

# Barriers to Recruitment and Retention of Entry-Level Employees: Perceptions from Employers in Ramsey County



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## MISMATCH Final Report

Ramsey County Workforce Solutions

PA 5041

University of Minnesota

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### **ABSTRACT**

Across Ramsey County, businesses are having difficulty filling entry-level positions. Analysts do not attribute the problem solely to a lack of qualified candidates, but also that many candidates simply live too far away from job opportunities. In particular, many St. Paul residents are good candidates for entry-level positions in the suburbs, but cannot access them because they do not own cars.

Working in conjunction with the Ramsey County Workforce Solutions (WFS), our team conducted eight qualitative interviews with employers in Ramsey County in order to identify solutions to these hiring challenges. Our questions were designed to identify the most significant barriers employers face in recruiting and maintaining employees in entry-level positions, with a primary focus on transportation barriers.

Overall, only some employers found transportation to be a major barrier to hiring entry-level employees, while virtually all employers said that low-wages and a competitive job market were major hiring barriers. Additionally, most employers did not think that Gold and Rush Line expansions would lead to an increase in entry-level hiring and that most entry-level workers will take jobs closer to where they live if possible. However, some employers mentioned that the county could help them retain entry-level workers by offering ride-sharing subsidies for employees who are temporary without cars.

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## INTRODUCTION

In their conversations with Ramsey County Workforce Solutions (WFS), hiring managers discussed their recent struggles recruiting and retaining entry-level employees. One source of these hiring difficulties could be the spatial mismatch between St. Paul and its surrounding suburbs. Spatial mismatch refers to a situation in which business struggles to fill a position because its physical location is inaccessible to many ideal candidates (Houston 2005). In the case of Ramsey County, many suburban businesses are struggling to fill entry-level positions for this reason (University of Minnesota Center for Transportation Studies 2016). As shown in Appendix E., suburbs such as White Bear Lake, Vadnais Heights, and White Bear Township have median household incomes that are significantly higher than St. Paul or Ramsey County as a whole (American Community Survey 2017). Since individuals in suburban cities have higher incomes on average, this could also mean that they are less likely to be interested in entry-level work. These graphs also show that St. Paul has a significantly higher unemployment rate than its surrounding suburbs, which could mean that a larger proportion of its population would be interested in entry-level employment. However, a lack of reliable transportation options for St. Paul has significantly limited their access to jobs in the suburbs (Fan Guthrie Das 2016). Based on the evidence examined, we hypothesize that many people close enough to these jobs would typically not be interested, and many of those that would apply cannot access them due to transportation barriers.

To identify the primary source of these hiring difficulties, WFS requested that our team conduct a qualitative assessment. Hiring managers will naturally have the most insight as to why their businesses are struggling to hire entry level positions, so it is vital to get their perspective. Over the course of eight qualitative interviews, our team asked employers in Ramsey County about their hiring practices, their struggles recruiting entry-level workers, how their employees commute to work, and their opinions about proposed expansions of public transit. While the spatial mismatch between St. Paul and its suburbs is well-documented and supported by previous studies, we did not want to make the assumption that it was the primary cause of underemployment for entry-level positions in Ramsey County. We also asked employers to describe to what extent the high costs of housing and childcare limited their ability to hire entry-level workers, and if these factors limited hiring to a greater or lesser extent than transportation barriers.

These considerations shape our primary research question: What circumstances and factors do major employers in Ramsey County perceive to be contributing to the difficulty in recruiting and maintaining entry-level employees in their organizations? Specifically, what ways might spatial and skills mismatch play roles, and in what ways are they committed to working with Ramsey County to mitigate those circumstances and factors? By addressing these questions, we can assist WFS in its mission to connect citizens with better employment opportunities.

## LITERATURE REVIEW

According to Ramsey County Workforce Solutions (WFS), many businesses in the counties' suburbs, especially those in retail, health care, and manufacturing sectors, are understaffed and struggling to recruit and maintain entry-level employees. WFS seeks to know the major suburban employers' (firms with 500 and more employees) perceptions of the employment barriers and look for possible solutions in collaboration with the major suburban employers.

### *Entry-level employment*

Entry-level employment is defined as jobs for operatives, laborers, and service workers (Cohn and Fossett, 1996). These occupations have the lowest average educational requirements of the available occupation categories. A worker with less than a high school education would have a reasonable prospect of obtaining many of these positions (Ibid.).

### *Spatial and Skills Mismatch*

The spatial and skills mismatch theories are two of the most prevalent labor market explanations of underemployment in suburban areas (Fan, 2012; Houston, 2005; Fan, Guthrie, and Das, 2016). Spatial mismatch hypothesis states that the lack of affordable housing in the suburban housing market, the decentralization of jobs to the suburbs, and the lack of transportation options for the socioeconomically disadvantaged group contribute to the underemployment in suburbs (Kain, 1968; Preston, McLafferty, and Liu, 1998; MacDonald, 1999). Skills mismatch highlights a mismatch between the skills of the unemployed and the skills demanded by employers (Houston, 2005). Other studies indicate that the disconnection between the mainstream labor market and the socioeconomically disadvantaged group also contributes to the difficulties in filling job vacancies (Pastor and Adams, 1996; Chapple, 2001). Low-income urban residents also face other non-spatial barriers to work including employment discrimination, lack of worker control over schedules, and high levels of caregiving burdens on single mothers (Fan, 2012; Henly, Shaefer, and Waxman, 2006).

Efforts to mitigate spatial mismatch often include spatially targeted poverty dispersal and job creation as well as transportation improvements for the poor, while efforts to mitigate skills mismatch tend to focus on skill-building and occupational training programs for low-income job seekers (Gilothe, 2000). Most of the efforts are made by local governments, and occasionally there are employers involved. However, some programs can only be carried out with the help of employers due to the limited capacity of local government. For instance, successful shuttle service programs in suburban settings have involved active employer support and co-sponsorship, since the population densities in suburban areas are often too low to operate cost-effective programs if relying solely on public finance (Cervero, 2004).

*The Case of Ramsey County*

Due to the lack of affordable housing in the suburban area, low-income individuals in Ramsey County primarily reside in the urban neighborhoods; these individuals may not access entry-level jobs in the suburbs since they do not own cars, and there is not a reliable transit service between the two locations (Fan, Guthrie, and Das, 2016). The first and last mile problem, which usually occurs when physical distances between stations and trip origins or destination points that are greater than what people are typically willing to walk, is prominent in suburbs as well (Ibid.). Besides, suburban Ramsey County has a highly educated workforce, which does not typically pursue entry-level jobs (Ibid.). Major employers cannot meet their employment needs if they recruit exclusively from the suburbs according to the information provided by WFS. However, since most low-income workers do not own cars, these businesses have also found themselves unable to recruit workers from the city.

