Promoting Gainful Employment Opportunities for Individuals with Disabilities

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**EXECUTIVE SUMMARY**

The unemployment rate for Individuals with disabilities (IWDs) is double the unemployment rate of the general population. In addition, IWDs are overrepresented in part-time and lower-paying positions. This report identifies potential barriers to employment for IWDs, from both employer and employee perspectives, and explores strategies that MDI can use to reduce that disparity.

We recommend that MDI approach this problem with two strategic objectives in mind:

1. Increase employers’ exposure to individuals with disabilities.
2. Increase awareness of alternative hiring methods.

We developed these recommendations after an extensive research process. We began with a review of current literature, followed by a series of depth interviews with HR professionals, IWDs, and job coaches. Finally, we administered two surveys to IWDs and HR professionals. This process allowed us to build upon our earlier findings and develop a refined understanding of the employment landscape for IWDs.

We identified the following barriers to employment for IWDs that informed our recommendations:

**Employer-side barriers:**

1. A lack of awareness about the capabilities of IWDs
2. A lack of open communication about disability issues
3. Implicit biases

**Employee-side barriers:**

1. Discomfort with ambiguity and new environments
2. Challenges with basic life and communication skills
3. Logistical issues with commuting to work
4. A lack of awareness of available employment resources

This report presents an analysis and discussion of the research findings. Comprehensive appendices are provided to support our findings and recommendations.
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INTRODUCTION

Project Overview

There are substantial differences in the employment landscape for individuals with disabilities (IWDs) compared to those without a disability. The unemployment rate among IWDs is double that of those without disabilities (Bureau of Labor Statistics, 2017). MDI would like to reduce that disparity by finding ways to increase the employment of IWDs into the mainstream work environment in the Twin Cities.

MDI, which started in 1960 as the first Minnesota supported work program, is a leader in manufacturing corrugated plastic packaging solutions, production assembly, and environmental services. As a non-profit through a Social Enterprise model, MDI provides meaningful work in an inclusive environment, with nearly half of the workforce comprised of people with disabilities. In addition, MDI offers job placement services for individuals with disabilities to other companies in Minnesota.

The researchers are full-time MBA students at the University of St. Thomas. They consulted for MDI as a part of the Applied Business Research (ABR) class. The researchers sought to understand the issues surrounding the employment of individuals with disabilities, ultimately leading to the development of recommendations that address MDI’s goal of reducing unemployment of individuals with disabilities.

Objectives

The following project objectives were identified:

Objective 1: Understand the employment landscape for individuals with disabilities.

Objective 2A: Identify the most significant barriers for Employers Hiring IWDs.

Objective 2B: Identify the most significant barriers to employment for IWDs.

Objective 3: Identify the most effective approach MDI can take to increase the employment of IWDs in mainstream companies.
SECONDARY RESEARCH

Introduction

The first step in finding strategies to increase the employment of IWDs was to gain a deeper understanding of the employment landscape that they face. We explored this issue from two perspectives: the employers’ and the IWDs’. We examined the legal and regulatory environment surrounding the employment of IWDs, with an emphasis on how private organizations comply with state and federal regulations. An examination of current academic research in this field provided an understanding of some of the key issues IWDs face in the workplace, including implicit bias and employer reluctance to hire IWDs. Finally, an assessment of current strategies to improve the employment rate of IWDs provided us with the context necessary to determine which approaches are likely to succeed. By gaining a better understanding of the current situation, we were better able to direct our subsequent primary research and provide MDI with quality recommendations.

Background Data on Individuals with Disabilities

Demographic Characteristics

According to a Bureau of Labor Statistics News Release (2017) describing the labor force characteristics for persons with a disability in 2016, persons with a disability formed 12% of the civilian, non-institutional population\(^1\) that was 16 years old and over. They had the following demographic characteristics:

**Age:**

Nearly half of all persons with a disability (47%) were age 65 and over, about three times larger than the share of those with no disability (15%). (See Appendix A, Exhibit 1.)

**Gender:**

There were more women with a disability than there were men (54% and 46% respectively. (See Appendix A, Exhibit 1.)

**Race and Ethnicity:**

Blacks and Whites had a higher prevalence of disability than Asians and Hispanics. (See Appendix A, Exhibit 1.)

**Educational Attainment**

36% of persons with a disability have a high school education, 26% have some college or associate degree education, while 17% have a bachelor’s degree and higher. 20% did not attain

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\(^1\) The civilian non-institutional population refers to people 16 years of age and older residing in the 50 States and the District of Columbia who are not inmates of institutions (penal, mental facilities, homes for the aged), and who are not on active duty in the Armed Forces.
In contrast, persons without a disability generally attained a higher level of education than persons with a disability. Only 9% of persons without a disability did not attain a high school diploma, while 36% had attained a bachelor’s degree or higher. (See Appendix A, Exhibit 1.)

**Employment**

In 2016, the employment-population ratio increased from 17.5% to 17.9% for persons with a disability. The ratio increased from 65.0% to 65.3% for those with no disability. The lower ratio among persons with a disability can be attributed partly to the older age profile of persons with a disability; regardless of disability status, older workers are less likely to be employed. However, persons with a disability were much less likely to be employed than those with no disability, across all age groups. (See Appendix A, Exhibit 1 and Exhibit 2.)

As previously discussed, persons with a disability were less likely to have completed a bachelor’s degree or higher than those without a disability. Among both groups, those who had attained higher levels of education were more likely to be employed than those with less education. Across all levels of education in 2016, persons with a disability were much less likely to be employed than were their counterparts with no disability. (Educational attainment data are presented for those age 25 and over.) (See Appendix A, Exhibit 1.)

Workers with a disability were more likely to be employed part time than those with no disability. Among workers with a disability, 34% usually worked part time in 2016, compared with 18% of those without a disability. The proportion of workers who were employed part time for economic reasons was slightly higher among those with a disability than among those without a disability (6% versus 4%). These individuals were working part time because their hours had been cut back or because they were not able to find a full-time job. (See Appendix A, Exhibit 3.)

In 2016, persons with a disability were more concentrated in service occupations than those with no disability (21.3 % compared with 17.6%). Workers with a disability were more likely than those with no disability to work in production, transportation, and material moving occupations (14.6% compared with 11.6%). Persons with a disability were less likely to work in management, professional, and related occupations than those without a disability (31.7% compared with 39.5%). (See Appendix A, Exhibit 4.)

The proportion of persons employed in government was about the same for both persons with a disability and persons without a disability in 2016 (14.0% and 13.6%, respectively). However, a smaller share of workers with a disability were employed as private wage and salary workers (75.4%), compared with those with no disability (80.1%), and a larger share were self-employed than were those with no disability (10.6 % versus 6.2%). (See Appendix A, Exhibit 5.)
Unemployment:

The unemployment rate for persons with a disability was 10.5% in 2016, which is double that of those with no disability (4.6%). Unemployed persons are those who did not have a job, were available for work, and were actively looking for a job in the 4 weeks preceding the survey. The unemployment rate for persons with a disability was little changed over the year, while the rate for persons without a disability declined by 0.5% to 4.6% in 2016. (See Appendix A, Exhibit 1 and Exhibit 2.)

Among persons with a disability, the unemployment rates were similar for both men and women in 2016 (10.1% and 11.0%, respectively). The rates for both men and women changed little from 2015 to 2016. Jobless rates for persons with a disability also showed little change among major race and ethnicity groups in 2016. As is the case among persons without a disability, the jobless rate for those with a disability was higher for Blacks (16.6%) than for Hispanics (12.5%), Asians (10.7%), and Whites (9.5%). (See Appendix A, Exhibit 1.)

Labor Force Participation:

Persons who are neither employed nor unemployed are not in the labor force. A larger proportion of persons with a disability—about 8 in 10—were not in the labor force in 2016, compared with about 3 in 10 of those with no disability. In part, this reflects the older age profile of persons with a disability; persons age 65 and over are much less likely to participate in the labor force than younger age groups. Across all age groups, however, persons with a disability were more likely to be out of the labor force than those with no disability. (See Appendix A, Exhibit 1.)

Regardless of disability status, the majority of those not in the labor force do not want a job; in 2016, 3% of those with a disability and 7% of those without a disability wanted a job. About 1% of persons with a disability and 2% of those without a disability were marginally attached to the labor force. These individuals wanted and were available to work and had looked for a job sometime in the prior 12 months. They were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey. (Persons marginally attached to the labor force include discouraged workers.) (See Appendix A, Exhibit 6.)

Legal and regulatory environment surrounding employment of IWDs:

There is a strong and well enforced regulatory and legal environment surrounding employment of individuals with disabilities both on the national and the state level. On the national level, section 503 of the Rehabilitation Act specifically defines the regulatory environment surrounding employment of individuals with disabilities. Section 503 of the Rehabilitation act outlines that employers are not allowed to discriminate against individuals with disabilities and must also take affirmative action to both recruit and hire individuals with disabilities. The act requires a seven percent utilization rate nationwide and requires that the number of individuals with disabilities who apply and are hired be documented.
The most well-known legal framework for employing individuals with disabilities is the Americans with Disabilities Act. The Americans with Disabilities Act (ADA) “prohibits discrimination against qualified persons with disabilities by private employers, state and local governments, employment agencies, and labor unions” (ADA Enforcement Focus Poses New Compliance Challenges., 2012; Disability, n.d). The employers highlighted above are required to comply with the ADA or they could face the U.S Equal Employment Opportunity Commission (EEOC) (Curb Cuts to the Middle-Class Initiative). The definition and qualifications for individuals to be protected under the act is open to broad interpretation because the laws true intention is to protect a wide array of individuals.

