

REIMAGINING RAMSEY COUNTY

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.

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REIMAGINING RAMSEY COUNTY

Volume 3

Southern St. Paul

RealTime Talent

September 2020



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

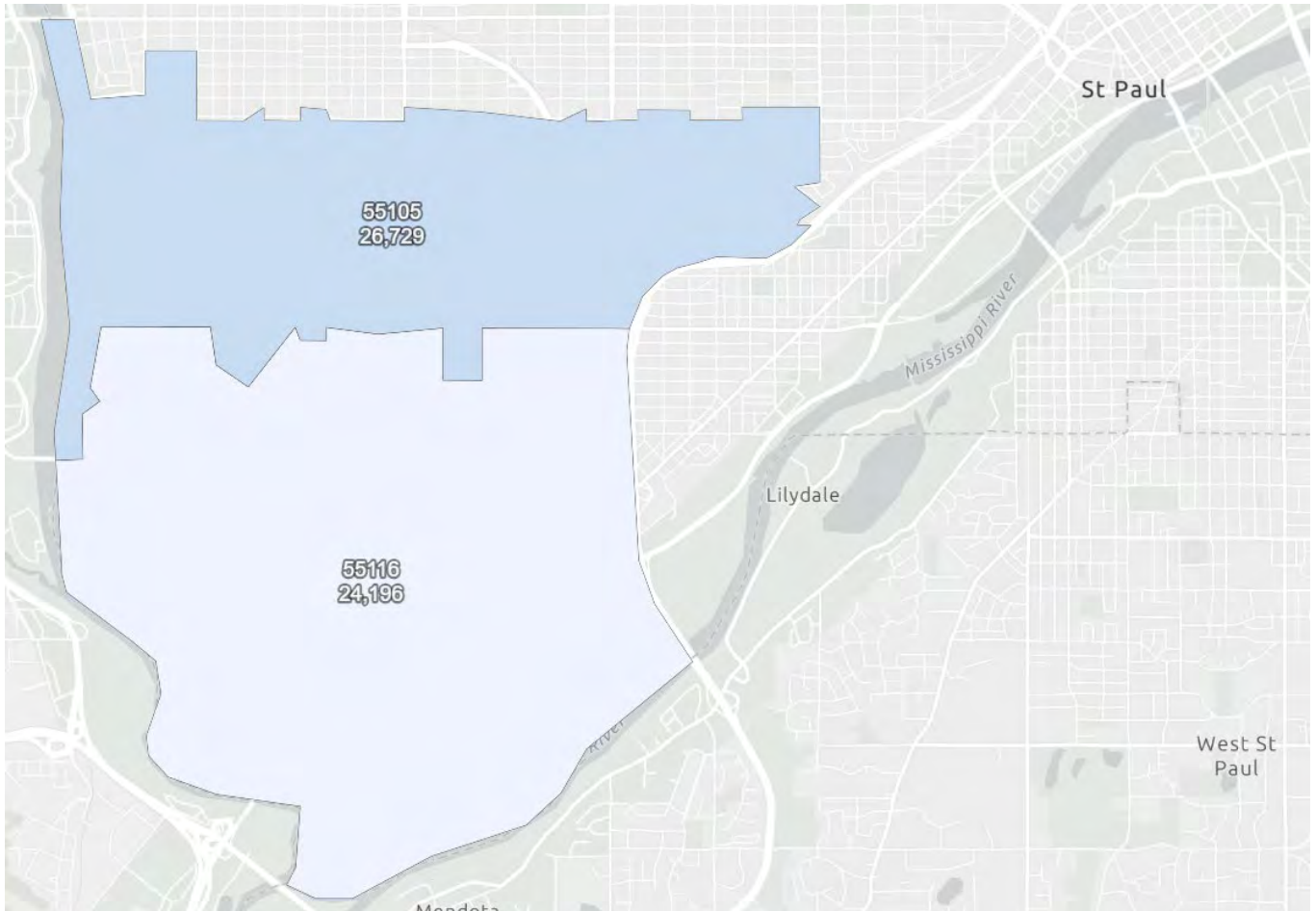


RAMSEY COUNTY
Workforce Solutions

Introduction

Southern St. Paul is a group of active and diverse neighborhoods nestled to the southwest direction from downtown St. Paul. Southern St. Paul is defined by zip codes 55105 and 55116 or the communities of Macalester-Groveland and Highland Park. By population, the largest number of people live in zip code 55105, which is the area east of the Mississippi River and west of 35E and south of Summit Avenue and north of Randolph Avenue. An estimated 1,565 businesses work out of Southern St. Paul.

Resident Population of Southern St. Paul

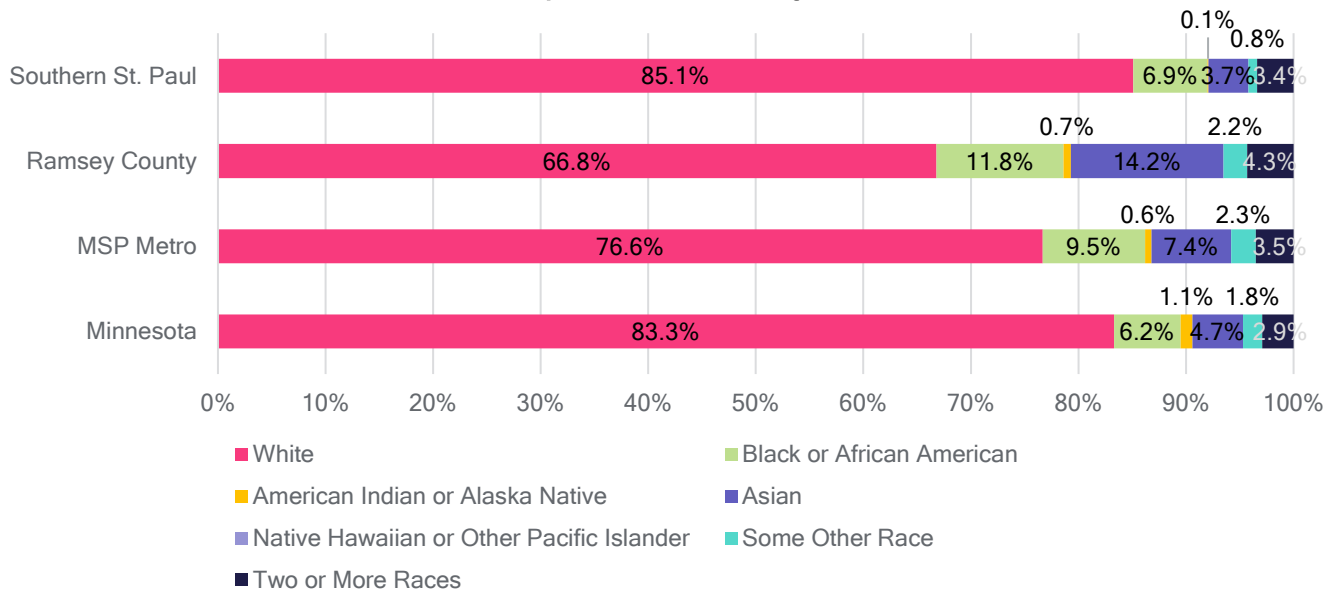


Community Profile

Demographics

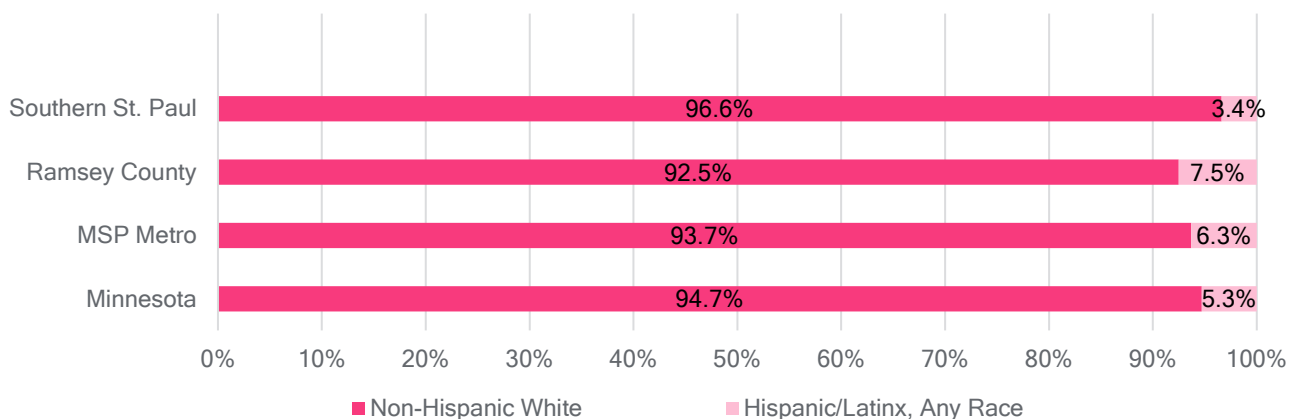
Southern St. Paul is less demographically diverse than Ramsey County overall; 14.9% of the population are non-Hispanic people of color, plus 3.4% identify as Hispanic or Latinx. The largest racial or ethnic group on Southern St. Paul after Non-Hispanic White is the Black or African American population, with 6.9% of residents of Southern St. Paul identifying as Black or African American compared to 11.8% in Ramsey County overall.

Population Race, All Ages



American Community Survey 2014-2018.

Population Ethnicity, All Ages



American Community Survey 2014-2018.

Community Demographics

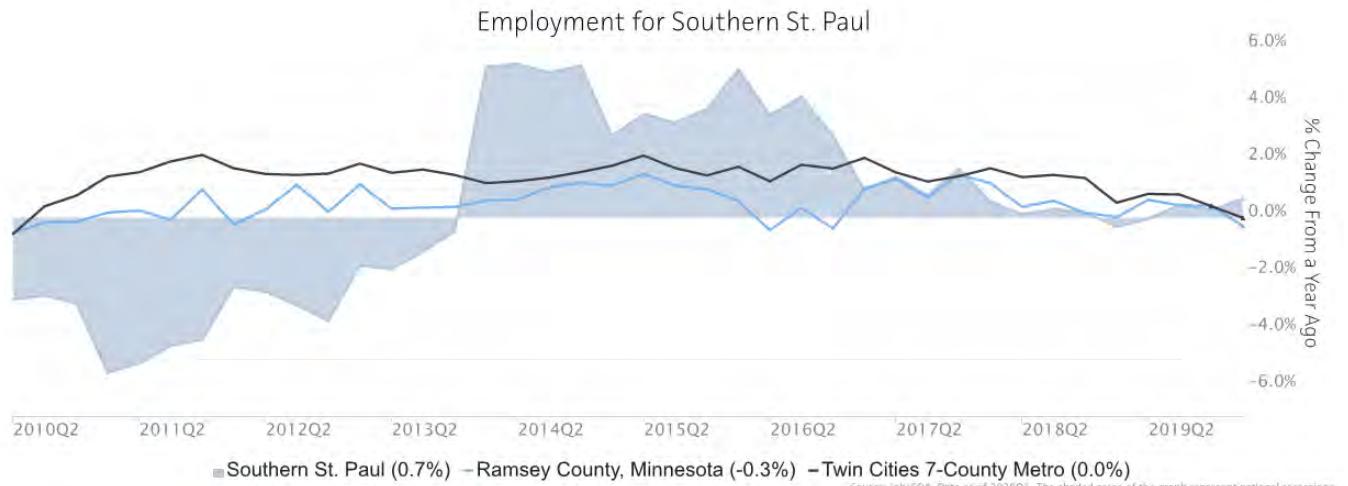
Demographics	Percent			Value		
	Southern St. Paul	Ramsey County, Minnesota	Twin Cities 7-County Metro	Southern St. Paul	Ramsey County, Minnesota	Twin Cities 7-County Metro
Population (ACS)	–	–	–	50,925	541,493	3,039,708
Male	47.3%	48.7%	49.4%	24,073	263,843	1,500,624
Female	52.7%	51.3%	50.6%	26,852	277,650	1,539,084
Median Age*	–	–	–	36.1	34.9	36.8
Under 18 Years	19.4%	23.4%	23.6%	9,889	126,490	717,668
18 to 24 Years	13.2%	10.2%	8.7%	6,708	55,420	263,378
25 to 34 Years	15.4%	16.6%	15.1%	7,862	89,740	459,585
35 to 44 Years	11.8%	12.0%	13.1%	6,019	65,173	399,319
45 to 54 Years	12.6%	11.8%	13.5%	6,392	63,728	410,408
55 to 64 Years	13.8%	12.3%	12.8%	7,011	66,694	390,595
65 to 74 Years	8.1%	7.8%	7.7%	4,122	42,271	234,633
75 Years, and Over	5.7%	5.9%	5.4%	2,922	31,977	164,122
Race: White	85.1%	66.8%	76.6%	43,360	361,501	2,328,568
Race: Black or African American	6.9%	11.8%	9.5%	3,494	63,724	288,828
Race: American Indian and Alaska Native	0.1%	0.7%	0.6%	71	3,723	18,437
Race: Asian	3.7%	14.2%	7.4%	1,868	77,156	225,056
Race: Native Hawaiian and Other Pacific Islander	0.0%	0.0%	0.0%	0	192	1,157
Race: Some Other Race	0.8%	2.2%	2.3%	422	12,028	70,602
Race: Two or More Races	3.4%	4.3%	3.5%	1,710	23,169	107,060
Hispanic or Latino (of any race)	3.4%	7.5%	6.3%	1,712	40,569	192,028

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.

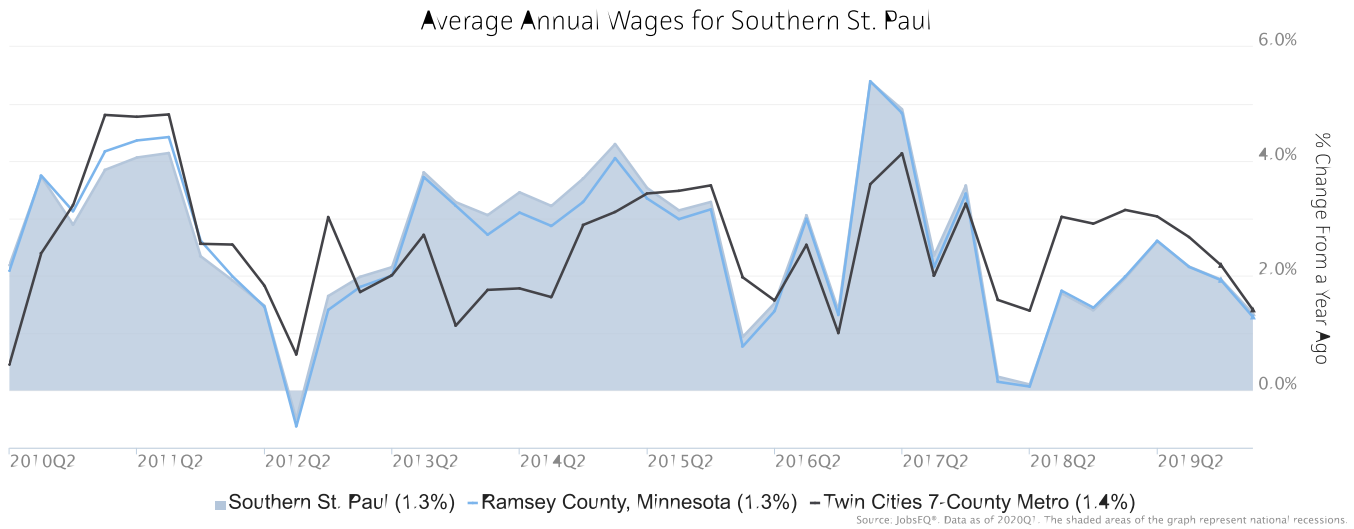
Employment

As of 2020Q1, total employment for the Southern St. Paul was 22,877 (based on a four-quarter moving average). Over the year ending 2020Q1, employment increased 0.7% in the region.

