Massachusetts Commission for the Blind VR Research Initiatives 2020

An Understanding of the Most Prevalent "Essential Job Duties" in Successful VR Case Closures

September 2020

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# Abstract / Executive Summary

On behalf of the Massachusetts Commission for the Blind (MCB), Public Consulting Group. (PCG) conducted a study to develop an understanding of the most prevalent essential job duties in successful vocational rehabilitation (VR) case closures.

The goals of the study were to develop an understanding of: the most prominent job duties in career fields individuals who are visually impaired, or blind are most likely to enter; and, the corporate culture and workplace experiences of individuals who are visually impaired or blind.

1. Focus training on ‘soft skills’
2. Maximize the value of apprenticeship opportunities
3. Create opportunities to increase compensation
4. Provide opportunities for workplace leadership training
5. Identify new occupational entry points
6. Closely monito labor market changes
7. Ensure consistent data recording practices

**Recommendations**

PCG’s approach to this research included analyzing required essential job duties, reviewing administrative data, conducting a literature review, analyzing data for the Bureau of Labor Statistics (BLS) and the Massachusetts Department of Labor, assessing the most common essential job duties, and providing recommendations for MCB’s path forward.

Major findings within this report include:

* High rates of unemployment and low rates of labor force participation among the visually impaired, in Massachusetts and nationally;
* A focus on occupations in service sectors;
* A focus on job duties that revolve around communication, helping others, and emotional labor;
* A lack of focus on duties relating to specific physical or technical proficiencies and skills;
* A diverse range of educational requirements within the most common occupations;
* Entry into occupations and industries with below average wages; and,
* Fewer jobs in management and professional occupations, and reason to believe that limited advancement opportunities exist.

Beyond essential job duties, the study also examines opportunities for the future. One opportunity for MCB to consider working with its consumers to develop the skills and job duties most frequently in demand for the occupations that MCB consumers pursue. In addition, individuals with visual disabilities are significantly more likely to be in the labor market, and to be employed, than individuals with other forms of a disability. The prospect of an emerging ‘tele-work first’ economy also presents opportunities.

PCG identified the occupations most frequently pursued by MCB consumers using data provided by MCB. PCG identified six employment categories in which successful VR closures are most likely to enter into. The categories include:

* Counselors, all other, all others;
* Teachers, all other; all others;
* Social Workers;
* Office and Administrative Support, all other Staff; all others;
* Customer Service Representatives; and,
* Retail Sales Workers.

The occupations most frequently pursued by MCB consumers require a diverse array of educational attainment levels, from graduate degrees to jobs requiring no formal educational credentialing whatsoever. MCB’s consumer population, as shown in the CSNA, is well educated. Several of the occupational categories that MCB consumers are most likely to enter are projected to grow more quickly than the labor market overall, both in the short and long term. This higher demand will create more opportunities for MCB consumers in these areas.

The study also assessed prospective barriers to success. One of the greatest barriers is that some of the largest occupational categories that MCB consumers pursue, such as retail sales, are predicted to either shrink or grow very slowly over the next ten years. In addition, the occupations frequently entered by MCB consumers are often low wage, compared to higher paying careers with similar demands for education.

# introduction

This section outlines the objectives and goals of this research, as defined by MCB and PCG.

## Study Objective

The Massachusetts Commission for the Blind (MCB) is charged with administering Vocational Rehabilitation (VR) services for the Commonwealth’s legally blind job-seeking consumers. Integral components of the services MCB provides to VR consumers is multifaceted; job training skills need to be individualized towards consumers’ career paths and the complex needs of individual consumers need to be addressed.

These complexities require MCB to understand the most prevalent job duties of the occupations in which VR consumers are commonly employed. This report provides MCB with a comprehensive assessment of the job duties associated with the most common occupations and employment opportunities of successful MCB VR consumers. A VR consumer is considered successful when they close their case by achieving competitive employment at a market rate wage, in a setting integrated with others who do not have disabilities.

To complete this assessment, PCG performed a series of steps to obtain the required information as shown in Figure 1 and Figure 2 below:

Figure : PCG Data Collection Steps 1 through 3

Figure : PCG Data Collection Steps 4 through 6

First, PCG analyzed the required essential job duties of the top reported career paths of successful MCB VR consumers. The first task was to review administrative data of VR consumers who MCB has assisted in successfully obtaining competitive, integrated employment to develop a list of common occupations. PCG identified six occupational categories that MCB VR consumers were most likely to enter when their case closed successfully.

Next, an employment landscape was created by assembling information from academic and trusted governmental sources of information. PCG conducted a review of relevant literature to create recommendations for improving service delivery. The literature review assessed the employment disparities of individuals who are visually impaired within the national landscape. In addition, data from the Bureau of Labor Statistics and the Massachusetts Department of Labor were collected to assess the predicted annual rate of change in openings for each of the six occupations reviewed.

Next, PCG assessed the most common essential job duties that need to be completed for each of those occupations. A search of job opportunities for each commonly reported occupational category was then conducted. Commonalties between the job types were then assessed and compiled to determine what skills MCB should focus development and learning opportunities toward.

Finally, PCG composed a series of recommendations based on the findings of this research. These recommendations should be considered as MCB plans future services for technical and training opportunities. The recommendations also contain several opportunities for continued research which MCB may want to pursue.

## Results Vision

This report will assist MCB with understanding:

1. The most prominent job duties in career fields individuals who are visually impaired, or blind are most likely to enter;
2. The corporate culture and workplace experiences of individuals who are visually impaired or blind; and
3. The training and technical assistance opportunities available to MCB to enhance service delivery opportunities for VR consumers as they prepare to enter the workplace.

# Methodology

The following section presents our approach to the research. It includes a glossary of important terms and acronyms used throughout the document, for reference.

## Terminology

Key terms are addressed and defined in Table 1 in the context of this report and MCB’s goals.

**Employment Rate:** The rate at which individuals in the labor force are employed.

**Labor Force Participation Rate:** The rate at which working age adults are either employed or are searching for jobs.

**Non-employed:** An individual who is either unemployed or who is not in the labor force.

**Successful Case Closure**: An MCB VR case which is closed when the consumer involved achieves employment for a competitive wage in a setting in which individuals with and without disability are integrated.

**Unemployment Rate:** The rate at which individuals in the labor force are searching for jobs and are not currently employed.

Table Frequently Used Acronyms

|  |  |
| --- | --- |
| **Acronym** | **Description** |
| MCB | Massachusetts Commission for the Blind |
| VR | Vocational Rehabilitation |
| PCG | Public Consulting Group, Inc |
| ADA  | Americans with Disabilities Act of 1990  |
| BLS | Bureau of Labor Statistics |
| CPS | Current Population Survey |
| ARES | Adult Rehabilitation and Employment Survey |
| GSS | General Social Survey  |
| IFLA | International Federation of Library Associations and Institutions |

## Data Collection & Research

This section outlines the data collection methods used for the study.

|  |  |
| --- | --- |
| **Research Review** | * PCG reviewed available scholarly literature on job training, job seeking, and skill development among individuals with various disabilities.
* In total, PCG reviewed six (6) articles on job training, job seeking, and skill development among individuals with disabilities.
* PCG also accessed federal statistics and information on employment in Massachusetts and among individuals with visual impairments to create an employment landscape.
 |
| **Research** | * PCG reviewed RSA 911 data to identify those occupations MCB vocational rehabilitation participants are most likely to enter.
* Job opportunities for each of these occupations were collected and analyzed to determine the job duties cited within.
* Analysis was performed to determine the duties present across all occupational categories.
 |
| **Data Analysis** | * PCG reviewed other research done in partnership with MCB for potential connections and overlapping themes.
* A series of recommendations for where research efforts might complement each other was composed.
 |

# Employment Landscape

The following section presents findings drawn from PCG’s exploration of secondary data sources. These include surveys and data published by Commonwealth and federal agencies which track employment, and in the scholarly literature of peer reviewed publications examining the ways in which individuals with a disability interact with the workforce. Complete references for all cited works can be found in Section 10: References.

## Labor Statistics

PCG attempted to understand the overall shape of the labor market for individuals with visual disabilities including blindness. By exploring national data sets, PCG assembled a broad-strokes picture of the labor market for individuals with visual disabilities in Massachusetts. The findings paint an overall picture showing that there are significant barriers to labor force participation for those with visual impairments. Some of these barriers may be linked to the role’s individuals can expect to fulfill when they are employed. These statistics show that when an individual with a visual disability enters the labor force, it is more difficult for them to find a job, and the jobs they do find is likely to be less well paying and lower status than other Americans.

The estimates of labor force participation and employment in this section are taken from the American Community Survey (ACS) 1-year estimates for 2018. These are the most recent estimates available at the time of writing.