The strong legal and regulatory environment regarding individuals with disabilities is strengthened by Minnesota’s own regulations regarding individuals with disabilities. The Minnesota Human Rights Act works similarly to the ADA, but covers all business, no matter how small. The ADA will cover employers with 15 employees or more, and the Minnesota Human Rights Act does that as well, but also covers the smaller employers. The legal and regulatory environment in Minnesota is conducive for an equal opportunity environment for IWDs. Under both the ADA and the MHRA employers must make an effort to provide “reasonable accommodation.” This accommodation must be effective and includes: modifying work schedules, job restructuring, acquisition of devices and more (MN Department of Human Rights). Additional reasonable accommodations that can be requested in the workplace include modifying work place rules, allowing the use of a job coach, reassignment to a vacant position or telework (Iyer and Masling, 2015).

Compliance

The price for ADA compliance failure is steep, in 2011, US businesses paid over $100 million in fines (Controller’s Report, 2012). Disability discrimination claims are rising compared to other types of discrimination. Additionally, the Equal Employment Opportunity Commission (EEOC) regulations surrounding ADA Amendment Act (ADAAA) make it easier for employees to prove a disability and to sue for discrimination. Employers may fail ADA compliance if leave-of-absence policies have termination dates, or if they require full medical release (Controller’s Report, 2012). Despite the strength of these regulations, the ADA has historically provided minimal guidance for employers on how to provide equal opportunity access for disabled employees (Jones, 2001). Employers generally err on the side of caution; which while good from a compliance standpoint, may be perceived as an excessive regulatory burden and discourage employers from actively seeking out IWDs.

Perceptions and Experiences of IWDs in the Workforce:

Management Perspectives

Luecking (2011) categorizes employer views on IWDs in three ways: negative or inadvertent stereotyping, disengagement from actively seeking IWDs, and positive attitudes derived from specific experience (Luecking, 2011). Decades of research into implicit bias demonstrate that it
is very difficult for individuals to overcome the subconscious biases that help them navigate the world around them, even when they are made aware of the bias (Greenwald and Krieger, 2006). This suggests that the best approach to improve employer perceptions of IWDs would be to target the second group, the disengaged. Perhaps involving such employers in a work experience program for IWDs could plant the seeds of a positive perception of IWDs, leading to more opportunities for IWDs in the long term.

On a positive note, research has consistently shown that employers with previous experience hiring IWDs are significantly more likely to hire IWDs in the future, indicating a positive experience with disabled employees (Unger, 2002). In a meta-analysis conducted in 2011, Luecking found that employers with experience hiring IWDs cite the importance of receiving assistance from partner organizations with experience in disability issues, especially if those partners were able to provide positive contribution to the overall operations of the business (Luecking, 2011). It appears to be as important for such partner organizations to effectively communicate the value of employing IWDs as it is for companies to be aware of the presence of IWDs in the labor markets.

Employers are generally responsive to the idea of hiring and accommodating IWDs, but these positive attitudes don't necessarily translate into an increase in hiring of IWDs (Hernandez, Keys, & Balcazar, 2000). Many employers reported a willingness to accept a lower standard of performance from employees with a cognitive impairment in exchange for improved attitude and attendance (Blanck, 1998). Smaller organizations appear to be more likely to discriminate against IWDs than larger organizations (Draper, Reid, & McMahon, 2011). This is perhaps due to weaker organizational structures surrounding the employment and career pathing of IWDs. Another likely explanation of this trend is the limited number of decision makers in smaller businesses, amplifying the effect of those decision makers' implicit biases. It is important to note, however, that this finding is inconclusive, as other research has failed to find significant differences between small and large employers (Unger, 2002).

Managers also worry about how their non-disabled employees will perceive the accommodations necessary for their disabled colleagues, especially in cases where the disability is not obviously apparent (Gewurtz & Kirsh, 2009). Physical accommodations are easy to meet, but the more important social accommodations are much more difficult as they require buy-in from other employees. Often managers risk creating resentment when accommodations are perceived to disrupt day-to-day operations (Gewurtz & Kirsh, 2009). Managers also face the problem of non-disabled employees requesting similar accommodations, which can't be provided to all employees without significant financial or operational costs. When denied what they believe to be a reasonable request, employees may become resentful of both management and their disabled colleagues (Harlan & Robert, 1998).

Many employers recognize that there are numerous positive business implications for hiring IWDs. IWDs provide valuable benefits and insights to companies that employ them (Iyer & Masling, 2015). IWDs and their families are an expanding customer base. Additionally,
customers favor and generally have a good impression of businesses that hire IWDs. Business need to ensure best practices for recruiting, hiring and retaining IWDs. Companies can bring added value by developing internal hiring policies, targeting IWDs for open job postings, and providing reasonable accommodations for disabled employees. Companies should also encourage IWDs to apply directly on the job applications along with stating that any reasonable accommodations will be provided (Iyer & Masling, 2015).

**Employee Experiences**

While IWDs are frequently lumped together as a single group, the nature and severity of their disabilities is extremely diverse, with individuals facing their own set of unique challenges. Indeed, research has shown that there is a hierarchy of social preference surrounding disabilities, with mental disabilities viewed as more difficult to work with than physical disabilities (Jones, 2001). This hierarchy of disability perceptions is confirmed in a meta-analysis of employer attitudes towards IWDs (Unger, 2002). In fact, colleagues are less likely to assist and support employees with disabilities who experience difficulties due to significant mental illness, stressful work conditions, or conditions that are not obviously apparent than if their colleague had an obvious physical impairment or illness (Gewurtz & Kirsh, 2009). IWDs face pressure not to disclose their disability, especially if it is not apparent (e.g. Epilepsy). In fact, many do not disclose their disability out of fear of reprisal (Draper, Reid, & McMahon, 2011). Another significant challenge IWDs face is implicit bias, as colleague opinions and managers' decision-making can be impacted by biases that they may not be aware of (Draper, Reid, & McMahon, 2011).

Although the ADA provides protection from hiring discrimination, it provides very little support or guidance for companies wishing to provide disabled employees with more opportunities for growth, mentorship, and inclusion in the work community (Jones, 2001). The general lack of career support for IWDs is reflected in their employment figures, as IWDs are more likely to be employed part-time or in lower paying sectors like service or retail (Bureau of Labor Statistics, 2017). In a 2011 study, Lindstrom, Doren, & Miesch examined the post-secondary career outcomes for young adults with disabilities. They determined that ongoing career advancement relied heavily on access to post-secondary education or training, stable employment, and personal attributes such as persistence (Lindstrom, Doren, & Miesch, 2011). Additionally, access to adult mentors and transition services played a key role in securing post-secondary employment and educational opportunities (Lindstrom, Doren, & Miesch, 2011). Clearly improvements must be made to provide IWDs with the adequate support they need to develop successful and fulfilling careers.

**Current and Potential Demand-Side Employer-Based Strategies to Increase Employment for IWDs**

A study published in the Psychiatric Rehabilitation Journal (Delman, 2017) describes current and potential demand-side strategies to increase job retention and employment rates of people
living with serious mental illnesses. The article sought to increase awareness of the potential impact of demand side strategies and generate considerations to implement and evaluate these strategies. The study is relevant because employees with mental illnesses still struggle to keep jobs despite vocational rehabilitation efforts that focus on the supply side interventions (Lutterman, 2013). Vocational interventions include efforts to preparing individuals with disabilities for the job search, helping them find jobs, and supporting them on the job (Delman, 2017.) The study suggests that employer-side strategies may be effective at helping persons with a mental disability find and retain employment.

**Current Strategies**

**Employee Assistance Program (EAP):**
This is a confidential counselling and referral service that helps employees with serious mental health problems to access evidence-based services shortly after onset. This potentially improves mental health symptoms, workplace functionality, and productivity (Lerner, Rodday, Cohen, & Rogers, 2013; Richmond, Pampel, Wood, & Nunes, 2016.)

**Short Term Disability Insurance (STDI):**
This pays a portion of the salary of a worker who becomes disabled, which allow the employee to fully focus on his or her recovery and retain the position for the long-term.

**U.S. Family and Medical Leave Act (FMLA):**
This law requires covered employers to grant employees 12 weeks of leave per year to address serious health conditions (Mayer, 2013).

However, eligibility for these programs requires employees to work substantial hours (STDI, 24 hours per week; FMLA, full-time), leaving out many people with serious mental illnesses, who are more likely to work part-time (Drake et al., 2013).

**Potential Strategies**

**Employer Resource Networks (ERNs):**
These are a lower cost alternative to EAPs. They are multi-employer collaborations designed to link and leverage vocational support resources. Some ERNs have been developed by groups of businesses that pay a fee to participate, whereas others are based on government subsidies, such as Massachusetts’ five “Regional Employment Collaboratives.” These collaboratives help organizations to hire and retain people with disabilities (Henry, Laszlo, & Nicholson, 2015).

**Trainings:**
Training management and other employees on how to support employees with serious mental illnesses and understanding their role in helping employees access workplace accommodations.

**Tax credits:**
Tax credits offered to employers who hire individuals with a disability may increase the demand for their employment. It has been suggested that the tax credits cover the cost of
accommodations that would otherwise impose an “undue hardship” on business operations (Hollenbeck, 2015).

Limitations of Current Research and Unanswered Questions

There has been relatively limited research into the views and attitudes of managers and supervisors with front line experience working with IWDs, as much of the research on employer attitudes towards IWDs has been conducted via interviews and surveys with more senior management and HR professionals. There has also been little direct research into the attitudes other employees have towards disabled colleagues, as their perspectives have been largely inferred from work with management and the application of psychological and sociological frameworks. Additionally, most of the research into this issue focuses on the perspective of the employer, with little input from IWDs. Further work could be done to gain insights into how IWDs view their job search and employment experience, and whether there are steps that could be taken to improve it.

