Carly Lykes Frostman

Minnesota's Untapped Workforce

Blind, DeafBlind and low-vision Minnesotans can help the state address its growing labor challenges.

Minnesota needs more workers to fill a growing number of jobs. Typical recruiting methods and data sources, however, may overlook an untapped source of labor – blind, DeafBlind and low-vision Minnesotans.

Although common strategies may help the general population, they frequently exclude people with disabilities by neglecting accessibility needs.

State Services for the Blind (SSB), a division of DEED, helps Minnesotans with visual impairments meet career demands by providing vocational rehabilitation (VR) services. The Workforce Innovation and Opportunity Act (WIOA) underscores the value of people with disabilities and their contribution to society by promoting competitive integrated employment goals for state VR customers and earmarking funds to prepare youth ages 14 to 21 for careers.

This article highlights the capacity of blind, DeafBlind, and low-vision Minnesotans to be productive employees. National survey and SSB administrative data are used, as well as staff and customer stories, to demonstrate successes and describe challenges that many SSB customers still face in the labor market.

Data Challenges

Many researchers rely exclusively on national surveys, such as the American Community Survey (ACS), because the data are readily available and their accuracy is widely recognized. Extra care must be taken, however, when using these data to describe small populations. Administrative data can add depth and specificity to analyses of small populations, and specifically people with disabilities.

Several recent articles illustrate the problem of relying exclusively on ACS data to describe Minnesotans with disabilities. A recent Trends article[1] using 2014 ACS data suggests that those with vision disabilities have lower unemployment rates than those with no disabilities. Moreover, a recent Minnesota State Demographic Center report[2] using 2015 ACS data indicates that those with vision disabilities have the second-highest labor force participation rate among those with disabilities.

In contrast, a 2017 study based on national VR administrative data concluded that those with vision disabilities face the lowest odds of achieving competitive integrated employment.[3]

One reason for the inconsistencies between these three studies rests with the different definitions used for disability and employment. While the ACS relies on individuals to self-report the level of difficulty they experience hearing or seeing in order to

[1] Mourssi-Alfash, Mohamed, "The Disability Employment Gap, by Type of Disability," Trends, December 2016.

[2] Egbert, Andi, "Minnesotans With Disabilities: Demographic and Economic Characteristics," March 2017, Minnesota State Demographic Center.

[3] O'Neill, John; Kaczetow, Walter; Pfaller, Joseph; and Verkuilen, Jay, "Impairment, Demographics, and Competitive Employment in Vocational Rehabilitation," Journal of Vocational Rehabilitation, 46 (2017): 149-158. Doi: 10.3233/JVR-160851.

identify people with hearing and vision disabilities, people who participate in state VR programs must typically meet specific medical criteria to be eligible. Thus, the ACS may capture a broader range of disability levels compared with VR participants.

WIOA and government-funded VR programs do not recognize employment below minimum wage or in segregated settings, commonly referred to as "sheltered workshops," as successful outcomes. The ACS does not make this distinction.

Few people realize that laws permit employers with special certificates to pay people with disabilities below minimum wage to perform piece-rate work.[4]

Another factor is that the first two articles rely on one-year ACS sample data. Small ACS sample sizes can result in very few observations of that population in any one year (see second column in Table 1).

Furthermore, accessibility barriers, such as needing braille, further decrease the odds that people with disabilities will complete mail or phone surveys. Overall, small sample sizes create huge variability across years and high standard errors in the resulting estimates as shown in the fifth column of Table 1. One easy way to correct this problem is to use five-year estimates as are shown in Table 2.[5]

Programs serving specific subpopulations, like those with visual impairments, are able to collect more detailed data from more people within that group through contact with customers.

