

# REIMAGINING RAMSEY COUNTY

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## Building a Resilient Workforce

### RealTime Talent

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# Reimagining Ramsey County

## Introduction

In the first three months of the economic impact of COVID-19, 80,036 Ramsey County residents applied for unemployment insurance—about 22.8% of the local employed workforce, and representing over 10% of all unemployment insurance applications statewide. Although the employment impacts of the pandemic have been forecast to be sharp and short by most economists, without intentional reimagining of our communities, recovery is unlikely to be equally positive for all residents.

This report aims to highlight disparate workforce impacts of the COVID-19 pandemic and the racial and ethnic disparities that have persisted in our community. This report—part of a series of five community profiles—provides the background data necessary for a deeper understanding of community demographics, the varied impacts of job loss by industry, occupation, and demographic, rising opportunities in each community, and opportunities to reimagine the future of work. We explored the following research questions to guide this foundational study:

- What is the educational, linguistic, transportation, and digital literacy profile of each community?
- What industries are most vulnerable to the negative impacts of COVID-19? What is the possible short-term impact on key occupations? What do unemployment insurance application numbers indicate regarding demographics of job loss and occupations losing workers?
- What are the 1) transit accessible, 2) high-demand, 3) high-wage, 4) low-pandemic-vulnerability, and 5) high-skill jobs in each community?

### *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 get involved in Reimagining Ramsey County, contact Ling Becker at [ling.becker@co.ramsey.mn.us](mailto:ling.becker@co.ramsey.mn.us).

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# REIMAGINING RAMSEY COUNTY

Volume 6

## Ramsey County

### RealTime Talent

December 2020



**RealTime Talent**  
Using data to build the  
world's best workforce



**RAMSEY COUNTY**  
**Workforce Solutions**

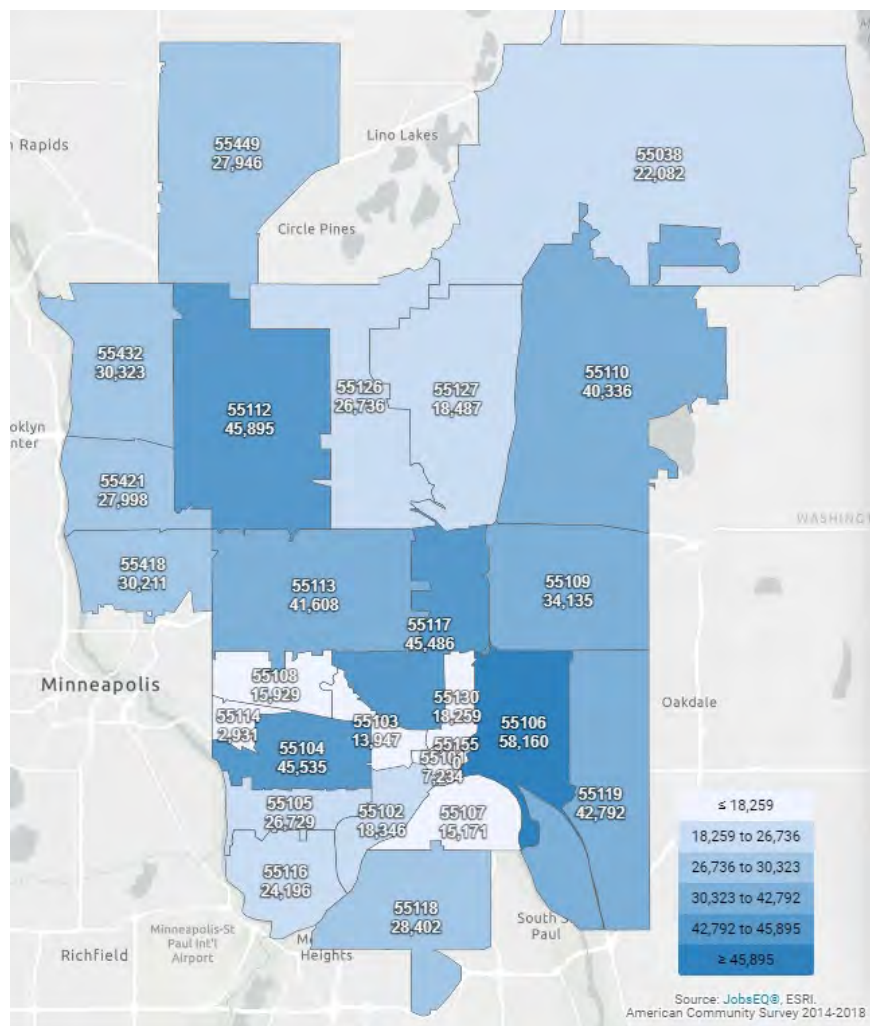
# Introduction

Ramsey County includes urban communities within the City of St. Paul and suburban communities such as Maplewood, White Bear Lake, Vadnais Heights, Shoreview, Mounds View, Little Canada, Roseville, North Oaks, Gem Lake, North St. Paul, Lauderdale, Falcon Heights, New Brighton, Arden Hills. Ramsey County was divided into five subregions and estimated by the following zip codes:

- **Midway, Downtown, and Northern St. Paul** -- 55108, 55114, 55104, 55103, 55101 and 55155
- **Southern St. Paul** -- 55105 and 55116
- **St. Paul's East Side** -- 55130, 55106, and 55119
- **St. Paul's West Side** -- 55102, 55107 and the Ramsey County portion of 55118
- **Suburban Ramsey** -- 55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449

Ramsey County is densely populated; about 541,493 people live in the county. By population, the largest number of people live in zip code 55106, which is the portion of St. Paul's Eastside that straddle both sides of I-94 heading east out of downtown. An estimated 17,781 businesses work out of Ramsey County.

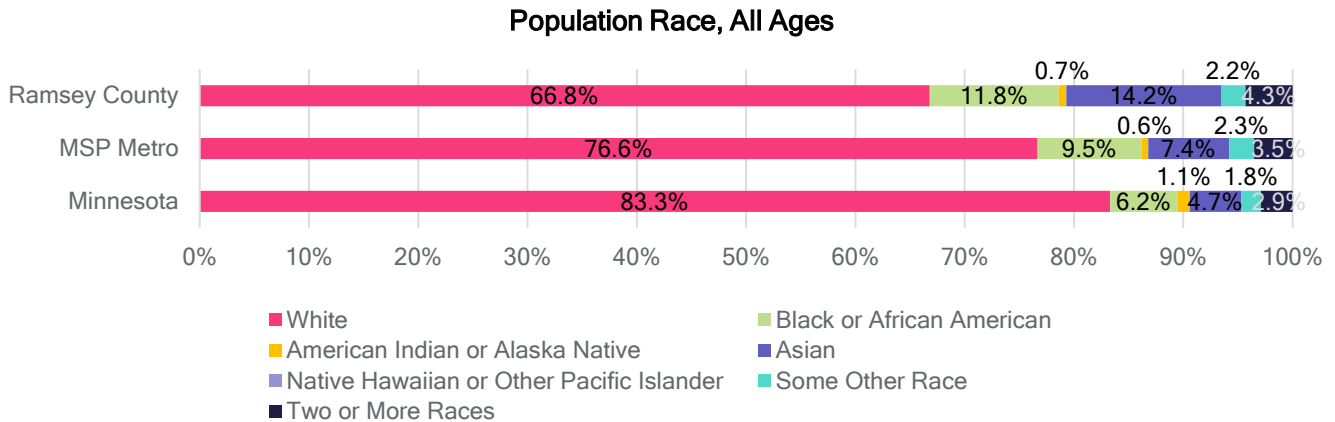
## Resident Population of Ramsey County



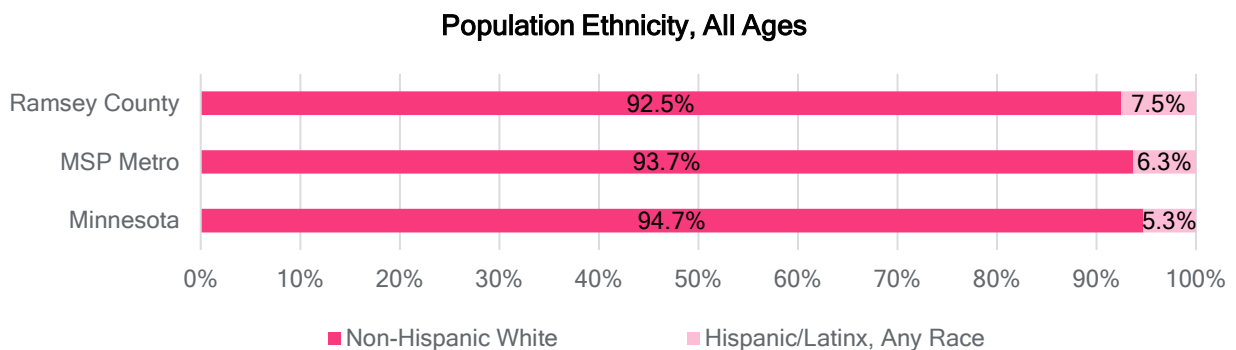
# Community Profile

## Demographics

Ramsey County is more demographically diverse than the MSP Metro and Minnesota as a whole; 33.2% of Ramsey County's population are non-Hispanic people of color, plus 7.5% identify as Hispanic or Latinx. The largest racial or ethnic group in Ramsey County after Non-Hispanic White is the Asian population, with 14.2% of residents of Ramsey County identifying as Asian compared to 7.4% in the MSP Metro overall.



American Community Survey 2014-2018.

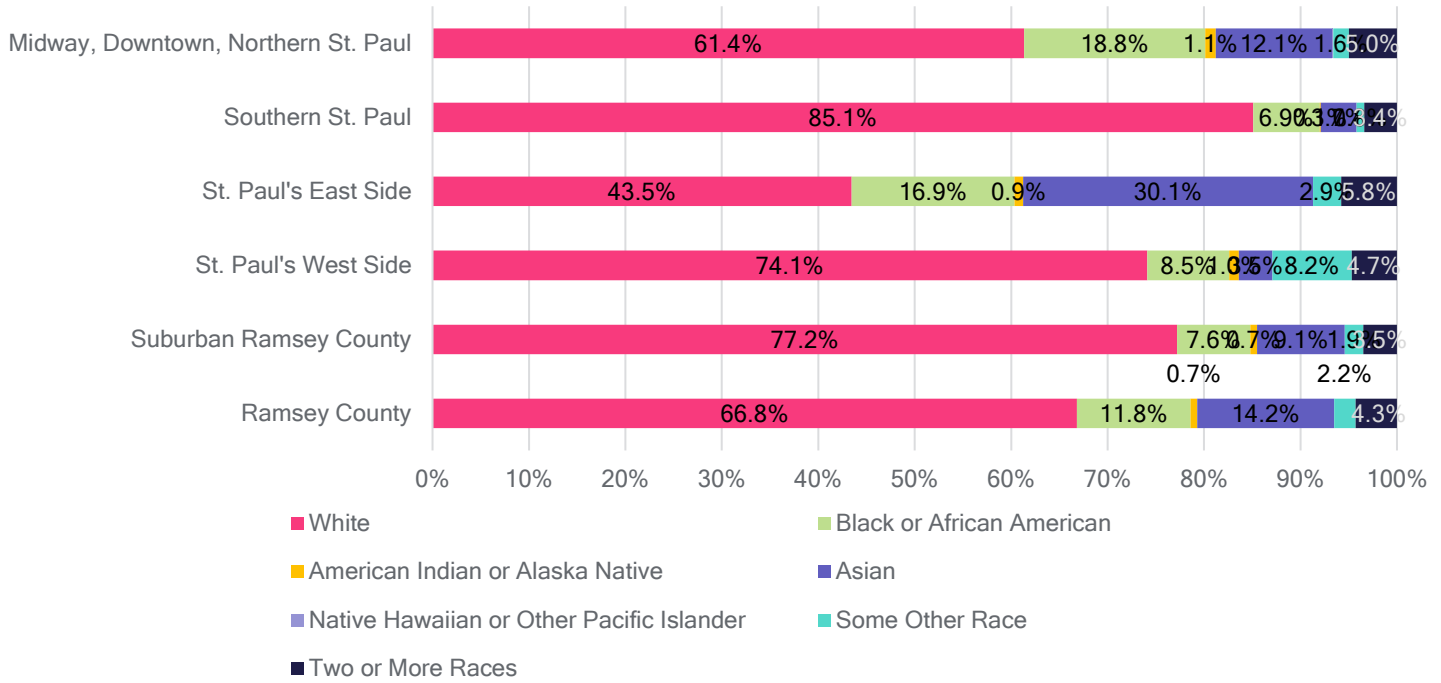


American Community Survey 2014-2018.

Among the five Ramsey County subregions,<sup>1</sup> St. Paul's East Side is not only more populated than the other subregions of the county, but this community is also more demographically diverse. Within St. Paul's East Side, 56.5% of the population are non-Hispanic people of color, plus 11.7% identify as Hispanic or Latinx. Midway, Downtown, and Northern St. Paul is the second most demographically diverse subregion in Ramsey County, 38.6% of the population are non-Hispanic people of color. The largest Hispanic/Latinx population resides in St. Paul's West Side, representing 18.3% of the community's population.

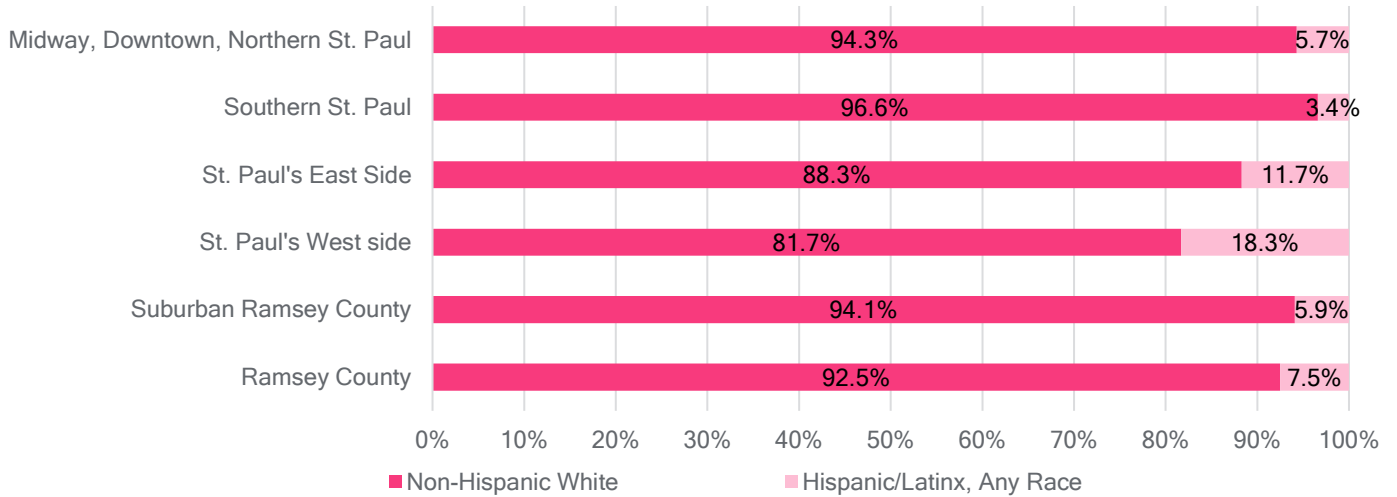
<sup>1</sup>Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

### Population Race, All Ages



American Community Survey 2014-2018.

### Population Ethnicity, All Ages



American Community Survey 2014-2018.



## Community Demographics\*

Demographics	Percent			Value		
	Ramsey County, Minnesota	Twin Cities 7-County Metro	Minnesota	Ramsey County, Minnesota	Twin Cities 7-County Metro	Minnesota
Population (ACS)	–	–	–	541,493	3,039,708	5,527,358
Male	48.7%	49.4%	49.8%	263,843	1,500,624	2,751,748
Female	51.3%	50.6%	50.2%	277,650	1,539,084	2,775,610
Median Age**	–	–	–	34.9	36.8	37.9
Under 18 Years	23.4%	23.6%	23.4%	126,490	717,668	1,291,607
18 to 24 Years	10.2%	8.7%	9.1%	55,420	263,378	503,989
25 to 34 Years	16.6%	15.1%	13.6%	89,740	459,585	752,944
35 to 44 Years	12.0%	13.1%	12.4%	65,173	399,319	685,568
45 to 54 Years	11.8%	13.5%	13.1%	63,728	410,408	725,714
55 to 64 Years	12.3%	12.8%	13.3%	66,694	390,595	737,424
65 to 74 Years	7.8%	7.7%	8.5%	42,271	234,633	470,691
75 Years, and Over	5.9%	5.4%	6.5%	31,977	164,122	359,421
Race: White	66.8%	76.6%	83.3%	361,501	2,328,568	4,606,044
Race: Black or African American	11.8%	9.5%	6.2%	63,724	288,828	342,186
Race: American Indian and Alaska Native	0.7%	0.6%	1.1%	3,723	18,437	58,982
Race: Asian	14.2%	7.4%	4.7%	77,156	225,056	262,359
Race: Native Hawaiian and Other Pacific Islander	0.0%	0.0%	0.0%	192	1,157	2,187
Race: Some Other Race	2.2%	2.3%	1.8%	12,028	70,602	97,833
Race: Two or More Races	4.3%	3.5%	2.9%	23,169	107,060	157,767
Hispanic or Latino (of any race)	7.5%	6.3%	5.3%	40,569	192,028	292,764

American Community Survey 2014-2018 unless noted otherwise.

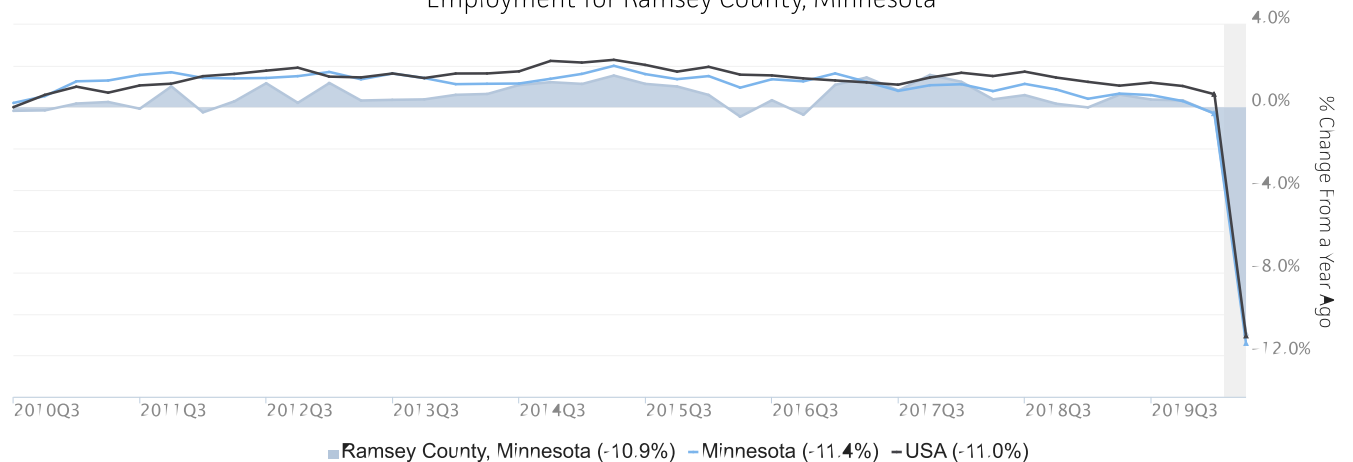
\*Community Demographics for the five subregions of Ramsey County can be found in the individual reports.

\*\*Median values for certain aggregate regions (such as MSAs) may be estimated as the weighted averages of the median values from the composing counties.

## Employment

As of 2020Q1, total employment for Ramsey County was 351,392 (based on a four-quarter moving average). Over the year ending 2020Q1, employment had declined 0.3% in the region. Over the year ending 2020Q2, employment declined 10.9% in the same region.

Employment for Ramsey County, Minnesota

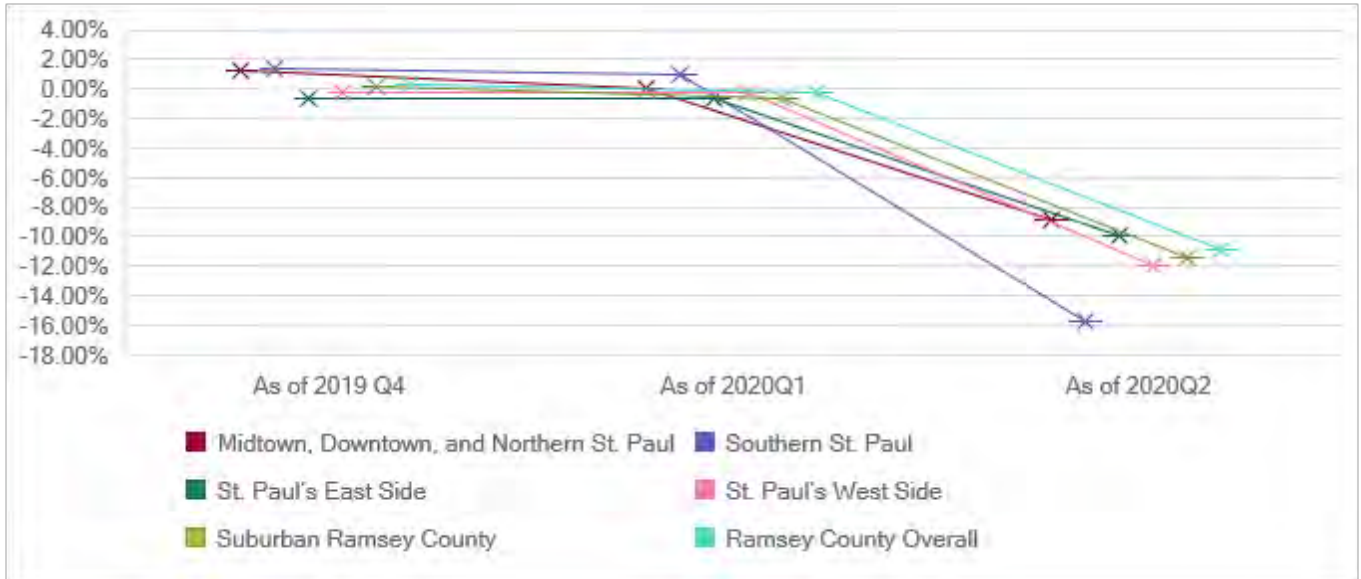


Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2019Q3 with preliminary estimates updated to 2020Q1.



Evaluating the one-year historical employment trends (based on a four-quarter moving average) for the years ending 2019Q4, 2020Q1, and 2020Q2 by Ramsey County subregions<sup>2</sup> reveals Southern St. Paul had the steepest decline in employment from the year ending 2020Q1 to 2020Q2.

### Employment Trends for Ramsey County and Subregions (Year Over Year % Change)



	Total Employment as of 2020Q1	One-Year Historical Employment Trends*		
		As of 2019Q4	As of 2020Q1	As of 2020Q2
Midtown, Downtown, and Northern St. Paul	97,595	1.2%	0.0%	-8.9%
Southern St. Paul	23,016	1.4%	1.0%	-15.8%
St. Paul's East Side	32,621	-0.7%	-0.7%	-10.0%
St. Paul's West Side	47,180	-0.3%	-0.2%	-12.0%
Suburban Ramsey County	192,144	0.2%	-0.6%	-11.4%
<b>Ramsey County Overall</b>	<b>351,392</b>	<b>0.3%</b>	<b>-0.3%</b>	<b>-10.9%</b>

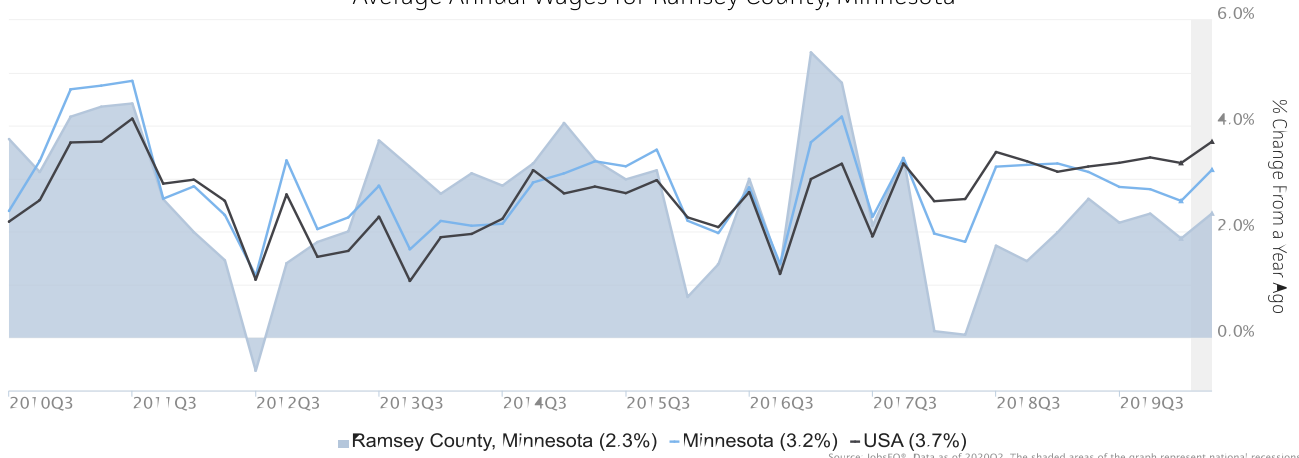
Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2019Q4 with preliminary estimates updated to 2020Q2.

\*One-year historical employment trends (based on a four-quarter moving average) for the years ending 2019Q4, 2020Q1, and 2020Q2 by Ramsey County subregions are shaded green when value is more than 0.1% higher than that of Ramsey County and are shared red when the value is more than 0.1%

The average worker in Ramsey County earned annual wages of \$63,399 as of 2020Q1. Average annual wages per worker increased 1.9% in the region over the preceding four quarters. For comparison purposes, annual average wages were \$57,624 in the nation as of 2020Q1.

<sup>2</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

Average Annual Wages for Ramsey County, Minnesota



Annual average wages per worker data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2019Q4 with preliminary estimates updated to 2020Q2.

Over the three periods, years ending 2019Q4, 2020Q1, and 2020Q2, the one-year historical average annual wage trends (based on a four-quarter moving average) for each Ramsey County subregions<sup>3</sup> follow a similar trajectory.