Key Findings

Our secondary research revealed that there were substantial differences in the employment landscape for IWDs compared to those without a disability. The unemployment rate for IWDs was 10.5% in 2016, which was double that of those with no disability (4.6%). Further, IWDs were more likely to work part time, work in service industries, and were less likely to work in management roles than their counterparts without a disability. There were also differences in the labor participation rate between IWDs and those with no disability. Across all age groups, IWDs were more likely to be out of the labor force than those with no disability.

We also found that there was a relationship between the level of education attained and employment status. In 2016, for all persons, those with a higher level of education were more likely to be employed. However, there were significant differences in educational attainment between IWDs and those with no disability. IWDs were found to attain lower levels of education than those with no disability. For instance, in 2016, 17% of IWDs had a bachelor’s degree or higher compared to 36% for those with no disability.

Despite the regulations in place, our research revealed that employers’ perspectives played a big role in whether IWDs found and retained employment. Most employers’ perspectives on IWDs fell into one of three categories: negative stereotyping, disengagement from actively recruiting IWDs, and positive attitude derived from specific experience. Although most employers recognize, at least in theory, the benefits that IWDs can bring to their organization, factors such as implicit bias and difficulties providing social and cultural accommodation likely deter many from hiring IWDs.

Because individuals with disabilities still struggle to keep jobs despite vocational rehabilitation efforts and regulations that focus on the supply side interventions, our research suggested that demand-sided, employer-based strategies may potentially solve the problem. These demand-
side, employer-based strategies include strategies that help increase employers’ demand for workers with disability through monetary incentives such as tax credits or disability insurance, as well as strategies that help to create positive perceptions of IWDs among employers.
PRIMARY RESEARCH

Qualitative Research

Introduction

Although our secondary research has provided quality background information into this topic, there are significant gaps in the literature that need to be filled. To gain a better understanding of both employers’ and IWDs’ experiences with employment and the job search process, we conducted a series of depth interviews with relevant parties, including HR professionals, job coaches, and IWDs. The depth interviews conducted explored the barriers to employment that currently exist for IWDs, employer perspectives of IWDs, the resources currently available to facilitate employment of IWDs, and potential approaches to improve or increase the employment of IWDs. Some commonalities that emerged throughout the interviews include the importance of a personal connection to the issue, the impact that broader corporate culture can have on the inclusion of IWDs in the workplace, and some of the day-to-day workplace challenges faced by IWDs.

Research Methodology

Depth interviews (30-45 minutes) were conducted with 4 HR professionals, 1 Industrial/Organizational Psychologist, 14 Job Coaches/Paraprofessionals, 3 program coordinators, and 4 Individuals with disabilities. Interviews were either conducted via phone or in-person. Most interviews were recorded, however, some informants declined to be recorded. Detailed notes of their interviews were taken. Transcripts and notes from interviews with IWDs can be found in Appendix B, transcripts from interviews with HR professionals can be found in Appendix C, and transcripts and notes from interviews with Job Coaches, Paraprofessionals, and Program Coordinators can be found in Appendix D.

Respondents Background

![Fig. 1: Breakdown of depth interview participants](image)

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HR Professionals

HR professionals were recruited directly via LinkedIn and come from a variety of human resources backgrounds, including recruitment, management, and academic research. Some of them reported having a personal connection to the issue of disability employment. They provided employer-side insights to issues affecting the employment of individuals with disabilities including employer perspectives of IWDs and the government regulations regarding IWDs at the workplace.

Employer Perspectives

Something that was stated throughout our interviews with HR professionals was that individuals with disabilities, like all employees, need to be able to perform the primary duties of their position. That said, one of our informants was skeptical, and believed that employers would sometimes avoid hiring candidates with disabilities, saying:

“I think if we were to send them a candidate fully qualified with disabilities and a candidate fully qualified without, because they don’t want to necessarily make reasonable accommodations, they would go with the qualified candidate without.” (Appendix C, Exhibit 3).

Of course, these experiences vary between employers.

One area of concern highlighted by our secondary research was the potential difficulty of integrating disabled employees into their work environment. However, HR professionals did not report having experienced difficulties managing relationships between IWDs and their colleagues, with the exception of employees who had interpersonal difficulties in general.

“I can’t think of anyone that I’ve ever terminated as the result of their unwillingness or inability to work with a disabled person, but I certainly have done so if they just never... You know, typically if they can’t get along with that person they can’t get along with anybody...” (Appendix C, Exhibit 1).

Government Regulation

In general, government regulations were not seen as an impediment to their business. A lot of employers are usually concerned with new regulations, but most of their initial concerns are alleviated as they learn to adapt to the new regulatory framework. Encouragingly, one of our informants cited the ADA as a significant causal factor for a broader change in attitudes towards IWDs.

“My experience has been that there hasn’t been a change in policies. It’s been more a change in attitude. I think the ADA policies have pointed people in the right direction.” (Appendix C, Exhibit 1).
Another area of concern that employers have about disability regulation is the potential for abuse. They initially fear that some employees will take advantage of the law in unscrupulous ways and they will have no legal recourse. Fortunately, this doesn’t appear to be the case after new regulations are implemented. One respondent reported:

“When the ADA was reformed a few years ago and it was the ADA-A-A-A-A-A-A-A... I haven’t seen people use it inappropriately, but I think a lot of employers thought that people were going to, that they were going to take advantage of the legislation and I haven't seen that happen” (Appendix C, Exhibit 1).

Clearly government regulations have the potential to positively impact attitudes towards IWDs and have gone a long way towards reducing some of the biases and barriers to employment faced by IWDs.

“There's increasing recognition that it's important to give people opportunities to be employed and to make it possible for them.” (Appendix C, Exhibit 5).

However, implicit bias is part of human nature, and will always play a factor in people’s interactions with IWDs.

**Implicit Bias**

HR professionals, managers, and other people without experience working with IWDs are generally naïve about the challenges of employing and working with IWDs. They are not opposed to working with IWDs, but they may lack the expertise to facilitate their employment and integration. One of our informants talked at length about how people who lack experience with disabled individuals may not be able to look past their disability in an interview setting.

“I think that then whoever’s doing that interview, especially if it's a hiring manager and not a recruiter or an HR person who does this all the time, they can just be intimidated, like they don't know for sure what to do, or what to say.” (Appendix C, Exhibit 5).

Implicit bias is such a powerful force that even well-intentioned individuals struggle to overcome their subconscious biases.

Even companies with good programs for IWDs struggle to create a company-wide understanding of IWD employment. For example, one business would send employees on inclusivity retreats, but then those employees wouldn’t share what they learned with the rest of the organization. One respondent says, “I do not remember any specific forum or a way to disseminate it. I think it was more about exposing a variety of people to the content.” (Appendix C, Exhibit 4).
Of course, the purpose of most organizations is not to employ IWDs, but to make money, so it is understandable that they are reluctant to commit a lot of resources to this subject. Interestingly, companies tend to view integrating IWDs generally falls within broader diversity and inclusion initiatives, alongside people of color, women, and other marginalized populations.

“When you start looking at inclusion then you discover there is so much more in terms of abilities, disabilities, the educational background, age, family situation, sexual orientation and so on. And you create a workplace and you also create the organization where these things are included in” (Appendix C, Exhibit 4).

Personal connections to individuals with disabilities were found to build understanding and spur action, and this can be magnified when business leaders have these connections. One respondent experience shared their experience:

“One of the executives, and I recalled I learned in one of those educational sessions, one of the executives had a son who was dealing very severe disabilities. There was a personal connection and I think that was extremely powerful for somebody very high up in the organization to be able to speak to their personal experience.” (Appendix C, Exhibit 4).

Personal experience also encourages people to engage with the issue of disability employment throughout their lives, one of our informants was previously a paraprofessional before entering the HR field.

“Previously I was a para at a high school. I kind of helped students with disabilities work and manage that. And then I volunteered with- I've helped with disabilities throughout my life.” (Appendix C, Exhibit 3).

Encouragingly, it was reported that there has been a notable change in attitudes towards IWDs over the last decade or so “Certainly the generation of people like yourself and younger, they see the world in a very, very different way and I think the old focus on just gender and ethnic background and looking at numbers, that's just so insufficient.” (Appendix C, Exhibit 4). This change in attitude, coupled with an increased awareness of other social justice issues in our society indicates that now is an opportune time to act.

**Outside Partnerships**

One opportunity for action is facilitating partnerships between employers and outside agencies, such as schools and transition programs. Such relationships can assist employers with the hiring and integration of qualified candidates with disabilities. Outside agencies usually have established rapport with individual candidates and are often better equipped to handle the
needs of specific individuals than employers. One of our informants described the relationship “the organization would work with them and place people there. And if there was a problem, they certainly would work with them to work out the issues.” (Appendix C, Exhibit 2). By taking some of the pressure of integrating individuals with specific needs off employers, outside partners can help place IWDs into roles that may not have otherwise been available. The impact such partnerships can have is effectively summarized by one of the respondents.

“I think if you have an agency that wants to work with you and help you put something together I think the probability of success is much higher if you have some structure to work with. When it comes to starting things from scratch, it's almost impossible because there are so many other things that you have to deliver on.” (Appendix C, Exhibit 4).

Concerted efforts to facilitate more or stronger relationships between employers and outside agencies can significantly improve employment opportunities for IWDs.

The most effective way to mitigate implicit bias is through exposure, especially through personal connections with IWDs. Creating opportunities for people to be exposed to IWDs on a personal level can effectively mitigate the impact of implicit bias.

**Job Coaches, Paraprofessionals, and Program Coordinators**

This group of respondents displayed a strong dedication and commitment to what they do, and they firmly believe in the value that IWDs have to offer society. Several of the respondents had personal experience with disability, such as a disabled child. They confirmed our findings in the literature that individuals with personal experience with disability are much more likely to care about IWDs.

