

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 4

St. Paul's West Side

RealTime Talent

October 2020



Using data to build the
world's best workforce



RAMSEY COUNTY
Workforce Solutions

Introduction

St. Paul's West Side is a group of active and diverse neighborhoods nestled directly south and southwest of downtown St. Paul. St. Paul's West Side is defined by zip codes 55102, 55107 and a portion of 55118 the neighborhoods of West Seventh, Irvine Park, Riverview, Baker-Annapolis, and the West Side. The Ramsey County portion of 55118, east of Winslow Street and west of Winslow Avenue and north of Annapolis Street West and of south of Winona Street West, is not shown on the map. However, the data from this portion of 55118 is included in report below. By population, the largest number of people live in zip code 55102, which is the area north of the Mississippi River and south of Iglehart and Concordia Avenue and east of Highway 35E and Dale Street and west of Wabasha Street North and Cedar Street. The An estimated 2,008 businesses work out of St. Paul's West Side.

Resident Population of St. Paul's West Side

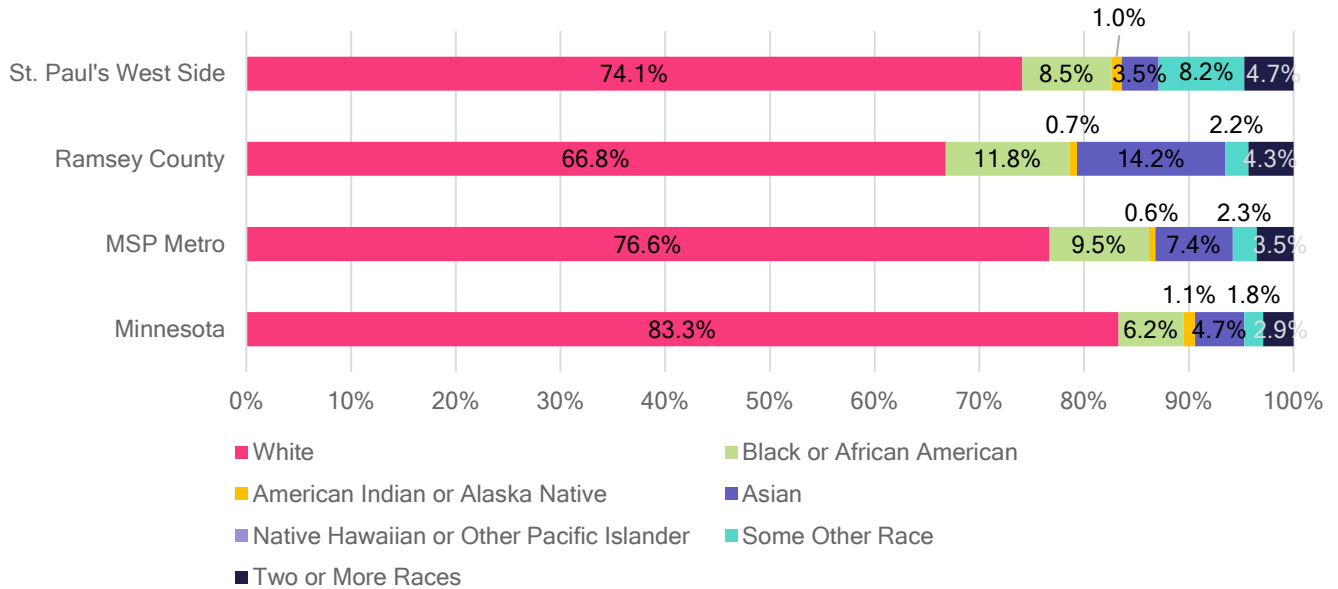


Community Profile

Demographics

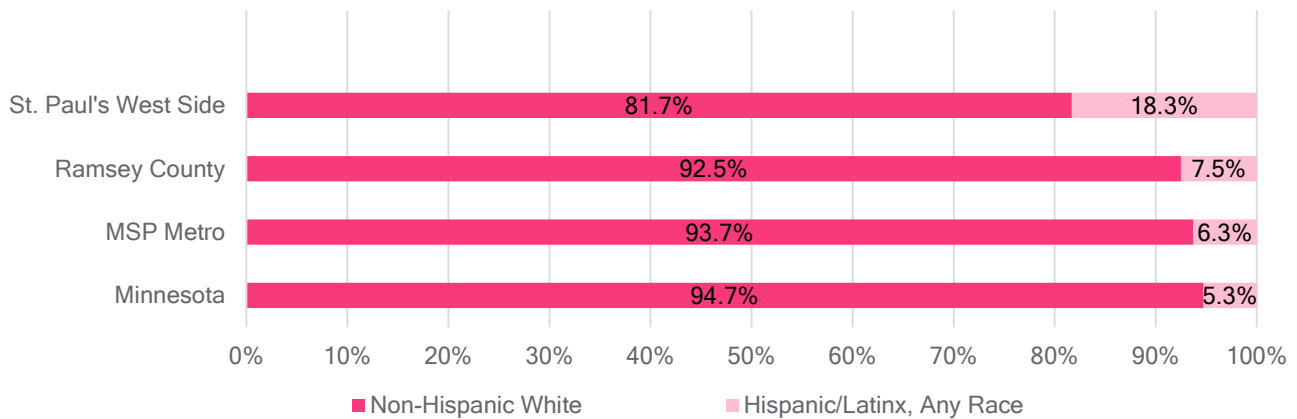
St. Paul's West Side is less demographically diverse than Ramsey County overall; 25.9% of the population are non-Hispanic people of color. The largest racial or ethnic group on St. Paul's West Side after Non-Hispanic White is the Hispanic or Latino, with 18.3% of residents of St. Paul's West Side identifying as Hispanic or Latino compared to 7.5% in Ramsey County overall.

Population Race, All Ages



American Community Survey 2014-2018.

Population Ethnicity, All Ages



American Community Survey 2014-2018.

Community Demographics

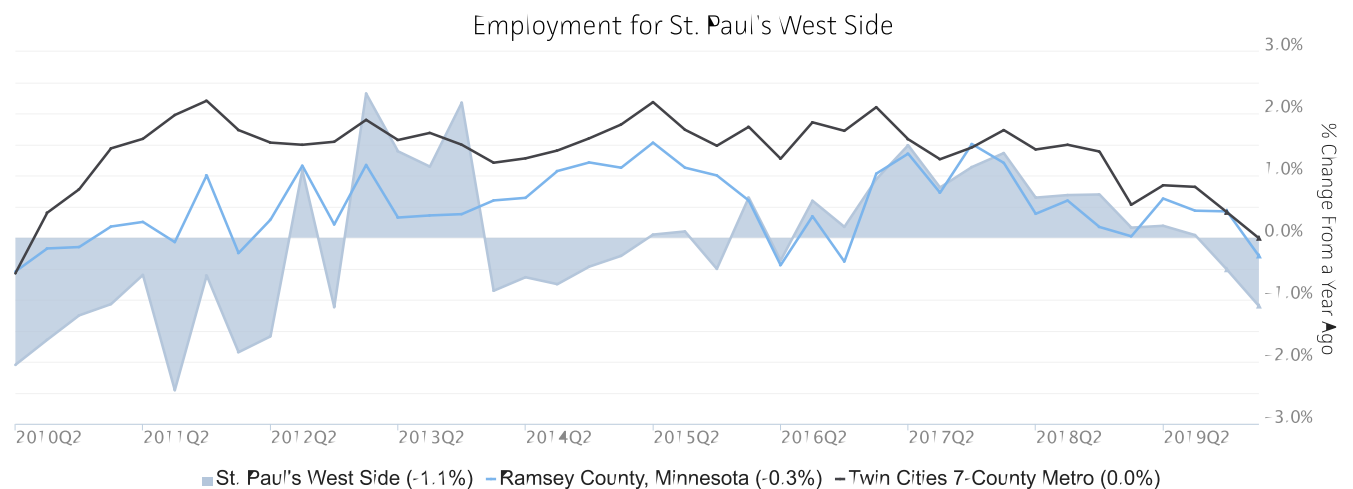
Demographics	St. Paul's West Side	Percent Ramsey County, Minnesota	Twin Cities 7-County Metro	St. Paul's West Side	Value Ramsey County, Minnesota	Twin Cities 7-County Metro
Population (ACS)	—	—	—	61,919	541,493	3,039,708
Male	48.2%	48.7%	49.4%	29,829	263,843	1,500,624
Female	51.8%	51.3%	50.6%	32,090	277,650	1,539,084
Median Age*	—	—	—	37.8	34.9	36.8
Under 18 Years	21.3%	23.4%	23.6%	13,174	126,490	717,668
18 to 24 Years	8.9%	10.2%	8.7%	5,509	55,420	263,378
25 to 34 Years	16.2%	16.6%	15.1%	10,050	89,740	459,585
35 to 44 Years	12.2%	12.0%	13.1%	7,572	65,173	399,319
45 to 54 Years	12.4%	11.8%	13.5%	7,686	63,728	410,408
55 to 64 Years	12.9%	12.3%	12.8%	7,977	66,694	390,595
65 to 74 Years	8.8%	7.8%	7.7%	5,466	42,271	234,633
75 Years, and Over	7.2%	5.9%	5.4%	4,485	31,977	164,122
Race: White	74.1%	66.8%	76.6%	45,868	361,501	2,328,568
Race: Black or African American	8.5%	11.8%	9.5%	5,289	63,724	288,828
Race: American Indian and Alaska Native	1.0%	0.7%	0.6%	636	3,723	18,437
Race: Asian	3.5%	14.2%	7.4%	2,158	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	8.2%	2.2%	2.3%	5,058	12,028	70,602
Race: Two or More Races	4.7%	4.3%	3.5%	2,910	23,169	107,060
Hispanic or Latino (of any race)	18.3%	7.5%	6.3%	11,330	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.

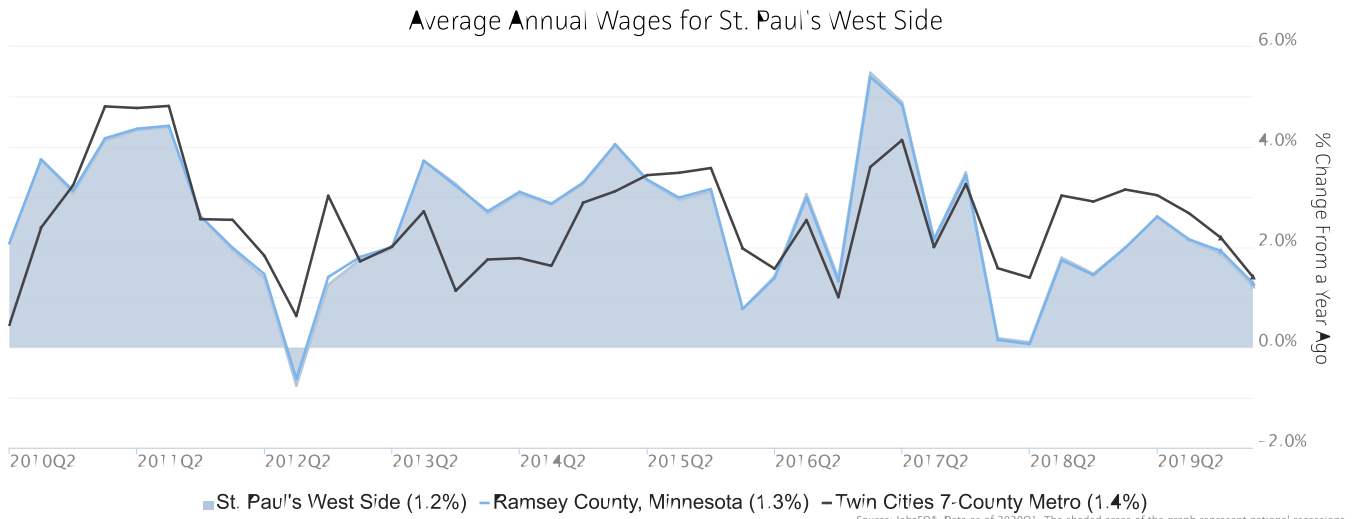
Employment

As of 2020Q1, total employment for the St. Paul's West Side was 47,024 (based on a four-quarter moving average). Over the year ending 2020Q1, employment declined 1.1% in the region.

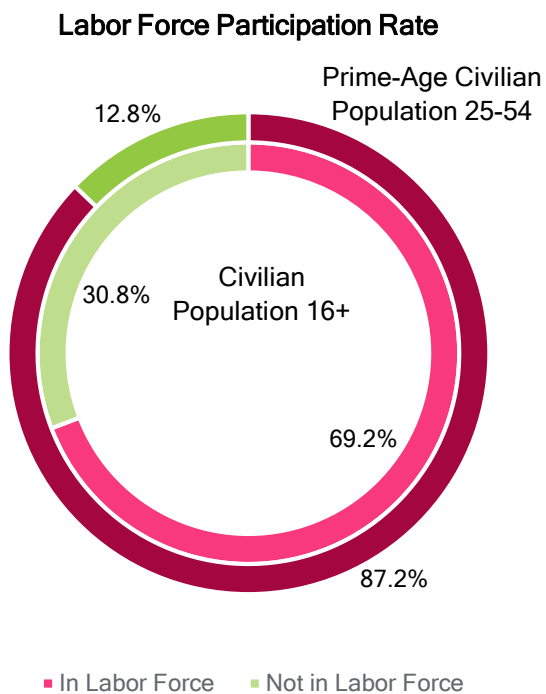


Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2019Q3 with preliminary estimates updated to 2020Q1.

The average worker in the St. Paul's West Side earned annual wages of \$63,225 as of 2020Q1. Average annual wages per worker increased 1.2% 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 St. Paul's West Side has an equivalent labor force participation rate for the civilian population 16 year and over as in Ramsey County and a higher rate for prime working age (Ramsey County Labor Force Participation is 69% for all and 86% for prime working age). These neighborhoods have a higher number of single parent households (5,610 or 44.0% of households) and residents with disabilities (4,383 or 11.3% of residents) than seen in other communities in the MSP Metro, which could impact the labor force participation rate. Higher rate for prime working age residents may be contributed to having fewer residents that may be ineligible to work, as only 10.9% of St. Paul's West Side residents are foreign born. This community has a greater proportion of uninsured residents (6.7%) and households receiving food stamps (13.4%), and smaller proportion of disconnected youth (1.6%) compared to other communities of Ramsey County. The greatest share of disconnected youth in this

population (3.3%) and the largest share of residents who commute to work or school by public transportation (8.5%) are in zip code 55102, which corresponds with the West Seventh and Irvine Park neighborhoods. The largest share of adults between the ages of 25 and 64 without a high school diploma or GED (17.2%) correspond with 55107 or the West Side, Riverview, Baker-Annapolis neighborhoods.