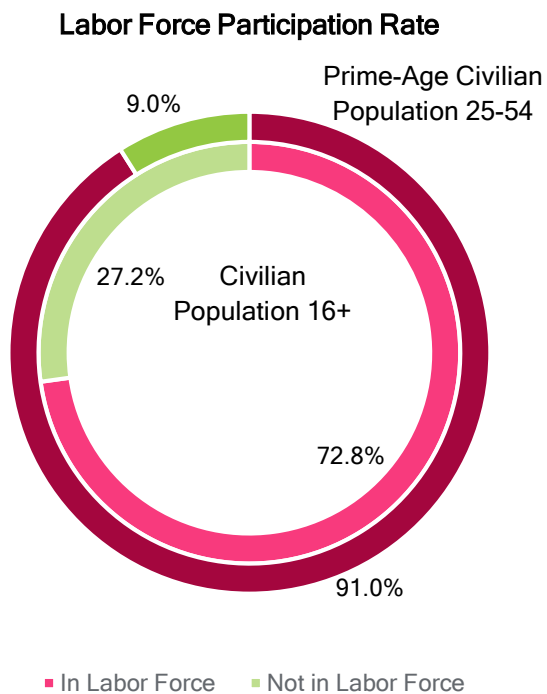


Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2019Q3 with preliminary estimates updated to 2020Q1.

The average worker in the Southern St. Paul earned annual wages of \$62,174 as of 2020Q1. Average annual wages per worker increased 1.3% in the region over the preceding four quarters. For comparison purposes, annual average wages were \$57,624 in the nation as of 2020Q1.



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 2019Q3 with preliminary estimates updated to 2020Q1.



Residents of Southern St. Paul have a higher labor force participation rate than in Ramsey County overall (Ramsey County Labor Force Participation is 86% for prime working age and 69% for all). Perhaps this is in part due to this neighborhood having a fewer number of single parent households (1,662 or 17.0% of households) and residents with disabilities (2,110 or 6.2% of residents) than seen in other communities in the MSP Metro. It may also be that this community has fewer residents that may be ineligible to work, as only 9.3% of Southern St. Paul residents are foreign born. This community has a lower proportion of uninsured residents (2.4%), households receiving food stamps (4.6%), and disconnected youth (1.6%) compared to other communities of Ramsey County. All disconnected youth in this population are in zip code 55116 (7.6%), which corresponds with the Highland Park neighborhood. This is also the zip code in this community with the largest share of adults between the ages of 25 and 64 without a high

school diploma or GED (4.6%) and the largest share of residents who commute to work or school by public transportation (9.5%).

Economic and Social Characteristics of Southern St. Paul

Economic and Social Characteristics	Percent			Values		
	Southern St. Paul	Ramsey County, Minnesota	7-County MSP Metro	Southern St. Paul	Ramsey County, Minnesota	7-County MSP Metro
Labor Force Participation Rate and Size (civilian population 16 years and over)	72.8%	69.0%	72.1%	30,504	295,458	1,730,688
Prime-Age Labor Force Participation Rate and Size (civilian population 25-54)	91.0%	86.0%	88.7%	18,458	187,867	1,125,534
Armed Forces Labor Force	0.0%	0.0%	0.1%	0	214	1,274
Veterans, Age 18-64	1.8%	2.9%	3.5%	627	9,950	67,574
Veterans Labor Force Participation Rate and Size, Age 18-64	78.0%	75.8%	81.5%	489	7,538	55,073
Median Household Income*	–	–	–	\$78,408	\$62,304	\$77,034
Per Capita Income	–	–	–	\$50,584	\$34,049	\$40,637
Poverty Level (of all people)	8.4%	14.7%	9.4%	4,049	77,330	282,384
Households Receiving Food Stamps/SNAP	4.6%	12.8%	8.2%	1,006	26,850	96,883
Enrolled in Grade 12 (% of total population)	0.8%	1.4%	1.5%	430	7,827	46,253
Disconnected Youth**	1.6%	2.1%	1.5%	54	597	2,270
Children in Single Parent Families (% of all children)	17.0%	35.8%	27.9%	1,662	43,659	193,871
Uninsured	2.4%	5.5%	4.6%	1,212	29,542	139,536
With a Disability, Age 18-64	6.2%	10.0%	8.0%	2,110	33,948	152,512
With a Disability, Age 18-64, Labor Force Participation Rate and Size	53.6%	47.0%	53.4%	1,131	15,945	81,517
Foreign Born	9.3%	15.6%	12.0%	4,753	84,379	363,294

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.

Education



97.3% of prime working age adult residents have at least a high school diploma or GED.

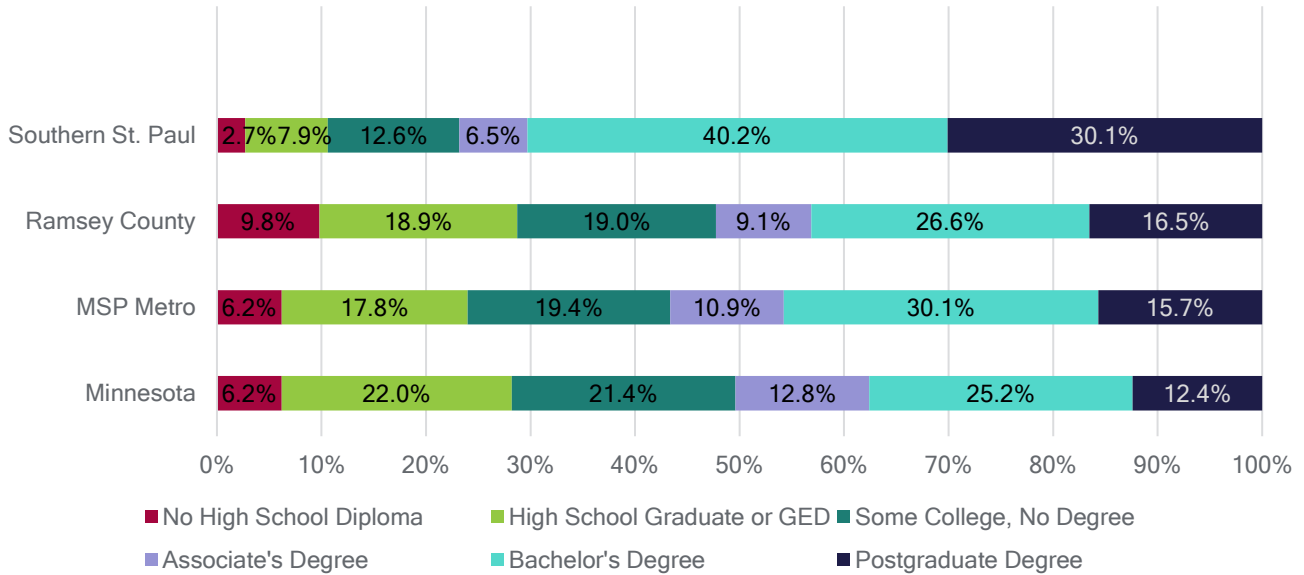
The residents of Southern St. Paul have a higher level of educational attainment overall in comparison to Ramsey County as a whole and the 7-County MSP Metro. According to the most recent American Community Survey estimates, only 2.7% of Southern St. Paul residents between ages 25 and 64 do not have a high school diploma, and 40.2% hold a Bachelor's Degree as their highest level of educational attainment.

Educational Characteristics of Southern St. Paul

Educational Characteristics	Percent			Values		
	Southern St. Paul	Ramsey County, Minnesota	7-County MSP Metro	Southern St. Paul	Ramsey County, Minnesota	7-County MSP Metro
No High School Diploma	2.7%	9.8%	6.2%	740	28,060	103,067
High School Graduate	7.9%	18.9%	17.8%	2,166	54,037	295,274
Some College, No Degree	12.6%	19.0%	19.4%	3,427	54,211	321,288
Associate's Degree	6.5%	9.1%	10.9%	1,763	25,991	180,284
Bachelor's Degree	40.2%	26.6%	30.1%	10,976	75,814	499,663
Postgraduate Degree	30.1%	16.5%	15.7%	8,212	47,222	260,331

American Community Survey 2014-2018 unless noted otherwise.

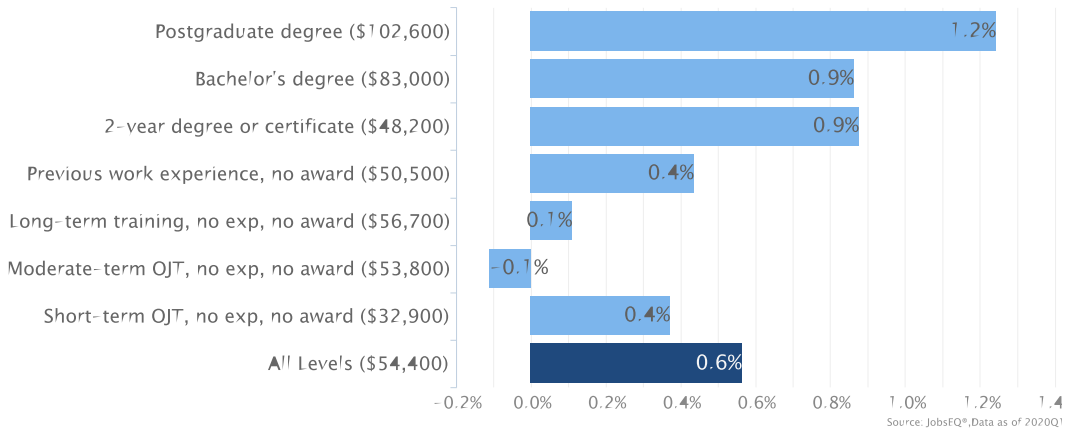
Educational Attainment, Age 25-64



American Community Survey 2014-2018.

Expected growth rates for occupations vary by the education and training required. While all employment in the Southern St. Paul is projected to grow 0.6% over the next ten years, occupations typically requiring a postgraduate degree are expected to grow 1.2% per year, those requiring a bachelor’s degree are forecast to grow 0.9% per year, and occupations typically needing a 2-year degree or certificate are expected to grow 0.9% per year.

Annual Average Projected Job Growth by Training Required for Southern St. Paul



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.

Transportation



2,403 residents
Commute via public transit (8.3%)

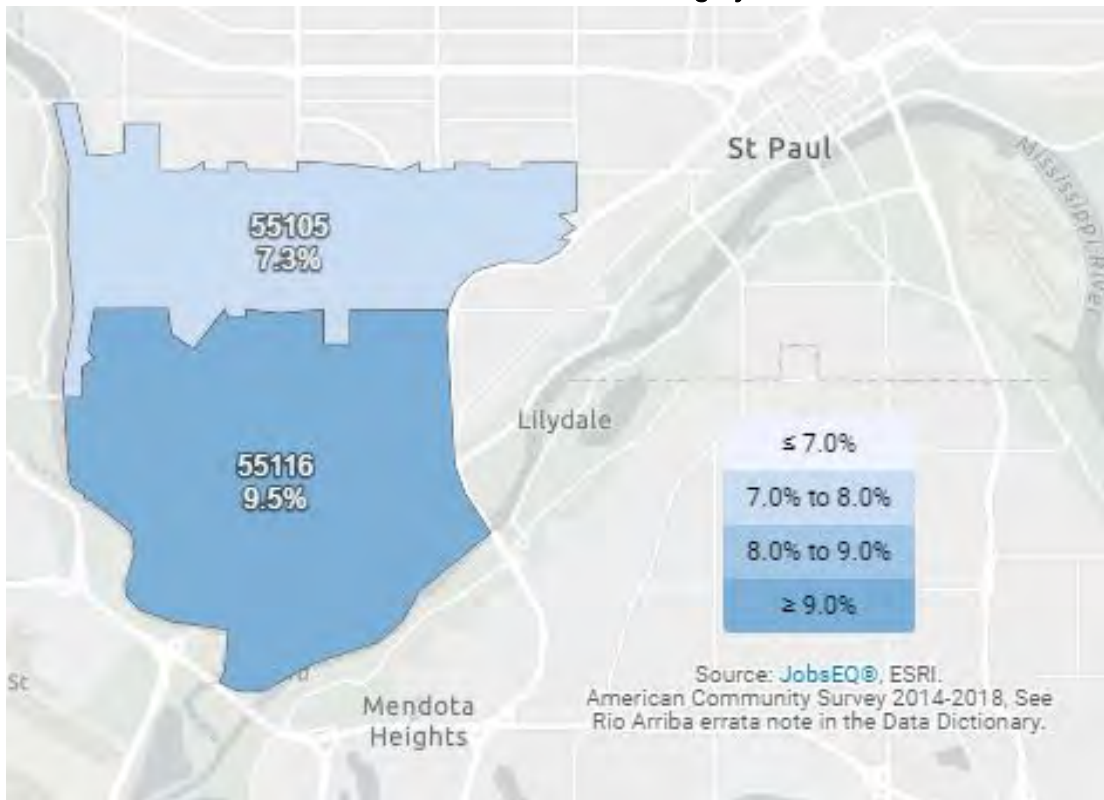
22.7 Minute



Mean Commute Time

1,733 Residences have no vehicle available
(8.0% of all occupied residences)

Southern St. Paul Residents Commuting by Public Transit



Transportation Characteristics of Southern St. Paul

Transportation Characteristics	Percent			Values		
	Southern St. Paul	Ramsey County, Minnesota	7-County MSP Metro	Southern St. Paul	Ramsey County, Minnesota	7-County MSP Metro
Mean Commute Time (minutes)	–	–	–	22.7	23.9	24.7
Commute via Public Transportation	8.3%	6.7%	5.3%	2,403	18,565	87,307
Occupied Housing Units with No Vehicle Available (% of Occupied Units)	8.0%	10.5%	7.8%	1,733	21,937	91,325

American Community Survey 2014-2018 unless noted otherwise.

Language



5.2% of residents over age 5 speak English less than “very well” (a total of 2,486 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 Southern St. Paul

Language Characteristics	Percent			Values		
	Southern St. Paul	Ramsey County, Minnesota	7-County MSP Metro	Southern St. Paul	Ramsey County, Minnesota	7-County MSP Metro
Speak English Less Than Very Well (population 5 yrs and over)	5.2%	10.8%	6.6%	2,486	54,243	187,303

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%
Total:	468,656	

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 Internet¹



5% to 19% of households in each census tract have no access to the internet.