**Barriers to Success**

The landscape of disability assistance programs is fragmented and localized. Many of the respondents worked with the Hopkins, Minnetonka, and St. Louis Park school districts’ transition program for disabled young adults. They provided career and life-skill coaching for 18-21-year-old students to help transition them from school to adulthood. Due to privacy laws, they did not generally follow up with their matriculated students, except in cases of personal friendship between individual employees and former students.

Many of the job coaches and paraprofessionals identified personal hygiene as a barrier to success for IWDs. Some IWDs were dependent on the paraprofessionals for maintaining an acceptable level of hygiene during the day. However, other IWDs were capable at maintaining good personal hygiene.
Social skills played a big role in the success or failure for IWDs in the workplace. To get a job, IWDs must first successfully navigate the recruitment process, including the interview. Some IWDs struggle with various aspects of interacting with people including making eye contact.

“I don't really make eye contact that easily, but I'm starting to do that a lot better now that I got my help with my mental health.” Appendix B, Exhibit 3.

Many of the IWDs struggle with ambiguity. Additionally, some experience anxiety about the employment environment, specifically the change in routine from school to work.

"So, a lot of our students really like that kind of repetition, it's comforting to them, they don't like surprises, they don't like changes, they don't like different stuff, so you have a job coach there who is able to kind of do a little handholding in the beginning but then in the end, they have the intellect to be able to do it. We just have to say to them, you can do this" (Appendix D, Exhibit 8).

"What I've seen a lot are students that are nervous going into them because they have never had that experience and they don't really know how it's going to work for them, and it's scary. A new situation can be really overwhelming, and that's especially so within special needs kids." (Appendix D, Exhibit 1).

Also, confidence was mentioned as an essential skill that job coaches try to instill in their students. With confidence, a student is much more likely to succeed in a new position, especially when there is confusion around what's expected of them.

Finding a Job
Our respondents talked about how frustrating it is for IWDs to be categorized as a broad group. IWDs are individual people like anyone else, and their needs are specific to their experience. This creates a challenge when working with employers who may be reluctant to tailor accommodations on such an individual level.

One insight from the job coaches regarding the ease of finding jobs and the retention of jobs was that higher-functioning individuals with disabilities tend to find it easier to get jobs. However, they tend not to retain jobs for as long as the moderate-functioning individuals. This was because higher-functioning individuals tended to be more selective about the type of job they want, as well as their preference for the working environment. The fact that their job search experience was easier encouraged them to consider leaving a job to search for better ones. Moderate-functioning individuals, on the other hand, tended to have difficulties finding a job, because it was harder for them to inspire confidence that they can perform their duties
well. Consequently, when they did find jobs, they tended to have a better work ethic, exert more effort, took pride in their work, and generally did all they can to keep the job.

**Job Performance**

Job coaches have mentioned that IWDs can work in a variety of positions just like anyone else if employers are willing to see their ability. Once employers saw that IWDs can perform the essential job functions, they become more confident in the notion of hiring them. The ability of IWDs to find a job is driven by job coaches in preparing them for work both by training and specific relationships between the coaching agency and employers. By working together with an employer, on-site job coaches, a trial period of employment, or discussing job duties and work environment before the position begins, IWDs can make an easier transition into the job.

"I would tell them, they should give it a chance, give it a try. It may not work, but in most cases, we're able to adapt to whatever, and I would just give it a try. Try it. What's going to hurt to try it?" (Appendix D, Exhibit 3).

Through unpaid internships at job sites, IWDs are given the opportunity to showcase their skills and demonstrate their abilities. The unpaid positions were found to build confidence through repetition of tasks and continued success grows. Ultimately, the students aspire to be able to work independent of their job coaches.

"The students really want to feel like, "I'm there," are accounted for as people, that is to say, that they're doing something that is fundamental, not just background things, cleaning or whatever it might be. That's part of it. But, they want to operate the register. They want to make coffee drinks. They want to be functional with people, and they kind of want to lose their tether to me and cohabitate with working people. So, it's a full public place, which is kind of interesting in that respect, because the entire public comes in there and they're kind of watching and listening and so, you really are in a performance space" (Appendix D, Exhibit 6).

**Employer Focus**

The employers that took part in the job training by providing job sites for the transition program were generally happy to work with IWDs. Some of the roles are paid, but many are volunteer positions designed to help develop job skills like customer service, point of sale, and inventory management. The center and the employers generally have long-term relationships, and new employers aren’t generally sought out. All of these individuals were adamant that employers just need to give IWDs a chance to demonstrate their value, because in their experience every employer who has worked with IWDs is excited to work with them in the future.
"Employers not understanding how they can actually contribute beyond that because of the social barrier and the insecurities of the students feeling like they don't know how to interact or wouldn't be successful or wouldn't get hired. Somebody wouldn't want them to work there" (Appendix D, Exhibit 1).

Unfortunately, due to the scarcity of resources in this space, many programs for IWDs are forced to compete against each other for resources. Job coaches expressed their concern for the lack of money and support that is required for them to be successful in their positions. Funds are stretched amongst numerous students with there being not enough resources to hire additional job coaches, paraprofessionals, and program coordinators.

IWDs

The IWDs we spoke with were all employed in entry level positions at that time. They provided the following insights:

**The Job Search Process**

Regarding the job search process, some individuals were proactive in searching for jobs and looked for jobs that interested them independent of the job training opportunities that would be available for them through the transition program, as evidenced by some responses from the respondents:

“So my mom is actually really proud of me because I did it all by myself and got a job on my own.” (Appendix B, Exhibit 1).

“That was my first job ever out of my own. I got it myself and it was really amazing.” (Appendix B, Exhibit 3).

Some expressed that they found it difficult to find jobs. When asked how many applications they submitted before getting a job, one respondent had the following response:

“Oh my God, a ton of places. I don't even know how many because there’s so many. I'm trying to think... Target, two or three times. I don't know about the others, but there's been a lot of places I applied. None of them hired, and then Lunds just hired me.” (Appendix B, Exhibit 1).

**Career Goals**

The depth interviews revealed that IWDs, like other individuals, have specific career goals and would like to find jobs that match their interests and their passions, rather than doing whatever jobs people think they are capable of doing. For example, one respondent described a job she enjoyed as follows:
“I'm a very creative person and I love to do anything that makes me really creative. I love arts and crafts and also, I'm very hands on also. If it's easy to get my hands on and I can actually create stuff. So like at Dairy Queen when I made the ice creams and everything. That made me so happy because I was actually creating something and it was doing something that I enjoy.” (Appendix B, Exhibit 3).

Self-Awareness in the Workplace
Some IWDs face certain behavioral challenges that may have a negative impact on their effectiveness in the work place. For example, one individual refused to speak with the researchers until he had finished some work. An inquiry from the work coordinator revealed that the work was not due for another two weeks, and that no one required that he complete the work immediately. However, this individual had decided that the work had to be done before he could do anything else. This lack of flexibility may have an impact at the work place.

However, respondents also displayed some self-awareness about their behavior. The respondent referred to in the previous paragraph says:

“I am not good at being flexible, especially when it comes to a change of plans, especially to what job it is I'm doing”. (Appendix B, Exhibit 1).

Other respondents reveal the following about their shortcomings:

“I don't really make eye contact that easily, but I'm starting to do that a lot better now that I got my help with my mental health.” (Appendix B, Exhibit 3).

“I used to get really anxious and have to call my mom but now [when that happens] I know that I can take deep breaths and calm myself down.” (Appendix B, Exhibit 3).

Factors That Lead Good Work Experiences
IWDs enjoyed different aspects of the job. One individual reported that he enjoyed working at a job where he was able to perform his duties well (Appendix B, Exhibit 1). Good performance was important to him, and he took pride in his work. Another individual valued the interaction with other employees as well as customers. It was important to her that she developed good relationships during the course of her work (Appendix B, Exhibit 3). In a similar vein, another individual said that the best part of her job was the other employees that she was working with (Appendix B, Exhibit 2). Opportunities to socialize and find pride in their work were crucial to positive work outcomes.
**Challenges at Work**
The most significant challenge reported by these individuals was acclimating to a new environment. Many reported feelings of anxiety about the transition from a school environment to the workplace. However, these feelings are common amongst people their age. Some challenges were directly related to the performance of their jobs, such as jobs that required them to stand for long periods of time (Appendix B, Exhibit 3), or jobs that take a long time to complete (Appendix B, Exhibit 1).

Other challenges were related to the relationships at work with managers and other employees (Appendix B, Exhibit 2; Appendix B, Exhibit 3). The respondents valued good relationships with the people they worked with. If these relationships were challenging, feelings of stress and anxiety often followed. The ease with which individuals were able to adjust to their work environment was a crucial factor to their success.

**Summary**
The respondents were generally pleased with their current positions, though some also expressed a desire to move to different positions within their current employer. Generally, the job search process was difficult for those jobs that were sought without assistance from the transition program. Those that searched for jobs on their own, looked for jobs that they would enjoy and that play to their strengths. The respondents showed a level of self-awareness; they were able to identify and discuss some of the factors that lead to difficulties at work, and how they could improve, with some citing significant improvements. The major factors that determined whether their work experiences were good related to the tasks themselves (how well and how quickly they could learn to carry out their duties), as well as the relationships with their colleagues and managers.

Overall, their employment experience was not dissimilar to employment experiences of most 19-21-year-olds. They did not complain of excessive difficulties interacting with their colleagues or managers, and they were generally happy to be a part of their work community. One difference, however, was that they felt that they needed to prove their capabilities every day, and that their coworkers initially didn’t expect much from them.