Economic and Social Characteristics of St. Paul's West Side

Economic and Social Characteristics	St. Paul's West Side	Percent		St. Paul's West Side	Values	
		Ramsey County, Minnesota	7-County MSP Metro		Ramsey County, Minnesota	7-County MSP Metro
Labor Force Participation Rate and Size (civilian population 16 years and over)	69.2%	69.0%	72.1%	34,847	295,458	1,730,688
Prime-Age Labor Force Participation Rate and Size (civilian population 25-54)	87.2%	86.0%	88.7%	22,066	187,867	1,125,534
Armed Forces Labor Force	0.0%	0.0%	0.1%	0	214	1,274
Veterans, Age 18-64	2.8%	2.9%	3.5%	1,087	9,950	67,574
Veterans Labor Force Participation Rate and Size, Age 18-64	82.4%	75.8%	81.5%	896	7,538	55,073
Median Household Income*	—	—	—	\$60,531	\$62,304	\$77,034
Per Capita Income	—	—	—	\$37,430	\$34,049	\$40,637
Poverty Level (of all people)	14.9%	14.7%	9.4%	9,072	77,330	282,384
Households Receiving Food Stamps/SNAP	13.4%	12.8%	8.2%	3,529	26,850	96,883
Enrolled in Grade 12 (% of total population)	1.5%	1.4%	1.5%	925	7,827	46,253
Disconnected Youth**	1.6%	2.1%	1.5%	46	597	2,270
Children in Single Parent Families (% of all children)	44.0%	35.8%	27.9%	5,610	43,659	193,871
Uninsured	6.7%	5.5%	4.6%	4,089	29,542	139,536
With a Disability, Age 18-64	11.3%	10.0%	8.0%	4,383	33,948	152,512
With a Disability, Age 18-64, Labor Force Participation Rate and Size	49.6%	47.0%	53.4%	2,174	15,945	81,517
Foreign Born	10.9%	15.6%	12.0%	6,727	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



90.7% of prime working age adult residents have at least a high school diploma or GED.

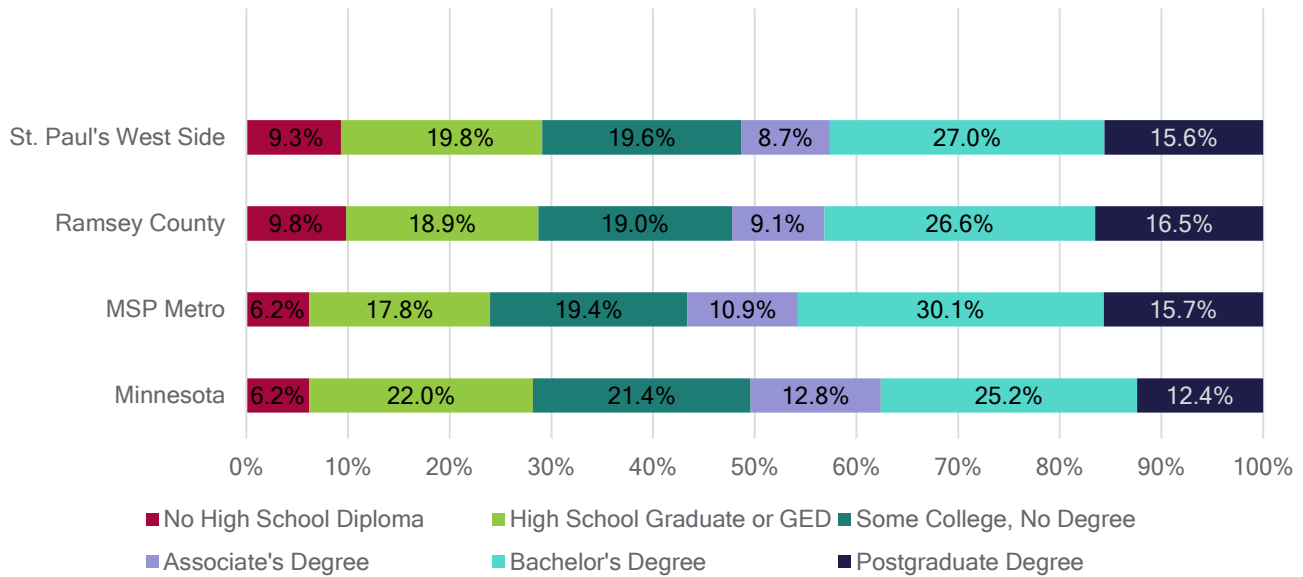
The residents of St. Paul's West Side have a lower level of educational attainment overall in comparison to Ramsey County as a whole and the 7-County MSP Metro. According to the most recent American Community Survey estimates, 9.3% of St. Paul's West Side residents between ages 25 and 64 do not have a high school diploma and 27.0% hold a Bachelor's Degree as their highest level of educational attainment.

Educational Characteristics of St. Paul's West Side

Educational Characteristics	St. Paul's West Side	Percent		St. Paul's West Side	Values	
		Ramsey County, Minnesota	7-County MSP Metro		Ramsey County, Minnesota	7-County MSP Metro
No High School Diploma	9.3%	9.8%	6.2%	3,083	28,060	103,067
High School Graduate	19.8%	18.9%	17.8%	6,589	54,037	295,274
Some College, No Degree	19.6%	19.0%	19.4%	6,517	54,211	321,288
Associate's Degree	8.7%	9.1%	10.9%	2,902	25,991	180,284
Bachelor's Degree	27.0%	26.6%	30.1%	8,998	75,814	499,663
Postgraduate Degree	15.6%	16.5%	15.7%	5,196	47,222	260,331

American Community Survey 2014-2018 unless noted otherwise.

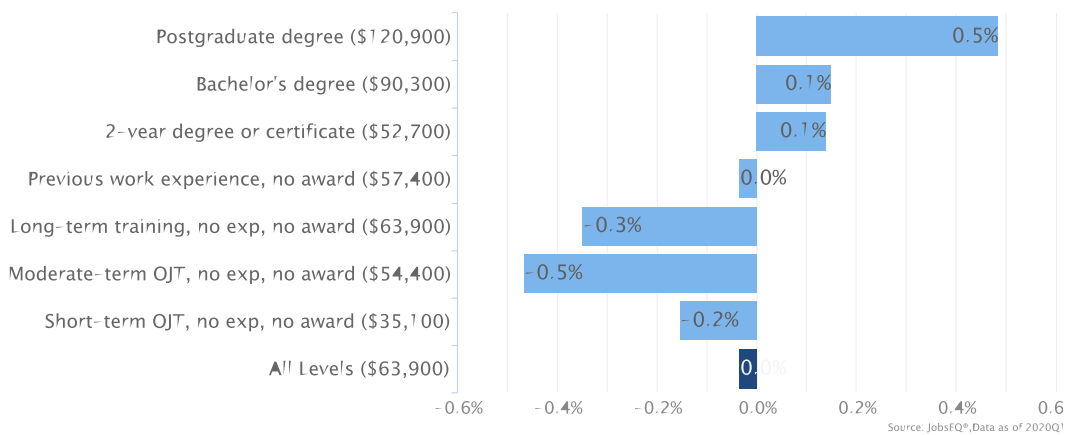
Educational Attainment, Age 25-64



American Community Survey 2014-2018.

Expected growth rates for occupations vary by the education and training required. While all employment in the St. Paul's West Side is projected to contract 0.0% over the next ten years, occupations typically requiring a postgraduate degree are expected to grow 0.5% per year, those requiring a bachelor's degree are forecast to grow 0.1% per year, and occupations typically needing a 2-year degree or certificate are expected to grow 0.1% per year.

Annual Average Projected Job Growth by Training Required for St. Paul's West Side



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



2,037 residents
Commute via public transit (6.3%)

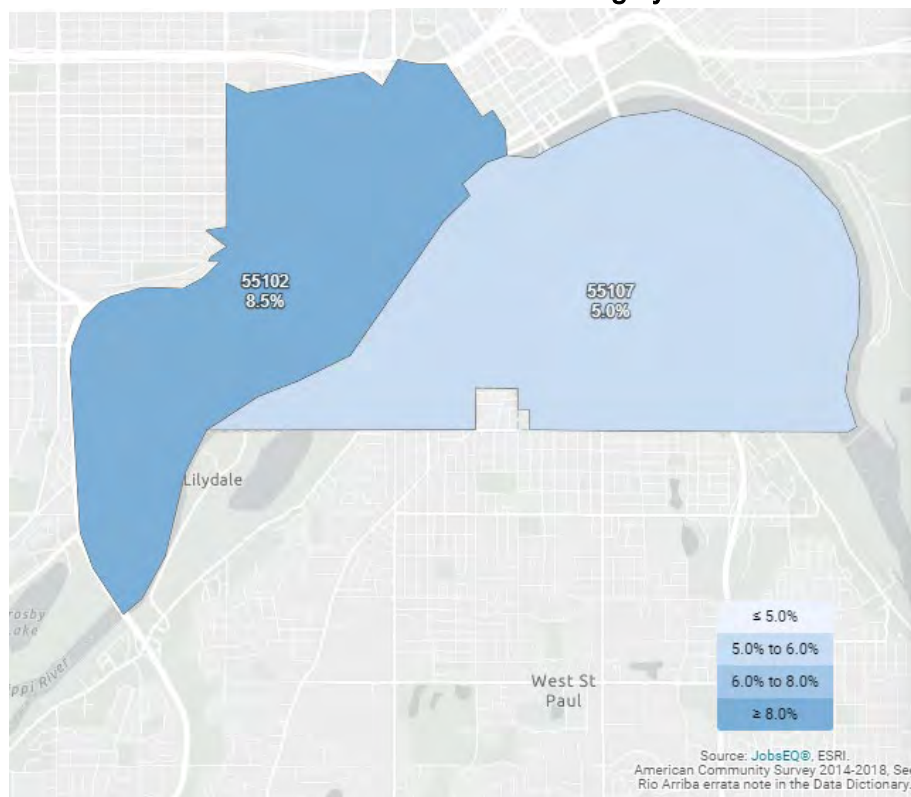
3,255 Residences have no vehicle available
(12.4% of all occupied residences)

22.6 Minute



Mean Commute Time

St. Paul's West Side Residents Commuting by Public Transit¹



Transportation Characteristics of St. Paul's West Side

Transportation Characteristics	St. Paul's West Side	Percent		St. Paul's West Side	Values	
		Ramsey County, Minnesota	7-County MSP Metro		Ramsey County, Minnesota	7-County MSP Metro
Mean Commute Time (minutes)	—	—	—	22.6	23.9	24.7
Commute via Public Transportation	6.3%	6.7%	5.3%	2,037	18,565	87,307
Occupied Housing Units with No Vehicle Available (% of Occupied Units)	12.4%	10.5%	7.8%	3,255	21,937	91,325

American Community Survey 2014-2018 unless noted otherwise.

¹ The Ramsey County portion of 55118 is not represented on this map; 5.2% of residents commute via public transportation.

Language



7.3% of residents over age 5 speak English less than “very well” (a total of 4,252 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 St. Paul's West Side

Language Characteristics	Percent			Values		
	St. Paul's West Side	Ramsey County, Minnesota	7-County MSP Metro	St. Paul's West Side	Ramsey County, Minnesota	7-County MSP Metro
Speak English Less Than Very Well (population 5 yrs and over)	7.3%	10.8%	6.6%	4,252	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 Internet²



6% to 28% of households in each census tract have no access to the internet.

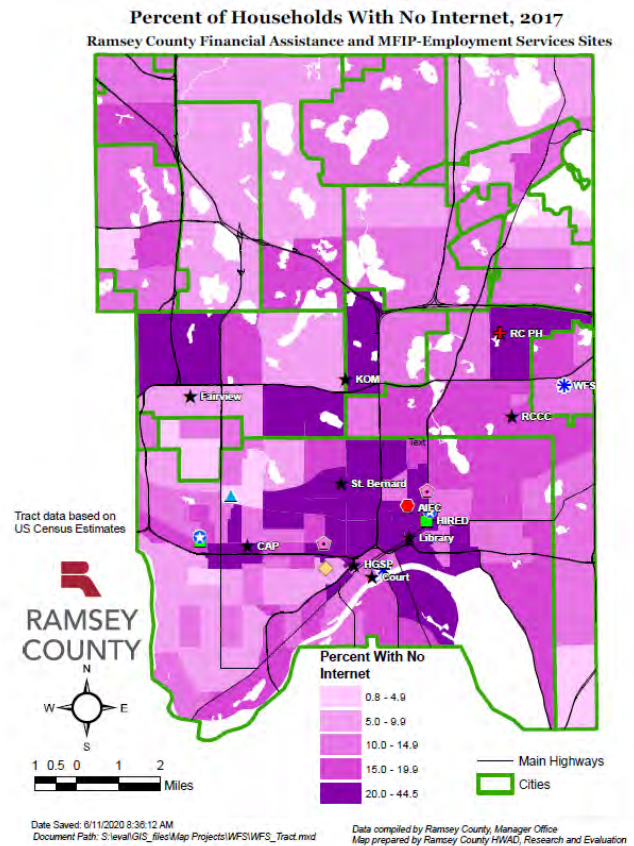
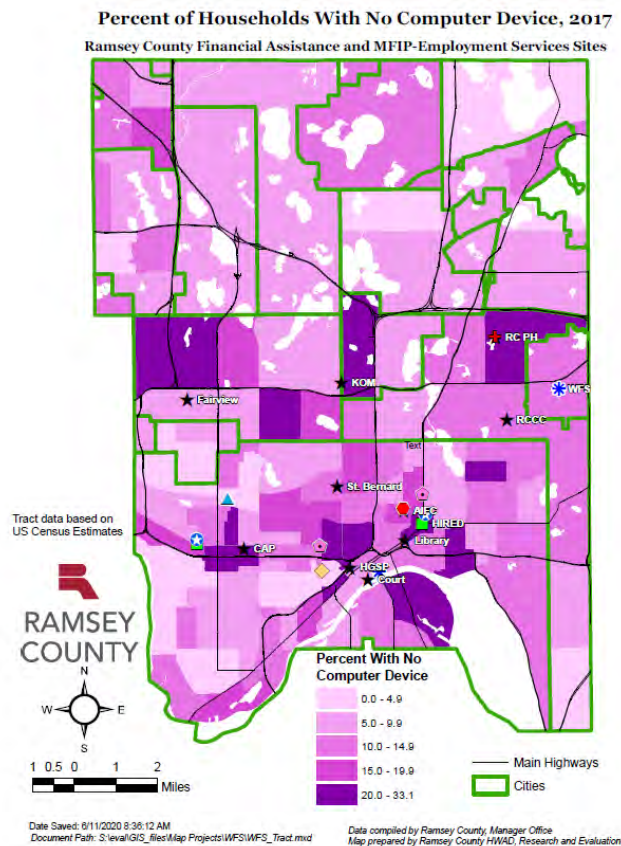
American Community Survey, 2017.