Average Annual Wages for Ramsey County Subregions (Year Over Year % Change)

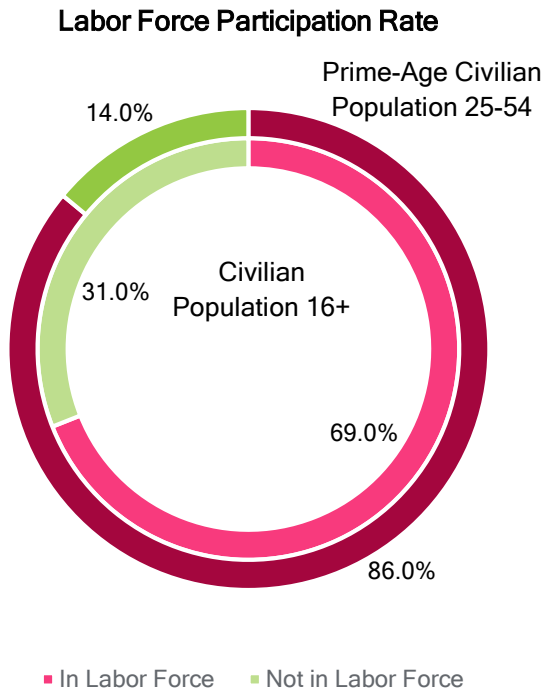


	Average Annual Wage as of 2020Q1	One-Year Historical Wage Trends*		
		As of 2019Q4	As of 2020Q1	As of 2020Q2
Midtown, Downtown, and Northern St. Paul	\$63,768	2.3%	1.9%	2.4%
Southern St. Paul	\$62,483	2.4%	2.0%	2.3%
St. Paul's East Side	\$63,203	2.3%	1.9%	2.3%
St. Paul's West Side	\$63,597	2.3%	1.8%	2.3%
Suburban Ramsey County	\$62,133	2.4%	2.1%	2.6%
Ramsey County Overall	\$63,399	2.3%	1.9%	2.3%

Annual average wages per worker data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2019Q4 with preliminary estimates updated to 2020Q2.

<sup>3</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

\*One-year historical average annual wage trends (based on a four-quarter moving average) for the years ending 2019Q4, 2020Q1, and 2020Q2 by Ramsey County subregions<sup>4</sup> are shaded green when value is more than 0.1% higher than that of Ramsey County and are shared red when the value is more than 0.1% below.



Ramsey County residents have a lower labor force participation rate than in the rest of the Metro (The MSP Metro Labor Force Participation is 88.7% for prime working age and 72.1% for all). This may be due in part to Ramsey County having a greater number of single parent households (43,659 or 35.8% of households) and residents with disabilities (33,948 or 10.0% of residents) than seen in the MSP Metro. It may also be that this community has more residents that may be ineligible to work, as 10.8% of Ramsey County residents are foreign born. This community has a higher proportion of uninsured residents (5.5%), households receiving food stamps (12.8%), and disconnected youth (2.1%) compared to other communities in the MSP Metro. As we detail in the next section of this report, there is variation in the needs and experiences of residents of Ramsey County across different communities. The largest share of disconnected youth in this population by subregion is Midtown, Downtown, and Northern St.

Paul (3.9% or 189 youth). The subregion with the largest share of adults between the ages of 25 and 64 without a high school diploma or GED (19.6%) is St. Paul's East Side, and the largest share of residents who commute to work or school by public transportation (14.2%) is Midway, Downtown, and Northern St. Paul.

### Economic and Social Characteristics of Ramsey County

Economic and Social Characteristics	Percent			Values		
	Ramsey County, Minnesota	7-County MSP Metro	Minnesota	Ramsey County, Minnesota	7-County MSP Metro	Minnesota
Labor Force Participation Rate and Size (civilian population 16 years and over)	69.0%	72.1%	69.7%	295,458	1,730,688	3,050,676
Prime-Age Labor Force Participation Rate and Size (civilian population 25-54)	86.0%	88.7%	88.2%	187,867	1,125,534	1,906,910
Armed Forces Labor Force	0.0%	0.1%	0.1%	214	1,274	2,329
Veterans, Age 18-64	2.9%	3.5%	4.1%	9,950	67,574	138,077
Veterans Labor Force Participation Rate and Size, Age 18-64	75.8%	81.5%	79.5%	7,538	55,073	109,835
Median Household Income*	-	-	-	\$62,304	\$77,034	\$68,411
Per Capita Income	-	-	-	\$34,049	\$40,637	\$36,245
Poverty Level (of all people)	14.7%	9.4%	10.1%	77,330	282,384	547,442
Households Receiving Food Stamps/SNAP	12.8%	8.2%	8.2%	26,850	96,883	178,604
Enrolled in Grade 12 (% of total population)	1.4%	1.5%	1.4%	7,827	46,253	79,941
Disconnected Youth**	2.1%	1.5%	1.8%	597	2,270	5,025
Children in Single Parent Families (% of all children)	35.8%	27.9%	28.0%	43,659	193,871	348,224

<sup>4</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

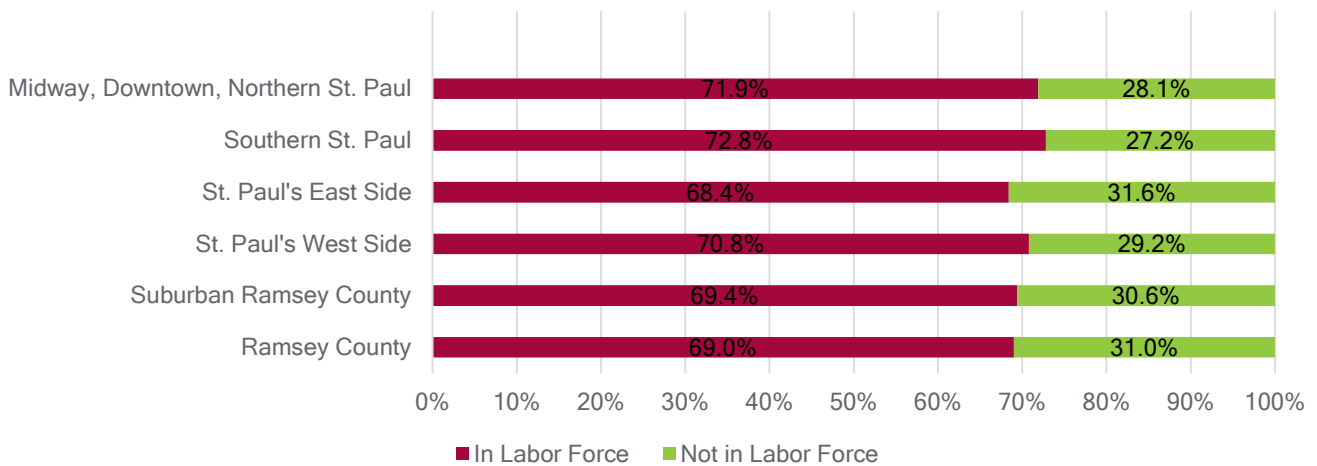
Uninsured	5.5%	4.6%	4.7%	29,542	139,536	254,764
With a Disability, Age 18-64	10.0%	8.0%	8.7%	33,948	152,512	292,907
With a Disability, Age 18-64, Labor Force Participation Rate and Size	47.0%	53.4%	52.5%	15,945	81,517	153,894
Foreign Born	15.6%	12.0%	8.4%	84,379	363,294	461,758

American Community Survey 2014-2018 unless noted otherwise.

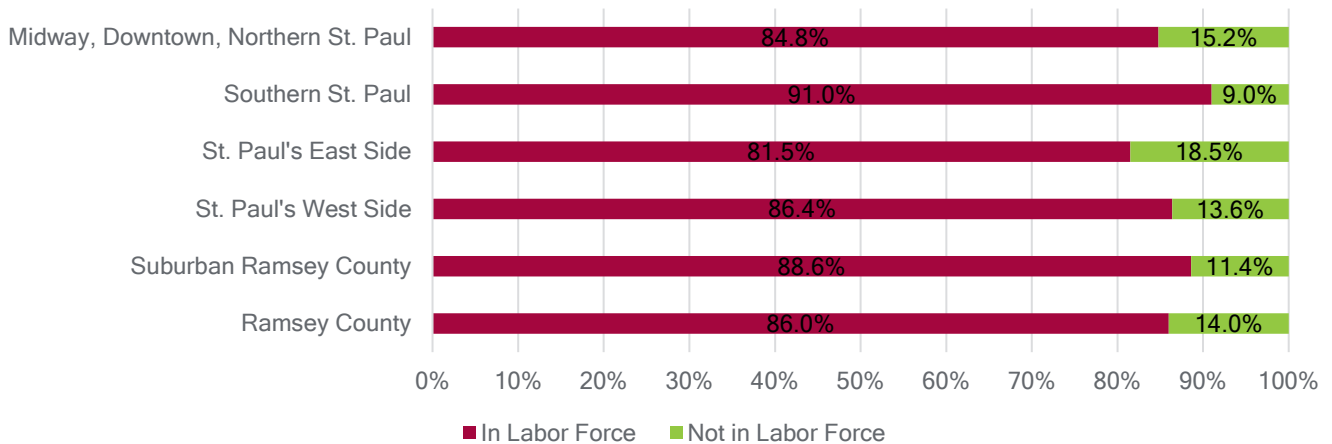
\*Median values for certain aggregate regions (such as MSAs) may be estimated as the weighted averages of the median values from the composing counties. \*\*Disconnected Youth are 16-19 year olds who are (1) not in school, (2) not high school graduates, and (3) either unemployed or not in the labor force.

Across Ramsey County, Southern St. Paul has the highest labor force participation rate for all ages than the other communities in Ramsey County. In addition to having the largest population and highest share of diverse populations, St. Paul’s East Side has a lowest labor force participation rate for the population 16 years old and over.

### Labor Force Participation Rate (civilians 16+)



### Prime-Age Labor Force Participation Rate (civilians ages 25-54)



# Education



**90.2%** of prime working age adult residents have at least a high school diploma or GED.

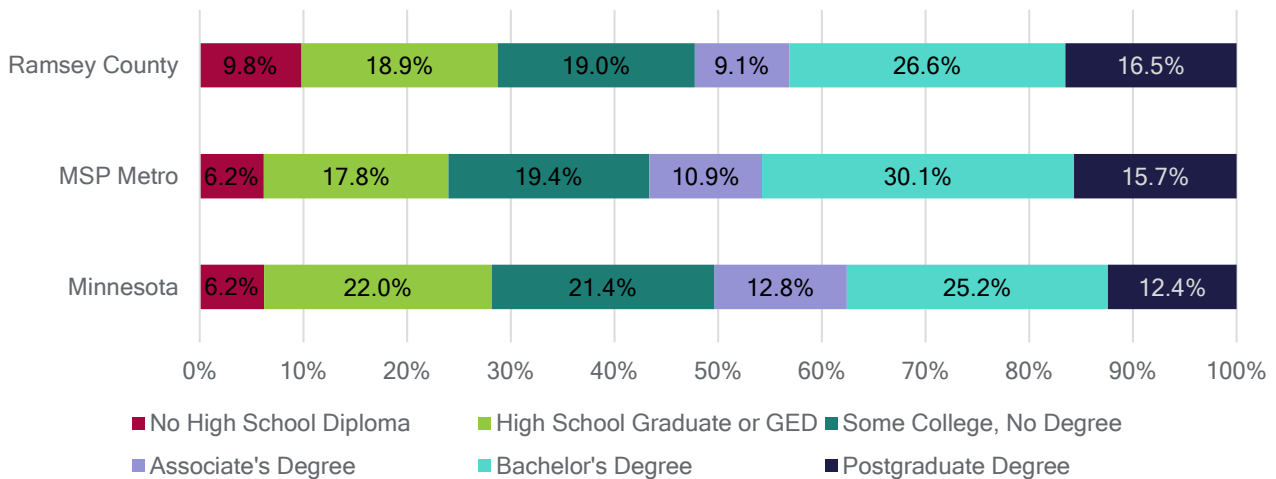
Ramsey County residents have a lower level of educational attainment overall in comparison to the 7-County MSP Metro. According to the most recent American Community Survey estimates, only 9.8% of Ramsey County residents between ages 25 and 64 do not have a high school diploma, and 26.6% hold a Bachelor's Degree as their highest level of educational attainment.

## Educational Characteristics of Ramsey County

Educational Characteristics	Percent			Values		
	Ramsey County, Minnesota	7-County MSP Metro	Minnesota	Ramsey County, Minnesota	7-County MSP Metro	Minnesota
No High School Diploma	9.8%	6.2%	6.2%	28,060	103,067	178,547
High School Graduate	18.9%	17.8%	22.0%	54,037	295,274	639,601
Some College, No Degree	19.0%	19.4%	21.4%	54,211	321,288	620,252
Associate's Degree	9.1%	10.9%	12.8%	25,991	180,284	372,692
Bachelor's Degree	26.6%	30.1%	25.2%	75,814	499,663	731,462
Postgraduate Degree	16.5%	15.7%	12.4%	47,222	260,331	359,096

American Community Survey 2014-2018 unless noted otherwise.

## Educational Attainment, Age 25-64



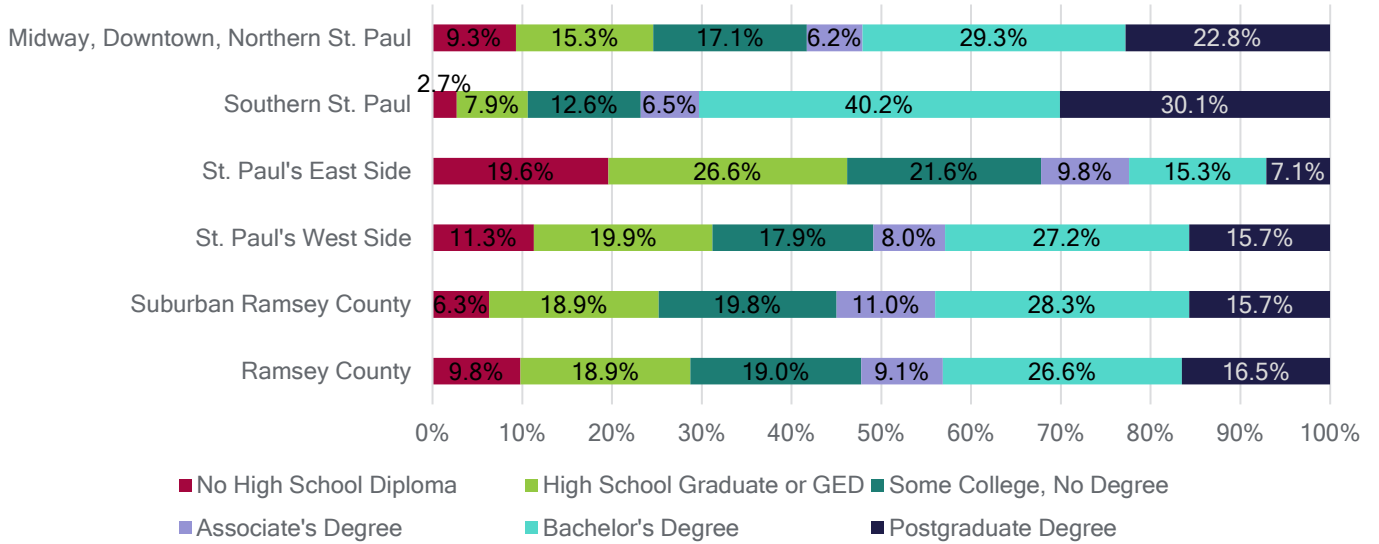
American Community Survey 2014-2018.

Across the Ramsey County subregions<sup>5</sup>, there is variation across residents' level of educational attainment, according to the most recent American Community Survey estimates. Southern St. Paul

<sup>5</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

residents have a higher level of educational attainment than the four communities in the county. St. Paul's East Side residents have a lower level of educational attainment than other communities. 19.6% of St. Paul's East Side residents between ages 25 and 64 do not have a high school diploma, and only 15.3% hold a Bachelor's Degree as their highest level of educational attainment.

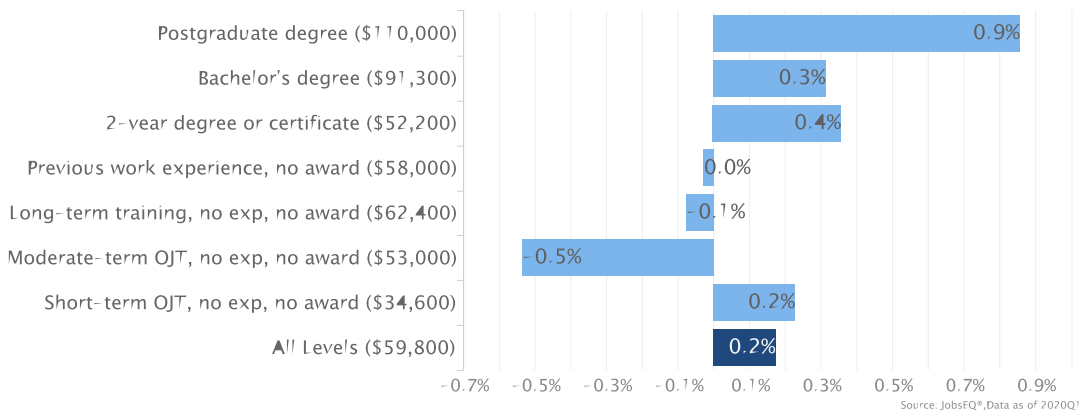
### Educational Attainment, Age 25-64



American Community Survey 2014-2018.

Expected growth rates for occupations vary by the education and training required. While all employment in Ramsey County is projected to grow 0.2% over the next ten years, occupations typically requiring a postgraduate degree are expected to grow 0.9% per year, those requiring a bachelor's degree are forecast to grow 0.3% per year, and occupations typically needing a 2-year degree or certificate are expected to grow 0.4% per year.

### Annual Average Projected Job Growth by Training Required for Ramsey County, Minnesota



Employment by occupation data are estimates as of 2020Q1. Education levels of occupations are based on BLS assignments. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

Expected growth rates for occupations vary by the education and training required across the Ramsey County subregions. St. Paul's West Side's average-annual projected job growth by training required is consistently smaller than the other subregions across all education levels. In contrast, Southern St. Paul's annual average projected job growth is persistently larger than the other subregions.

Annual Average Projected Job Growth by Training Required for Ramsey County and Subregions



	All Levels*	Short-term OJT, no exp, no award	Moderate-term OJT, no exp, no award	Long-term training, no exp, no award	Previous work experience, no award	2-year degree or certificate	Bachelor's degree	Postgraduate degree
Midtown, Downtown, and Northern St. Paul	0.4%	0.6%	-0.4%	-0.2%	-0.1%	0.6%	0.4%	1.0%
Southern St. Paul	0.6%	0.4%	-0.1%	0.1%	0.4%	0.9%	0.9%	1.2%
St. Paul's East Side	0.4%	0.6%	-0.4%	-0.1%	-0.1%	0.6%	0.4%	0.6%
St. Paul's West Side	0.0%	-0.2%	-0.5%	-0.3%	0.0%	0.1%	0.1%	0.5%
Suburban Ramsey County	0.0%	0.0%	-0.7%	0.1%	0.0%	0.2%	0.2%	0.9%
<b>Ramsey County Overall</b>	<b>0.2%</b>	<b>0.2%</b>	<b>-0.5%</b>	<b>-0.1%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.9%</b>

Employment by occupation data are estimates as of 2020Q1. Education levels of occupations are based on BLS assignments. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

\* Cells are shaded green when value is more than 0.1% higher than that of Ramsey County and are shaded red when the value is more than 0.1% below.



# Transportation



**18,565** residents  
Commute via public transit (6.7%)

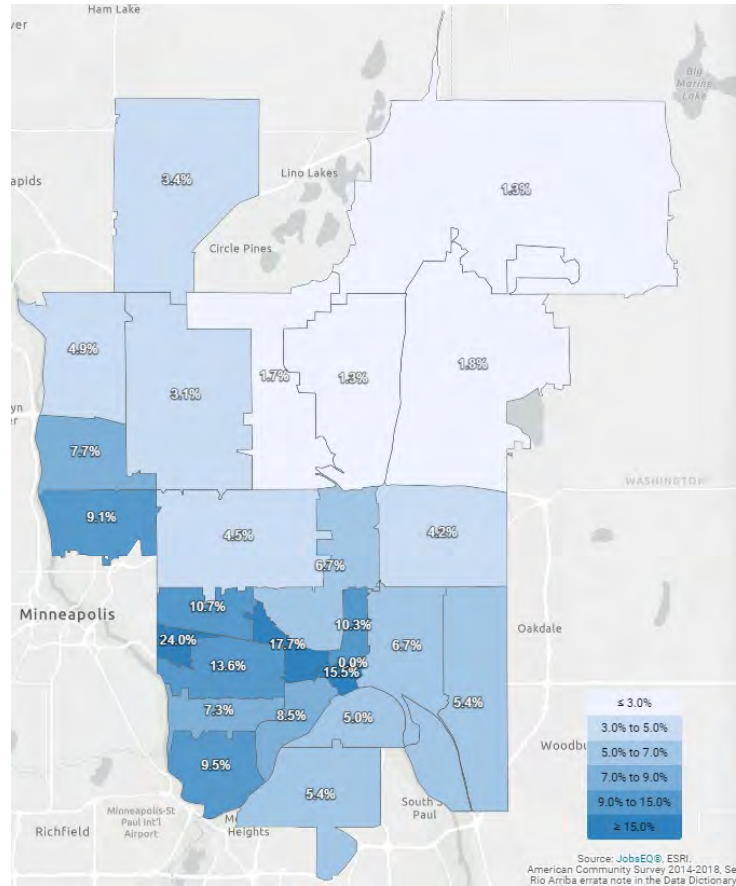
**23.9** Minute



Mean Commute Time

**21,937** Residences have no vehicle available  
(10.5% of all occupied residences)

**Ramsey County Residents Commuting by Public Transit**

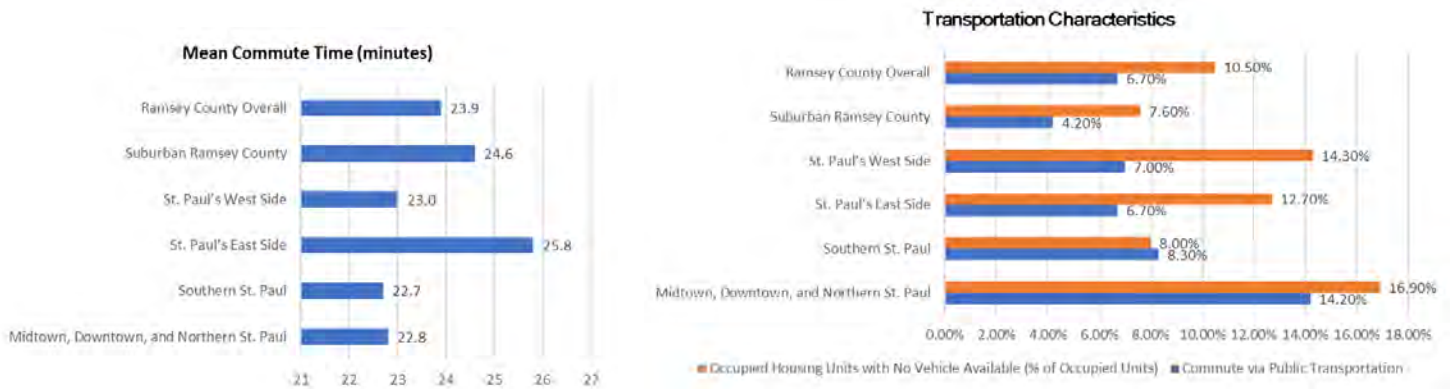


**Transportation Characteristics of Ramsey County**

Transportation Characteristics	Percent			Values		
	Ramsey County, Minnesota	7-County MSP Metro	Minnesota	Ramsey County, Minnesota	7-County MSP Metro	Minnesota
Mean Commute Time (minutes)	-	-	-	23.9	24.7	23.5
Commute via Public Transportation	6.7%	5.3%	3.6%	18,565	87,307	103,390
Occupied Housing Units with No Vehicle Available (% of Occupied Units)	10.5%	7.8%	6.9%	21,937	91,325	148,982

American Community Survey 2014-2018 unless noted otherwise.

St. Paul’s East Side has the longest mean commute time, in addition to having the third-highest share of households without a vehicle available and the second-lowest percentage of residents who commute via public transportation. Midtown, Downtown, and Northern St. Paul have the largest share of households without a vehicle available; however, they also have the largest share of residents who commute via public transportation.



**Transportation Characteristics of Ramsey County and Subregions\***

	Mean Commute Time (minutes)	Commute via Public Transportation	Value	Occupied Housing Units with No Vehicle Available (% of Occupied Units)	Value
		Percent	Commute via Public Transportation	Percent	Occupied Housing Units with No Vehicle Available (% of Occupied Units)
Midtown, Downtown, and Northern St. Paul	22.8	14.2%	6,594	16.9%	5,822
Southern St. Paul	22.7	8.3%	2,403	8.0%	1,733
St. Paul’s East Side	25.8	6.7%	3,612	12.7%	4,907
St. Paul’s West Side	23.0	7.0%	1,266	14.3%	2,080
Suburban Ramsey County	24.6	4.2%	7,961	7.6%	10,794
<b>Ramsey County Overall</b>	<b>23.9</b>	<b>6.7%</b>	<b>18,565</b>	<b>10.5%</b>	<b>21,937</b>

American Community Survey 2014-2018 unless noted otherwise.

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shaded red when the value is more than 1% below.

# Language



**10.8%** of residents over age 5 speak English less than “very well” (a total of 54,243 residents)

**77.1%** of Ramsey County residents over age 5 speak **ONLY** English (a total of 388,179 residents)

- 11.5% Asian/Pacific Island Languages
- 5.2% Spanish
- 3.7% Other Languages (African, etc.)
- 2.4% Indo-European Languages

## Language Characteristics of Ramsey County

Language Characteristics	Percent			Values		
	Ramsey County, Minnesota	7-County MSP Metro	Minnesota	Ramsey County, Minnesota	7-County MSP Metro	Minnesota
Speak English Less Than Very Well (population 5 yrs and over)	10.8%	6.6%	4.7%	54,243	187,303	240,698

American Community Survey 2014-2018 unless noted otherwise.

St. Paul’s East Side has the highest linguistic diversity and possible barriers communicating in the English language of any subregion of Ramsey County. Across St. Paul’s East Side, about 21.8% of the population over the age of 5 years speaks English less than “very well” and the community also has the highest rates of speaking some language other than English.

## Language Characteristics of Ramsey County Subregions

	Speak English Less Than Very Well (population 5 yrs and over)	
	Percent	Value
Midtown, Downtown, and Northern St. Paul	10.7%	8,597
Southern St. Paul	5.2%	2,486
St. Paul’s East Side	21.8%	23,738
St. Paul’s West Side	8.8%	2,804
Suburban Ramsey County	6.7%	22,492
<b>Ramsey County Overall</b>	<b>10.8%</b>	<b>54,243</b>

American Community Survey 2014-2018 unless noted otherwise.

### Primary Languages Spoken in Ramsey County, Ages 5+

English	378,245	80.71%
All languages other than English combined	90,411	19.29%
Hmong	27,858	5.94%
Spanish	24,405	5.21%
African languages	10,883	2.32%
Chinese	3,578	0.76%
Other Asian languages	2,847	0.61%
Vietnamese	2,621	0.56%
French	2,504	0.53%
German	2,018	0.43%
Laotian	1,264	0.27%
Mon-Khmer, Cambodian	1,200	0.26%
Korean	953	0.20%
Arabic	898	0.19%
Tagalog	836	0.18%
Russian	773	0.16%
Thai	721	0.15%
Hindi	720	0.15%
Other Indic languages	676	0.14%
Other Indo-European languages	637	0.14%
Japanese	549	0.12%
Italian	538	0.11%
Polish	496	0.11%
Scandinavian languages	488	0.10%
Other specified North American Indian languages	462	0.10%
Other Slavic languages	380	0.08%
Hebrew	284	0.06%
Portuguese	259	0.06%
Urdu	259	0.06%
Serbo-Croatian	239	0.05%
Other West Germanic languages	202	0.04%
<b>Total:</b>	<b>468,656</b>	

U.S. Census Bureau, 2010 Decennial Census (5-year summary data, collected 2006-2010). Detailed language data available every 10 years.