**Barriers to IWD employment**

**Employer-side barriers:**
The most noteworthy barrier discovered through our depth interviews was a general ignorance of the value IWDs can provide in the workplace. IWDs frequently struggle to overcome an assumption of incompetence. The more common sentiments we heard from paraprofessionals and job coaches was that individuals with disabilities can do the job, but they’re written off before they have the chance to prove themselves. To paraphrase one of our informants: I feel like some employers don’t treat people with learning disabilities fairly (Appendix B, Exhibit 2).

Coupled with an assumption of incompetence is lack of open discussion surrounding disability employment. HR professionals have a desire to be politically correct and strictly adhere to
company policy, which can lead to a reluctance to address the issue. Many HR professionals become uncomfortable and intimidated when speaking to and about individuals with disabilities. Specific government and company policies do not call for open discourse on disabilities, which has restricted the ability to openly communicate and learn more about how to address disabilities. This has created a barrier for HR professionals because they want to follow policy as closely as possible, and not cross any lines.

Another barrier we discovered was concern about the financial implications of employing IWDs. Companies desire to make money quickly and efficiently. While IWDs may be able to do the job, one thing we discovered from our interviews was that they often required additional training or extra time to complete the job. In a corporate world the longer a task takes, the less money they are making. This barrier in some form or another was noted in almost all our interviews with HR professionals. Job coaches also stated that because of financial concerns, a lot of accessible jobs are disappearing. For example, one job coach noted that a restaurant that used to employ four to five IWDs to work behind the counter, clean, make sandwiches, and perform other ancillary tasks has now consolidated those four jobs into one, which was too much work for one IWD. Therefore, their students were no longer employed by that restaurant.

Finally, HR professionals face the barrier of own implicit biases. To employ more individuals with disabilities, decision makers must first become aware of their implicit biases. Implicit biases play a role in forming our opinions of a group of individuals. Individuals with disabilities are being automatically questioned as to whether they can perform the job or not. In most cases, when given the opportunity to prove that not only are they capable of doing the job but that they can perform the job well, individuals with disabilities can overcome implicit bias; however, overcoming implicit bias takes time and must be done on an individual, experiential level. Merely educating people via seminars or courses is insufficient.

**IWD-side barriers:**
One barrier to meaningful, gainful employment faced by IWDs is a struggle with ambiguous situations. Job coaches and IWDs both elaborated on the fact that employers will often assign a task without explanation and expect it to be completed in a timely and efficient manner. Some IWDs noted that this was a difficult aspect of their work because they perform better when they are given specific instructions. Along with ambiguity came anxiety, and job coaches consistently noted that anxiety can be a significant barrier to finding and keeping a job. One job coach went as far to say that a lot of IWDs drop out of college because they get behind and are afraid to ask for help, leading to a vicious cycle of anxiety and poor academic performance.

Many IWDs also need more support than non-disabled individuals. For example, one HR professionals told us how a man in a wheel chair had an assistant that was with him at all time, he applied for a warehouse manager role, but his assistant would do all the work. Since he would not be doing the work, they could not hire him because the support he needed was so great and although he was mentally able, he could physically not perform the work. The support that IWDs need in a working environment is necessary but can also become a barrier to
Employment. Employers are required under the ADA to provide reasonable accommodations for IWDs, but this can be costly, and can sometimes create a stigma around IWDs. On top of this, IWDs also face a barrier of transportation. Many of the job coaches noted they have no set way to get to work on time, which could impact their performance and their ability to adhere to a strict work schedule.

Additionally, the network of support services can be confusing and inconsistent. In high school or a transition program they have access to job coaches and aids, but upon graduation there is often less guidance around available employment resources. While vocational services offer quality support, there is limited follow-up with matriculated individuals, due in large part to state and federal privacy regulations. This can lead to individuals moving frequently between resources with little to no anchored support. Many times, individuals and their families will have to seek out their own support system, and the lack of communication between state agencies, local agencies, and nonprofits makes it difficult to navigate the support system.

Another common barrier individuals with disabilities face when seeking mainstream employment is learning and maintaining simple life skills. A frequent concern brought up by job coaches was their students’ abilities to master life skills such as personal hygiene and respectful communication techniques. For example, one IWD stated she was fired from a previous job for having emotional outbursts and trouble with communication. The job coaches we spoke to all spend a significant amount of time teaching their students how to properly communicate in a business environment, and many expressed that this is a common concern voiced by the companies they work with and a barrier they see their students having to overcome.

Key Findings

Throughout the qualitative research process, we have discovered three potential barriers to IWD employment. The first barrier is implicit bias amongst the general population. Implicit bias is part of human nature, and it can never be fully eliminated. It can, however, be mitigated. People who have either a personal connection to, or have worked with, IWDs are more willing to do so again, and seem to care more about the issue than those without a personal connection. Effective, personal, and positive exposure to IWDs can help overcome implicit bias and improve employer’s perception of, and willingness to work with, IWDs.

Second, IWDs often need additional assistance in the workplace. This assistance is not simply limited to the reasonable accommodations specified in the ADA, but may also include more personal assistance with things like hygiene and relationship management. While there are organizations that provide this sort of assistance, especially for younger adults, they are numerous and small. These programs are often forced to compete with one another for scarce resources and are often among the first to lose funding during periods of financial stress. Additionally, many of these programs have established relationships with a small number of employers and lack the resources to expand their impact outside their core networks.
Finally, it is crucial for IWDs to have opportunities to learn valuable career skills. Throughout our interviews, HR professionals emphasized the necessity of the applicant’s ability to perform the required tasks. Unfortunately, this can present something of a Catch-22, especially for people with cognitive impairments, as many IWDs lack basic job skills, but need on-the-job experience to develop those skills. To be fully integrated into the mainstream employment environment, IWDs must have the opportunity to develop job skills and breakdown employer's implicit biases. This in turn requires employers who are willing and able to provide early career opportunities for IWDs. Without such development opportunities, many IWDs are relegated to positions that don’t allow them to achieve their full potential.
Quantitative Research

Introduction

The results of our secondary and qualitative research illustrated the impact that implicit bias, employer’s personal experience with disability, and employment experience can have on an IWD’s career opportunities. To further assess these factors, we conducted two separate surveys: one targeted towards HR professionals, and another targeted towards IWDs. The results of the HR survey confirmed the significant positive effect personal experience with disability has on individual’s perceptions of IWDs. Additionally, the aggregate results of the Attitudes Towards Disabled Persons (ATDP) test demonstrated an overall positive attitude towards IWDs amongst HR professionals. Although we had a low response rate for the IWD survey, we were able to gain valuable insights into their employment expectations and experiences, such as the importance placed on finding a sense of purpose through their work. Through our quantitative research, we were better able to understand the employment landscape for IWDs and more effectively design our recommendations to MDI.

Research Methodology

The HR survey was designed to assess personal experience with disability, knowledge and experience with placement services and disability outreach programs, perceptions of employer policies, and general attitudes towards disability. We adapted the ATDP scale (Yuker, Block, & Younng, 1970) to assess respondents’ general attitudes towards IWDs. This survey was distributed to lists of 1586 HR professionals in the Twin Cities and 1480 HR professionals in Chicago, from which we received a total of 45 completed surveys. The lists were purchased from the market research firm Exact Data.

The IWD survey was designed to examine respondents’ experience with the job search process, employment, and outside agencies. Respondents were also provided opportunities to answer free response questions about experiences with discrimination and what their ideal job would look like. The IWD survey was distributed to a list 1538 IWDs in the Twin Cities, from which we received 20 completed surveys. This list was also purchased from Exact Data. Due to the sensitive nature of our research, we received a limited number of responses, which must be weighed against our findings when considering the implications of our research.

HR Report

Demographics

Of our respondents, 72% identified as female, and 28% identified as male (Appendix F, Exhibit 1). Respondents’ ages ranged from 22 to 69, with an average age of 49 (Appendix F, Exhibit 2). Our respondents held rather senior positions in their careers, with 39% holding positions at or above director level and 40% in manager roles (Fig. 2, Appendix F, Exhibit 3). The advanced seniority of our respondents lends more weight to the results of our survey, as they are likely to have more relevant experience than less experienced individuals.
Fig. 2: Career position of respondents

ATDP Scale
Originally developed in 1970, the ATDP scale is designed to measure how “differently” an individual perceives disabled persons as compared to non-disabled persons. The ATDP scale has been widely used throughout the scientific community to assess how attitudes towards IWDs can affect performance in fields ranging from school teachers to physical therapists (Bohlander, 2009). By examining HR professionals with a well-understood measure, we hoped to determine if the ATDP scale could be utilized to screen potential candidates for collaborative efforts with MDI. Unfortunately, we found no significant relationship between an individual’s ATDP score and any other variable in our study. Encouragingly, our respondents scored high on our modified scale, with an average score of 153 (scores could range from 30-210) (Fig. 3, Appendix F, Exhibit 4). This could indicate that HR professionals view IWDs as more like non-disabled people than unlike non-disabled people. However, we have no way of eliminating social desirability bias, which could positively skew our results.
**Effect of Personal Experience**

Throughout our secondary and qualitative research, we found that people who have a personal connection to an IWD are much more committed to disability causes, and much more aware of the value IWDs have to offer society. These findings were confirmed in our quantitative research. Respondents with a disabled friend or family member are much more likely to view disabled employees as assets to their employer (Fig. 4; Appendix F, Exhibit 5). Additionally, respondents who’ve worked with disabled colleagues are more likely to disagree with the statement “Current government regulations are too strict” (Fig. 5; Appendix F, Exhibit 6). These findings only highlight the important role that experience with IWDs can play in improving IWD employment rates.