Access to Technology



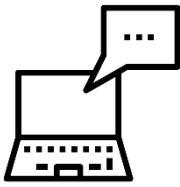
4% to 24% of households in each census tract have no access to a computer device.

American Community Survey, 2017.



² Census tracts allocated to St. Paul's West Side have 50% or more of their geographic area within zip codes 55102 and 55107.

Digital Skills



48% of Basic Computer Skills assessments received a passing score on the first try in 2019, 50% of Internet Basics, and 41% of Word 2016 assessments.

Northstar Digital Literacy, a program of Literacy Minnesota

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

In St. Paul's West Side, Northstar Digital Literacy sites³ administered 843 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.⁴ Among the most frequent assessments administered in St. Paul's West Side in 2019, 41% of Word 2016 assessments received a passing score on the first try, 69% of Email, and 43% of Excel 2016. Member organizations administered 86 first attempt assessments in St. Paul's West Side during the first half of 2020, which is a 77% decrease from the previous time periods.

Number of Digital Literacy Assessments with Passing Scores on the First Try in Basic Computer Skills, Internet Basics, and Email within a Six-month Period, St. Paul's West Side

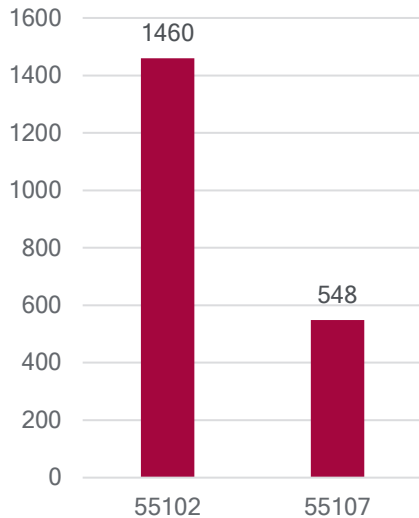
Subject	First Half of 2019		Second Half of 2019		First Half of 2020	
	Passed	Total	Passed	Total	Passed	Total
Basic Computer Skills	52% (42)	81	43% (23)	54	68% (13)	19
Internet Basics	57% (33)	58	40% (16)	40	25% (1)	4
Word 2016	33% (28)	84	49% (36)	73	75% (3)	4

³ 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.

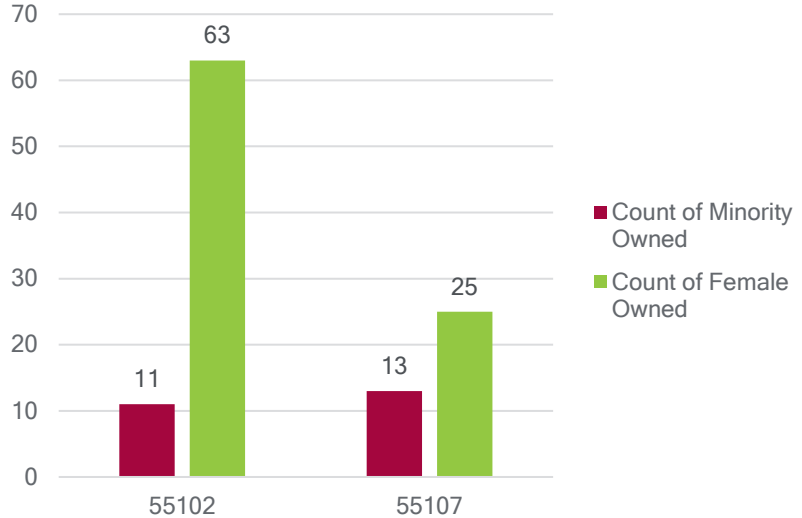
Businesses

According to DatabaseUSA, there are about 2,008 businesses located in St. Paul's West Side. Over 70% (1,460 businesses) are located in zip code 55102. Of all St. Paul's West Side businesses, just 88 are confirmed to be female-owned, and 24 are confirmed to be "minority-owned."

Businesses in St. Paul's West Side

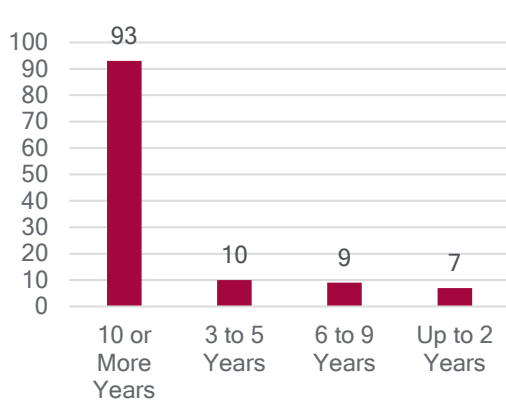


Female & Minority-Owned Businesses in St. Paul's West Side

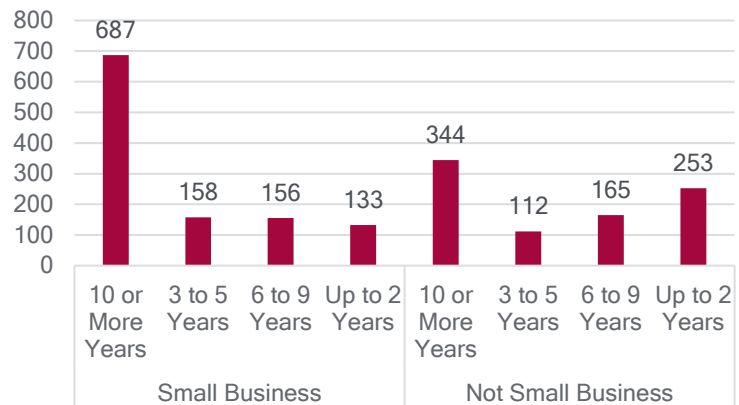


Among the 119 local non-profit organizations, the vast majority have been in existence for ten or more years, with very few young organizations in the community. The majority of for-profit businesses in the area are small businesses.

Non-Profits in St. Paul's West Side



Businesses by Size in St. Paul's West Side



Workforce Impacts of COVID-19

Community Vulnerability

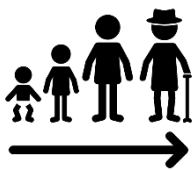
Because COVID-19 is a new disease, more work is needed to better understand the risk factors for severe illness or complications. Potential risk factors that have been identified by the Center for Disease Control (CDC) to date include:

- 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.

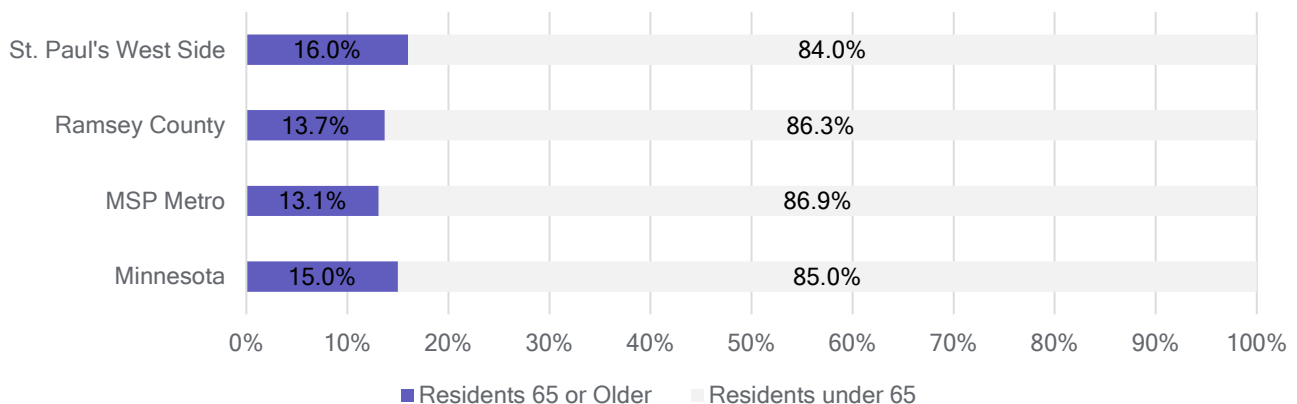
St. Paul's West Side represents a diversity of income and population. This report shows an overall picture of low community vulnerable; however, there are communities within St. Paul's West Side that are highly vulnerable.

AGE



St. Paul's West Side has a **HIGHER** share of residents 65 or older (16% of residents).

Residents 65+



American Community Survey 2014-2018.

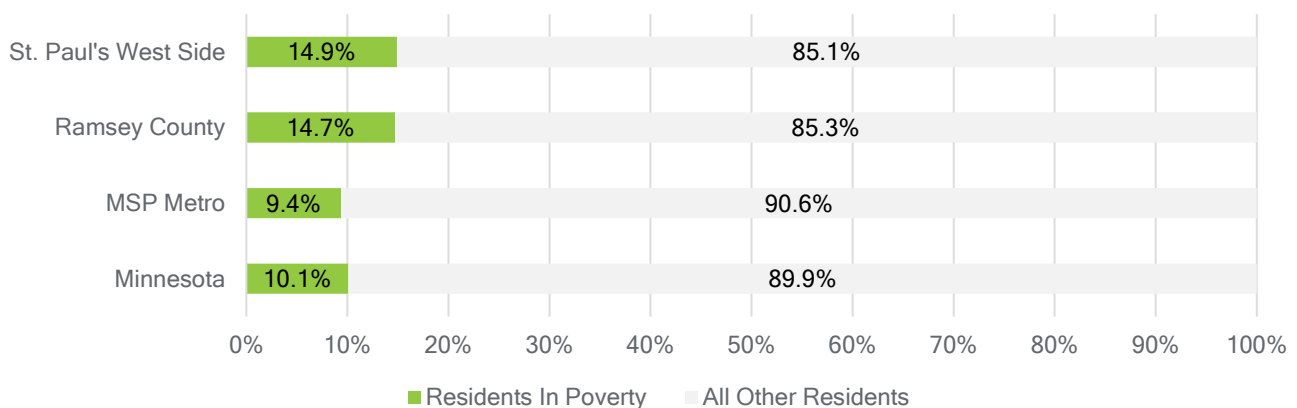
POVERTY



St. Paul's West Side has a **HIGHER** share of residents living in poverty (14.9%).

The per-capita income of residents of St. Paul's West Side is \$37,430, which is over \$3,381 higher than the per-capita income of Ramsey County residents overall (\$34,049). About one in seven (14.9%) St. Paul's West Side residents lives in poverty, and about one in eight (13.4%) of households receive food stamps, Compared to 14.7% and 12.8% across Ramsey County, respectively.

Residents in Poverty



American Community Survey 2014-2018.

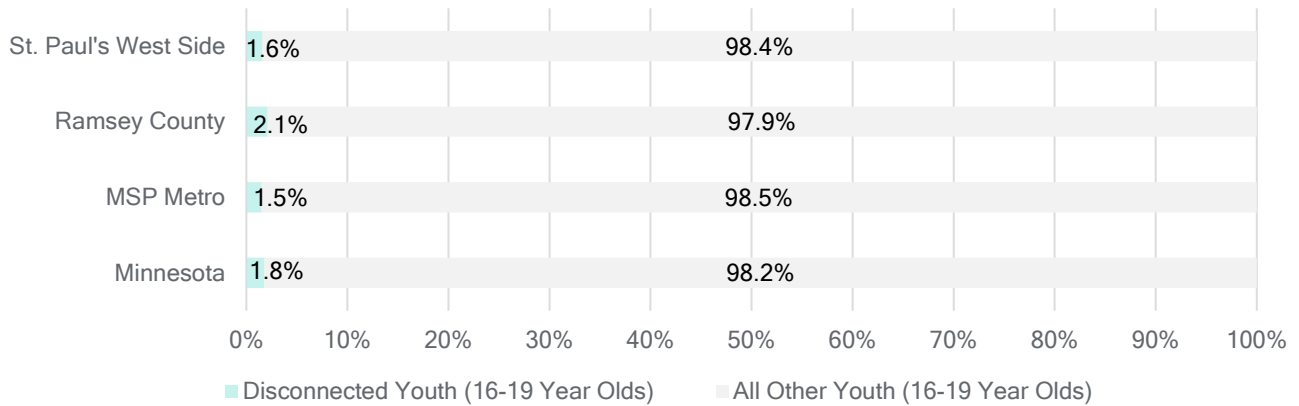
DISCONNECTED YOUTH



St. Paul's West Side has a **LOWER** share of disconnected youth (1.6%).

St. Paul's West Side has about 46 disconnected youth, which is about 1.6% of the total population of people between the ages of 16 and 19; the number of disconnected youth are almost evenly distributed between zip codes 55102 and 55107. These youth are not in school, not high school graduates, and are either unemployed or not in the labor force. St. Paul's West Side disconnected youth represent about 1% of all disconnected youth in the state (5,025 total statewide).

Disconnected Youth



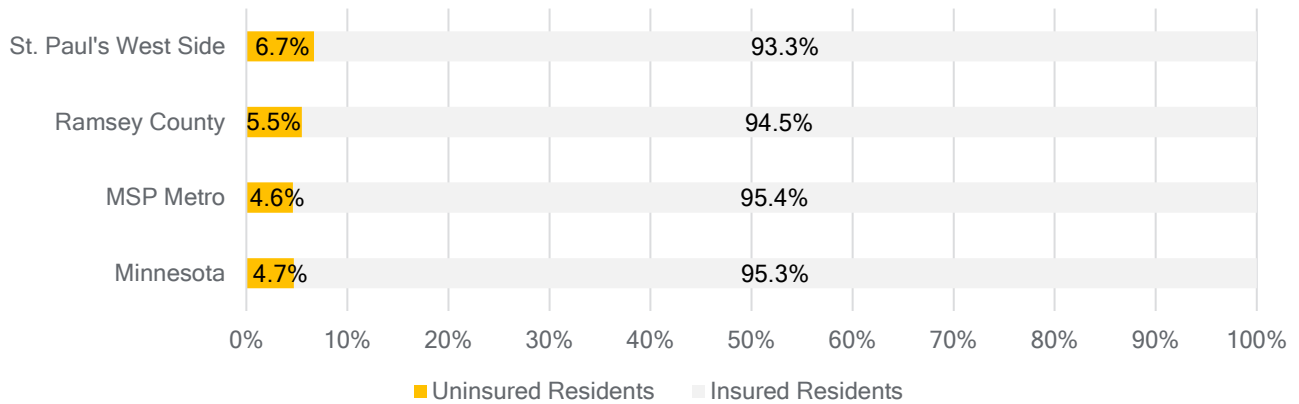
American Community Survey 2014-2018.

UNINSURED



St. Paul's West Side has a **HIGHER** share of residents without health insurance (6.7%).

Uninsured Residents



American Community Survey 2014-2018.