Table 2 displays the rate at which working age adults (adults aged 18 to 64) in Massachusetts participate in the labor force. The labor force participation rate is the rate at which individuals are employed or are actively seeking employment. The table shows that most working age adults in Massachusetts are participating in the labor force. However, the rates of labor force participation are much lower for those with some form of disability. Those with a visual disability are more likely to participate in the labor force than those with any disability, but still participate at a much lower rate than those with no disability. Just over half of working age adults in Massachusetts with a visual disability report that they are in the labor force.

Table : Labor Force Participation Rate of Massachusetts Adults Age 18-64, ACS 1-year Estimates (2018)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Massachusetts** | **Individuals with No Disability** | **Individuals with a Disability** | **Individuals with a Visual Disability** |
| Total Population, Age 18-64 | 4,362,578 | 3,978,445 | 384,133 | 62,691 |
| In Labor Force | 80.2% | 83.7% | 43.3% | 51.7% |
| Not in Labor Force | 19.8% | 16.3% | 56.7% | 48.3% |

Among those in the labor force there are two groups - those currently employed, and those who are unemployed. Someone is considered unemployed if they do not currently have a job and are actively looking for a job. Table 3 shows the rate of employment of working age adults in Massachusetts. Individuals with disabilities who are in the labor force are almost three times more likely to be looking for a job, rather than being employed. Individuals with a visual disability are less likely to be unemployed than those with any disability, they are almost twice as likely to be unemployed as those without any sort of disability. This indicates that when individuals with disabilities try to find employment in Massachusetts, they are less likely to be successful than individuals without a disability.

Table : Employment and Unemployment Rates of Adults age 18-64 in Massachusetts, ACS 1-year Estimates (2018)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Massachusetts** | **Individuals with No Disability** | **Individuals with a Disability** | **Individuals with a Visual Disability** |
| Adults in Labor Force | 3,497,195 | 3,330,676 | 166,519 | 32,404 |
| Employed | 95.3% | 95.7% | 88.1% | 92.2% |
| Unemployed | 4.7% | 4.3% | 11.9% | 7.8% |

PCG also analyzed the types of occupations individuals get when they are employed. Information was taken from the most recent (2019) publication of the Current Population Survey (CPS) produced by the Bureau of Labor Statistics. The CPS is the largest and most up-to-date resource on employed, wages, and labor available in the United States. However, due to limitations within the data set, this analysis is limited to the national level.

Table 4 displays national rates of employment within the major categories of jobs for individuals with and without visual disabilities. Nationally, employed individuals with visual disabilities are more likely to hold jobs in service occupations, as well as production occupations. They are notably less likely to hold a job in a professional occupation and management, business, and financial occupation. Examples of specific jobs within each of these categories are presented in Figure 3.

Table : Major Occupation Category of Employed US Adults, with and without a visual disability (2019 CPS)

|  |  |  |
| --- | --- | --- |
|   | **Individuals with a Visual Disability** | **Individuals without a Visual Disability** |
| Construction and extraction occupations | 6.5% | 5.3% |
| Farming, fishing, and forestry occupations | 0.3% | 0.8% |
| Installation, maintenance, and repair occupations | 2.6% | 2.9% |
| Management, business, and financial occupations | 13.9% | 16.6% |
| Office and Administrative Support, all other occupations | 12.3% | 11.3% |
| Production occupations | 7.7% | 5.5% |
| Professional and related occupations | 17.5% | 23.4% |
| Sales and related occupations | 11.5% | 10.0% |
| Service occupations | 20.7% | 17.5% |
| Transportation and material moving occupations | 7.0% | 6.5% |

Figure 3: Examples of Careers in Selected Occupation Categories

Occupation is distinct from industry. According to the BLS, an occupation describes what an individual does, and is determined by their day-to-day responsibilities of the position. Industry, on the other hand, is determined by a workplace’s principle product or activity. While some occupations are specific to certain industries, they are not necessarily synonymous. For example, while few Teachers, all other work outside of education, office administrators can be found in almost any industry. Table 5 shows the rate at which adults in the United States, with and without a visual disability, are employed across the major industry categories documented by BLS. Employed adults with visual impairments are more likely to work in wholesale or retail, construction, and other service industries, and are less likely to be employed in professional and business services, education and health, and financial services.

Table : Major Industry Category of Employed US Adults, with and without a visual disability (2019 CPS)

|  |  |  |
| --- | --- | --- |
|   | **Individuals with a Visual Disability** | **Individuals without a Visual Disability** |
| Agriculture, forestry, fishing, and hunting | 2.1% | 1.5% |
| Construction | 9.1% | 7.0% |
| Educational and health services | 21.2% | 23.0% |
| Financial activities | 4.2% | 6.6% |
| Information | 1.2% | 1.8% |
| Leisure and hospitality | 10.2% | 9.7% |
| Manufacturing | 8.1% | 9.9% |
| Mining | 0.9% | 0.5% |
| Professional and business services | 9.1% | 12.4% |
| Public administration | 3.9% | 4.5% |
| Transportation and utilities | 5.2% | 5.6% |
| Wholesale and retail trade | 18.0% | 12.7% |
| Other services | 6.9% | 4.8% |

This analysis suggests that, on a national level, individuals with visual impairments are likely to be employed in occupations that offer relatively less status and lower wages than those without visual disabilities. This is likely both a cause of, and an effect of, lower labor force participation. Individuals with visual impairments who might be well suited to the workforce know they will struggle with finding employment, even under the best labor market conditions. Additionally, they may feel they are less likely to be compensated well or work in a field that brings them similar social rewards like status to others. Their barriers to entry are more significant, and the rewards comparatively smaller. Businesses therefore see fewer potential opportunities in accommodating or customizing employment for individuals with visual impairments or maintaining competency in those activities. This raises the barriers even higher.

## Literature Review

This section presents the findings and associated analysis of a comprehensive literature review, which closely examined the topics of career desires, labor force characteristics, and workplace experiences and corporate culture.

### Career Desires

To develop a framework of the most prominent job duties in occupations common to individuals who are visually impaired or blind, it is necessary to first understand the types of careers individuals with visual impairments or blindness desire. Several research publications have reported findings on the types of careers non-employed individuals with disabilities desire.

The General Social Survey (GSS) is a representative national survey of workforce age individuals in the United States that provides supplemental worker preferences for individuals who have a disability. According to Ali, Schur, & Blanck (2010), who assessed the findings from the 2006 GSS, compared to individuals without a disability, individuals with disabilities who are not employed are as likely to:

* Want a job, but are less likely to be actively searching;
* Have prior job experience; and,
* Have similar views of the importance of income, job security, and other valued job characteristics.

While there are no significant differences between individuals with disabilities and individuals without disabilities in regard to their desire to be employed, individuals with disabilities are significantly less optimistic about their prospects of finding a job (Ali, Schur, & Blanck, 2010). Individuals with disabilities were also less likely to be actively looking for employment, compared to individuals without disabilities.

**“People with disabilities not only have the same desire to work but their desire to spend ‘‘much more’’ time in paid work is significantly higher than for non-disabled people (42 and 20%, respectively).”**

**- Ali, Schur, & Blanck, 2010, p. 202**

Ali, Schur and Blanck assessed the rate at which individuals were likely to have taken specific job seeking actions. These actions included:

1. Answering advertisements;
2. Registering at an unemployment agency;
3. Registering at a private agency;
4. Advertising for a job;
5. Asking relatives, friends or colleagues about potential opportunities; and
6. Applying directly to an employer.

Individuals with visual impairments or blindness were the least likely to have taken four of the six actions to find a job, when findings were broken out by impairment types among individuals with disabilities (Ali, Schur, and Blanck, 2010). Those four actions were: registering at an unemployment agency; registering at a private agency; answering advertisements for jobs; and applying directly to an employer.

Studies also found almost no difference between individuals with and without disabilities in their desire for employment. Ali, Schur, and Blanck (2010) attempted to understand if it was a lack of desire for work keeping individuals with a disability from participating in the workforce. They looked at non-employed adults, that is, adults who are either unemployed or not currently in the labor force. They found that eighty percent of non-employed people with disabilities would like a job now or in the future, compared to 78 percent among individuals without disabilities (Ali, Schur and Blanck, 2010). This suggests that, despite a lower rate of labor force participation, there is a desire to work. However, individuals with a disability are more likely to be discouraged and exit the labor force because of a perceived lack of opportunities.

Individuals with disabilities who are unemployed have no differences, compared to individuals without disabilities, in the training opportunities they seek out to improve their skills (Ali, Schur, & Blanck, 2010; Bell & Silverman, 2018). In addition, studies have found individuals with a disability are not more likely to desire flexibility in work schedules, higher income or greater job security compared to individuals without disabilities (Ali, Schur, and Blanck, 2010). In fact, studies have shown that the desires of individuals with visual impairments are no different than those of people without visual impairments.. Individuals with a disability frequently want employment, and they would be happy to accept employment on the same parameters as others. All of this suggests that a lack of employment relates to a lack of opportunities.

