.

Volume of Deduplicated Youth-Friendly Human Services Jobs Posted Online in Ramsey County, March 2020 - February 2021



Blue: All jobs advertised requiring a high school diploma or less and 0-2 years of experience

Purple: Business, Management, and Administration jobs requiring a high school diploma or less and 0-2 years of experience

A total of 192 direct employers and staffing agencies advertised potentially youth-friendly Human Services positions since the start of the pandemic, using over 55 different job boards to advertise their positions. Several employers in security, personal care, veterinary care, and county government saw increases in volumes of new postings for youth-friendly Human Services positions. Youth-friendly positions advertised in social services, senior care, legal services, and public services declined.

Volume of Youth-Friendly Human Services Jobs Advertised by Employers, March 2020 - February 2021

Employer	Job Postings (and % change pre-pandemic)
1) Lutheran Social Services	133 (-43%)
2) Per Mar Security	113 (+769%)
3) Banfield Pet Hospital	27 (+50%)
4) Regions Hospital	24 (+9%)
5) Garda	24 (+2,300%)
6) Allied Universal	21 (+31%)
7) Whelan Security	18 (+125%)
8) The Salvation Army	16 (+7%)
9) M Health Fairview	16 (+23%)
10) Ramsey County	16 (+23%)

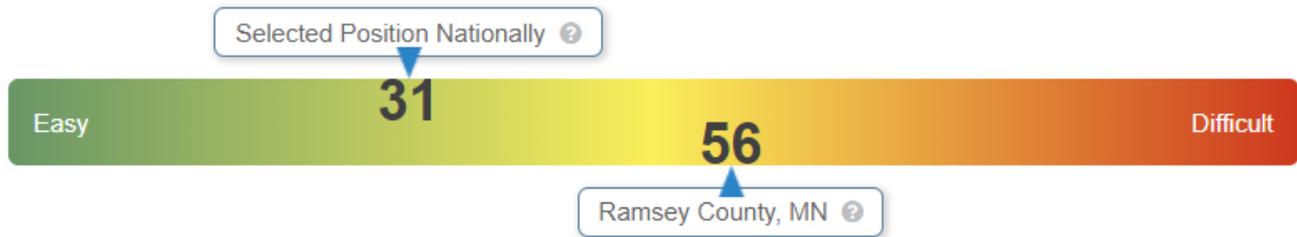
It is more difficult to hire talent for these entry-level Human Services positions in Ramsey County compared to nationally as of March 2021. The median salary offered for these youth-friendly positions in Ramsey County is about \$34,650 as of March 2021, similar to the national median for these same positions.

Youth-Friendly Human Services Talent Pool, Direct Employer Competition, and Hiring Difficulty as of March 2021

Potential Candidates in the workforce: 45,000

Direct Employers currently competing: 39

Open Jobs posted by Direct Employers: 76



The most in-demand skills required by employers seeking talent in these youth-friendly Human Services roles include basic skills needed to schedule clients or patients, engage with the public, and self-manage.

Top Employability Skills and Characteristics Sought by Employers Advertising Youth-Friendly Human Services Jobs, March 2020 - February 2021

- 1) Communication
- 2) Scheduling
- 3) Dedication
- 4) Writing
- 5) Basic Computer Skills

BUSINESS, MANAGEMENT, AND ADMINISTRATION

Business, Management, and Administration is an important career field for youth, having some of the broadest ranges of opportunities from hospitality to management to finance industries. It also has some of the greatest volumes of overall opportunities accessible to individuals with a high school diploma or less and two or fewer years of experience. Of the top 100 occupations that could be most accessible to youth (requiring 0-2 years of experience and a high school diploma or less), 47 of them fall into the Business, Management, and Administration career field.

In all, the youth-friendly roles in Business, Management, and Administration represent about 88,986 workers in Ramsey County. Many of the occupations identified below experienced high rates of unemployment during the pandemic. Overall, these 47 youth-friendly careers together only forecast an overall growth rate of about 0.7% annually through 2025.

Business, Management, & Administration in the Top 100 Youth Careers in Ramsey County, 2020Q3

SOC	Occupation	Empl 2020Q3	Median Ann Wages ²	Unempl	Unempl Rate	Total 5-Year Demand	5-Year Avg Ann % Growth	5-Year Avg Ann Supply Gap
35-3023	Fast Food and Counter Workers	7,258	\$25,200	1,048	13.4%	8,380	2.7%	151
41-2031	Retail Salespersons	7,064	\$26,700	481	6.9%	5,871	1.2%	78
43-4051	Customer Service Representatives	6,613	\$40,800	317	5.3%	4,190	-0.4%	57
43-9061	Office Clerks, General	6,539	\$39,900	273	5.2%	3,754	-0.3%	42
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,772	\$31,700	346	6.5%	4,166	0.8%	28
41-2011	Cashiers	5,523	\$26,000	557	9.5%	5,067	-0.2%	138
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	4,566	\$43,500	166	4.6%	2,249	-0.9%	30
35-3031	Waiters and Waitresses	4,024	\$24,800	491	11.5%	4,712	2.3%	93
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,583	\$47,000	106	3.6%	1,971	-0.4%	20
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,002	\$72,000	66	2.7%	1,584	0.1%	3
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,718	\$63,300	71	3.4%	1,346	-0.4%	7
35-2014	Cooks, Restaurant	2,377	\$31,900	418	14.2%	2,490	4.0%	18
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	2,354	\$124,100	47	2.3%	866	-0.1%	-4
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	2,173	\$60,600	124	6.5%	1,491	0.7%	8
41-1011	First-Line Supervisors of Retail Sales Workers	2,119	\$45,800	68	3.7%	1,222	0.4%	11
43-4171	Receptionists and Information Clerks	2,011	\$32,000	129	7.7%	1,470	0.8%	11
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,691	\$39,000	127	7.9%	1,587	2.1%	16
43-6011	Executive Secretaries and Executive Administrative Assistants	1,658	\$60,600	48	4.2%	648	-2.4%	22
35-3011	Bartenders	1,229	\$24,100	104	9.4%	1,475	3.6%	18
43-3071	Tellers	1,173	\$31,800	21	2.3%	518	-2.2%	13

41-3031	Securities, Commodities, and Financial Services Sales Agents	1,129	\$90,100	28	2.5%	530	-0.1%	-1
41-3021	Insurance Sales Agents	1,069	\$62,000	25	3.0%	512	-0.1%	-3
53-3031	Driver/Sales Workers	1,051	\$25,400	47	4.9%	686	1.1%	2
35-2021	Food Preparation Workers	1,039	\$29,400	200	14.4%	984	1.0%	23
35-3041	Food Servers, Nonrestaurant	945	\$27,200	106	10.3%	850	1.4%	10
35-2012	Cooks, Institution and Cafeteria	927	\$36,500	174	13.8%	733	1.1%	13
35-9021	Dishwashers	790	\$26,700	272	21.1%	750	1.9%	21
11-9141	Property, Real Estate, and Community Association Managers	692	\$64,800	16	3.1%	262	-0.1%	-2
43-5061	Production, Planning, and Expediting Clerks	678	\$53,000	15	3.4%	376	0.5%	0
41-1012	First-Line Supervisors of Non-Retail Sales Workers	659	\$85,200	15	2.7%	279	-0.7%	3
41-2021	Counter and Rental Clerks	655	\$30,400	36	6.6%	465	0.9%	5
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	632	\$25,000	70	11.6%	889	2.6%	20
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	623	\$71,900	14	2.8%	327	0.1%	0
11-9051	Food Service Managers	545	\$61,000	10	2.7%	392	2.1%	0
43-3011	Bill and Account Collectors	501	\$37,600	21	6.5%	262	-1.0%	4
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	485	\$24,500	126	16.4%	519	2.6%	11
43-4111	Interviewers, Except Eligibility and Loan	458	\$42,900	19	7.0%	286	0.2%	2
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	397	\$46,000	11	4.7%	216	-0.3%	2
51-3011	Bakers	351	\$33,000	55	9.3%	260	0.8%	5
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	328	\$48,900	15	4.8%	213	1.2%	0
13-1022	Wholesale and Retail Buyers, Except Farm Products	320	\$67,900	3	1.9%	153	-0.6%	2
27-1026	Merchandise Displayers and Window Trimmers	314	\$30,500	12	5.5%	162	0.3%	1
41-3011	Advertising Sales Agents	283	\$50,300	11	4.3%	184	-0.3%	3
43-4081	Hotel, Motel, and Resort Desk Clerks	226	\$26,900	16	7.1%	251	3.1%	4
35-1011	Chefs and Head Cooks	204	\$53,700	24	9.9%	177	2.7%	1
41-9041	Telemarketers	190	\$32,200	14	11.7%	129	-1.3%	4
41-9011	Demonstrators and Product Promoters	48	\$30,600	4	10.9%	43	0.5%	1
	Top Business, Management, and Administration Youth Careers	88,986	\$41,600	6,365	7.7%	65,948	0.7%	
	Youth Occupations - Top 100 - Refined	161,579	\$40,400	10,656	7.2%	116,457	0.9%	
	Total – All Business, Management, & Administration Occupations	141,645	\$53,900	8,544	6.7%	94,998	0.6%	
	Total - All Occupations	334,772	\$48,200	17,722	6.0%	204,662	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

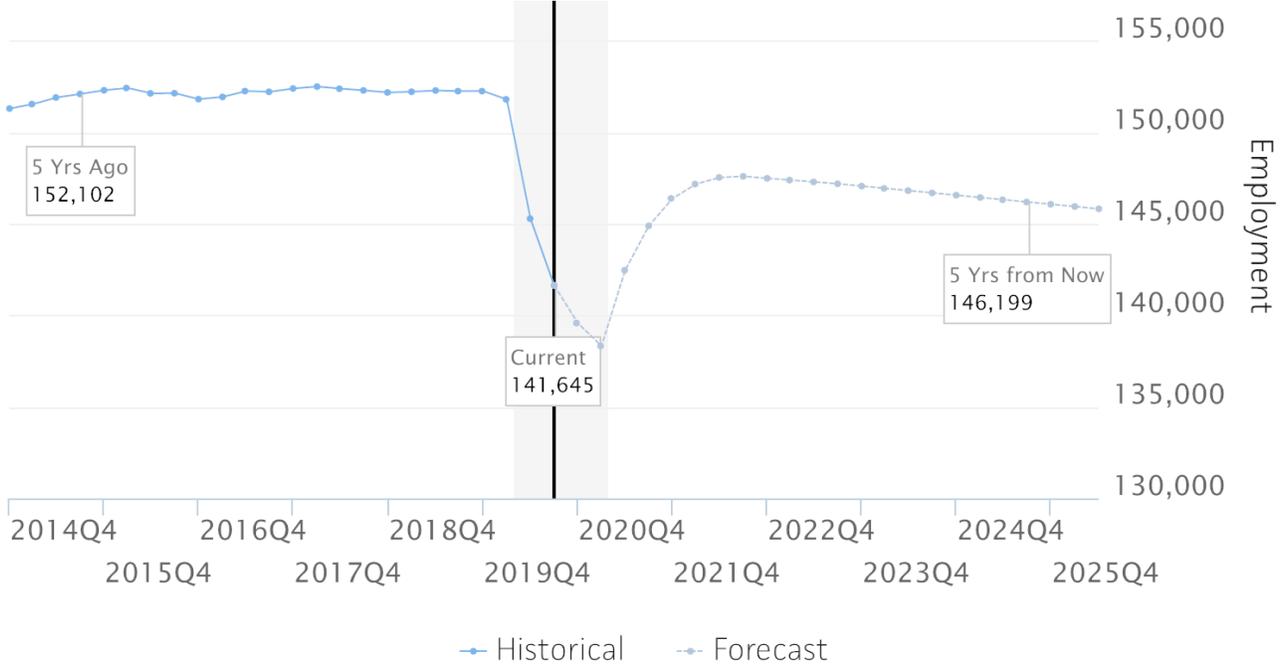
with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).