# Digital Literacy

## Access to Internet<sup>6</sup>



1% to 45% of households in each census tract have no access to the internet.

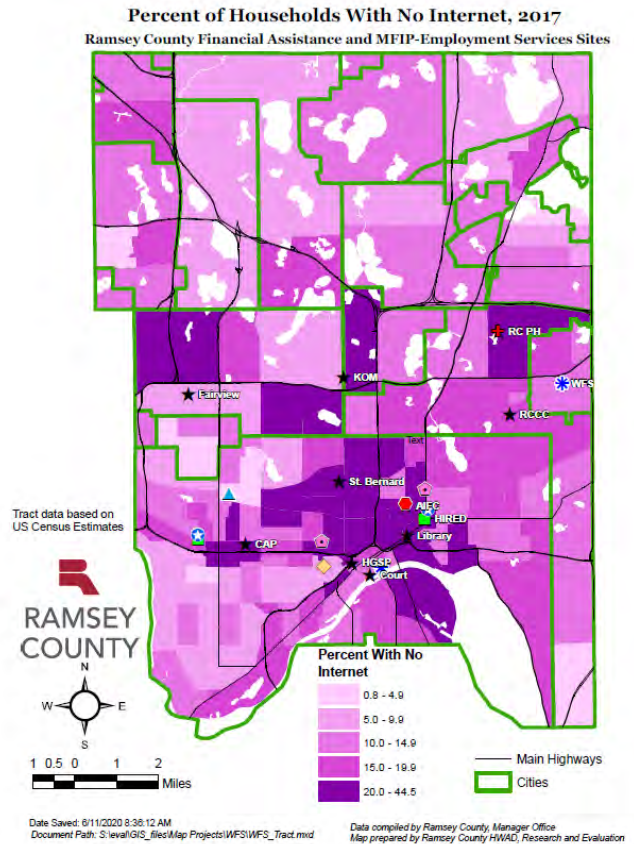
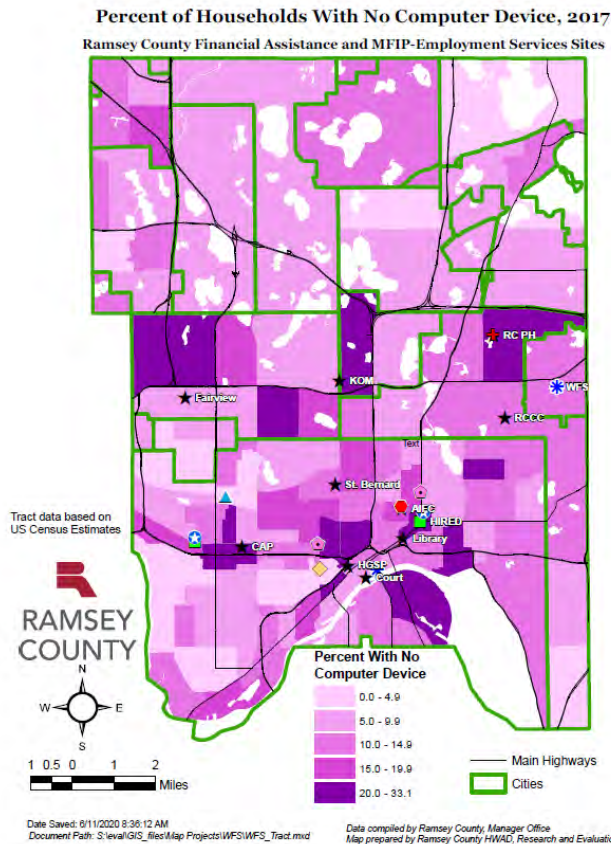
American Community Survey, 2017.

## Access to Technology



0% to 33% of households in each census tract have no access to a computer device.

American Community Survey, 2017.



### Access to Internet & Technology by Ramsey County Subregions

	Percent of Households with no Internet (range)	Percent of Households with no Computer Device (range)
Midtown, Downtown, and Northern St. Paul	1% - 45%	0% - 33%
Southern St. Paul	5% - 19%	0% - 16%
St. Paul's East Side	3% - 34%	4% - 25%
St. Paul's West Side	6% - 28%	4% - 24%
Suburban Ramsey County	3% - 23%	0% - 24%
<b>Ramsey County Overall</b>	<b>1% - 45%</b>	<b>0% - 33%</b>

American Community Survey, 2017.

## Digital Skills



**39%** of Basic Computer Skills assessments received a passing score on the first try in 2019, 38% of Internet Basics, and 30% of Word 2016 assessments.

Northstar Digital Literacy, a program of Literacy Minnesota

North Star Digital Literacy, a program of Minnesota Literacy, offers online assessment modules, curricula resources, and learning tools to help organizations identify gaps and improve digital literacy in their client populations.

In Ramsey County, Northstar Digital Literacy sites<sup>7</sup> administered 3,508 skills assessments in twelve key areas that represent the first attempt of tester-takers seeking to earn certificates and badges during a six-month period in 2019.<sup>8</sup> Among the most frequent assessments administered in Ramsey County in 2019, 40% of Basic Computer Skills received a passing score on the first try, 39% of Windows 10, and 40% of Word 2016. Member organizations administered 1,112 first attempt assessments in Ramsey County during the first half of 2020, a 33% decrease from the previous period.

### Number of Digital Literacy Assessments with Passing Scores on the First Try in Basic Computer Skills, Internet Basics, and Email within a Six-month Period, Ramsey County

Subject	First Half of 2019		Second Half of 2019		First Half of 2020	
	Passed	Total	Passed	Total	Passed	Total
<b>Basic Computer Skills</b>	43% (202)	471	36% (128)	351	41% (137)	332
<b>Internet Basics</b>	36% (115)	317	42% (86)	204	39% (65)	167
<b>Word 2016</b>	39% (107)	271	40% (87)	220	43% (56)	130

Northstar Digital Literacy, a program of Literacy Minnesota

Among the Northstar Digital Literacy sites in the county, Midway, Downtown, and Northern St. Paul and Suburban Ramsey County administered the largest share of skills assessments to first-time testers in 2019; 924 tests administered or 26% and 1,289 or 37%, respectively. Out of the twelve key areas of assessments administered in Ramsey County in 2019, the largest share of first attempts of tester-takers in Basic Computer Skills (23%), Internet Basics (15%), and Word 2016 (14%).

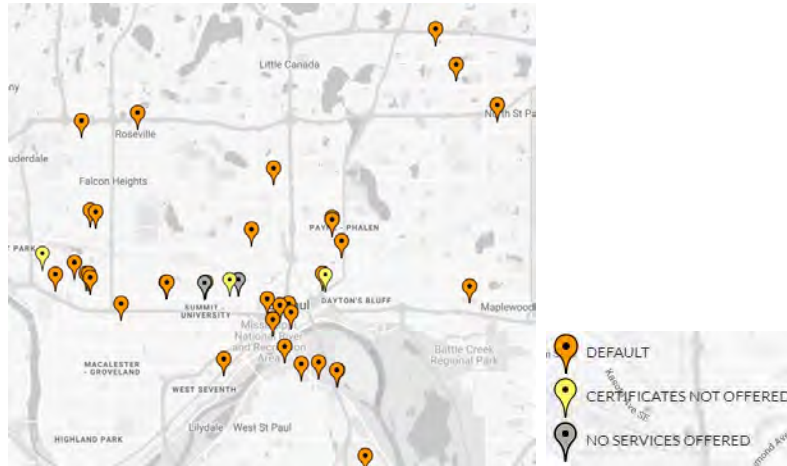
<sup>7</sup> Northstar Digital Literacy is a program of Literacy Minnesota, and Northstar locations are subscription sites independent of Literacy Minnesota/Northstar. Learn more about Northstar Digital Literacy and find test sites at <https://www.digitalliteracyassessment.org/>.

<sup>8</sup> Passing a given digital literacy assessment in a specific area does not indicate digital literacy skills in other areas. Numbers in the report reflect distinct first takes within the six-month period.



Geographic locations Northstar Digital Literacy assessment locations may impact where Ramsey County residents have access to digital literacy tests and certificates. Using the Northstar Digital Literacy assessment locations map to examine geographical accessibility shows limited access to sites on St. Paul's East Side and a concentration of assessment sites along University Avenue in St. Paul. The Northstar Digital Literacy assessment can also be accessed online but would require access to the internet or a computer device.

### Northstar Digital Literacy Assessment Locations in Ramsey County



### First Attempt Digital Literacy Assessments Administered in 2019, Ramsey County

	St. Paul's East Side	St. Paul's West Side	Midway, Downtown, and Northern St. Paul	Suburban Ramsey County	Ramsey County
Basic Computer Skills	107	135	212	368	<b>822</b>
	13.0%	16.4%	25.8%	44.8%	100.0%
	24%	16%	23%	29%	23%
Internet Basics	87	98	109	227	<b>521</b>
	17%	19%	21%	44%	100%
	19%	12%	12%	18%	15%
Email	65	156	107	141	<b>469</b>
	14%	33%	23%	30%	100%
	14%	19%	12%	11%	13%
Windows 10	42	44	158	106	<b>350</b>
	12%	13%	45%	30%	100%
	9%	5%	17%	8%	10%
Mac OS	9	7	43	41	<b>100</b>
	9%	7%	43%	41%	100%
	2%	1%	5%	3%	3%
Word 2016	62	157	141	131	<b>491</b>
	13%	32%	29%	27%	100%
	14%	19%	15%	10%	14%
Excel 2016	21	147	52	79	<b>299</b>
	7%	49%	17%	26%	100%
	5%	17%	6%	6%	9%
PowerPoint 2016	13	44	44	66	<b>167</b>
	8%	26%	26%	40%	100%
	3%	5%	5%	5%	5%
Social Media	18	34	9	53	<b>114</b>
	16%	30%	8%	46%	100%
	4%	4%	1%	4%	3%
Info Literacy	13	11	26	47	<b>97</b>
	13%	11%	27%	48%	100%
	3%	1%	3%	4%	3%
Career Search Skills	11	6	17	22	<b>56</b>
	20%	11%	30%	39%	100%
	2%	1%	2%	2%	2%
Digital Footprint	4	4	6	8	<b>22</b>
	18%	18%	27%	36%	100%
	1%	0%	1%	1%	1%
<b>Total</b>	<b>452</b>	<b>843</b>	<b>924</b>	<b>1289</b>	<b>3508</b>
<b>Row %</b>	13%	24%	26%	37%	100%
<b>Column %</b>	100%	100%	100%	100%	100%

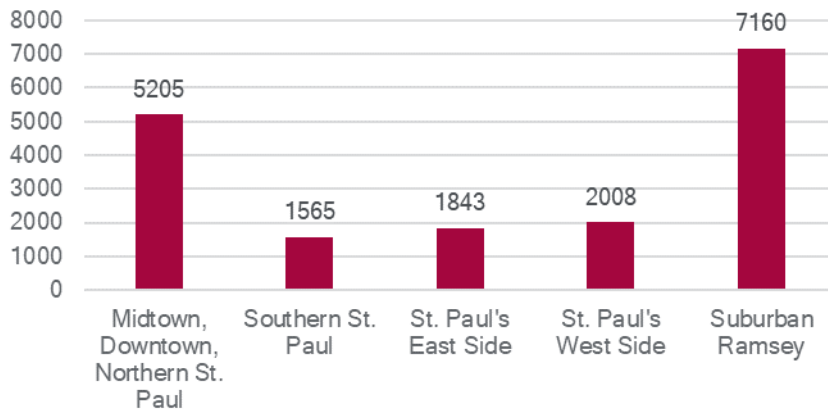
Northstar Digital Literacy, a program of Literacy Minnesota



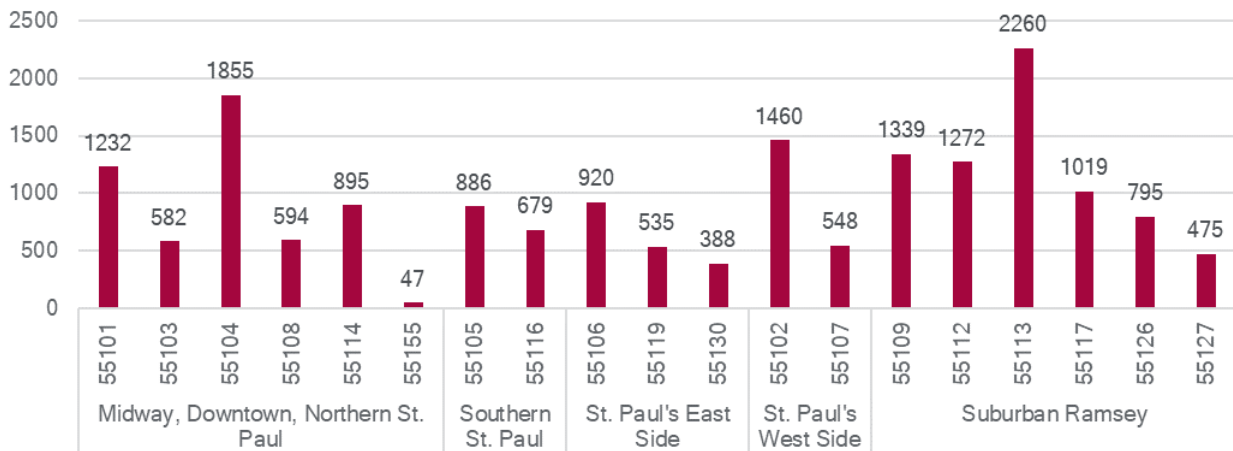
## Businesses

According to DatabaseUSA, there are about 17,781 businesses located in Ramsey County. Over 40% (7,160 businesses) are located in Suburban Ramsey County. The largest share of businesses in Ramsey County by zip code is 55113 (13% or 2260), which corresponds to the City of Roseville. Of all Ramsey County businesses, just 921 (5%) are confirmed to be female-owned, and 284 (2%) are confirmed to be “minority-owned.” The zip code 55104, corresponding to Midway area in St. Paul, has the second largest number of businesses and the largest number of female-owned and minority-owned businesses in Ramsey County.

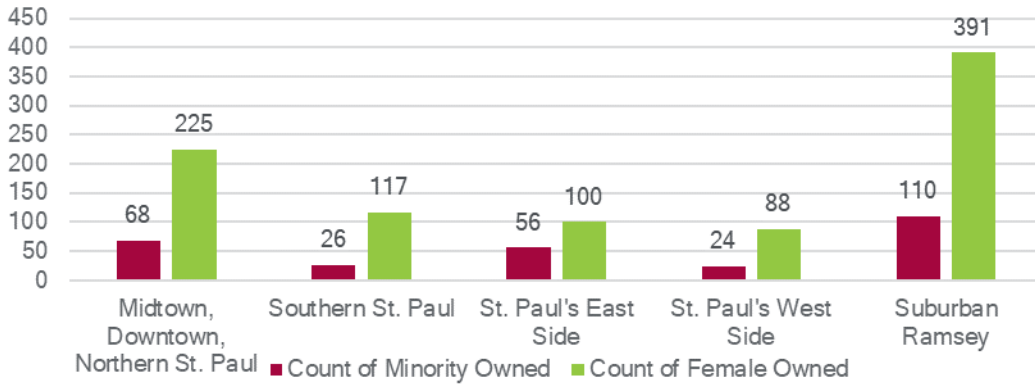
**Business in Ramsey County by Subregion**



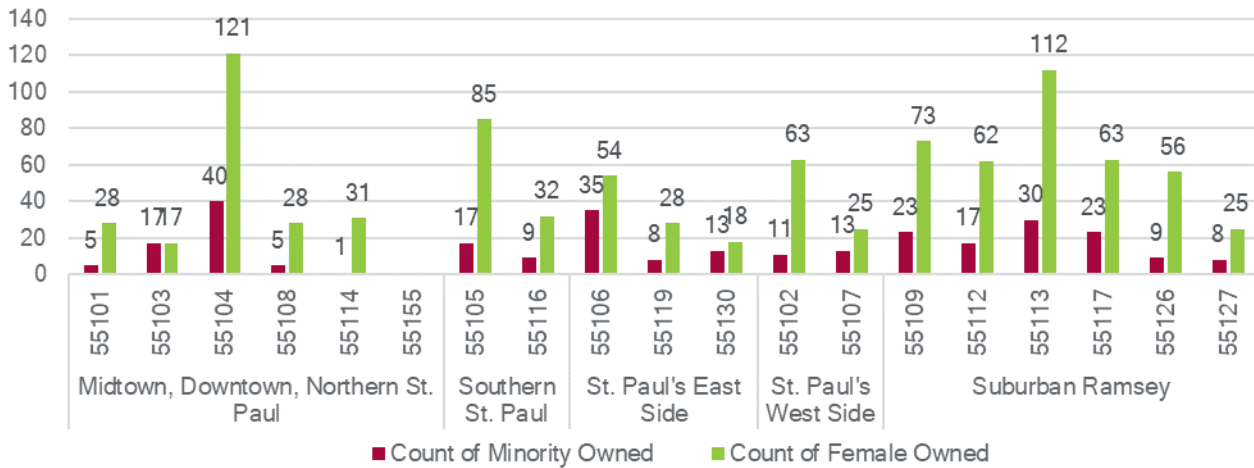
**Business in Ramsey County by Zip Code**



### Female & Minority-Owned Businesses by Ramsey County Subregions

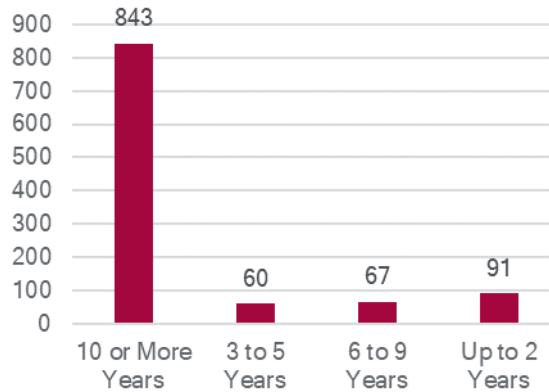


### Female & Minority-Owned Ramsey County Businesses by Zip Code

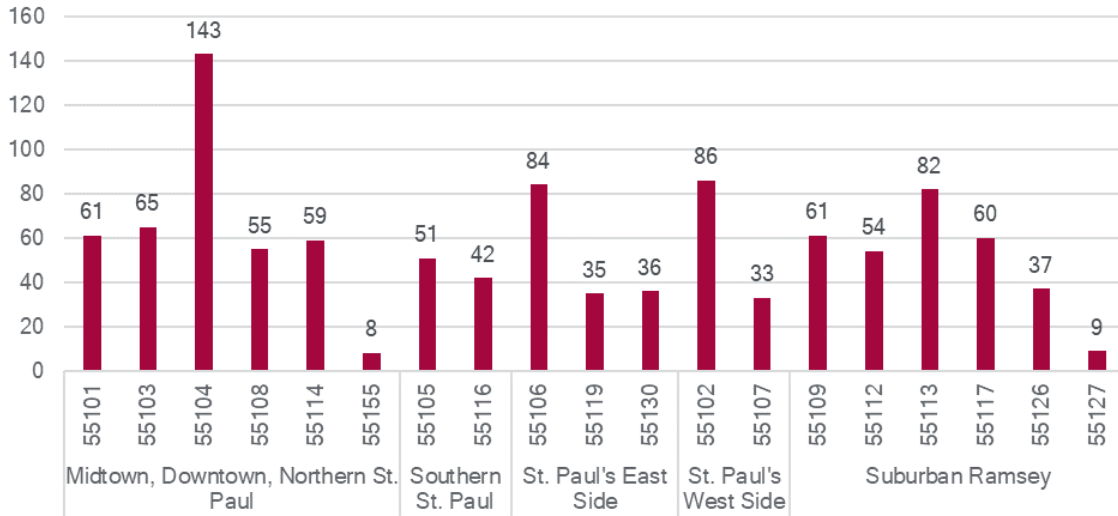


Among the 1,061 local non-profit organizations, the vast majority have been in existence for ten or more years, with very few young organizations in the community. The largest number of non-profit organizations are in Ramsey County by zip code is 55104 (143), which corresponds to the Midway neighborhood in St. Paul.

### Non-Profits in Ramsey County

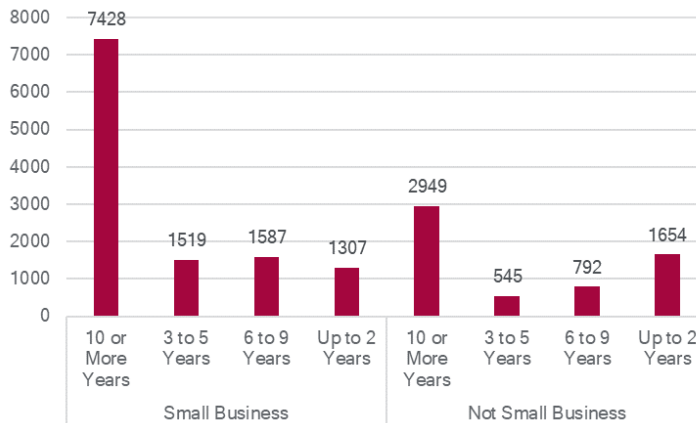


### Non-Profits in Ramsey County by Zip Code

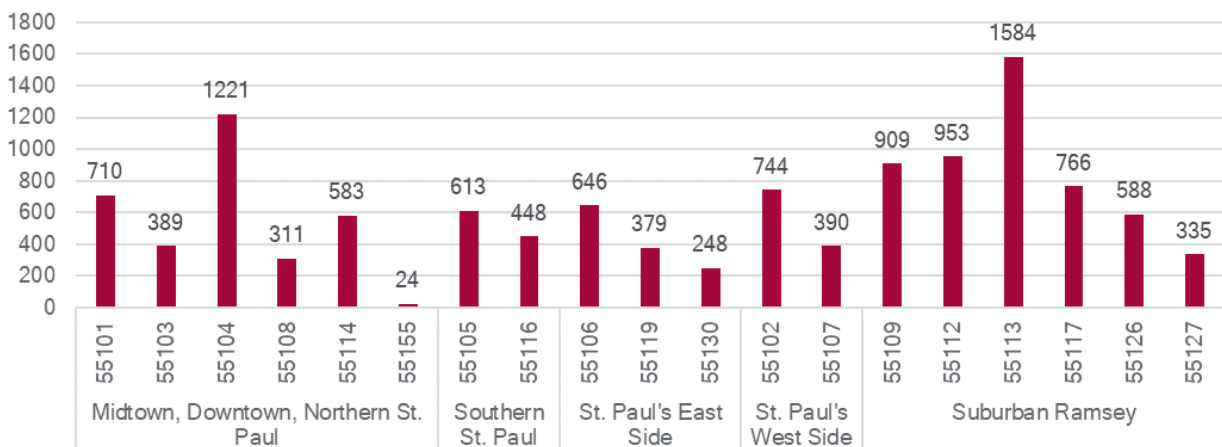


About 66% of for-profit businesses in the area are small businesses. The largest number of small businesses are located with 55104 and 55113. About 70% of businesses in 55113 are small businesses, and 65% of business in 55104 are small businesses.

### Businesses by Size in Ramsey County



### Number of Small Businesses in Ramsey County by Zip Code



# Workforce Impacts of COVID-19

## *Community Vulnerability*

Because COVID-19 is a new disease, more work is needed to better understand the risk factors for severe illness or complications. Potential risk factors that have been identified by the Center for Disease Control (CDC) to date include:

- Age
- Race/ethnicity
- Gender
- Some medical conditions
- Use of certain medications
- Poverty and crowding
- Certain occupations
- Pregnancy

Older adults and people with medical conditions are at increased risk for severe illness. People who may need extra precautions, as the prevalence of the virus is higher for these groups, include racial and ethnic minority groups, people living in rural communities, and people experiencing homelessness. Additional groups advised by the CDC to take additional precautions are those who may have more complex treatment needs if they were to fall seriously ill, such as people who are pregnant or breastfeeding, people with disabilities, and people with developmental or behavioral disorders.

Ramsey County is home to a diverse population of residents. Overall, Ramsey County faces a higher level of vulnerability based on age, rate of insurance, disability, poverty rates, and youth connectedness to school and work. However, there is a wide range in degree of vulnerability by subregion<sup>9</sup> across the county.

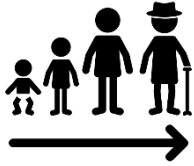
### Summary of Community Vulnerability by Ramsey County Subregion

	Age (65+)	Poverty	Disconnected Youth	Uninsured	Disability
Midtown, Downtown, Northern St. Paul	Green	Red	Red	Yellow	Yellow
Southern St. Paul	Yellow	Green	Yellow	Green	Green
St. Paul's East Side	Green	Red	Red	Red	Red
St. Paul's West Side	Yellow	Red	Yellow	Red	Red
Suburban Ramsey County	Red	Green	Green	Green	Green

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shaded red when the value is more than 1% below.

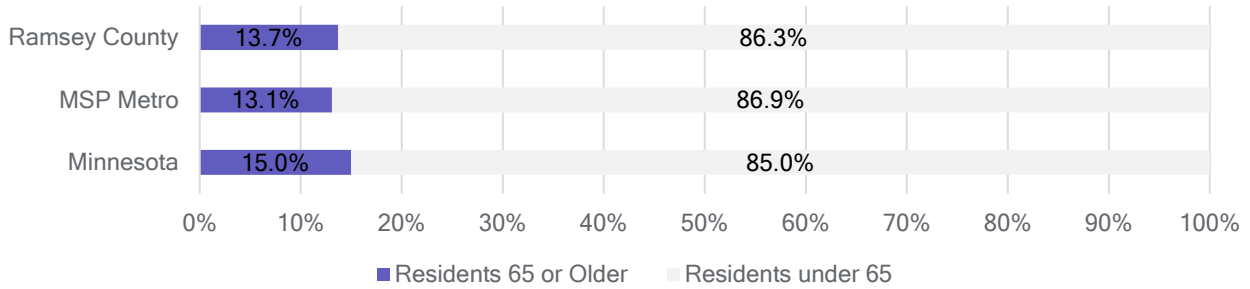
<sup>9</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

AGE



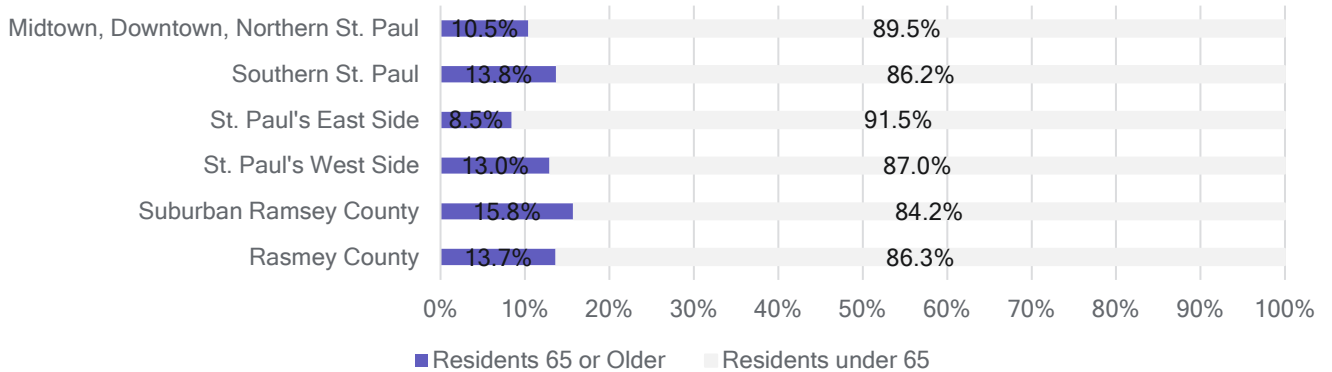
Ramsey County has a **HIGHER** share of residents 65 or older (13.7% of residents) than the MSP Metro.