Actions have been taken by Ramsey County to tackle the spatial and skills mismatch. WFS has helped to mitigate skills mismatch and build up connections between employers and workers by providing training opportunities and personalized assistance to job seekers. The Metro Gold Line and the Rush Line Bus Rapid Transit (BRT), which are currently in development, are expected to alleviate the spatial mismatch by improving the accessibility of suburban areas. Still, RCWFS are looking for more options to overcome the employment barriers in collaboration with local employers (Figure 1).

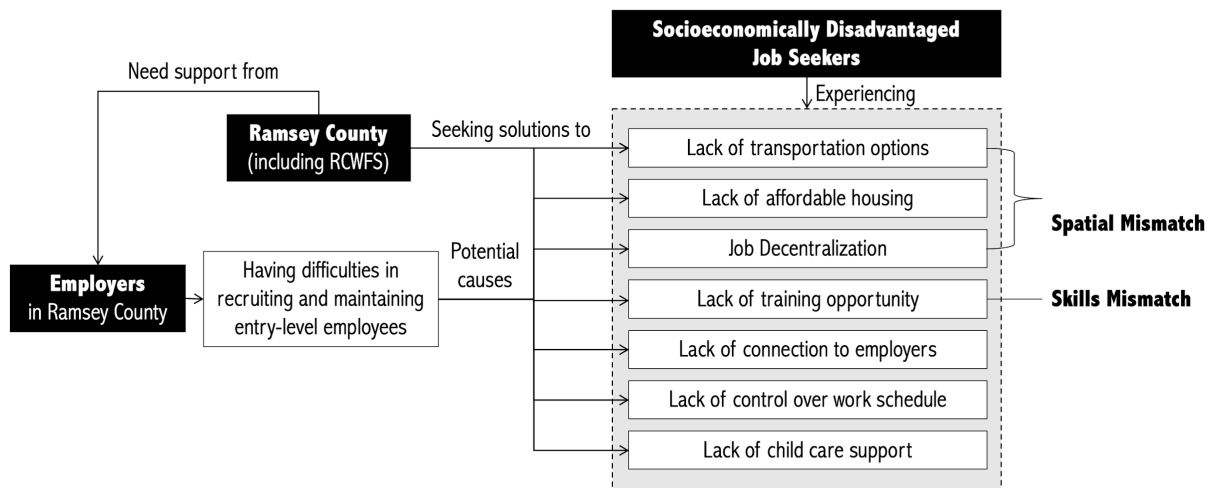


Figure 1. Conceptual Framework

*The First and Last Mile Problem*

Research finds that people are much less likely to use public transportation if it drops them off one mile or more from their destination with poor connecting options, which is commonly

referred to is referred to as the “the first and last mile” problem (Zellner, Massey, Shifton, Levine, and Arquero 2016). In our discussion with Ramsey County Workforce solutions, officials described the last mile problem in. If an individual is traveling north from St. Paul, public transportation can reliably and efficiently get them as far as Maplewood. However, if that person wants to travel farther to White Bear Lake or Vadnais Heights, they would run into the last mile problem and have to make multiple transfers to reach their destination.

### *The Gap in Current Research*

Most of the research on spatial mismatch has been focused on individual workers and does not include the employers’ perspective. By conducting comprehensive interviews with employers, our study aims to close some of the gaps in the literature.

### *Research Questions*

What circumstances do employers in Ramsey County perceive to be contributing to the difficulty in recruiting and maintaining entry-level employees in their organizations? In what ways might spatial and skills mismatch play their roles, and in what ways are they committed to working with Ramsey County to mitigate those circumstances?

## **METHODOLOGY**

### *Identifying Disparities in Income and Employment*

Before conducting qualitative interviews, it was useful to understand how economic opportunities in St. Paul differed from its surrounding suburbs. To determine if there are meaningful differences between the labor force in St. Paul and the labor force in the suburbs, we accessed census data on unemployment and median household income for each city in Ramsey County (American Community Survey 2017). Next, we input this data into Geographic Information System (GIS) to graphically represent the spatial distribution of unemployment and household income. The graphs can be seen in Appendix E.

### *Research Design*

The design of this qualitative study was informed by the conceptual framework (Figure 1) and guided by the question presented by Ramsey County Workforce Solutions which was to better understand the specific transportation needs of Ramsey County Workforce Solutions (WFS) Participants and the challenges experienced by employers in hiring and retaining workers through the program. The study took place over a four-month period from February 2019 to May 2019 by four students in a Qualitative Methods course at the University of Minnesota. The overall research design, sampling strategy, and interview questions were considered in collaboration with a staff representative from Ramsey County.



### *Sampling Strategy*

We initially bound the sample to include only participants from the contact list we received from WFS. This sampling resulted in two scheduled interviews. In order to increase our sample size, we began our own recruitment and did so using the following criteria: 1) Organization has at least one location in Ramsey County, 2) Participant must have knowledge of the hiring process for entry-level employees, and 3) Organization has concerns with recruitment and/or retention of entry-level employees. The only difference between our initial sampling set and the latter one is that the latter set did not necessarily have a previous relationship with WFS. While this meant that we would have less information to offer WFS about perceptions of their programs, we do not believe that utilizing these two different sampling strategies impacted the overall quality of the data. Additionally, while it was not our original intention to sample by industry, our data set ended up including four organizations from the home health-care sector and three from the manufacturing sector.

### *Data-Collection Strategy*

To recruit participants, we used several methods. First, we contacted by phone and email the list of contacts received from WFS. Two participants were recruited from this list. Additional support from staff members at the County resulted in securing two more interviewees. The final four interviews in this study were recruited through personal networks of the research team as well as direct email outreach to additional businesses in Ramsey County. An example of our recruitment email script can be found in Appendix A and Table 1 outlines the source of each interview.

**Table 1.**

| <b>Recruitment Source</b>                  | <b>Number of interviews from source</b> |
|--|---|
| Initial List from Workforce Solutions      | 2                                       |
| Additional Recruiting by Contact at County | 2                                       |
| Use of Personal Networks                   | 1                                       |
| Direct email outreach                      | 3                                       |
| Total:                                     | 8                                       |

We conducted 60-minute semi-structured interviews using our standardized interview guide with all eight participants. All interviews were conducted at the workplaces of the participants. In March, before we began interviews, we sent a preliminary set of interview questions to our contact at the county for feedback. A final set of interview guide questions (Appendix B) were developed after gaining this feedback and were largely based on the literature review.

Content areas for the interviews included:

1. Recruitment process and requirements on the job seekers
2. Employers' perceptions of the employment barriers
3. The working schedule for entry-level employees
4. Retention of existing employees in entry-level positions
5. Employers' perceptions of the current Ramsey County transit projects (Metro Gold Line and Rush Line)
6. Employers' perceptions of the current Work Force Solutions projects
7. Employers' willingness to participate in the solution (of recruiting and maintaining entry-level employees)

#### *About the Organizations*

The organizations we interviewed vary in sectors and sizes (Table 2). The smallest organization has only 4 entry-level employees, while the largest organization has 760. The number of entry-level employees sought is related to organization size and market demand. The average hourly wage of employees ranges from 11 to 18 dollars. Five out of eight organizations indicated that their entry-level workers were predominantly women. Four out of eight organizations mentioned that there were many immigrants or people of color in entry-level jobs.