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Occupations highlighted in yellow indicate occupations that cross over to Business, Management, and Administration or Engineering, Manufacturing, and Technology career fields as well as Agriculture, Food, and Natural Resources.

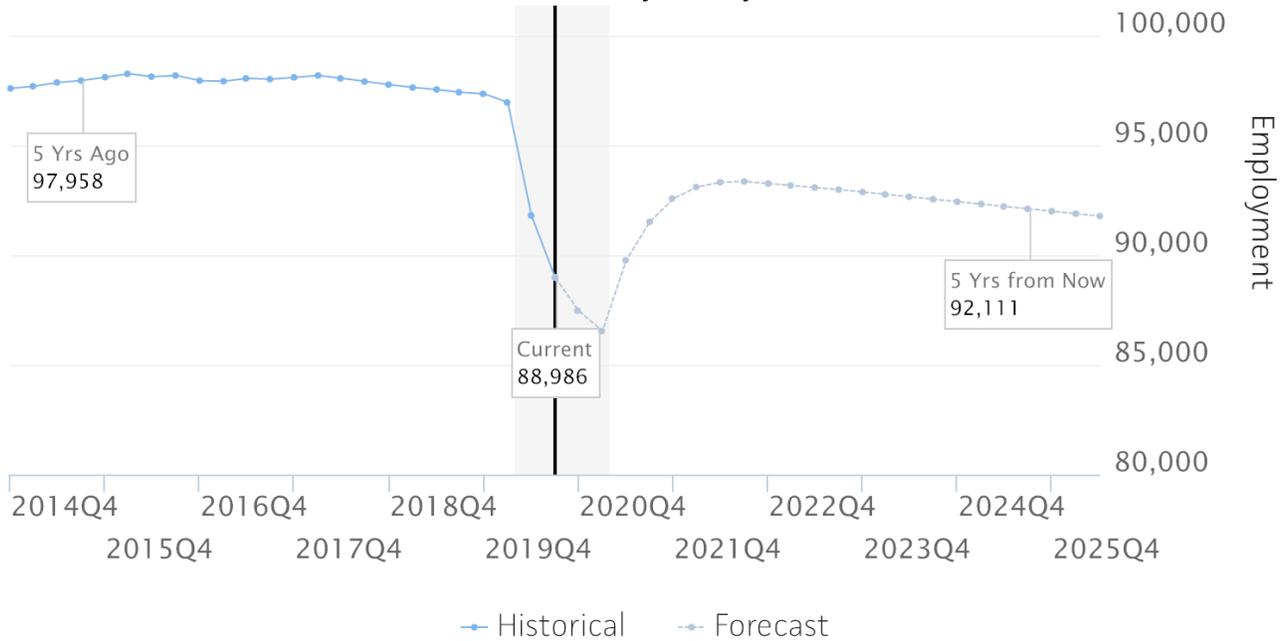
In Ramsey County, it is anticipated that local employment in all occupations in the Business, Management, and Administration field will reach the lowest point in the first quarter of 2021. The field's youth-friendly forecast follows a similar trend, with employment forecast to rebound under an optimistic forecast by the second quarter of 2022 and with a gradual rise through 2025.

Business, Management, & Administration 5-Year Employment Forecast in Ramsey County



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

Top 47 Youth-Friendly Business, Management, & Administration 5-Year Employment Forecast in Ramsey County



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

The median annual wage across all the top 47 youth-friendly Business, Management, and Administration careers is \$41,600, about \$800 above the median wage across all top 100 youth occupations. Just seventeen occupations in the top youth-friendly occupations of this field pay a livable wage for a single adult with no children living in Ramsey County (\$15.94/hour).¹⁶

SOC	Occupation	Median Ann Wage	Entry Level Wage	Entry Level Hourly Wage	Empl 2020Q3	% of Empl (Ages 16 – 24)
11-9051	Food Service Managers	\$61,000	\$43,700	\$21.00	545	12.9%
11-9141	Property, Real Estate, and Community Association Managers	\$64,800	\$44,900	\$21.60	692	3.3%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$124,100	\$77,300	\$37.16	2354	2.8%
13-1022	Wholesale and Retail Buyers, Except Farm Products	\$67,900	\$46,400	\$22.32	320	9.4%
27-1026	Merchandise Displayers and Window Trimmers	\$30,500	\$23,200	\$11.17	314	9.5%
35-1011	Chefs and Head Cooks	\$53,700	\$34,500	\$16.59	204	11.6%
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	\$39,000	\$29,900	\$14.38	1691	22.8%
35-2012	Cooks, Institution and Cafeteria	\$36,500	\$28,800	\$13.86	927	26.3%
35-2014	Cooks, Restaurant	\$31,900	\$26,700	\$12.83	2377	27.2%
35-2021	Food Preparation Workers	\$29,400	\$23,500	\$11.31	1039	42.3%
35-3011	Bartenders	\$24,100	\$21,800	\$10.48	1229	21.1%

¹⁶Living Wage Calculation for Ramsey County, Minnesota, updated 2019 <https://mn.gov/deed/data/data-tools/col/>

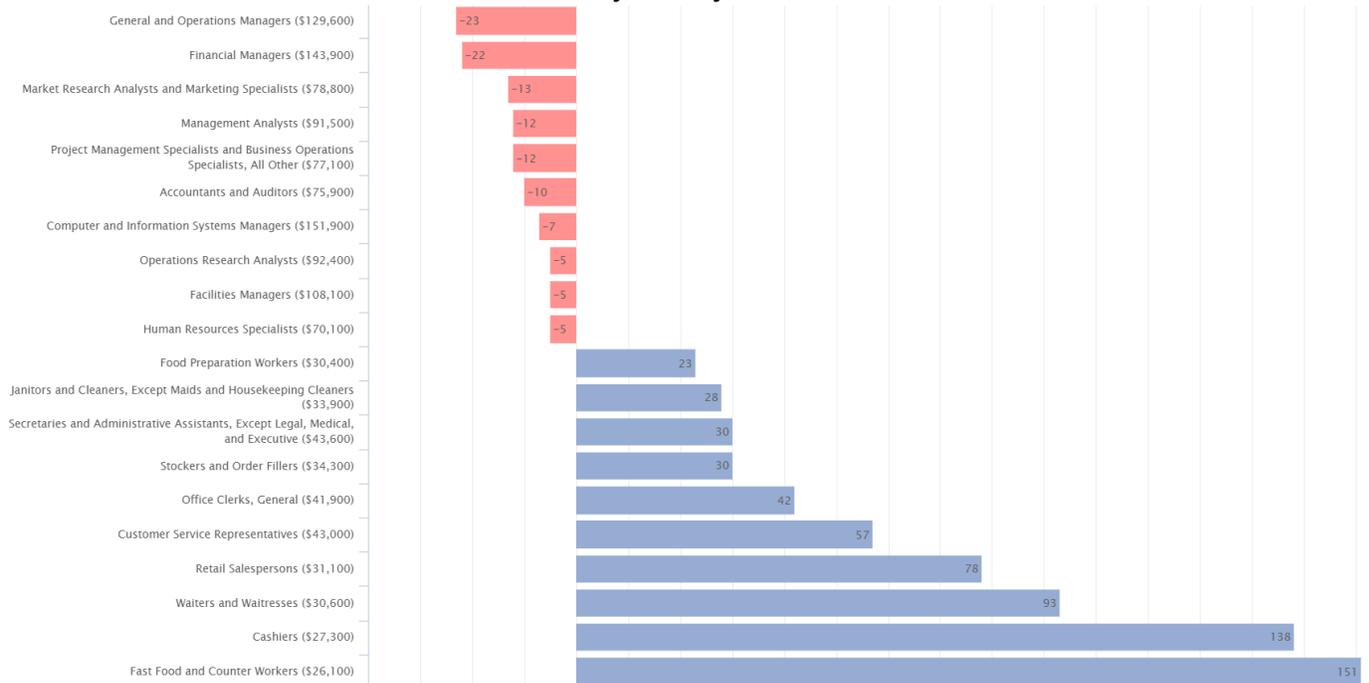
35-3023	Fast Food and Counter Workers	\$25,200	\$22,200	\$10.69	7258	57.2%
35-3031	Waiters and Waitresses	\$24,800	\$22,200	\$10.66	4024	47.1%
35-3041	Food Servers, Nonrestaurant	\$27,200	\$22,800	\$10.95	945	37.4%
35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	\$24,500	\$21,800	\$10.46	485	44.2%
35-9021	Dishwashers	\$26,700	\$22,200	\$10.67	790	39.4%
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	\$25,000	\$22,400	\$10.78	632	75.0%
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	\$48,900	\$34,600	\$16.63	328	2.9%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$31,700	\$24,700	\$11.89	5772	13.1%
41-1011	First-Line Supervisors of Retail Sales Workers	\$45,800	\$32,700	\$15.74	2119	9.0%
41-1012	First-Line Supervisors of Non-Retail Sales Workers	\$85,200	\$51,700	\$24.88	659	4.5%
41-2011	Cashiers	\$26,000	\$22,700	\$10.93	5523	46.5%
41-2021	Counter and Rental Clerks	\$30,400	\$24,300	\$11.68	655	17.6%
41-2031	Retail Salespersons	\$26,700	\$22,800	\$10.94	7064	30.1%
41-3011	Advertising Sales Agents	\$50,300	\$31,700	\$15.26	283	9.7%
41-3021	Insurance Sales Agents	\$62,000	\$38,600	\$18.56	1069	6.5%
41-3031	Securities, Commodities, and Financial Services Sales Agents	\$90,100	\$48,000	\$23.08	1129	10.0%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$60,600	\$38,000	\$18.27	2173	11.0%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$71,900	\$43,900	\$21.10	623	6.1%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$72,000	\$45,200	\$21.72	3002	6.4%
41-9011	Demonstrators and Product Promoters	\$30,600	\$25,300	\$12.14	48	12.2%
41-9041	Telemarketers	\$32,200	\$24,400	\$11.73	190	20.9%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$63,300	\$43,900	\$21.12	2718	5.2%
43-3011	Bill and Account Collectors	\$37,600	\$30,500	\$14.67	501	10.0%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$47,000	\$34,100	\$16.39	3583	6.9%
43-3071	Tellers	\$31,800	\$25,600	\$12.33	1173	30.1%
43-4051	Customer Service Representatives	\$40,800	\$29,700	\$14.26	6613	25.2%
43-4081	Hotel, Motel, and Resort Desk Clerks	\$26,900	\$23,000	\$11.07	226	30.4%
43-4111	Interviewers, Except Eligibility and Loan	\$42,900	\$32,600	\$15.68	458	15.2%
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	\$46,000	\$34,900	\$16.77	397	14.7%
43-4171	Receptionists and Information Clerks	\$32,000	\$24,300	\$11.68	2011	23.7%
43-5061	Production, Planning, and Expediting Clerks	\$53,000	\$38,500	\$18.52	678	6.0%
43-6011	Executive Secretaries and Executive Administrative Assistants	\$60,600	\$45,700	\$21.97	1658	8.0%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$43,500	\$31,200	\$15.01	4566	8.0%
43-9061	Office Clerks, General	\$39,900	\$28,400	\$13.66	6539	18.7%
51-3011	Bakers	\$33,000	\$27,400	\$13.16	351	12.6%
53-3031	Driver/Sales Workers	\$25,400	\$22,500	\$10.82	1051	8.9%

Top Business, Management, & Administration Youth Careers	\$41,600	\$30,500	\$14.68	88,986	25.1%
Youth Occupations - Top 100 - Refined	\$40,400	\$30,100	\$14.49	161,579	19.7%
Total – All Business, Management, & Administration Occupations	\$53,900	\$37,800	\$18.18	141,645	19.9%
Total - All Occupations	\$48,200	\$28,300	\$13.62	334,772	15.1%

Source: [JobsEQ®](#). Wage data are as of 2019 and represent the average for all Covered Employment. *Entry level hourly wages highlighted in green meet or surpass the criteria for a living wage for a single adult without children in Ramsey County, which is \$15.94.