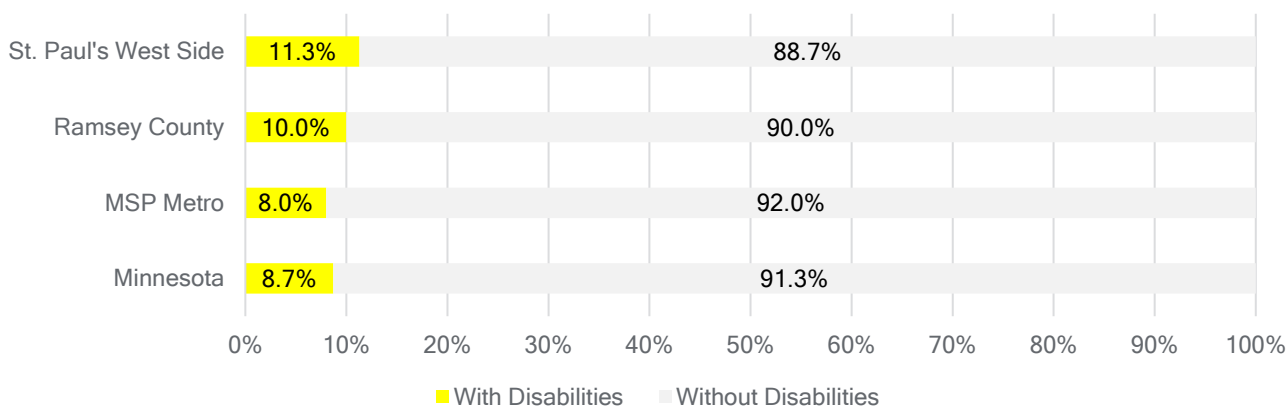
DISABILITY



St. Paul's West Side has a **HIGHER** share of residents with disabilities (11.3%).

St. Paul's West Side has a larger share of prime working age adults with disabilities, with about 4,383 adults (11.3%) having some form of disability. Of these, 49.6% participate in the labor force (2,174 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.⁵ 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 measures 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.

⁵ Chmura Economics, April 2020. <http://www.chmuraecon.com/interactive/covid-19-economic-vulnerability-index/>

An estimated 15% of local occupations by industry on St. Paul's West Side are vulnerable to the immediate-term impacts of COVID-19.

Short-Term Industry Vulnerability to COVID-19 Pandemic, St. Paul's West Side

Industry	Anticipated Short-Term Job Loss from COVID-19	Total Local Employment	Total Vulnerable Jobs
Accommodation and Food Services	60%	4,134	2,480
Arts, Entertainment, and Recreation	60%	3,594	2,156
Other Services (except Public Administration)	15%	1,796	269
Transportation and Warehousing	10%	352	35
Retail Trade	20%	839	168
Wholesale Trade	20%	540	108
Information	15%	1,945	292
Manufacturing	7%	1,789	125
Construction	7%	1,948	136
Mining, Quarrying, and Oil and Gas Extraction	5%	20	1
Real Estate and Rental and Leasing	5%	584	29
Health Care and Social Assistance	5%	11,040	552
Finance and Insurance	5%	4,615	231
Educational Services	5%	2,896	145
Administrative and Support and Waste Management and Remediation Services	2%	576	12
Agriculture, Forestry, Fishing and Hunting	2%	33	1
Public Administration	1%	5,488	55
Professional, Scientific, and Technical Services	1%	1,635	16
Management of Companies and Enterprises	1%	2,824	28
Utilities	1%	373	4
Total Jobs	15%	47,024	6,844

Economic Vulnerability Index model from Chmura Economics & Analytics

Occupational Vulnerability

Research by Dingel and Neiman⁶ and by Leibovici, Santacreu, and Famiglietti⁷ 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 St. Paul's West Side, 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,

⁶ Dingel, C. L., and B. Neiman (2020): "How Many Jobs Can be Done at Home?" *NBER Working Paper No. 26948*.

⁷ 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.

St. Paul's West Side has a larger share of high contact-intensity positions than Minnesota overall, with about 28% 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 30% of new positions opening up due to job exits, job changes, or job growth under normal economic conditions would be for high contact-intensity positions in St. Paul's West Side. Across Ramsey County, these high contact-intensity roles pay an average \$51,300 per year compared to \$60,900 for jobs located in St. Paul's West Side.

Summary Statistics of High Contact-Intensity Positions in St. Paul's West Side, 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	50	0	8	8	52	21	23	\$55,100
31-1100	Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	90.3	(1)	1,322	6	242	249	1,386	577	584	\$34,400
35-1000	Supervisors of Food Preparation and Serving Workers	88.0	2	364	1	70	71	374	176	168	\$43,400
29-1000	Healthcare Diagnosing or Treating Practitioners	86.2	(46)	3,718	17	285	302	3,883	621	853	\$105,800
39-1000	Supervisors of Personal Care and Service Workers	84.5	(1)	90	0	13	13	94	30	33	\$45,100
29-2000	Health Technologists and Technicians	82.7	(15)	1,688	3	161	164	1,718	382	458	\$55,500
31-9000	Other Healthcare Support Occupations	80.2	(4)	586	7	96	103	658	226	245	\$43,800
25-2000	Preschool, Elementary, Middle, Secondary, and Special Education Teachers	79.5	(5)	1,011	6	113	120	1,074	282	309	\$66,500
25-3000	Other Teachers and Instructors	79.0	(1)	369	1	64	65	378	142	146	\$45,100
53-3000	Motor Vehicle Operators	75.6	1	485	0	83	83	484	191	187	\$43,200
39-9000	Other Personal Care and Service Workers	75.5	6	649	1	146	147	661	355	327	\$34,800
35-3000	Food and Beverage Serving Workers	75.2	43	2,722	12	709	721	2,842	1,713	1,499	\$28,200
All High Contact-Intensity Occupations		13,054	54	1,990	2,046	13,604	4,716	4,832	13,054	54	\$60,900
Total - All Occupations		47,021	-15	6,947	6,931	46,865	17,022	16,959	47,021	-15	\$60,200
Share High Contact-Intensity				28%	MOD	29%	30%	29%	28%	28%	

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 St. Paul's West Side and experiencing higher than average growth demand. Average wages for these roles are \$105,800 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.”⁸

Food and Beverage Serving Workers and Retail Sales Workers had the most applicants for unemployment in Ramsey County since the beginning of the COVID-19 Pandemic, representing over 15% of all applications. Both of these occupation groups are also found in moderate volumes in St. Paul's West Side, representing about 8% of all local jobs together.

⁸ Ibid.

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

Occupation Group	Unempl. Insurance Applicants in Ramsey County	% of Total Applicants in Ramsey County	2020Q1 Employment in St. Paul's West Side	% of Total in St. Paul's West Side*
Food and Beverage Serving Workers	6,235	7.90%	2,739	5.8%
Retail Sales Workers	5,875	7.50%	822	1.7%
Cooks and Food Preparation Workers	3,589	4.60%	1,030	2.2%
Motor Vehicle Operators	3,496	4.40%	488	1.0%
Construction Trades Workers	3,240	4.10%	1,299	2.8%
Other Healthcare Support Occupations	3,196	4.10%	592	1.3%
Information and Record Clerks	2,961	3.80%	2,336	5.0%
Other Food Preparation and Serving Related Workers	2,704	3.40%	460	1.0%
Other Production Occupations	2,624	3.30%	304	0.6%
Health Diagnosing and Treating Practitioners	2,512	3.20%	3,774	8.0%
Personal Appearance Workers	1,959	2.50%	118	0.2%
Nursing, Psychiatric, and Home Health Aides	1,844	2.30%	1,340	2.8%
Other Office and Administrative Support Workers	1,694	2.20%	1,375	2.9%
Building Cleaning and Pest Control Workers	1,588	2.00%	827	1.8%
Health Technologists and Technicians	1,555	2.00%	1,707	3.6%
Other Education, Training, and Library Occupations	1,547	2.00%	538	1.1%
Other Personal Care and Service Workers	1,537	2.00%	660	1.4%
Other Management Occupations	1,483	1.90%	1,097	2.3%
Preschool, Primary, Secondary, and Special Education	1,207	1.50%	993	2.1%
Computer Occupations	1,187	1.50%	1,848	3.9%
Total	52,033		47,180	

*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 44 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 St. Paul's West Side, 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, St. Paul's West Side 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. Females comprise a larger share of St. Paul's West Side's workforce 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 St. Paul's West Side, there are higher numbers of Hispanic, American Indian, Non-Hispanic White and workers identifying with more than one race 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 St. Paul's West Side Employment in High Contact-Intensity Occupations

	Ramsey County		St. Paul				St. Paul's West Side	
	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	Difference (> 0 Indicates Higher Than Expected UI App by Group)	Share of 2020Q1 Workers in St. Paul's West Side	Employment in High Contact-Intensity Occupations in St. Paul's West Side **
Age Group								
65+	4,602	5.10%	3,308	4.4%	4.1%	0.3%	4.7%	4.7%
55-64	11,603	12.90%	8,533	11.3%	14.3%	-3.0%	14.2%	13.2%
45-54	13,117	14.60%	10,113	13.3%	17.1%	-3.8%	16.9%	15.2%
35-44	18,656	20.80%	15,066	19.9%	19.2%	0.7%	20.2%	18.7%
25-34	26,620	29.60%	23,248	30.7%	28.7%	2.0%	30.0%	29.9%
20-24	12,682	14.10%	13,322	17.6%	12.4%	5.2%	10.0%	12.1%
16-19	2,639	2.90%	2,179	2.9%	4.2%	-1.3%	4.1%	6.3%
Education Level								
Advanced	6,224	6.9%	4,924	6.5%	16.8%	-10.3%	15.4%	16.0%
4-year degree	17,608	19.6%	14,839	19.6%	28.4%	-8.8%	29.4%	26.3%
2-year degree	7,513	8.4%	5,834	7.7%	9.7%	-2.0%	9.8%	12.0%
Some college	23,239	25.8%	20,123	26.6%	16.7%	9.9%	17.0%	18.2%
HS	28,689	31.9%	24,079	31.8%	20.3%	11.5%	20.4%	20.5%
Less than HS	6,646	7.4%	5,970	7.9%	8.1%	-0.2%	8.1%	6.9%
Gender								
Female	46,363	51.60%	38,676	51.0%	49.7%	1.3%	52.9%	70.6%
Male	43,555	48.40%	37,092	49.0%	50.3%	-1.3%	47.1%	29.4%
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%	4.6%	4.8%
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%	1.1%	1.1%
Hispanic	45,825	6.70%	5,840	8.1%	8.3%	-0.2%	16.3%	13.4%
Asian	13,295	14.80%	11,037	15.4%	14.7%	0.7%	4.1%	3.9%
Black	16,436	18.30%	15,426	21.5%	12.9%	8.6%	9.8%	12.9%
Non-Hispanic White	45,825	51%	36,090	50.2%	60.3%	-10.1%	80.4%	77.3%
Total UI Applications	89,919		75,769				19,318	4,661

*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.

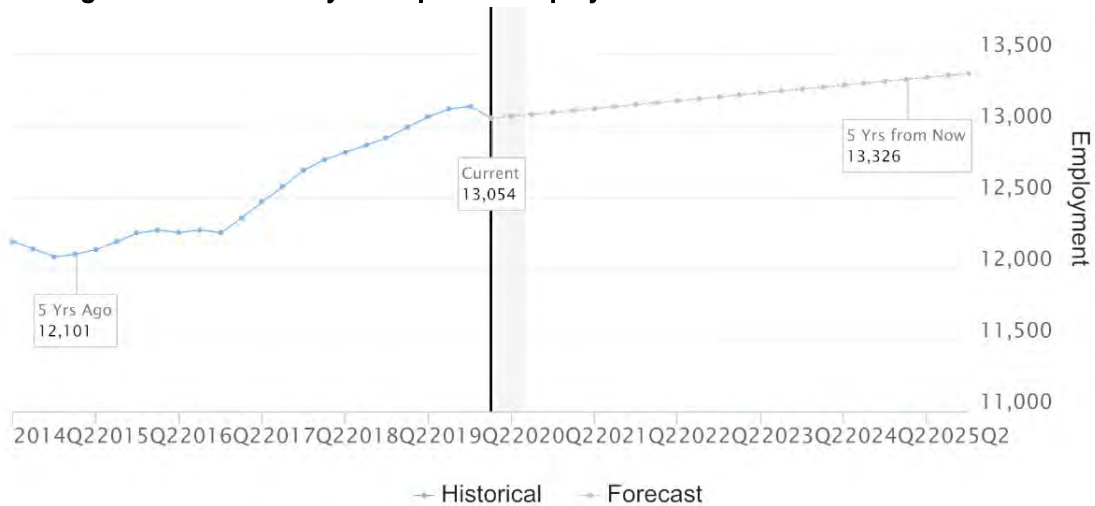
**Fields marked in orange are found in greater concentration on St. Paul's West Side than in St. Paul broadly.

Mid-Term Occupational Impacts

Early on in the pandemic, many economists optimistically hoped that impacts of COVID-19 would be sharp and short, with an eventual return to the forecasted trends anticipated prior to the impact of the virus. Across Ramsey County, it is anticipated that 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.

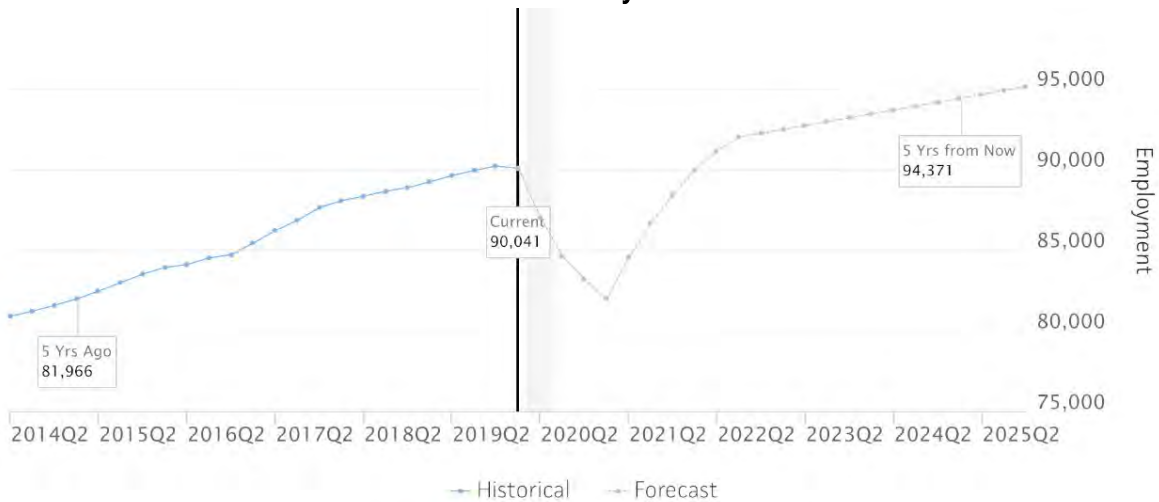
Employment was forecast to grow across Ramsey County by 0.2% annually over the next five years but will likely only grow by about 0.1% due to the impacts of COVID-19. Specific statistics to local occupational impacts of COVID-19 are not possible to compute at zip code levels.