Residents 65+



American Community Survey 2014-2018.

Residents 65+ by Ramsey County Subregion



	Percent of Residents 65+ in Subregions*	Number of Residents 65+
Midtown, Downtown, and Northern St. Paul	10.5%	8,947
Southern St. Paul	13.8%	7,044
St. Paul's East Side	8.5%	10,138
St. Paul's West Side	13.0%	4,366
Suburban Ramsey County	15.8%	57,081
<b>Ramsey County</b>	<b>13.7%</b>	<b>74,248</b>

American Community Survey 2014-2018.

\* Cells are shaded green when value is more than 0.1% higher than that of Ramsey County and are shaded red when the value is more than 0.1% below.

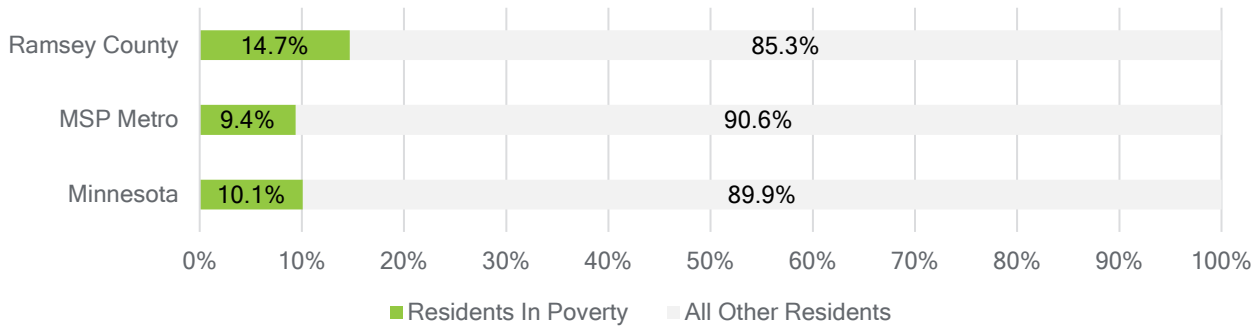
# POVERTY



Ramsey County has a **HIGHER** share of residents living in poverty (14.7%) than the MSP Metro.

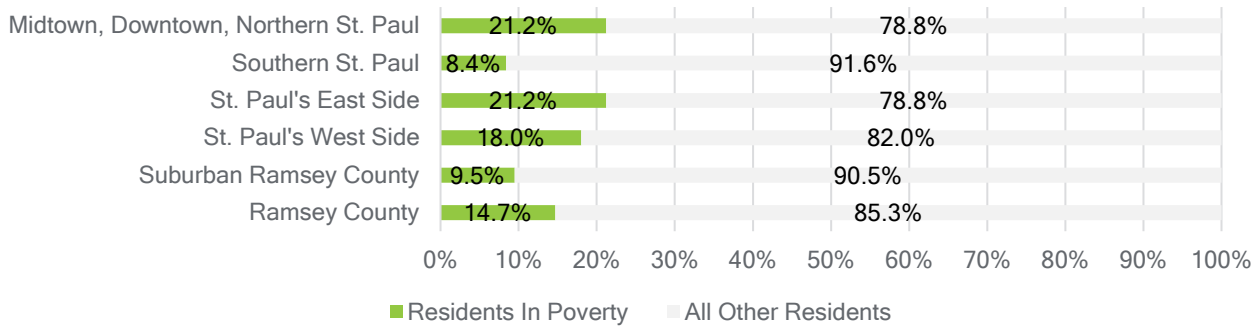
The per-capita income of residents of Ramsey County is \$34,049, which is about \$6,588 lower than the per-capita income of the MSP Metro residents overall (\$40,637). About one in seven (14.7%) Ramsey County residents lives in poverty, and about one in eight (12.8%) of households receive food stamps, Compared to 9.4% and 8.2% across MSP Metro, respectively.

Residents in Poverty



American Community Survey 2014-2018.

Residents in Poverty by Ramsey County Subregion



	Percent of Residents in Poverty in Subregion*	Number of Residents in Poverty	Percent of Households Receiving Food Stamps in Subregion	Number of Households Receiving Food Stamps	Per Capita Income
Midtown, Downtown, and Northern St. Paul	21.2%	17,388	14.7%	5,087	\$32,237
Southern St. Paul	8.4%	4,049	4.6%	1,006	\$50,584
St. Paul's East Side	21.2%	25,032	23.7%	9,146	\$22,110
St. Paul's West Side	18.0%	5,945	16.6%	2,416	\$33,012
Suburban Ramsey County	9.5%	33,611	8.7%	12,410	\$37,945
<b>Ramsey County</b>	<b>14.7%</b>	<b>77,330</b>	<b>14.7%</b>	<b>26,850</b>	<b>\$34,049</b>

American Community Survey 2014-2018.

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shared red when the value is more than 1% below.

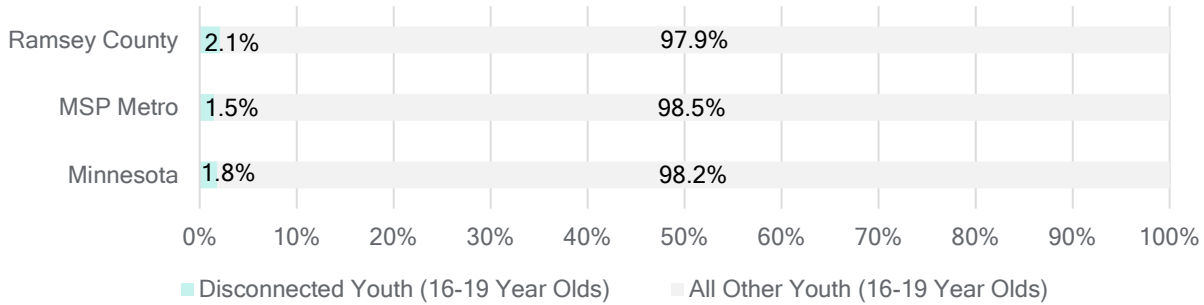
## DISCONNECTED YOUTH



Ramsey County has a **HIGHER** share of disconnected youth (2.1%) than the MSP Metro.

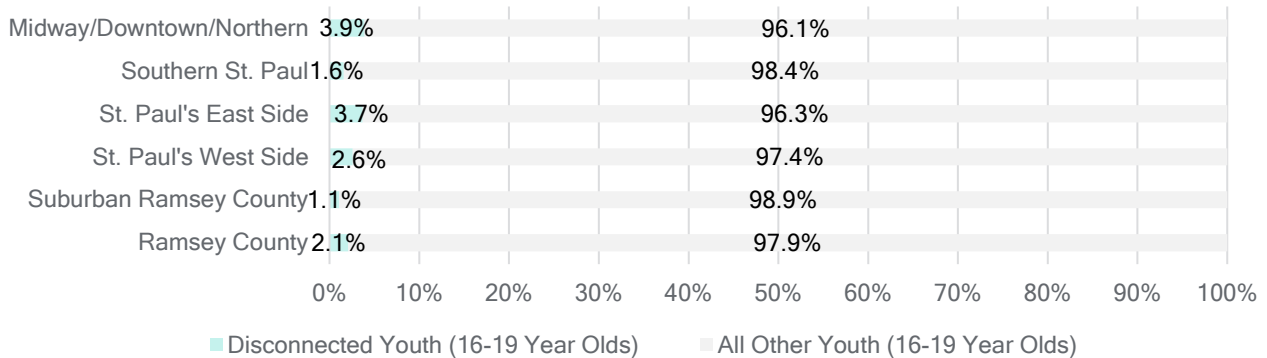
Ramsey County has about 597 disconnected youth, which is about 2.1% of the total population of people between the ages of 16 and 19. The largest share of disconnected youth in this population by zip code are in 55101 (30.4% or 45 youth), which corresponds with the Lowertown neighborhood. The zip code with the largest number of disconnected youths is 55104 (4.0% or 105 youth), which corresponds with the Summit-University neighborhood. These youth are not in school, not high school graduates, and are either unemployed or not in the labor force. Ramsey County's disconnected youth represent about 12% of all disconnected youth in the state (5,025 total statewide).

**Disconnected Youth**



American Community Survey 2014-2018.

**Disconnected Youth by Ramsey County Subregion**



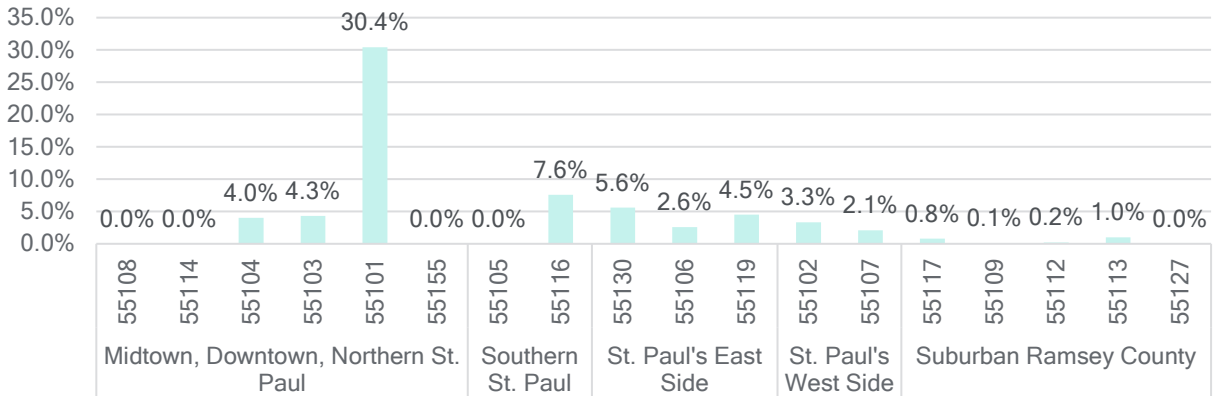
	Percent of Disconnected Youth in Subregion*	Number of Disconnected Youth in Subregion
Midtown, Downtown, and Northern St. Paul	3.9%	189
Southern St. Paul	1.6%	54
St. Paul's East Side	3.7%	235
St. Paul's West Side	2.6%	40
Suburban Ramsey County	1.1%	177
<b>Ramsey County</b>	<b>2.1%</b>	<b>597</b>

American Community Survey 2014-2018.

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shared red when the value is more than 1% below.



### % Disconnected Youth by Ramsey County Subregion and Zip Code



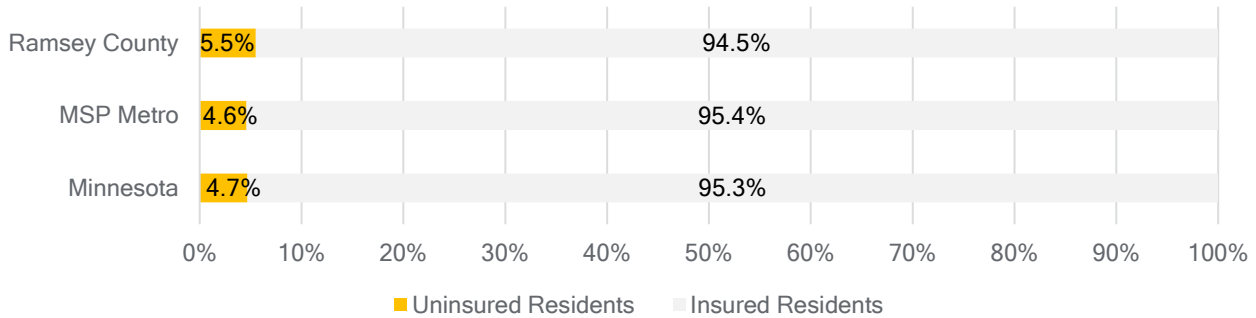
American Community Survey 2014-2018.

## UNINSURED



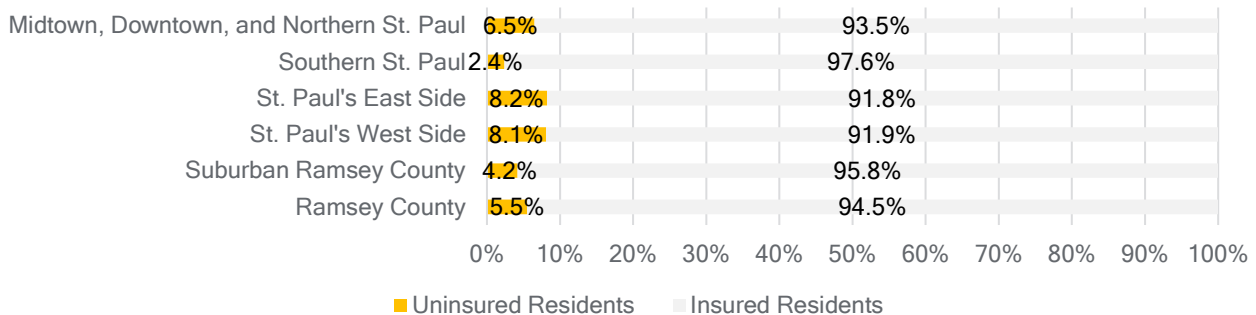
Ramsey County has a **HIGHER** share of residents without health insurance (5.5%) than the MSP Metro.

### Uninsured Residents



American Community Survey 2014-2018.

### Uninsured Residents by Ramsey County Subregion



### Uninsured Residents by Ramsey County Subregion

	Percent of Uninsured Residents in Subregion*	Number of Uninsured Residents in Subregion
Midtown, Downtown, and Northern St. Paul	6.5%	5,518
Southern St. Paul	2.4%	1,212
St. Paul's East Side	8.2%	9,713
St. Paul's West Side	8.1%	2,695
Suburban Ramsey County	4.2%	18,737
<b>Ramsey County</b>	<b>5.5%</b>	<b>29,542</b>

American Community Survey 2014-2018.

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shared red when the value is more than 1% below.

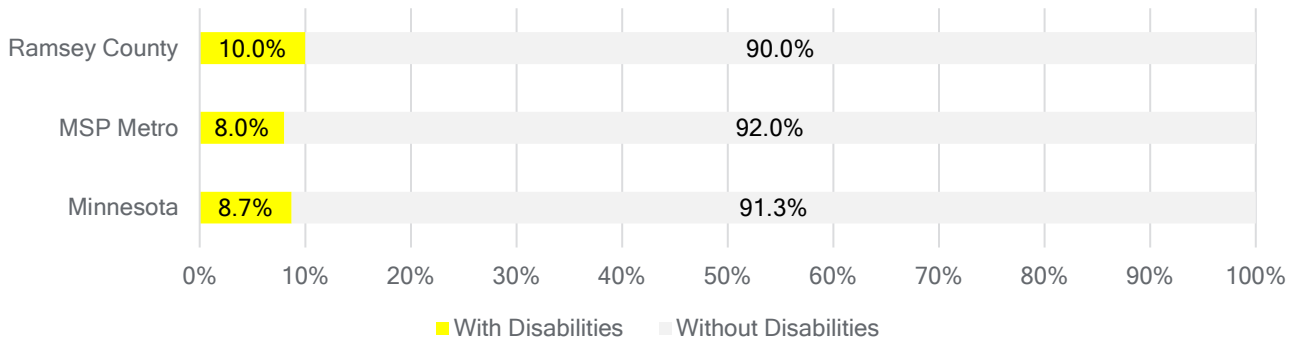
## DISABILITY



Ramsey County has a **HIGHER** share of residents ages 25-64 with disabilities (10.0%) than the MSP Metro.

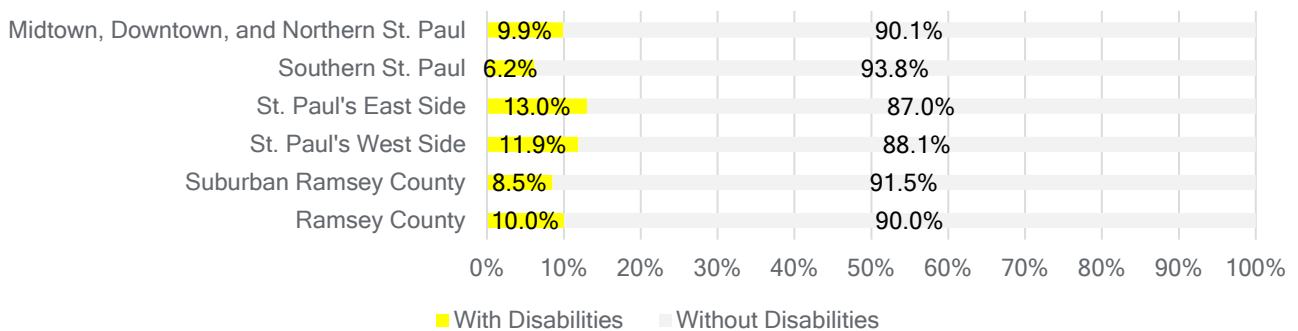
Ramsey County has a larger share of prime working age adults with disabilities, with about 33,948 adults (10.0%) having some form of disability. Of these, 47.0% participate in the labor force (15,945 total working or seeking work), compared to 53.4% in the MSP Metro and 52.5% statewide.

### Residents with Disabilities, Ages 18-64



American Community Survey 2014-2018.

### Residents with Disabilities by Ramsey County Subregion, Ages 18-64



### Residents with Disabilities by Ramsey County Subregion, Ages 18-64

	Percent of Residents with Disabilities in Subregion*	Number of Residents with Disabilities in Subregion
Midtown, Downtown, and Northern St. Paul	9.9%	5,851
Southern St. Paul	6.2%	2,110
St. Paul's East Side	13.0%	9,466
St. Paul's West Side	11.9%	2,599
Suburban Ramsey County	8.5%	18,737
<b>Ramsey County</b>	<b>10.0%</b>	<b>33,948</b>

American Community Survey 2014-2018.

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shaded red when the value is more than 1% below.

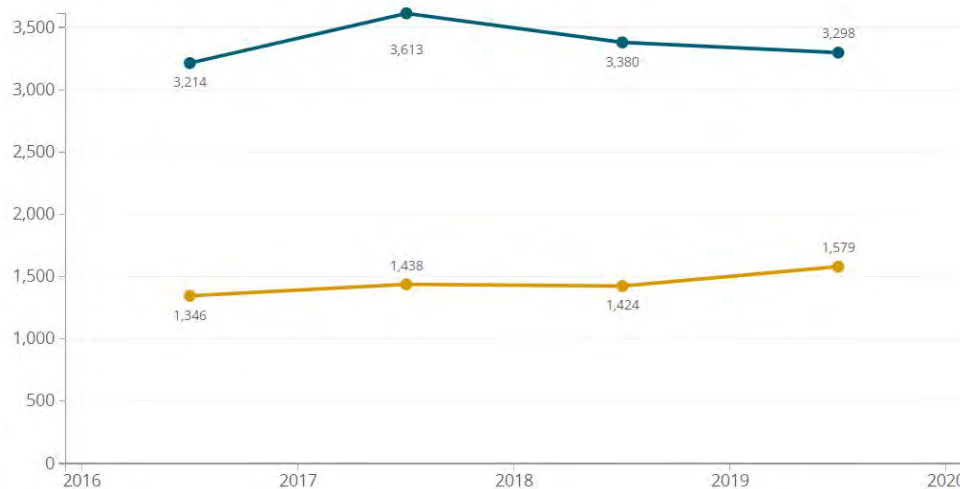
## HOMELESSNESS



About 1,579 Ramsey County residents (0.3%) experienced homelessness in January 2019, and an estimated 3,298 (0.6% of residents) accessed emergency shelter services in 2019.

According to the Ramsey County Homelessness Management Information System (HMIS), 3,298 people accessed emergency shelter services in Ramsey County in 2019—or about one in every 200 people residing in Ramsey County. On a single night in January 2019, there were 1,579 Point-in-Time (PIT) individuals experiencing homelessness, including those in emergency shelters, transitional housing, unsheltered, or in other outdoor places. The majority of people counted in the PIT estimates were utilizing emergency shelters. Black and American Indian people are much more likely to experience homelessness than other groups, with Black individuals being eight times more likely and American Indian people 13 times more likely to experience homelessness than White people in Ramsey County. According to PIT estimates, about 27% of Ramsey County residents experiencing homelessness in 2019 were children.

### Ramsey County Residents Experiencing Homelessness



Ramsey County, 2019. <https://opendata.ramseycounty.us/Health-and-Environment/Total-Homeless/h9kg-nnh5>

## Industry Vulnerability

The Economic Vulnerability Index is a measurement developed by Chmura Economics to estimate the negative impact that the coronavirus crisis can have on employment based upon a community's mix of industries.<sup>10</sup> For example, accommodation and food services are projected to lose more jobs as a result of the coronavirus (over half of jobs lost, on average across the broad industry category) compared to utilities and education services (with mild or no job contractions in most cases). Overall, this index measure the possible impact in a community dependent upon the local industry mix—it does not take into account variation due to a region's rate of viral infection, health services, policies, or other considerations.

According to Chmura Economics, “the average Vulnerability Index score is 100, representing the average job loss expected in the United States. Higher scores indicate the degree to which job losses may be greater—an index of 200, for example, means the rate of job loss can be twice as large as the national average. Conversely, an index of 50 would mean a possible job loss of half the national average.” In the MSP Metro, Scott County may have as much as 20% higher job losses, while Ramsey County may have about 18% lower job losses than the national average.

### Economic Vulnerability of MSP Metro Counties by Industry Mix, July 2020

MSP Metro Counties	Vulnerability Index	National Rank
Scott County	119.58 ↘	252 ↘
Washington County	117.73 ↗	276 ↗
Dakota County	104.03 ↗	591 ↗
Anoka County	103.07 ↗	635 ↗
Carver County	95.46 ↘	1,019 ↗
Hennepin County	93.01 ↗	1,176 ↗
Ramsey County	81.76 ↘	1,795 ↗

Economic Vulnerability Index model from Chmura Economics & Analytics

Note: Trendline indicates whether the county improved or lost rank from the first forecasts put forth in March. Downward arrow indicates improved ranking. Scott County remains in the top 8% for expected impact out of 3,141 counties nationwide.

An estimated 12% of local occupations by industry on Ramsey County are vulnerable to the immediate-term impacts of COVID-19.

<sup>10</sup> Chmura Economics, April 2020. <http://www.chmuraecon.com/interactive/covid-19-economic-vulnerability-index/>

### Short-Term Industry Vulnerability to COVID-19 Pandemic, Ramsey County

Industry	Anticipated Short-Term Job Loss from COVID-19	Total Local Employment	Total Vulnerable Jobs
Accommodation and Food Services	60%	24,345	14,607
Arts, Entertainment, and Recreation	60%	8,219	4,931
Other Services (except Public Administration)	15%	16,662	2,499
Transportation and Warehousing	10%	8,465	847
Retail Trade	20%	26,540	5,308
Wholesale Trade	20%	12,170	2,434
Information	15%	6,676	1,001
Manufacturing	7%	28,328	1,983
Construction	7%	13,332	933
Mining, Quarrying, and Oil and Gas Extraction	5%	31	2
Real Estate and Rental and Leasing	5%	5,211	261
Health Care and Social Assistance	5%	68,550	3,427
Finance and Insurance	5%	18,097	905
Educational Services	5%	31,726	1,586
Administrative and Support and Waste Management and Remediation Services	2%	19,278	386
Agriculture, Forestry, Fishing and Hunting	2%	124	2
Public Administration	1%	27,678	277
Professional, Scientific, and Technical Services	1%	16,860	169
Management of Companies and Enterprises	1%	17,932	179
Utilities	1%	1,209	12
<b>Total Jobs</b>	<b>12%</b>	<b>351,432</b>	<b>41,749</b>

Economic Vulnerability Index model from Chmura Economics & Analytics

### Short-Term Industry Vulnerability to COVID-19 Pandemic, Ramsey County Subregions

Industry	Anticipated Short-Term Job Loss from COVID-19*	Total Local Employment	Total Vulnerable Jobs
Midtown, Downtown, and Northern St. Paul	9%	97,595	8,332
Southern St. Paul	17%	22,877	3,980
St. Paul's East Side	10%	32,787	3,353
St. Paul's West Side	15%	47,024	6,844
Suburban Ramsey County	13%	150,746	19,101
<b>Ramsey County</b>	<b>12%</b>	<b>351,432</b>	<b>41,749</b>

Economic Vulnerability Index model from Chmura Economics & Analytics

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shaded red when the value is more than 1% below.

## *Occupational Vulnerability*

Research by Dingel and Neiman<sup>11</sup> and by Leibovici, Santacreu, and Famiglietti<sup>12</sup> highlight occupations that cannot be done from home and are consistently high contact-intensity. Following their models, a combination of occupational employment estimates as of the fourth quarter of 2020 in Ramsey County, coupled with an index of occupational contact-intensity from O\*NET, gives us a picture of local occupations in high vulnerability due to their level of close proximity to patients or the general public. O\*NET classifies positions based on a rating system of job requirements in close physical proximity to other people. The possible answers and corresponding scores are:

- I don't work near other people (beyond 100 ft.): 0
- I work with others but not closely (e.g. private office): 25
- Slightly close (e.g. shared office): 50
- Moderately close (at arm's length): 75
- Very close (near touching): 100

All occupations are then classified into low-medium and high contact-intensity categories based on scores of 0-50 (low), 50-75 (medium), and 75+ (high). Fifteen out of 107 occupations at the four-digit Standard Occupation Level (SOC) are considered high contact-intensity. The occupation cluster of highest contact intensity are Barbers, Hairstylists, and Cosmetologists, with a physical proximity index of 92.17. Other occupations that are contact-intensive include teachers, health care workers, and a multitude of roles in the service industry. Minnesota has around 21% of workers in high contact-intensity roles, on the lower end of states ranging from 20% to 25% overall.