**Table 2.** Information about the organizations

| # | Sector        | Current Number of Entry-level Employees | Number of Entry-level Employees looking to hire | Hourly Wage (\$) | Gender              | Race/Ethnicity                  |
|---|---------------|---|---|------------------|---------------------|---------------------------------|
| 1 | Manufacturing | 20                                      | 4   | 13.5             | N/A                 | N/A                             |
| 2 | Health Care   | 42                                      | Depends on the number of clients                | 15               | 92%~95% are women   | Many immigrants (Somali)        |
| 3 | Manufacturing | 50                                      | 5 per week                                      | 14~18            | Predominantly women | N/A                             |
| 4 | Manufacturing | 20                                      | 2~4   | 15               | 10% are women       | Many immigrants (Asian & Black) |

|   |                                 |        |                              |       |               |                      |
|---|---------------------------------|--------|------------------------------|-------|---------------|----------------------|
| 5 | Accommodation and Food Services | 4      | Depends on the customer flow | 12    | N/A           | N/A                  |
| 6 | Health Care                     | 760    | 65                           | 11~13 | 70% are women | Many immigrants      |
| 7 | Health Care                     | 400    | 30~40 interviews per week    | 12    | 75% are women | Many people of color |
| 8 | Health Care                     | 97~121 | 20                           | 14.7  | 85% are women | N/A                  |

### *Ethical Considerations*

Since revealing struggles associated with difficulties in hiring could be detrimental to the reputations of the individuals we interviewed and/or the companies they work for, our team developed several strategies to ensure comfort and confidentiality for our participants. These details are outlined in our informed consent document (Appendix C) and included the ability of the interviewee to stop the interview at any time, ensuring that we de-identified data in our notes and in our final report, and storing files and data related to the project on a secure server.

We read the consent form aloud at the beginning of each interview, gained verbal consent, and requested permission to audio record each interview. Interviewers clearly communicated to participants that they could stop the interview at any time if they became uncomfortable. We also communicated that although we were unable to provide financial compensation for participating in the interview, that we would provide to them our final report in full upon its completion.

Each interviewee agreed to audio recording and one of the two interviewers from the group used their phone to record the audio. Audio recordings were then uploaded to a secure drive at the University of Minnesota and deleted off the interviewer's personal device. During data analysis, contact notes from each of the interviews were named using a numbered system that only the team knew and could decipher. This was done to protect the individual identity of the interviewees. These audio files and contact notes will be deleted upon completion of this project.

### *Data Analysis*

In order to review the data and ensure accuracy, team members from the research group triangulated the data in several ways. One member of each two-person interview team uploaded contact notes from their notes taken during the interview. Then, the other team member present at the interview used the audio to add or correct the original contact note. As a final measure, a third person (who was not present at the interview) reviewed the contact note while listening to the audio to ensure that nuances in the data were included.

After this process, two members from the team used NVivo to code the data to draw out themes from the conceptual framework. Codes and code definitions were added to the codebook as necessary when new concepts arose through the analysis. The other two team members did a review of this initial coding. This led to the creation of two additional codes and clarification of several code definitions. As a final step in triangulation, the team reviewed the data separately and met together to discuss overall themes found in the data. For example, as mentioned previously, it was during this team analysis that it became apparent that although we had not originally intended to recruit from two distinct industries for our interview participants, in the end, we had three manufacturing companies and four home health companies. This unintentional boundedness of the data allowed us to draw preliminary findings of some of the unique struggles in each of these industries. This will be discussed in greater detail in our results section.

### *Limitations*

There are a few important notes to make about the limits of the data collected for this study. First of all, while we did see some interesting themes emerge from having two sectors to compare, we do not believe we reached full saturation within these groups. As such, our limited time frame presented another limitation as we were unable to recruit additional participants for this study.

With regard to reflexivity, we believe that our status as novice researchers played a minor role in the quality of the data. For example, upon review of the audio data, we noticed places where interviewers asked leading questions, and we also realized that one of our participants did not, in the end, fit our sampling criteria. This led to important learning for the students in the group, and during the data analysis process, we were able to identify the pieces of data we could not include in the results and recommendations because of these limitations.

## **RESULTS AND DISCUSSION**

### ***Major Research Findings***

1. Consistent with the literature review, public transportation is often unreliable for entry-level employees in the manufacturing and healthcare sectors because of their nonstandard work schedules (Fan, 2012; Henly, Shaefer, and Waxman, 2006). Even if entry-level employees have standard work schedules that work well with public transit lines, they may still have to figure out the “the first and last mile” issue.
2. A large proportion of the applicants for entry-level jobs are less educated immigrants, who do not always have access to language and job training programs. There were always people looking for jobs, but most of them are not qualified for the posted positions.

3. Women and people of color are disproportionately represented in entry-level occupations, especially in the healthcare sector. Our empirical analysis suggests that entry-level jobs in the manufacturing and healthcare sectors tend to be physically and emotionally intensive, which becomes a major reason for employees to quit their work.
4. The competition between employers in terms of pay, benefit packages, and commute time is one of the barriers that were frequently brought up by our interviewees. Job seekers always prefer higher paying jobs keeping other factors constant.
5. Half of the employers we interviewed did not anticipate that the Rush Line and Gold Line would really help with hiring because most of their employees did not live where the routes would go.
6. WFS programs do not result in direct hires that help with the entry-level labor shortage.
7. It would be beneficial for local employers if the county allocates more money to job training.
8. Employers from the healthcare sector applaud the idea of providing temporary subsidies for ride-sharing, including carpooling services provided by Uber and Lyft - particularly when employees lose access to their personal vehicles.

### ***Employers' Perceptions of Barriers to Recruitment and Retention of Entry-level Employees***

#### *Car Ownership Matters More than Public Transportation*

Public Transportation is unreliable for entry-level employees who work in manufacturing and health care sectors. Most of the employees travel by car and many jobs require driving. In-home caregivers usually go to multiple homes in a day. Nursing assistants in assisted living facilities and workers in manufacturing companies often have nonstandard work schedules which do not work well with public transit. Although not all these positions require a driver's license to be eligible, not owning a car or not having the skill is definitely "a big stumbling block" for the employees.

Tight work schedules, evening or overnight shifts, and mandatory overtime requests make the public transportation irrelevant to most of the entry-level workers (Table 3). There were a few entry-level employees who commute by public transportation in every organization we interviewed, but in general, it was not an option for the majority. Most of these organizations are not directly on the bus/metro stop, and it is the same for their employees' homes. Oftentimes, the employees have to walk to the bus/metro stop if there are no other connecting options. Consistent with our literature review, people are much less likely to use public transportation when the physical distances between stations and trip origins/destinations are greater than what people are typically willing to walk, especially in extreme weather conditions. According to our interviewees, instead of getting off at a bus/metro station that is more than a 15-minute walk from their workplace, what the entry-level employees need are "buses to pick them up at their front door, and drop them off at [the client]'s door".