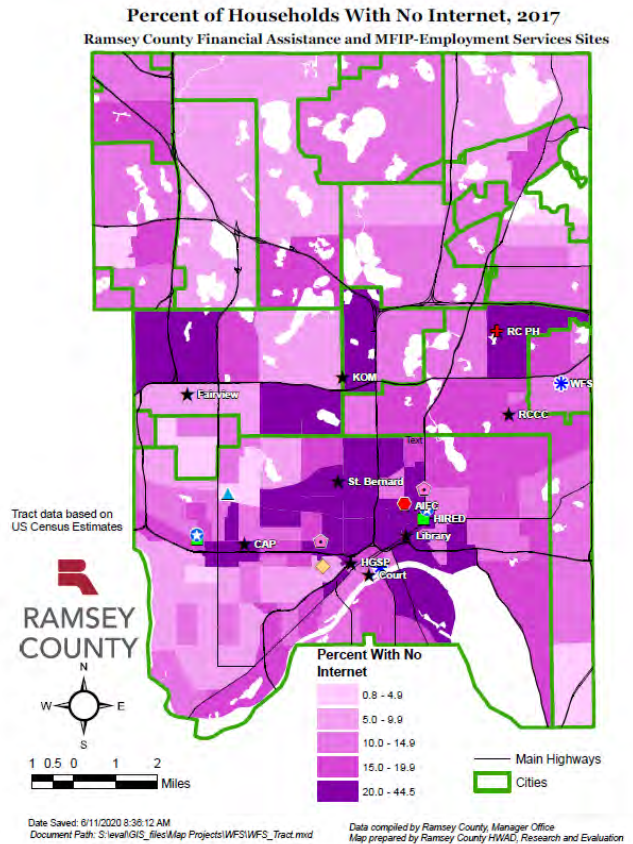
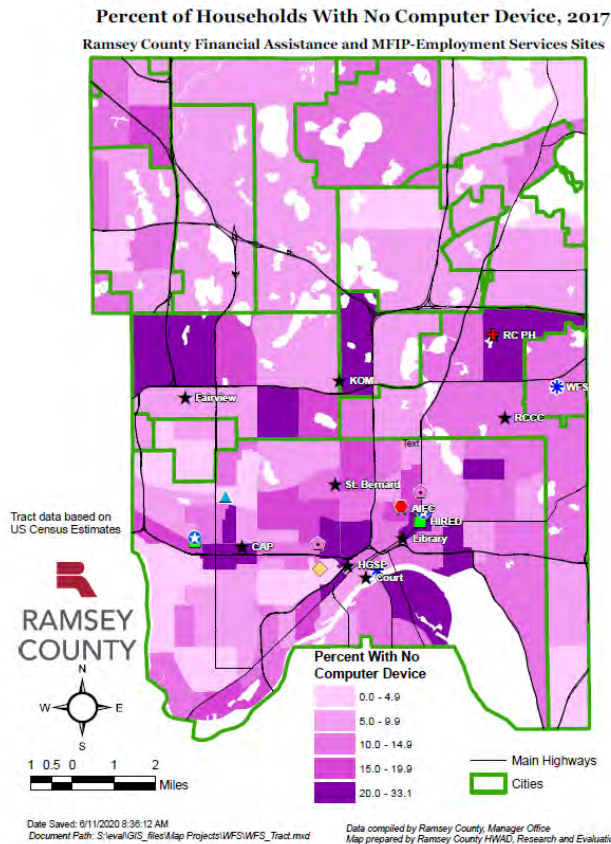
American Community Survey, 2017.

Access to Technology



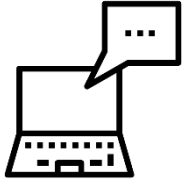
0% to 16% of households in each census tract have no access to a computer device.

American Community Survey, 2017.



¹ Census tracts allocated to Southern St. Paul have 50% or more of their geographic area within zip codes 55105 and 55116.

Digital Skills



Northstar 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 sites² 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.³ The most frequent assessments administered in Ramsey

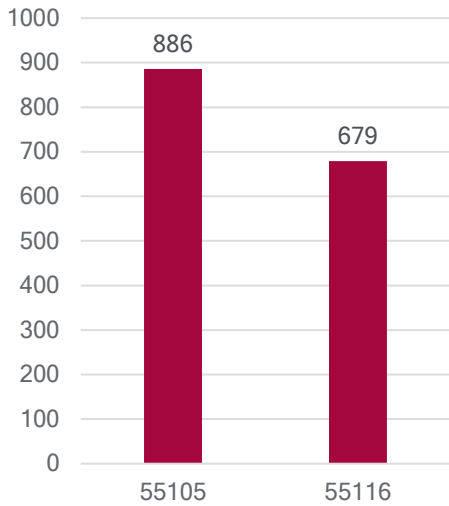
County in 2019 were Basic Computer Skills (23%), Internet Basics (15%), and Word 2016 (14%). No Northstar Digital Literacy testing sites are found in Southern St. Paul.

² 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/>. 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.

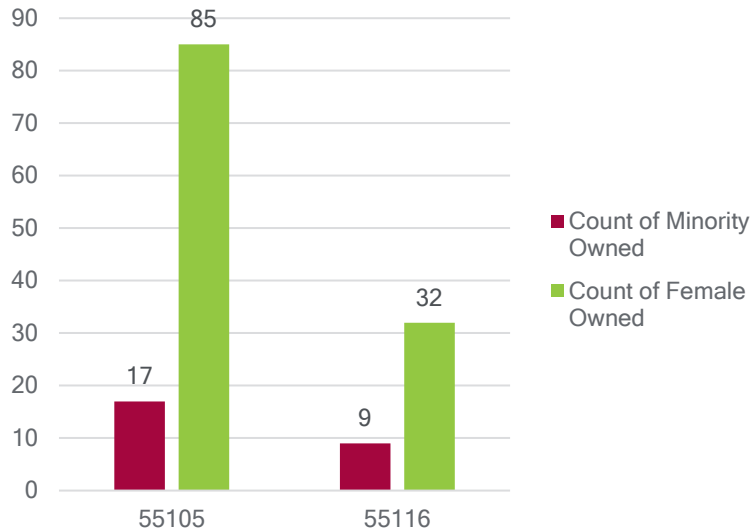
Businesses

According to DatabaseUSA, there are about 1,565 businesses located in Southern St. Paul. Over half (886 businesses) are located in zip code 55105. Of all Southern St. Paul businesses, just 117 are confirmed to be female-owned, and 26 are confirmed to be “minority-owned.”

Businesses in Southern St. Paul

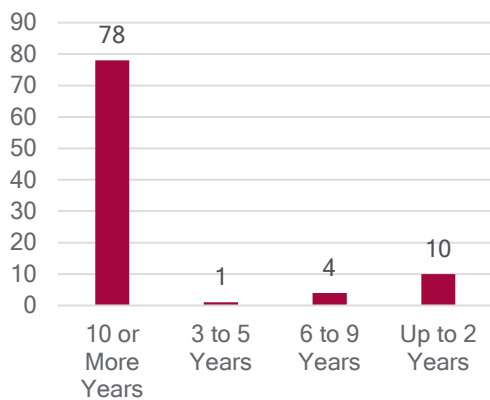


Female & Minority-Owned Businesses in Southern St. Paul

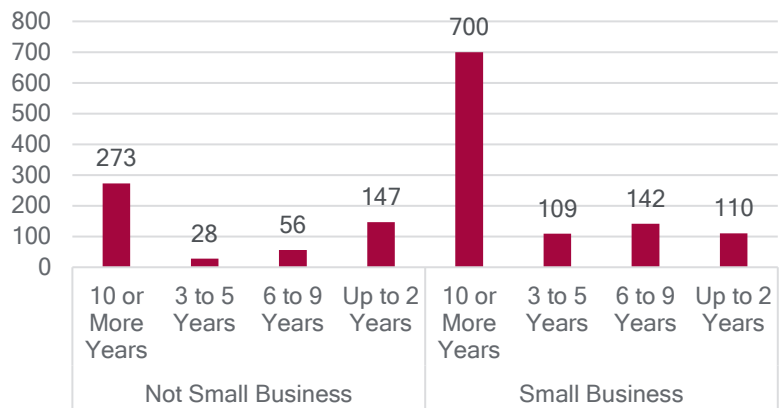


Among the 93 local non-profit organizations, the vast majority have been in existence for ten or more years, with very few young organizations in the community. The majority of for-profit businesses in the area are small businesses.

Non-Profits in Southern St. Paul



Businesses by Size in Southern St. Paul



Workforce Impacts of COVID-19

Community Vulnerability

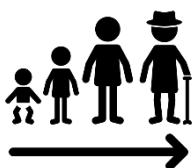
Because COVID-19 is a new disease, more work is needed to better understand the risk factors for severe illness or complications. Potential risk factors that have been identified by the Center for Disease Control (CDC) to date include:

- 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 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.

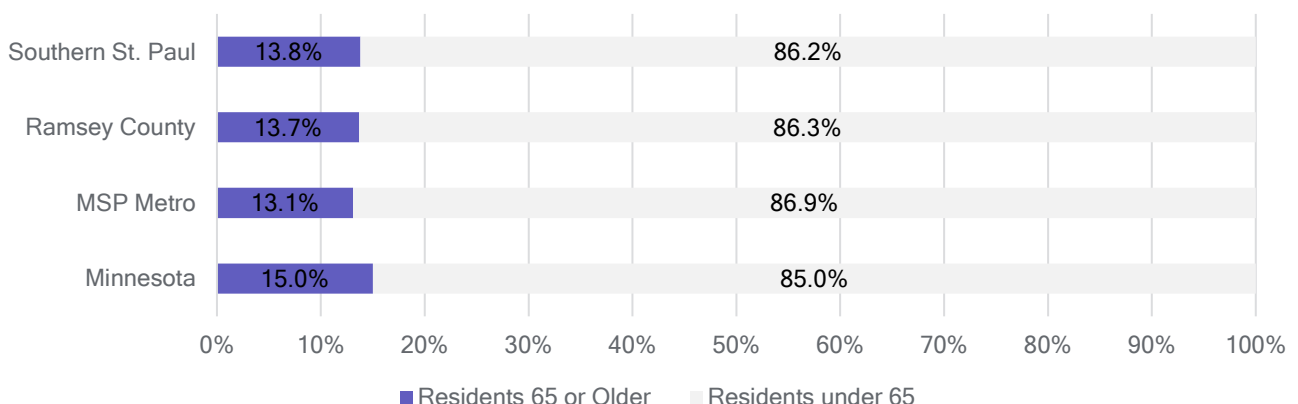
Southern St. Paul represents a diversity of income and population. This report shows an overall picture of low community vulnerable; however, there are communities within Southern St. Paul that are highly vulnerable.

AGE



Southern St. Paul has an **EQUAL** share of residents 65 or older (13.8% of residents).

Residents 65+



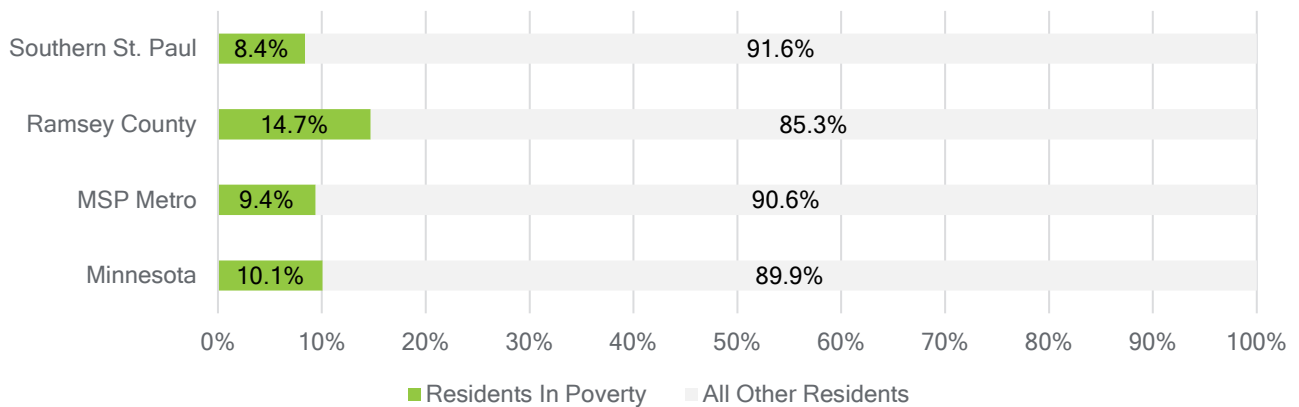
POVERTY



Southern St. Paul has a **LOWER** share of residents living in poverty (8.4%).

The per-capita income of residents of Southern St. Paul is \$50,584, which is just over \$16,535 higher than the per-capita income of Ramsey County residents overall (\$34,049). About one in twelve (8.4%) Southern St. Paul residents lives in poverty, and about one in twenty-one (4.6%) of households receive food stamps, Compared to 14.7% and 12.8% across Ramsey County, respectively.

Residents in Poverty



American Community Survey 2014-2018.

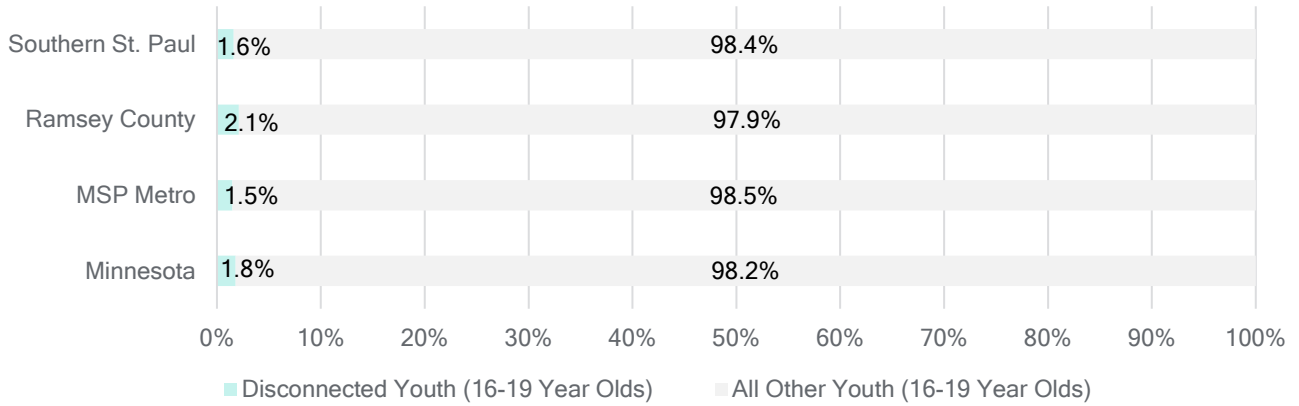
DISCONNECTED YOUTH



Southern St. Paul has a **LOWER** share of disconnected youth (1.6%).

Southern St. Paul has about 54 disconnected youth, which is about 1.6% of the total population of people between the ages of 16 and 19; all 54 disconnected youth are in zip code 55116, which corresponds with the Highland Park neighborhood. These youth are not in school, not high school graduates, and are either unemployed or not in the labor force. Southern St. Paul's disconnected youth represent about 1% of all disconnected youth in the state (5,025 total statewide).