However, despite having comparable levels of desire to find gainful employment, significant differences exist in labor force characteristics between individuals with disabilities and individuals without disabilities.

### Labor Force Characteristics

Despite the passage of the Americans with Disabilities Act (ADA) in 1990 and other policy initiatives implemented federally to improve employment opportunities for individuals with disabilities, rates of employment for those with a disability remain significantly lower in comparison to individuals without a disability. According to Ali, Schur, & Blanck (2010), the average employment rate for individuals with any type of disability is 51 percent, compared to the 75 percent employment rate for individuals without a disability. The employment rate among individuals with visual impairments is 51.5 percent, according to Ali et al. (2010).

The Bureau of Labor Statistics (BLS) reported in 2017 that among the two million individuals between the ages of 16 and 64 in the U.S. who have a visual impairment or are blind, 61 percent were not in the civilian labor force, compared to only 27 percent of individuals without a visual impairment or blindness (Bell & Silverman, 2018). More recent data was provided by BLS on the labor force characteristics among individuals with all disabilities. Compared to the 51 percent employment rate among individuals with disabilities reported by Ali et al. in 2010, in 2019 only 19.3 percent of individuals with disabilities were employed in 2019 (U.S. Department of Labor, 2020). The decline in employment rates among individuals with disabilities over the last ten years is cause for concern among VR organizations who provide services to individuals with disabilities (McDonnall, 2010).

One reason for the sharp spike in unemployment rates among individuals with disabilities in this data may be that age is strongly correlated with disability. As of 2019 half of all individuals with a disability who were out of the workplace were aged 65 or older. In fact, non-employed individuals with disabilities are, on average, seven years older than individuals with no disabilities (Ali et al., 2010; Yellin & Trupin, 2003) who are not employed. However, across all age groups, the employment-population ratios for individuals with a disability are far lower than for those without a disability (U.S. Department of Labor, 2020). Even within their own age group, individuals with a disability are less likely to be employed.

Table 6 depicts the age demographics reported by the BLS of employed and unemployed persons with a disability and with no disability (U.S. Department of Labor, 2020).

Table : Employment Status of the Civilian Non-Institutional Population by Disability Status and Age, Source: U.S. Department of Labor, 2020

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age** | **Employed Persons with a Disability**  | **Employed Persons with No Disability**  | **Unemployed Persons with a Disability**  | **Unemployed Persons with No Disability**  | **Participation Rate in Labor Force for Persons with a Disability** | **Participation Rate in Labor Force for Persons with No Disability** |
| 16 to 64 years  | 30.9% | 74.6% | 8.0% | 3.6% | 33.6% | 77.3% |
| 16 to 19 years | 18.4% | 31.4% | 21.7% | 12.4% | 23.5% | 35.8% |
| 20 to 24 years  | 40.2% | 68.5% | 44.4% | 6.6% | 45.4% | 73.4% |
| 25 to 34 years  | 43.5% | 81.5% | 11.0% | 3.5% | 48.8% | 84.5% |
| 35 to 44 years  | 38.5% | 83.2% | 7.0% | 2.6% | 41.5% | 85.5% |
| 45 to 54 years  | 31.5% | 83.6% | 7.4% | 2.5% | 34.0% | 85.8% |
| 55 to 64 years  | 23.7% | 70.4% | 4.9% | 2.4% | 24.9% | 72.2% |
| 65 years and over  | 7.6% | 24.4% | 4.3% | 2.8% | 7.9% | 25.1% |

Unemployment rates for individuals with disabilities were much higher, even when comparing groups with similar educational attainment. In addition, individuals who have a disability were less likely to have attained a bachelor’s degree or higher, compared to individuals without a disability. (U.S. Department of Labor, 2020). Table 7 depicts the age demographics reported by the BLS of employed and unemployed persons with a disability and with no disability (U.S. Department of Labor, 2020).

Table : Employment Status of the Civilian Non-Institutional Population by Disability Status and Educational Attainment, Source: U.S. Department of Labor, 2020

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Educational Attainment**  | **Employed Persons with a Disability (%)** | **Employed Persons with No Disability (%)** | **Unemployed Persons with a Disability (%)** | **Unemployed Persons with No Disability (%)** | **Participation Rate in Labor Force for Persons with a Disability** | **Participation Rate in Labor Force for Persons with No Disability** |
| Total, 25 years and over  | 18.6% | 69.0% | 6.6% | 2.8% | 20.0% | 71.0% |
| Less than a high school diploma | 9.1% | 54.3% | 9.3% | 5.1% | 10.0% | 57.2% |
| Highschool graduates, no college1  | 15.5% | 63.7% | 7.2% | 3.5% | 16.7% | 66.0% |
| Some college or associate degree  | 22.1% | 69.6% | 7.2% | 2.8% | 23.8% | 71.6% |
| Bachelor’s degree and higher2  | 28.2% | 75.5% | 4.5% | 2.0% | 29.6% | 77.1% |

**1** Includes persons with a high school diploma or equivalent.

**2** Includes persons with bachelor’s, master’s, professional, and doctoral degrees.

Individuals with disabilities were also found to be more likely to be employed part-time or be self-employed, compared to individuals without any disabilities (U.S. Department of Labor, 2020). In addition, individuals with a disability who are employed are more likely to be employed in service occupations, and less likely to hold managerial positions (Ali et al, 2010; U.S. Department of Labor, 2020).

Some of the findings reported by Ali, Schur, & Blanck (2010) are presented in Table 8 below. Individuals with visual impairments were likely to be unemployed over two times longer than individuals with no disabilities, based on the mean number of years when their last job ended. The reasons most commonly stated for why employment ended for individuals with a visual impairment are they became permanently disabled (38%) and had family responsibilities to attend to (17.1%). Individuals with visual impairments were four times less likely to work in a professional occupation and about twice as likely to work in a service occupation, compared to individuals without disabilities. Finally, individuals with disabilities were eight times less likely to have received career training within the 12 months prior to survey participation, compared to individuals without disabilities.

Table : Prior Employment and Recent Training Among Non-Employed Individuals, Source: Ali, Schur, and Blanck, 2010

|  |  |  |
| --- | --- | --- |
| **Prior Employment and Recent Training Categories** | **Individuals with Visual Impairment** | **Individuals with No Disabilities** |
| Ever had job for 1 year or more [% (n)] | 85.7 (25) | 83.2 (153) |
| Mean # of years ago (n) when last paid job ended | 10.98\*\*\* (21) | 4.74 (127) |
| Main reason job ended was retirement age (%) | 0.0 | 6.4 |
| Main reason job ended was retired early by choice (%) | 15.4 | 13.6 |
| Main reason job ended was retired early not by choice (%) | 0.0 | 1.4 |
| Main reason job ended was became permanently disabled (%) | 38.0\*\* | 9.5 |
| Main reason job ended was place of work shut down (%) | 10.5 | 14.1 |
| Main reason job ended was dismissed (%) | 2.5 | 6.3 |
| Main reason job ended was term of employment/contract ended (%) | 14.2 | 10.0 |
| Main reason job ended was family responsibilities (%) | 17.1\* | 36.6 |
| Main reason job ended was got married [% (n)] | 2.4 (21) | 2.1 (125) |
| Occupation of most recent job was Management (%) | 10.9 | 5.9 |
| Occupation of most recent job was Management -related (%) | 0.0 | 4.0 |
| Occupation of most recent job was Professional (%) | 4.9\*\*\* | 16.7 |
| Occupation of most recent job was Technical (%) | 1.3 | 3.3 |
| Occupation of most recent job was Sales (%) | 4.9 | 12.0 |
| Occupation of most recent job was Clerical (%) | 19.8 | 18.9 |
| Occupation of most recent job was Service (%) | 40.9\*\* | 21.5 |
| Occupation of most recent job was Agricultural (%) | 0.0 | 0.6 |
| Occupation of most recent job was Blue-collar [% (n)] | 17.2 (37) | 17.1 (365) |
| Individual had training to improve job skills in past 12 months [% (n)] | 2.0\*\*\* (25) | 16.4 (150) |

\* Significant difference from no-disability figure at P< 0.10, \*\* P< 0.05, \*\*\* P< 0.01

The current labor force characteristics indicate that individuals with a disability have reduced employment opportunities, despite their desire to work. Individuals with a disability who are outside of the labor force report a desire for future employment similar to those without a disability. Unemployment and exiting the labor force are higher among those with a disability in every age group. While individuals with a disability are notably less likely to be working, it seems unlikely that it is due to a lower desire to work.