**Table 3.** The work schedule for entry-level employees

| # | Sector                          | Schedule  |
|---|---------------------------------|---|
| 1 | Manufacturing                   | A switch schedule. Three 12-hr shifts a week, Mon to Wed and Thu to Sat. Every 13 weeks employees swap Mon-Wed and Thu-Sat. Employees are sometimes required to work overtime on short notice in order to meet deadlines. |
| 2 | Health Care                     | A set schedule. Caregivers typically go to 2 homes a day. A newly recruited caregiver will be put into different homecare scenarios to ensure the best fit.   |
| 3 | Manufacturing                   | A set schedule. Morning shifts begin in rotation at 6:30 am, 7 am or 7:30 am and end at 3:00, 3:30, 4:00 (depending on the position of the employee).   |
| 4 | Manufacturing                   | A tight schedule. Shifts for entry-level jobs are 05:00 - 13:30 and 20:00 - 05:30. Sometimes has mandatory overtime requests.   |
| 5 | Accommodation and Food Services | A set schedule. If they have a plan to change the schedule, they give their employees notice three to four weeks in advance.  |
| 6 | Health Care                     | A set schedule, but things come up and it is common to pick-up or trade shifts.   |
| 7 | Health Care                     | A set schedule. Scheduling is included in the initial stages to ensure fit. They do offer overtime, but it is voluntary.  |
| 8 | Health Care                     | A set schedule.   |

It is worth noting that in one of the manufacturing companies we interviewed, a fair number of entry-level employees do ridesharing. Most of these rideshare people get to their job via personal networks. Usually, they do not have a driver's license, but they know somebody who lives close to them is working in this company. These people come to look for a job and ask the employer to put them on the same shift as their neighbor's so that they can get to work every day by carpooling. Carpooling works for entry-level jobs that have a fixed location, and it could help to alleviate the transportation problem only if employees live close to each other. It is not suitable for employees who need to travel between multiple locations within a day.

#### *Lack of Affordable Housing Near Workplace*

The cost of living includes both housing and transportation. Although there were two interviewees who never considered affordable housing as a barrier, there were several employers who had suffered from entry-level labor shortage because the total cost of housing and transportation in surrounding neighborhoods (within walking distance) were too high for their potential employees to afford.

Inconsistent with the literature review, the areas which are unaffordable are not necessarily suburban communities. A human resource manager mentioned that most of their employees live in Southeast or Northeast suburbs. Downtown St. Paul has become too expensive to live recently, and low-income population has been moving out to the inner-ring suburbs, where communities have a relatively cheaper rent or property price compares to the gentrifying urban core. One of the employers demonstrated how the existence of an affordable housing complex close to the workplace can make life much easier for the low-income population:

*A huge portion of the Somali community lives down in a place called Sibley Manor. Sibley Manor is within walking distance from those senior high rises. And they do walk. That is a huge match.*

### *Lack of Training Opportunity*

Employers we interviewed constantly face the shortage of qualified applicants in their recruitment process. They expect applicants to have English proficiency, fundamental math skills, basic computer skills, and sometimes a driver's license. In the health care sector, employers typically look for people with credentials. Skilled nursing requires the applicants to complete the Certified Nursing Assistant (CNA) training before they take on the job, which normally takes 2-6 weeks.

The lack of training opportunity is the primary cause of the shortage of qualified applicants. A large proportion of the applicants for entry-level jobs are less educated immigrants, who do not always have access to language and job training programs. There are always people looking for jobs, but most of them are not qualified for the posted positions. One human resource manager recalled that he constantly saw familiar faces at the job fair:

*So I've seen five or six people from the public and they come each like every single time to apply for the same positions. [...] they don't have the motor skills. [...] we need different people. They are not qualified for our jobs.*

In addition to technical skills, the lack of “soft skills” is another problem that employers struggled with. Soft skills refer to personal attributes that enable someone to interact effectively and harmoniously with other people, such as being punctual, being a good team player, and learning how to communicate with people. For manufacturing workers, being able to cooperate and work well with other colleagues is essential for their career. For nursing assistants, learning how to interact with their patients in an appropriate manner plays a vital role in their daily work. According to our interviewee, the State of Minnesota had recently lifted requirements that NA must have 250 hours of clinical experience. This resulted in some nursing assistant coming to the job with no personal interaction with patients and have no idea what they are getting into. Some quit for this reason.

### *Job Seekers Lacks Connection to Employers*

According to our interviewees, most hires are done by word of mouth and referrals. Some organizations use referral rewards as an incentive for employees to recruit additional workers. This made the recruitment process largely dependent on interpersonal networks of the current employees. Although some organizations utilize online sources like Indeed, ZipRecruiter, and Handshake, it still limits their recruitment to people who have computer access and basic skills to navigate information online. There is a clear constraint in the organization's ability to reach out to their potential employees. Correspondingly, job seekers might also find it difficult to connect with employers.

### *Lack of Childcare Support*

Some of the employees quit their job because of a lack of childcare. Childcare support or changing family dynamics at home for childcare affects both men and women. Sometimes employees will try to work on different shifts to avoid paying for childcare. One employer worked with employees in the past to block their hours and let them work until they can get new childcare arrangements, but this only serves as a temporary solution. One of the human resource managers revealed that the lack of childcare accounts for roughly 20% of employees who quit.

*Probably 20% of the time with some folks, like, they'll start working and they'll think that things are going okay. And then their childcare provider isn't. And that could be like a family member or a friend who was watching their kids and they said, "No, we can't do this anymore." [...] They can't necessarily afford an in-home person or a daycare center. And so then they have to say I can't, I can't do this. [...] people who we want to have to do overnights, [...] end up not being able to do it because their person who was going to take care of their kids quit.*

### *Employees Quit Because of Physical and Emotional Stress*

Entry-level jobs are not only associated with low wage but also tend to be labor and emotionally intensive. One HR manager at a manufacturing company referred to their entry-level position as being "very dirty and grueling." "People get tired of it easily," the manager said. In healthcare organizations, the entry-level job is both physically and emotionally draining, caregivers quit when they feel "it is too much to put up with". These factors lead workers to quit their jobs and further result in a decline in the labor pool.

*It's a tough, thankless job if you want to talk about being on the front line of stuff. [...] They're doing everything, [...] if they [the patients] are upset, they [the nursing assistants] are the first ones to hear about it [...] So there just aren't people to fill the positions.*



### *The Organization Lacks Relative Competitiveness in Terms of Wage and Commute Time*

The lack of relative competitiveness in terms of pay, benefit packages, and commute time is one of the barriers that were frequently brought up by our interviewees. This barrier is most evident in the healthcare sector. Job seekers always prefer higher paying jobs keeping other factors constant.

*Just last week, I had two candidates made offers to, and umm, they had at least five other offers they were considering. And so they don't come our way. It's just so competitive.*

Caregivers, especially nursing assistants, are in high demand in recent years because of the huge increase in need of caregivers associated with the nationwide demographic change. The shortage of nursing assistants led to huge competition between agencies. For job applicants, there is little incentive for them to commute hours on difficult to navigate routes by public transportation when there are similar paying jobs close to their homes.