Disconnected Youth



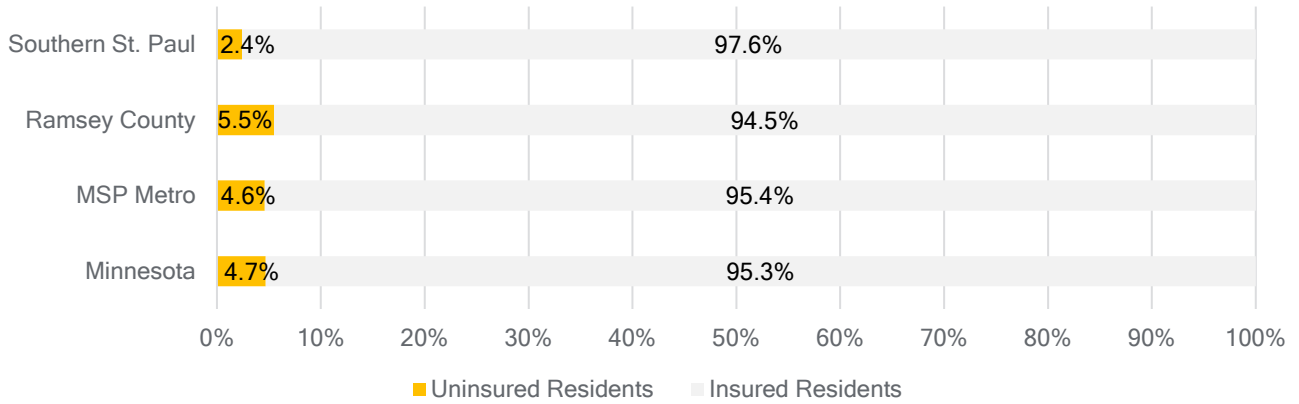
American Community Survey 2014-2018.

UNINSURED



Southern St. Paul has a **LOWER** share of residents without health insurance (2.4%).

Uninsured Residents



American Community Survey 2014-2018.

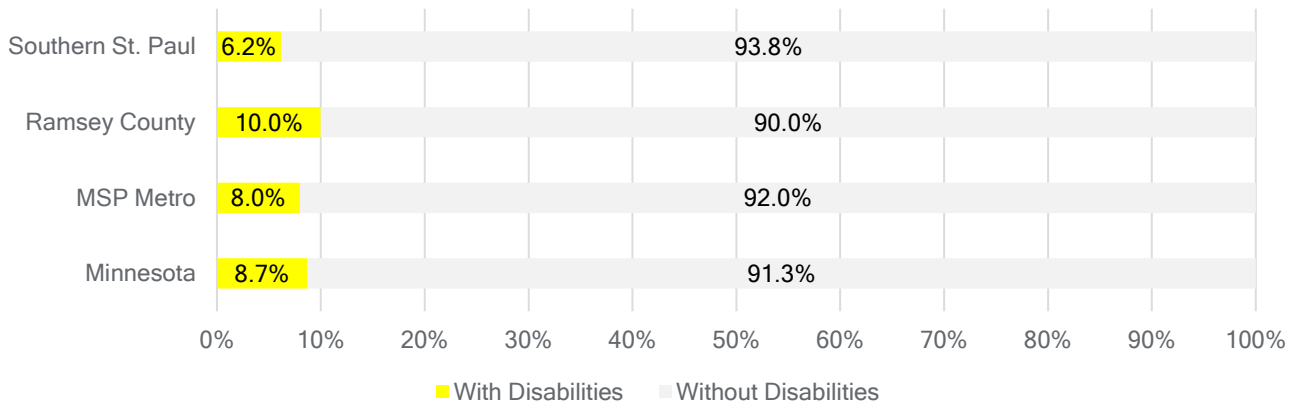
DISABILITY



Southern St. Paul has a **LOWER** share of residents with disabilities (6.2%).

Southern St. Paul has a smaller share of prime working age adults with disabilities, with about 2,110 adults (6.2%) having some form of disability. Of these, 53.6% participate in the labor force (1,131 total working or seeking work), compared to 52.5% statewide.

Residents with Disabilities, Ages 18-64



American Community Survey 2014-2018.

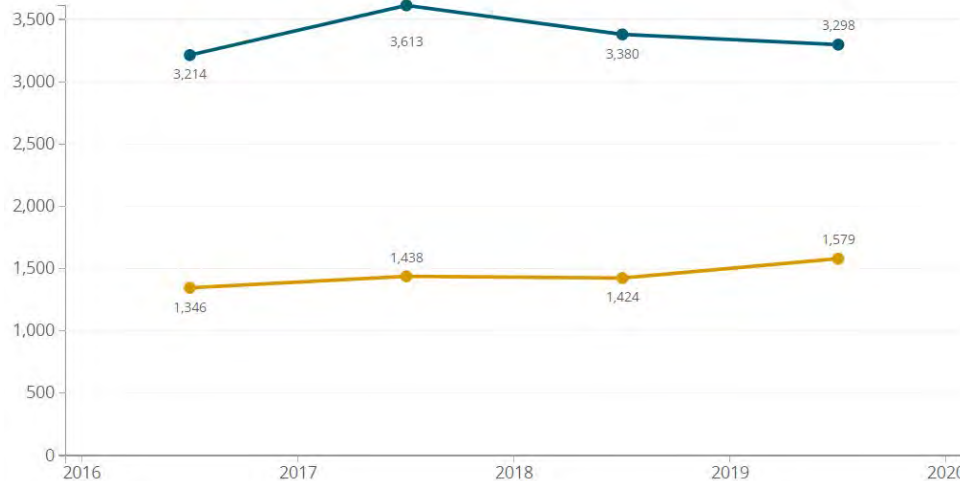
HOMELESSNESS



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.⁴ 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.

⁴ Chmura Economics, April 2020. <http://www.chmuraecon.com/interactive/covid-19-economic-vulnerability-index/>

An estimated 17% of local occupations by industry on Southern St. Paul are vulnerable to the immediate-term impacts of COVID-19.

Short-Term Industry Vulnerability to COVID-19 Pandemic, Southern St. Paul

Industry	Anticipated Short-Term Job Loss from COVID-19	Total Local Employment	Total Vulnerable Jobs
Accommodation and Food Services	60%	3,248	1,949
Arts, Entertainment, and Recreation	60%	356	214
Other Services (except Public Administration)	15%	1,714	257
Transportation and Warehousing	10%	139	14
Retail Trade	20%	3,469	694
Wholesale Trade	20%	1,148	230
Information	15%	125	19
Manufacturing	7%	389	27
Construction	7%	278	19
Mining, Quarrying, and Oil and Gas Extraction	5%	0	-
Real Estate and Rental and Leasing	5%	677	34
Health Care and Social Assistance	5%	3,789	189
Finance and Insurance	5%	444	22
Educational Services	5%	5,967	298
Administrative and Support and Waste Management and Remediation Services	2%	270	5
Agriculture, Forestry, Fishing and Hunting	2%	6	0
Public Administration	1%	17	0
Professional, Scientific, and Technical Services	1%	695	7
Management of Companies and Enterprises	1%	146	1
Utilities	1%	-	-
Total Jobs	17%	22,877	3,980

Economic Vulnerability Index model from Chmura Economics & Analytics

Occupational Vulnerability

Research by Dingel and Neiman⁵ and by Leibovici, Santacreu, and Famiglietti⁶ 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 Southern St. Paul, 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,

⁵ Dingel, C. L., and B. Neiman (2020): "How Many Jobs Can be Done at Home?" *NBER Working Paper No. 26948*.

⁶ 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.>

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.

Southern St. Paul has a larger share of high contact-intensity positions than Minnesota overall, with about 33% 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. Of these, the healthcare positions are expecting the greatest volume in annual growth over the next five years. In all, about 38% 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 Southern St. Paul. Across Ramsey County, these high contact-intensity roles pay an average \$51,300 per year compared to just \$46,900 for jobs located in Southern St. Paul.

Summary Statistics of High Contact-Intensity Positions in Southern St. Paul, 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	0	26	1	5	6	36	11	12	\$55,000
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	90.3	0	1,409	47	314	362	1,882	685	686	\$31,300
35-1000	Supervisors of Food Preparation and Serving Workers	88.0	1	266	1	52	54	280	129	123	\$42,800
29-1000	Healthcare Diagnosing or Treating Practitioners	86.2	(9)	818	15	65	80	969	138	182	\$113,000
39-1000	Supervisors of Personal Care and Service Workers	84.5	0	58	0	8	9	62	19	21	\$45,200
29-2000	Health Technologists and Technicians	82.7	(4)	424	6	48	53	481	105	124	\$52,600
31-9000	Other Healthcare Support Occupations	80.2	(1)	232	3	41	44	264	90	96	\$46,900
25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	79.5	(4)	874	9	101	110	964	251	270	\$65,400
25-3000	Other Teachers and Instructors	79.0	(1)	539	6	98	104	603	210	216	\$44,600
53-3000	Motor Vehicle Operators	75.6	1	442	-1	70	69	429	167	164	\$46,100
39-9000	Other Personal Care and Service Workers	75.5	4	442	2	100	103	465	237	220	\$34,600
35-3000	Food and Beverage Serving Workers	75.2	30	1,978	12	526	538	2,098	1,254	1,102	\$28,000
All High Contact-Intensity Occupations				7,508	101	1,428	1,532	8,533	3,296	3,216	\$46,900
Total - All Occupations				22,879	129	3,933	4,063	24,203	9,369	9,096	\$59,800
Share High Contact-Intensity				33%	MOD	36%	38%	35%	35%	35%	

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 Southern St. Paul and experiencing higher than average growth demand. Average wages for these roles are \$113,000 in these neighborhoods 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.

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.”⁷

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 large volumes in Southern St. Paul, representing about 17% of all local jobs together.

⁷ Ibid.

Unemployment Insurance Applicants by Top 20 Occupations Requesting Insurance in Ramsey County from March 16, 2020 - July 25, 2020, with Southern St. Paul Employment

Occupation Group	Unempl. Insurance Applicants in Ramsey County	% of Total Applicants in Ramsey County	2020Q1 Employment in Southern St. Paul	% of Total in Southern St. Paul*
Food and Beverage Serving Workers	6,235	7.90%	1,978	8.6%
Retail Sales Workers	5,875	7.50%	1,830	8.0%
Cooks and Food Preparation Workers	3,589	4.60%	747	3.3%
Motor Vehicle Operators	3,496	4.40%	442	1.9%
Construction Trades Workers	3,240	4.10%	205	0.9%
Other Healthcare Support Occupations	3,196	4.10%	232	1.0%
Information and Record Clerks	2,961	3.80%	632	2.8%
Other Food Preparation and Serving Related Workers	2,704	3.40%	317	1.4%
Other Production Occupations	2,624	3.30%	116	0.5%
Health Diagnosing and Treating Practitioners	2,512	3.20%	818	3.6%
Personal Appearance Workers	1,959	2.50%	314	1.4%
Nursing, Psychiatric, and Home Health Aides	1,844	2.30%	1,409	6.2%
Other Office and Administrative Support Workers	1,694	2.20%	547	2.4%
Building Cleaning and Pest Control Workers	1,588	2.00%	434	1.9%
Health Technologists and Technicians	1,555	2.00%	424	1.9%
Other Education, Training, and Library Occupations	1,547	2.00%	524	2.3%
Other Personal Care and Service Workers	1,537	2.00%	442	1.9%
Other Management Occupations	1,483	1.90%	650	2.8%
Preschool, Primary, Secondary, and Special Education	1,207	1.50%	874	3.8%
Computer Occupations	1,187	1.50%	378	1.7%
Total	52,033		22,877	

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

By demographic, St. Paul Residents between the ages of 20 and 24 years 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 Southern St. Paul, there is a greater share of people under the age of 34 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 and in St. Paul. Similarly, Southern St. Paul has a higher concentration of local workers who have low educational experience in high contact-intensity occupations. By sex, females have applied for unemployment insurance at higher rates in St. Paul than males. Not only do females comprise a larger share of Southern St. Paul's workforce, but they also represent a larger share of high contact-intensity occupation roles. Asian and Black/African American workers in St. Paul have also applied for unemployment insurance at higher rates than would be expected by their local employment rate. In Southern St. Paul, there are higher numbers of Black/African American workers in high contact-intensity occupations than expected by their local employment rate.

Unemployment Insurance Applicant Demographics from March 16 - July 25, 2020 in Ramsey County and St. Paul, With Southern St. Paul Employment in High Contact-Intensity Occupations

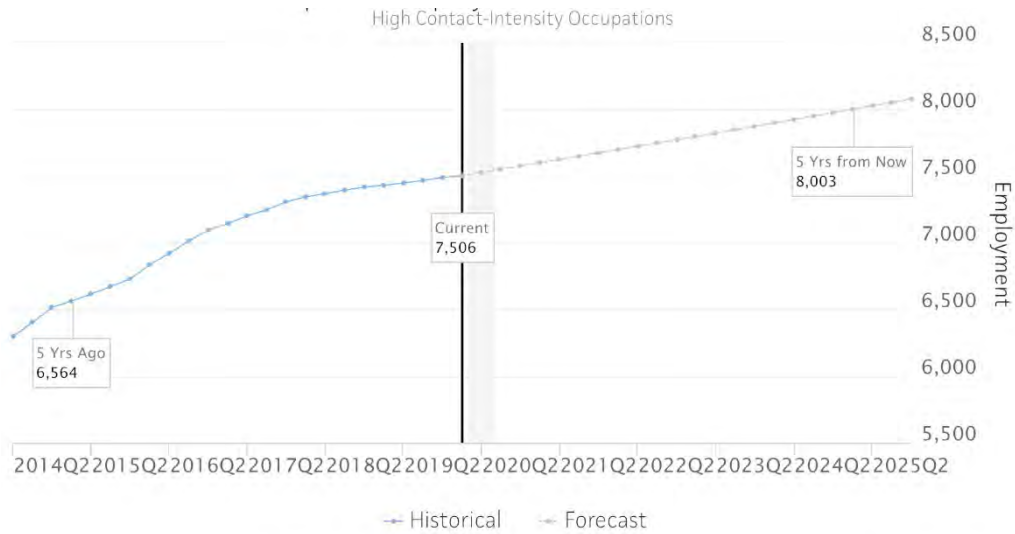
	Ramsey County		St. Paul			Difference (> 0 Indicates Higher Than Expected UI App by Group)	Southern St. Paul	
	Ramsey County Workers Filing for Unemployment between March 15 and July 25, 2020	Percent of Total in Ramsey County Filing for Unemployment	St. Paul Workers Filing for Unemployment between March 15 and July 25, 2020	Percent of Total in St. Paul Filing for Unemployment	Share of Total 2020Q1 St. Paul Employment		Share of 2020Q1 Workers in Southern St. Paul	Employment in High Contact-Intensity Occupations in Southern St. Paul **
Age Group								
65+	4,602	5.10%	3,308	4.4%	4.1%	1.5%	5.2%	4.8%
55-64	11,603	12.90%	8,533	11.3%	14.3%	-0.7%	17.4%	15.9%
45-54	13,117	14.60%	10,113	13.3%	17.1%	-2.6%	18.6%	17.5%
35-44	18,656	20.80%	15,066	19.9%	19.2%	0.8%	18.4%	18.1%
25-34	26,620	29.60%	23,248	30.7%	28.7%	0.4%	24.1%	24.2%
20-24	12,682	14.10%	13,322	17.6%	12.4%	3.9%	11.2%	12.2%
16-19	2,639	2.90%	2,179	2.9%	4.2%	-3.1%	5.1%	7.4%
Education Level								
Advanced	6,224	6.9%	4,924	6.5%	16.8%	-10.3%	28.6%	31.0%
4-year degree	17,608	19.6%	14,839	19.6%	28.4%	-8.8%	36.8%	30.1%
2-year degree	7,513	8.4%	5,834	7.7%	9.7%	-2.0%	8.2%	9.9%
Some college	23,239	25.8%	20,123	26.6%	16.7%	9.9%	12.3%	12.1%
HS	28,689	31.9%	24,079	31.8%	20.3%	11.5%	11.1%	12.6%
Less than HS	6,646	7.4%	5,970	7.9%	8.1%	-0.2%	3.1%	4.2%
Gender								
Female	46,363	51.60%	38,676	51.0%	49.7%	1.3%	52.3%	69.3%
Male	43,555	48.40%	37,092	49.0%	50.3%	-1.3%	47.7%	30.7%
Race and Ethnicity								
Choose not to answer	N/A*	N/A	3,936	5.2%				
More than one race	N/A	N/A	2,787	3.9%	3.4%	0.5%	2.1%	2.1%
Native Hawaiian or Pacific Islander	N/A	N/A	119	0.2%	0.0%	0.2%	0.0%	0.0%
American Indian Alaska Native	595	0.70%	534	0.7%	0.7%	0.0%	0.1%	0.1%
Hispanic	45,825	6.70%	5,840	8.1%	8.3%	-0.2%	3.4%	3.3%
Asian	13,295	14.80%	11,037	15.4%	14.7%	0.7%	3.5%	3.2%
Black	16,436	18.30%	15,426	21.5%	12.9%	8.6%	7.6%	9.2%
Non-Hispanic White	45,825	51%	36,090	50.2%	60.3%	-10.1%	86.6%	85.4%
Total UI Applications	89,919		75,769					

*Race percent are of those who indicated a race/ethnicity. Some race data was not available online at the county level through the UI Applicant Data Tool.