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**Fig. 3: Distribution of ATDP scores**

The distribution of ATDP scores shows a normal distribution with a mean of 153.0 and a standard deviation of 18.98. The sample size (N) is 45.
Fig. 4: Effect of personal experience on competence perceptions of employees with disabilities

![Chart: Employees with Disabilities are Assets]

Fig. 5: Effect of personal experience on perceptions of current disability regulations

![Chart: Government Regulations are too Strict]

**Views on Placement Agencies**

There is a clear split in perception between respondents who’ve had experience working with placement agencies and those who have not. Of the 22% of respondents who have worked with placement agencies (Appendix F, Exhibit 7), 80% reported the experience to be positive (Appendix F, Exhibit 8). On the other hand, of the respondents without experience working with placement agencies, only 4% reported having an interest in working with a placement agency (Fig. 6, Appendix F, Exhibit 9). Again, these findings illustrate the important role personal experience plays in shaping attitudes.
When asked what they expect from placement agencies, several themes emerged from our respondent’s answers. Several respondents said that they would expect a placement agency to assist with reasonable accommodations “I would expect them to help with ADA accommodations” and job coaching “Job coaching, assistance to get them to and from work if necessary.” Additionally, many reported that they would like placement agencies to assist in the candidate screening process, much like traditional recruitment firms “good prescreening to ensure the candidate has the skill sets to do the job.” Selected responses can be found in Appendix F, Exhibit 10.

Disability Outreach
Although only 18% of our respondents have participated in disability outreach activities (Appendix F, Exhibit 11), 88% of those who have reported it to be a positive experience (Appendix F, Exhibit 12). When asked about what takeaway they got from the experience, one respondent said, “The joy that the individuals showed for being given a chance” (Appendix F, Exhibit 13). We also found a relationship between disability outreach participation and utilization of placement agencies. Respondents who’ve worked with placement agencies before were much more likely to have participated in disability outreach programs (Appendix F, Exhibit 14).

Employee Integration
Nearly half (47%) of the respondents reported that their employer did a good job integrating disabled employees with the rest of their workforce, while only 7% thought their employers did
not do a good job (Appendix F, Exhibit 15). Despite this, 51% of respondents said their employer could improve, while only 13% said there were no improvements to be made.

**Key Takeaways**

Much like our secondary and qualitative research, we found strong evidence that personal experience with IWDs improves an individual’s overall perception of IWDs and awareness of the challenges IWDs face in the workforce. Personal experiences can range from having a disabled close friend or loved one, to simply participating in outreach programs. From the results of this analysis, any strategies to improve IWD employment should include the provision of opportunities for employers to interact with IWDs; this leads to personal experiences that are so strongly correlated to positive perceptions of IWDs.

**IWD Report**

**Demographics**

The respondents of our survey were much older than the general population, ranging from 27-86, with an average age of 62 (Appendix G, Exhibit 1). 68% of our respondents identified as female (Appendix G, Exhibit 2). 52% of our respondents reported having an income greater than $50,000 per year (Appendix G, Exhibit 3). Only 10% of our respondents reported having never been employed (Appendix G, Exhibit 4). With only 20 respondents, it is difficult to draw statistically significant conclusions from this survey. However, there are still valuable insights to be gained from its analysis.

**Job Search**

We had initially hypothesized that the job search process for IWDs would be much more challenging than for non-disabled people. However, the data we collected suggests that the process is largely the same for everyone. Surprisingly, 61% of our respondents reported a job search length of 0-3 months for their most recent position, while only 11% had a job search lasting longer than 1 year (Appendix G, Exhibit 5). Additionally, only 27% reported facing unfair treatment during the search process (Appendix G, Exhibit 6), with only one respondent citing a disability as the reason for unfair treatment “I work p/t (physical therapy) also and I broke my leg in the summer of 2016. I was let go by the company I worked for, Home Depot because they did not want me to climb ladders. I have been unable to find suitable employment, p/t” (Appendix G, Exhibit 7). One commonly cited reason for unfair treatment was age, with 20% of respondents citing age as a reason for their difficult job search (Appendix G, Exhibit 7).

**Job Experience**

Respondents reported having on the job experiences comparable to what we would expect to see in the general population. When asked what they enjoyed about their jobs, 67% reported their coworkers and work environment, 78% reported enjoying their work assignments, and 89% reported enjoying the sense of purpose that work provides them. Only 28% reported enjoying working with their immediate managers (Appendix G, Exhibit 8). When asked about what the found challenging about their jobs, 50% reported that their relationships with their managers were challenging, while 44% found their workload challenging. 22% found
maintaining their other benefits to be a concern (Appendix G, Exhibit 9). Although this survey was not administered to a control group of non-disabled individuals, we do not anticipating finding much of a difference between IWDs and non-disabled individuals.

One surprising finding was the complete absence of respondents who reported ever requiring special accommodations (Appendix G, Exhibit 10). While our small sample size limits the amount of inferences that can be made, we did expect at least a few respondents to have experience with special accommodations. It is possible that many IWDs do not require special accommodations, but further study would be required to make that determination.

In an effort to gain a better picture of IWD employment perspectives, we asked respondents to describe their ideal job. Their answers were largely indistinguishable from expected answers from the general population, with respondents rarely mentioning any issues with disability. A complete list of these responses can be found in Appendix G, Exhibit 11.

Program Awareness and Utilization
In our secondary and qualitative research, we found that assistance from outside organizations and job coaches can play a significant role in helping IWDs locate and retain employment. 61% of our respondents were aware of the existence of such resources (Appendix G, Exhibit 12). Broken down more specifically, only 39% were aware of placement agencies, 33% were aware of job coaches and state agencies, and 22% were aware of transition services (Fig. 7, Appendix G, Exhibit 13). With such low awareness levels, it is unsurprising that only 17% of respondents reported ever utilizing a job coach (Appendix G, Exhibit 14). Clearly, there is a need to increase awareness of the existence and availability of these resources.

![Employment Resource Awareness](image-url)

**Fig. 7: Respondent awareness of employment resources for IWDs**
**Key Takeaways**

The most significant finding from this survey was the low levels of awareness and utilization of employment resources for IWDs. Consequently, there is an opportunity to make a significant impact through promoting community awareness of such resources. It is also important to note that, while in some ways flavored by disability, the on-the-job experiences of IWDs are not dissimilar to what is experienced by the general population. It is crucial that people in the business community remember that these people are so much more than their conditions; they have as much to offer as anyone else.

**Limitations**

The most significant limitation was the low response rates of our surveys. There was a total of 45 completed surveys from HR professionals, and 20 from IWDs. This limits the ability to confidently make inferences about the target population from the results of our findings. Additionally, we were unable to conduct a comparable control survey with members of the general public, which limits our ability to draw comparisons between the employment experiences of disabled and non-disabled individuals.
KEY FINDINGS

The Employment Landscape for Individuals with Disabilities

1. Differences in the employment landscape for IWDs and individuals with no disabilities

   Our secondary research revealed that there were substantial differences in the employment landscape for IWDs compared to those without a disability. The unemployment rate for IWDs was double that of those with no disability. Further, IWDs were more likely to work part time, work in service industries, and were less likely to work in management roles than their counterparts without a disability. There were also differences in the labor participation rate between IWDs and those with no disability. Across all age groups, IWDs were more likely to be out of the labor force than those with no disability.

2. As educational attainment increased, unemployment rates decreased

   We found that there was a relationship between the level of education attained and employment status. For all persons, those with a higher level of education were more likely to be employed. However, there were significant differences in educational attainment between IWDs and those with no disability. IWDs were found to attain lower levels of education than those with no disability, which in turn, made it more likely for them to be unemployed.

3. There was no evidence that the regulatory environment concerning IWDs helped to reduce unemployment rates among IWDs

   We found that there was a strong and well enforced regulatory and legal environment concerning the employment of IWDs. However, these regulations seemed more effective at ensuring that the IWDs that were employed received the appropriate accommodations and faced no discriminations, rather than increasing the employment of IWDs.

4. Employer perspectives played a key role in whether IWDs found and retained jobs

   Most employers' perspectives on IWDs fell into one of three categories: negative stereotyping, disengagement from actively recruiting IWDs, and positive attitude derived from specific experience. Although most employers recognize, at least in theory, the benefits that IWDs can bring to their organization, factors such as implicit bias and difficulties providing social and cultural accommodation likely deter many from hiring IWDs.
Employer-Side Barriers to Hiring IWDs

1. **A lack of awareness about the capabilities of IWDs**
   
   A recurring theme in our qualitative research was that employers tended to write off IWDs before they had a chance to prove themselves. In our depth interviews, IWDs raised concerns that employers tended to group IWDs into a broad category of people that are not capable of performing basic or higher-level jobs; they seemed unaware of the wide range of capabilities that different IWDs have.

2. **A lack of open communication about disability issues**
   
   In an effort to be mindful of the sensitive nature of disability, many HR professionals are self-censoring themselves when discussing the issue. While it is encouraging to see people treating IWDs with respect, the reluctance to speak frankly about this difficult issue may impede the difficult, but important conversations necessary to truly address some of the barriers to employment for IWDs. This, in turn, would limit efforts to overcome those barriers.

3. **Implicit biases**
   
   Both our secondary and primary research revealed that implicit biases against IWDs exist, making employers less willing to hire IWDs. However, our research also revealed that the effects of implicit biases can be mitigated through programs that raise awareness if the issues surrounding disabilities.

Employee-Side Barriers to Hiring IWDs

1. **Discomfort with ambiguity and new environments**
   
   From our interviews with IWDs and job coaches, some IWDs tended to be uncomfortable with new work environments and ambiguity in their tasks. In such cases, the job coaches played a crucial role in helping the IWDs feel comfortable enough in their new environment. However, IWDs typically sought to be able to work independent of their job coaches.