*Somebody noticed that the actual applicant pool of people applying for nursing programs was significantly lower than the existing workforce of retiring nurses, which was going to create a nursing shortage throughout the entire state. And then you got the baby boomers that are all going to be retiring roughly around the same time. So they saw this huge mushroom cloud coming down the road.*

We did not include the lack of competitiveness as a potential barrier in our initial conceptual framework. It is a barrier that we identified via inductive coding after all the interviews were completed. Our literature review focused on the difficulties that socioeconomically disadvantaged job seekers face, ignoring the fact that the employers themselves have limitations and constraints in the amount of wage they were able to offer and in their location choice.

### ***Employer's Perceptions of the Rush Line BRT and the Metro Gold Line and WFS projects***

#### *Mixed Feelings for Rush Line BRT and The Metro Gold Line*

Half of the employers we interviewed did not anticipate that the Rush Line and Gold Line would help with their hiring because most of their employees did not live where the routes would go. They need more individual transportation solutions than the Rush Line and Gold Line.

*I don't know how bus line from downtown St. Paul is gonna facilitate any help for us in hiring. Because what I need is that, I need buses to pick up my caregivers at their front door, drop them off at the [the client's] door, and that's not gonna happen.*

Nevertheless, the other half of the employers expressed a feeling that their organization was understaffed partly due to their locations, which previously were not accessible by public

transport. They expected that the Rush Line BRT and Metro Gold Line could help to expand their pool of candidates.

*The First and Last Mile Problem Need to be Addressed First*

Workers who intend to commute by public transit have to figure out how they can deal with the “the first and last mile” issue first. Most of the organizations we interviewed are not directly on the bus or metro stop, which make “the first and last mile” an evident problem. If there are no feasible connecting options from the trip destination or origin to the bus/metro stop, it would be extremely hard to make these two transit lines beneficial for local employers.

*The Workforce Solution Project Has Been Hit or Miss*

Five out of eight interviewees have worked with WFS before (Table 4). Although these organizations appreciated the efforts made by WFS, their programs barely result in direct hires that can help with their entry-level labor shortage. Job fairs or connections have produced some applicants, but only a few have resulted in job placement. One primary complaint from our interviewees is that applicants who come to them via WFS either fail to meet the requirements for vehicles or cannot pass a Department of Human Services (DHS) background check.

*The candidates that we received from there [WFS] probably weren't going to work for us because they didn't have a vehicle, or they didn't have valid car insurance. And so that became a challenge. Also, we have to be able to pass a DHS background study. And so some people who came to us from the Workforce Center weren't able to pass the background study, so it's been hit or miss for us.*

**Table 4.** Employer’s Perceptions of public transportation and WFS projects

| # | Sector                          | Perception of Public Transportation | Previous Experience with WFS | Perception of WFS  |
|---|---------------------------------|-------------------------------------|------------------------------|--|
| 1 | Manufacturing                   | It helps                            | Yes                          | It wasn't a good fit                                     |
| 2 | Health Care                     | Not reliable                        | No                           | It is not doing enough                                   |
| 3 | Manufacturing                   | Neutral                             | Yes                          | It doesn't go much further than information sharing      |
| 4 | Manufacturing                   | Neutral                             | Yes                          | It helps, but only a few have resulted in job placements |
| 5 | Accommodation and Food Services | Not reliable                        | No                           | Not sure about whether they could help                   |
| 6 | Health Care                     | Neutral                             | No                           | N/A  |

|   |             |               |     |                                   |
|---|-------------|---------------|-----|-----------------------------------|
| 7 | Health Care | It won't help | Yes | It has been hit or miss           |
| 8 | Health Care | It won't help | Yes | It didn't really lead to anything |

### ***What Are the Employers Willing to Do***

#### *Efforts Made by the Employers to Recruit and Maintain Entry-level Employees*

In terms of recruiting, referrals have been the most effective way both in the healthcare and manufacturing sectors. One organization rewards employees who refer new hires with \$1000 after the new hire has worked. A healthcare organization does “Zip code recruiting,” which intends to hire people within a 20-minute drive of their care locations. Manufacturing firms recruit entry-level employees through temporary placement agencies, which can provide responsive help based on an immediate need.

Several employers invested in training programs. Two healthcare organizations paid for their applicants’ internal training, certifications in Cardio-Pulmonary Resuscitation (CPR) and medication dispersion, but it is their employees’ responsibility to complete training. If not completed in two months, their application will be terminated. One organization worked with a local high school to do an introductory class on nursing. They also partnered with a local college to do training for Nursing Assistants. The organization pays for the classes, and the deal is that the students have to work for them for at least 6 months after graduating.

Employers have different strategies to maintain their current employees. Some of them are very flexible with hours, offering schedule changes when situations change. Others provide benefits such as insurance, mileage reimbursement, and gas cards. Some organizations offer to carpool, and there are shift managers who are willing to come and pick someone up if they have car trouble, but that does not happen often. One healthcare organization had thought about providing shuttle service and subsidy for Uber trips but had failed to carry out the programs due to cost-effectiveness considerations:

*We've looked at all that stuff [shuttle service] in terms of how much it's a cost factor, you know, we have finite resources here. So we actually looked at all that stuff, like seeing what it would cost and contract to have a bus line, drop them off at the mall. And then we have a facility van to go pick people up. And where it falls apart is what are you going to do if someone gets off work early? [...] so we have variable hours, [...] No one's getting hour cuts, right? But that's where the breakdown comes in [...] how long are they going to sit there waiting for that? [...] And who's responsible for what? [...] There's liability involved in all that.*

*We also looked at doing like corporate account, corporate accounts for Uber. That gets super expensive. [...] one ride for three miles away is \$7, [...] \$14 a day round trip. [...] hundred bucks a week [...] That's for one person.*

### ***What Employers would like to See from the County***

#### *Job Training*

Five out of eight employers would like to see that more money to be allocated to job training. Local organizations, including hospitals, assisted living facilities, could benefit from the CNA training program if it can be offered or subsidized by the county. Additionally, a training program that incorporates soft skills would also be helpful.

*I hope that they're [the related departments in Ramsey County are] also teaching them how to be a good corporate citizen, sure, show up on time, communicate with people, you know, be a good team player, all kinds of soft skills that a lot of people coming in for the first time don't have, they didn't learn it in whatever manner that they could have.*

#### *Temporary Subsidies for Ride-sharing*

Three employers from the healthcare sector applauded the idea of providing temporary subsidies for ride-sharing, including carpooling services provided by Uber and Lyft. According to one of the human resource managers we interviewed, lots of people in their organization have only one car per household, so sometimes those individuals may temporarily lose access to cars because of maintenance or because someone in their family needs to use the car. Given this fact, subsidizing Uber or Lyft trips for individuals who temporarily lose access to vehicles would be a huge facilitator for the retention of entry-level employees.