**Fields marked in orange are found in greater concentration on Southern St. Paul than in St. Paul broadly.

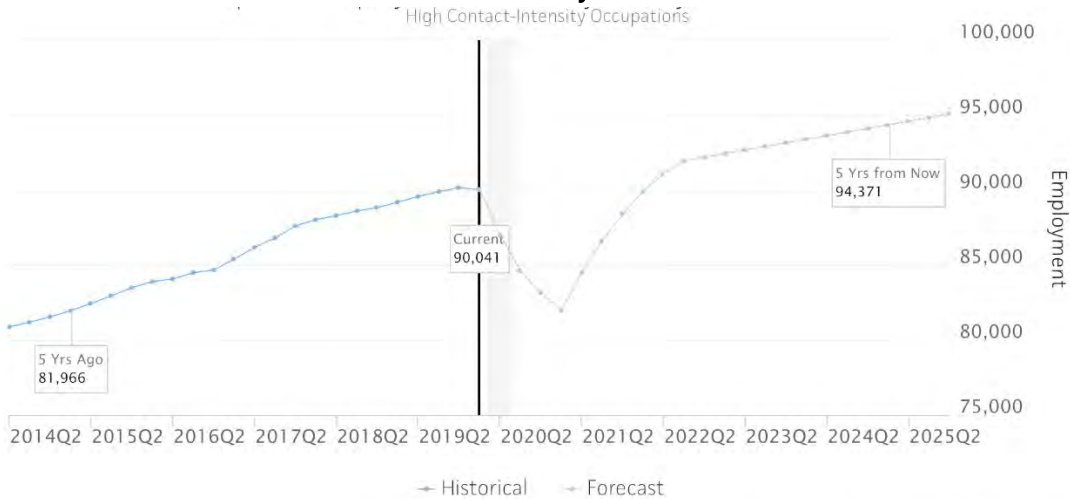
Overall, impacts of COVID-19 have been expected to be sharp and short, with an eventual return to the forecasted trends anticipated prior to the impact of the virus. Across Ramsey County, it is anticipated that from the 90,041 people employed locally in high contact-intensity roles during the fourth 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 prior to the pandemic. These occupations listed in the table above were 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, but an estimated drop from 0.6% growth formerly forecast for Southern St. Paul's high contact-intensity roles down to about 0.55% growth overall in these positions is a reasonable estimated impact.

Baseline High Contact-Intensity Occupation Employment 5-Year Forecast in Southern St. Paul



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

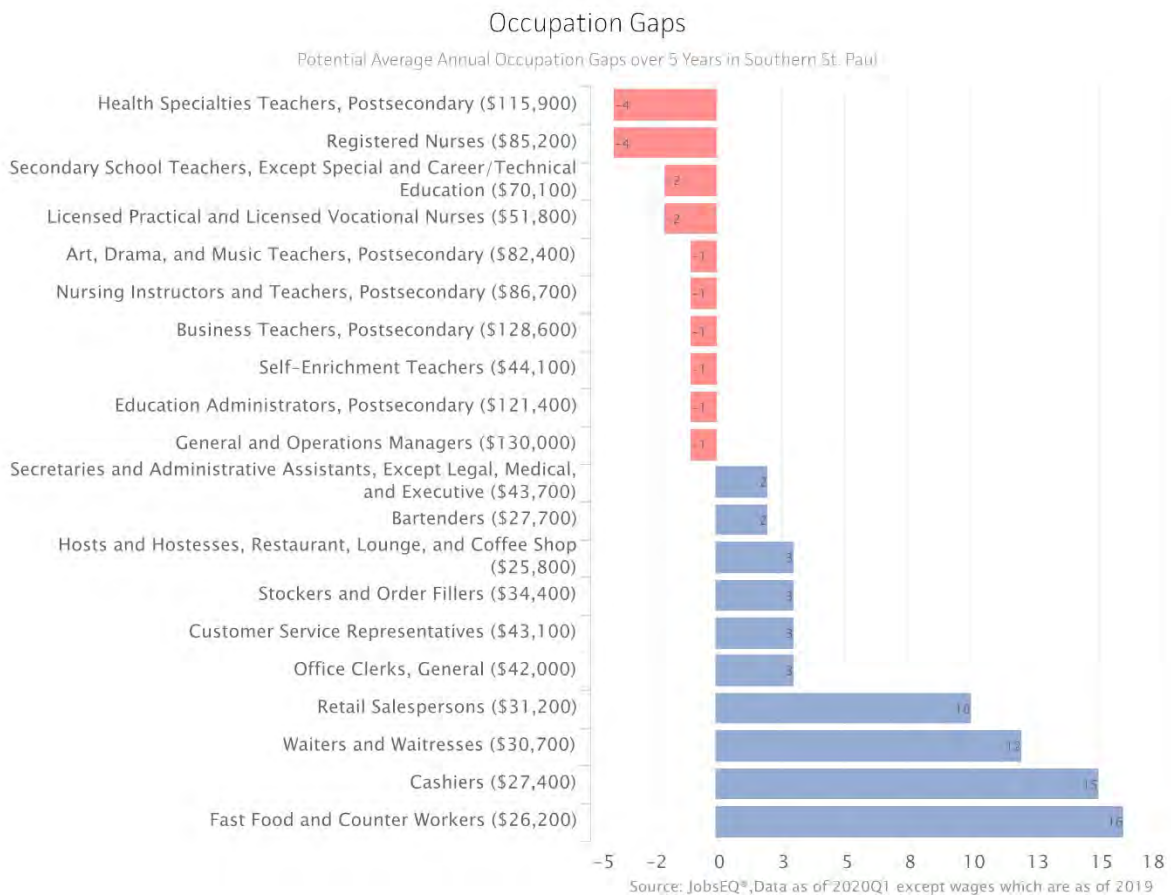


Source: JobsEQ®, Data as of 2020Q1. The shaded areas of the graph represent national recessions.

Mid-Term Occupational Impacts

Estimation of mid-term and long-term recovery of critical local occupations is based on our most reasonable hypothesis given current conditions. In Southern St. Paul, an analysis of local labor market occupational gaps as of the first quarter of 2020 showed that there was a shortage of local Postsecondary Health Teachers, Nurses, Secondary Teachers, Postsecondary Art, Drama, and Music Teachers, Postsecondary Nursing and Business Instructors, Education Administrators, and Managers. Based on 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 \$44,000 per year or over, 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 all require less than a high school diploma on average and pay under \$44,000 per year. Seven out of ten of these positions typically cannot be done remotely, and six 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 Southern St. Paul reveal that approximately 59% of all jobs offered in the community are non-remote, and just 9% of positions can be made fully remote. The remaining positions (32%) may be able to function as partially-remote but will still require in-person activities.

Remote, Partial, and Non-Remote Jobs by Place of Employment, Southern St. Paul, 2020Q1

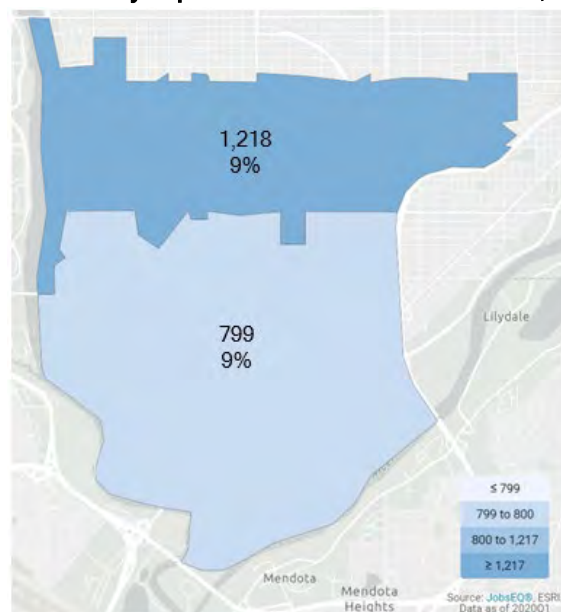
	Southern	55105	55116	Entire Southern St. Paul
Remote		1,218	799	2,017
Partially-Remote		5,001	2,395	7,396
Non-Remote		8,032	5,431	13,463
All Occupations		14,251	8,625	22,877

	Southern	55105	55116	Entire Southern St. Paul
Remote		9%	9%	9%
Partially-Remote		35%	28%	32%
Non-Remote		56%	63%	59%
All Occupations		14,251	8,625	22,877

Remote Work

Across the 22,877 positions employing people in Southern St. Paul, 9% are either remote full-time or able to be made fully remote without dramatic changes to the occupational role. Across the two zip codes of Southern St. Paul, 55105 and 55116 have an equal share of remote work positions out of the total number of positions employing workers in each zip code (9%).

Remote Work by Zip Code in Southern St. Paul, 2020Q1



Analysis of employment by race, ethnicity, and gender reveal that a disproportionate share of Asian and White workers living in Southern St. Paul 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, four have 5.2% or more being Asian workers, compared to 3.5% across all types of occupations. Similarly, half of the top ten remote work positions by volume of residents employed, have 89.0% or more White workers compared to 86.6% across all types of occupations. These top ten positions also have a disproportionately high volume of non-Hispanic workers. Lawyers, Marketers, Financial Managers, Personal Service Managers, and Bookkeeping, Accounting and Auditing Clerks also have a disproportionately high share of White workers in Southern St. Paul.

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. Remote work positions in Southern St. Paul pay an average annual salary of \$93,000 compared to \$59,800 across all local employment. Overall, remote work positions in Southern St. Paul are forecast to grow by an average of 0.4% annually over the next five years, about 0.1 percentage points lower than overall expected employment growth in the community.

Demographics of Remote Work Talent by Occupation and Place of Residence in Southern St. Paul, 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
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	594	74.7%	3.8%	0.1%	19.7%	0.0%	1.2%	98.8%	1.2%	83.8%	16.2%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	489	87.0%	5.9%	0.4%	4.8%	0.0%	1.3%	97.5%	2.5%	46.5%	53.5%
13-2011	Accountants and Auditors	488	88.3%	4.8%	0.1%	5.2%	0.0%	1.9%	97.9%	2.1%	42.4%	57.6%
15-1211	Computer Systems Analysts	376	82.4%	5.7%	0.1%	9.4%	0.0%	1.6%	98.1%	1.9%	63.9%	36.1%
23-1011	Lawyers	374	93.4%	3.1%	0.0%	2.3%	0.0%	2.2%	98.7%	1.3%	67.4%	32.6%
13-1111	Management Analysts	374	88.2%	4.3%	0.0%	6.1%	0.0%	1.4%	98.0%	2.0%	62.0%	38.0%
13-1161	Market Research Analysts and Marketing Specialists	309	91.0%	3.3%	0.0%	4.9%	0.0%	1.3%	98.3%	1.7%	47.6%	52.4%
11-3031	Financial Managers	298	89.0%	4.7%	0.1%	4.0%	0.0%	2.2%	97.3%	2.7%	50.8%	49.2%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	287	91.2%	4.4%	0.1%	2.9%	0.0%	0.8%	97.5%	2.5%	67.9%	32.1%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	270	91.9%	4.4%	0.1%	2.3%	0.0%	1.3%	96.8%	3.2%	13.4%	86.6%
95-0300	Remote Jobs	7,094	87.8%	4.6%	0.1%	5.9%	0.0%	1.6%	97.9%	2.1%	58.6%	41.4%
00-0000	Total - All Occupations	30,546	86.6%	7.6%	0.1%	3.5%	0.0%	2.1%	96.6%	3.4%	47.7%	52.3%

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 Southern St. Paul, 2020Q1

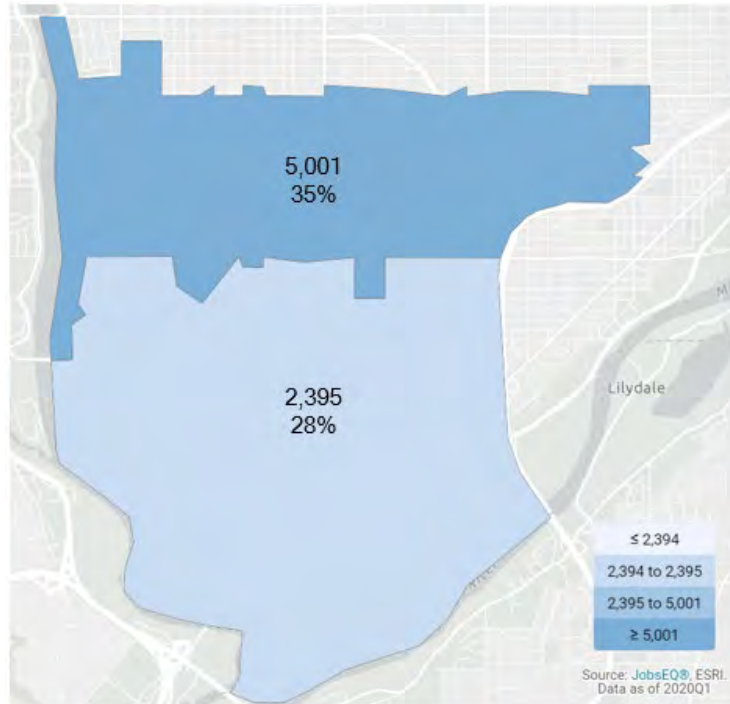
SOC		Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	\$105,600	0.9%	Bachelor's degree	None	None
13-1198	Project Management Specialists and Business Operations Specialists, All Other	\$77,400	0.7%	Bachelor's degree	None	None
13-2011	Accountants and Auditors	\$76,000	0.4%	Bachelor's degree	None	None
15-1211	Computer Systems Analysts	\$97,400	0.8%	Bachelor's degree	None	None
23-1011	Lawyers	\$128,600	0.2%	Doctoral or professional degree	None	None
13-1111	Management Analysts	\$91,500	0.8%	Bachelor's degree	Less than 5 years	None
13-1161	Market Research Analysts and Marketing Specialists	\$79,000	1.6%	Bachelor's degree	None	None
11-3031	Financial Managers	\$144,300	1.3%	Bachelor's degree	5 years or more	None
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$134,900	0.3%	Bachelor's degree	Less than 5 years	None
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$47,800	-0.7%	Some college, no degree	None	Moderate-term on-the-job training
	Remote Jobs	\$93,000	0.4%	n/a	n/a	n/a
	Total - All Occupations	\$59,800	0.5%	n/a	n/a	n/a

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.