### Workplace Experiences and Corporate Culture

Schur, Kruse, Blasi, & Blanck (2003) found that employees with disabilities were more likely to be in production jobs, and less likely to be in sales, management or supervisory positions, compared to individuals without disabilities. One reason for this can be attributed to the workplace experiences of individuals with disabilities and the negative, even sometimes hostile, corporate and professional cultures they have been exposed to. Employer attitudes and unwelcome corporate cultures which reflect stigma and prejudice against individuals with disabilities may constrain employment opportunities for individuals with visual impairments or blindness (Dixon, Kruse, & Van Horn, 2003).

The research conducted by Ali, Schur, & Blanck (2010) indicated that there were no significant differences in the types of careers individuals with disabilities desired, compared to individuals without disabilities. However, individuals with disabilities were less likely to prefer working for a private business versus a government agency. One theory provided was “people with disabilities may believe that government agencies are less likely to practice discrimination in hiring and work practices, or that government agencies provide better and more stable benefits” (Ali, Schur, & Blanck, 2010, p. 204).

**“People with disabilities may believe that government agencies are less likely to practice discrimination in hiring and work practices, or that government agencies provide better and more stable benefits”**

**- Ali, Schur, & Blanck, 2010, p. 204**

Studies have shown employees with disabilities are more likely to be paid on an hourly basis, as opposed to having a salaried position, and are more likely to be Union members compared to individuals without disabilities (Ali, Schur, & Blanck, 2010; Schur et al, 2003). Schur et al. (2003) also found that, on average, employees with disabilities earn 8 percent less than employees without disabilities. Moreover, individuals with disabilities who are employed are aware of these pay gaps and rate satisfaction with their employers lower in the areas of wages and benefits.

Individuals with disabilities tend to have a lower work status compared to their non-disabled peers. They also have less job security, are more likely to be closely supervised or micro-managed and are less likely to be included in department decision-making (Schur et al, 2003; Yelin & Trupin, 2003). Individuals with disabilities are more likely to receive on-the-job training and professional development (PD), however, they are less likely to receive informal training or mentoring from co-workers.

**“The unfair treatment perceived by workers with disabilities is only partially captured by disparities in pay and work organization variables, indicating they also perceive unfair treatment in other areas.”**

**- Schur, Kruse, Blasi, & Blanck, 2003, p. 397**

Lower levels of informal mentoring provide less access to promotion opportunities (Schur et al, 2003). This suggests that while firms may have instituted formal procedures to help individuals with a disability access the workplace, cultures and job roles tend to be more difficult to address. Lower status and a lack of power over decision making can be discouraging and are frequently associated with lower wages and earnings. All of this may be part of why individuals with a disability exit the labor force at a higher rate, as accessing work is more difficult, and less rewarding.

Some additional workplace condition findings reported by Yelin & Trupin, 2003 are presented in Table 9 and Table 10, below. They show that the workplaces described by individuals with and without a disability are roughly similar, but individuals with a disability are less likely to supervise others, have the freedom to decide how they do their work, or require high amounts of education. They are less likely to work a traditional nine to five weekday work schedule, and less likely to describe their job as meeting their economic needs.

Table : Working Conditions Among Employed Individuals, Source: Yellin & Trupin, 2003

|  |  |  |
| --- | --- | --- |
| **Working Conditions Among Employed** | **With a Disability**  | **Without a Disability**  |
| Size of Firm: Small Firm (Fewer than 50 people) | 35.2% | 39.3% |
| Size of Firm: Large Firm (500 or more people) | 64.8% | 60.7% |
| Size of Firm: Self-employed | 12.4% | 12.2% |
| Work regular day shift | 71.8% | 78.7% |
| Have flexible work hours | 54.0% | 56.2% |
| Work at home all the time  | 8.5% | 5.5% |
| Work at home some of the time | 29.4% | 32.3% |
| Supervise others at work  | 46.3% | 51.9% |
| Member of a union | 24.5% | 24.9% |
| Physical labor is part of work  | 52.6% | 47.9% |
| Psychological Demands: Have the freedom to decide how to do own work | 70.9% | 74.9% |
| Psychological Demands: Job does not require working fast without taking breaks | 57.9% | 57.8% |
| Psychological Demands: Job requires learning new things  | 93.9% | 89.2% |
| Psychological Demands: Job allows own decision making  | 79.4% | 82.8% |
| Psychological Demands: Have enough time to get the job done  | 77.2% | 78.1% |
| Cognitive Job Demands:Concentrate for long periods of time | 80.8% | 84.1% |
| Cognitive Job Demands:Interact with other people | 98.1% | 97.0% |
| Cognitive Job Demands:Use computers | 71.1% | 74.7% |
| Cognitive Job Demands:All of the preceding – concentrate for long periods of time, interact with other people, and use of computers  | 64.8% | 64.9% |
| Job requires more education | 10.4% | 13.1% |
| Job requires less education  | 36.7% | 34.5% |

Table : Synthetic Measures of Employment Among Employed Individuals, Source: Yellin & Trupin, 2003

|  |  |  |
| --- | --- | --- |
| **Employment Measures Applied to those Currently Employed** | **With a Disability (%)** | **Without a Disability (%)** |
| Traditional Employment (Monday through Friday, 9 to 5 work schedule)  | 28.0% | 34.0% |
| Employment Continuum: Job Is –Optimal | 28.0% | 34.0% |
| Employment Continuum: Job Is –Economically adequate  | 27.0% | 30.0% |
| Employment Continuum: Job Is –Psychological adequate | 13.0% | 11.0% |
| Employment Continuum: Job Is –Barely adequate | 10.0% | 13.0% |
| Employment Continuum: Job Is –Inadequate  | 22.0% | 12.0% |
| Traditional and optimal employment  | 8.8% | 17.5% |
| Job strain (high demand and low control) | 15.9% | 14.4% |

# Most Common Occupations Among MCB VR Successful Closures

This section presents a current-state description of the most common occupations among MCB VR successful case closures, as well as an analysis on current and projected wages for these occupations, specific job duties for these occupations, and a detailed description of the work environment people experience in these occupations.

## Most Common Occupations Identified

PCG analyzed RSA 911 reports provided by MCB for the years 2017 through 2019. These reports contain the Standard Occupation Code (SOC) for each participant whose case closes into a successful, competitive employment outcome. The Standard Occupation Code is a set of codes and categories maintained by the BLS which groups occupations based on job role and specific job duties and, in some cases, required education, skills, or training. SOCs are independent of job title, and each code encompasses a range of job titles that perform similar duties. This allows data on wages, occupation growth, and other job details to be analyzed reliably no matter how organizations categorize their employees.

According to the data presented by MCB, the jobs that MCB consumers are most likely to have at a successful VR case closure are presented in Table 11. Taken together, these occupations represent 20.5% of all MCB successful case closures in the data.

Table : SOC Categories Used Most Often by MCB VR Participants

|  |  |  |
| --- | --- | --- |
| **SOC Code** | **Title** | **Number of Placements** |
| 211019 | Counselors, all other, All Other | 5 |
| 253099 | Teachers, all other, All Other | 14 |
| 211029 | Social Workers  | 10 |
| 439199 | Office and Administrative Support, All Other  | 8 |
| 434051 | Customer Service Representatives | 21 |
| 412031 | Retail Sales Workers | 13 |

All of these jobs are service economy based, i.e., providing services to other individuals. MCB consumers are less likely to have jobs that rely primarily on working with materials, such as manufacturing, or working with information or ideas such as computer sciences or academics. As further analysis will show, these careers all rely, at least to some extent, on the ability to work socially with others, relate to others, and find some level of pleasure in helping others accomplish their goals.

Further details on BLS information for each of the job groups is presented in Appendix 1: Bureau of Labor Statistics Job Data for MCB Most Common Careers. This includes wage and job outlook information for each of the selected careers.

## Wages and Hours

PCG analyzed wages and hours worked by successful case closures within the RSA 911 data set. These show that, on average, wages for successful case closures tend to be lower than wages for working age Massachusetts residents overall. Table 12 shows the average (or mean) hourly wages of individuals with a successful MCB case closure from 2017 to 2019, and the average hours worked per week. The N represents the number of individuals in the group. For example, for case closures with consumers age 22 to 34, the average hourly wage was $20 per hour. The average weekly hours worked was 32.4. There were 79 cases in this group. Among the most frequently noted occupations cited above, average wages and hours both tend to be lower for all MCB closures, as shown in Table 13.