## **POLICY IMPLICATIONS & CONCLUSION**

### *Policy Implications*

As we will discuss further in this section, the clearest trend in our research suggests that Ramsey County and employers of entry-level workers focus efforts on retention of employees rather than recruitment. Additionally, specific to the home healthcare sector we found an incredible need to address a concurrent problem in the industry, which is the “tidal wave of aging baby boomers” as one interviewee described it. And in response to the primary point of interest for Ramsey County WFS, we found that current efforts by the county to increase the development of public transportation to suburban areas may not be adequately addressing the needs of entry-level employees in the manufacturing and home healthcare fields.

One of the most surprising findings in our research lead to our recommendation for policy to move towards retention efforts rather than focusing on assisting employers in recruitment. In the home healthcare and light manufacturing fields of entry-level work, many of the employers we interviewed noted high rates of employee turnover. In some cases this is due to receiving alternative job offers with better pay at other companies, but most prevalent in our research were changes in arranged childcare, cost/availability of healthcare benefits, or problems with their primary mode of transportation. Many times our interviewees noted that this resulted in immediate termination of employment or no-call/no-show. We noticed that many of the programs that the county is focusing on are directed at recruitment, and while there was affirmation for some of these (particularly in training and awareness) collaboration with employers on further development of resources to address the barriers of current employees would likely make a strong impact on retention. Further, we would recommend that future research and sampling be sector-specific. While we found many similarities between the various fields of entry-level work, we also encountered barriers to our research design and questioning due to the constraints of our more broad sample.

Finally, it is important to report on our recommendations policy implications in regards to the impact of public transit development on spatial mismatch and barriers to commuting for entry-level employees, as it was of specific interest from WFS. What we found in our interviews was that most of the employers reported that their employees were already driving or carpooling, or were required to own and operate a personal vehicle in order to perform their job. While some employers noted that the temporary hiring agencies they work with would have more eligible applicants if they were closer to public transit options, there were two overwhelming responses in regards to the continued barriers with public transit:

1. Schedule: Particularly in the manufacturing industry, shifts can start in the early hours of the morning, or second/third shift workers start or end late at night. Generally, public transit is prohibitive for these employees due to their start or ending shift times in that there are no compatible routes to/from their home location or their place of employment. Two additional points on this note of schedule, many routes to/from suburban areas run on limited schedules, so if an employee ran a few minutes late and missed a connection, that would result in an hour or more added to their delay. And, the routes and connections themselves have some employees reporting commute times of well over an hour one way.
2. Last-Mile: Even with the proposed additions to transit options in suburban Ramsey County, providing increased access for those communities, they are often lacking in options to connect individuals from the “end of the line” to their destination or point of departure. Whether for employees living in suburban areas trying to commute downtown or those living in well-served public transit areas seeking employment in the suburbs, there is still a need to address how to connect people to the end of the line.

### *Future Research*

Three areas for future research from our analysis are the feasibility of more flexible public transit options; the feasibility of opportunities for Ramsey County to collaborate with employers on employee retention - with specific focus on support for health insurance and childcare; and alternative approaches to the increasing demand for home healthcare in an already overwhelmed industry. Finally, we also recommend that in any future research, Ramsey County WFS stratify the sample set by sector in order to facilitate a more targeted line of questioning, providing industry-specific results.

### *Conclusion*

In general, while employers were not encouraged about further Public Transit development addressing the commuting needs of their employees, we noted recognition and appreciation for other work that Ramsey County Workforce Solutions is doing to support employers in terms of awareness and advocacy - particularly in the manufacturing sector for the County's development and sponsorship of public high school programs. Employers noted that some further support could be had in terms of employee readiness, suggesting the county could also look at providing additional training and certification courses for job-seekers. Most importantly however, we found a significant correlation between employee retention and recruitment in the entry-level job market. We recommend that WorkForce Solutions focus its efforts on collaborating with employers in Ramsey County to support their retention of current employees. According to our findings, addressing barriers surrounding health insurance and childcare in particular would have a significant impact on retention rates of current employees.

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**APPENDIX A***Recruitment Script*

[For electronic dispersion]

Dear [HR REPRESENTATIVE],

I'm contacting you on behalf of a team of graduate students at the University of Minnesota. This spring we have partnered with the Ramsey County Workforce Solutions program to address concerns of [ORGANIZATION] and other organizations regarding the difficulties in recruiting and maintaining entry-level employees.

We would appreciate the opportunity to schedule an interview with you to find out more about your unique hiring challenges and the experiences of your employees. The conversation would last about 60 minutes at [BUSINESS] or another convenient location and we will provide our questions to you ahead of time. With your permission, responses will be recorded and compiled alongside other businesses in Ramsey County and presented to the Workforce Solutions program to aid in their continued efforts to serve the community.

A few options for interview times are listed below, please let us know which might work best.

XXXXXX  
 XXXXXX  
 XXXXXX  
 XXXXXX

Sincerely,

Student Name

Email

Phone

Second Student Name, email

Third Student Name, email

Fourth Student Name, email

**APPENDIX B: Interview Guide**

Interview #: \_\_\_\_\_ Date: \_\_\_\_\_  
 Interviewer(s): \_\_\_\_\_  
 Participant Code: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Interview Comments: \_\_\_\_\_

Room  
Setup:

*Content area: Recruitment process and requirements on the job seekers*

- 1. Can you tell us about your recruitment process?**
  - a. How and where do you recruit people (online, word of mouth, etc.)?
  - b. When interviewing applicants, does the city/town they live in play a factor in your hiring decision?
- 2. What Entry Level Positions are you currently hiring for?**
- 3. What requirements do you have for the entry-level positions\*?**

*\* entry-level employment refers to occupations that have the lowest average educational requirements, usually less than a high school degree.*

  - a. Are applicants required to have a driver's license? If so, why?

*Content area: Employers' perceptions of the employment barriers*

- 4. What circumstances and factors do you perceive to be contributing to the difficulty in recruiting and maintaining entry-level employees in your organization?**
  - a. How do most employees commute to work?
  - b. In your estimation, is public transportation a reliable option for employees?
  - c. How does **the availability of affordable housing** affect your recruitment and maintenance of entry-level employees?
  - d. How does **the location of your organization** affect your recruitment and maintenance of entry-level employees?
    - i. Why don't you move closer to your potential employees?

*Content area: Working schedule for the entry-level employees*

- 5. Do most employees have a set schedule, or does it change week by week?**
  - a. How much notice would an employee typically receive before a schedule/shift change?

*Content area: Maintenance of the existing employees*

- 6. What might happen to employees if they show up late to work/misses work/requires a last-minute change to their schedule?**
- a. Are there uniform consequences or are they done on a case by case basis?
- 7. What are the most common reasons why entry-level employees quit their jobs?**
- a. Has an employee ever quit because it was just too difficult to commute by bus?
  - b. Have you ever encounter employee quitting their job because of a lack of childcare support?