Partially-Remote Work

Of the 22,877 positions employing people in Southern St. Paul, 32% can be served at least partially remotely. Across the two zip codes of Southern St. Paul, 55105 has the greatest share of partially-remote work positions out of the total number of positions employing workers in that zip code (35%).

Partially-Remote Work by Zip Code in Southern St. Paul, 2020Q1



Distribution of employment in partially-remote occupations by race, ethnicity, and gender is relatively balanced to overall employment rates, though White workers hold a greater share of partially-remote roles in comparison to other racial groups. However, Asian workers and workers who identify with two or more races are underrepresented in about half of the partially-remote occupations that employ the largest number of Southern St. Paul residents. Women are more likely to hold partially-remote roles than men (55.6% of partially-remote jobs are held by women in Southern St. Paul).

Seven 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, Secondary School Teachers, and Human Resource Specialist, which require a Bachelor's degree) and little or no previous work experience. Partially-remote work positions in Southern St. Paul pay on average about \$27,800 less than remote work positions (but about \$5,400 more than the overall average salary), at an average annual salary of \$65,200. Overall, partially-remote work positions in Southern St. Paul are forecast to grow by an average of 0.8% annually over the next five years, about 0.3 percentage points more than overall expected employment growth in the community.

Demographics of Partially-Remote Work Talent by Occupation and Place of Residence in Southern St. Paul, 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	664	76.3%	16.9%	0.3%	4.1%	0.0%	2.4%	94.3%	5.7%	16.7%	83.3%
11-1021	General and Operations Managers	578	92.2%	3.8%	0.1%	1.5%	0.0%	2.4%	97.0%	3.0%	73.0%	27.0%
43-9061	Office Clerks, General	551	85.5%	8.6%	0.1%	3.9%	0.0%	1.9%	94.5%	5.5%	20.0%	80.0%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	360	91.5%	5.3%	0.2%	1.5%	0.0%	1.6%	96.7%	3.3%	8.0%	92.0%
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	359	93.5%	3.8%	0.0%	1.3%	0.0%	1.3%	97.9%	2.1%	47.7%	52.3%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	318	93.3%	3.5%	0.1%	1.6%	0.0%	1.6%	97.4%	2.6%	76.1%	23.9%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	269	91.9%	4.7%	0.0%	2.1%	0.0%	1.3%	97.0%	3.0%	73.2%	26.8%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	254	88.0%	8.2%	0.2%	1.6%	0.0%	2.0%	96.7%	3.3%	35.4%	64.6%
13-1071	Human Resources Specialists	232	86.5%	8.0%	0.1%	3.1%	0.0%	2.3%	96.6%	3.4%	30.0%	70.0%
25-3021	Self-Enrichment Teachers	230	88.1%	6.6%	0.1%	2.6%	0.0%	2.6%	97.2%	2.8%	39.4%	60.6%
95-0290	Partially Remote Jobs	11,374	87.9%	7.1%	0.1%	2.9%	0.0%	1.9%	96.9%	3.1%	44.4%	55.6%
00-0000	Total - All Occupations	30,546	86.6%	7.6%	0.1%	3.5%	0.0%	2.1%	96.6%	3.4%	47.7%	52.3%

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 Southern St. Paul, 2020Q1

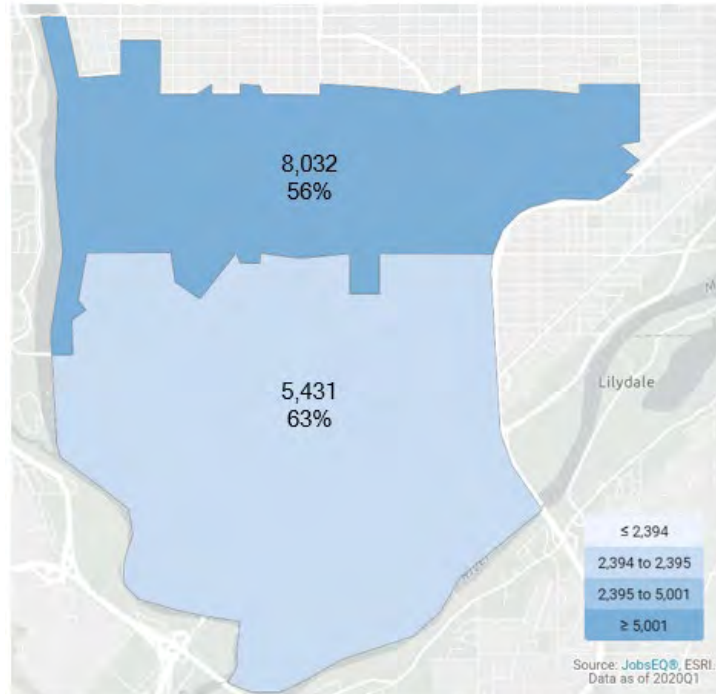
SOC		Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
31-1122	Personal Care Aides	\$28,900	3.2%	High school diploma or equivalent	None	Short-term on-the-job training
11-1021	General and Operations Managers	\$130,000	0.4%	Bachelor's degree	5 years or more	None
43-9061	Office Clerks, General	\$42,000	-0.4%	High school diploma or equivalent	None	Short-term on-the-job training
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$43,700	-0.9%	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	1.1%	Bachelor's degree	None	None
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$83,200	-0.3%	High school diploma or equivalent	None	Moderate-term on-the-job training
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
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$66,900	-0.3%	High school diploma or equivalent	Less than 5 years	None
13-1071	Human Resources Specialists	\$70,300	0.5%	Bachelor's degree	None	None
25-3021	Self-Enrichment Teachers	\$44,100	1.2%	High school diploma or equivalent	Less than 5 years	None
	Partially-Remote Jobs	\$65,200	0.8%	n/a	n/a	n/a
	Total - All Occupations	\$59,800	0.5%	n/a	n/a	n/a

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

Non-Remote Work

Over half (59%) of all positions employing workers in Southern St. Paul as of 2020Q1 cannot be made remote or partially-remote. Zip code 55116 has the largest share of non-remote occupations (63%) followed by 55105 (56%). These 13,463 positions are some of the most vulnerable to pandemic impacts.

Non-Remote Work by Zip Code in Southern St. Paul, 2020Q1



Although over half of all positions employing people that work in Southern St. Paul are non-remote, only 40% of Southern St. Paul residents work in non-remote positions—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, and residents of two or more races work in non-remote occupations in Southern St. Paul. Female residents account for 55.5% of non-remote employees who live in Southern St. Paul, compared to 52.3% of workers overall. Food service, retail, warehouse labor, customer service, elementary education, and nursing positions dominate the top non-remote work positions by employment. All but four positions that are in the top ten by employment among residents of Southern St. Paul (Registered Nurses, Retail Salespersons, Waiters and Waitresses, and Elementary School Teachers) employ a disproportionately high volume of Black or African American and Hispanic or Latino workers.

Seven of the top ten non-remote work positions by volume in this community require a high school diploma or less (except for Registered Nurses, Elementary School Teachers and Teaching Assistants, which require either some college or Bachelor's degree) and no previous work experience. Registered Nurses and Elementary School Teachers are the only occupations of the top ten that pays a living wage for a household of three. These two occupations require an Associate's or Bachelor's degree and are predominantly held by Southern St. Paul's White residents, 87.4% and 92.2%, respectively. Non-remote positions in Southern St. Paul pay about \$17,100 less than the overall average, with non-remote roles paying an average annual salary of \$42,700. Non-remote work positions in Southern St. Paul are forecast to grow by an average of 0.3% annually over the next five years, 0.2 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 Southern St. Paul, 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	1,018	87.4%	7.1%	0.1%	4.1%	0.0%	1.3%	98.3%	1.7%	12.9%	87.1%
41-2031	Retail Salespersons	771	88.0%	7.5%	0.1%	2.0%	0.0%	2.5%	95.2%	4.8%	55.9%	44.1%
43-4051	Customer Service Representatives	631	83.1%	10.9%	0.2%	2.3%	0.0%	3.5%	94.9%	5.1%	39.9%	60.1%
35-3023	Fast Food and Counter Workers	534	81.6%	11.6%	0.3%	2.4%	0.0%	4.1%	95.0%	5.0%	43.1%	56.9%
35-3031	Waiters and Waitresses	428	84.3%	7.3%	0.2%	3.4%	0.0%	4.8%	93.7%	6.3%	32.5%	67.5%
25-2021	Elementary School Teachers, Except Special Education	421	92.2%	5.3%	0.1%	1.1%	0.0%	1.3%	97.6%	2.4%	22.3%	77.7%
41-2011	Cashiers	417	80.1%	12.1%	0.3%	3.4%	0.0%	4.2%	93.5%	6.5%	32.6%	67.4%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	310	80.9%	15.0%	0.2%	1.3%	0.0%	2.6%	93.8%	6.2%	81.5%	18.5%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	285	82.2%	13.3%	0.3%	1.6%	0.0%	2.7%	90.8%	9.2%	67.0%	33.0%
25-9045	Teaching Assistants, Except Postsecondary	255	87.7%	8.2%	0.2%	1.8%	0.0%	2.1%	95.4%	4.6%	12.0%	88.0%
95-0280	Non-Remote Jobs	12,077	84.7%	9.8%	0.2%	2.8%	0.0%	2.5%	95.5%	4.5%	44.5%	55.5%
00-0000	Total - All Occupations	30,546	86.6%	7.6%	0.1%	3.5%	0.0%	2.1%	96.6%	3.4%	47.7%	52.3%

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 Southern St. Paul, 2020Q1

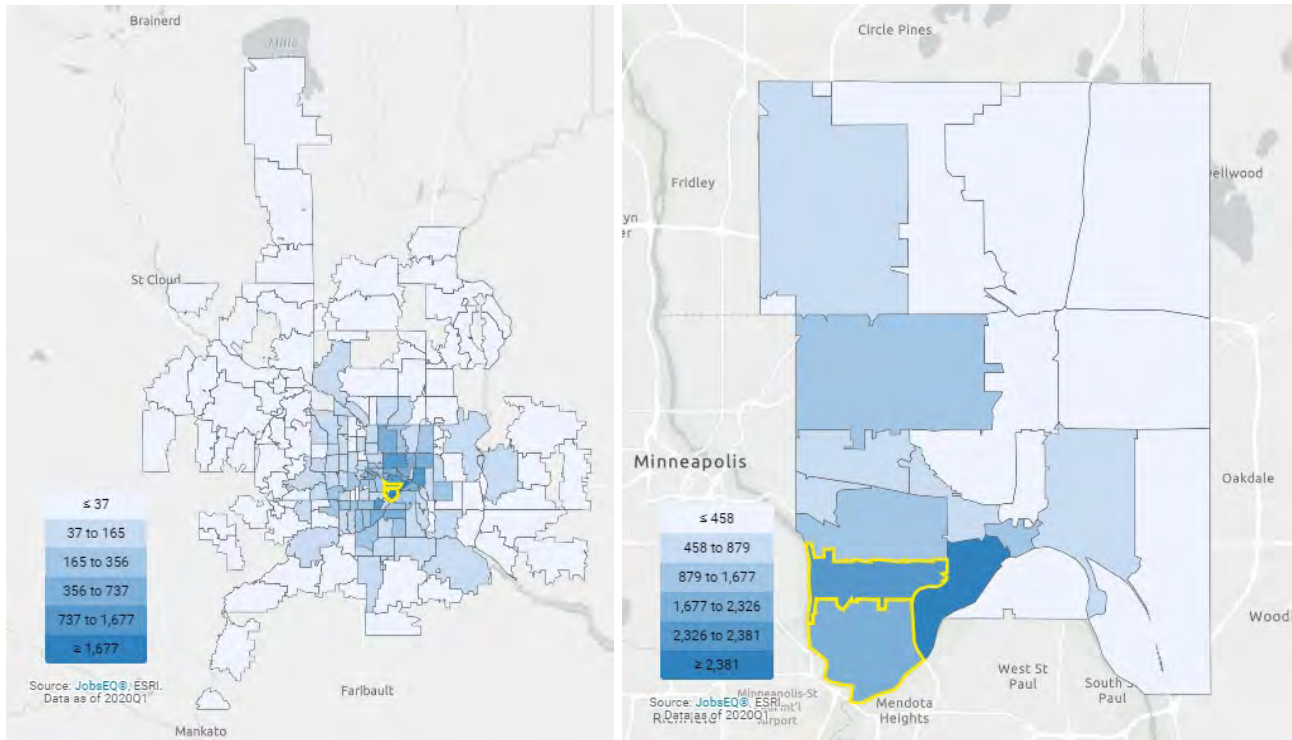
SOC	Occupation	Total Empl	Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
29-1141	Registered Nurses	1,018	\$85,200	2.3%	Bachelor's degree	None	None
41-2031	Retail Salespersons	771	\$31,200	-0.7%	None	None	Short-term on-the-job training
43-4051	Customer Service Representatives	631	\$43,100	-0.6%	High school diploma or equivalent	None	Short-term on-the-job training
35-3023	Fast Food and Counter Workers	534	\$26,200	0.9%	None	None	Short-term on-the-job training
35-3031	Waiters and Waitresses	428	\$30,700	0.1%	None	None	Short-term on-the-job training
25-2021	Elementary School Teachers, Except Special Education	421	\$69,500	1.1%	Bachelor's degree	None	None
41-2011	Cashiers	417	\$27,400	-0.9%	None	None	Short-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	310	\$37,700	-0.1%	None	None	Short-term on-the-job training
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	285	\$34,000	0.5%	None	None	Short-term on-the-job training
25-9045	Teaching Assistants, Except Postsecondary	255	\$34,700	0.9%	Some college, no degree	None	None
Non-Remote Jobs		12,077	\$42,700	0.3%	n/a	n/a	n/a
Total - All Occupations		30,546	\$59,800	0.5%	n/a	n/a	n/a

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.