Occupation gap estimates are based on our most reasonable hypothesis given current conditions. In Ramsey County, an analysis of local Business, Management, and Administration occupational gaps as of the third quarter of 2020 revealed that just four out of the 47 youth-friendly occupations in this field are forecasting very small talent shortages. However, many of the occupations in this career field have large volumes of replacement demand resulting in regular openings in these positions and are still viable youth career paths into a range of careers.

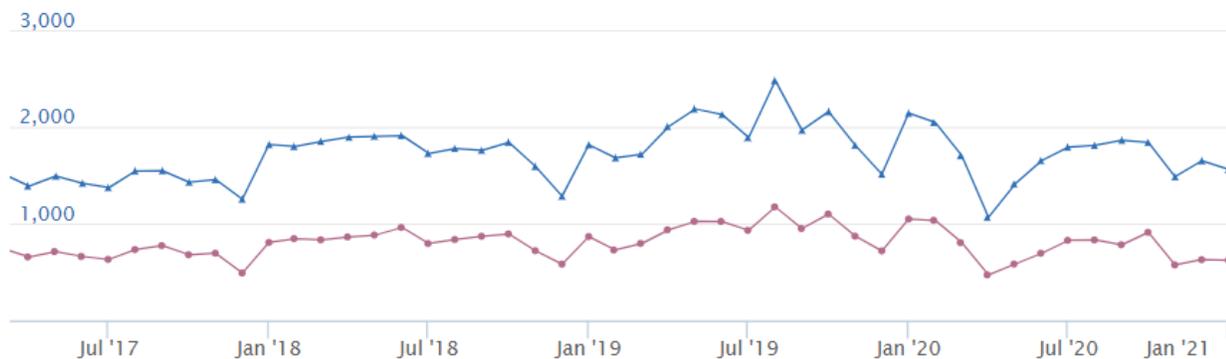
Business, Management, & Administration Potential Average Annual Occupation Gaps over 5 Years in Ramsey County



YOUTH-FRIENDLY JOB POSTING TRENDS

Business, Management, and Administration job opportunities accessible to youth declined since the pandemic by about 27%, a greater degree than seen in youth-friendly occupations overall (-19% from the pre-pandemic period). While overall, there were about 19,444 jobs advertised in Ramsey County that required two or fewer years of experience and a high school diploma or less between the beginning of March 1, 2020 and the end of February 2021. About 43% of these opportunities were in high-volume Business, Management, and Administration careers (the 47 Business, Management, and Administration occupations of the top 100 local youth opportunities). There were nearly 8,500 Business, Management, and Administration jobs potentially accessible to youth in Ramsey County since the start of the pandemic—though youth were not the only demographic seeking these opportunities.

Volume of Deduplicated Youth-Friendly Business, Management, & Administration Jobs Posted Online in Ramsey County, March 2020 - February 2021



Blue: All jobs advertised requiring a high school diploma or less and 0-2 years of experience

Purple: Business, Management, and Administration jobs requiring a high school diploma or less and 0-2 years of experience

A total of 1,584 direct employers and staffing agencies advertised open Business, Management, and Administration positions since the start of the pandemic, using well over 150 different job boards to advertise their positions. Several employers in facilities management, storage, convenience stores, pharmacies, food service, and senior living saw increases in volumes of new postings for youth-friendly Business, Management, and Administration positions. Youth-friendly positions advertised in retail, staffing agencies, banks, and hospitals declined.

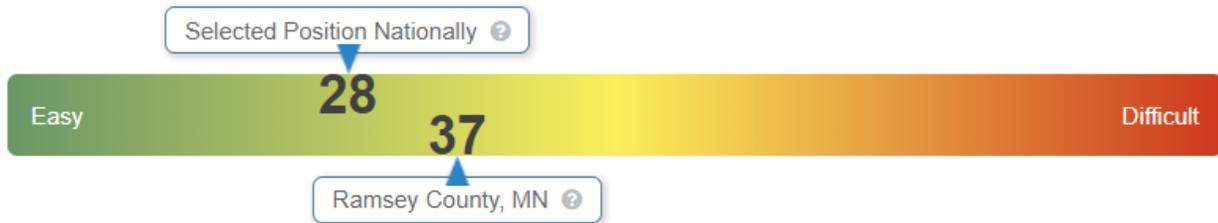
Volume of Youth-Friendly Business, Management, & Administration Jobs Advertised by Employers, March 2020 - February 2021

Employer	Job Postings (and % change pre-pandemic)
1) Robert Half International	830 (-30%)
2) Macy's	163 (-60%)
3) Public Storage, Inc.	144 (+177%)
4) Walgreens	139 (+1,886%)
5) M Health Fairview	111 (-58%)
6) Panera Bread	99 (+80%)
7) Luxottica	97 (-46%)
8) Regions Hospital	85 (-9%)
9) US Bank	77 (-68%)
10) FedEx	77 (-43%)

It is moderately more difficult to hire talent for these entry-level Business, Management, and Administration positions in Ramsey County compared to nationally as of March 2021, due in part to the comparatively strong industry mix of the MSP Metro and more favorable overall unemployment trends broadly in the MSP Metro compared to other communities nationwide. The median salary offered for these positions in Ramsey County is about \$38,000 as of March 2021, about \$4,000 higher than the national median for these same positions.

Youth-Friendly Business, Management, & Administration Talent Pool, Direct Employer Competition, and Hiring Difficulty as of March 2021

Potential Candidates in the workforce: **324,000**
 Direct Employers currently competing: **392**
 Open Jobs posted by Direct Employers: **1,037**



The most in-demand skills required by employers seeking talent in these youth-friendly Business, Management, and Administration roles include basic skills needed to engage with the public and self-manage.

Top Employability Skills and Characteristics Sought by Employers Advertising Youth-Friendly Business, Management, & Administration Jobs, March 2020 - February 2021

- 1) Customer Service
- 2) Communication
- 3) Dedication
- 4) Innovation
- 5) Friendliness

ENGINEERING, MANUFACTURING, AND TECHNOLOGY

Job opportunities in the Engineering, Manufacturing, and Technology field range from transportation to manufacturing, science, and mathematics. Of the top 100 occupations that could be most accessible to youth (requiring 0-2 years of experience and a high school diploma or less), 26 of them fall into the Engineering, Manufacturing, and Technology career field.

A variety of career pathways in this field offer opportunities for individuals with two or fewer years of experience and just a high school diploma or less, from automotive to maintenance and logistics. In all, these youth-friendly roles represent about 33,689 workers in Ramsey County. Many of the occupations identified below experienced high rates of unemployment during the pandemic but may not see dramatic growth in the long-term either. Overall, these 26 youth-friendly careers together only forecast an overall growth rate of about 0.4% annually through 2025.

Engineering, Manufacturing, & Technology in the Top 100 Youth Careers in Ramsey County, 2020Q3

SOC	Occupation	Empl 2020Q3	Median Ann Wages ²	Unempl	Unempl Rate	Total 5-Year Demand	5-Year Avg Ann % Growth	5-Year Avg Ann Supply Gap
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3,967	\$35,700	458	9.5%	3,020	0.9%	42
53-7065	Stockers and Order Fillers	3,318	\$31,400	309	9.2%	2,304	0.4%	30
53-3032	Heavy and Tractor-Trailer Truck Drivers	2,885	\$53,000	184	6.6%	1,689	0.3%	10

49-9071	Maintenance and Repair Workers, General	2,744	\$47,400	89	4.1%	1,455	0.7%	-3
37-3011	Landscaping and Groundskeeping Workers	1,853	\$36,700	216	10.0%	1,380	1.2%	10
51-2092	Team Assemblers	1,786	\$35,100	186	9.6%	876	-1.2%	29
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	1,693	\$37,100	112	6.7%	1,334	2.3%	0
53-3033	Light Truck Drivers	1,658	\$40,900	102	5.6%	1,043	0.8%	1
47-2061	Construction Laborers	1,353	\$59,500	213	12.4%	809	0.6%	8
49-3023	Automotive Service Technicians and Mechanics	1,305	\$46,700	58	4.9%	632	0.0%	5
43-5071	Shipping, Receiving, and Inventory Clerks	1,254	\$38,500	64	5.5%	558	-0.7%	9
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	1,141	\$38,100	72	7.4%	641	-0.1%	6
51-1011	First-Line Supervisors of Production and Operating Workers	1,101	\$69,500	29	3.4%	563	0.1%	2
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,097	\$45,800	51	5.9%	567	-1.4%	14
51-4041	Machinists	833	\$54,400	30	4.4%	472	0.9%	0
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	831	\$73,900	20	3.6%	393	0.3%	-2
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	693	\$82,900	30	5.2%	378	0.4%	-1
53-7051	Industrial Truck and Tractor Operators	659	\$44,700	83	8.9%	392	0.5%	5
53-7061	Cleaners of Vehicles and Equipment	608	\$29,000	119	12.9%	487	0.9%	9
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	600	\$56,500	26	5.4%	304	0.6%	0
51-9198	Helpers--Production Workers	574	\$30,300	80	9.4%	481	1.3%	7
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	567	\$61,100	22	4.9%	330	0.7%	0
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	492	\$48,500	7	2.9%	255	-0.4%	1
51-2099	Assemblers and Fabricators, All Other	427	\$34,800	49	8.9%	238	-0.3%	6
53-6021	Parking Attendants	181	\$26,800	28	8.5%	164	1.8%	2
49-9031	Home Appliance Repairers	70	\$37,600	2	3.9%	35	-0.5%	0
	Top Engineering, Manufacturing, & Technology Youth Careers	33,689	\$44,300	17,722	6.0%	20,800	0.4%	
	Youth Occupations - Top 100 - Refined	161,579	\$40,400	10,656	7.2%	116,457	0.9%	
	Total – All Engineering, Manufacturing, & Technology Occupations	66,011	\$56,400	4,746	7.3%	37,298	0.3%	
	Total - All Occupations	334,772	\$48,200	17,722	6.0%	204,662	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

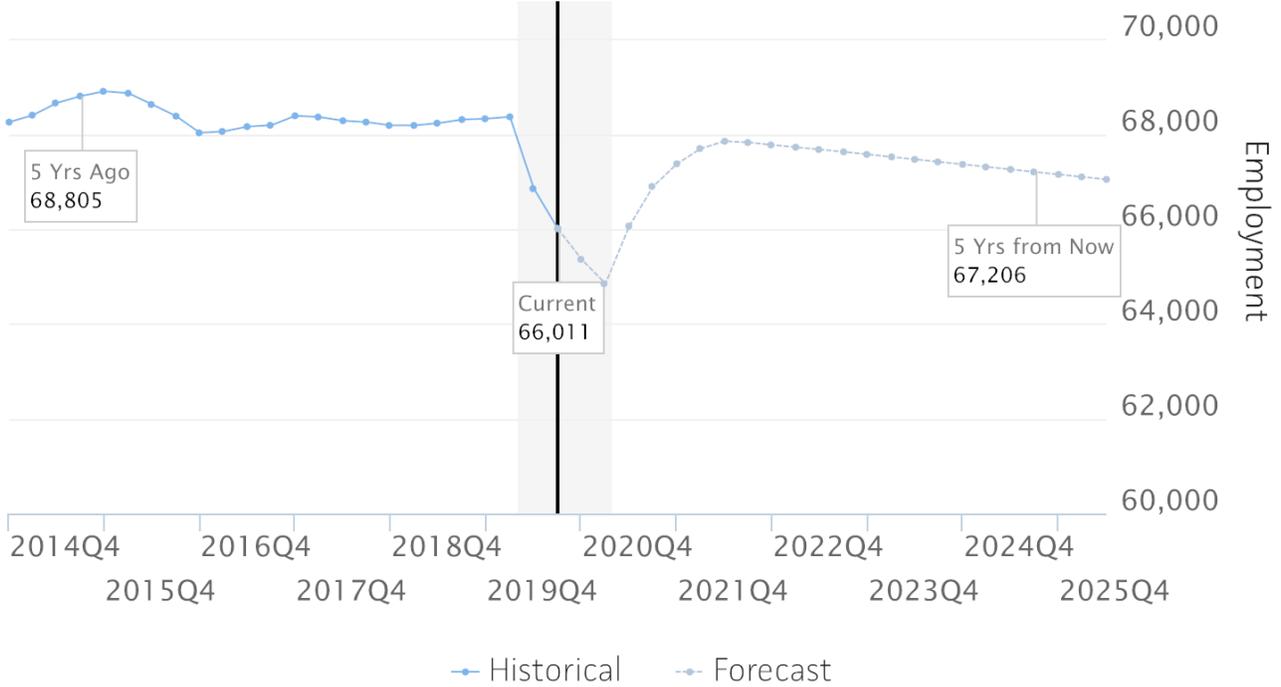
with greatest employment in that place for queries in this analytic. Due to alternative county-assignment algorithms, ad counts in this analytic may not match that shown in RTI (nor in the popup window ad list).