Table : Average Hourly Wages and Weekly Hours of Successful MCB VR Case Closures by Age

|  |  |  |
| --- | --- | --- |
| **Age** |  **Mean Hourly Wage at Exit** | **Mean Weekly Hours at Exit** |
| 22 to 34 (N=79) | $20.00 | 32.4 |
| 35 to 44 (N=61) | $21.24 | 31.4 |
| 45 to 54 (N=68) | $20.79 | 28.0 |
| 55 to 64 (N=73) | $24.76 | 30.0 |
| 65 and older (N=55) | $25.37 | 28.9 |

Table : Hourly Wages and Weekly Hours of Successful MCB Case Closures in MCB Most Common Occupation

|  |  |  |
| --- | --- | --- |
|  | **Mean Hourly Wage at Exit** | **Mean Weekly Hours at Exit** |
| Mean (N=71) | $17.36 | 27.3 |

## Analysis of Job Duties

Using the above information, PCG searched widely used online job boards (Indeed and ZipRecruiter) to identify a selection of jobs for which MCB VR consumers could openly apply. These job listings change and are updated regularly, from a variety of sources. Searches were limited to Massachusetts-based job listings, and therefore represent a random sample of potential open jobs an MCB VR consumer might encounter during a job search.

PCG identified a total of 52 job listings. The number of listings reviewed for each occupation category are presented in Table 14. All occupations had between 7 and 10 listings reviewed. Office and Administrative Support and customer service representatives were the most reviewed, with 10 jobs listings assessed for each category. Retail sales worker job listings were reviewed the least reviewed, with 7 job listings assessed.

Table : Number of Job Listings Reviewed By SOC Category

|  | **Count** | **Percent** |
| --- | --- | --- |
| Counselors, all other | 8 | 15.4% |
| Teachers, all other | 8 | 15.4% |
| Social Workers | 9 | 17.3% |
| Office and Administrative Support, all other | 10 | 19.2% |
| Customer Service Representatives | 10 | 19.2% |
| Retail Sales Workers | 7 | 13.5% |
| Total | 52 | 100.0% |

PCG reviewed job listings for positions commonly accepted by individuals with a visual impairment or who are blind, and categorized each job duty, task, or skill listed as a requirement of the job. The lists of categorized duties were combined for overall analysis, identifying those which are the most commonly required or requested by employers and recruiters. The following tables, therefore, do not necessarily sum to 100%. Rather, each category ranges between 1 percent and 100 percent, depending on how many of the 52 reviewed job listings required that duty, task, or skill.

Most job descriptions listed a minimum educational requirement, presented in Table 15. The table shows that most of the job listings reviewed required either a bachelor’s degree (38.5%) or a high school diploma of equivalent (23.1%). Only 11.5% of jobs did not have any stated educational requirement. Where a special license or certification was required, i.e., being a licensed social worker or requiring a driver’s license, the job education or certification requirements are considered independently, causing the percentage to total more than 100 percent.

Table : Required Educational or Certification Attainment for Job Listings

|  |  |
| --- | --- |
|   | **Percent of Job Listings** |
| Education: None Listed | 11.5% |
| Education: High School diploma | 23.1% |
| Education: Associate degree | 1.9% |
| Education: Bachelor's degree | 38.5% |
| Education: Graduate/Professional degree | 17.3% |
| Special license or certification | 25.0% |

Figure 4 and Figure 5 provide a description of some specific job duties listed in the BLS Occupational Outlook Handbook for each employment category reviewed.

Figure 4: Description of Job Duties for Counselors, all others, Teachers, all other, and Social Workers, Source: BLS Occupational Outlook Handbook

Figure 5: Description of Job Duties for Office and Administrative Support, all other, Customer Service Representatives, and Retail Sales Workers, Source: BLS Occupational Outlook Handbook

**Source:** [**https://www.bls.gov/ooh/**](https://www.bls.gov/ooh/)

Table 16 identifies the duties found in the reviewed job listings. The most commonly required duties were related to interpersonal skills, talking with others, working as part of a team, and communicating effectively. These were followed by basic computer skills; however, none of the job listings cited a need for advanced computer skills or coding. Paperwork, administration and general office tasks, like filing or documenting events, were also listed as common requirements. Jobs were also likely to call for conflict resolution and emotional labor skills, followed by written communication skills.

Table : Important Qualities for Job Listings

|   | **Percent of Job Listings** |
| --- | --- |
| Interpersonal / Communication Skills | 76.9% |
| Basic Typing and Computer / Microsoft Office Skills | 67.3% |
| Paperwork / Administration / General Office | 57.7% |
| Conflict Resolution and Emotional Support | 46.2% |
| Email and Written Communications Tasks | 46.2% |
| Coordination and Planning | 46.2% |
| Meeting Attendance | 32.7% |
| Scheduling Tasks | 28.8% |
| Teaching Life Skills | 23.1% |
| Sales Tasks | 23.1% |
| Interact Regularly with Youths | 21.2% |
| Medical Tasks | 21.2% |
| Standing, Walking, Lifting | 19.2% |
| Experience Working with Diverse Populations | 17.3% |
| Supervisory / Management Tasks | 15.4% |
| Education and Persuasion | 15.4% |
| Curriculum / Lesson Planning / Report Writing | 15.4% |
| Cleaning Tasks | 13.5% |
| Data Collection | 13.5% |
| Driving/Transporting Others, Driver's License | 11.5% |
| Maintain / Update Policies and Procedures | 11.5% |
| Internet Access | 9.6% |
| Social Media / Advertising Knowledge | 7.7% |
| Apply Physical Restraints/Physical Conflict | 5.8% |
| Cash Handling | 5.8% |
| Accounting / Payroll | 5.8% |
| Purchasing Tasks | 5.8% |
| Advanced Software Skills | 5.8% |
| Public Speaking | 1.9% |
| Bilingual | 1.9% |

The job duties most prevalent in the job listings analyzed suggest the most essential job duties of individuals served by MCB tend to be those associated with relatively low wage and low status positions. There are exceptions to this, some Teachers, all other and Counselors, all other make significantly more than the median income. However, average wage data among MCB consumers shows that lower than average wages are the norm.

Few of the job listings reviewed demand high level technical skills or specialized subject area knowledge, beyond requirements for educational attainment. This includes knowledge of specialized computing programs or software and relies instead on widely used computing programs such as Microsoft Office products or basic skills such as typing or data input.

Figure 6 and Figure 6 identify important qualities mentioned in the BLS Occupational Outlook Handbook which are required for the most common employment categories of successful VR closures. Communication skills is an important quality required for each employment category listed.

Figure 6: Important Qualities for Counselors, all others, Teachers, all other and Social Workers, Source: BLS Occupational Outlook Handbook

Figure 7: Important Qualities for Office and Administrative Support, all other, Customer Service Representatives and Retail Sales Workers, Source: BLS Occupational Outlook Handbook

**Source:** [**https://www.bls.gov/ooh/**](https://www.bls.gov/ooh/)

Combined with the data on wages of successful MCB case closures in Section 5.1, a clearer image of the types of occupations that successful MCB case closures primarily fill begins to become clear. The most common jobs are relatively low wage, and often low skill. While some, such as social workers and Teachers, all other, require high degrees of educational attainment and specialized certification, they remain less well compensated compared to other jobs with similar education and credentialing requirements. Individuals who have received services from MCB and have closed their cases tend to pursue occupations that involve working with other people as a primary duty, usually in a service role. Any specific knowledge is less frequently required, aside from the ability to communicate well and handle the routine functions of a workplace.

## Wage Projections

Table 17 identifies the current wage projections in Massachusetts required for the most common employment categories of successful VR closures. The average earnings in Massachusetts in 2020 was $65,680.00. Social workers had the greatest average earnings in 2020 while retail sales workers earned the least. The lowest 10 percent and highest 10 percent of learnings for each employment categories are also listed.

Table : Current Wage Projections in Massachusetts, Source: O\*NET OnLine

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Lowest 10% Earnings** | **Average Earnings** | **Highest 10% Earnings** |
| Massachusetts Overall | --- | $65,680.00 | --- |
| Counselors, all other | $29,250.00 or less | $46,550.00  | $114,690.00 or more |
| Teachers, all other | $25,610.00 or less | $45,700.00  | $94,980.00 or more |
| Social Workers | $51,380.00 or less | $71,200.00  | $100,440.00 or more |
| Office and Administrative Support, all other | $25,700.00 or less | $37,830.00  | $61,330.00 or more |
| Customer Service Representatives | $27,950.00 or less | $40,940.00  | $66,110 or more |
| Retail Sales Workers | $25,080.00 or less | $27,550.00  | $43,530.00 or more |

***Source:*** [***www.onetonline.org***](http://www.onetonline.org)

## Work Environment

Table 20 identifies the typical work schedule of workers by employment category. Aside from retail sales workers, employees for each category listed typically work full-time. Retail sales workers and customer service representatives may be required to work evenings, weekends and holidays; social workers may have these requirements as well, and they may also be required to be on-call for clients.