*Buffer example: Ramsey County is currently working on the development of the Metro Gold Line, which will be connecting Lake Elmo with Downtown St. Paul, as well as the Rush Line BRT, which will be connecting Union Depot in Saint Paul with downtown White Bear Lake.*

*Content area: Employers' perceptions of the current transit projects*

- 8. Do you think that the Metro Gold line will facilitate hiring and keeping entry-level employees?**
- 9. To what extent would the Rush Line BRT help with your recruitment and maintenance of entry-level employees?**
- 10. Do you think the ride-sharing services that offer direct transit, like Uber and Lyft will be a facilitator for your recruitment and retention of entry-level employees?**

*Content area: Employers' perceptions of the current WFS projects*

- 11. Have you ever reached out to RCWFS concerning your employment issues?/Share with us how RCWFS have helped you with employment issues?**
- a. What assistance have you received from RCWFS with recruiting/screening/training/retaining entry-level workers?
  - b. How their assistance affect your recruitment and maintenance of entry-level employees?

*Content area: Major employers' willingness to participate in the solution*

- 12. How do you view the role of the county in addressing these issues?**
- a. What support from the county would be most helpful to you?
- 13. How does your organization view its role in addressing these problems or providing solutions?**
- a. What kind of solutions would your business be interested in offering?
  - b. Have you considered organizing carpooling?

- c. Have you considered co-sponsoring a shuttle service for your employees together with Ramsey County / other major employers?
- d. Transit is known to have delays. Would employees be held to strict start times if they are commuting by shuttle or bus? Would you be willing to rethink this policy if you received a tax credit/subsidy?

*Content area: About the organization*

- 14. How long have your organization been here?**
- 15. How many entry-level workers are you seeking to hire/do you currently have?**
- 16. What is the average hourly wage of entry-level employees?**

*Content area: Wrap-up*

Thank you for sharing your thoughts on mitigating the employment barriers. This conversation was incredibly helpful.

- 17. Are there any topics we didn't cover that you think would be relevant to the employers' perceptions of the employment barriers? Feel free to share anything that's on your mind before we wrap up.**
- 18. Can we answer any questions for you?**

Example probes:

- Can you say more about that?
- Can you provide an example?
- Interesting. We hear from other organizations that... What are your thoughts on that difference in perspective?
- I'm hearing you say...Is that correct?
- What kind of feedback did you get?
- Looking back, would you do anything differently now, if anything?
- What was the outcome?
- Hmm, I'd like to hear more.

## **APPENDIX C: (Verbal) Informed Consent Document**

### ***Background and Purpose***

This spring we have partnered with the Ramsey County Workforce Solutions (RCWFS) to address concerns of several organizations regarding the difficulties in recruiting and maintaining entry-level employees. With your permission, responses will be recorded and compiled alongside other businesses in Ramsey County and presented to the RCWFS to aid in their continued efforts to serve the community.

### ***Procedures***

We will be asking you a few questions regarding your perception and knowledge of barriers to your current or potential employees. We will also be asking to what lengths you have already or are willing to work with your employees and/or with Ramsey County to address these barriers. We will be interviewing a number of employers from across the county in this study and will be compiling the responses in a report to RCWFS.

### ***Confidentiality***

This data will be stored in a private folder that is password protected and only accessible to members of our team. This project will conclude on May 10th, 2019, at which point we will delete all records of this contact information.

Our team will take every possible precaution to protect the identities and personal information of all individuals who participate in this study. We will not publish the names of any individual we interview. Furthermore, we will not include descriptions of the individual's race, age, gender, mannerisms, physical characteristics, or information of any kind that could reveal his or her identity to the public.

While we will not reveal the identities of interview subjects at any point in our final report, it will be necessary to keep records of your contact information throughout the course of this project. We will keep records of participants' email and phone number in case we need to follow up. We will also keep records of their names, place of employment, and positions. Our team's commitment to confidentiality goes beyond protecting clients' names. We will also not publish the identity of their employer. While we may reference the industry that they work in, we will not use any specific company names in our report.

### ***Voluntary Nature of the Study***

You are free to end the conversation at any time. This includes your ability to choose not to answer specific questions, as well as changing your mind about your participation in the entire study.

### ***Compensation***

We are not able to offer any compensation for your participation in this study.

***Statement of Consent:***

Are you willing to participate in this study?

***Contacts and Questions:***

If you have questions about research appointments, the study, research results, or other concerns contact the researchers. You may ask any questions you have now, or if you have questions later, you are encouraged to contact them:

Kayla Lyftogt, [lyfto002@umn.edu](mailto:lyfto002@umn.edu)

Jack Malone, [malon269@umn.edu](mailto:malon269@umn.edu)

John N. Murray, [murr0328@umn.edu](mailto:murr0328@umn.edu)

Yi Wang, [wang8262@umn.edu](mailto:wang8262@umn.edu)

## APPENDIX D: Codebook and Definitions

**MISMATCH Codebook and Definitions**

1. **Setting of Interview** – The ambiance of location
2. **People We Interviewed** – Information about the Interviewees
3. **Open Entry Level Positions** – Which entry-level positions is the company currently hiring for
4. **Organization Info** – General information about the Organization (location, overall # of employees, etc).
  - a. **Number of Entry Level Employees** – Total number of entry-level employees
  - b. **Number of Employees Organizations are Seeking to Hire**
  - c. **Longevity of Employees** – How long do employees tend to stay once they are hired and/or how long do employees have to stay to be retained for several years
  - d. **Location of Org** – where is the main location and/or satellite locations
  - e. **Industry** – Which industry does this organization fit into
  - f. **Hourly Wage for Entry level Employees** – Starting Entry-Level pay and information about raises
  - g. **Employee Demographics** – Demographics of entry-level employees including age, gender, and race
5. **Recruitment Process** – General information about recruitment process
  - a. **How and where do you recruit people** – Descriptions of all the ways employers attempt to increase applicant pool
  - b. **Does where applicant lives factor into hiring decisions** – Is the residence of the employee taken into considerations in any part of the recruiting/screening process
6. **Requirements for Entry Level Positions** -What types of skills or experiences must an applicant have in order to be able to apply for the position
7. **Barriers to Recruitment and Maintenance of Entry level Employees**
  - a. **Transportation used for Commuting** – How do employees get to work (walk, bike, bus, train, car, car-pool, etc)
  - b. **Feasibility of Public Transportation** – Is it feasible for entry-level employees to use public transportation to get to work
  - c. **Availability of Affordable Housing** - Employers' perception of the impact of availability of Affordable Housing on their ability to recruit
  - d. **Location of Organization**- Does the interviewee believe the location of their organization limits who they can recruit
  - e. **Job Seekers have limited information about organization**
  - f. **Lack of Control of Schedule** – Can employees use their own agency to change their schedule or must they abide by company-driven changes in their schedule
  - g. **Lack of Proficiency in English** – Must applicants be proficient in English (writing or reading) in order to qualify for an interview