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Occupations highlighted in yellow indicate occupations that cross over to Business, Management, and Administration or Engineering, Manufacturing, and Technology career fields as well as Agriculture, Food, and Natural Resources.

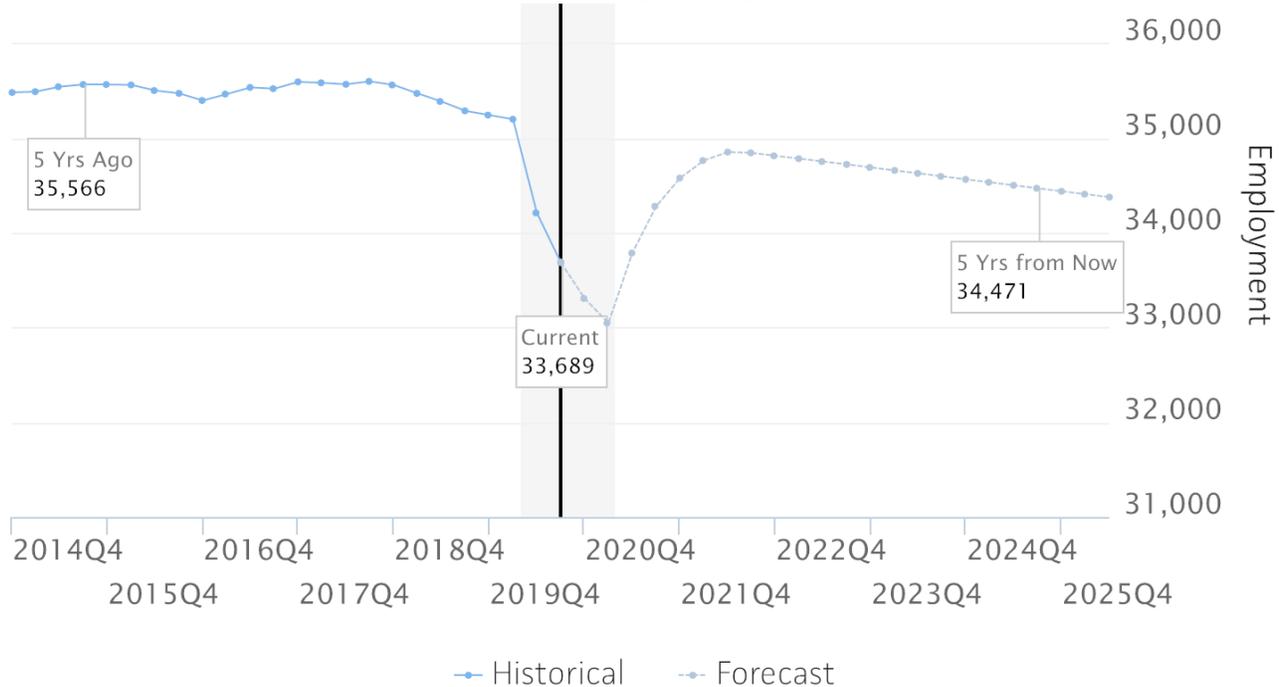
In Ramsey County, it is anticipated that local employment in all occupations in the Agriculture, Food, and Natural Resources field will reach the lowest point in the first quarter of 2021, dropping from 68,368 workers in the third quarter of 2020 to 64,848. Starting the second quarter of 2021 and continuing through the second quarter of 2022, employment in this field is forecast to rise and then decline gradually through 2025. The field's youth-friendly forecast follows a similar trend, with employment rebounding by the second quarter of 2022 and with a gradual rise through 2025.

Engineering, Manufacturing, & Technology 5-Year Employment Forecast in Ramsey County



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

Top 26 Youth-Friendly Engineering, Manufacturing, & Technology 5-Year Employment Forecast in Ramsey County



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

The median annual wage across all the top 26 youth-friendly Engineering, Manufacturing, and Technology careers is \$44,300, about \$4,000 below the median wage across all top 100 youth occupations. Ten occupations of the top youth-friendly occupations in this field have entry-level wages that are suitable to meet local costs of living for a single adult with no children living in Ramsey County (\$15.94/hour).¹⁷

SOC	Occupation	Median Ann Wage	Entry Level Wage	Entry Level Hourly Wage	Empl 2020Q3	% of Empl (Ages 16 – 24)
37-3011	Landscaping and Groundskeeping Workers	\$36,700	\$26,400	\$12.71	1,853	16.3%
43-5071	Shipping, Receiving, and Inventory Clerks	\$38,500	\$29,000	\$13.94	1,254	13.6%
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$82,900	\$59,300	\$28.49	693	3.8%
47-2061	Construction Laborers	\$59,500	\$35,400	\$17.02	1,353	15.6%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	\$73,900	\$50,800	\$24.43	831	1.6%
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	\$48,500	\$29,800	\$14.35	492	11.7%
49-3023	Automotive Service Technicians and Mechanics	\$46,700	\$32,700	\$15.74	1,305	15.9%
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$56,500	\$41,900	\$20.16	600	13.5%
49-9031	Home Appliance Repairers	\$37,600	\$28,400	\$13.65	70	10.4%
49-9071	Maintenance and Repair Workers, General	\$47,400	\$33,400	\$16.05	2,744	7.7%

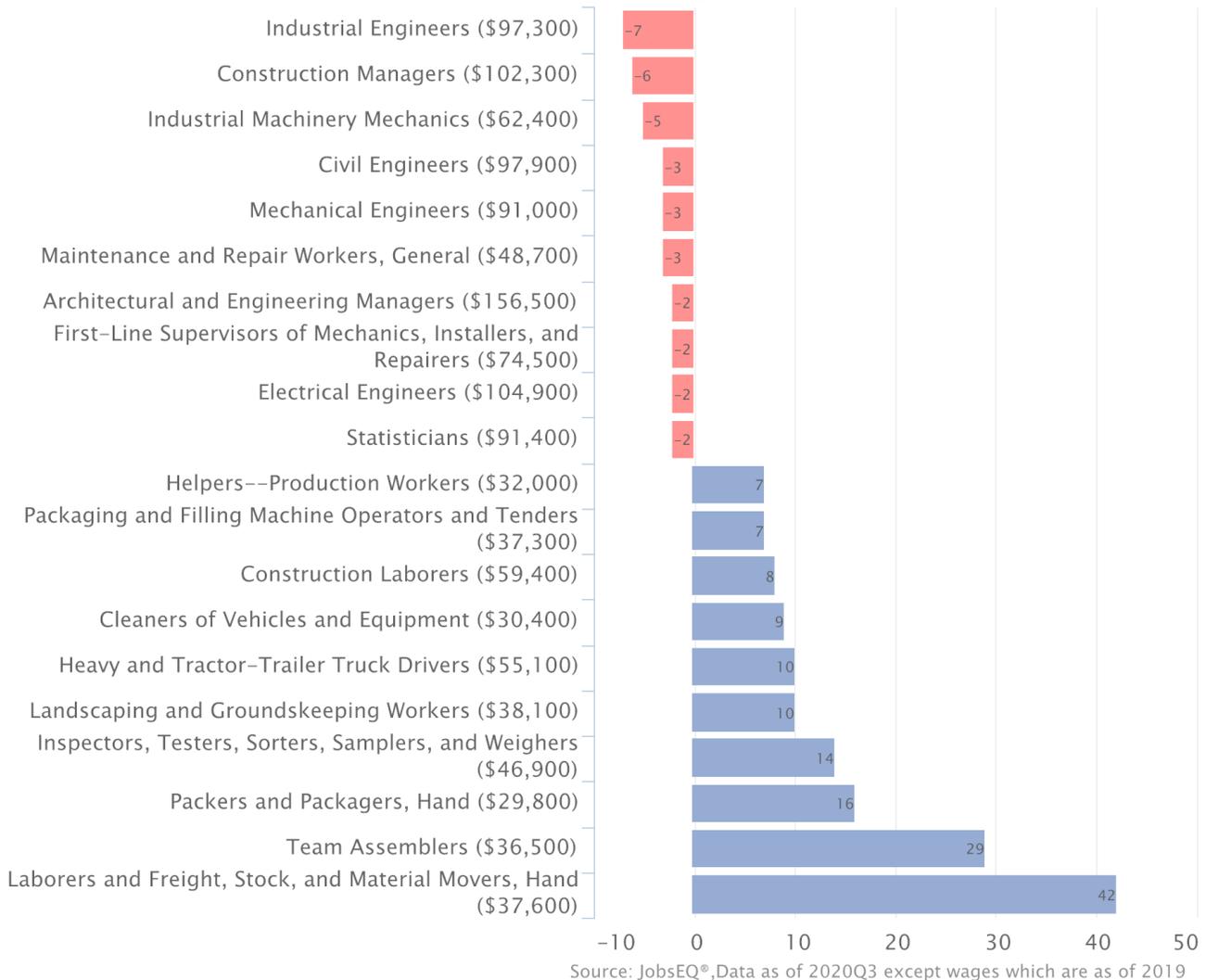
¹⁷Living Wage Calculation for Ramsey County, Minnesota, updated 2019 <https://mn.gov/deed/data/data-tools/col/>

51-1011	First-Line Supervisors of Production and Operating Workers	\$69,500	\$50,100	\$24.09	1,101	2.7%
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	\$38,100	\$30,600	\$14.71	1,141	12.4%
51-2092	Team Assemblers	\$35,100	\$26,700	\$12.82	1,786	15.3%
51-2099	Assemblers and Fabricators, All Other	\$34,800	\$26,400	\$12.70	427	14.6%
51-4041	Machinists	\$54,400	\$39,500	\$18.97	833	12.1%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$45,800	\$32,700	\$15.71	1,097	10.9%
51-9198	Helpers--Production Workers	\$30,300	\$24,400	\$11.73	574	11.3%
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	\$61,100	\$40,100	\$19.28	567	6.1%
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$53,000	\$42,300	\$20.31	2,885	9.2%
53-3033	Light Truck Drivers	\$40,900	\$28,600	\$13.76	1,658	9.1%
53-3058	Passenger Vehicle Drivers, Except Bus Drivers, Transit and Intercity	\$37,100	\$28,300	\$13.61	1,693	5.0%
53-6021	Parking Attendants	\$26,800	\$22,700	\$10.90	181	39.4%
53-7051	Industrial Truck and Tractor Operators	\$44,700	\$33,500	\$16.13	659	15.6%
53-7061	Cleaners of Vehicles and Equipment	\$29,000	\$24,300	\$11.69	608	27.9%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$35,700	\$26,400	\$12.70	3,967	15.6%
53-7065	Stockers and Order Fillers	\$31,400	\$25,100	\$12.04	3,318	30.1%
	Top Engineering, Manufacturing, & Technology Youth Careers	\$44,300	\$32,500	\$15.60	33,689	15.6%
	Youth Occupations - Top 100 - Refined	\$40,400	\$30,100	\$14.49	161,579	19.7%
	Total – All Engineering, Manufacturing, and Technology Occupations	\$56,400	\$40,400	\$19.41	66,011	12.0%
	Total - All Occupations	\$48,200	\$28,300	\$13.62	334,772	15.1%

Source: JobsEQ®, Wage data are as of 2019 and represent the average for all Covered Employment. *Entry level hourly wages highlighted in green meet or surpass the criteria for a living wage for a single adult without children in Ramsey County, which is \$15.94.