Baseline High Contact-Intensity Occupation Employment 5-Year Forecast in St. Paul's West Side



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



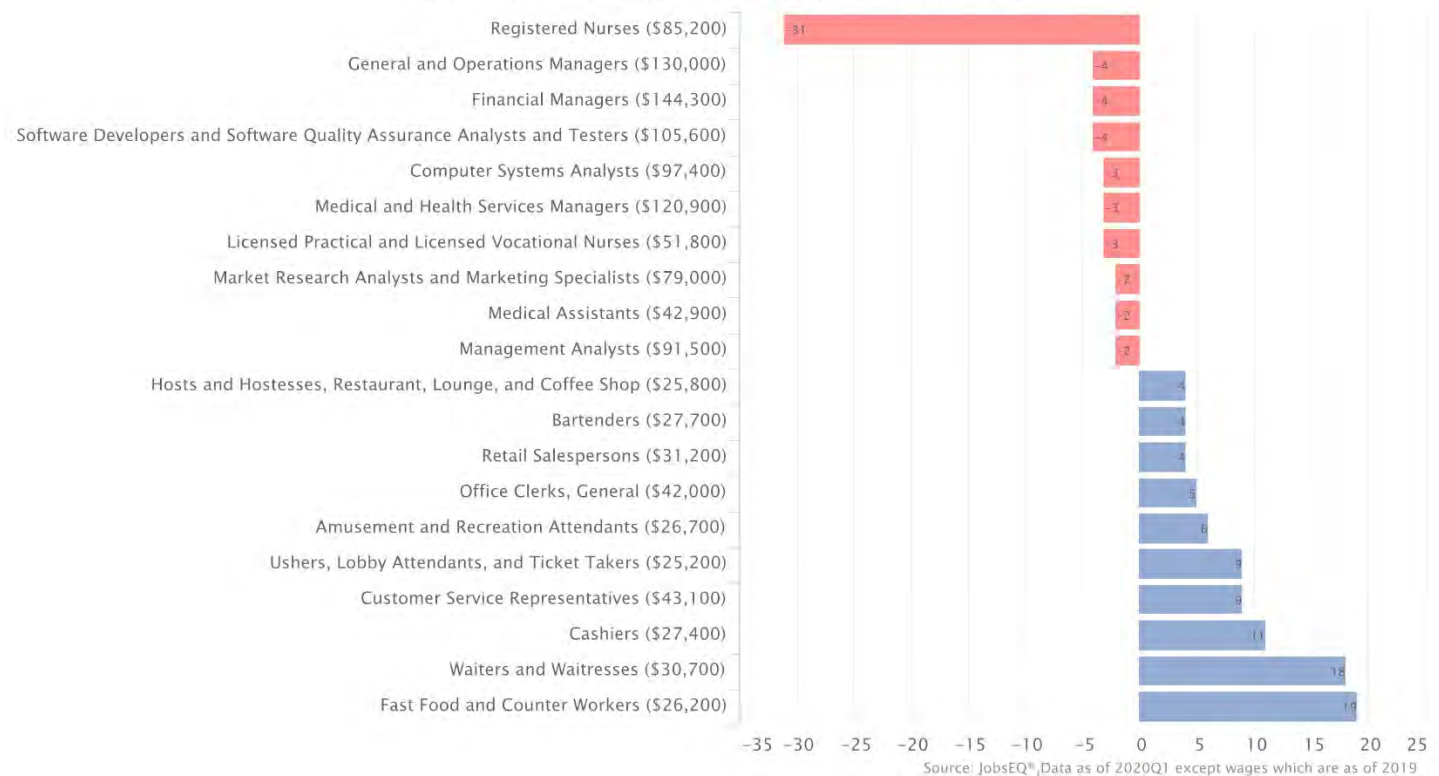
Source: JobsEQ®, Data as of 2020Q1. The shaded areas of the graph represent national recessions.

Estimation of mid-term and long-term recovery of critical local occupations is based on our most reasonable hypothesis given current conditions. On St. Paul's West Side, an analysis of local labor market occupational gaps as of the first quarter of 2020 showed that there is likely to be a shortage of local Nurses, General Managers, Financial Managers, Software Developers, Computer Systems Analysts, Medical and Health Services Managers, Market Research Analysts, Medical Assistants, and Management Analysts over the next five years. Based on forecasted growing demand for health, 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, and thus with the potential for even greater local shortages. All of the top ten positions of highest forecasted talent shortage over the next five years pay wages of \$42,900 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 \$43,100 on average per year. Nine out of ten of these positions typically cannot be done remotely, and three 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.

Occupation Gaps

Potential Average Annual Occupation Gaps over 5 Years in St. Paul's West Side



Shifting Opportunities

An analysis of current opportunities in St. Paul's West Side reveal that approximately 55% of all jobs offered in this community are non-remote, and 16% of positions can be made fully remote. The remaining positions (29%) 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, St. Paul's West Side, 2020Q1

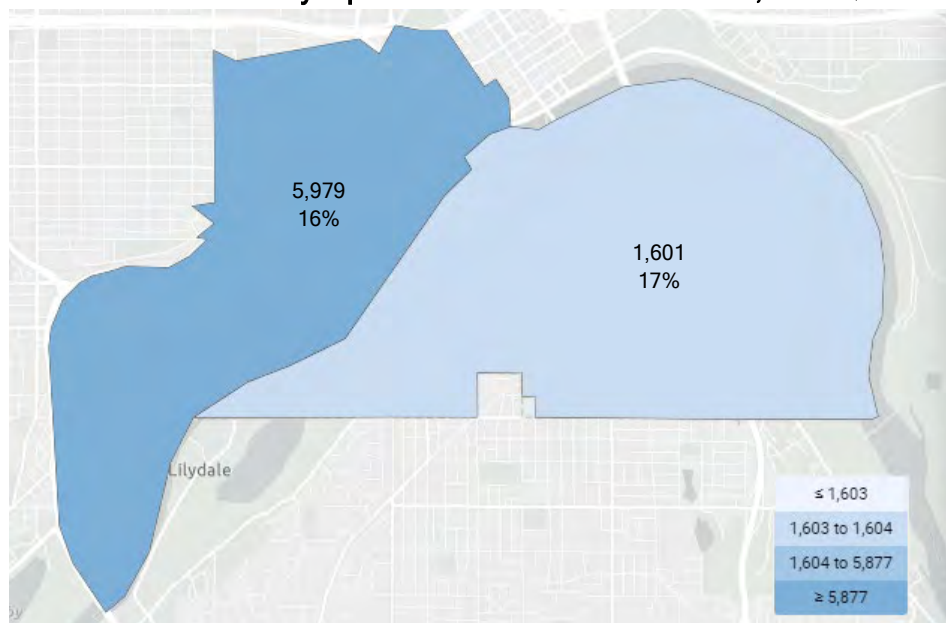
West Side	55102	55107	Entire St. Paul's West Side
Remote	5,979	1,601	7,590
Partially-Remote	10,891	2,883	13,790
Non-Remote	20,633	5,128	25,800
All Occupations	37,503	9,612	47,180

West Side	55102	55107	Entire St. Paul's West Side
Remote	16%	17%	16%
Partially-Remote	29%	30%	29%
Non-Remote	55%	53%	55%
All Occupations	37,503	9,612	47,180

Remote Work

Across the 47,180 positions employing people in St. Paul's West Side, 16% 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 St. Paul's West Side, 55102 and 55107 have an almost equal share of remote work positions out of the total number of positions employing workers in each zip code, 16% in 55102 and 17% in 55107.

Remote Work by Zip Code on St. Paul's West Side, 2020Q1



Analysis of employment by race, ethnicity, and gender reveal that a disproportionate share of Asian and White workers living in St. Paul's West Side 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, six have 6.0% or more being Asian workers, compared to 4.1% across all types of occupations. Similarly, seven of the top ten remote work positions by volume of residents employed, have 83.5% or more White workers compared to 80.4% across all types of occupations. These top ten positions also have a disproportionately high volume of non-Hispanic workers. Bookkeeping, Accounting and Auditing Clerks, Accountants, Management Analysts, Personal Service Managers, Financial Managers, Lawyers, and Marketers also have a disproportionately high share of White workers in St. Paul's West Side.

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 St. Paul's West Side pay an average annual salary of \$95,300 compared to \$59,800 across all local employment. Overall, remote work positions in St. Paul's West Side are forecast to grow by an average of 0.0% annually over the next five years, which is the same as overall expected employment growth in the community.

Demographics of Remote Work Talent by Occupation and Place of Residence in St. Paul's West Side, 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	190	69.3%	4.7%	0.4%	22.2%	0.0%	3.4%	96.5%	3.5%	79.9%	20.1%
13-1198	Project Management Specialists and Business Operations Specialists, All Other	189	80.8%	7.1%	2.1%	6.0%	0.0%	3.9%	92.5%	7.5%	40.2%	59.8%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	189	88.7%	4.9%	0.5%	3.4%	0.0%	2.5%	89.4%	10.6%	10.4%	89.6%
13-2011	Accountants and Auditors	173	83.5%	6.0%	0.4%	6.7%	0.0%	3.4%	93.7%	6.3%	36.4%	63.6%
15-1211	Computer Systems Analysts	132	76.4%	7.0%	0.5%	11.2%	0.0%	5.0%	94.3%	5.7%	57.9%	42.1%
13-1111	Management Analysts	126	83.9%	5.3%	0.3%	7.6%	0.0%	2.9%	94.0%	6.0%	55.9%	44.1%
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	125	87.4%	5.1%	0.7%	3.8%	0.0%	2.8%	92.5%	7.5%	61.6%	38.4%
11-3031	Financial Managers	115	84.0%	5.8%	0.4%	5.3%	0.0%	4.5%	91.7%	8.3%	44.2%	55.8%
23-1011	Lawyers	107	90.3%	3.9%	0.3%	2.9%	0.0%	2.5%	96.2%	3.8%	62.0%	38.0%
13-1161	Market Research Analysts and Marketing Specialists	102	88.0%	4.1%	0.0%	6.2%	0.0%	1.7%	95.1%	4.9%	41.7%	58.3%
95-0300	Remote Jobs	2,605	83.8%	5.8%	0.5%	6.6%	0.0%	3.3%	93.5%	6.5%	51.1%	48.9%
00-0000	Total - All Occupations	19,318	80.4%	9.8%	1.1%	4.1%	0.0%	4.6%	83.7%	16.3%	47.1%	52.9%

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 St. Paul's West Side, 2020Q1

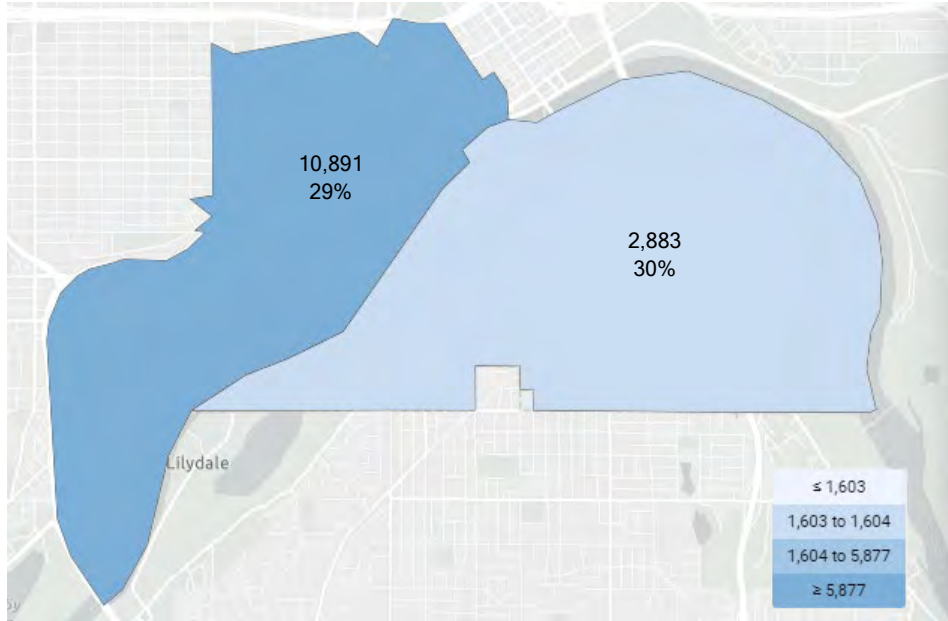
SOC		Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	\$105,600	0.5%	Bachelor's degree	None	None
13-1198	Project Management Specialists and Business Operations Specialists, All Other	\$77,400	0.0%	Bachelor's degree	None	None
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$47,800	-1.0%	Some college, no degree	None	Moderate-term on-the-job training
13-2011	Accountants and Auditors	\$76,000	0.0%	Bachelor's degree	None	None
15-1211	Computer Systems Analysts	\$97,400	0.1%	Bachelor's degree	None	None
13-1111	Management Analysts	\$91,500	0.5%	Bachelor's degree	Less than 5 years	None
11-9198	Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	\$134,900	0.1%	Bachelor's degree	Less than 5 years	None
11-3031	Financial Managers	\$144,300	0.8%	Bachelor's degree	5 years or more	None
23-1011	Lawyers	\$128,600	0.1%	Doctoral or professional degree	None	None
13-1161	Market Research Analysts and Marketing Specialists	\$79,000	1.1%	Bachelor's degree	None	None
Remote Jobs		\$95,300	0.0%	n/a	n/a	n/a
Total - All Occupations		\$59,800	0.0%	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 47,180 positions employing people in St. Paul's West Side, 29% can be served at least partially remotely. Across the two zip codes of St. Paul's West Side, 55107 has the greatest share of partially-remote work positions out of the total number of positions employing workers in that zip code (30%).

Partially-Remote Work by Zip Code in St. Paul's West Side, 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, Black and Asian workers and workers who identify with two or more races are underrepresented in over half of the partially-remote occupations that employ the largest number of St. Paul's West Side residents. Women are more likely to hold partially-remote roles than men (62.9% of partially-remote jobs are held by women in St. Paul's West Side).

Eight of the top ten partially-remote work positions by volume in this community require just a high school diploma (except for General and Operations Managers and Secondary School Teachers, which require a Bachelor's degree) and little or no previous work experience. Partially-remote work positions in St. Paul's West Side pay on average about \$28,300 less than remote work positions (but about \$7,200 more than the overall average salary), at an average annual salary of \$67,000. Overall, partially-remote work positions in St. Paul's West Side are forecast to decline by an average of 0.2% annually over the next five years, about 0.2 percentage points less than overall expected employment growth in the community.