Ramsey County has a larger share of high contact-intensity positions than Minnesota overall, with about 26% of individuals employed in the first quarter of 2020 being employed in high contact-intensity positions. The majority of these were in direct health care support roles, health diagnosing and treating roles, food and beverage service roles, or teaching roles. The healthcare positions are expecting the greatest volume in annual growth over the next five years. In all, about 30% of new positions opening up due to job exits, job changes, or job growth under normal economic conditions would be for high contact-intensity positions in Ramsey County. Across Ramsey County, these high contact-intensity roles pay an average of \$51,700 per year.

<sup>11</sup> Dingel, C. L., and B. Neiman (2020): "How Many Jobs Can be Done at Home?" *NBER Working Paper No. 26948*.

<sup>12</sup> Leibovici, F., A. M. Santacreu, and M. Famiglietti (2020): "Social Distancing and Contact-Intensive Occupations," FRB St. Louis Technical Report, URL: <https://www.stlouisfed.org/on-the-economy/2020/march/social-distancing-contact-intensive-occupations#:~:text=Food%20and%20beverage%20serving%20workers%20are%20at%20the%20bottom%20of,K%20to%2012th%20grade%20teachers.>

## Summary Statistics of High Contact-Intensity Positions in Ramsey County, 2020Q1

SOC	Occupation	Proximity Index	Annual Supply Gap	Current Empl. 2020Q1	Annual Growth Demand	Annual Sep Demand	Total Annual Demand	Projected Empl 2030	Accum. Supply 2025	Accum. Demand 2025	Avg Wages
31-2000	Occupational Therapy and Physical Therapist Assistants and Aides	90.5	(3)	348	8	62	70	425	146	160	\$54,900
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	90.3	(4)	20,552	507	4,402	4,910	25,626	9,920	9,940	\$30,800
35-1000	Supervisors of Food Preparation and Serving Workers	88.0	10	2,172	9	427	436	2,266	1,058	1,006	\$42,900
29-1000	Healthcare Diagnosing or Treating Practitioners	86.2	(179)	14,894	153	1,159	1,312	16,421	2,483	3,377	\$109,200
39-1000	Supervisors of Personal Care and Service Workers	84.5	(5)	741	6	106	113	805	245	271	\$45,200
29-2000	Health Technologists and Technicians	82.7	(65)	7,264	52	746	798	7,787	1,718	2,043	\$53,200
31-9000	Other Healthcare Support Occupations	80.2	(19)	3,320	44	558	602	3,760	1,291	1,384	\$45,700
25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	79.5	(40)	8,300	62	945	1,007	8,924	2,349	2,552	\$65,600
25-3000	Other Teachers and Instructors	79.0	(6)	3,112	22	552	575	3,336	1,211	1,239	\$44,700
53-3000	Motor Vehicle Operators	75.6	8	8,373	3	1,407	1,410	8,408	3,236	3,198	\$45,000
39-9000	Other Personal Care and Service Workers	75.5	42	5,184	25	1,175	1,200	5,432	2,800	2,591	\$34,000
35-3000	Food and Beverage Serving Workers	75.2	245	15,781	87	4,162	4,249	16,650	9,968	8,745	\$27,900
<b>All High Contact-Intensity Occupations</b>				<b>90,041</b>	<b>978</b>	<b>15,701</b>	<b>16,682</b>	<b>99,840</b>	<b>36,425</b>	<b>36,506</b>	<b>\$51,700</b>
<b>Total - All Occupations</b>				<b>351,392</b>	<b>615</b>	<b>54,499</b>	<b>55,108</b>	<b>357,535</b>	<b>133,379</b>	<b>131,164</b>	<b>\$59,800</b>
<b>Share High Contact-Intensity</b>				<b>26%</b>	<b>MOD</b>	<b>29%</b>	<b>30%</b>	<b>28%</b>	<b>27%</b>	<b>28%</b>	

The ongoing pandemic affects each of these occupations, though in different ways: for instance, with hospitality and food service roles being largely eliminated during the first three months of the pandemic, while essential occupations remained in high demand and experienced dramatic shortages of workers. Health Diagnosing and Treating Practitioners is one occupation area that has had extremely varied experiences, as some medical procedures not deemed essential were placed on hold for a period of time and sending many into furlough. Long-term, Health Diagnosing and Treating Practitioners are expected to be in shortage in Ramsey County and experiencing higher than average growth demand. Average wages for these roles are \$109,200 in the county and positions typically require a college degree. See more on detailed occupation impacts in the immediate-term through local unemployment application trends and the mid-term based on occupation supply-demand analysis.



Subregions<sup>13</sup> across Ramsey County have different concentrations of high contact-intensity roles, based on the varying geographies of industry concentrations across the county. Southern St. Paul has the highest share of high contact-intensity positions of the Ramsey County subregions. Suburban Ramsey County has the lowest share of high contact-intensity positions of the Ramsey County subregions.

### Summary Statistics of High Contact-Intensity Positions in Ramsey County Subregions, 2020Q1

Industry	Share High Contact-Intensity(HCI)	Total - All Local Occupations	All Local High Contact-Intensity Occupations	Total Annual Demand - Local High Contact Intensity Occupations	Ave Wages Local High Contact Intensity Occupations
Midtown, Downtown, and Northern St. Paul	27%	97,823	26,023	32%	\$51,400
Southern St. Paul	33%	22,879	7,508	38%	\$46,900
St. Paul's East Side	31%	32,787	10,016	37%	\$48,600
St. Paul's West Side	28%	6,947	1,990	30%	\$60,900
Suburban Ramsey County	22%	150,746	33,425	26%	\$50,500
<b>Ramsey County</b>	<b>26%</b>	<b>351,392</b>	<b>90,041</b>	<b>30%</b>	<b>\$51,700</b>

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shaded red when the value is more than 1% below.

<sup>13</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

## Immediate-Term Occupational Impacts

Non-essential occupations that require a high-degree of close physical interaction have been hit hardest in the early weeks of the pandemic, as consumers reduced demand in pursuit of social distancing and regulation at state and local levels shut down business functions in high-contact roles. According to Leibovici and collaborating authors, “these occupations are likely to be more vulnerable to the shock, leading either to layoffs of nonessential workers or to an increase in the risk of contagion among those workers that have to stay in the workplace to perform essential activities. Carrying out some of these occupations remotely, when plausible, is likely to allow them to better absorb the negative shock.”<sup>14</sup>

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, representing over 15% of all applications. Both of these occupation groups are also found in moderate volumes in Ramsey County, representing about 8.8% of all local jobs together.

### Unemployment Insurance Applicants by Top 20 Occupations Requesting Insurance in Ramsey County from March 16, 2020 - July 25, 2020, and 2020Q1 Employment

Occupation Group	Unempl. Insurance Applicants in Ramsey County	% of Total Applicants in Ramsey County	2020Q1 Employment in Ramsey County	% of Total in Ramsey County
Food and Beverage Serving Workers	6,235	7.90%	15,781	4.5%
Retail Sales Workers	5,875	7.50%	15,053	4.3%
Cooks and Food Preparation Workers	3,589	4.60%	5,894	1.7%
Motor Vehicle Operators	3,496	4.40%	8,373	2.4%
Construction Trades Workers	3,240	4.10%	8,639	2.5%
Other Healthcare Support Occupations	3,196	4.10%	3,320	0.9%
Information and Record Clerks	2,961	3.80%	14,288	4.1%
Other Food Preparation and Serving Related Workers	2,704	3.40%	2,380	0.7%
Other Production Occupations	2,624	3.30%	5,351	1.5%
Health Diagnosing and Treating Practitioners	2,512	3.20%	14,894	4.2%
Personal Appearance Workers	1,959	2.50%	1,659	0.5%
Nursing, Psychiatric, and Home Health Aides	1,844	2.30%	20,552	5.8%
Other Office and Administrative Support Workers	1,694	2.20%	9,119	2.6%
Building Cleaning and Pest Control Workers	1,588	2.00%	8,327	2.4%
Health Technologists and Technicians	1,555	2.00%	7,264	2.1%
Other Education, Training, and Library Occupations	1,547	2.00%	4,808	1.4%
Other Personal Care and Service Workers	1,537	2.00%	5,184	1.5%
Other Management Occupations	1,483	1.90%	8,435	2.4%
Preschool, Primary, Secondary, and Special Education	1,207	1.50%	8,300	2.4%
Computer Occupations	1,187	1.50%	11,651	3.3%
<b>Total - Top 20 Occupations</b>	<b>52,033</b>		<b>179,272</b>	<b>51.0%</b>
<b>Total - All Occupations</b>	<b>78,663</b>		<b>351,392</b>	

\*Fields marked in orange are in the top ten percent of occupations by volume.

<sup>14</sup> Ibid.

Subregions<sup>15</sup> across Ramsey County have different concentrations of occupations that are comparable to those of unemployment insurance applicants in the top 20 occupations requesting insurance in Ramsey County, based on the varying geographies of industry concentrations across the county. Southern St. Paul has the highest share of positions aligned to one of the top 20 occupations for applicants requesting unemployment insurance in Ramsey County. Midtown, Downtown, and Northern St. Paul has the lowest share of these positions of the Ramsey County subregions.

### Summary of Unemployment Insurance Applicants by Top 20 Occupations Requesting Insurance in Ramsey County Subregions from March 16, 2020 - July 25, 2020, and 2020Q1 Employment

	Total Employment 2020Q1	Share of Total Ramsey County Employment 2020Q1	All Top 20 Occupations related to Ramsey County UI Applicants	Share of Top 20 Occupations related to Ramsey County UI Applicants
Midtown, Downtown, and Northern St. Paul	97,825	27.8%	48,444	49.5%
Southern St. Paul	22,879	6.5%	13,313	58.2%
St. Paul's East Side	32,787	9.3%	17,545	53.5%
St. Paul's West Side	6,947	2.0%	24,347	51.6%
Suburban Ramsey County	150,746	42.9%	75,723	50.2%
<b>Ramsey County</b>	<b>351,392</b>	<b>100%</b>	<b>179,272</b>	<b>51.0%</b>

\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shaded red when the value is more than 1% below.

By demographic, Ramsey County Residents between the ages of 20 and 44 and 65 and older 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. In Ramsey County, there is a greater share of people under the age of 24 in high contact-intensity roles than the same age group in overall employment across all occupations. Individuals in these groups may be more likely to be exposed to the virus in their place of work or experience layoffs associated with being in proximity to the public.

Occupations requiring a high school diploma or only some college education were disproportionately impacted by COVID-19 across Ramsey County. Similarly, Ramsey County has a higher concentration of local workers with only some college education or a two-year degree in high contact-intensity occupations. By sex, females have applied for unemployment insurance at higher rates in Ramsey County than males. Females also represent a larger share of high contact-intensity occupation roles. Asian, Black/African American, and American Indian or Alaska Native workers in Ramsey County have also applied for unemployment insurance at higher rates than would be expected by their local employment rate. In Ramsey County, there are higher numbers of Asian, Black/African American, and workers who identify with more than one race in high contact-intensity occupations than expected by their local employment rate.

<sup>15</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

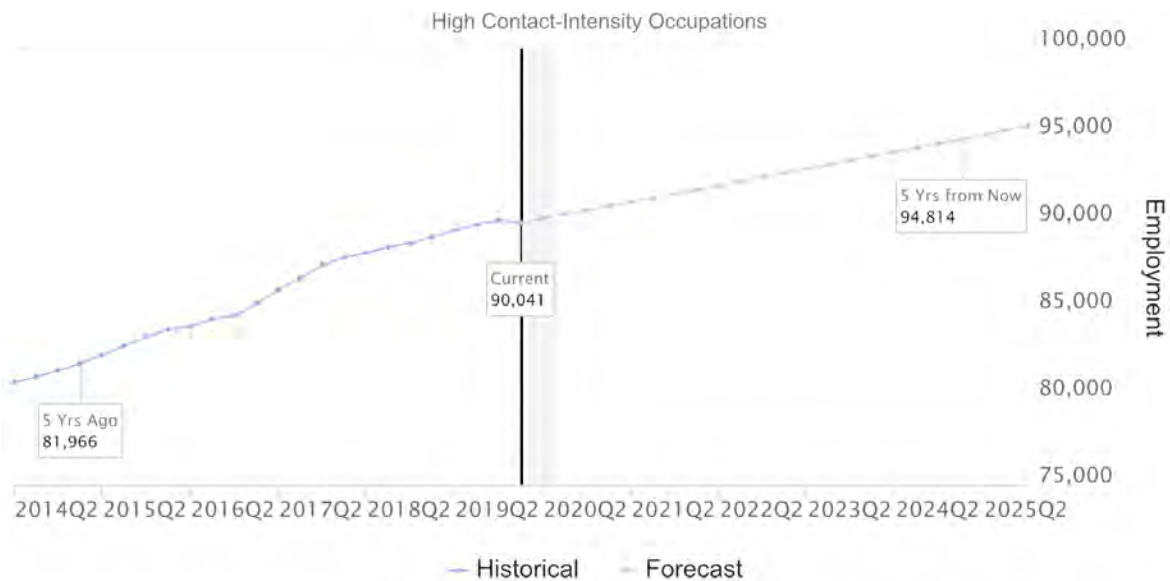
## Unemployment Insurance Applicant Demographics from March 16 - July 25, 2020 in Ramsey County and Ramsey County Employment in High Contact-Intensity Occupations

	Ramsey County		Difference (> 0 Indicates Higher Than Expected UI App by Group)	Ramsey County	
	Ramsey County Workers Filing for Unemployment between March 15 and July 25, 2020	Percent of Total in Ramsey County Filing for Unemployment		Share of 2020Q1 Workers in Ramsey County	Employment in High Contact-Intensity Occupations in Ramsey County **
<b>Age Group</b>					
65+	4,602	5.10%	0.4%	4.7%	4.6%
55-64	11,603	12.90%	-3.1%	16.0%	14.9%
45-54	13,117	14.60%	-3.9%	18.5%	16.9%
35-44	18,656	20.80%	1.7%	19.1%	18.0%
25-34	26,620	29.60%	3.1%	26.5%	26.4%
20-24	12,682	14.10%	3.2%	10.9%	12.8%
16-19	2,639	2.90%	-1.4%	4.3%	6.4%
<b>Education Level</b>					
Advanced	6,224	6.9%	-9.7%	16.6%	17.7%
4-year degree	17,608	19.6%	-9.8%	29.4%	25.9%
2-year degree	7,513	8.4%	-1.5%	9.9%	12.1%
Some college	23,239	25.8%	8.9%	16.9%	18.0%
HS	28,689	31.9%	12.2%	19.7%	19.7%
Less than HS	6,646	7.4%	0.0%	7.4%	6.6%
<b>Gender</b>					
Female	46,363	51.60%	1.8%	49.8%	68.5%
Male	43,555	48.40%	-1.8%	50.2%	31.5%
<b>Race and Ethnicity</b>					
Choose not to answer	N/A*	N/A			
More than one race	N/A	N/A		2.9%	3.0%
Native Hawaiian or Pacific Islander	N/A	N/A		0.0%	0.0%
American Indian Alaska Native	595	0.70%	0.1%	0.6%	0.5%
Hispanic	45,825	6.70%	-0.4%	7.1%	5.8%
Asian	13,295	14.80%	2.1%	12.7%	13.1%
Black	16,436	18.30%	7.7%	10.6%	13.6%
Non-Hispanic White	45,825	51%	-22.2%	73.2%	69.9%
<b>Total UI Applications</b>	<b>89,919</b>			<b>295,744</b>	<b>72,323</b>

Very early on in the pandemic, many economists optimistically hoped that the impacts of COVID-19 would be sharp and short, with an eventual return to the forecasted trends anticipated prior to the impact of the virus. Across Ramsey County, it is anticipated that the 90,041 people employed locally in high contact-intensity roles during the fourth quarter of 2020 will see a dramatic drop to just 81,982 by the first quarter of 2021, and then gradually rise through the third quarter of 2022 to return to a similar annual growth rate for these positions that was anticipated before to the pandemic.

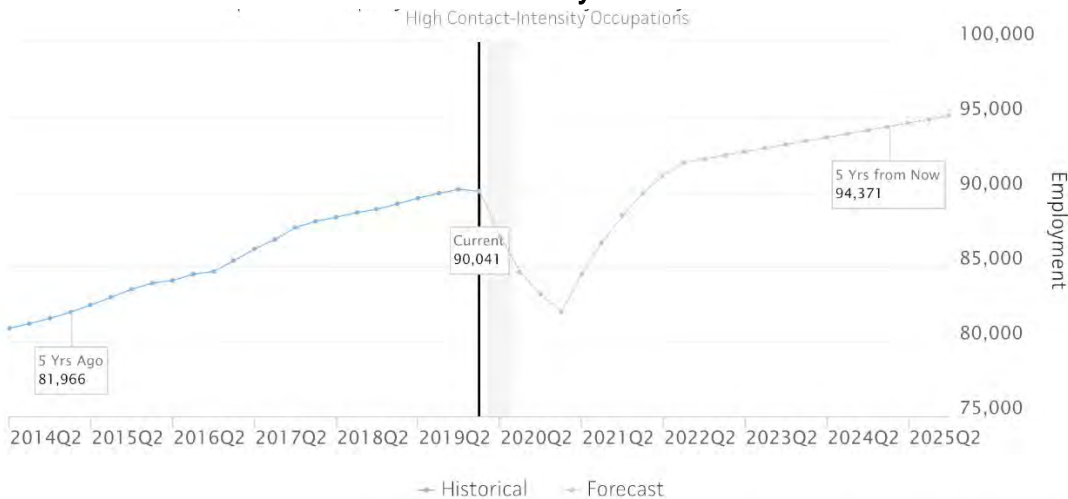
Employment was forecast to grow across Ramsey County by 0.2% annually over the next five years but will likely only grow by about 0.1% due to the impacts of COVID-19. Specific statistics to local occupational impacts of COVID-19 are not possible to compute at zip code levels.

**Baseline 2020Q1 High Contact-Intensity Occupation Employment 5-Year Forecast in Ramsey County**



Source: JobsEQ®, Data as of 2020Q1, The shaded areas of the graph represent national recessions.

**COVID-19-Impacted High Contact-Intensity Occupation Employment 5-Year Forecast in Ramsey County**

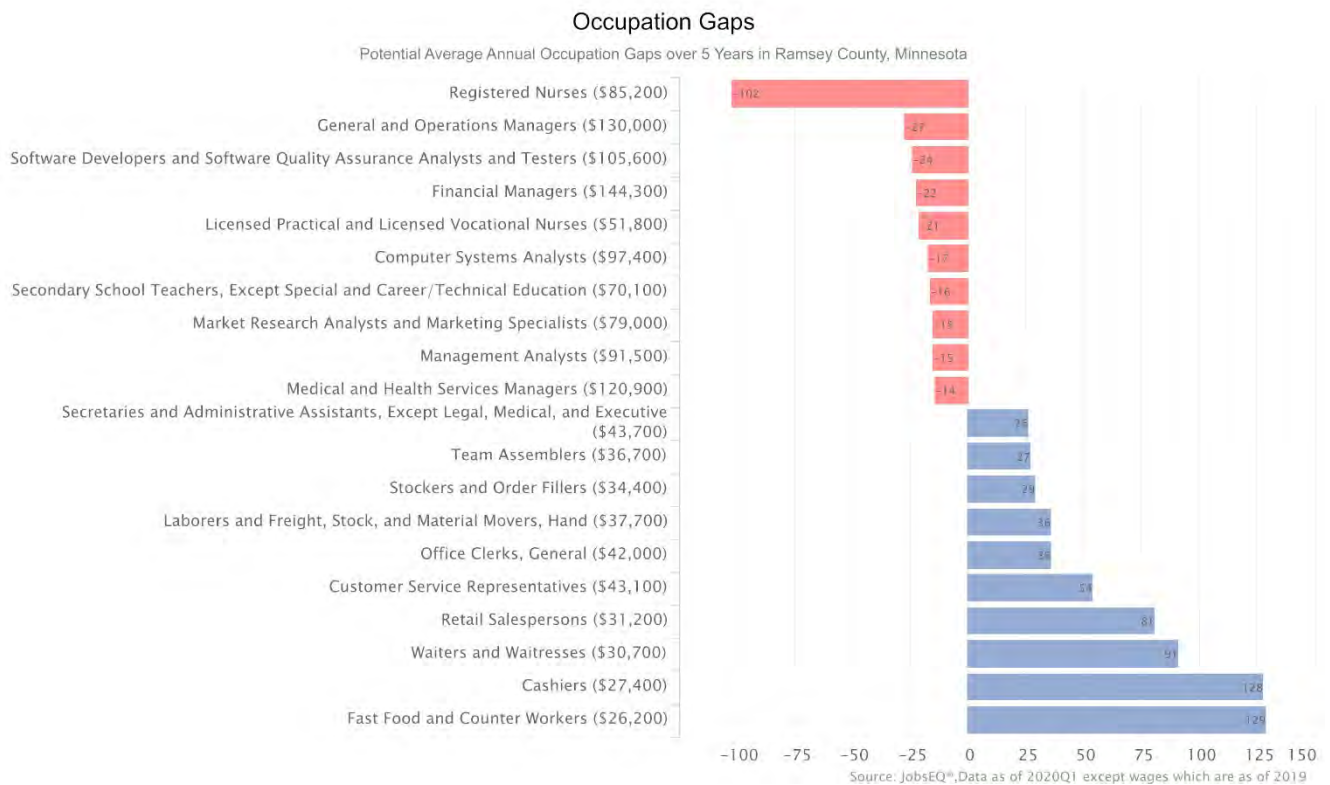


Source: JobsEQ®, Data as of 2020Q1, The shaded areas of the graph represent national recessions.

## Mid-Term Occupational Impacts

Estimations of the mid-term and long-term recovery of critical local occupations are based on our most reasonable hypothesis given current conditions. In Ramsey County, an analysis of local labor market occupational gaps as of the first quarter of 2020 showed that there was a shortage of local Nurses, Managers, Software Developers, Computer Systems Analysts, Secondary Teachers, and Marketers. Based on the forecasted growing demand for health, education, tech, and remote work-friendly management 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 \$70,000 or over per year, and require an Associate's Degree or higher.

Conversely, the ten positions forecast to have the highest surplus of talent as of the first quarter of 2020 require less than a high school diploma on average and pay under \$43,700 per year. All ten of these positions typically cannot be done remotely, and two out of ten of these positions are considered high contact-intensity. 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 on a daily basis.



## Shifting Opportunities

An analysis of current opportunities in Ramsey County reveal that approximately 56% of all jobs offered in the community are non-remote, and just 14% of positions can be made fully remote. The remaining positions (30%) may be able to function as partially-remote but will still require in-person activities. Southern St. Paul has the smallest share of positions can be made fully remote (9%) and the second largest share of non-remote positions (59%) among the Ramsey County subregions.<sup>16</sup>

### Remote, Partial, and Non-Remote Jobs by Place of Employment, Ramsey County, MSP Metro, and Minnesota, 2020Q1

	Ramsey County	MSP Metro	Minnesota
Remote	49,293	276,788	385,474
Partially-Remote	106,182	508,558	814,530
Non-Remote	195,957	1,089,096	1,901,918
<b>All Occupations</b>	<b>351,432</b>	<b>1,874,442</b>	<b>3,101,921</b>

	Ramsey County	MSP Metro	Minnesota
Remote	14%	15%	12%
Partially-Remote	30%	27%	26%
Non-Remote	56%	58%	61%
<b>All Occupations</b>	<b>351,432</b>	<b>1,874,442</b>	<b>3,101,921</b>

### Remote, Partial, and Non-Remote Jobs by Place of Employment, Ramsey County Subregions, 2020Q1

	Midway, Downtown, Northern St. Paul	Southern St. Paul	St. Paul's East Side	St. Paul's West Side	Suburban Ramsey County	Ramsey County
Remote	14,015	2,017	4,786	7,590	20,917	49,293
Partially-Remote	34,194	7,396	11,522	13,790	39,356	106,182
Non-Remote	49,386	13,463	16,479	25,800	90,474	195,957
<b>All Occupations</b>	<b>97,595</b>	<b>22,877</b>	<b>32,787</b>	<b>47,180</b>	<b>150,746</b>	<b>351,432</b>

	Midway, Downtown, Northern St. Paul	Southern St. Paul	St. Paul's East Side	St. Paul's West Side	Suburban Ramsey County	Ramsey County
Remote	14%	9%	15%	16%	14%	14%
Partially-Remote	35%	32%	35%	29%	26%	30%
Non-Remote	51%	59%	50%	55%	60%	56%
<b>All Occupations</b>	<b>97,595</b>	<b>22,877</b>	<b>32,787</b>	<b>47,180</b>	<b>150,746</b>	<b>351,432</b>

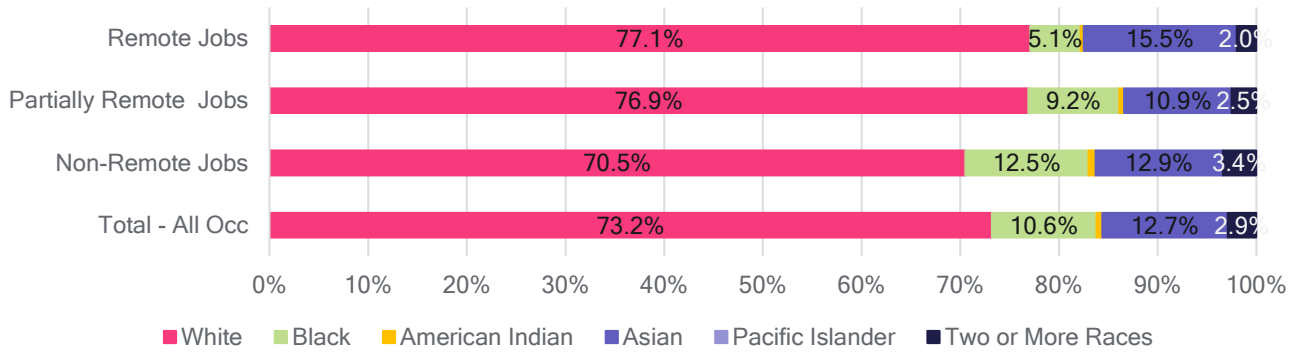
\* Cells are shaded green when value is more than 1% higher than that of Ramsey County and are shared red when the value is more than 1% below.

<sup>16</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

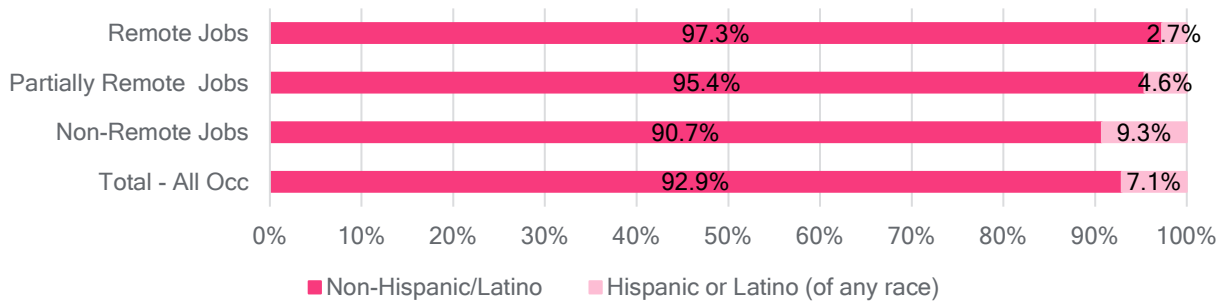


Employment by race across Ramsey County shows a disproportionate share of Asian and White workers living in Ramsey who are employed in remote work roles. In contrast, all other races and ethnic groups have a smaller share of local workers in these roles. Similarly, an evaluation of employment by ethnicity shows an underrepresentation of the Hispanic/Latinx workers in remote jobs and an over-representation in non-remote jobs. Regarding gender, males are both overrepresented in remote occupations and non-remote occupations. Women are more likely to hold partially-remote roles than men (women in Ramsey County hold 59.8% of partially-remote jobs).