Occupation gap estimates are based on our most reasonable hypothesis given current conditions. In Ramsey County, an analysis of local Engineering, Manufacturing, and Technology occupational gaps as of the third quarter of 2020 revealed that just three of the youth-friendly occupations in this field are forecasting small talent shortages (Maintenance and Repair Workers, Mechanics Supervisors, and Construction Supervisors). However, Industrial Engineers, Construction Managers, Industrial Machinery Mechanics, Maintenance and Repair Workers, Civil Engineers, and Mechanical Engineers may see small to moderate shortages.

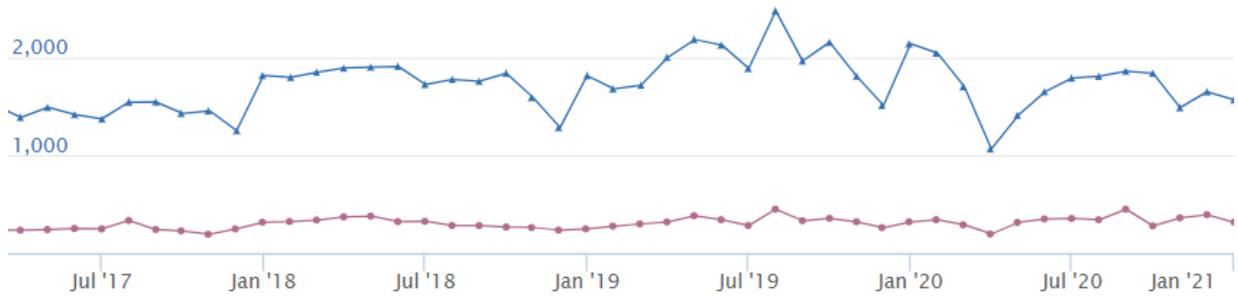
Engineering, Manufacturing, & Technology Potential Average Annual Occupation Gaps over 5 Years in Ramsey County



YOUTH-FRIENDLY JOB POSTING TRENDS

In general, the availability of opportunities for youth in this career field was not impacted by the pandemic. The top positions in this field potentially accessible to youth declined only minimally during the pandemic by about -0.4% across Ramsey County, much smaller than the decline seen for youth-friendly careers overall (-19% from the pre-pandemic period) or for all occupations advertised in Ramsey County from March 2020 through February 2021. However, this career field has fewer opportunities overall than Business, Management, and Administration, and some other career fields. Out of the 19,444 jobs advertised among the top 100 youth-friendly occupations, there were about 3,993 Engineering, Manufacturing, and Technology jobs advertised in Ramsey County that required two or fewer years of experience and a high school diploma or less between the beginning of March 1, 2020 and the end of February 2021—about 20% of the total advertised potentially youth-friendly careers (the 29 Engineering, Manufacturing, and Technology occupations of the top 100 local youth opportunities).

Volume of Deduplicated Youth-Friendly Engineering, Manufacturing, & Technology Jobs Posted Online in Ramsey County, March 2020 - February 2021



Blue: All jobs advertised requiring a high school diploma or less and 0-2 years of experience

Purple: Engineering, Manufacturing, and Technology jobs requiring a high school diploma or less and 0-2 years of experience

A total of 786 direct employers and staffing agencies advertised open Engineering, Manufacturing, and Technology positions since the start of the pandemic, using over 100 different job boards to advertise their positions. Several employers in shipping, logistics, online sales, and trucking saw increases in volumes of new postings for youth-friendly Engineering, Manufacturing, and Technology positions.

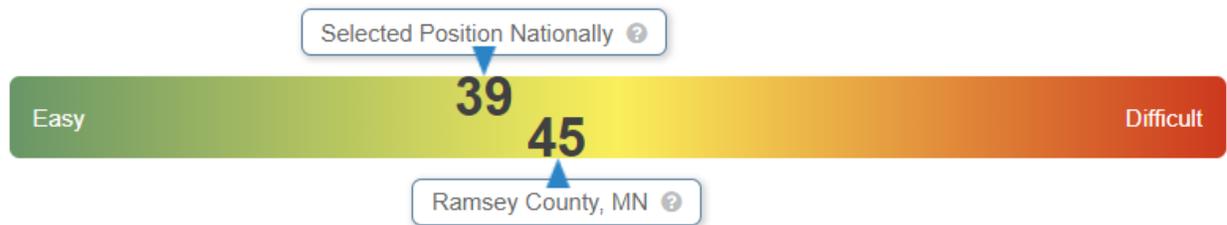
Volume of Youth-Friendly Engineering, Manufacturing, & Technology Jobs Advertised by Employers, March 2020 - February 2021

Employer	Job Postings (and % change pre-pandemic)
1) UberEats	336 (+1,668%)
2) Aerotek	223 (+223%)
3) Prostaff	115 (-22%)
4) Estes Express Lines	91 (+75%)
5) Randstad	56 (+30%)
6) Express Employment Professionals	49 (-17%)
7) Grupo Bimbo	47 (+42%)
8) Penske	46 (+119%)
9) Macy's	45 (-33%)
10) FedEx	43 (-47%)

It is moderately more difficult to hire talent for these entry-level Engineering, Manufacturing, and Technology positions in Ramsey County compared to nationally as of March 2021, due in part to the comparatively strong industry mix of the MSP Metro and more favorable overall unemployment trends broadly in the MSP Metro compared to other communities nationwide. The median salary offered for these positions in Ramsey County is about \$35,650 as of March 2021, about \$2,000 higher than the national median for these same positions.

Youth-Friendly Engineering, Manufacturing, & Technology Talent Pool, Direct Employer Competition, and Hiring Difficulty as of March 2021

Potential Candidates in the workforce: **107,000**
 Direct Employers currently competing: **214**
 Open Jobs posted by Direct Employers: **383**



The most in-demand skills required by employers seeking talent in these youth-friendly Engineering, Manufacturing, and Technology roles include the ability to handle a variable schedule, operate machinery (forklifts, shipping tools), and communicate effectively.

Top Employability Skills and Characteristics Sought by Employers Advertising Youth-Friendly Engineering, Manufacturing, & Technology Jobs, March 2020 - February 2021

- 1) Scheduling
- 2) Reliability
- 3) Communication
- 4) Supervision
- 5) Customer Service

AGRICULTURE, FOOD, AND NATURAL RESOURCES

The Agriculture, Food, and Natural Resources career field includes career pathways in Agribusiness, Biotechnology, Animal Systems, Plant Systems, Environmental Services, Natural Resources, and Food Products and Processing. This field includes occupations that are critical to ensuring strong and stable food sources and environmental conditions for society and overlaps significantly with all other career fields described in this report. This career field has the smallest volume of youth-friendly employment in Ramsey County, representing less than 1% of all employment in roles requiring a high school diploma or less and two or fewer years of experience. Of the top 100 occupations that could be most accessible to youth (requiring 0-2 years of experience and a high school diploma or less), only one of them falls into the Arts, Communications, and Information Systems career field.

All but two of the eleven Agriculture, Food, and Natural Resources occupations that made the top 100 list of youth-friendly occupations in Ramsey County are in Food Products and Processing career paths. In all, these youth-friendly roles represent about 16,000 workers in Ramsey County, with Animal Caretakers (545 workers) and Tree Trimmers and Pruners (204 workers) being the only two occupations exclusively aligned to this career field. Many of the occupations identified below experienced high rates of unemployment during the pandemic, and moderately high annual forecasted growth is due in large part to forecasted recovery to these occupations in an optimistic 5-year outlook.

Agriculture, Food, & Natural Resources in the Top 100 Youth Careers in Ramsey County, Minnesota - COVID, 2020Q3

SOC	Occupation	Empl 2020Q3	Median Ann Wages ²	Unempl	Unempl Rate	Total 5-Year Demand	5-Year Avg Ann % Growth	5-Year Avg Ann Supply Gap
35-3023	Fast Food and Counter Workers	1,568	\$56,300	1,048	13.4%	8,380	2.7%	151
35-2014	Cooks, Restaurant	7,258	\$25,200	418	14.2%	2,490	4.0%	18
37-3011	Landscaping and Groundskeeping Workers	2,377	\$31,900	216	10.0%	1,380	1.2%	0
35-2021	Food Preparation Workers	1,853	\$36,700	200	14.4%	984	1.0%	23
35-3041	Food Servers, Nonrestaurant	1,039	\$29,400	106	10.3%	850	1.4%	10
35-2012	Cooks, Institution and Cafeteria	945	\$27,200	174	13.8%	733	1.1%	13
11-9051	Food Service Managers	927	\$36,500	10	2.7%	392	2.1%	0
39-2021	Animal Caretakers	545	\$61,000	42	11.6%	449	2.8%	2
51-3011	Bakers	425	\$26,300	55	9.3%	260	0.8%	5
35-1011	Chefs and Head Cooks	351	\$33,000	24	9.9%	177	2.7%	1
37-3013	Tree Trimmers and Pruners	204	\$53,700	18	9.3%	57	0.8%	1
	Top Agriculture, Food, & Natural Resources Youth Careers	16,003	\$30,500	2,311	12.6%	16,153	2.4%	
	Youth Occupations - Top 100 - Refined	161,579	\$40,400	10,656	7.2%	116,457	0.9%	
	Total – All Agriculture, Food, & Natural Resources Occupations (Focused Plus Youth Entrypoints)	25,560	\$43,600	2,714	10.3%	21,316	1.6%	
	Total - All Occupations	334,772	\$48,200	17,722	6.0%	204,662	0.8%	

Source: JobsEQ®

Data as of 2020Q3 unless noted otherwise

Note: Figures may not sum due to rounding.

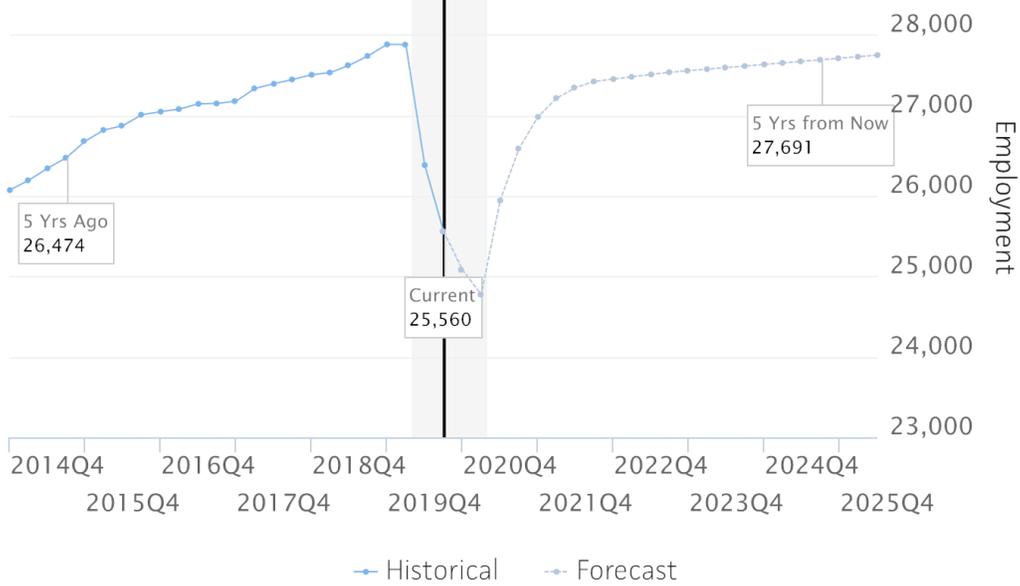
1. Data based on a four-quarter moving average unless noted otherwise.
2. Wage data are as of 2019 and represent the average for all Covered Employment
3. Data represent found online ads active within the last thirty days in the selected region; data represents a sampling rather than the complete universe 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).