Demographics of Partially-Remote Work Talent by Occupation and Place of Residence in St. Paul's West Side, 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	543	68.0%	19.4%	1.9%	6.0%	0.0%	4.7%	81.4%	18.6%	12.7%	87.3%
43-9061	Office Clerks, General	343	80.1%	9.8%	0.9%	5.5%	0.0%	3.8%	83.5%	16.5%	15.8%	84.2%
11-1021	General and Operations Managers	289	88.1%	4.5%	0.5%	2.0%	0.0%	4.9%	90.5%	9.5%	66.8%	33.2%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	227	87.7%	6.0%	0.9%	2.1%	0.0%	3.2%	89.4%	10.6%	6.2%	93.8%
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	153	90.2%	4.0%	0.4%	2.2%	0.0%	3.2%	91.8%	8.2%	70.5%	29.5%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	145	83.4%	9.3%	1.1%	2.2%	0.0%	4.0%	89.7%	10.3%	29.2%	70.8%
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	129	89.1%	5.2%	0.2%	2.8%	0.0%	2.7%	91.0%	9.0%	67.3%	32.7%
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	112	90.2%	4.9%	0.3%	1.8%	0.0%	2.8%	93.9%	6.1%	41.7%	58.3%
43-4171	Receptionists and Information Clerks	109	80.0%	10.9%	1.0%	2.8%	0.0%	5.4%	83.0%	17.0%	9.8%	90.2%
21-1093	Social and Human Service Assistants	103	69.5%	18.0%	3.2%	2.6%	0.0%	6.7%	87.5%	12.5%	19.4%	80.6%
95-0290	Partially Remote Jobs	5,218	82.2%	9.2%	0.9%	3.6%	0.0%	4.0%	89.3%	10.7%	37.1%	62.9%
00-0000	Total - All Occupations	19,318	80.4%	9.8%	1.1%	4.1%	0.0%	4.6%	83.7%	16.3%	47.1%	52.9%

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 St. Paul's West Side, 2020Q1

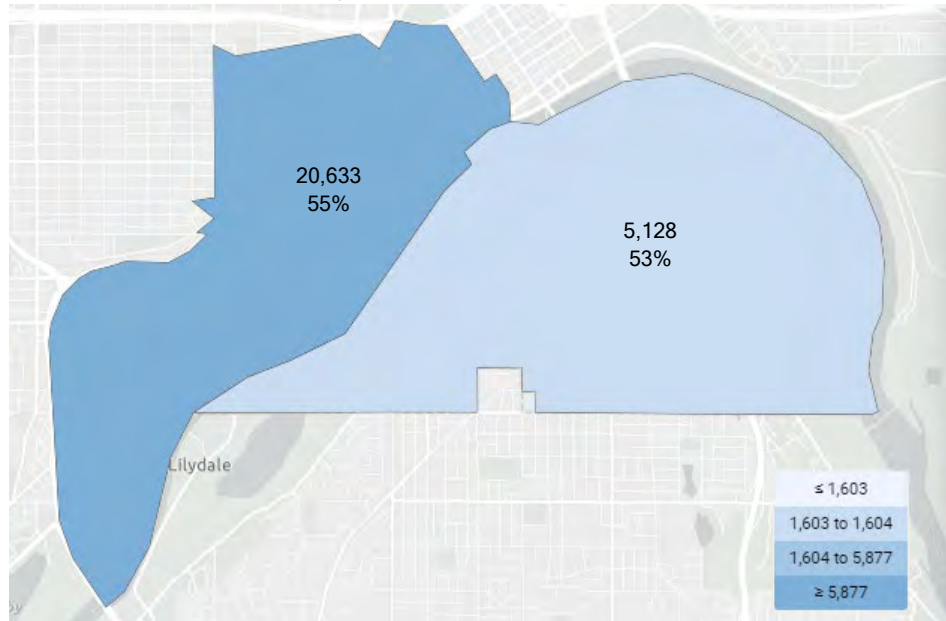
SOC		Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
31-1122	Personal Care Aides	\$28,900	1.4%	High school diploma or equivalent	None	Short-term on-the-job training
43-9061	Office Clerks, General	\$42,000	-1.0%	High school diploma or equivalent	None	Short-term on-the-job training
11-1021	General and Operations Managers	\$130,000	0.1%	Bachelor's degree	5 years or more	None
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$43,700	-1.5%	High school diploma or equivalent	None	Short-term on-the-job training
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$83,200	-0.5%	High school diploma or equivalent	None	Moderate-term on-the-job training
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$66,900	-0.8%	High school diploma or equivalent	Less than 5 years	None
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	\$69,200	-0.2%	High school diploma or equivalent	None	Moderate-term on-the-job training
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	\$70,100	0.7%	Bachelor's degree	None	None
43-4171	Receptionists and Information Clerks	\$33,300	0.1%	High school diploma or equivalent	None	Short-term on-the-job training
21-1093	Social and Human Service Assistants	\$38,100	0.6%	High school diploma or equivalent	None	Short-term on-the-job training
95-0290	Partially-Remote Jobs	\$67,000	-0.2%	n/a	n/a	n/a
00-0000	Total - All Occupations	\$59,800	0.0%	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 (55%) of all positions employing workers in St. Paul's West Side as of 2020Q1 cannot be made remote or partially-remote. Zip code 55102 has the largest share of non-remote occupations (55%) followed by 55107 (53%). These 25,800 positions are some of the most vulnerable to pandemic impacts.

Non-Remote Work by Zip Code in St. Paul's West Side, 2020Q1



Over half of all positions employing people that work in St. Paul's West Side are non-remote. 59% of St. Paul's West Side 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 St. Paul's West Side. Female residents account for 49.2% of non-remote employees who live in St. Paul's West Side, compared to 52.9% of workers overall. Food service, retail, customer service, janitors, warehouse labor, and nursing positions dominate the top non-remote work positions by employment. All but three positions that are in the top ten by employment among residents of St. Paul's West Side (Registered Nurses, Retail Salespersons, and Waiters and Waitresses) employ a disproportionately high volume of Black or African American and Hispanic or Latino workers.

Eight of the top ten non-remote work positions by volume in this community require a high school diploma or less (except for Registered Nurses and Nursing Assistants, which require either Bachelor's degree or some college) and no previous work experience. Registered Nurses is the only occupations of the top ten that pays a living wage for a household of three. This occupation requires a Bachelor's degree and is predominantly held by St. Paul's West Side's White residents. Non-remote positions in St. Paul's West Side pays about \$9,900 less than the overall average, with non-remote roles paying an average annual salary of \$52,900. Overall, non-remote work positions in St. Paul's West Side are forecast to grow by an average of 0.0% annually over the next five years, which is the same as overall expected employment growth in the community

Demographics of Non-Remote Work Talent by Occupation and Place of Residence on St. Paul's West Side, 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
35-3023	Fast Food and Counter Workers	529	75.1%	11.9%	1.5%	3.6%	0.0%	7.9%	83.3%	16.7%	35.2%	64.8%
29-1141	Registered Nurses	448	83.1%	8.7%	0.6%	5.0%	0.0%	2.6%	95.1%	4.9%	10.6%	89.4%
41-2031	Retail Salespersons	421	82.8%	8.7%	0.8%	2.8%	0.0%	4.9%	85.4%	14.6%	48.5%	51.5%
43-4051	Customer Service Representatives	387	76.6%	12.4%	1.0%	3.3%	0.0%	6.8%	84.4%	15.6%	33.1%	66.9%
41-2011	Cashiers	369	72.6%	12.9%	1.7%	4.9%	0.0%	7.9%	79.4%	20.6%	25.9%	74.1%
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	360	77.6%	13.3%	1.4%	2.4%	0.0%	5.3%	72.2%	27.8%	58.4%	41.6%
35-3031	Waiters and Waitresses	321	77.3%	7.7%	1.2%	4.7%	0.0%	9.1%	81.1%	18.9%	26.2%	73.8%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	310	77.3%	14.7%	1.1%	1.9%	0.0%	5.0%	79.6%	20.4%	75.2%	24.8%
35-2014	Cooks, Restaurant	233	74.9%	13.4%	1.5%	4.5%	0.0%	5.8%	67.9%	32.1%	53.8%	46.2%
31-1131	Nursing Assistants	222	62.7%	29.3%	1.1%	3.2%	0.0%	3.7%	84.9%	15.1%	10.3%	89.7%
95-0280	Non-Remote Jobs	11,495	78.8%	11.0%	1.4%	3.7%	0.0%	5.2%	78.9%	21.1%	50.8%	49.2%
00-0000	Total - All Occupations	19,318	80.4%	9.8%	1.1%	4.1%	0.0%	4.6%	83.7%	16.3%	47.1%	52.9%

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 St. Paul's West Side, 2020Q1

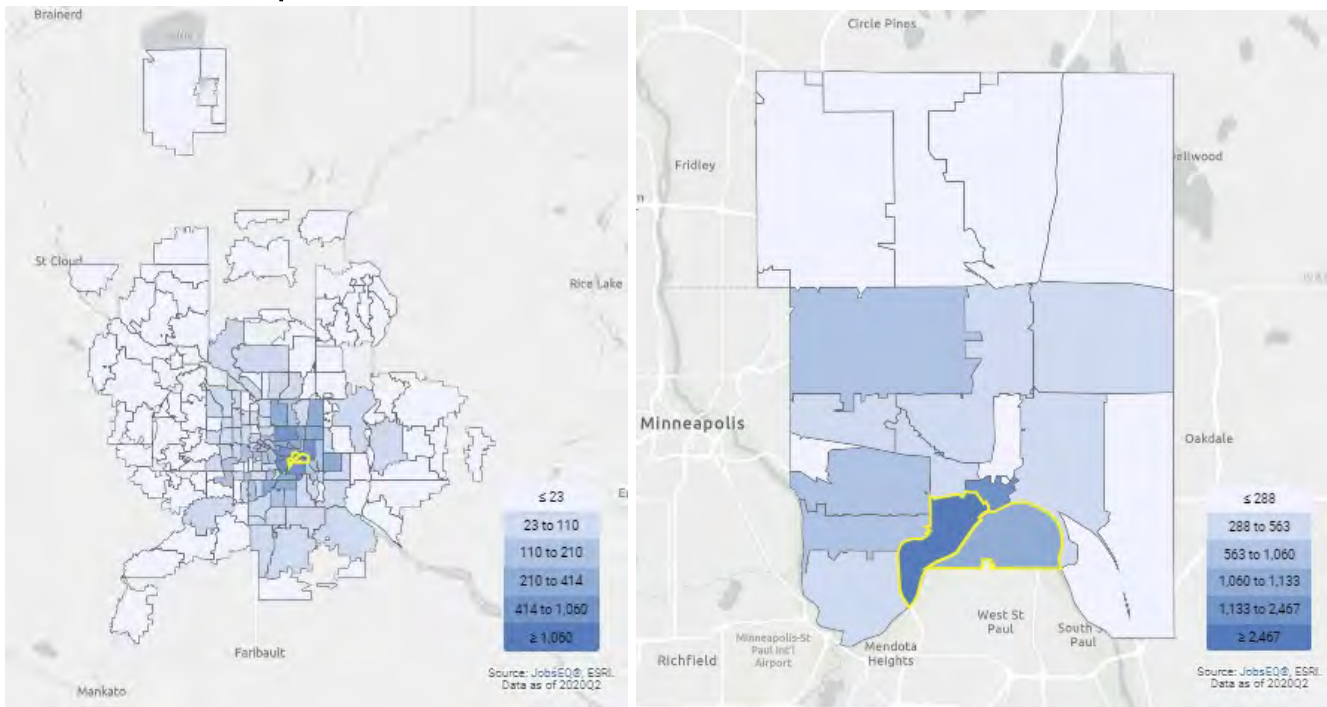
SOC	Occupation	Avg Ann Wages	Forecast Ann Growth	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
35-3023	Fast Food and Counter Workers	\$26,200	0.8%	None	None	Short-term on-the-job training
29-1141	Registered Nurses	\$85,200	0.3%	Bachelor's degree	None	None
41-2031	Retail Salespersons	\$31,200	-0.4%	None	None	Short-term on-the-job training
43-4051	Customer Service Representatives	\$43,100	-1.2%	High school diploma or equivalent	None	Short-term on-the-job training
41-2011	Cashiers	\$27,400	-0.6%	None	None	Short-term on-the-job training
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$34,000	0.1%	None	None	Short-term on-the-job training
35-3031	Waiters and Waitresses	\$30,700	0.1%	None	None	Short-term on-the-job training
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$37,700	0.0%	None	None	Short-term on-the-job training
35-2014	Cooks, Restaurant	\$32,600	1.5%	None	Less than 5 years	Moderate-term on-the-job training
31-1131	Nursing Assistants	\$37,800	-0.2%	Postsecondary non-degree award	None	None
95-0280	Non-Remote Jobs	\$52,900	0.0%	n/a	n/a	n/a
00-0000	Total - All Occupations	\$59,800	0.0%	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

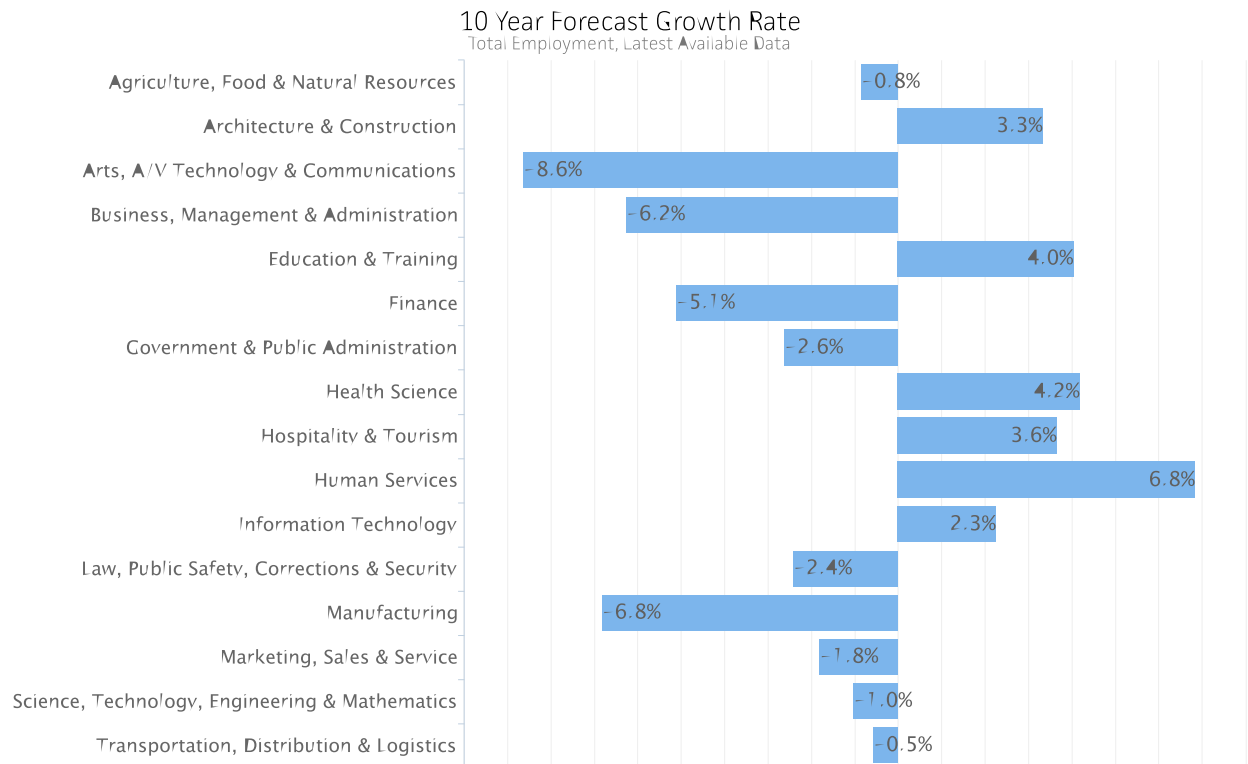
A generous share of residents of St. Paul's West Side work within the West Side community. In all, 3,528 residents of St. Paul's West Side also work in their community, which is about 18.3% of local residents and about 50% of the total workforce employed on St. Paul's West Side. Of all Ramsey County 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 St. Paul's West Side



Future Growth by Cluster

Of sixteen career clusters used by Career and Technical Education (CTE), six are expected to grow and ten are expected to decline over the next ten years on St. Paul's West Side. The clusters expecting the greatest growth are Human Services (6.8%), Health Science (4.2%), and Education and Training (4.0%). In contrast, Arts, A/V Technology and Communications (-8.6%), and Manufacturing (-6.8%) 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.