2. **Challenges with basic life and communication skills**
   
   Primary research revealed that some IWDs struggle with some basic life skills such as hygiene, and communication skills such as eye contact. Employers then infer about the IWDs future performance at work based on their ability to communicate. In one interview, a job coach spoke about an instance where an IWD did not get a job because the prospective employer doubted that the IWD would handle the job given his inability to get through the interview. Our research also revealed that basic life skills and communication skills can be
improved to some extent, provided the individual is willing and he or she receives consistent support such as through a transition program.

3. **Logistical issues with commuting to work**

   In our depth interviews IWDs reported facing logistical challenges in getting to work. Many did not drive nor use public transportation, and so they relied on family members or job coaches to facilitate their commute to and from work.

4. **A lack of awareness of available employment resources**

   In our secondary and qualitative research, we found that assistance from outside organizations and job coaches can play a significant role in helping IWDs locate and retain employment. However, our primary research revealed that there were low levels of awareness and utilization of the resources available to help with the challenges surrounding employment for IDWs. For example, only 39 percent of the IWD respondents were aware of placement agencies, 33 percent were aware of job coaches and state agencies, and 22 percent were aware of transition services.
RECOMMENDATIONS

Our primary and secondary research highlighted areas where recommendations could be made to increase mainstream employment opportunities for individuals with disabilities. After thorough research we have developed two strategic recommendations with broken down steps to take moving forward. The first strategic goal would be to increase exposure to IWDs. Our research has shown that those individuals who have worked with or are related to an individual with a disability they are more likely to be willing to work with them in the future. The second strategic goal is to increase awareness of alternative hiring methods. Such methods are designed to be both more effective at recruiting qualified applicants and limit the anxiety surrounding the interview process.

Recommendations to MDI

Strategic Objective: Increase employers’ exposure to individuals with disabilities

Recommendation 1: Involve Mr. Peter McDermott in CEO Roundtables

Purpose: The CEO Roundtables hosted by St. Thomas allow CEOs in various business sectors to discuss challenges and share advice and recommendations amongst each other. The sessions would allow Mr. McDermott the opportunity to bring awareness of IWD employment to the leadership within the major metropolitan area businesses.

Next Steps: Contact the organizers of the CEO Roundtables at this link: http://www.ceo-roundtable.org/contact/.

Recommendation 2: Conduct joint volunteer events with area businesses

Purpose: Inform and educate businesses about individuals with disabilities and their work experiences. Through volunteer events co-hosted by MDI and a local business, members of the business community will be able to experience first-hand the talent and work ethic of MDI employees. These events have the potential to erode implicit biases at all levels of an organization.

Recommendation 3: Increase social media outreach

Purpose: MDI has a strong vision for the future and has made great strides in attaining that. To reach a broader audience, MDI should increase their social media outreach. This can be achieved through releasing employee bios. These vignettes would demonstrate the positive impact meaningful employment can have on an individual’s life, and how valuable that employee is to MDI. Although employee success stories are on the website currently, we recommend that MDI publish stories/bios/videos of their employees on all social media channels to capture a greater exposure. Including links to social media pages on the MDI website and increase posting frequency on LinkedIn, Twitter, Facebook, and Instagram would be a good first step. Additionally, conducting joint social media campaigns with other organizations that work with IWDs would increase the reach of the MDI social network.
**Strategic Objective:** Increase awareness of alternative hiring methods

**Recommendation: Advertise assessment-based hiring**

**Purpose:** One of the major hurdles to individuals with disabilities gaining mainstream employment is getting their foot in the door and receiving an interview. Companies like Microsoft recognize the talents that individuals with disabilities bring to the table and understand that they may not thrive in an interview-based hiring process. Instead they are allowing IWDs the opportunity to take on work tasks for a week to see if they can do the job and then brought in for an informal interview. Other companies are tasking potential employees with group work and mental challenges that simulate a work environment to screen for desirable skillsets. These examples both improve the hiring process and make it easier for IWDs to get their foot in the door. We recommend that MDI as well as others explore and advocate assessment-based hiring practices.

**Recommendations to Other Stakeholders**

**Strategic Objective:** Increase exposure to individuals with disabilities

**Recommendation 1: Explore partnership opportunities**

**Purpose:** Many transition programs are looking for gainful employment for their students as well as opportunities to expose them to mainstream employment. Starting a partnerships signals to the community at large that you are a progressive and diverse company, and in the increasing public facing business community, it is imperative that your company maintain progress and innovation.

**Recommendation 2: Implement youth mentorship programs**

**Purpose:** Companies incur minimal costs from youth mentor programs and can have a lasting benefit. The programs will expose employees at various businesses to working with individuals with disabilities and will also prove to both the youth who have a disability and the employer that individuals with disabilities are more than capable and willing to work in mainstream employment. The benefit of a mentor program such is this is two-sided and only increase exposure to individuals with disabilities, which will allow the breakdown of the barrier to gainful employment.

**Strategic Objective:** Increase awareness of different hiring methods

**Recommendation 1: Attend reverse job fairs**

**Purpose:** Unlike a traditional job fair where applicants approach businesses that are looking to hire, reverse job fairs place the applicant at the center and allow recruiters to seek out specific individuals. These job fairs give potential employees the opportunity to present themselves not just as a resume, but as a complete individual. This environment can help mitigate much of the anxiety that some applicants feel at traditional job fairs, while simultaneously streamlining the recruitment process, as recruiters can more effectively seek out desirable candidates.
**Recommendation 2: Diversify recruitment locations**

**Purpose:** Companies often return to the same schools, networks, and job fairs when looking for candidates. In an increasingly global business environment, diversity can provide companies with a competitive advantage. Diversifying recruitment locations can provide businesses access to candidates that wouldn't traditionally be sought out, and candidates with opportunities that wouldn't traditionally be available to them.
REFERENCES


# APPENDIX

Appendix A: Secondary Research Data

Exhibit 1: Employment status by disability status and selected characteristics

Table 1 from the Bureau of Labor Statistics (2017), PERSONS WITH A DISABILITY: LABOR FORCE CHARACTERISTICS — 2016

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Civilian noninstitutional population</th>
<th>Civilian labor force</th>
<th>Not in labor force</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total, 10 years and over...</td>
<td>129,157</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>78,497</td>
<td>66.5</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>50,660</td>
<td>55.8</td>
</tr>
<tr>
<td></td>
<td>Persons with a disability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total, 10 years and over...</td>
<td>20,871</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>15,097</td>
<td>18.4</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>5,774</td>
<td>14.2</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16 to 54 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15,748</td>
<td>31.4</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>11,957</td>
<td>26.5</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>3,791</td>
<td>40.3</td>
</tr>
<tr>
<td></td>
<td>25 to 34 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,621</td>
<td>23.2</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>1,027</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>594</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td>45 to 64 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,367</td>
<td>19.4</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>1,053</td>
<td>21.2</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>314</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>65 years and over</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,227</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>967</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>260</td>
<td>6.0</td>
</tr>
</tbody>
</table>

1 Includes persons with a high school diploma or equivalent.
2 Includes persons with bachelor’s, master’s, professional, and doctoral degrees.

Note: Estimates for the races included (White, Black or African American, and Asian) do not sum to totals because data are not presented for all races. Persons whose ethnicity is identified as Hispanic or Latino may be of any race.
Exhibit 2: Employment status by disability status and age

Table A from the Bureau of Labor Statistics (2017), PERSONS WITH A DISABILITY: LABOR FORCE CHARACTERISTICS — 2016

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total, 16 years and over</th>
<th>16 to 64 years</th>
<th>65 years and over</th>
<th>Total, 16 years and over</th>
<th>16 to 64 years</th>
<th>65 years and over</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERSONS WITH A DISABILITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian noninstitutional population</td>
<td>29,752</td>
<td>15,771</td>
<td>13,981</td>
<td>29,971</td>
<td>15,746</td>
<td>14,225</td>
</tr>
<tr>
<td>Civilian labor force</td>
<td>5,813</td>
<td>4,812</td>
<td>1,001</td>
<td>6,005</td>
<td>4,919</td>
<td>1,086</td>
</tr>
<tr>
<td>Participation rate</td>
<td>19.5</td>
<td>30.5</td>
<td>7.2</td>
<td>20.0</td>
<td>31.2</td>
<td>7.6</td>
</tr>
<tr>
<td>Employed</td>
<td>5,103</td>
<td>4,250</td>
<td>942</td>
<td>5,372</td>
<td>4,366</td>
<td>1,016</td>
</tr>
<tr>
<td>Employment-population ratio</td>
<td>17.5</td>
<td>26.9</td>
<td>6.7</td>
<td>17.9</td>
<td>27.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Unemployed</td>
<td>621</td>
<td>562</td>
<td>59</td>
<td>633</td>
<td>564</td>
<td>70</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>10.7</td>
<td>11.7</td>
<td>5.9</td>
<td>10.5</td>
<td>11.5</td>
<td>6.4</td>
</tr>
<tr>
<td>Not in labor force</td>
<td>23,039</td>
<td>10,959</td>
<td>12,080</td>
<td>23,965</td>
<td>10,827</td>
<td>13,139</td>
</tr>
<tr>
<td><strong>PERSONS WITH NO DISABILITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian noninstitutional population</td>
<td>221,049</td>
<td>188,521</td>
<td>32,528</td>
<td>223,567</td>
<td>189,757</td>
<td>33,810</td>
</tr>
<tr>
<td>Civilian labor force</td>
<td>151,317</td>
<td>143,517</td>
<td>7,800</td>
<td>153,182</td>
<td>144,996</td>
<td>8,185</td>
</tr>
<tr>
<td>Participation rate</td>
<td>66.5</td>
<td>76.1</td>
<td>24.0</td>
<td>66.5</td>
<td>76.4</td>
<td>24.2</td>
</tr>
<tr>
<td>Employed</td>
<td>143,641</td>
<td>136,119</td>
<td>7,522</td>
<td>146,064</td>
<td>138,164</td>
<td>7,900</td>
</tr>
<tr>
<td>Employment-population ratio</td>
<td>65.0</td>
<td>72.2</td>
<td>23.1</td>
<td>65.3</td>
<td>72.8</td>
<td>23.4</td>
</tr>
<tr>
<td>Unemployed</td>
<td>7,678</td>
<td>7,398</td>
<td>278</td>
<td>7,118</td>
<td>6,832</td>
<td>285</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>5.1</td>
<td>5.2</td>
<td>3.6</td>
<td>4.6</td>
<td>4.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Not in labor force</td>
<td>68,732</td>
<td>45,034</td>
<td>24,728</td>
<td>70,385</td>
<td>44,781</td>
<td>25,624</td>
</tr>
</tbody>
</table>