Table : Employment Schedule by Work Category, Source: BLS Occupational Outlook Handbook

|  |  |  |
| --- | --- | --- |
|  | **Full-Time or Part-Time** | **Work Schedule** |
| Counselors, all other | Full-time | Typically, Monday through Friday; 8-hour shifts |
| Teachers, all other | Full-time | Typically, during school hours; 2-month summer break |
| Social Workers | Full-time | May include evenings, weekends, and holidays; on-call hours |
| Office and Administrative Support, all other | Full-time | Typically, Monday through Friday; 8-hour shifts |
| Customer Service Representatives | Full-time | May include evenings, weekends, and holidays |
| Retail Sales Workers | Full-time and part-time | May include evenings and weekends |

**Source:** [**https://www.bls.gov/ooh/**](https://www.bls.gov/ooh/)

# Opportunities and Challenges

This section presents opportunities for the future and potential barriers to career success based on the findings of this research. This includes an examination of the potential outlook for the most common occupations entered by MCB consumers.

## Opportunities

The skills and job duties most frequently in demand for the occupations that MCB consumers pursue are not particularly specialized. Much the opposite, they are duties that are realistically part of almost every job in a modern labor market. Interpersonal and written communications skills, the ability to handle emotionally challenging situations, and basic computer skills are necessary to navigate most workplaces. A focus on training in the skills found to be most critical in this research will be beneficial for individuals entering the researched occupations. Almost any MCB consumer with low levels of job experience will benefit from training, making many of the recommendations outlined in this report widely applicable.

While individuals with visual disabilities are more likely to be unemployed and less likely to be in the labor market than individuals without a disability, they are significantly more likely to be in the labor market, and to be employed, than individuals with other forms of a disability. While MCB does often deal with individuals with multiple forms of a disability, the majority of MCB’s consumers have no secondary disability according to the CSNA. This expands the scope of potential occupational opportunities that could realistically be available to MCB consumers, particularly as more and more work shifts to virtual platforms and remote offices.

The prospect of an emerging ‘tele-work first’ economy also presents opportunities. MCB consumers, staff, and supporting agencies all frequently cite transportation as an unmet need for the visually impaired in Massachusetts. As a result of the Covid-19 pandemic, offices are encouraged to shift to primarily remote or tele-work models, and internet access becomes a suitable replacement for transportation in some situations. According to the ACS, 78.6% of Massachusetts households have broadband internet access. Only 10.9% of households lack any sort of internet access, and these tend to be households of individuals over the age of 65.

The occupations most frequently pursued by MCB consumers require a diverse array of educational attainment levels, from graduate degrees to jobs requiring no formal educational credentialing whatsoever. MCB’s consumer population, as shown in the CSNA, is well educated. This presents a wide array of possible occupations, beyond the ones presented here. It also makes clear that MCB’s process for funding and promoting education among its consumers is effective. MCB’s focus on educational attainment is effective and could yield many more successful employment outcomes particularly when combined with the training focus on communication skills, social-emotional skills, and basic adaptive computer skills.

## Prospective Barriers to Success

Some of the largest occupational categories that MCB consumers pursue – retail sales workers and office administrative support staff positions – are predicted to either shrink or grow very slowly over the next ten years. Combined with the high rate of unemployment for individuals with visual disabilities, this suggests that MCB consumers looking for these openings will have more trouble entering them than in the past. MCB consumers may need to wait longer to enter such an occupation or do more to demonstrate that they are the best possible candidate for a job.

The occupations frequently entered by MCB consumers are often low wage, compared to higher paying careers with similar demands for education. Some examples of these common low wage occupations include retail sales workers and Office and Administrative Support, all other staff positions (See Table 17). This is reflected in the lower annual income of individuals who are in those occupations. While these occupations can be rewarding in other ways, a wage needs to be competitive to make the prospect of work competitive with non-work options available to some MCB consumers.

Likewise, several of the occupations most likely to be entered could be considered low status. Direct customer service and retail work are often depicted as occupations with very little social clout. A sense of identity and social standing can be important aspects of a job. Combined with low wages, these occupations may hold little interest for some MCB consumers. MCB may need to find ways to promote jobs that do not depend on the direct benefits, but also incorporate the ability of consumers to move to occupations that are more rewarding in every sense.

## Labor Market Outlook

In contrast to the expectation that growth in the occupational job categories of retail sales workers and office administrative staff support positions will slow, several of the other occupational categories that MCB consumers are most likely to enter are projected to grow more quickly than the labor market overall, both in the short and long term. The counseling occupation is anticipated to have the most growth in the next 3 years, followed by teachers, all other and Office and Administrative Support, all other staff positions. This growth is illustrated in Table 19 and Table 20.

This higher demand will create more opportunities for MCB consumers in these areas. While these occupational categories are often relatively small, several with fewer than 100 job openings a year, increased demand will present new opportunities that MCB consumers can take advantage of.

Table : Short-Term Employment Outlook in Massachusetts (2019-2021), Source: Projections Central

|  | **% Change**  | **Average Annual Openings** |
| --- | --- | --- |
| Massachusetts Overall | + 1.2% | 479,702 |
| Counselors, all other | 5.9% | 20 |
| Teachers, all other | 2.8% | 1,150 |
| Social Workers | 1.7% | 60 |
| Office and Administrative Support, all other | 2.8% | 280 |
| Customer Service Representatives | 0.5% | 9,110 |
| Retail Sales Workers | -0.5% | 14,140 |

***Source:*** [**www.projectionscentral.com**](http://www.projectionscentral.com)

Table : Long-Term Employment Outlook in Massachusetts (2018-2028), Source: Projections Central

|  |  |  |
| --- | --- | --- |
|  | **% Change**  | **Average Annual Openings** |
| Massachusetts Overall | + 0.3% | 439,851 |
| Counselors, all other | 6.1% | 40 |
| Teachers, all other | 6.7% | 890 |
| Social Workers | 6.9% | 60 |
| Office and Administrative Support, all other | 4.1% | 240 |
| Customer Service Representatives | -5.1% | 8,650 |
| Retail Sales Workers | 0.6% | 15,310 |

***Source:*** [**www.projectionscentral.com**](http://www.projectionscentral.com)

## Implications of COVID-19

While the labor market projections presented in this document account for predicted job market changes due to the COVID-19 pandemic, there are other changes to the workforce and the way individuals work that MCB should anticipate. Transportation is a major barrier to employment for MCB consumers, as found in other aspects of research done in partnership between MCB and PCG. More and more workplaces are shifting to completely or partially remote platforms. National legislation has allowed greater access to telehealth/telemedical services. Working to promote these changes in legislation or cement these cultural shifts could open a wide array of opportunities to MCB’s consumers and confront a primary barrier to employment.

# Recommendations

The following recommendations are based on the findings of this research and represent potential actions that MCB could undertake to incorporate this research more directly into service offerings. The recommendations here are presented in no particular order.

## Focus Training on ‘Soft Skills’

The occupations that MCB case closures entered most commonly have a wide variety of specific training and requirements that individuals should be encouraged to pursue if they express interest. However, the most MCB case closures will be helped by focusing on the soft skills - interpersonal communication, conflict resolution, and emotional intelligence. These skills are critical and primary features of the most common occupations MCB consumers enter. They are also skills that are widely needed in almost every occupation to some extent. MCB consumers would be well served by focusing at least some amount of initial training on these soft skills.

## Maximize the Value of Apprenticeship Opportunities

As described in PCG’s feasibility study on apprenticeship opportunities for MCB consumers, Registered Apprenticeship Programs (RAPs) can provide an opportunity for expanding integrated employment opportunities. RAPs are structured paid work-based learning programs which aim to provide businesses with a diverse and consistent talent pipeline and provide apprentices a structured opportunity to grow their skillset while increasing their earnings. The Massachusetts Executive Office of Labor and Workforce Development (EOLWD) aims to expand apprenticeship in high-growth industries such as IT/Tech, healthcare, and advanced manufacturing. The Commonwealth also has targeted efforts to reach populations historically underserved by apprenticeship, including populations with disabilities, to help them connect to apprenticeship opportunities. These efforts point to an increased number of RAPs across a variety of industries, as well as Pre-Apprenticeship programs to provide on-ramps to apprenticeship. MCB should review the recommendations outlined in the apprenticeship feasibility study, including outreach to partners such as the Massachusetts Division of Apprentice Standards, MassHire, and WIOA state partners to formalize partnerships and discuss opportunities to connect MCB’s consumers to apprenticeship opportunities.

## Create Opportunities to Increase Compensation

Benefits counseling services provided by MCB are premised around the notion that work for income may involve tradeoffs of other benefits such as disability or income-dependent benefits like MassHealth which could make it less desirable for some consumers. Labor force participation is lower among those with visual disabilities than the general population. This may be in part because the occupations consumers enter are less well paid and don’t necessarily provide the level of benefits other occupations might. While the literature shows individuals with a disability aren’t seeking higher wages, they are not necessarily seeking lower wages than the population at large. MCB could help advocate to make work more rewarding. Raises in the minimum wage would disproportionately impact MCB consumers and make the prospect of work more rewarding, helping more of them to choose to go to work. If government benefits were less closely associated with incomes, MCB consumers receiving those benefits would face lower barriers to choosing employment. MCB could advocate at the state level for legislative changes, such as a higher minimum wage or decoupling benefit programs from income, which would make the sorts of occupations their consumers enter more desirable.