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Occupations highlighted in yellow indicate occupations that cross over to Business, Management, and Administration or Engineering, Manufacturing, and Technology career fields as well as Agriculture, Food, and Natural Resources.

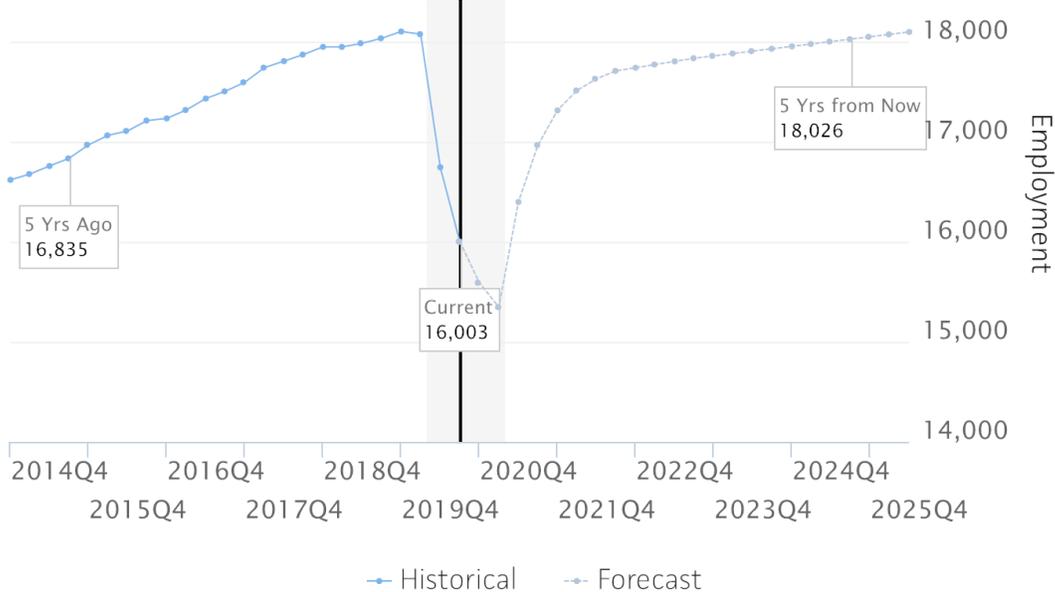
In Ramsey County, it is anticipated that local employment in all occupations in the Agriculture, Food, and Natural Resources field will reach the lowest point in the first quarter of 2021, dropping from 27,879 workers in the third quarter of 2020 to 24,775. Starting the second quarter of 2021 and continuing through the third quarter of 2022, employment in this field is forecast to rise through 2022 and then remain relatively stable through 2025. The field's youth-friendly forecast follows a similar trend, with employment rebounding by the third quarter of 2022 and with a gradual rise through 2025.

Agriculture, Food, & Natural Resources 5-Year Employment Forecast in Ramsey County



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

Top 11 Youth-Friendly Agriculture, Food, & Natural Resources 5-Year Employment Forecast in Ramsey County



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

The median annual wage across all the top 11 youth-friendly Agriculture, Food, and Natural Resources careers is \$30,500, nearly \$10,000 below the median wage across all top 100 youth occupations. Just three occupations in these top youth-friendly occupations of this field pay a livable wage for a single adult with no children living in Ramsey County (\$15.94/hour).¹⁸

¹⁸Living Wage Calculation for Ramsey County, Minnesota, updated 2019 <https://mn.gov/deed/data/data-tools/col/>

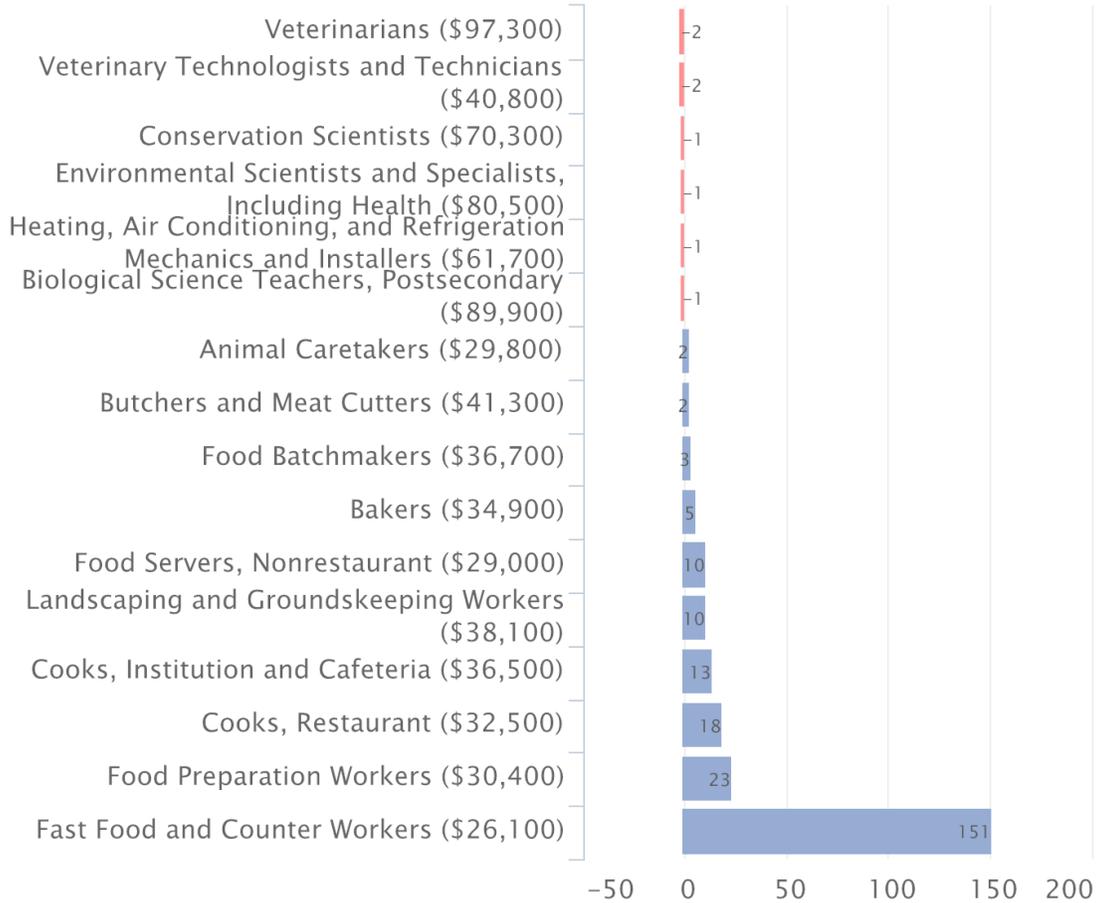
SOC	Occupation	Median Ann Wage	Entry Level Wage	Entry Level Hourly Wage	Empl 2020Q3	% of Empl (Ages 16 – 24)
11-9051	Food Service Managers	\$61,000	\$43,700	\$21.00	545	12.9%
35-1011	Chefs and Head Cooks	\$53,700	\$34,500	\$16.59	204	11.6%
35-2012	Cooks, Institution and Cafeteria	\$36,500	\$28,800	\$13.86	927	26.3%
35-2014	Cooks, Restaurant	\$31,900	\$26,700	\$12.83	2,377	27.3%
35-2021	Food Preparation Workers	\$29,400	\$23,500	\$11.31	1,039	42.2%
35-3023	Fast Food and Counter Workers	\$25,200	\$22,200	\$10.69	7,258	57.2%
35-3041	Food Servers, Nonrestaurant	\$27,200	\$22,800	\$10.95	945	37.4%
37-3011	Landscaping and Groundskeeping Workers	\$36,700	\$26,400	\$12.71	1,853	16.3%
37-3013	Tree Trimmers and Pruners	\$52,100	\$33,900	\$16.31	80	15.1%
39-2021	Animal Caretakers	\$26,300	\$22,700	\$10.91	425	32.8%
51-3011	Bakers	\$33,000	\$27,400	\$13.16	351	12.6%
	Top Agriculture, Food, & Natural Resources Youth Careers	\$30,500	\$25,000	\$12.00	16,003	39.1%
	Youth Occupations - Top 100 - Refined	\$40,400	\$30,100	\$14.49	161,579	19.7%
	Total – All Agriculture, Food, & Natural Resources Occupations	\$43,600	\$32,300	\$15.51	25,560	30.0%
	Total - All Occupations	\$48,200	\$28,300	\$13.62	334,772	15.1%

Source: JobsEQ®, Wage data are as of 2019 and represent the average for all Covered Employment

*Entry level hourly wages highlighted in green meet or surpass the criteria for a living wage for a single adult without children in Ramsey County, which is \$15.94.

Occupation gap estimates are based on our most reasonable hypothesis given current conditions. In Ramsey County, an analysis of local Agriculture, Food, and Natural Resources occupational gaps as of the third quarter of 2020 revealed that none of the youth-friendly occupations in this field are forecasting talent shortages. However, Veterinarians, Veterinary Technologists, Conservation Scientists, Environmental Scientists, HVAC Technicians, and Biological Science Teachers may see small shortages.

Agriculture, Food, & Natural Resources Potential Average Annual Occupation Gaps over 5 Years in Ramsey County

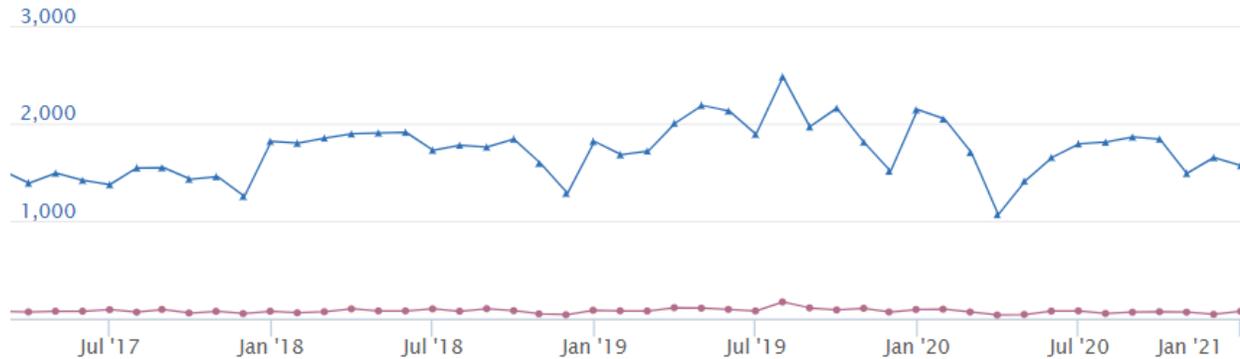


Source: JobsEQ®, Data as of 2020Q3 except wages which are as of 2019

YOUTH-FRIENDLY JOB POSTING TRENDS

Job opportunities in the Agriculture, Food, and Natural Resources field include a broad range of opportunities from food production and processing career pathways to biotechnology, environmental services, natural resources, and agribusiness. The top-recruiting positions in this field potentially accessible to youth declined during the pandemic by about -37% across Ramsey County, much higher than the decline seen for youth-friendly careers overall (-19% from the pre-pandemic period) or for all occupations advertised in Ramsey County from March 2020 through February 2021. Of the twelve top-ranking Agriculture, Food, and Natural Resources occupations that made the top 100 youth-friendly job openings list by volume in Ramsey County between March 1, 2020 and the end of February 2021—only about 4% of the total advertised potentially youth-friendly careers in Agriculture, Food, and Natural Resources (the 12 Agriculture, Food, and Natural Resources occupations of the top 100 local youth opportunities).