Commute Shed

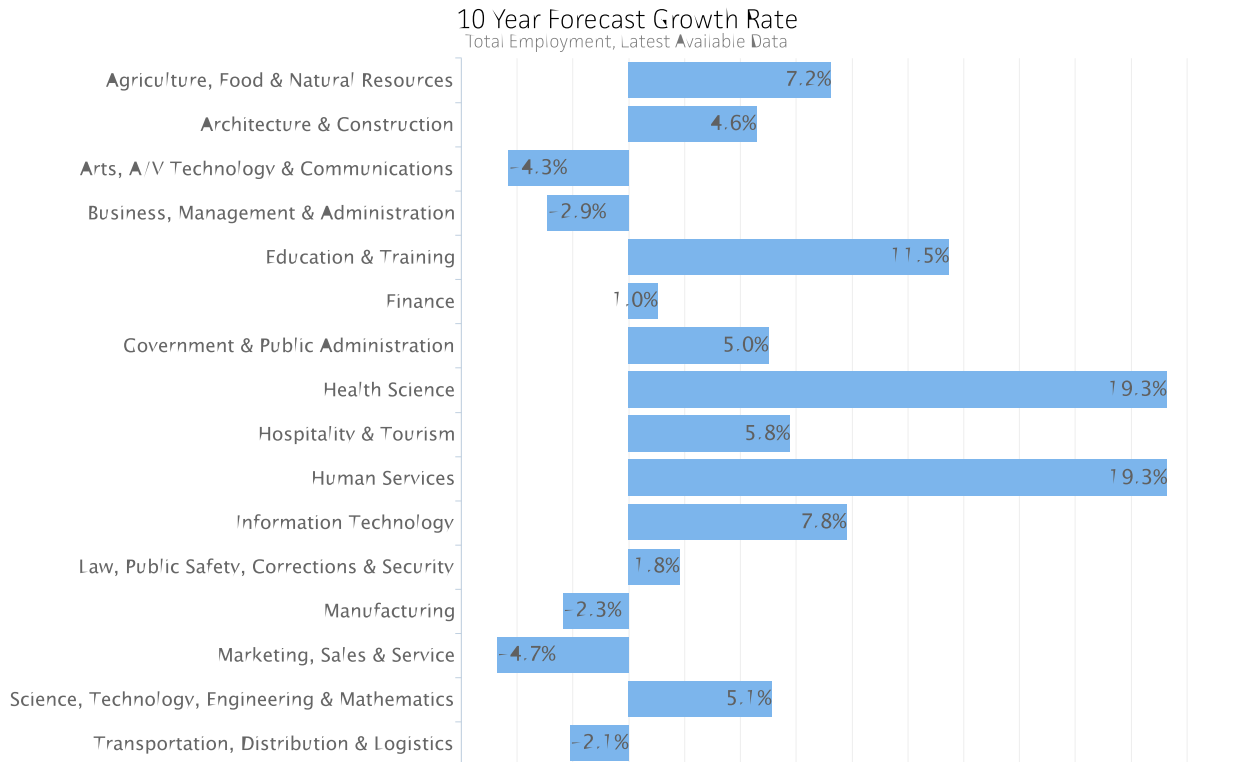
A moderately large share of residents of Southern St. Paul work outside of their neighborhood. In all, 4,003 residents of Southern St. Paul also work in their community, which is about 13% of local residents and about 18% of the total workforce employed within Southern St. Paul. Of all Ramsey County residents, 55.3% also work in Ramsey County. Just 1.1% of Ramsey County residents work in a state other than Minnesota.

Zip Code of Place of Work for Residents of Southern St. Paul



Future Growth by Cluster

Of sixteen career clusters used by Career and Technical Education (CTE), eleven are expected to grow and five are expected to decline over the next ten years in Southern St. Paul. The clusters expecting the greatest growth are Human Services (19.3%), Health Science (19.3%), and Education and Training (11.5%). In contrast, Marketing Sales and Service (-4.7%), Arts, A/V Technology and Communications (-4.3%), and Business, Management, and Administration (-2.9%) 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. However, it can be challenging to pinpoint exactly which positions advertised would be physically located in a specific geography without a complete address being included in a job post.

Despite these limitations, there are still a sufficient number of job postings that do include an address or a zip code for the location of the job opportunity being advertised. Looking at positions in this way will favor employers that have the particular practice of including the business' physical location in the posting. Typically, staffing agencies and temp agencies are some of the more likely companies to have this standard practice. Although attempting to use these approximation for local job opportunities may not be a complete picture of all demand in the community, it can give a glimpse into the trending opportunities and how they compare to opportunities in the past.

In St. Paul during the first three months of the COVID-19 pandemic,⁸ there were 113 new jobs advertised specifying one of the two zip codes of Southern St. Paul. This volume of new posted positions was a decrease of about 12% of positions specifically indicating these neighborhoods in the same three months in 2019. The top position advertised by volume—and with one of the highest growths in job postings from the prior year—included Customer Service Representatives. Other positions trending locally include Office Clerks, Information Security Analysts, Pharmacy Technicians, and Loan Interviewers and Clerks.

⁸ March 15-June 15, 2020.

Top Emerging Occupations in Southern St. Paul, March 15-June 15, 2020

1. **Customer Service Representatives** (Service Agent, Service Advisor, Customer Service Associate)
2. **Office Clerks** (General Clerk, Clerk I, Document Review Clerk, Mail Clerk)
3. **Information Security Analysts** (Security Analyst, IT Security Analyst)
4. **Pharmacy Technicians** (Pharm Tech Apprenticeship, Certified Bedside Pharmacy Technician)
5. **Loan Interviewers and Clerks** (Loan Specialist, Mortgage Loan Processor, Post Closing Specialist, Loan Servicing Support)
6. **Retail Salespersons** (Sales Associate, Visual Associate, Customer Service and Sales Associate)
7. **Bookkeeping, Accounting, and Auditing Clerks** (Accounts Payable Clerk, Financial Services Clerk, Accounting 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 dramatically higher volumes from March 15-June 15, 2020 in comparison to early 2020 or any point in 2019.

Top Emerging Skills in Southern St. Paul in Order of Frequency in Job Postings, March 15-June 15, 2020

1. Customer Service (+16% from pre-COVID-19)
2. Collaboration (+10% from pre-COVID-19)
3. Operations (+147% from pre-COVID-19)
4. Detail-Oriented (+111% from pre-COVID-19)
5. Research (+23% from pre-COVID-19)
6. Written Communications (+65% from pre-COVID-19)
7. Compliance (+183% from pre-COVID-19)
8. Problem Solving (+256% from pre-COVID-19)
9. Monitoring (+114% from pre-COVID-19)
10. Teamwork (+383% from pre-COVID-19)

Accessible Career Pathways

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

Taking a holistic look at high-wage, accessible career opportunities in Southern St. Paul reveals a large number of business and administrative opportunities that are 1) uniquely concentrated in this community, 2) have seen high historic employment growth, 3) may have been trending in job postings since March 2020, and 3) would be able to be done remotely or with low contact-intensity. Most of these high-opportunity positions currently have low numbers of Black, Indigenous, and Southern St. Paul residents of color working in these roles.

For example, **Self-Enrichment Teachers** are found in Southern St. Paul at nearly six times the rate expected for a community of this size in Minnesota (578% more, or an LQ of 5.78). Over the next five years, about 211 Clerk positions will need to be filled, primarily due to retirements and job transitions. Just 12% of local Southern St. Paul residents working in these roles are Black, Indigenous, or People of Color, and typically these positions do not require advanced education or experience.

Office Clerks, General

Titles Used: General Clerk, Clerk 1, Document Review Clerk

Employers: Rose International, Pyramid Consulting Inc, BCforward, Kelly

Secretaries and Admin Assistants

Titles Used: Operations Processor, Administrative Assistant

Employers: St. Catherine University, Robert Half International

Self-Enrichment Teachers

Titles Used: Wellness Coordinator, Dance Specialist, Adult Coordinator, Tennis Pro

Employers: Benedictine Health System, St. Paul Public Schools

Customer Service Representatives

Titles Used: Customer Service Associate, Customer Associate, Customer Service Clerk, Customer Service Specialist

Employers: Walgreens, Rose International, Robert Half International, Duane Reade, Kelly Services, Accounting Principals, Sherwin-Williams, Staffward

Supervisors of Food Prep Workers

Titles Used: Service Crew Manager, Service Manager, Team Lead

Employers: Crisp Greens, Potbelly Sandwich Shop

Southern St. Paul Local High-Opportunity Careers Requiring an Associate's Degree or Less

SOC	Occupation	Current				Historical High Ann % Empl. Growth	5-Year Forecast		Considerations				Education & Experience		
		2020Q1 Empl	High Wage (Avg Ann Wages)*	High Local Concentration (LQ)	Low Historic Unemployment Rate		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 47.9%)	Typical Entry-Level Education	Previous Work Experience	Typical On-the- Job Training
43-9061	Office Clerks, General	466	\$42,000	1.06	2.2%	0.3%	267	-0.4%		L	T	14.5%	High school diploma or equivalent	None	Short- term on- the-job training
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	362	\$43,700	1.16	1.8%	0.9%	178	-0.9%		L		8.5%	High school diploma or equivalent	None	Short- term on- the-job training
25-3021	Self-Enrichment Teachers	318	\$44,100	5.78	2.5%	14.7%	211	1.2%				11.9%	High school diploma or equivalent	Less than 5 years	None
41-1011	First-Line Supervisors of Retail Sales Workers	294	\$48,500	1.34	1.2%	2.2%	148	-0.6%		L		11.1%	High school diploma or equivalent	Less than 5 years	None
43-4051	Customer Service Representatives	289	\$43,100	0.68	2.6%	3.5%	178	-0.6%		L	T	16.9%	High school diploma or equivalent	None	Short- term on- the-job training
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	238	\$41,400	1.62	1.4%	1.9%	192	0.5%				16.3%	High school diploma or equivalent	Less than 5 years	None
41-4012	Sales Representatives , Wholesale and Manufacturing, Except Technical and Scientific Products	221	\$83,200	1.11	1.3%	-1.1%	110	-0.3%		L		6.7%	High school diploma or equivalent	None	Moderate- term on- the-job training
49-9071	Maintenance and Repair Workers, General	213	\$48,800	1.00	1.3%	1.7%	109	0.4%		L		11.3%	High school diploma or equivalent	None	Moderate- term on- the-job training

43-3031	Bookkeeping, Accounting, and Auditing Clerks	194	\$47,800	0.81	1.2%	-1.4%	103	-0.7%	R	L	T	8.1%	Some college, no degree	None	Moderate-term on-the-job training
29-2061	Licensed Practical and Licensed Vocational Nurses	167	\$51,800	1.62	1.3%	-1.5%	88	2.1%				23.3%	Postsecondary non-degree award	None	None
Total - All Occupations		22,877	\$59,800	1.00	1.8%	1.7%	14,618	0.6%				13.40%			

*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 1.8% are considered high and highlighted in green. Forecasted annual employment growth over 0.6% 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 the zip codes of the communities comprising Southern St. Paul. It is not a complete or representative list of job opportunities in the neighborhood, but is offered as a sampling of jobs advertised.⁹ 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 one of the two zip codes for Southern St. Paul. In some cases, these employers located in the neighborhood may be hiring for positions in other parts of St. Paul.

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

Almost none of the rising and most promising accessible careers in Southern St. Paul that typically require a Bachelor's degree or higher can be done fully remotely—however, many of the teaching and education roles may be transitioning to a partially-remote format for the 2020-21 school year. A large majority of local opportunities in Southern St. Paul that will see growth, high wages, and high local concentration of need are in education, training, and faith-based organizations. In fact, of the top five occupations by volume, the employer with the most local postings in 2020 was Saint Paul Public Schools.

For example, **Secondary School Teachers** are more concentrated in Southern St. Paul than an average community of its size in Minnesota, and historically, local unemployment in these roles has been very low (1.8%). Over the next five years, about 95 secondary teaching positions will need to be filled due to job growth (about 1.1% anticipated), retirements, and job transitions. Only 6.5% of local Southern St. Paul residents working in these roles are Black, Indigenous, or People of Color (compared to 13.4% overall in these communities), and usually these roles seek fresh talent with a Bachelor's degree and no prior experience needed.

Secondary School Teachers

Titles Used: High School Math Teacher, Art/Technology Teacher, Biological Science Teacher

Employers: St. Paul Public Schools, K12

Coaches and Scouts

Titles Used: Basketball Coach, Baseball Coach, C-Squad Volleyball Coach

Employers: St. Paul Public Schools

Clergy

Titles Used: Chaplain, Manager of Spiritual Health Services

Employers: Allina Health

Educational, Guidance, and Career Counselors and Advisors

Titles Used: Placement Coordinator, Peer Mentor, STEM Inclusive Excellence Peer Mentor

Employers: St. Catherine University, University of St. Thomas

Middle School Teachers

Titles Used: Middle School Science Teacher, Online Graphic Arts Teacher, Jr. High School STEM Teacher

Employers: St. Paul Public Schools

Instructional Coordinators

Titles Used: Cultural Academic Support Specialist, Senior Special Populations Consultant

Employers: Pearson, U.S. Bank, St. Paul Public Schools

Southern St. Paul Local High-Opportunity Careers Requiring a Bachelor's Degree or Higher

SOC	Occupation	Current				Historical High Ann % Empl. Growth	5-Year Forecast		Considerations				Education & Experience		
		2020Q1 Empl	High Wage (Avg Ann Wages)	High Local Concentration (LO)	Low Historic Unemployment Rate		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 Employment (over 47.9%)	Typical Entry- Level Education	Previous Work Experience	Typical On-the- Job Training
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	223	\$70,100	1.55	1.8%	2.3%	95	1.1%				6.5%	Bachelor's degree	None	None
27-2022	Coaches and Scouts	195	\$45,200	4.95	2.5%	8.9%	162	1.2%		L		10.9%	Bachelor's degree	None	None
21-2011	Clergy	132	\$50,000	3.73	0.8%	0.3%	74	0.2%		L		10.8%	Bachelor's degree	None	Moderate-term on-the-job training
21-1012	Educational, Guidance, and Career Counselors and Advisors	125	\$62,400	2.90	1.2%	1.4%	79	1.6%		L		14.1%	Master's degree	None	None
25-2022	Middle School Teachers, Except Special and Career/Technical Education	111	\$70,600	1.31	1.8%	2.0%	49	1.1%				7.7%	Bachelor's degree	None	None
25-9031	Instructional Coordinators	79	\$78,000	3.08	2.2%	4.0%	42	0.9%		L		9.3%	Master's degree	5 years or more	None
21-2021	Directors, Religious Activities and Education	75	\$62,100	3.47	n/a	0.3%	45	-0.1%	R	L		4.4%	Bachelor's degree	Less than 5 years	None
25-3031	Substitute Teachers, Short-Term	72	\$43,600	0.83	2.4%	3.9%	45	0.8%				12.1%	Bachelor's degree	None	None

13-1071	Human Resources Specialists	67	\$70,300	0.71	2.0%	5.3%	36	0.5%		L		13.5%	Bachelor's degree	None	None
15-1211	Computer Systems Analysts	67	\$97,400	0.76	1.1%	-0.3%	27	0.8%	R	L		17.6%	Bachelor's degree	None	None
27-3031	Public Relations Specialists	54	\$64,500	1.41	1.0%	1.9%	31	0.6%		L		8.4%	Bachelor's degree	None	None
Total - All Occupations		22,877	\$59,800	1.00	1.8%	1.7%	14,618	0.6%				13.40%			

*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 1.7% are considered high and highlighted in green. Forecasted annual employment growth over 0.6% 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 the zip codes of the communities comprising Southern St. Paul. It is not a complete or representative list of job opportunities in the neighborhood, but is offered as a sampling of jobs advertised.¹⁰ 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 one of the two zip codes for Southern St. Paul (55105 or 55106). In some cases, these employers located in the neighborhood may be hiring for positions in other parts of St. Paul.

Retooling and Reimagining Work

The following section highlights the critical skills in demand in Southern St. Paul, 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 the zip codes 55105 and 55116. This list is not a complete or representative list of job opportunities in the region but is offered as a sampling of jobs advertised.¹¹ In some cases, these employers located in Southern St. Paul may be hiring for positions in other parts of the county.

In Southern St. Paul, 50 identified employers advertised 186 jobs locally between March 16 and July 31, 2020. The employers who advertised jobs within 55105 and 55116 that explicitly included a location in Southern St. Paul 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.¹² 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 fewer 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.

¹² 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

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 (BPMN), and Rational Unified Process.