## Provide Opportunities for Workplace Leadership Training

Analysis of the skills, wages, and income of the most common occupations entered by MCB case closures suggests they are likely to enter to relatively low wage occupations with fewer supervisory or management responsibilities. Literature shows that individuals with a disability feel they are less likely to be presented with advancement or mentorship opportunities. The occupations most commonly entered by MCB consumers do have the potential for advancement. In order to prevent consumers from remaining in the lower levels of their chosen occupations, MCB should consider providing leadership training and management training for those individuals who wish to pursue it, in particular for those receiving post-employment services. This could help strengthen the ability of consumers and former consumers to move up the career ladder no matter where they choose to work, resulting in relatively higher wages and destigmatizing the presence of individuals with disabilities in leadership roles within organizations.

## Identify New Occupational Entry Points

The occupations most commonly entered into by MCB case closures are Counselors, all other, Teachers, all other, social workers. Office and Administrative Support, all other, customer service representatives, and retail sales workers. Some of these occupations are predicted to shrink or grow slowly over the next decade. Occupations most likely to be impacted are retail sales workers and Office and Administrative Support, all other staff positions. As demand for these jobs decreases and job openings become more scarce, the persistently higher unemployment rate among individuals with visual impairments suggests they are likely to be some of the first to lose their positions and some of the last to be selected for positions that do open up. While some of these positions will still have thousands of openings each year in Massachusetts, MCB should begin preparing now for a future with fewer openings in the most common occupations. This may mean looking forward to finding similar occupations that consumers could transfer into or imagining new methods of working with businesses to adapt workplaces quickly, easily, and cost-effectively to present new occupational opportunities for people who are blind or visually impaired.

## Closely Monitor Labor Market Changes

The labor market for the most common occupations pursued by MCB consumers is changing rapidly. The largest occupational category analyzed, retail sales workers, is predicted to have fewer annual job openings for the next decade. The fastest rate of growth is located in the smallest occupational fields, including social workers and Counselors, all other. Given these trends, it will be important for MCB to monitor labor market changes for potential deviations from these predictions, and to monitor growing job categories to find MCB consumers entry into the labor market.

## Ensure Consistent Data Recording Practices

Several of the occupation categories recorded in the RSA 911 documents provided to PCG were ‘general other’ categories. One category was not actually present in the SOC code list as a specific occupation, but was instead an umbrella header for multiple, related occupations. While this did not present problems for this analysis, in the future, MCB should ensure that it is able to gather and analyze this data and understand the need for the highest level of specificity possible.

# Selection of MCB 2020 Research Initiatives

PCG is conducting a wide range of research in partnership with MCB. Many themes overlap between these efforts. The following sections demonstrate how topics within the multiple research efforts might complement each other or benefit from further consideration.

## Comprehensive Statewide Needs Assessment

The Comprehensive Statewide Needs Assessment (CSNA) shows areas that present barriers to employment for individuals with disabilities, as well as areas of MCB strength. Some of the most frequently cited were transportation, a need for a larger income, and the perception of discrimination in workplaces and hiring practices. In order to address some of the issues and barriers presented here, as well as maximize the benefits of this report, MCB should consider the recommendations in the CSNA and how they can be used in conjunction with this research. In particular, MCB should address the most frequently cited barriers that consumers present. While transportation is the most frequently cited barrier in the CSNA, the perception of discrimination against people with a disability is also common. This research suggests that perception is likely justified.

## Feasibility of Apprenticeships in Emerging Industries for Blind VR Consumers Feasibility Assessment eCommerce

While the research on apprenticeships and early career opportunities found few existing options for the visually impaired, this research suggests that such opportunities may be needed. Individuals with visual impairments appear to have difficulty finding higher paying, more specialized employment in some fields. Investing in early career opportunities that foster the technical skills necessary for these career paths could widen the number of occupational opportunities and variety available to MCB consumers.

## Feasibility Study to Evaluate Establishment of a For-Profit Business Employing the Blind

Should MCB choose to go about selecting a model and building an organization which provides a specific service, they may consider the skills and job duties that their program is already familiar with providing. A business venture which is set up to capitalize on the skills MCB consumers already have is more likely to be successful, and more likely to have opportunities readily available for existing MCB consumers without the need for re-training.

## The Impact that Participation in Team Sports has on VR Outcomes

The review of literature and interviews revealed that the types of job skills promoted by team sports may closely align with the sorts of skills required in occupations frequently pursued by MCB consumers. Interpersonal communications, teamwork and coordination, and emotional skills are all attributes that research shows are developed by participating in a team setting and are necessary for success at work. They are also some of the skills that are most in demand for the occupations that MCB consumers enter. Promotion participation in team activities may help prepare MCB consumers to enter the workforce, and provide a low-stakes, effective forum for skills training.

# Conclusion

The job duties most often required by MCB consumers whose cases close successfully accurately represent the occupations they are most likely to enter – those that are focused on interpersonal skills, basic computer use, and emotional skills. Individuals with a visual disability are notably more likely to enter service and retail-oriented occupations and industries than other American adults.

Labor market conditions are poor for individuals with a visual disability in the best of times. They have higher rates of unemployment, and low rates of labor force participation compared to adults without a disability. This finding may be self-reinforcing, as data on jobs and workplaces shows that individuals with a disability are less likely to be in supervisory roles, less likely to report having freedom to do their jobs as they see fit, and less likely to be satisfied with the wages and benefits offered to them.

The occupations they enter are also less likely to be highly compensated. Jobs are more difficult for individuals with a disability to obtain and are less rewarding than average when they are acquired. This may lead to lower rates of labor force participation. To fully promote employment, MCB may need to focus not only on providing skills but on identifying ways to make work equally rewarding for those with a visual disability.

These are issues that MCB will need to seek to overcome at a time when labor markets are shifting rapidly and in potentially unknown ways. MCB will need to maintain focus on the changing career outlooks of their most common occupational categories and may need to find ways to help their consumers transition from lower wage, entry level jobs to roles with greater responsibility and compensation. These recommendations follow a natural extension of the essential services MCB already provides.

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# Appendix: Bureau of Labor Statistics Job Data for MCB Most Common Careers

The following information is taken directly from the Bureau of Labor Statistics’ Occupational Outlook Handbook. This handbook lists detailed information for all BLS SOC codes. It is updated annually and freely available to the public at the following URL: <https://www.bls.gov/ooh/>. It is also important to note that all of the publicly available information on jobs, wages, and job outlook were compiled and calculated before the COVID-19 pandemic and do not reflect any potential job market changes that may have been caused by that.

## Overall US Employment

|  |
| --- |
| **SOC Quick Facts: All Occupations** |
| 2019 Median Pay | $53490 per year  |
| $25.72 per hour |
| Typical Entry-Level Education | N/A |
| Work Experience in a Related Occupation | N/A |
| On-the-Job Training  | N/A |
| Number of Jobs, 2018 | 161,037,700 |
| Job Outlook, 2018-2028 | 8,398,200 |
| Employment Change, 2018-2028 | 5.2% |

## 211019 - Counselors, all other, All Other

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Counselors, all other** | Marriage and Family Therapists | Psychologists | Rehabilitation Counselors, all other  |
| 2019 Median Pay | $49,610 per year | $80,370 per year | $35,950 per year |
| $23.85 per hour  | $38.64 per hour | $17.28 per hour |
| Typical Entry-Level Education | Master's degree | Doctoral degree  | Master's degree |
| Work Experience in a Related Occupation | None | None | None |
| On-the-Job Training  | Internship/Residency | Internship/Residency | None |
| Number of Jobs, 2018 | 55,300 | 181,700 | 119,700 |
| Job Outlook, 2018-2028 | 22% | 14% | 10% |
| Employment Change, 2018-2028 | 12,300 | 26,100 | 11,800 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Counselors, all other** | Social and Community Service Managers | Social and Human Service Assistants  | Substance Abuse, Behavioral Disorder, and Mental Health Counselors, all other  |
| 2019 Median Pay | $67,150 per year | $35,060 per year | $46,240 per year |
| $32.28 per hour | $16.85 per hour | $22.23 per hour |
| Typical Entry-Level Education | Bachelor's degree | High school diploma or equivalent | Bachelor's degree |
| Work Experience in a Related Occupation | Less than 5 years | None | None |
| On-the-Job Training  | None | Short-term on-the-job training | None |
| Number of Jobs, 2018 | 168,800 | 413,700 | 304,500 |
| Job Outlook, 2018-2028 | 13%  | 13% | 22% |
| Employment Change, 2018-2028 | 21,900 | 52,200 | 68,500 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Counselors, all other** | Training and Development Specialists | Genetic Counselors, all other | Health Educators and Community Health Workers  |
| 2019 Median Pay | $61,210 per year | $81,880 per year | $46,910 per year |
| $29.43 per hour | $39.36 per hour | $22.55 per hour |
| Typical Entry-Level Education | Bachelor's degree | Master's degree | Bachelor's degree |
| Work Experience in a Related Occupation | Less than 5 years | None | None |
| On-the-Job Training  | None | None | Minimum |
| Number of Jobs, 2018 | 306,400 | 4,000 | 123,800 |
| Job Outlook, 2018-2028 | 9% | 27% | 11% |
| Employment Change, 2018-2028 | 28,900 | 800 | 14,100 |