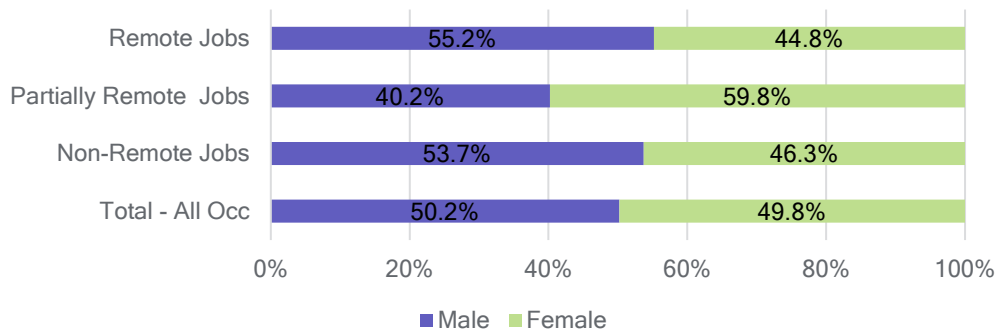
**Race of Remote, Partially-Remote and Non-Remote Work Talent by Place of Residence in Ramsey County, 2020Q1**



**Ethnicity of Remote, Partially-Remote and Non-Remote Work Talent by Place of Residence in Ramsey County, 2020Q1**



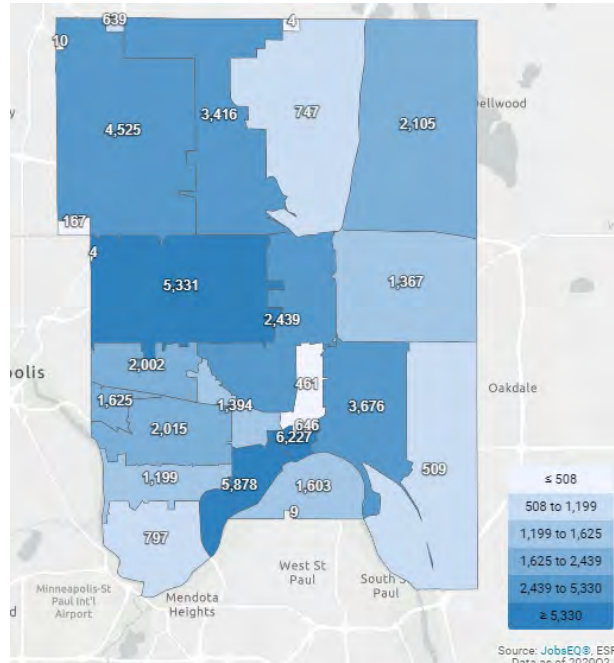
**Gender of Remote, Partially-Remote and Non-Remote Work Talent by Place of Residence in Ramsey County, 2020Q1**



## Remote Work

Across the 351,432 positions employing people in Ramsey, 14% are either remote full-time or able to be made fully remote without dramatic changes to the occupational role. Across the five subregions<sup>17</sup> in Ramsey, St. Paul's West Side has the greatest share of remote work positions out of the total number of positions employing workers in that subregion (16%). The zip code with the highest share of remote work positions out of the total number of positions employing workers locally within Ramsey County is 55101, corresponding to the Lowertown neighborhood in St. Paul, with 21% remote workers.

**Remote Work by Place of Work and Zip Code in Ramsey County, 2020Q1**



Analysis of employment by race, ethnicity, and gender reveal that a disproportionate share of Asian and White workers living in Ramsey who are employed in remote work roles, whereas all other race and ethnic groups have a smaller share of local workers in these roles. Among the top ten remote work positions by volume of residents employed, seven have 13.5% or more being Asian workers, compared to 12.7% across all types of occupations. Similarly, seven of the top ten remote work positions by volume of residents employed, have 75.5% or more White workers compared to 73.2% across all types of occupations. These top ten positions also have a disproportionately high volume of non-Hispanic workers. Bookkeeping, Accounting and Auditing Clerks, Personal Service Managers, Management Analysts, Financial Managers, Lawyers, and Marketers have a disproportionately high share of White workers in Ramsey County.

All of the top ten remote work positions by volume in this community require some college or higher, with nine out of the ten positions requiring a Bachelor's degree or higher but little to no prior experience or on-the-job training. In Ramsey County, remote work positions pay an average annual salary of \$96,800 compared to \$59,800 across all local employment. Overall, remote work positions in Ramsey County are forecast to grow by an average of 0.1% annually over the next five years, about 0.1 percentage points lower than overall expected employment growth in the community.

<sup>17</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

## Demographics of Remote Work Talent by Occupation and Place of Residence in Ramsey County, 2020Q1

SOC	Occupation	Total Empl	White	Black	American Indian	Asian	Pacific Islander	Two or More Races	Non-Hispanic/Latino	Hispanic or Latino (of any race)	Male	Female
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,990	80.9%	5.3%	0.2%	12.0%	0.0%	1.6%	95.7%	4.3%	12.1%	87.9%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	2,977	73.8%	6.6%	1.0%	16.2%	0.0%	2.4%	96.8%	3.2%	44.6%	55.4%
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	3,250	54.6%	3.3%	0.1%	40.2%	0.0%	1.7%	98.6%	1.4%	82.8%	17.2%
13-2011	Accountants and Auditors	2,738	76.3%	5.2%	0.2%	16.3%	0.0%	2.0%	97.4%	2.6%	40.7%	59.3%
15-1211	Computer Systems Analysts	2,080	66.4%	5.7%	0.2%	24.8%	0.0%	2.8%	97.6%	2.4%	62.2%	37.8%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	1,957	81.6%	5.0%	0.4%	11.2%	0.0%	1.8%	96.9%	3.1%	65.9%	34.1%
13-1111	Management Analysts	2,007	75.5%	4.7%	0.1%	17.9%	0.0%	1.7%	97.5%	2.5%	60.3%	39.7%
11-3031	Financial Managers	1,770	78.2%	5.3%	0.2%	13.5%	0.0%	2.7%	96.5%	3.5%	48.9%	51.1%
23-1011	Lawyers	1,804	86.4%	3.8%	0.2%	8.0%	0.0%	1.6%	98.4%	1.6%	66.2%	33.8%
13-1161	Market Research Analysts and Marketing Specialists	1,644	80.6%	3.6%	0.0%	14.8%	0.0%	1.0%	97.9%	2.1%	46.0%	54.0%
<b>95-0300</b>	<b>Remote Jobs</b>	<b>41,081</b>	<b>77.1%</b>	<b>5.1%</b>	<b>0.3%</b>	<b>15.5%</b>	<b>0.0%</b>	<b>2.0%</b>	<b>97.3%</b>	<b>2.7%</b>	<b>55.2%</b>	<b>44.8%</b>
<b>00-0000</b>	<b>Total - All Occupations</b>	<b>295,744</b>	<b>73.2%</b>	<b>10.6%</b>	<b>0.6%</b>	<b>12.7%</b>	<b>0.0%</b>	<b>2.9%</b>	<b>92.9%</b>	<b>7.1%</b>	<b>50.2%</b>	<b>49.8%</b>

Note: Employment estimates as of 2020Q1 by place of residence, derived from the Chmura Industry/Occupation Matrix and industry employment data from the Quarterly Census of Employment and Wages (QCEW) provided by the Bureau of Labor Statistics.

## Wages, Forecast, and Experience Requirements of Remote Work Talent by Occupation and Place of Residence in Ramsey County, 2020Q1

SOC		Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$47,800	-0.9%	Some college, no degree	None	Moderate-term on-the-job training
13-1198	Project Management Specialists and Business Operations Specialists, All Other	\$77,400	0.2%	Bachelor's degree	None	None
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	\$105,600	0.4%	Bachelor's degree	None	None
13-2011	Accountants and Auditors	\$76,000	0.0%	Bachelor's degree	None	None
15-1211	Computer Systems Analysts	\$97,400	0.3%	Bachelor's degree	None	None
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$134,900	0.1%	Bachelor's degree	Less than 5 years	None
13-1111	Management Analysts	\$91,500	0.6%	Bachelor's degree	Less than 5 years	None
11-3031	Financial Managers	\$144,300	0.9%	Bachelor's degree	5 years or more	None
23-1011	Lawyers	\$128,600	0.1%	Doctoral or professional degree	None	None
13-1161	Market Research Analysts and Marketing Specialists	\$79,000	1.2%	Bachelor's degree	None	None
<b>Remote Jobs</b>		<b>\$96,800</b>	<b>0.1%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Total - All Occupations</b>		<b>\$59,800</b>	<b>0.2%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

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.

## Remote Work by Occupation and Place of Residence in Ramsey County

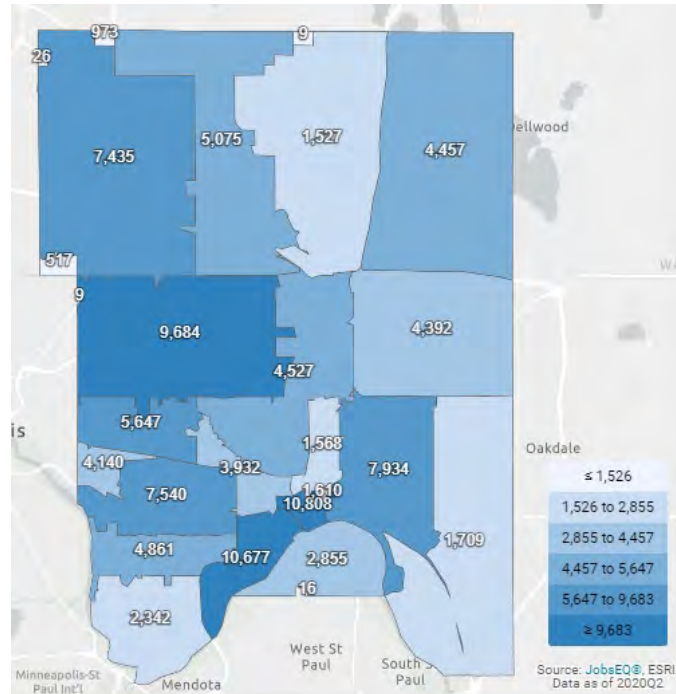
	Avg Ann Wages Remote Jobs	Number of Remote Top Ten Jobs Requiring Bachelor's Degree or Higher	Forecast Ann Growth*	
			Remote Jobs	Total - All Occupations
Midtown, Downtown, and Northern St. Paul	\$96,700	9 out of 10	0.1%	0.3%
Southern St. Paul	\$93,000	9 out of 10	0.4%	0.5%
St. Paul's East Side	\$97,700	9 out of 10	0.1%	0.3%
St. Paul's West Side	\$95,300	9 out of 10	0.0%	0.0%
Suburban Ramsey County	\$97,700	9 out of 10	0.0%	-0.1%
<b>Ramsey County</b>	<b>\$96,800</b>	<b>9 out of 10</b>	<b>0.1%</b>	<b>0.2%</b>

\* Cells are shaded green when value is more than 0.1% higher than that of Ramsey County and are shaded red when the value is more than 0.1% below.

## Partially-Remote Work

Of the 351,432 positions employing people in Ramsey County, 30% can be served at least partially remotely. Across the five subregions of Ramsey County, Midway, Downtown, Northern St. Paul, and St. Paul's East Side have the greatest share of partially-remote work positions out of the total number of positions employing workers in the subregion (35%). The zip code with the highest share of partially-remote work positions (40.4%) out of the total number of positions employing workers locally within Ramsey County is 55108, corresponding to the Como neighborhood in St. Paul.

Partially-Remote Work by Zip Code in Ramsey County, 2020Q1



The distribution of employment in partially-remote occupations by race, ethnicity, and gender is relatively balanced to overall employment rates. However, White workers hold a greater share of partially-remote roles in comparison to other racial groups. However, Asian workers, Black workers, and workers who identify with two or more races are underrepresented in over half of the partially-remote occupations that employ the largest number of Ramsey County residents. Women are more likely to hold partially-remote roles than men (women in Ramsey County hold 59.8% of partially-remote jobs).

Eight of the top ten partially-remote work positions by volume in this community require just a high school diploma (except for General and Operations Managers and Secondary School Teachers, which require a Bachelor's degree) and little or no previous work experience. Partially-remote work positions in Ramsey County pay on average about \$32,300 less than remote work positions (but about \$4,700 more than the overall average salary), at an average annual salary of \$64,500. Overall, partially-remote work positions in Ramsey County are forecast to grow by an average of 0.3% annually over the next five years, about 0.1 percentage points more than overall expected employment growth in the community.

## Demographics of Partially-Remote Work Talent by Occupation and Place of Residence in Ramsey County, 2020Q1

SOC	Occupation	Total Empl	White	Black	American Indian	Asian	Pacific Islander	Two or More Races	Non-Hispanic/Latino	Hispanic or Latino (of any race)	Male	Female
31-1122	Personal Care Aides	8,919	55.3%	20.1%	0.9%	20.9%	0.1%	2.8%	91.7%	8.3%	14.8%	85.2%
43-9061	Office Clerks, General	5,322	70.7%	9.7%	0.4%	16.9%	0.1%	2.3%	92.7%	7.3%	18.2%	81.8%
11-1021	General and Operations Managers	4,508	84.9%	4.8%	0.2%	6.9%	0.0%	3.2%	96.1%	3.9%	70.9%	29.1%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,502	82.5%	6.8%	0.5%	8.0%	0.0%	2.1%	95.6%	4.4%	7.2%	92.8%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,548	87.1%	4.0%	0.2%	6.7%	0.0%	2.0%	96.7%	3.3%	74.3%	25.7%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,222	79.5%	9.8%	0.6%	7.5%	0.1%	2.6%	95.7%	4.3%	33.1%	66.9%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1,893	85.0%	5.2%	0.1%	8.1%	0.0%	1.7%	96.2%	3.8%	71.4%	28.6%
21-1093	Social and Human Service Assistants	1,466	67.4%	18.4%	1.6%	8.2%	0.1%	4.4%	94.6%	5.4%	22.4%	77.6%
43-4171	Receptionists and Information Clerks	1,691	74.2%	11.7%	0.5%	10.1%	0.1%	3.4%	92.4%	7.6%	11.3%	88.7%
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	1,814	88.3%	4.8%	0.1%	4.9%	0.0%	1.8%	97.4%	2.6%	46.2%	53.8%
<b>95-0290</b>	<b>Partially Remote Jobs</b>	<b>82,546</b>	<b>76.9%</b>	<b>9.2%</b>	<b>0.5%</b>	<b>10.9%</b>	<b>0.0%</b>	<b>2.5%</b>	<b>95.4%</b>	<b>4.6%</b>	<b>40.2%</b>	<b>59.8%</b>
<b>00-0000</b>	<b>Total - All Occupations</b>	<b>295,744</b>	<b>73.2%</b>	<b>10.6%</b>	<b>0.6%</b>	<b>12.7%</b>	<b>0.0%</b>	<b>2.9%</b>	<b>92.9%</b>	<b>7.1%</b>	<b>50.2%</b>	<b>49.8%</b>

Note: Employment estimates as of 2020Q1 by place of residence, derived from the Chmura Industry/Occupation Matrix and industry employment data from the Quarterly Census of Employment and Wages (QCEW) provided by the Bureau of Labor Statistics. \*Except Legal, Medical, and Executive \*\*Except Technical and Scientific Products \*\*\*Except Advertising, Insurance, Financial Services, and Travel

## Wages, Forecast, and Experience Requirements of Partially-Remote Work Talent by Occupation and Place of Residence in Ramsey County, 2020Q1

SOC		Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
31-1122	Personal Care Aides	\$28,900	2.6%	High school diploma or equivalent	None	Short-term on-the-job training
43-9061	Office Clerks, General	\$42,000	-0.8%	High school diploma or equivalent	None	Short-term on-the-job training
11-1021	General and Operations Managers	\$130,000	0.1%	Bachelor's degree	5 years or more	None
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$43,700	-1.3%	High school diploma or equivalent	None	Short-term on-the-job training
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$83,200	-0.5%	High school diploma or equivalent	None	Moderate-term on-the-job training
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$66,900	-0.6%	High school diploma or equivalent	Less than 5 years	None
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$69,200	0.0%	High school diploma or equivalent	None	Moderate-term on-the-job training
21-1093	Social and Human Service Assistants	\$38,100	1.3%	High school diploma or equivalent	None	Short-term on-the-job training
43-4171	Receptionists and Information Clerks	\$33,300	0.1%	High school diploma or equivalent	None	Short-term on-the-job training
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	\$70,100	0.8%	Bachelor's degree	None	None
<b>Partially-Remote Jobs</b>		<b>\$64,500</b>	<b>0.3%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Total - All Occupations</b>		<b>\$59,800</b>	<b>0.2%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

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. \*Except Legal, Medical, and Executive \*\*Except Technical and Scientific Products \*\*\*Except Advertising, Insurance, Financial Services, and Travel

### Partially-Remote Work by Occupation and Place of Residence in Ramsey County

	Avg Ann Wages Partially-Remote Jobs	Number of Partially-Remote Top Ten Jobs Requiring Bachelor's Degree or Higher	Forecast Ann Growth*	
			Partially-Remote Jobs	Total - All Occupations
Midtown, Downtown, and Northern St. Paul	\$60,800	3 out of 10	0.5%	0.3%
Southern St. Paul	\$65,200	3 out of 10	0.8%	0.5%
St. Paul's East Side	\$62,200	1 out of 10	0.5%	0.3%
St. Paul's West Side	\$67,000	2 out of 10	-0.2%	0.0%
Suburban Ramsey County	\$67,400	3 out of 10	0.0%	-0.1%
<b>Ramsey County</b>	<b>\$64,500</b>	<b>2 out of 10</b>	<b>0.3%</b>	<b>0.2%</b>

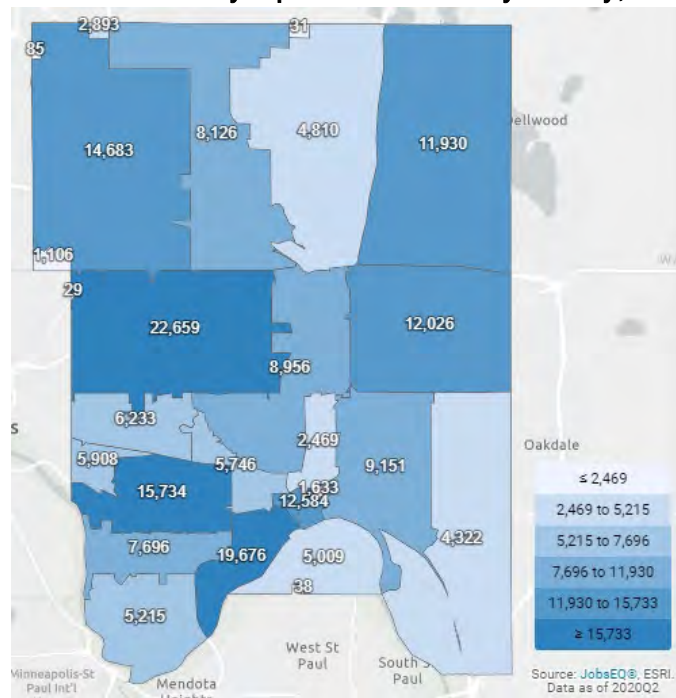
\* Cells are shaded green when value is more than 0.1% higher than that of Ramsey County and are shaded red when the value is more than 0.1% below.



## Non-Remote Work

Over half (56%) of all positions employing workers in Ramsey County as of 2020Q1 cannot be made remote or partially-remote. These 195,957 positions are some of the most vulnerable to pandemic impacts. Across the five subregions<sup>18</sup> in Ramsey, Suburban Ramsey County has the greatest share of non-remote work positions out of the total number of positions employing workers in that subregion (60%). The zip codes with the highest share of non-remote work positions out of the total number of positions employing workers locally within Ramsey County is 55127 and 55109, corresponding to Vadnais Heights and North Oaks (68%) and North St. Paul and Maplewood (68%), respectively. The zip code 55155 has the smallest share of non-remote occupations (42.2%) corresponding to the Minnesota State Capitol and followed by 55101 (43.0%) corresponding to Lowertown.

### Non-Remote Work by Zip Code in Ramsey County, 2020Q1



More than half of Ramsey County residents work in non-remote positions (58%)—whether they work in the neighborhood or commute to work outside of the neighborhood where they live. A greater share of Black, African American, American Indian, Hispanic, Asian, and residents of two or more races work in non-remote occupations in Ramsey County. Male residents account for 53.7% of non-remote employees who live in Ramsey County, compared to 50.2% of workers overall. Food service, retail, warehouse labor, customer service, laborers, and nursing positions dominate the top non-remote work positions by employment. All but three positions that are in the top ten by employment among residents of Ramsey County (Registered Nurses, Retail Salespersons, and Waiters and Waitresses) employ a disproportionately high volume of Black or African American workers.

Nine of the top ten non-remote work positions by volume in this community require a high school diploma or less (except for Registered Nurses, which requires a Bachelor's degree) and no previous work experience. Registered Nurse is the only occupation of the top ten that pays a living wage for a

<sup>18</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

household of three. This occupation typically requires a Bachelor's degree and predominantly employs Ramsey County's White residents (74.8%). Non-remote positions in Ramsey County pay about \$11,800 less than the overall average, with non-remote roles paying an average annual salary of \$48,000. Non-remote work positions in Ramsey County are forecast to grow by an average of 0.1% annually over the next five years, 0.1 percentage points lower than the overall expected employment growth for residents in the community.

## Demographics of Non-Remote Work Talent by Occupation and Place of Residence on Ramsey County, 2020Q1

SOC	Occupation	Total Empl	White	Black	American Indian	Asian	Pacific Islander	Two or More Races	Non-Hispanic/Latino	Hispanic or Latino (of any race)	Male	Female
29-1141	Registered Nurses	6,238	74.8%	8.4%	0.3%	14.9%	0.1%	1.6%	97.8%	2.2%	12.0%	88.0%
35-3023	Fast Food and Counter Workers	7,281	66.7%	13.7%	0.8%	13.7%	0.0%	5.1%	92.7%	7.3%	39.4%	60.6%
41-2031	Retail Salespersons	6,991	77.7%	9.2%	0.4%	9.5%	0.0%	3.1%	93.7%	6.3%	53.1%	46.9%
43-4051	Customer Service Representatives	5,823	71.6%	12.8%	0.5%	10.8%	0.1%	4.3%	93.3%	6.7%	37.2%	62.8%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,258	68.8%	16.5%	0.8%	10.3%	0.1%	3.6%	86.9%	13.1%	63.0%	37.0%
41-2011	Cashiers	5,438	64.1%	13.5%	0.8%	16.6%	0.0%	4.9%	90.9%	9.1%	29.6%	70.4%
35-3031	Waiters and Waitresses	4,391	69.2%	8.3%	0.6%	16.1%	0.0%	5.8%	91.4%	8.6%	29.7%	70.3%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	4,549	70.9%	17.5%	0.6%	7.6%	0.1%	3.3%	91.2%	8.8%	78.8%	21.2%
31-1121	Home Health Aides	3,076	52.6%	32.0%	0.5%	12.5%	0.0%	2.3%	93.4%	6.6%	12.0%	88.0%
33-9032	Security Guards	2,294	62.1%	23.8%	0.9%	8.9%	0.1%	4.2%	93.4%	6.6%	79.0%	21.0%
<b>95-0280</b>	<b>Non-Remote Jobs</b>	<b>172,116</b>	<b>70.5%</b>	<b>12.5%</b>	<b>0.7%</b>	<b>12.9%</b>	<b>0.0%</b>	<b>3.4%</b>	<b>90.7%</b>	<b>9.3%</b>	<b>53.7%</b>	<b>46.3%</b>
<b>00-0000</b>	<b>Total - All Occupations</b>	<b>295,744</b>	<b>73.2%</b>	<b>10.6%</b>	<b>0.6%</b>	<b>12.7%</b>	<b>0.0%</b>	<b>2.9%</b>	<b>92.9%</b>	<b>7.1%</b>	<b>50.2%</b>	<b>49.8%</b>

Note: Employment estimates as of 2020Q1 by place of residence, derived from the Chmura Industry/Occupation Matrix and industry employment data from the Quarterly Census of Employment and Wages (QCEW) provided by the Bureau of Labor Statistics.

## Wages, Forecast, and Experience Requirements of Non-Remote Work Talent by Occupation and Place of Residence in Ramsey County, 2020Q1

SOC	Occupation	Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
29-1141	Registered Nurses	\$85,200	0.9%	Bachelor's degree	None	None
35-3023	Fast Food and Counter Workers	\$26,200	0.9%	None	None	Short-term on-the-job training
41-2031	Retail Salespersons	\$31,200	-0.7%	None	None	Short-term on-the-job training
43-4051	Customer Service Representatives	\$43,100	-0.9%	High school diploma or equivalent	None	Short-term on-the-job training
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$34,000	0.3%	None	None	Short-term on-the-job training
41-2011	Cashiers	\$27,400	-0.8%	None	None	Short-term on-the-job training
35-3031	Waiters and Waitresses	\$30,700	0.1%	None	None	Short-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$37,700	-0.2%	None	None	Short-term on-the-job training
31-1121	Home Health Aides	\$28,900	2.7%	High school diploma or equivalent	None	Short-term on-the-job training
33-9032	Security Guards	\$36,400	0.0%	High school diploma or equivalent	None	Short-term on-the-job training
<b>Non-Remote Jobs</b>		<b>\$48,000</b>	<b>0.1%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Total - All Occupations</b>		<b>\$59,800</b>	<b>0.2%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

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.