During the first three months of the COVID-19 pandemic,⁹ there were 216 new jobs advertised specifying one of the two zip codes of St. Paul's West Side. This volume of new posted positions was an increase of about 9% 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—was Registered Nurses. Other positions trending locally include Software Quality Assurance Engineers and Testers, Social and Human Services Assistants, and Business Operations Specialists.

⁹ March 15-June 15, 2020.

Top Emerging Occupations on St. Paul's West Side, March 15-June 15, 2020

1. **Registered Nurses** (Operating Room RN, Nurse Specialist)
2. **Software Quality Assurance Engineers and Testers** (Quality Assurance Analyst, Quality Analyst, Loan Assurance Analyst, Banking Quality Analyst)
3. **Social and Human Services Assistants** (Domestic Violence Legal Advocate, Coordinated Entry Navigator, Recovery Advocate, Tenant Navigator, Youth Case Manager, Clinical Supervisory for Assertive Community Treatment)
4. **Business Operations Specialists** (Mortgage Specialist, Business Ops Specialist, Digital Quality Specialist)
5. **Customer Service Representatives** (Processor, Contact Center Representative, Customer Support Agent)
6. **Combined Food Preparation and Serving Workers** (Team Member, Restaurant Team Member)
7. **Accountants** (Sr Accountant, Public Tax Staff, Staff Accountant)

The certifications in demand locally match in particular to the healthcare and transportation positions listed above. Skills like leadership, compliance, monitoring, communication, and supervision 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 on St. Paul's West Side in Order of Frequency in Job Postings, March 15-June 15, 2020

1. Communication (+24% from pre-COVID-19)
2. Supervision (+33% from pre-COVID-19)
3. Customer Service (+6% from pre-COVID-19)
4. Leadership (+83% from pre-COVID-19)
5. Research (+14% from pre-COVID-19)
6. Innovation (+74% from pre-COVID-19)
7. Compliance (+167% from pre-COVID-19)
8. Relationship-Building (+35% from pre-COVID-19)
9. Operations (+3% from pre-COVID-19)
10. Monitoring (+131% 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 St. Paul's West Side 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 residents of color working in these roles.

For example, **Nursing Assistants** are found on St. Paul's West Side at nearly double the rate expected for a community of this size in Minnesota (71% more, or an LQ of 1.71). Over the next five years, about 403 Nursing Assistant positions will need to be filled in this community alone, primarily due to retirements and job transitions. About one in three, or 37.3% of local West Side residents working in these roles are BIPOC, and typically these positions require a non-degree postsecondary award.

Maintenance and Repair Workers

Titles Used: Maintenance Technician, Multi-Side Maintenance Tech, Commercial Maintenance Technician

Employers: Bigos Management, Greco Pizza, Dominion, TD Garden

Customer Service Representatives

Titles Used: Customer Service Telephone Representative, Nutrition Services Representative

Employers: Assurance, Regions Hospital, Public Storage, Goodwill Industries, TalentBurst, Walgreens, CVS, Camping World

Supervisors of Retail Workers

Titles Used: Store Manager, Assistant Manager, Supervisor, Shift Lead

Employers: Macalester College, Signet Jewelers, Lumber Liquidators, Journeys, Walgreens, Target

Heavy and Tractor-Trailer Truck Drivers

Titles Used: CDL Class B Route Delivery Driver, CDL A Truck Driver, Company Driver

Employers: West Side Transport, Airgas Inc, Midnite Express

Registered Nurses

Titles Used: Correctional Health RN, Operating Room RN, Nurse Case Manager, Health Unit Coordinator

Employers: Ramsey County, Regions Hospital, iHire LLC, Allina Health, Guild Incorporated

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

SOC	Occupation	Current				Historical	5-Year Forecast		Considerations				Education & Experience		
		2020Q1 Empl	High Wage (Avg Ann Wages)	High Local Concentration (LQ)	Low Historic Unemployment Rate	High Ann % Empl Growth	High Total Demand (Replacing Over 50% of 2020Q1 Empl in 5 Yrs)	Ann % Growth	Able to be Remote (R)	Low Contact Intensity (L)	Trending in Job Postings Locally During Pandemic (T)	Higher than Local Resident Average BIPOC Employment (over 19.6%)	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
35-3023	Fast Food and Counter Workers	1,206	\$26,200	1.02	6.1%	1.5%	1,187	0.8%				24.9%	None	None	Short-term OJT
43-4051	Customer Service Representatives	1,091	\$43,100	1.25	3.6%	0.9%	626	-1.2%		L	T	23.4%	High school diploma or equivalent	None	Short-term OJT
35-3031	Waiters and Waitresses	950	\$30,700	1.24	4.2%	1.1%	920	0.1%				22.7%	None	None	Short-term OJT
31-1131	Nursing Assistants	739	\$37,800	1.71	3.5%	-0.8%	403	-0.2%			T	37.3%	Postsecondary non-degree award	None	None
35-2014	Cooks, Restaurant	525	\$32,600	1.27	5.9%	4.0%	434	1.5%		L	T	25.1%	None	Less than 5 years	Moderate-term OJT
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	521	\$34,000	0.75	4.2%	-0.8%	347	0.1%		L		22.4%	None	None	Short-term OJT
43-3031	Bookkeeping, Accounting, and Auditing Clerks	497	\$47,800	1.01	1.7%	-3.4%	254	-1.0%	R	L		11.3%	Some college, no degree	None	Moderate-term OJT
43-1011	Supervisors of Office and Administrative Support Workers	442	\$66,900	0.98	1.7%	-0.4%	207	-0.8%		L	T	16.6%	High school diploma or equivalent	Less than 5 years	None
49-9071	Maintenance and Repair Workers, General	389	\$48,800	0.89	2.0%	-0.8%	192	0.1%		L		15.2%	High school diploma or equivalent	None	Moderate-term OJT
41-3091	Sales Representatives of Services	337	\$69,200	1.08	3.8%	2.1%	207	-0.2%		L		10.9%	High school diploma or equivalent	None	Moderate-term OJT
Total - All Occupations		47,024	\$59,800	1.00	3.4%	0.4%	25,098	0.0%	19.6%						

*In other reports, only careers paying an average of \$40,000 or more are included in this table. However, given the West Side's reliance on lower-wage entry-level positions, several occupations not hitting this wage threshold are included above. 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% is considered high and highlighted in green.

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

Seven out of ten of the rising and most promising accessible careers on St. Paul's West Side that typically require a Bachelor's degree or higher can be done fully remotely. A large majority of local opportunities on the West Side of St. Paul that will see growth, high wages, and high local concentration of need are in healthcare, finance, management, and IT roles.

For example, **Software Developers** and **Project Management Specialists** are both more concentrated on St. Paul's West Side than an average community of its size in Minnesota, and historically, local unemployment in these roles has been very low (1.3% and 2.6% respectively). Over the next five years, about 214 Software Developer positions will need to be filled due to job growth (about 0.5% anticipated), retirements, and job transitions. These positions are highly diverse, with nearly 31% of local West Side St. Paul residents working in these roles being Black, Indigenous, or People of Color (compared to 19.6% overall in this community).

Registered Nurses

Titles Used: Clinical Educator, SUPV Patient Care, Manager of Patient Care, Float Pool Med/Surg

Employers: Regions Hospital, Allina Health, DaVita Inc

Bookkeeping, Accounting, and Auditing Clerks

Titles Used: Finance Clerk, Bookkeeper, Accounts Payable Specialist, Mortgage Audit Specialist, Cash Application Specialist, Accounts Receivable Clerk, Pre-Auditing Clerk

Employers: Robert Half International

Software Quality Assurance Engineers and Testers

Titles Used: Curam Software Quality Assurance Tester, Quality Assurance Analyst

Employers: Virtual Networx Inc, Infor Global Solutions, Rose International, BC Forward, Kforce Professional Staffing

Human Resources Managers

Titles Used: Director of HR Operations, Human Resources Generalist, Human Resources/Office Manager, Talent Management Partner

Employers: Ramsey County, Planned Parenthood, MN Environmental Partnership, American National Bank

Social and Human Services Assistants

Titles Used: Chaplain, Manager of Spiritual Health Services

Employers: Allina Health

Accountants

Titles Used: Tax Accountant, Staff Accountant, Senior Accountant, Controller

Employers: Ecolab, Robert Half International

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

SOC	Occupation	Current				Historical	5-Year Forecast		Considerations				Education & Experience		
		2020Q1 Empl	High Wage (Avg Ann Wages)	High Local Concentration (LQ)	Low Historic Unemployment Rate	High Ann % Empl Growth	High Total Demand (Replacing Over 50% of 2020Q1 Empl in 5 Yrs)	Ann % Growth	Able to be Remote (R)	Low Contact Intensity (L)	Trending in Job Postings Locally During Pandemic (T)	Higher than Local Resident Average BIPOC Employment (over 19.6%)	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
29-1141	Registered Nurses	2,485	\$85,200	2.74	1.1%	1.6%	716	0.3%			T	16.9%	Bachelor's degree	None	None
11-1021	General and Operations Managers	697	\$130,000	0.96	1.6%	1.3%	307	0.1%		L		11.9%	Bachelor's degree	5 years or more	None
15-1256	Software Developers and Q/A Analysts and Testers	549	\$105,600	1.27	1.3%	2.6%	214	0.5%	R	L	T	30.7%	Bachelor's degree	None	None
13-1198	Project Management Specialists and Business Operations Specialists	529	\$77,400	1.38	2.6%	0.5%	253	0.0%	R	L	T	19.2%	Bachelor's degree	None	None
13-2011	Accountants and Auditors	512	\$76,000	1.23	1.5%	-0.4%	237	0.0%	R	L	T	16.5%	Bachelor's degree	None	None
15-1211	Computer Systems Analysts	418	\$97,400	2.29	1.3%	0.7%	154	0.1%	R	L		23.6%	Bachelor's degree	None	None
11-3031	Financial Managers	370	\$144,300	1.83	1.2%	0.8%	162	0.8%	R	L	T	16.0%	Bachelor's degree	5 years or more	None
13-1111	Management Analysts	324	\$91,500	1.26	2.8%	1.3%	164	0.5%	R	L		16.1%	Bachelor's degree	Less than 5 years	None
25-2021	Elementary School Teachers	311	\$69,500	0.76	2.1%	0.6%	129	0.6%				11.5%	Bachelor's degree	None	None
11-9198	Personal Service Managers	282	\$134,900	0.90	1.4%	0.6%	107	0.1%	R	L		12.6%	Bachelor's degree	Less than 5 years	None
Total - All Occupations		47,024	\$59,800	1.00	3.4%	0.4%	25,098	0.0%				19.6%			

*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% 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 St. Paul's West Side. 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 St. Paul's West Side. 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 on St. Paul's West Side, 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 55102 and 55107. 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 on St. Paul's West Side may be hiring for positions in other parts of the county.

On St. Paul's West Side, 185 identified employers advertised 443 jobs locally between March 16 and July 31, 2020, an increase of 50% in these communities from the same time frame in 2019. The employers who advertised jobs within 55102 and 55107 that explicitly included a location on St. Paul's West Side 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 (BLMN), and Rational Unified Process.

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

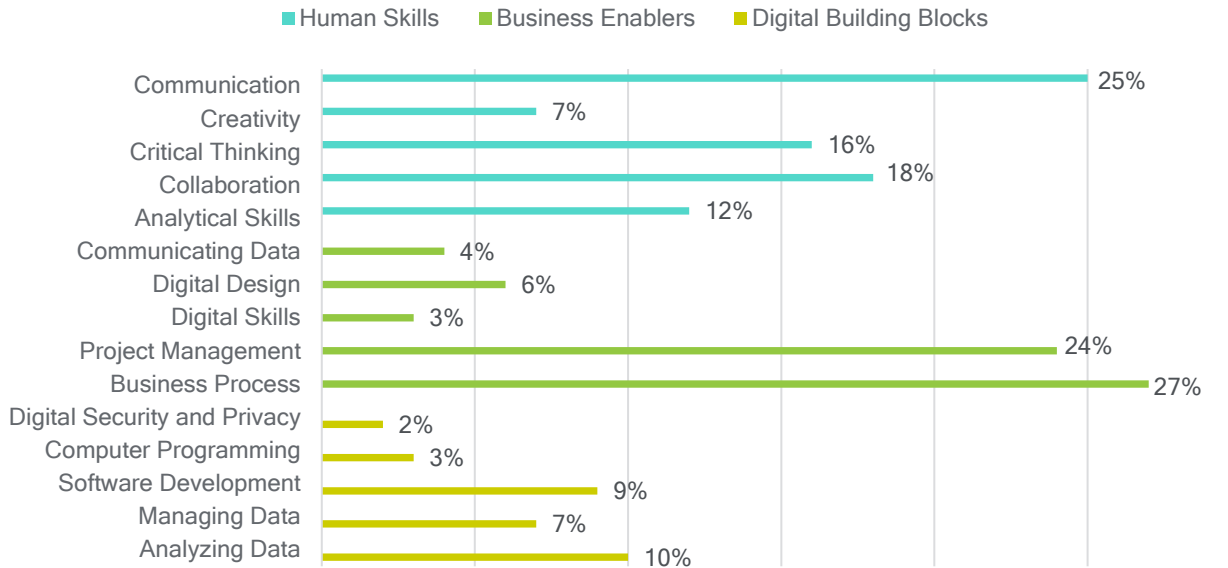
Digital Skills - social media, search engine marketing, analytics, content marketing, email, mobile campaigns, strategy and planning, social selling, pay per click marketing, Video production.