## 211029 - Social Workers

|  |
| --- |
| **SOC Quick Facts: Social Workers** |
| 2019 Median Pay | $50,470 per year  |
| 24.26 per hour |
| Typical Entry-Level Education | BA or MA |
| Work Experience in a Related Occupation | 2-years’ experience |
| On-the-Job Training  |   |
| Number of Jobs, 2018 | 707,400 |
| Job Outlook, 2018-2028 | 11% |
| Employment Change, 2018-2028 | 81,200 |

## 253099 - Teachers, all other, All Other

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Teachers, all other, All Others**  | Adult Literacy and High School Equivalency Diploma Teachers, all other | Career and Technical Education Teachers, all other | High School Teachers, all other |
| 2019 Median Pay | 54,350 per year  | 58,110 per year | 61,660 per year  |
| 26.13 per hour | 27.94 per hour | 29.64 per hour |
| Typical Entry-Level Education | Bachelor’s Degree | Bachelor's Degree | Bachelor's Degree |
| Work Experience in a Related Occupation | None | Less than 5 years | None |
| On-the-Job Training  | None | None | None |
| Number of Jobs, 2018 | 67,200 | 214,000 | 1,072,500 |
| Job Outlook, 2018-2028 | -10% | -1% | 4% |
| Employment Change, 2018-2028 | -7000 | -1,800 | 38,200 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Teachers, all other, All Others**  | Kindergarten and Elementary School Teachers, all other | Middle School Teachers, all other | Preschool Teachers, all other |
| 2019 Median Pay | 59,420 per year  | 59,660 per year | 30,520 per year  |
| 28.57 per hour | 28.68 per hour | 14.67 per hour |
| Typical Entry-Level Education | Bachelor's Degree | Bachelor's Degree | Associate's Degree |
| Work Experience in a Related Occupation | None | None | None |
| On-the-Job Training  | None | None | None |
| Number of Jobs, 2018 | 1,569,000 | 6,157,000 | 523,600 |
| Job Outlook, 2018-2028 | 3% | 3% | 7% |
| Employment Change, 2018-2028 | 53,100 | 21,400 | 36,900 |

|  |  |  |
| --- | --- | --- |
| **SOC Quick Facts: Teachers, all other, All Others**  | Special Education Teachers, all other | Teacher Assistants |
| 2019 Median Pay | 61,030 per year | 27,920 per year  |
| 29.34 per hour | 10.54 per hour |
| Typical Entry-Level Education | Bachelor's Degree | Some college, no Degree |
| Work Experience in a Related Occupation | None | None |
| On-the-Job Training  | None | None |
| Number of Jobs, 2018 | 437,200 | 1,380,300 |
| Job Outlook, 2018-2028 | 3% | 4% |
| Employment Change, 2018-2028 | 13,600 | 55,400 |

## 412031 - Retail Salespersons

|  |
| --- |
| **SOC Quick Facts: Retail Salesperson** |
| 2019 Median Pay | $25,440 per year  |
| 12.23 per hour |
| Typical Entry-Level Education | None |
| Work Experience in a Related Occupation | None |
| On-the-Job Training  | Short-term on-the-job training  |
| Number of Jobs, 2018 | 4,768,900 |
| Job Outlook, 2018-2028 | -2% |
| Employment Change, 2018-2028 | -105,200 |

## 434051 - Customer Service Representatives

|  |
| --- |
| **SOC Quick Facts: Customer Service Representatives**  |
| 2019 Median Pay | $34,710 per year  |
| 16.69 per hour |
| Typical Entry-Level Education | High School Diploma or Equivalent  |
| Work Experience in a Related Occupation | None |
| On-the-Job Training  | Short-term on-the-job training  |
| Number of Jobs, 2018 | 2,972,600 |
| Job Outlook, 2018-2028 | -2% |
| Employment Change, 2018-2028 | -51,600 |

## 439199 - Office and Administrative Support, all other Workers, All Other

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Office and Administrative Support, all other Staff, All Other**  | Bill and Account Collectors | Bookkeeping, Accounting, and Auditing Clerks | Customer Service Representatives |
| 2019 Median Pay | 37,000 per year  | 41,230 per year  | 34,710 per year  |
| 17.79 per hour | 19.82 per hour  | 16.69 per hour  |
| Typical Entry-Level Education | High School Diploma or equivalent  | Some college, no degree | High School Diploma or equivalent  |
| Work Experience in a Related Occupation | None | None | None |
| On-the-Job Training  | Moderate-term on-the-job training  | Moderate-term on-the-job training | Short-term on-the-job training  |
| Number of Jobs, 2018 | 258,000 | 1,707,700 | 2,972,600 |
| Job Outlook, 2018-2028 | -8% | -4% | -2% |
| Employment Change, 2018-2028 | -19,400 | -65,800 | -51,600 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Office and Administrative Support, all other Staff, All Other**  | Desktop Publishers | Financial Clerks | General Office Clerks |
| 2019 Median Pay | 45,390 per year  | 40,540 per year  | 34,040 per year  |
| 21.82 per hour | 19.49 per hour | 16.37 per hour |
| Typical Entry-Level Education | Associate's Degree | High School Diploma or equivalent | High School Diploma or equivalent |
| Work Experience in a Related Occupation | None | None | None |
| On-the-Job Training  | Short-term on-the-job training | Moderate-term on-the-job training1 | Short-term in-the-job training  |
| Number of Jobs, 2018 | 12,600 | 1,387,200 | 3,158,500 |
| Job Outlook, 2018-2028 | -16% | 5% | -4% |
| Employment Change, 2018-2028 | -2000 | 72,100 | -110,600 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Office and Administrative Support, all other Staff, All Other**  | Information Clerks | Material Recording Clerks | Police, Fire, and Ambulance Dispatchers |
| 2019 Median Pay | 35,390 per year | 30,010 per year  | 41,910 per year  |
| 17.01 per hour  | 14.43 per hour  | 20,15 per hour  |
| Typical Entry-Level Education | High School Diploma or equivalent2 | High School Diploma or equivalent  | High School Diploma or equivalent  |
| Work Experience in a Related Occupation | None | None  | None  |
| On-the-Job Training  | On-the-job training  | On-the-job training  | Moderate-term on-the-job training  |
| Number of Jobs, 2018 | 1,484,300 | 3,144,300 | 98,300 |
| Job Outlook, 2018-2028 | 0% | 1% | 6% |
| Employment Change, 2018-2028 | -7,300 | 46,900 | 5,500 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SOC Quick Facts: Office and Administrative Support, all other Staff, All Other**  | Postal Service Workers | Receptionists | Secretaries and Administrative Assistants |
| 2019 Median Pay | 52,060 per year  | 30,050 per year  | 39,850 per year  |
| 25.03 per hour  | 14.45 per hour  | 19.16 per hour |
| Typical Entry-Level Education | High School Diploma or equivalent  | High School Diploma or equivalent  | High School Diploma or equivalent  |
| Work Experience in a Related Occupation | None  | None | Experience using computer software applications |
| On-the-Job Training  | Short-term on-the-job training  | Short-term on-the-job training  | Short-term on-the-job training |
| Number of Jobs, 2018 | 504,100 | 1,101,500 | 3,786,800 |
| Job Outlook, 2018-2028 | -21% | 5% | -7% |
| Employment Change, 2018-2028 | -103,800 | 59,300 | -276,700 |

|  |  |
| --- | --- |
| **SOC Quick Facts: Office and Administrative Support, all other Staff, All Other**  | Tellers  |
| 2019 Median Pay | 31,230 per year  |
| 15.02 per hour  |
| Typical Entry-Level Education | High School Diploma or equivalent  |
| Work Experience in a Related Occupation | None |
| On-the-Job Training  | Short-term on-the-job training  |
| Number of Jobs, 2018 | 472,100 |
| Job Outlook, 2018-2028 | -12% |
| Employment Change, 2018-2028 | -57,800 |