## Non-Remote Work by Occupation and Place of Residence in Ramsey County

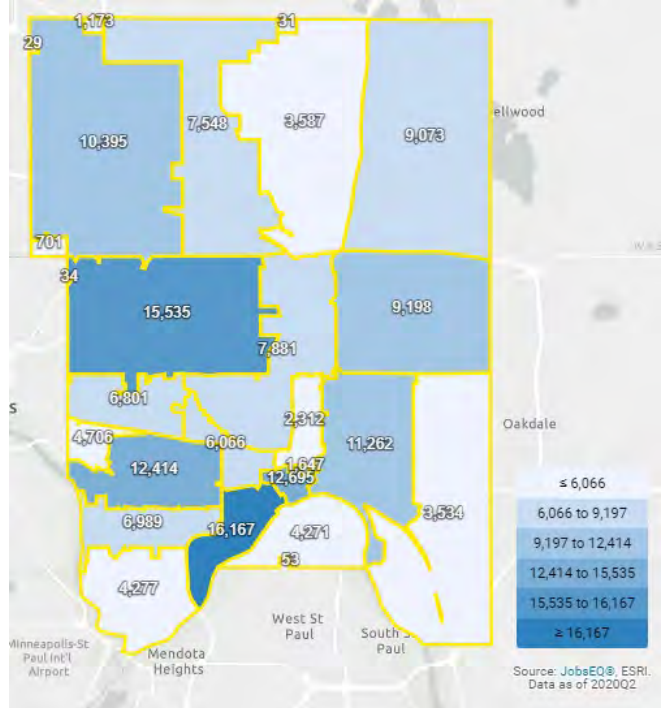
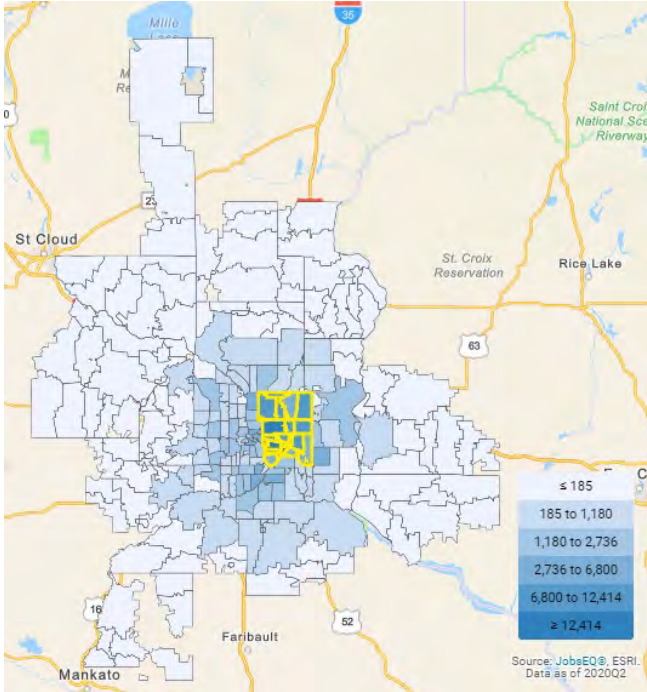
	Avg Ann Wages Non-Remote Jobs	Number of Non- Remote Top Ten Jobs Requiring Bachelor's Degree or Higher	Forecast Ann Growth*	
			Non-Remote Jobs	Total - All Occupations
Midtown, Downtown, and Northern St. Paul	\$49,600	1 out of 10	0.3%	0.3%
Southern St. Paul	\$42,700	2 out of 10	0.3%	0.5%
St. Paul's East Side	\$47,200	1 out of 10	0.3%	0.3%
St. Paul's West Side	\$52,900	1 out of 10	0.0%	0.0%
Suburban Ramsey County	\$46,700	1 out of 10	-0.1%	-0.1%
<b>Ramsey County</b>	<b>\$48,000</b>	<b>1 out of 10</b>	<b>0.1%</b>	<b>0.2%</b>

\* Cells are shaded green when value is more than 0.1% higher than that of Ramsey County and are shaded red when the value is more than 0.1% below.

## Commute Shed

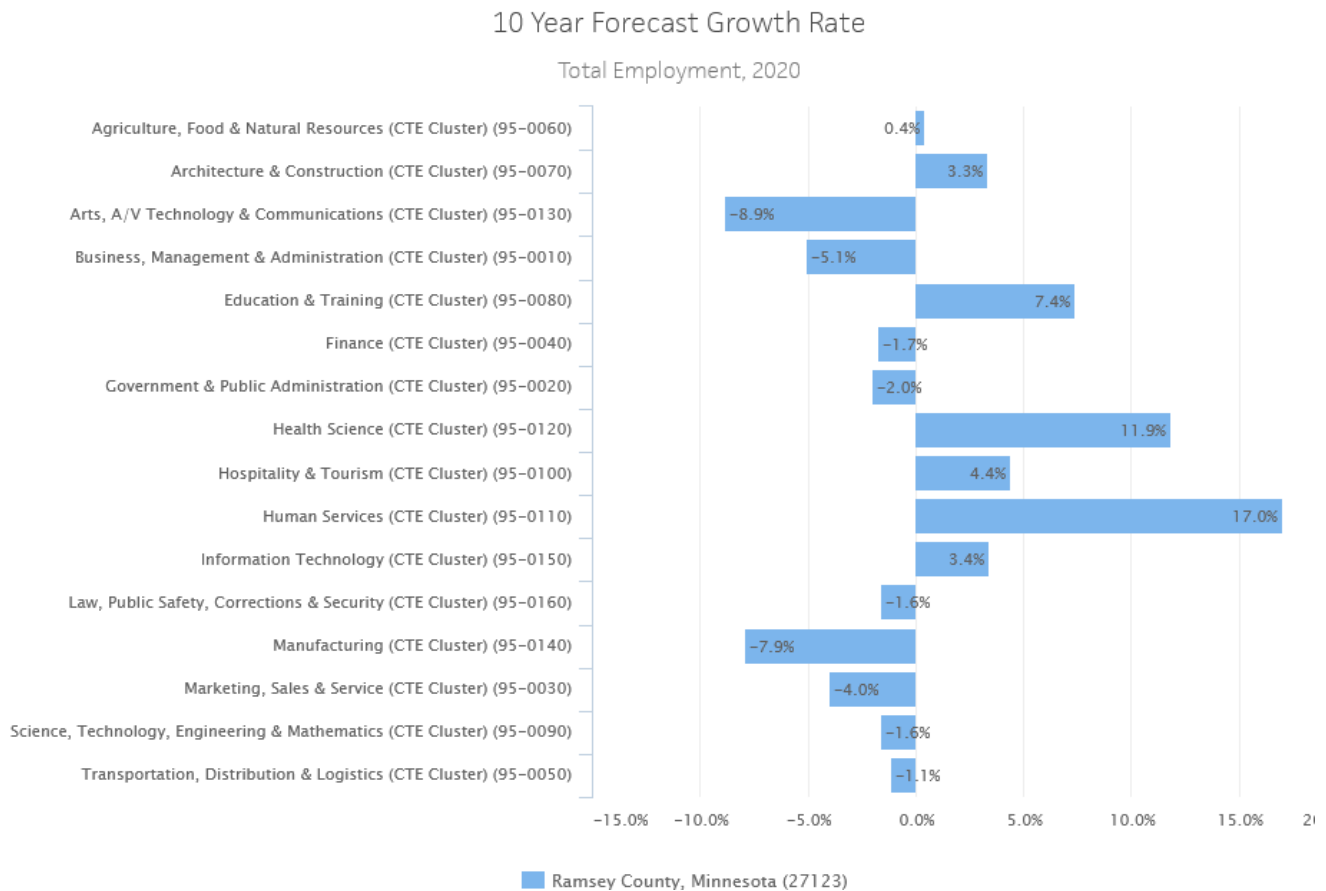
A moderate share of residents of Ramsey County work outside of their county. Of all Ramsey County residents, 55.3% also work in Ramsey County. Just 1.1% of Ramsey County residents work in a state other than Minnesota—most in Wisconsin.

Zip Code of Place of Work for Residents of Ramsey County



## Future Growth by Cluster

Of sixteen career clusters used by Career and Technical Education (CTE), seven are expected to grow and nine are expected to decline over the next ten years in Ramsey County. The clusters expecting the greatest growth are Human Services (17.0%), Health Science (11.9%), and Education and Training (7.4%). In contrast, Arts, A/V Technology and Communications (-8.9%), and Manufacturing (-7.9%) career clusters are anticipating the greatest declines in overall employment.



## Emerging Career Paths

Online job posting data can tell us a lot about employer demand for certain skills, certifications, qualifications, and occupational competencies. There is rich data available by city, county, and even by specific employer.

During the first three months of the COVID-19 pandemic,<sup>19</sup> there were 37,527 new jobs advertised across Ramsey County, a decline of about 27% in the same three months of 2019. The top position advertised by volume included Registered Nurses, Software Developers, and Customer Service Representatives. Other positions in high volume locally include Personal Care Aides, Social and Human Services Assistants, and Bookkeeping and Accounting Clerks.

<sup>19</sup> March 15-June 15, 2020.

**Top Emerging Occupations in Ramsey County (high job posting growth), March 15-June 15, 2020**

1. **Personal Care Aides** (Group Home Caregiver, Mental Health Caregiver, Homemaker, Direct Support Professional)
2. **Stock Clerks** (Warehouse Operator, Warehousing Worker, Shipping and Receiving Clerk)
3. **Insurance Sales Agents** (Remote Sales Representative, Field Service Representative, Life Insurance Sales Representative)
4. **Loan Interviewers and Clerks** (Loan Specialist, Mortgage Loan Processor, Post Closing Specialist, Loan Servicing Support)
5. **Information Security Analysts** (Cloud Engineer, Security Analyst, Cybersecurity Specialist)
6. **Cashiers** (Cashier, Desk Clerk)

The certifications in demand locally match in particular to the pharmaceutical positions listed above and the few food preparation and serving positions posted locally. Skills like operations, compliance, communication, attention to detail, and customer service were mentioned in job postings as required competencies for candidates in lower volumes across Ramsey County overall between March 15-June 15, 2020 in comparison to early 2020 or any point in 2019. However, in subregions across the county, several of these top skills were trending upward as job posting requirements.

**Top Skills in Ramsey County in Order of Frequency in Job Postings, March 15-June 15, 2020**

1. Communication (-33% from pre-COVID-19)
2. Dedication (-34% from pre-COVID-19)
3. Scheduling (-28% from pre-COVID-19)
4. Innovation (-9% from pre-COVID-19)
5. Customer Service (-31% from pre-COVID-19)
6. Collaboration (-34% from pre-COVID-19)
7. Analysis (-39% from pre-COVID-19)
8. Leadership (-32% from pre-COVID-19)
9. Operations (-31% from pre-COVID-19)
10. Monitoring (-29% from pre-COVID-19)



# Accessible Career Pathways

## Local Careers for People with an Associate's Degree or Less

Across Ramsey County, there is a strong mix of entry-level, mid-career, and advanced career opportunities being advertised by local employers. Specifically, healthcare careers have started to rebound since the early hit to non-essential health function roles in the first phase of the pandemic, and finance, loan officer, insurance, and logistics-related occupations have seen boosts in new job postings across the metro region. There is variation in the types of roles that are advertised by subregion, illustrating the nuanced needs of different communities across Ramsey County.<sup>20</sup> Considering job posting volumes, historic employment trends, unique local concentrations of occupations, and forecasted future growth, many top high-opportunity roles in Ramsey County are low contact-intensity, but very few can be done fully remotely.

### Top New Jobs Posted March 16 - July 31, 2020

1. Personal Care Aides: 1,012 (+127%)
2. Customer Service Representatives: 919 (-13%)
3. Heavy and Tractor-Trailer Truck Drivers: 620 (-26%)
4. Registered Nurses (AA level): 578 (-13%)
5. Nursing Assistants: 513 (+1%)
6. Stock Clerks: 495 (+8%)
7. Office Clerks, General: 486 (-18%)
8. Insurance Sales Agents: 461 (+26%)
9. Supervisors of Retail Sales Workers: 451 (-26%)
10. Social and Human Services Assistants: 433 (-19%)

### Top Employers Posting New Jobs March 16 - July 31, 2020

1. Robert Half International: 1,519 (+7%)
2. Fairview Health Services: 514 (-21%)
3. REM Hennepin, Inc.: 386 (+69%)
4. HealthEast Care System: 293 (-41%)
5. Aerotek: 278 (+10%)
6. Regions Hospital: 240 (-13%)
7. United Natural Foods, Inc: 221 (+294%)
8. Allina Health: 214 (-62%)
9. FedEx Ground: 202 (321%)
10. Target Corporation: 200 (+56%)

<sup>20</sup> Subregions are defined by the following zip codes: Midway, Downtown, and Northern St. Paul (55108, 55114, 55104, 55103, 55101 and 55155); Southern St. Paul (55105 and 55116); St. Paul's East Side (55130, 55106, and 55119); St. Paul's West Side (55102, 55107 and the Ramsey County portion of 55118); Suburban Ramsey (55117, 55109, 55112, 55113, 55127, and the Ramsey County portions of 55038, 55126, 55418, 55421, and 55449).

### Ramsey County High-Opportunity Careers Requiring an Associate's Degree or Less

SOC	Occupation	Current				Historical	5-Year Forecast		Considerations				Education & Experience		
		2020Q1 Empl	High Wage (Avg Ann Wages)*	High Local Concentration (LQ)	Low Historic Unemployment Rate	High Ann % Empl. Growth	High Total Demand (Replacing Over 50% of 2020Q1 Empl in 5 Yrs)	Ann % Growth	Able to Be Remote (R)	Low Contact Intensity (L)	Trending in Job Postings Locally During Pandemic (T)	Higher than Local Resident Average BIPOC Empl. (over 31.6%)	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
43-4051	Customer Service Representatives	6,908	\$43,100	1.06	3.2%	1.2%	4,094	-0.9%		L	T	33.0%	High school diploma or equivalent	None	Short-term on-the-job training
43-9061	Office Clerks, General	6,801	\$42,000	1.01	2.7%	-0.3%	3,680	-0.8%		L	T	34.1%	High school diploma or equivalent	None	Short-term on-the-job training
43-3031	Bookkeeping, Accounting, and Auditing Clerks	3,745	\$47,800	1.02	1.6%	-2.2%	1,931	-0.9%	R	L	T	22.4%	Some college, no degree	None	Moderate-term on-the-job training
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,099	\$83,200	1.01	1.6%	-2.6%	1,497	-0.5%		L	T	15.7%	High school diploma or equivalent	None	Moderate-term on-the-job training
53-3032	Heavy and Tractor-Trailer Truck Drivers	3,049	\$55,300	0.69	2.5%	0.9%	1,719	-0.1%				32.0%	Postsecondary non-degree award	None	Short-term on-the-job training
49-9071	Maintenance and Repair Workers, General	2,850	\$48,800	0.87	1.8%	0.5%	1,406	0.1%		L		26.9%	High school diploma or equivalent	None	Moderate-term on-the-job training
43-1011	First-Line Supervisors of Office and Administrative Support Workers	2,833	\$66,900	0.84	1.6%	0.3%	1,358	-0.6%		L		23.8%	High school diploma or equivalent	Less than 5 years	None
41-1011	First-Line Supervisors of Retail Sales Workers	2,372	\$48,500	0.70	1.5%	-1.3%	1,194	-0.6%		L		25.1%	High school diploma or equivalent	Less than 5 years	None
<b>Total - All Occupations</b>		<b>351,392</b>	<b>\$59,800</b>	<b>1.00</b>	<b>2.9%</b>	<b>0.6%</b>	<b>199,680</b>	<b>0.2%</b>				<b>31.6%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

\*Only careers paying an average of \$40,000 or more are included in this table. Occupations paying an average salary higher than the all-occupation average (\$59,800) in the community are highlighted in green. Unemployment rates below 3% are considered low and highlighted in green. Historical annual employment growth rates above 0.6% are considered high and highlighted in green. Forecasted annual employment growth over 0.2% is considered high and highlighted in green.

The job titles and employer data shown in this section is based on content found in jobs newly posted online and explicitly listed as located in Ramsey County.<sup>21</sup> These employers and job postings were identified by the address included by the employer in the job posting; therefore, it only represents jobs by those employers that explicitly included a community within Ramsey County. In some cases, these employers located in the county may be hiring for positions in other parts of the region.

## Local Careers for People with a Bachelor's Degree or Higher

In all, nine out of the ten top jobs requiring a Bachelor's degree or higher advertised across Ramsey County in the first four months of the pandemic can be done partially or fully remotely. This varies significantly by subregion, with none of the top trending occupations in Southern St. Paul, for example, being remote-friendly. A large number of opportunities that will see growth, high wages, and high local concentration of need across Ramsey County are in education, training, information technology, and human services roles and organizations. A diverse set of employers have been actively recruiting talent across Ramsey County in recent months, with large Tech, Healthcare, and Finance players continuing to recruit—albeit in smaller volumes than in years past.

### Top New Jobs Posted March 16 - July 31, 2020

1. Application Software Developers: 1,298 (-5%)
2. Registered Nurses: 741 (-43%)
3. Computer Systems Analysts: 521 (-32%)
4. Sales Representatives, Wholesale: 477 (+13%)
5. Network and Computer Systems Analysts: 438 (-26%)
6. Industrial Engineers: 432 (-33%)
7. Marketing Managers: 395 (-23%)
8. Information Security Analysts: 392 (+19%)
9. Accountants: 362 (-47%)
10. Computer Systems Engineers and Architects: 358 (+19%)

### Top Employers Posting New Jobs March 16 - July 31, 2020

1. Oracle: 1,374 (+24%)
2. Robert Half International: 1929 (-23%)
3. Medtronic: 430 (-56%)
4. Fairview Health Services: 358 (-31%)
5. Wells Fargo: 326 (-22%)
6. State of Minnesota: 322 (-79%)
7. Allina Health: 318 (-25%)
8. Travelers: 305 (+75%)
9. 3M: 302 (-64%)
10. HealthEast Care System: 229 (-42%)

### Ramsey County High-Opportunity Careers Requiring a Bachelor's Degree or Higher

SOC	Occupation	Current				Historical High Ann % Empl. Growth	5-Year Forecast High Total Demand (Replacin g Over 50% of 2020Q1 Empl in 5 Yrs)		Considerations				Education & Experience		
		2020Q1 Empl	High Wage (Avg Ann Wages)	High Local Concentration (LQ)	Low Historic Unemployment Rate		Ann % Growth	Able to Be Remote (R)	Low Contact Intensity (L)	Trending in Job Postings Locally During Pandemic (T)	Higher than Local Resident Average BIPOC Employment (over 47.9%)	Typical Entry- Level Education	Previous Work Experience	Typical On-the- Job Training	
15-1211	Computer Systems Analysts	2,444	\$97,400	1.80	1.3%	-0.1%	930	0.3%	R	L	T	35.1%	Bachelor's degree	None	None
25-2031	Secondary School Teachers, Except Special and CTE	2,026	\$70,100	0.92	2.0%	0.4%	816	0.8%				13.9%	Bachelor's degree	None	None
13-1071	Human Resources Specialists	1,749	\$70,300	1.22	2.3%	3.5%	885	0.0%		L		25.8%	Bachelor's degree	None	None
21-1021	Child, Family, and School Social Workers	1,665	\$59,800	2.25	1.2%	2.9%	915	0.8%		L		28.5%	Bachelor's degree	None	None
25-2022	Middle School Teachers, Except Special and CTE	1,057	\$70,600	0.81	2.0%	0.1%	446	0.8%				14.9%	Bachelor's degree	None	None
13-1041	Compliance Officers	984	\$80,000	1.41	0.6%	4.1%	433	0.0%		L		18.8%	Bachelor's degree	None	Moderate-term on-the-job training
13-1151	Training and Development Specialists	934	\$73,300	1.34	1.6%	1.8%	514	0.2%		L		23.9%	Bachelor's degree	Less than 5 years	None
27-3031	Public Relations Specialists	847	\$64,500	1.43	1.1%	0.1%	448	0.1%		L		17.5%	Bachelor's degree	None	None
25-3031	Substitute Teachers, Short-Term	821	\$43,600	0.62	2.7%	1.2%	502	0.5%				22.9%	Bachelor's degree	None	None
27-2022	Coaches and Scouts	816	\$45,200	1.35	2.8%	3.1%	654	0.9%		L		19.6%	Bachelor's degree	None	None
<b>Total - All Occupations</b>		<b>351,392</b>	<b>\$59,800</b>	<b>1.00</b>	<b>2.9%</b>	<b>0.6%</b>	<b>199,680</b>	<b>0.2%</b>				<b>31.6%</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

\*Only careers paying an average of \$40,000 or more are included in this table. Occupations paying an average salary higher than the all-occupation average (\$59,800) in the community are highlighted in green. Unemployment rates below 3% are considered low and highlighted in green. Historical annual employment growth rates above 0.6% are considered high and highlighted in green. Forecasted annual employment growth over 0.2% is considered high and highlighted in green.

The job titles and employer data shown in this section is based on content found in jobs newly posted online and explicitly listed as located in Ramsey County.<sup>22</sup> These employers and job postings were identified by the address included by the employer in the job posting; therefore, it only represents jobs by those employers that explicitly included a community within Ramsey County. In some cases, these employers located in the county may be hiring for positions in other parts of the region.

## Retooling and Reimagining Work

The following section highlights the critical skills in demand in Ramsey County, as identified by employers in jobs advertised online in the community. This section's data are based on the content found in jobs newly posted online by employers located in all Ramsey County zip codes.<sup>23</sup> This list is not a complete or representative list of job opportunities in the region but is offered as a sampling of jobs advertised. In some cases, these employers located in Ramsey County may be hiring for positions in outside of the county.

In Ramsey County, 3,731 identified employers advertised 28,190 jobs locally between March 16 and July 31, 2020. The employers who advertised jobs within this geography that explicitly included a location in Ramsey County may not have a physical location in the community (i.e., a staffing agency or chain headquartered elsewhere but recruiting in that specific zip code). The next two sections highlight the foundational skills in demand among local employers, and the skill transferability opportunities of the local talent supply.

### *Foundational Skills*

Much research has gone into determining what skills are considered essential in the emerging digital economy. According to 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.<sup>24</sup> 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.

In addition, positions that require at least one of the New Foundational Skills pay more on average. Nationwide, jobs requesting at least one of the New Foundational Skills advertised an average salary of \$61,000, which is \$8,000 higher than other jobs that do not require any of these foundational skills. Each of the skills in the Digital Building Block and Business Enabler skill groups include a further salary premium from 7% to 38% higher than the overall average. By developing a range of New Foundational Skills, this study found that job-seekers could increase their earning power and productivity by growing their abilities in all three skill areas. Burning Glass Technologies estimates that less than one in five job-seekers they analyzed had some skills developed in each of the three areas. To further clarify within the Business Enablers group, we have added a 15th Foundational Skill called "Digital Skills," which includes social media, search engine marketing, web analytics, content marketing, email, mobile campaigns, strategy and planning, social selling, video production, and similar related skillsets. For a full list of the New Foundational Skills, see below.

<sup>23</sup> 55108, 55114, 55104, 55103, 5510, 55155, 55105, 55116, 55130, 55106, 55119, 55102, 55107, 55117, 55109, 55112, 55113, and 55127 and the Ramsey County portion of 55118, 55038, 55126, 55418, 55421, and 55449

<sup>24</sup> 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](https://www.burning-glass.com/wp-content/uploads/New_Foundational_Skills.pdf)



## Defining the New Foundational Skills

### High-Demand Human Skills

**Analytical Skills** - Analyze information, problem solve, and make decisions - detect patterns, brainstorming, observing, interpreting data, integrating new information, theorizing, and making decisions based on multiple factors.

**Collaboration**—Open communication, reaching consensus, giving credit, identifying obstacles and addressing problems cooperatively, focus on group goals. Examples, resilience and respect for diversity.

**Critical Thinking**— Refers to evaluating information and then making a decision based on your findings. Examples: Process management, ongoing improvement, auditing, benchmarking, big data analytics, business intelligence, calculating, case analysis, causal relationships, classifying, computing, decision making, diagnostics, recording keeping, evaluating, prioritization, troubleshooting, attention to detail.

**Creativity** - Could include ability to spot trends, come up with innovative solutions, solve for big problems. Examples: Budgeting, brainstorming, optimization, predictive modeling, problem-solving, restructuring, strategic planning, integration.

**Communication** - Explain information orally in a meeting or presentation. Write a memo, email, or report. Examples: Active listening, reporting, surveying, teamwork, oral communication, written communication, presenting.

### High-Demand Digital Building Block Skills

**Analyzing Data** - Examples include SQL, Microsoft excel, critical thinking, R or Python, Data Visualization, Presentation skills and Machine learning, data cleaning, data preparation.

**Managing Data** - Data mining, data assessments, data validation, data security, data transference, SQL, Workflow Optimization, Information systems, and market analysis, databases.

**Software Development**—Examples mathematical aptitude, problem solving, programming languages (Python, React, Angular, Docker, CompTIA, Amazon AWS), time management, writing and testing code, Machine learning, Source Control, Operating systems.

**Computer Programming**—examples include programming languages, write computer programs, update computer programs, troubleshoot programs, test software programs, collaborate with other programmers, mathematical skills, problem-solving, inquisitiveness, Java, C++.

**Digital Security and Privacy**—examples security engineering, encryption, intrusion detection, breach response, firewall development, vulnerability analysis, penetration testing, security information and event management, cybersecurity, HTTPs, SSL, and TLS, Endpoint threat detection and data loss prevention.

### High-Demand Business Enabler Skills

**Business Process**—Operational procedures, ensure compliance, process improvements, business requirements, customer service, analysis techniques - Agile Business Analysis, Six Sigma, Business Process Modeling Notation (BLMN), and Rational Unified Process.

**Project Management**—Organization, negotiation, team management, time management, risk management, problem-solving, budget management, motivation, technical writing, adaptability, tech saavy, reporting skills, active listening, research skills, interpersonal skills, project management methodologies, policy knowledge, conflict management.

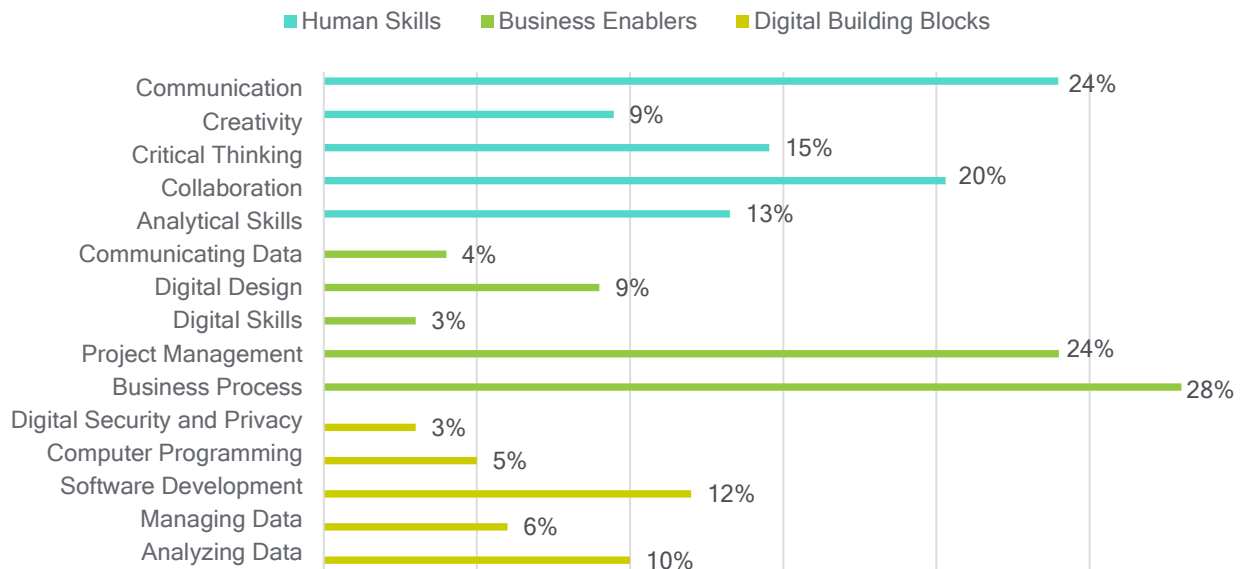
**Digital Skills** - social media, search engine marketing, analytics, content marketing, email, mobile campaigns, strategy and planning, social selling, pay per click marketing, Video production.