Volume of Deduplicated Youth-Friendly Agriculture, Food, & Natural Resources Jobs Posted Online in Ramsey County, March 2020 - February 2021



Blue: All jobs advertised requiring a high school diploma or less and 0-2 years of experience

Purple: Agriculture, Food, and Natural Resources jobs requiring a high school diploma or less and 0-2 years of experience

A total of 166 direct employers and staffing agencies advertised open Agriculture, Food, and Natural Resources positions since the start of the pandemic, using around 75 different job boards to advertise their over 760 positions locally. Several employers in food service, senior care facilities, hospitals, and grocery stores saw increases in volumes of new postings for youth-friendly Agriculture, Food, and Natural Resources talent—primarily in food product and food preparation pathways.

Volume of Youth-Friendly Agriculture, Food, & Natural Resources Jobs Advertised by Employers, March 2020 - February 2021

Employer	Job Postings (and % change pre-pandemic)
1) Panera Bread	70 (+150%)
2) Davey Tree Expert Company	45 (-4%)
3) Regions Hospital	42 (+147%)
4) Sunrise Senior Living	34 (+386%)
5) HealthEast Care System	29 (-74%)
6) Compass Group	28 (-56%)
7) Leann Chin Inc.	23 (+21%)
8) M Health Fairview	22 (-46%)
9) Chilis	18 (+80%)

Despite these positions being some of the easiest roles to fill in the current market, it is slightly more difficult to hire talent for these entry-level Agriculture, Food, and Natural Resources positions in Ramsey County compared to nationally as of March 2021. The median salary offered for these positions in Ramsey County is about \$31,350 as of March 2021, about \$2,000 higher than the national median for these same positions.

Youth-Friendly Agriculture, Food, & Natural Resources Talent Pool, Direct Employer Competition, and Hiring Difficulty as of March 2021

Potential Candidates in the workforce: **63,000**

Direct Employers currently competing: **75**

Open Jobs posted by Direct Employers: **195**



The most in-demand skills required by employers seeking talent in these youth-friendly Agriculture, Food, and Natural Resources roles include ability to adjust to a variable schedule, food handling, good customer service skills, and effective communication.

Top Employability Skills and Characteristics Sought by Employers Advertising Youth-Friendly Agriculture, Food, & Natural Resources Jobs, March 2020 - February 2021

- 1) Reliability
- 2) Cooking
- 3) Customer Service
- 4) Scheduling
- 5) Communication

Shifting Opportunities

As the world of work evolves during and post-pandemic, opportunities in the labor market will continue to shift. Options to work remotely have and will grow as our world has developed new ways to work outside of an office during the COVID-19 pandemic and, likely, after the pandemic subsides. The need for digital skills is expanding—and not just for adult workers or those who work in Information Technology.

Remote Work Accessible to Youth

Remote occupations include those that are either remote full-time or able to be made fully remote without dramatic changes to the occupational role. Of the top 100 occupations that could be most accessible to youth (requiring 0-2 years of experience and a high school diploma or less), only three of them—or 4% of top youth-friendly employment—are occupations that can be done fully remotely.

The remote youth occupations identified from the top 100 youth-friendly positions are forecast to decline by -0.3% on average annually through 2025. However, all of the identified remote youth occupations have low unemployment rates, ranging between 2.3% and 3.6%.

Remote Occupations in the Top 100 Youth Careers in Ramsey County, 2020Q3

SOC	Occupation	Empl 2020Q3	Median Ann Wages ²	Unempl	Unempl Rate	Total 5-Year Demand	5-Year Avg Ann % Growth
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,583	\$47,000	106	3.6%	1,971	-0.4%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	2,354	\$124,100	47	2.3%	866	-0.1%
41-1012	First-Line Supervisors of Non-Retail Sales Workers	659	\$85,200	15	2.7%	279	-0.7%
	Remote Youth Occupations in the Top 100 - Refined	6,596	\$78,300	168	3.0%	3,116	-0.3%
	Youth Occupations - Top 100 - Refined	161,579	\$40,400	10,656	7.2%	116,457	0.9%
	Total - All Occupations	334,772	\$48,200	17,722	6.0%	204,662	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.

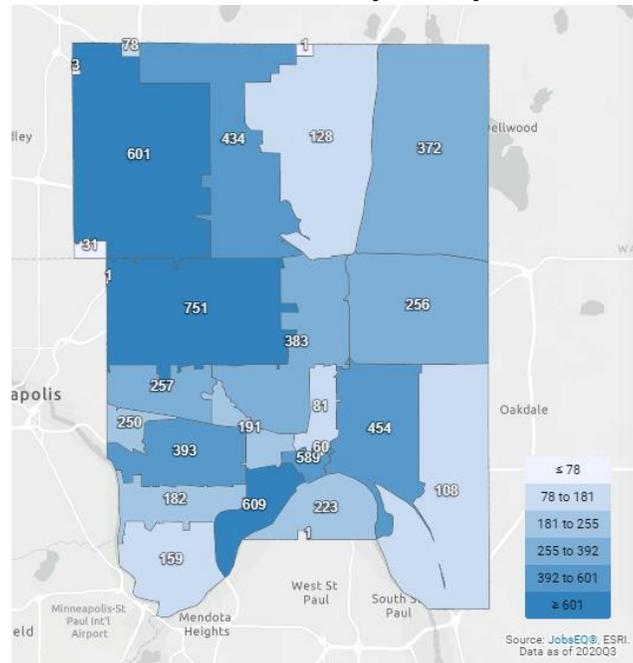
2. Wage data are as of 2019 and represent the average for all Covered Employment

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).

Exported on Tuesday, March 10, 2021 9:41 AM

Across Ramsey County, zip codes 55113 and 55102 have the greatest number of youth-friendly remote work positions.

Occupation Concentration by Place of Work and Zip Code for Remote Occupations in the Top 100 Youth Careers in Ramsey County, 2020Q3



Two of the three youth-friendly remote work positions in this community require some college or higher but little to no prior experience or on-the-job training. In Ramsey County, the median annual salary for youth-friendly remote work positions is \$78,300 compared to \$40,400 across the top 100 local youth-friendly occupations. Overall, youth-friendly remote work positions in Ramsey County are forecast to decline by an average of -0.9% annually over the next five years.

Wages, Forecast, and Experience Requirements of Remote Youth Occupations - Top 100 - Place of Residence in Ramsey County, 2020Q3

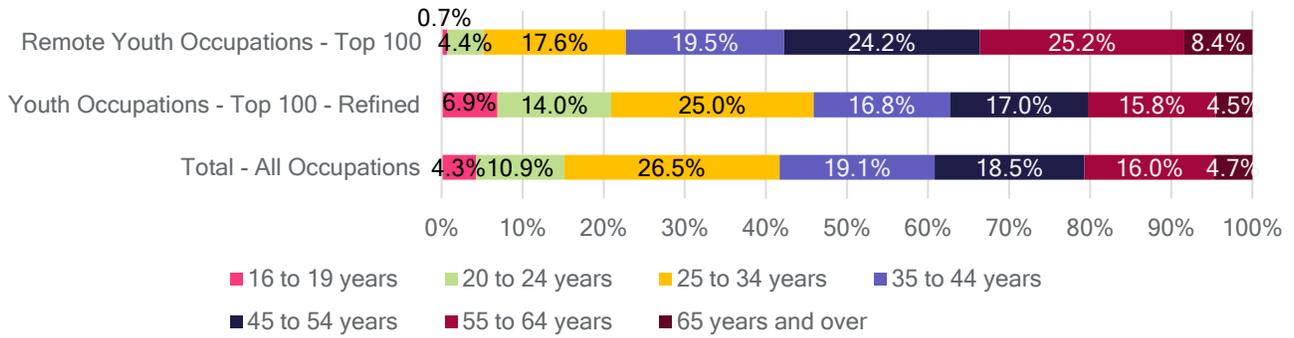
SOC		Median Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$47,000	-1.0%	Some college, no degree	None	Moderate-term on-the-job training
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$124,100	-0.5%	Bachelor's degree	Less than 5 years	None
41-1012	First-Line Supervisors of Non-Retail Sales Workers	\$85,200	-1.3%	High school diploma or equivalent	Less than 5 years	None
	Youth Occupations - Top 100 - Refined	\$78,300	-0.9%			
	Youth Occupations - Top 100 - Refined	\$40,400	0.0%			
	Total - All Occupations	\$48,200	0.1%			

Note: Average Annual Wages as of 2019 by the Bureau of Labor Statistics and imputed by Chmura, as necessary. Forecast employment growth uses projections from the Bureau of Labor Statistics for 2016-2026, adapted for regional growth patterns by Chmura.

AGE

Youth-friendly remote work occupations in Ramsey County have a lower share of younger talent between the ages 16 and 24 years old (5.1%); 15.8 percentage points lower than the County’s overall youth-friendly employment. The largest share of workers in youth-friendly remote occupations in the County are between the ages 55 to 64 years old, representing 25.2%, highlighting that not all workers in these roles requiring lower educational attainment and low experience are youth.

Population Age in Ramsey County

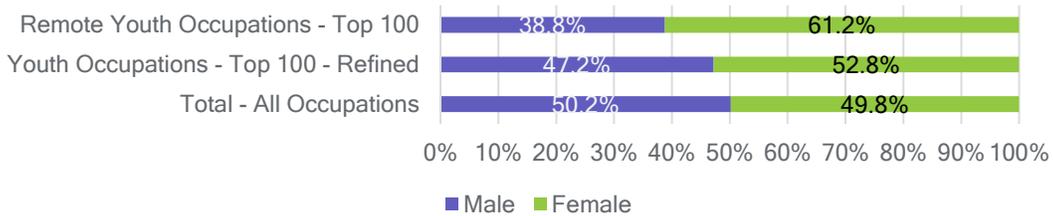


American Community Survey 2015-2019.

GENDER

Gender divisions in the youth-friendly workforce demographic show a higher share of female talent in remote positions than in non-remote occupations that could be accessible to youth.

Population Gender in Ramsey County

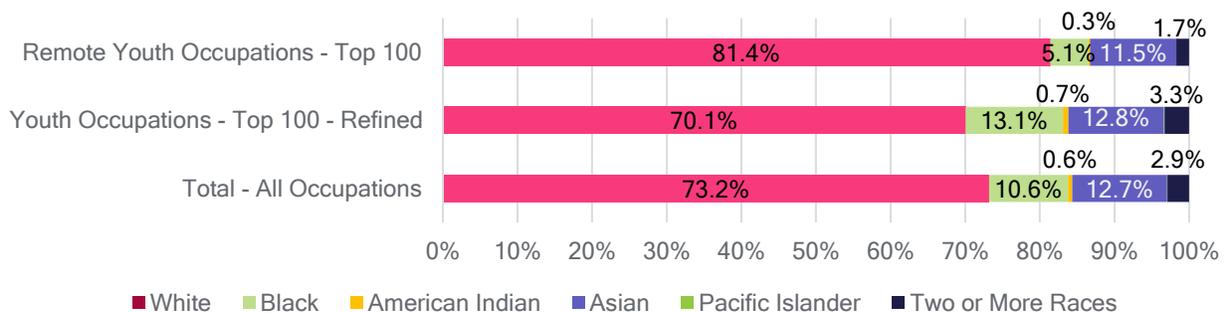


American Community Survey 2015-2019.