NOTE: Updated population controls are introduced annually with the release of January data.
# Exhibit 3: Employed full- and part-time workers by disability status and age

Table 2 from the Bureau of Labor Statistics (2017), PERSONS WITH A DISABILITY: LABOR FORCE CHARACTERISTICS — 2016

<table>
<thead>
<tr>
<th>Disability status and age</th>
<th>Employed</th>
<th>At work part time for economic reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Usually work full time</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 years and over</td>
<td>151,456</td>
<td>123,761</td>
</tr>
<tr>
<td>16 to 64 years</td>
<td>142,520</td>
<td>118,357</td>
</tr>
<tr>
<td>65 years and over</td>
<td>8,916</td>
<td>5,403</td>
</tr>
<tr>
<td>Persons with a disability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 years and over</td>
<td>5,372</td>
<td>3,564</td>
</tr>
<tr>
<td>16 to 64 years</td>
<td>4,356</td>
<td>3,088</td>
</tr>
<tr>
<td>65 years and over</td>
<td>1,016</td>
<td>476</td>
</tr>
<tr>
<td>Persons with no disability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 years and over</td>
<td>146,064</td>
<td>120,197</td>
</tr>
<tr>
<td>16 to 64 years</td>
<td>138,164</td>
<td>115,269</td>
</tr>
<tr>
<td>65 years and over</td>
<td>7,900</td>
<td>4,027</td>
</tr>
</tbody>
</table>

1 Refers to persons who, whether they usually work full or part time, worked 1 to 34 hours during the reference week for an economic reason such as slack work or unfavorable business conditions, inability to find full-time work, or seasonal declines in demand. Persons who usually work part time for an economic reason, but worked 35 hours or more during the reference week are excluded. Also excludes employed persons who were absent from their jobs for the entire reference week.

NOTE: Full time refers to persons who usually work 35 hours or more per week; part time refers to persons who usually work less than 35 hours per week.
### Exhibit 4: Employed persons by disability status, occupation, and sex

Table 3 from the news release PERSONS WITH A DISABILITY: LABOR FORCE CHARACTERISTICS — 2016

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Persons with a disability</th>
<th>Persons with no disability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Men</td>
</tr>
<tr>
<td>Total employed (in thousands)</td>
<td>5,372</td>
<td>2,961</td>
</tr>
<tr>
<td><strong>Occupation as a percent of total employed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total employed</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Management, professional, and related occupations</td>
<td>31.7</td>
<td>29.3</td>
</tr>
<tr>
<td>Management, business, and financial operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>occupations</td>
<td>14.2</td>
<td>15.4</td>
</tr>
<tr>
<td>Management occupations</td>
<td>10.2</td>
<td>12.1</td>
</tr>
<tr>
<td>Business and financial operations</td>
<td>3.6</td>
<td>3.3</td>
</tr>
<tr>
<td>Professional and related occupations</td>
<td>17.5</td>
<td>13.8</td>
</tr>
<tr>
<td>Computer and mathematical occupations</td>
<td>2.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Architecture and engineering occupations</td>
<td>1.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Life, physical, and social science occupations</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Community and social service occupations</td>
<td>2.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Legal occupations</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Education, training, and library occupations</td>
<td>4.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Arts, design, entertainment, sports, and media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>occupations</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Healthcare practitioner and technical occupations</td>
<td>3.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Service occupations</td>
<td>21.3</td>
<td>18.0</td>
</tr>
<tr>
<td>Healthcare support occupations</td>
<td>2.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Protective service occupations</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Food preparation and serving related occupations</td>
<td>5.9</td>
<td>5.0</td>
</tr>
<tr>
<td>Building and grounds cleaning and maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>occupations</td>
<td>0.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Personal care and service occupations</td>
<td>4.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Sales and office occupations</td>
<td>23.0</td>
<td>16.4</td>
</tr>
<tr>
<td>Sales and related occupations</td>
<td>10.5</td>
<td>9.3</td>
</tr>
<tr>
<td>Office and administrative support occupations</td>
<td>12.4</td>
<td>7.2</td>
</tr>
<tr>
<td>Natural resources, construction, and maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>occupations</td>
<td>9.5</td>
<td>16.1</td>
</tr>
<tr>
<td>Farming, fishing, and forestry occupations</td>
<td>0.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Construction and extraction occupations</td>
<td>5.1</td>
<td>8.8</td>
</tr>
<tr>
<td>Installation, maintenance, and repair occupations</td>
<td>3.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Production, transportation, and material moving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>occupations</td>
<td>14.6</td>
<td>20.1</td>
</tr>
<tr>
<td>Production occupations</td>
<td>6.9</td>
<td>8.7</td>
</tr>
<tr>
<td>Transportation and material moving occupations</td>
<td>7.7</td>
<td>11.4</td>
</tr>
</tbody>
</table>
Exhibit 5: Employed persons by disability status, industry, class of worker, and sex

Table 4 from the Bureau of Labor Statistics (2017), PERSONS WITH A DISABILITY: LABOR FORCE CHARACTERISTICS — 2016

<table>
<thead>
<tr>
<th>Industry and class of worker</th>
<th>Persons with a disability</th>
<th>Persons with no disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>Persons</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Persons</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>Persons</td>
<td>Men</td>
<td>Women</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry as a percent of total employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employed (in thousands)</td>
</tr>
<tr>
<td>Total employed</td>
</tr>
<tr>
<td>Agriculture and related industries</td>
</tr>
<tr>
<td>Nonagricultural industries</td>
</tr>
<tr>
<td>Mining, quarrying, and oil and gas extraction</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Wholesale trade</td>
</tr>
<tr>
<td>Retail trade</td>
</tr>
<tr>
<td>Transportation and utilities</td>
</tr>
<tr>
<td>Information</td>
</tr>
<tr>
<td>Financial activities</td>
</tr>
<tr>
<td>Professional and business services</td>
</tr>
<tr>
<td>Education and health services</td>
</tr>
<tr>
<td>Leisure and hospitality</td>
</tr>
<tr>
<td>Other services</td>
</tr>
<tr>
<td>Public administration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class of worker as a percent of total employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employed (in thousands)</td>
</tr>
<tr>
<td>Total employed</td>
</tr>
<tr>
<td>Wage and salary workers1</td>
</tr>
<tr>
<td>Private industries</td>
</tr>
<tr>
<td>Government</td>
</tr>
<tr>
<td>Federal</td>
</tr>
<tr>
<td>State</td>
</tr>
<tr>
<td>Local</td>
</tr>
<tr>
<td>Self-employed workers, unincorporated</td>
</tr>
</tbody>
</table>

1 Includes a small number of unpaid family workers, not shown separately.
2 Includes self-employed workers whose businesses are incorporated.
### Persons not in the labor force by disability status, age, and sex, 2016 annual averages

<table>
<thead>
<tr>
<th>Category</th>
<th>Total, 16 years and over</th>
<th>16 to 64 years</th>
<th>65 years and over</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERSONS WITH A DISABILITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total not in the labor force</td>
<td>23,965</td>
<td>10,827</td>
<td>5,097</td>
</tr>
<tr>
<td>Persons who currently want a job</td>
<td>734</td>
<td>500</td>
<td>242</td>
</tr>
<tr>
<td>Marginally attached to the labor force</td>
<td>198</td>
<td>155</td>
<td>84</td>
</tr>
<tr>
<td>Discouraged workers</td>
<td>52</td>
<td>39</td>
<td>27</td>
</tr>
<tr>
<td>Other persons marginally attached to the labor force</td>
<td>147</td>
<td>117</td>
<td>57</td>
</tr>
<tr>
<td><strong>PERSONS WITH NO DISABILITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total not in the labor force</td>
<td>70,385</td>
<td>44,761</td>
<td>16,339</td>
</tr>
<tr>
<td>Persons who currently want a job</td>
<td>5,115</td>
<td>4,527</td>
<td>2,099</td>
</tr>
<tr>
<td>Marginally attached to the labor force</td>
<td>1,605</td>
<td>1,465</td>
<td>778</td>
</tr>
<tr>
<td>Discouraged workers</td>
<td>502</td>
<td>446</td>
<td>280</td>
</tr>
<tr>
<td>Other persons marginally attached to the labor force</td>
<td>1,103</td>
<td>1,018</td>
<td>498</td>
</tr>
</tbody>
</table>

1 Data refer to persons who want a job, have searched for work during the prior 12 months, and were available to take a job during the reference week, but had not looked for work in the past 4 weeks.
2 Includes those who did not actively look for work in the prior 4 weeks for reasons such as thinks no work available, could not find work, lacks schooling or training, employer thinks too young or old, and other types of discrimination.
3 Includes those who did not actively look for work in the prior 4 weeks for such reasons as school or family responsibilities, ill health, and transportation problems, as well as a number for whom reason for nonparticipation was not determined.