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

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

On St. Paul's West Side, 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 Digital Security and Privacy and Computer Programming appear in lower volumes in this community.

St. Paul's West Side Foundational Skills for the Digital Economy



St. Paul's West Side	
Communication	25%
Creativity	7%
Critical Thinking	16%
Collaboration	18%
Analytical Skills	12%
Communicating Data	4%
Digital Design	6%
Digital Skills	3%
Project Management	24%
Business Process	27%
Digital Security and Privacy	2%
Computer Programming	3%
Software Development	9%
Managing Data	7%
Analyzing Data	10%

Jobs posted by employers on St. Paul's West Side between March 16 and July 31, 2020 showed demand comparable to in-demand skills across Ramsey County. Only 14% 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 St. Paul's West Side. There was also a difference in the frequency of the skills within postings in St. Paul's West Side compared to Ramsey County as a whole. The blue text below indicates skills required in positions advertised by employers located in St. Paul's West Side 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) Adaptability 2) Analysis 3) Computer usage 4) Finance	Analyzing Data 1) Monitoring 2) Evaluation 3) Analysis 4) Detail-oriented	Business Process 1) Scheduling 2) Customer Service 3) Operations 4) Monitoring
Collaboration 1) Dedication 2) Relationships 3) Collaboration 4) Leadership	Managing Data 1) Research 2) Detail-oriented 3) Organizational skills 4) Databases	Project Management 1) Supervision 2) Collaboration 3) Leadership 4) Coordination
Critical Thinking 1) Scheduling 2) Compliance 3) Evaluation 4) Problem solving	Software Development 1) Problem solving 2) Design 3) Prioritization 4) Independent Work	Digital Skills 1) Research 2) Marketing 3) Influencing
Creativity 1) Innovation 2) Design 3) Passion 4) Creativity	Computer Programming 1) Multitasking 2) Mathematics 3) Engineering 4) Technical support	Digital Design 1) Design 2) Prioritization 3) Creativity 4) Implementing
Communication 1) Communication 2) Customer Service 3) Supervision 4) Written Communication	Digital Security and Privacy 1) Confidentiality 2) Security	Communicating Data 1) Written Communications 2) Writing 3) Presentation skills

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.

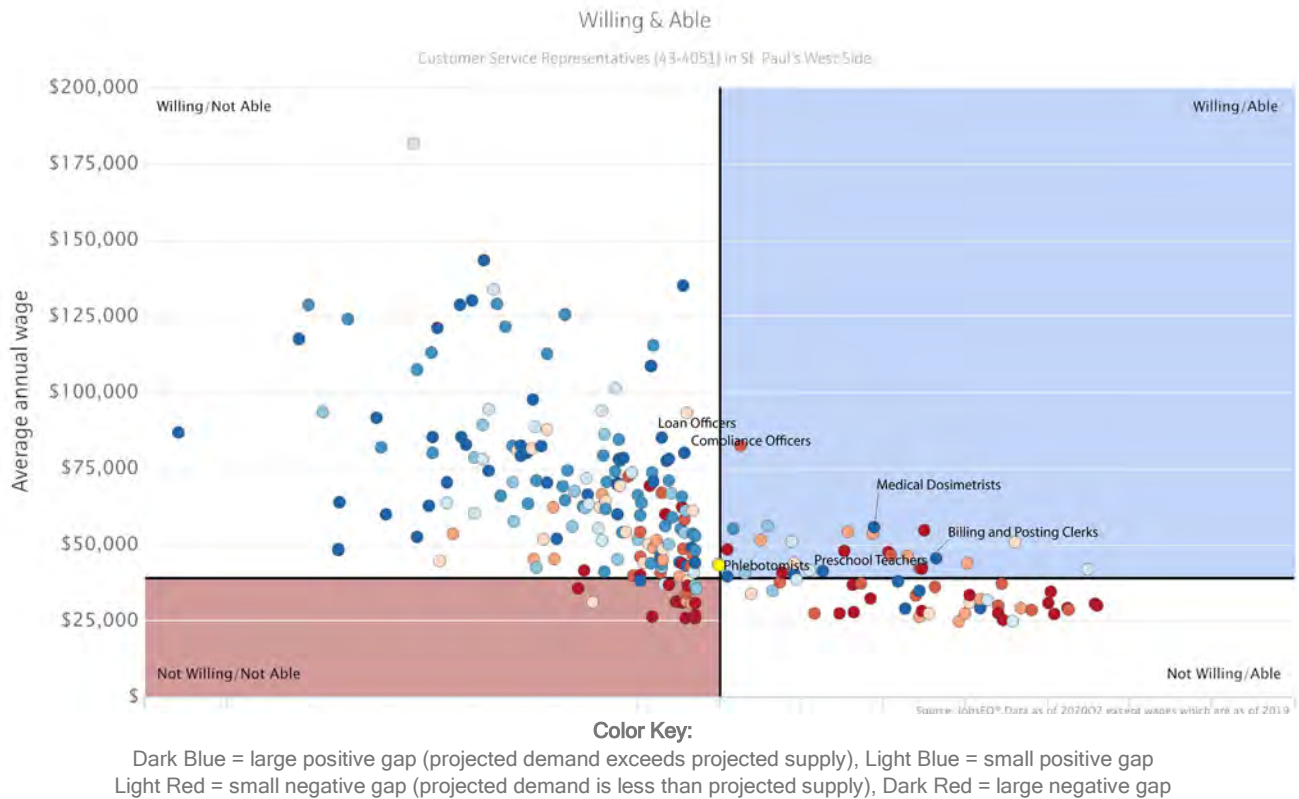
The occupations below are all found in high volumes in Southern St. Paul, are anticipated to have a local surplus of talent over the next five years, and experienced high unemployment applications across Ramsey County since the beginning of the pandemic.

Customer Service Representatives

Although currently found in relatively high volume and local concentration on St. Paul’s West Side, Customer Service 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 this community in the next few years. A broad range of positions for Phlebotomists, Medical Dosimetrists, Preschool Teachers, and Billing and Posting Clerks all have related skill sets and offer similar wages, plus typically do not require additional education or training.

In addition, by gaining a few industry skills or certifications, someone working as a Customer Service Representative could leverage customer service skills, communication, and coordination with some additional training to enter into a local career as a Compliance or Loan Officer, both of which have seen growing volumes in Ramsey County during the pandemic. For many roles found in the Willing/Not Able quadrant below, a Bachelor's degree may be required.

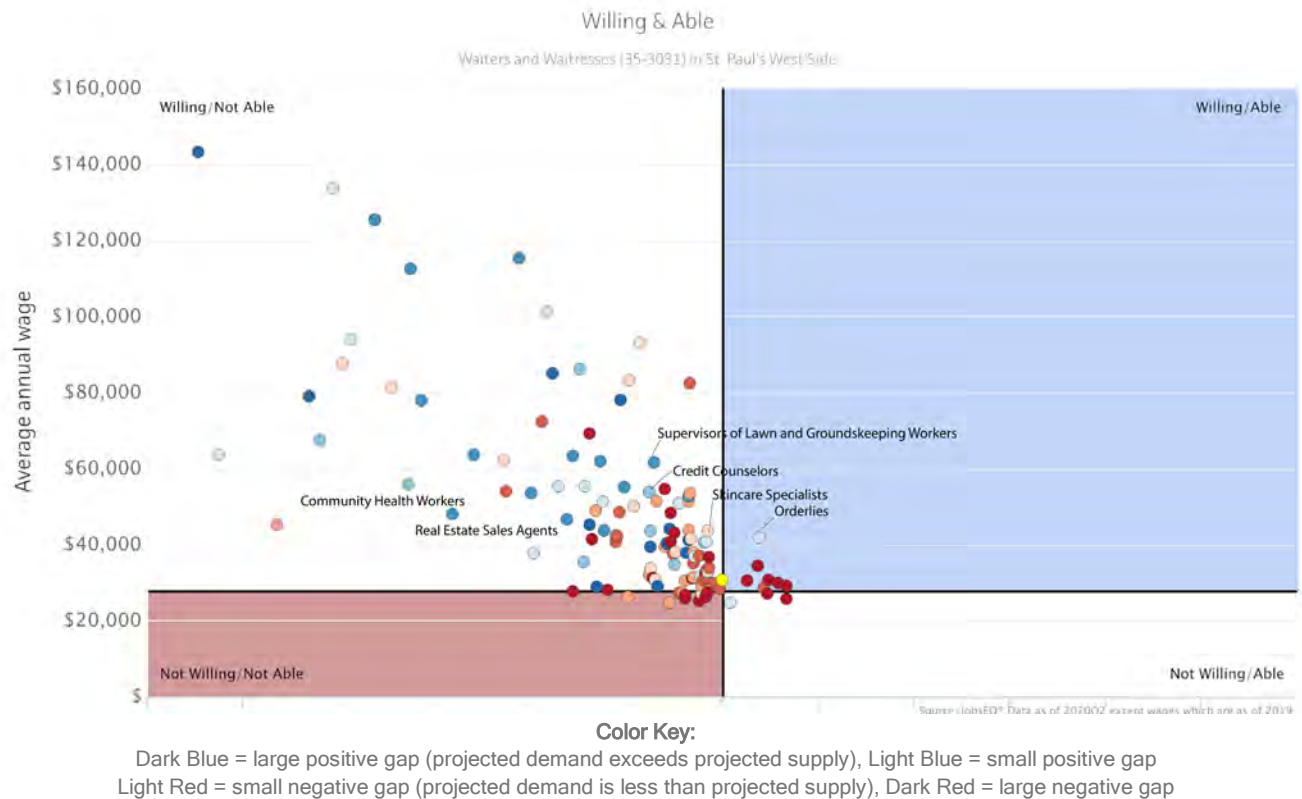
Customer Service Assistant Skill Transferability on St. Paul's West Side



Waiters and Waitresses

As of early 2020, there were about 825 people working on St. Paul's West Side as Waiters or Waitresses. Similar-paying, similar-skill, entry-level, high contact-intensity positions that may see shortages in talent locally over the next five years include Home Health Aides and Personal Care Aides, though these roles do not come with the opportunity for tips as additional income and may not be appealing to former food service workers for that reason. Occupations that would have related skillsets but require a bit more training to be accessible to a former food service talent include orderlies, skincare specialists, credit counselors, groundskeeping supervisors, real estate agents, and community health workers.

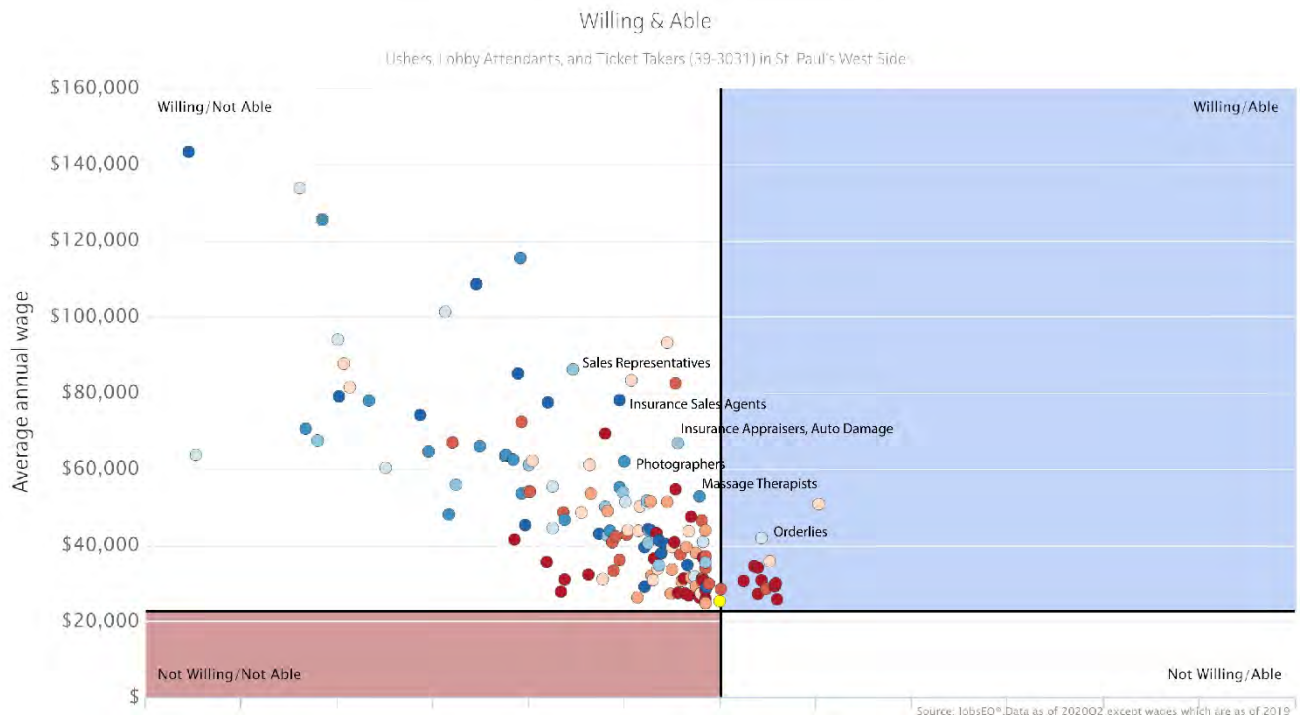
Waiter and Waitress Skill Transferability on St. Paul's West Side



Ushers, Lobby Attendants, and Ticket Takers

There were about 216 people employed on St. Paul's West Side as Ushers, Lobby Attendants, and Ticket Takers in the first quarter of 2020, with many of these being displaced as a result of the COVID-19 pandemic. Historically, this occupation's employment has remained relatively stable in these communities. Over the next five years, about 259 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 fluxuations 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 and value similar baseline skillsets include Home Health Aides, Personal Care Aides, and Orderlies. Unfortunately, all of these positions are high contact-intensity and cannot be done remotely. Other less vulnerable options that may be accessible to former Ushers, Lobby Attendants, and Ticket Takers with some additional education or training include Insurance Appraisers, Insurance Sales Agents, Sales Representatives, and Photographers.

Usher, Lobby Attendant, and Ticket Taker Skill Transferability on St. Paul's West Side



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

Conclusion

St. Paul's West Side 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 analytical skills, software development skills, and business process skills broadly indicate local businesses need technical business talent. Education and workforce programming on St. Paul's West Side 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 the West Side 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.