RACE AND ETHNICITY

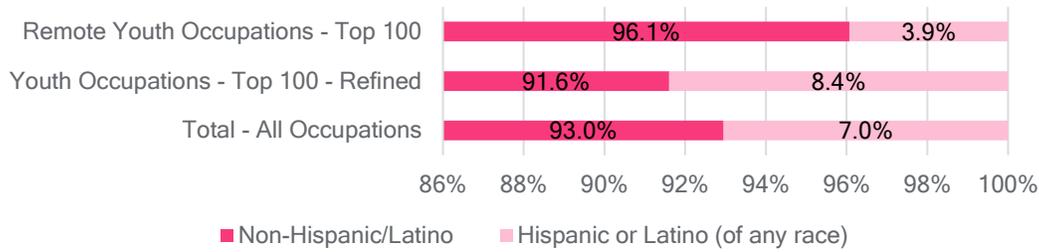
The distribution of race and ethnicity in youth-friendly remote occupations is less diverse than non-remote occupations accessible to youth and all occupations in both Ramsey County.

Population Race, All Ages in Ramsey County



American Community Survey 2015-2019.

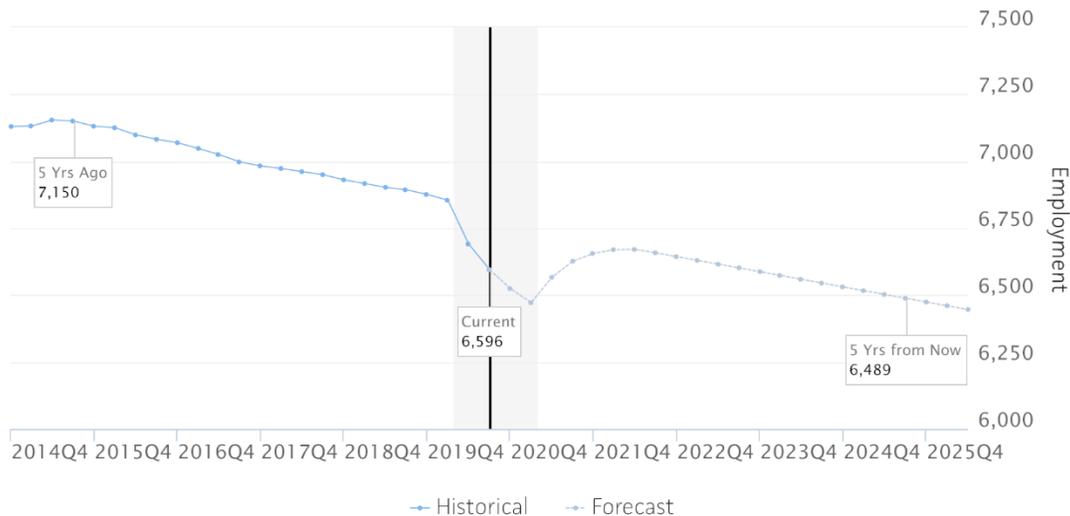
Population Ethnicity, All Ages



American Community Survey 2015-2019.

In Ramsey County, it is anticipated that local employment in remote occupations in the top 100 youth careers will reach the lowest point in the first quarter of 2021, dropping from 6,596 workers in the third quarter of 2020 to 6,473. Starting the second quarter of 2021 and continuing through the second quarter of 2022, employment in this field is forecast to rise sharply and then decline through 2025.

Remote Occupations in the Top 100 Youth Careers 5-Year Employment Forecast in Ramsey County



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

Digital Skills

A report published by Burning Glass Technologies and the Business Higher Education Forum in late 2019 titled “The New Foundational Skills of The Digital Economy: Developing the Professionals of the Future” classified 14 essential skills aligning to three categories: Human Skills, Business Enablers, and Digital Building Blocks.¹⁹ This research found that all three categories of New Foundational Skills are essential across every industry and job type and that all of these skills are able to be developed through training and education. Digital Building Blocks Skills include skills related to analyzing data, managing data, software development, computer programming, and digital security and privacy.

¹⁹ Burning Glass Technologies, BHEF. 2019. The New Foundational Skills of the Digital Economy: Developing the Professionals of the Future.” Accessed 7/30/2020 at https://www.burning-glass.com/wp-content/uploads/New_Foundational_Skills.pdf

Online job posting data can reveal a great deal about employer demand for certain skills, certifications, qualifications, and occupational competencies. The jobs posted by employers in Ramsey County between March 1, 2020, and February 28, 2021 showed demand in skills that are essential in the local emerging digital economy. Below is the list of top ten digital skills requested in positions that require a GED or high school diploma and two years of experience or less advertised by employers located in Ramsey County and listed in ranked order by volume.

Top Trending Digital Skills for Youth-Friendly Occupations in Ranked Order by Volume, March 1, 2020 - February 28, 2021

1. Detail-oriented	(-19%)
2. Computer usage (basic)	(-26%)
3. Problem solving	(-19%)
4. Monitoring	(+9%)
5. Mathematics	(-41%)
6. Interpreting	(-28%)
7. Microsoft Office	(-25%)
8. Math basic	(-46%)
9. Analysis	(-16%)
10. Data entry	(-28%)
11. Implementing	(-37%)
12. Troubleshooting	(+15%)
13. Microsoft Word	(-30%)
14. Microsoft Excel	(-28%)
15. Computers	(-31%)

Youth Jobseekers with Records

According to Sterling Talent Solutions, about 93% of employers that do some form of pre-hire screening use criminal records searches.²⁰ Employers do criminal record searches to avoid risk and liability. However, having a criminal history should not stop youth from seeking out a good-paying job and starting a career. Based on a recent study, over 80% of managers and two-thirds of HR professionals feel that workers with criminal records bring equal—or greater—value to an organization as workers without records.²¹ Plus, negligent hiring liability can be nearly eliminated by establishing fair and lawful screening procedures outlined and promoted for employers in a local Fair Chance Hiring Guide.²²

WHAT COMPANIES CAN CHECK

Minnesota Bans-The-Box prohibits prospective employers from asking about criminal history on job applications. Minnesota employers can only run a background check after an individual has been considered for an interview or before a conditional offer (if there is no interview). Any exclusions to be made must be job-related and consistent with business necessity. Therefore, employers must show

²⁰ Sterling Talent Solutions. (2017). Background Screening Trends and Best Practices Report. Retrieved from http://info.sterlingtalentsolutions.com/2017BenchmarkingReport-Homepage?_ga=2.222509907.951516221.1503510543-1013419664.1486478137

²¹ Society for Human Resource Management. (2018). Workers with Criminal Records. Retrieved from <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Pages/Second-Chances.aspx>

²² Twin Cities Rise. (2018). Fair Chance Hiring Guide. Retrieved from https://static1.squarespace.com/static/563938b2e4b045fad0613197/t/5af4c26488251bd8350f321f/1525989991776/TCR_EmployerGuide_Web+%28002%29.pdf

that their policies link specific criminal conduct with the risks posed by taking on a particular position. Employers might use a “relevancy screen” based on the Nature-Time-Nature Test, which can help them evaluate individual applicants on a case-by-case basis.²³ Depending on the applicant’s crime, when it happened, and the job they are applying for, there might be certain factors an employer could consider. For example, if driving is relevant to the position, employers may check the applicant’s DMV record to see if they have a recent DUI, moving violations, or speeding tickets. There would be a difference between a single car theft 15 years ago and multiple convictions for car theft within the past two years.

PREPARING FOR A JOB SEARCH WITH A RECORD

Youth jobseekers worried about their background check results could take a proactive approach by running a criminal background report on themselves before starting a job search. Although most third-parties charge a fee, there may be local options for free background checks.

Before a job interview, youth job seekers prepare to address the conviction, the rehabilitation they have completed, what they have learned from the experience, and how they are committed to making a positive contribution to society through their new job.

²³ E.E.O.C. Guidance (2012). Included in the Fair Chance Hiring Guide. Retrieved from https://static1.squarespace.com/static/563938b2e4b045fad0613197/t/5af4c26488251bd8350f321f/1525989991776/TCR_EmployerGuide_Web+%28002%29.pdf

Conclusion

Young workers are among the most vulnerable in the current economy. Workers between 16 and 24 years of age tend to have high unemployment and underemployment rates compared with older workers. Youth talents also tends to work in the industries and occupations that experienced the largest job losses due to the COVID-19 pandemic and resulting shutdowns. Furthermore, they are least likely to be able to work from home.

There is significant evidence that during recessions, younger workers experience more sustained and severe labor market outcomes than older workers. Given what we know about the long-lasting effects of recessions on youth in the workforce, targeted action is required to help ensure that young workers do not suffer significant negative consequences in the years to come.

What employment, wage, and unemployment trends were observed in youth employment over the past five years in Ramsey County, with particular attention to 2020?

- **Historical trends and forecasts not favorable** - Over the past five years, employment in youth-friendly roles has decreased by about -0.8% annually on average. The forecasts are not favorable for occupations historically held by youth, and levels of employment in these roles are unlikely to return to pre-pandemic levels within the next three to five years.
- **Concentration in lower-wage, vulnerable occupations** - Youth (ages 16 - 24) in the Ramsey County workforce are more likely to hold lower-wage occupations, such as Fast Food Workers and Hosts, Hostesses, Restaurant, Lounge, and Coffee Shop Workers that are most vulnerable to pandemic-induced recession.
- **Disproportionately negatively impacted by COVID-19** - From March 16, 2020, to February 23, 2021, youth applied for unemployment insurance at higher rates than expected based on the overall share of all workers they represent. Twenty-two of the top 25 occupations by volume of unemployment insurance applicants are youth-friendly occupations, including Food and Beverage Serving Workers and Retail Sales Workers.

What are the specific challenges for attracting youth talent to available careers?

- **Youth need more remote work opportunities** - Only three of the top 100 youth-friendly occupations are either remote full-time or able to be made fully remote without dramatic changes to the occupational role. Although the youth-friendly remote occupations identified in this report are forecasted to decline in employment, matching youth to remote work options could provide youth with the needed income while also allowing for more flexible schedules to manage school, family, and other responsibilities.
- **Youth need digital skills training** - The need for digital skills in the local workforce is expanding. Online job posting data tell us that youth-friendly positions require digital skills, including computer usage, mathematics, Microsoft Office, and data entry.

Which career paths present the most promising opportunities for youth in Ramsey County looking for well-paying, high-demand careers?

Ramsey County youth are currently employed in all six career fields. An estimated total of 41,989 people between the ages of 16 and 24 were employed in the County as of the third quarter of 2020, representing about 15.2% of all local employment. The following youth-friendly occupations are entry points into promising career paths for youth in Ramsey County who are looking for well-paying, high-demand careers.

Arts, Communications, and Information Systems

Computer User Support Specialists is a youth-friendly occupation with entry-level wages that support a living wage for a single individual living in Ramsey County. Despite moderate forecasted growth, this occupation offers a high opportunity pathway into growing Information Technology careers.

Health Science Technology

Medical Assistants has a high forecasted annual growth rate, offers a living wage, and is one of the four youth-friendly occupations of shortage in this field. This occupation offers a high opportunity pathway into careers in the growing Health Care industry.

Human Services

Social and Human Service Assistants has a higher-than-average forecasted growth and moderate opportunity pathway. This occupation has a lower wage in comparison to other youth-friendly occupations in other fields.

Business, Management, and Administration

Securities, Commodities, and Financial Services Sales Agents have a low forecasted average annual growth rate, but these roles are youth-friendly, offer a high wage, and are experiencing a local talent shortage.

Engineering, Manufacturing, and Technology

First-Line Supervisors of Mechanics, Installers, and Repairers also have a low forecasted average annual growth rate, but occupations in this field are anticipated to have long-term growth. These roles are youth-friendly, offer a high wage, and are experiencing a local talent shortage. This occupation maps into transportation career pathways.

Agriculture, Food, and Natural Resources

Animal Caretakers have a high average forecasted growth rate. Although entry-level roles do not offer a living wage on average, this occupation offers a high opportunity pathway into veterinary careers that is an area of future talent shortage both locally and statewide.