**Digital Design** - Typography, Adobe creative suite, interactive media, coding, branding, wireframing, layout and navigation principles, HTML/CSS, design thinking approaches, UX/UI.

**Communicating Data**—Data visualization, storytelling, writing and publishing skills, data visualization.

In Ramsey County, Human Skills like Communication and Collaboration and Business Enablers like Business Process and Project Management appear in the highest volumes as required skills for local jobs. Digital Building Blocks such as Computer Programming and Digital Security and Privacy appear in lower volumes in this community.

### Ramsey County Foundational Skills for the Digital Economy



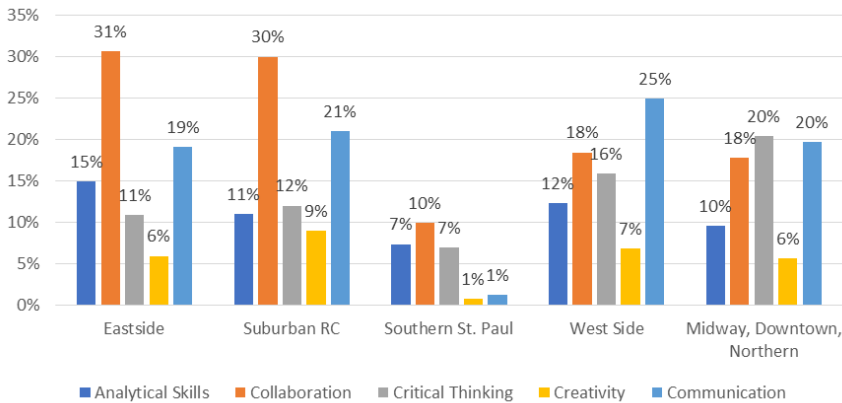
Southern St. Paul	
Communication	24%
Creativity	9%
Critical Thinking	15%
Collaboration	20%
Analytical Skills	13%
Communicating Data	4%
Digital Design	9%
Digital Skills	3%
Project Management	24%
Business Process	28%
Digital Security and Privacy	3%
Computer Programming	5%
Software Development	12%
Managing Data	6%
Analyzing Data	10%

The jobs posted by employers in Ramsey County between March 16 and July 31, 2020, showed demand in the required skills across Ramsey County. The text below indicates the top four skills required in positions advertised by employers located in Ramsey County by the Foundational Skill categories.

High-Demand Human Skills	High-Demand Digital Building Block Skills	High-Demand Business Enabler Skills
<b>Analytical Skills</b> 1) Analysis 2) Monitoring 3) Problem Solving 4) Research	<b>Analyzing Data</b> 1) Analysis 2) Monitoring 3) Detail-oriented 4) Evaluation	<b>Business Process</b> 1) Scheduling 2) Customer Service 3) Analysis 4) Operations
<b>Collaboration</b> 1) Dedication 2) Collaboration 3) Leadership 4) Relationships	<b>Managing Data</b> 1) Detail-oriented 2) Research 3) Databases 4) Organizational skills	<b>Project Management</b> 1) Collaboration 2) Leadership 3) Supervision 4) Responsibility
<b>Critical Thinking</b> 1) Scheduling 2) Compliance 3) Evaluation 4) Problem solving	<b>Software Development</b> 1) Design 2) Problem solving 3) Engineering 4) Implementing	<b>Digital Skills</b> 1) Research 2) Marketing 3) Influencing 4) Integrations
<b>Creativity</b> 1) Innovation 2) Design 3) Passion 4) Testing	<b>Computer Programming</b> 1) Engineering 2) Multitasking 3) Troubleshooting 4) Architecture	<b>Digital Design</b> 1) Design 2) Testing 3) Engineering 4) Implementing
<b>Communication</b> 1) Communication 2) Customer Service 3) Supervision 4) Written Communication	<b>Digital Security and Privacy</b> 1) Security 2) Independent Work 3) Confidentiality 4) Infrastructure	<b>Communicating Data</b> 1) Written Communications 2) Writing 3) Presentation skills

Across Ramsey County subregions, collaboration is among the top skills required in positions advertised by employers located in Ramsey County in both number and percentage. One potential explanation for the high share of requirements in job ads is that collaboration skills could be applied in any occupation.

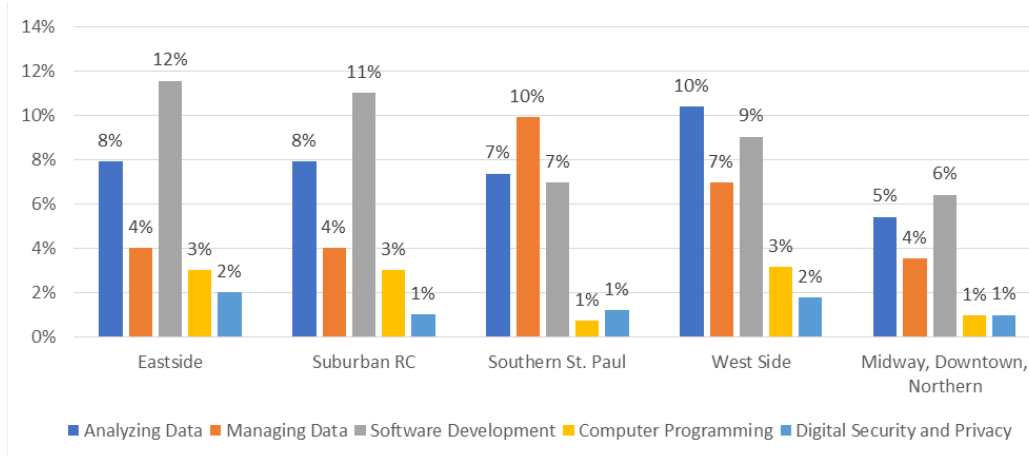
Human Skill Demand Across Subregions of Ramsey County, March 16 - July 31, 2020



Across the Ramsey County subregions, the digital building blocks skills are among the lowest in share of requested skills in positions advertised by employers located in Ramsey County in both number and percentage. This low share of request is contrast to the associated occupations, such as Software Developers, having positive forecasted annual growth. Lower mentions of required digital building

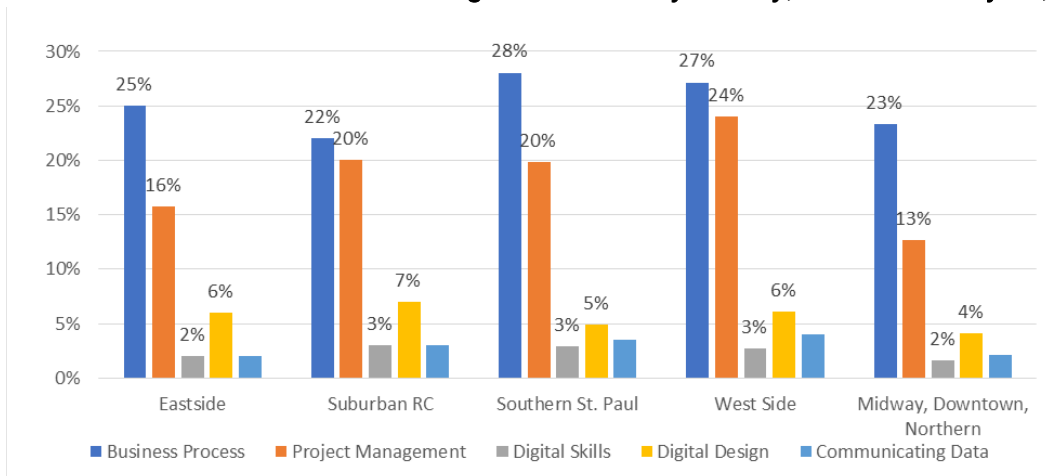
blocks in local job postings could be due to an assumption by employers that these technical skills are implied and understood by applicants for these high-demand IT occupations.

### Digital Building Block Demand Across Subregions of Ramsey County, March 16 - July 31, 2020



Business process and project management consistently have a higher percentage of mentions as required skills in positions advertised by employers located in Ramsey County. Whereas, the digital skills, digital design, and communicating data are persistently lower share of mentions in as required skills. Similar to collaboration, business process and project management skills could have a higher share of requirement in local postings as these skills could be applied in any occupation, including positions that would also require digital skills.

### Business Enabler Skill Demand Across Subregions of Ramsey County, March 16 - July 31, 2020



## Skill Transferability

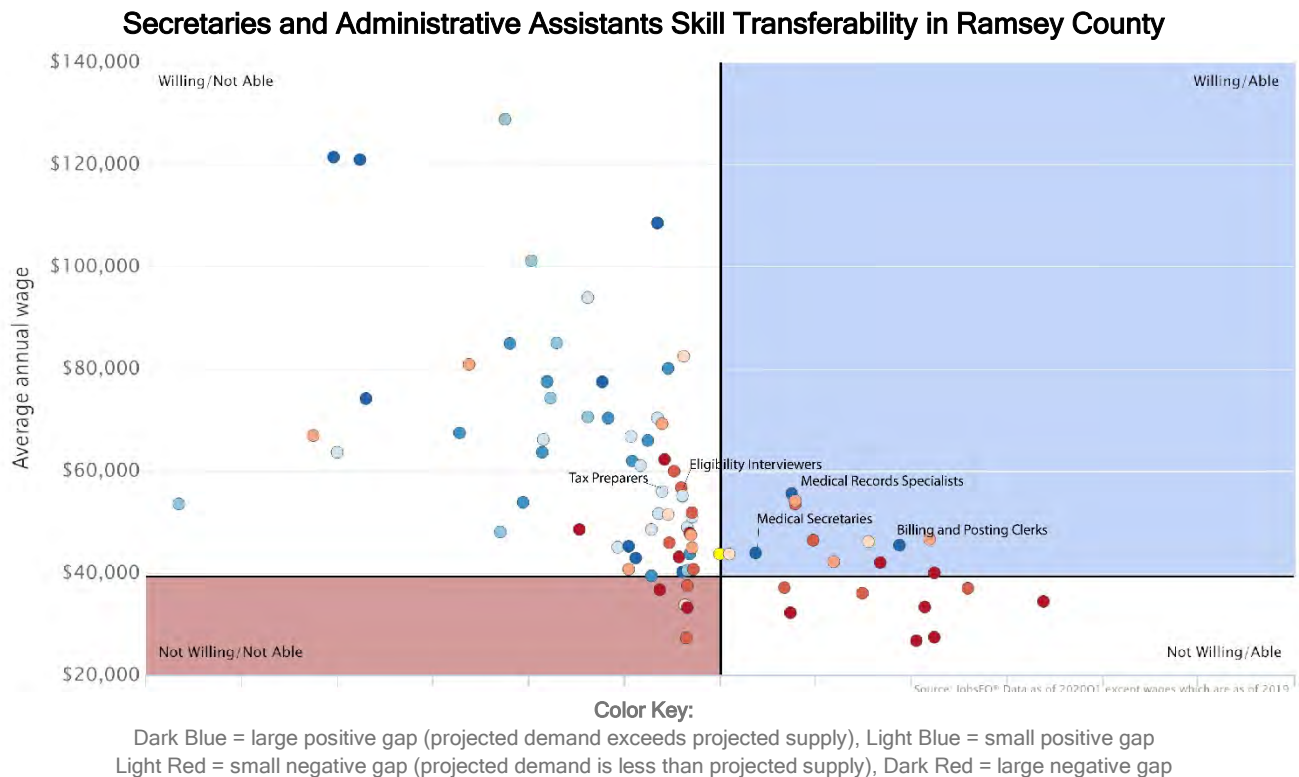
When advising individuals who have recently lost their jobs or are facing work instability, identifying jobs that the individual would be willing to take (meaning that it pays equally well or better than their prior role) and able to take (meaning they possess the skill set and educational background necessary for success). To simplify this search process, we can use a “willing and able” matrix, which utilizes skill competencies outlined in O\*NET and estimated local future talent supply gaps to allow us to create meaningful career and education decisions.

The occupations below are all found in high volumes in Ramsey County are anticipated to have a local surplus of talent over the next five years, and experienced high unemployment applications across Ramsey County since the beginning of the pandemic.

### Secretaries and Administrative Assistants

Although currently found in relatively high volume and local concentration across Ramsey County, Secretary and Administrative Assistant roles are likely to see a decline over the next five years. Fortunately, there are several occupations that have similar skill sets that pay higher wages and are likely to see shortages locally in the next few years. Roles such as Medical Secretaries, Medical Records Specialists, and Billing and Posting Clerks pay \$43,900-\$55,500 on average, which is above the average wage locally for Secretaries and Administrative Assistants at \$43,700.

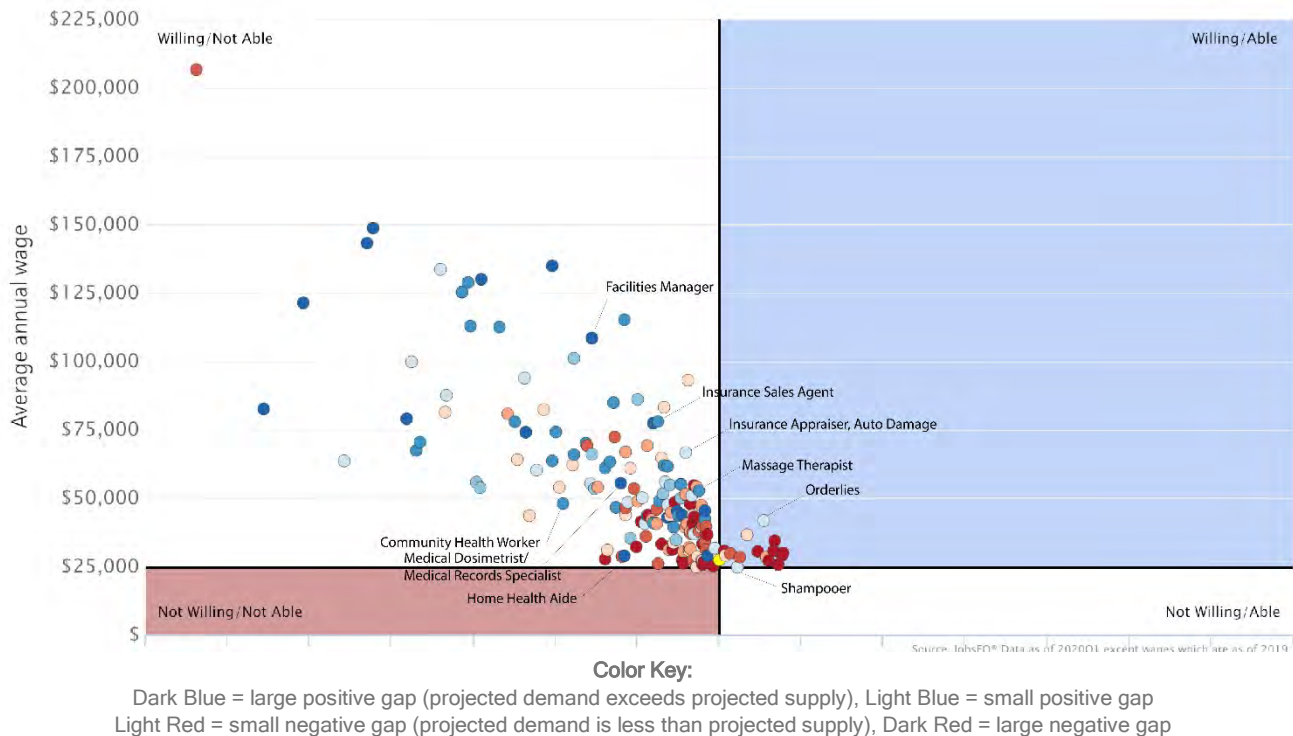
In addition, by gaining a few industry skills or certifications, someone working as an Administrative Assistant could leverage customer service skills, attention to detail, communication, and coordination to enter into a local career as a Brokerage Clerk, Tax Preparer, or Eligibility Interviewer. For many roles found in the Willing/Not Able quadrant below, a Bachelor’s degree may be required.



## Cashiers

Cashiers receive and disburse money in establishments other than financial institutions. They may use electronic scanners, cash registers, or related equipment, and often process credit or debit card transactions and validate checks. There are very few similar-paying, similar-skill, entry-level, high contact-intensity positions that may see shortages in talent in Ramsey County over the next five years. Occupations that would have related skillsets but require a bit more training to be accessible to a former Cashier include Billing and Posting Clerk, Medical Records Specialist, Community Health Worker, Insurance Appraiser, or Insurance Sales Agent. Reskilling and upskilling are very important for individuals looking to explore a new career after having worked as a cashier in this region.

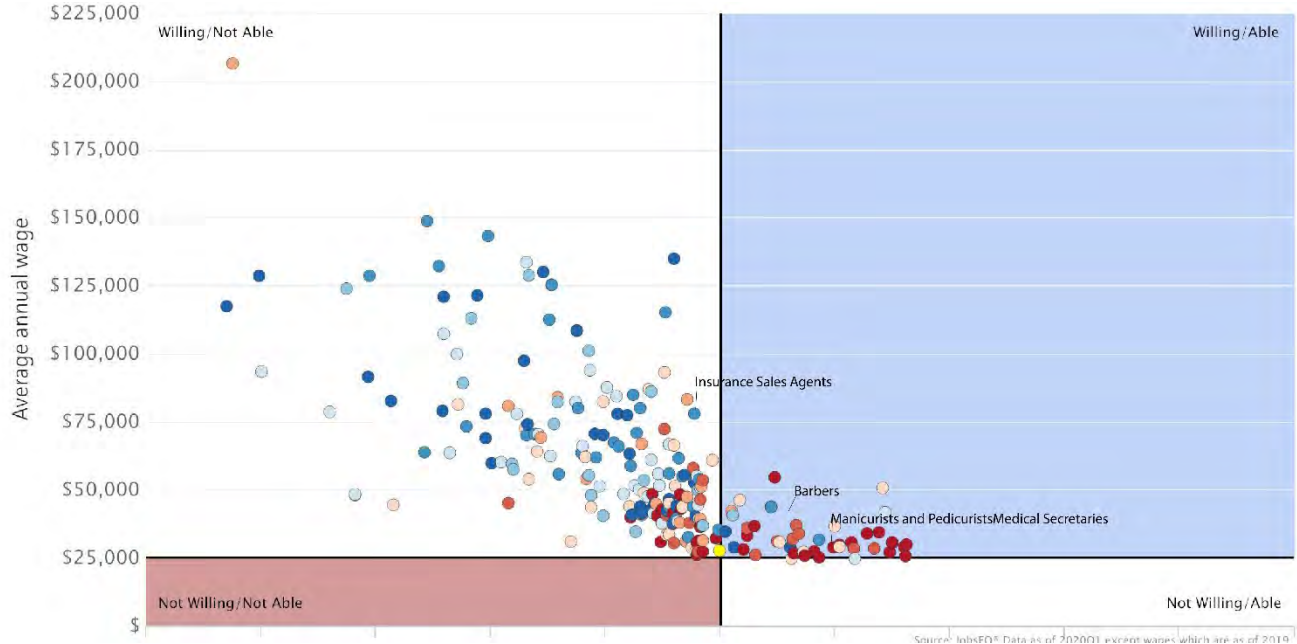
### Cashier Skill Transferability in Ramsey County



## Bartenders

There were about 1,585 people employed in Ramsey County as Bartenders in the first quarter of 2020, dropping about 12% to 1,393 in the second quarter due to impacts of the pandemic. Historically, Bartender employment has remained relatively stable in Ramsey County. Over the next five years, about 1,465 positions were estimated to be re-filled due to turnover and job changes, but this number may be higher or lower than initially forecast due to massive fluctuations in demand and ability of establishments to serve clientele in a traditional way. Other occupations anticipating shortages over the next five years that pay higher wages on average (without accounting for tips) and value similar baseline skillsets include Home Health Aides, Manicurists and Pedicurists, Skincare Specialists, and Barbers. Unfortunately, all of these positions require some form of new certification, are also high contact-intensity, and cannot be done remotely. Other less vulnerable options that may be accessible to former Bartenders include Teaching Assistants, Merchandise Displayers, and Insurance Sales Agents.

### Bartender Skill Transferability in Ramsey County



**Color Key:**

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



# Subregion Summaries

This report aimed to highlight the disparate workforce impacts of the COVID-19 pandemic, including racial and ethnic disparities that have persisted in our community. Below are the background data highlights based on community demographics and demographic, industry, and occupation vulnerabilities of each of the five subregion profiles, in addition to insights into rising opportunities in each community.

**Midway, Downtown, and Northern St. Paul** is the second most demographically diverse subregion in Ramsey County; 38.6% of the population are non-Hispanic people of color. This subregion has one of the highest percentages of residents living in poverty (21.2% or 17,388 residents). Over a third of households in areas of this community do not have access to a computer device, and 45% do not have internet access, adding up to a collective deficit in opportunity, education, and prospects. Within Midway, Downtown, and Northern St. Paul, zip code 55104 has the largest number of small businesses and the largest number of female-owned and minority-owned businesses in Ramsey County.

Regarding demographic, industry, and occupation vulnerabilities, Midtown, Downtown, and Northern St. Paul show signs of resilience. This community's industry vulnerability has the lowest level of anticipated short-term job loss from COVID-19 (9% or 8,332 out of 97,595). The zip code with the highest share of remote work positions out of the total number of positions employing workers locally (21% in 55101) and the zip code with the smallest share of non-remote occupations (42.2% in 55155) is found in Midtown, Downtown, and Northern St. Paul. Regarding Foundational Skills, this community has lowest share of local job postings requiring Digital Building Block skills. In this community, there are signs of an opportunity to increase access to digital devices and the internet, specifically through strategies that engage small businesses that employ local talent.

**Southern St. Paul** had the steepest decline in employment from the year ending 2020Q1 to 2020Q2 of all the Ramsey County subregions. In addition, this community has the highest level of short-term industry vulnerability based on anticipated job loss due to COVID-19 (17% or 3,980 out of 22,877) and the highest level of occupation vulnerability based on the share of high contact intensity occupations (33%). This community also has the smallest share of positions that can be made fully remote (9%) among the Ramsey County subregions.

Despite declines in employment and high vulnerabilities, Southern St. Paul shows a low community demographic vulnerability and a high level of resilience based on education level and projected growth. Southern St. Paul residents have a higher level of educational attainment than the four communities in the county; 40.2% have a Bachelor's degree, and 30.1% have a postgraduate degree. The annual average projected job growth in Southern St. Paul is persistently larger than the other subregions for all levels of education.

Education and workforce programming in Southern St. Paul may choose to focus on education, human services, and healthcare support occupations with strong entry-level pathways for individuals with lower educational attainment to obtain certifications and education that will be necessary to advance a career in the field locally.

**St. Paul's East Side** not only has the most populated zip code of Ramsey County, account for 11% of county residents, but this community is also more demographically diverse than other subregions. Within St. Paul's East Side, 56.5% of the population are non-Hispanic people of color, plus 11.7% identify as Hispanic or Latinx.

This community's residents also have a lower level of educational attainment than other communities; 19.6% of St. Paul's East Side residents between ages 25 and 64 do not have a high school diploma, and only 15.3% hold a bachelor's degree as their highest level of educational attainment. Additionally, this community's residents have the largest percentage of residents that "speak English less than fluent" (21.8%). Regarding transportation, St. Paul's East Side has the longest mean commute time, in addition to having the second-lowest percentage of residents who commute via public transportation.

Industry vulnerability and occupational vulnerability are mixed. St. Paul's East Side has the second-lowest level of short-term industry vulnerability based on anticipated job loss due to COVID-19 (10% or 3,353 out of 32,787), the second-highest level of occupation vulnerability based on share of high contact intensity occupations (31%), and second highest level of immediate-term vulnerability based on share of top occupation related to Ramsey County UI Applicants (53.5%) among Ramsey County subregions. Regarding foundational skills, St. Paul's East Side Employers have the highest mentions Digital Building Block skills such as software development and analyzing data.

St. Paul's East Side residents' limited access to transportation point to a workforce strategy to connect residents to local employment opportunities. However, prospects for local employment may be challenging, considering St. Paul's East Side residents' lower levels and educational attainment and employers' demand for digital skills.

**St. Paul's West Side** has the largest Hispanic/Latinx population in Ramsey County, representing 18.3% of that community's population. Similar to St. Paul's East Side, St. Paul's West Side's industry vulnerability and occupational vulnerability are mixed. St. Paul's West Side's average annual projected job growth by training required is persistently smaller than the other regions across all education levels. Additionally, this community also has the second highest level of short-term industry vulnerability based on anticipated job loss due to COVID-19 (15% or 6,844 out of 47,024). However, St. Paul's West Side has the highest share of jobs that can become fully remote (16%). Slowed average annual projected job growth and high anticipated job loss due to COVID-19 suggest a possible business strategy to drive recovery.

**Suburban Ramsey** has a large business community. Over 40% or 7,160 businesses are in Suburban Ramsey County, and 42.9% of Ramsey County's total employment is concentrated in Suburban Ramsey County. The largest share of businesses in Ramsey County by zip code is 55113 (13% or 2260), which corresponds to the City of Roseville. 55113 also has the largest number of small businesses by Ramsey County zip code and second-largest number of female-owned businesses and businesses in Ramsey County (112 out of the 921). Regarding demographics, Suburban Ramsey counting has the highest percent of residents 65+ (15.8% or 57,081), who are often more vulnerable to the negative health impacts of COVID-19.

Suburban Ramsey County has the lowest level of occupational vulnerability among the five subregions, based on share of high contact intensity occupations (22%). However, this community has the highest share of non-remote jobs (60%) in Ramsey County. The zip codes with the highest share of non-remote work positions out of the total number of positions employing workers locally within

Ramsey County is 55127 and 55109, corresponding to Vadnais Heights and North Oaks (68%) and North St. Paul and Maplewood (68%), respectively.

## Conclusion

Despite the negative impacts of the pandemic on critical service industries in the MSP Metro, occupational demand is anticipated to grow in Ramsey County across Human Services, Health Science, and Education careers clusters. Rising skills in business process, communications, and collaboration indicate local businesses need people with broad abilities to work with the public and as a team across a variety of occupations and industries. Digging deeper into community and industry vulnerabilities by neighborhood reveals unique opportunities and challenge by subregion of Ramsey County.

This report has highlighted the most critical human skills, digital skills, and business enablers sought across Ramsey County, as well as the related skills-based career shifts for individuals in service industries who may have experienced layoffs or are still employed in occupations that are likely to have an excess of talent locally over the next five years. The communities across Ramsey County have unique and varied needs as diverse as the businesses and residents that live here. Truly inclusive and transformative recovery depends on mindful and human-centered solutions that recognize these differences and leverage community assets for sustainable change.