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

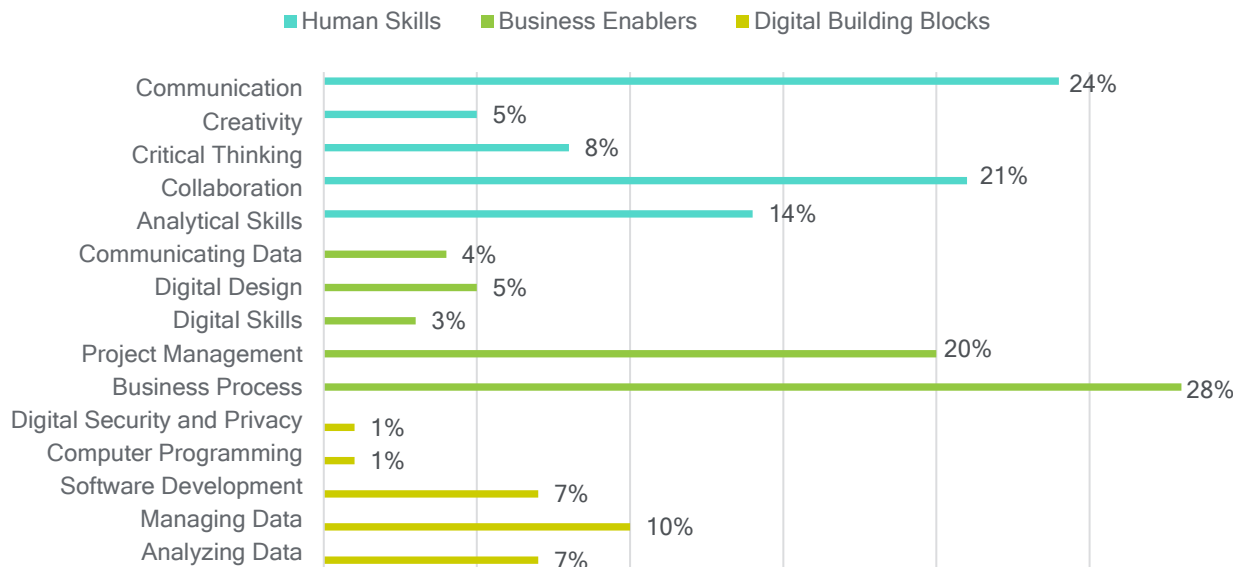
Digital Skills - social media, search engine marketing, analytics, content marketing, email, mobile campaigns, strategy and planning, social selling, pay per click marketing, Video production.

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 Southern St. Paul, 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.

Southern St. Paul Foundational Skills for the Digital Economy



Southern St. Paul	
Communication	24%
Creativity	5%
Critical Thinking	8%
Collaboration	21%
Analytical Skills	14%
Communicating Data	4%
Digital Design	5%
Digital Skills	3%
Project Management	20%
Business Process	28%
Digital Security and Privacy	1%
Computer Programming	1%
Software Development	7%
Managing Data	10%
Analyzing Data	7%

Jobs posted by employers in Southern St. Paul between March 16 and July 31, 2020, showed demand comparable to in-demand skills across Ramsey County. Only 39% of the 100 top skills mentioned as “required” in new job ads posted during this four-and-a-half-month period were specific to employers in Southern St. Paul. 8 of the 39 skills unique to jobs posted by employers in Southern St. Paul were related to retail positions, such as cashiers. There was also a difference in the frequency of the skills within postings in Southern St. Paul compared to Ramsey County as a whole. The blue text below indicates skills required in positions advertised by employers located in Southern St. Paul that are not in the top four required skills in each category across Ramsey County overall.

High-Demand Human Skills	High-Demand Digital Building Block Skills	High-Demand Business Enabler Skills
Analytical Skills 1) Research 2) Adaptability 3) Monitoring 4) Problem Solving	Analyzing Data 1) Detail-oriented 2) Monitoring 3) Evaluation 4) Microsoft Office	Business Process 1) Customer Service 2) Detail-oriented 3) Operations 4) Scheduling
Collaboration 1) Dedication 2) Collaboration 3) Teaching 4) Leadership	Managing Data 1) Research 2) Detail-oriented 3) Data Entry 4) Sorting	Project Management 1) Collaboration 2) Adaptability 3) Leadership 4) Problem Solving
Critical Thinking 1) Scheduling 2) Compliance 3) Problem solving 4) Evaluation	Software Development 1) Creativity 2) Problem solving 3) Independent Work 4) Flexibility	Digital Skills 1) Research 2) Marketing
Creativity 1) Creativity 2) Innovation 3) Passion 4) Marketing	Computer Programming 1) Mathematics	Digital Design 1) Creativity 2) Best Practices 3) Customer Experience 4) Mobile Applications
Communication 1) Communication 2) Customer Service 3) Detail-oriented 4) Relationships	Digital Security and Privacy 1) Security 2) IT Systems	Communicating Data 1) Written Communications 2) Writing 3) Report Generation

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.

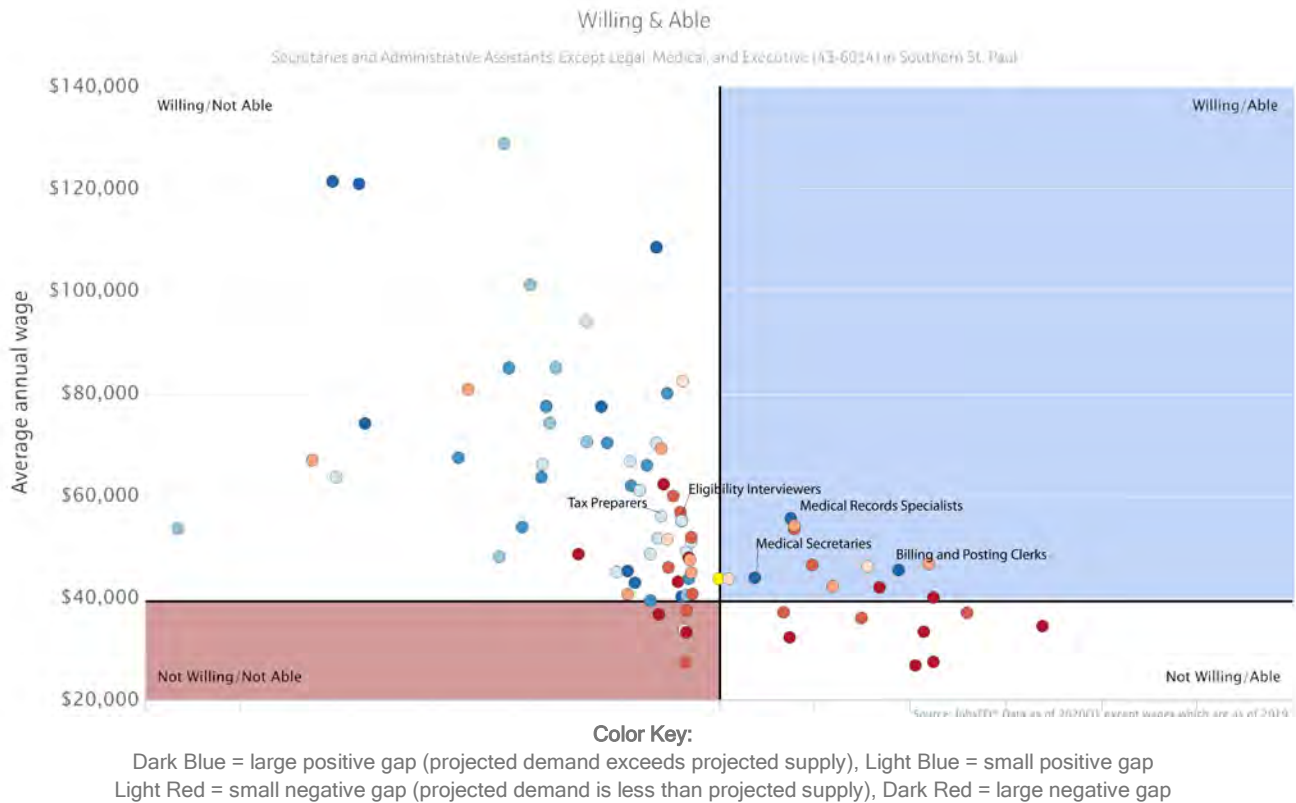
The occupations below are all found in high volumes in Southern St. Paul, are anticipated to have a local surplus of talent over the next five years, and experienced high unemployment applications across Ramsey County since the beginning of the pandemic.

Secretaries and Administrative Assistants

Although currently found in relatively high volume and local concentration in Southern St. Paul, 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 in Southern St. Paul 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.

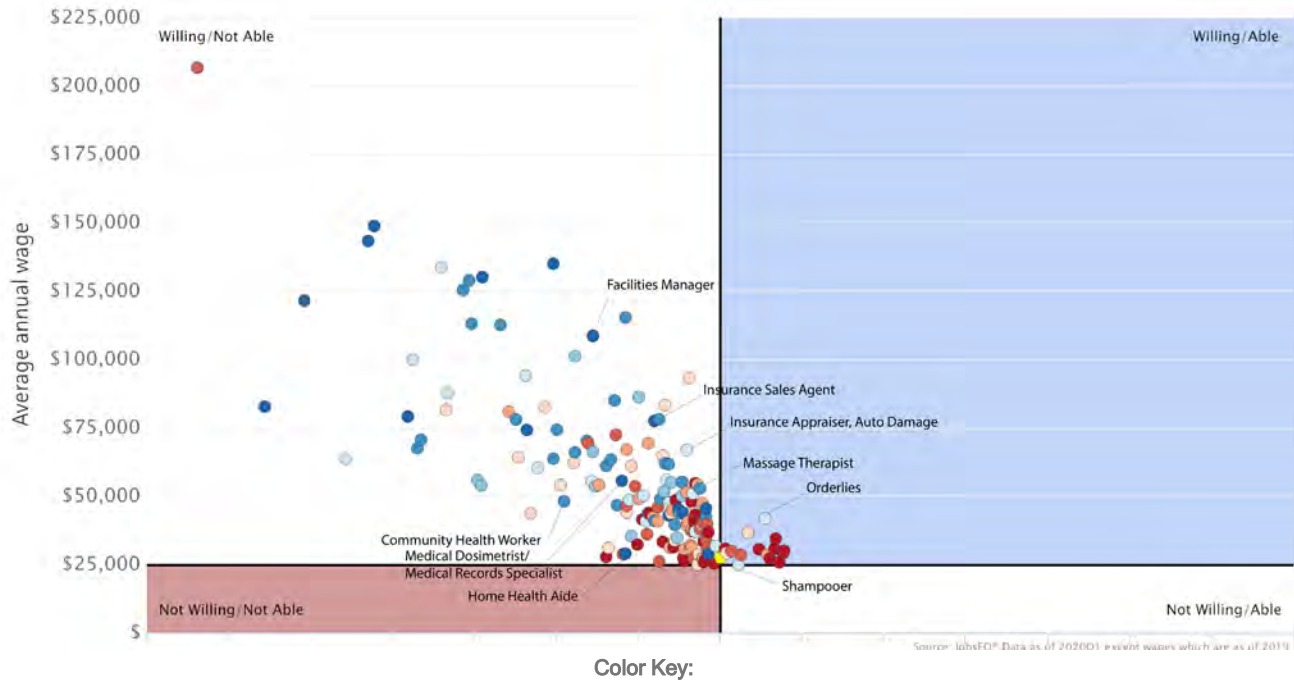
Secretaries and Administrative Assistants Skill Transferability in Southern St. Paul



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. Similar-paying, similar-skill, entry-level, high contact-intensity positions that may see shortages in talent in Southern St. Paul over the next five years include Shampooers and Orderlies. 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.

Cashier Skill Transferability in Southern St. Paul

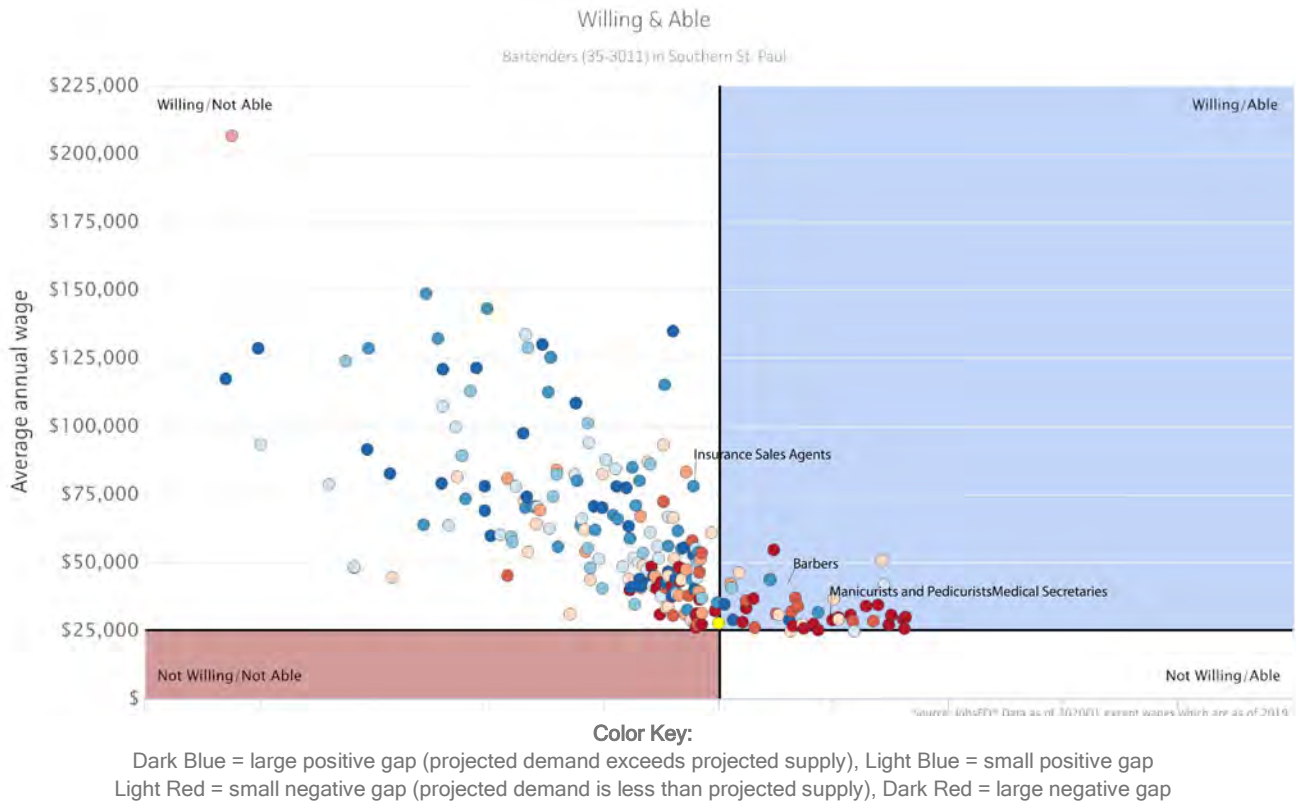


Color Key:
 Dark Blue = large positive gap (projected demand exceeds projected supply), Light Blue = small positive gap
 Light Red = small negative gap (projected demand is less than projected supply), Dark Red = large negative gap

Bartenders

There were about 173 people employed in Southern St. Paul as Bartenders in the first quarter of 2020, with many of these being displaced as a result of the COVID-19 pandemic. Historically, Bartender employment has remained relatively stable in these communities. Over the next five years, about 150 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 Southern St. Paul



Conclusion

Southern St. Paul has a variety of local career opportunities across multiple sectors, with education, education, health, religious, and human services careers in high demand now and into the future. 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. 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.

This report has highlighted the most critical human skills, digital skills, and business enablers sought in this community, 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. However, it is important to remember that Southern St. Paul is not an island; many individuals commute both in and out of this community daily for both work and educational opportunities; positioning these community needs in the broader context of Ramsey County as a whole will ensure that the county is filled with resilient neighborhood economies today and tomorrow.