- h. Lack of Driver's License** – Must applicants have a valid Driver's License in order to qualify for an interview
  - i. Lack of Soft Skills** – Do soft skills play a role in an entry-level employee's success in a position (i.e. person to person interactions, cultural responsiveness/awareness, professionalism)
  - j. Low Wages** – Does interviewee believe their low wages limit their ability to attract potential entry-level employees
  - k. Lack of Qualified Applicants** – Are there limited numbers of people available to fill a particular entry-level role in the metro (Minneapolis/St. Paul) area
  - l. Discrimination by Who Organization Serves** – Do the clients served by the organization (i.e. clients who need home care) discriminate based on race or gender
  - m. Lack of Childcare Support** – Does lack of child care or support for child care play a role in recruitment or retention of entry-level employees
  - n. Price of Healthcare** – Does the price of employer-offered health care impact an organizations' ability to recruit or maintain entry-level employees
  - o. Price of Auto Insurance** – Is having auto insurance a requirement for the entry-level position
  - p. Competitive Labor Market** – Does the high demand and low supply of certain types of entry-level employees impact ability to recruit/retain employees
- 8. Schedule** – What are the general schedules for entry-level employees
- a. Notice before shift change** – Do entry-level employees get any notice before a shift change
- 9. Consequences for Not Arriving on Time** – What are the overall repercussions set by the organization for not arriving on time to work
- a. Uniform Consequences** – Which consequences for lateness or missing work are uniform or standard
  - b. Case by Case Consequences** – Which consequences for lateness or missing work are flexible or individual
- 10. Common Reasons that entry level employees quit** – General statements about reasons entry-level employees quit
- a. Too difficult to commute by public transit** – Entry-level employee realizes after beginning work that public transportation would take too long
  - b. Lack of Childcare Support** – Entry-level employee must leave position because of a lack of childcare support
  - c. Lack of control over work schedule** – Entry-level employees quit because their schedule is unpredictable or changes frequently
    - i. Mandatory overtime** – Employer requires mandatory overtime and entry-level employee quits because of this requirement of the position
  - d. Didn't like the work** – Entry-level employee quits because they find the nature of the work to be too challenging (Emotionally or physically)
  - e. Found Job with higher wages** – Entry-level employees quit when they find a similar job elsewhere with higher pay



**f. Didn't fit with organizational culture** – Entry-level employee does not like the environment of the workplace

**g. Leave for School** – Do entry-level employees quit because they leave for College/University

**11. Impact of Metro Gold and Rush Line** – Does interviewee believe that the Metro Gold and Rush Lines will impact their ability to recruit or retain employees

**12. Relationship with WFS** – Overall descriptions of the employee's/organization's interactions with Work Force Solutions at Ramsey County

**a. Assistance Received from WFS** – What assistance has this organization received or are they receiving from Ramsey County Work Force Solutions

**b. Hires that were a result of WFS involvement** – Description of whether or not any hires were made because organization was involved with Ramsey County Work Force Solutions

**13. Role of Ramsey County in addressing Employment Barriers** – General comments of interviewee's beliefs about how Ramsey County could support organizations' recruitment and retention efforts

**a. Temporary Subsidies for Uber and Lyft** – Comments from interviewees about the impact of Uber and Lyft subsidies for entry-level employees

**14. Role of Employer in Addressing Employment Barriers** – How does employer view their role in addressing employment barriers

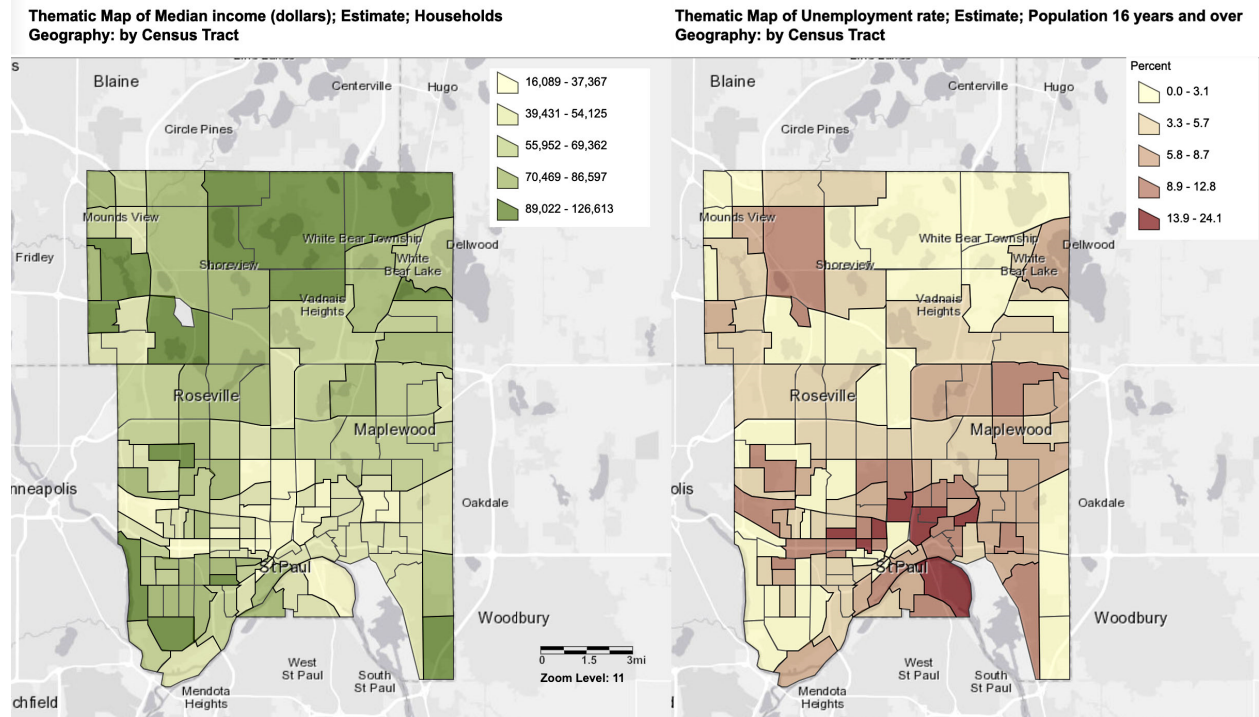
**a. Shuttle-** Would shuttles assist in recruiting/maintaining entry-level employees

**b. Flexibility With Attendance Policies-** How does flexibility with attendance policies impact the employer's ability to recruit/retain employees

**c. Flexibility with Scheduling-** How does feasibility with scheduling impact the employer's ability to recruit/retain employees

**d. Offering Carpooling-** Has the employer offered carpooling as a way to recruit/maintain entry-level employees

### Appendix E. Visualization of Household Income and Unemployment in Ramsey County



This map was created with data from *American Community Survey 2013-2017*

United States Census Bureau. "Ramsey County Profile Data" 2013 – 2017 *American Community Survey*. U.S. Census Bureau's American Community Survey Office, 2017. Retrieved from: <https://censusreporter.org/profiles/05000US27123-ramsey-county-mn/>