TABLE 1

2014 ACS One-Year Estimates for Minnesotans with Vision Impairment

	Sample Size	Estimated Population	Estimate	Standard Error	Lower	Upper
Prevalence	396	44,018	1.4%	0.1%	1.3%	1.5%
Labor Force Participants	195	22,482	51.1%	3.9%	47.1%	55.0%
Unemployed	6	834	3.7%	1.8%	1.9%	5.5%
Annual Income	189	21,648	$39,941	$4,526	$30,831	$49,050

Source: American Community Survey, one-year data, 2014

TABLE 2

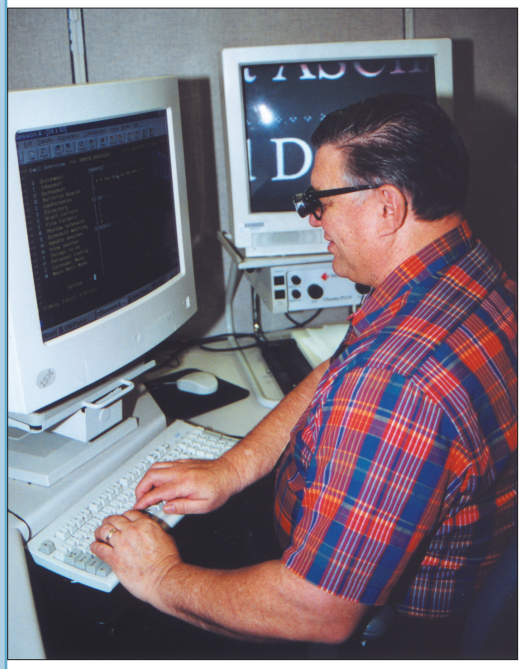
2011 - 2015 ACS Five-Year Estimates for Minnesotans with Visual Impairment

	Sample Size	Estimated Population	Estimate	Standard Error	Lower	Upper
Prevalence	1,852	38,963	1.2%	0.0%	1.2%	1.3%
Labor Force Participants	960	21,435	55.0%	1.9%	53.2%	56.9%
Unemployed	77	1,867	8.7%	1.3%	7.4%	10.0%
Annual Income	883	19,568	$36,420	$1,860	$32,761	$40,079

Source: American Community Survey, five-year data, 2011 to 2015

[4]Piece-rate work means that workers are paid for what they produce rather than their time.

[5]"The Disability Employment Gap, by Type of Disability" in the December 2016 issue of Trends used one-year ACS estimates. In looking at the other four years of estimates for the visually impaired we discovered huge variability in the unemployment estimate for this group. It is clear from this that five-year estimates are more reliable for this (and other) small populations and should be used in future articles on Minnesotans with disabilities.



This makes administrative data a rich source for describing specific populations. SSB administrative data, as shown in Table 3, allow for a more detailed report of the prevalence of specific vision impairments among customers who are all actively seeking to stay in or enter the labor force. It also shows more specificity in terms of outcomes. Moreover, whereas the ACS relies on customers to self-report their income, SSB verifies the income of customers as they exit programs.

What Does SSB Do?

SSB serves thousands of visually impaired people through its Workforce Development Unit (WDU), Communication Center and Senior Services Unit (SSU). This article focuses on the work of SSB's WDU, which serves more than 1,000 customers each year seeking to obtain, maintain or advance their employment.

All WDU customers must demonstrate eligibility with a verified medical diagnosis of a significant visual impairment. WDU customers must also seek an approved employment goal, which they develop with their VR counselor. After a customer is confirmed eligible, he or she is assigned to one of SSB's 15 VR counselors located at 13 offices across the state. The counselor, along with other SSB staff, guides the customer through an array of vocational assessments to gauge interests, abilities and needs.

Customers have access to other SSB staff, including job placement and assistive technology specialists. Job placement specialists conduct labor market analyses to gauge the opportunities available for different career paths, help customers write cover letters and resumes, prep for interviews, and line up work experience and jobs.

Assistive technology specialists help customers get the software and devices that best meet their needs, depending on their level of vision and the type of work they hope to do. Staff members outline the technology and services that will aid customers in reaching their goals.

SSB customers come from a range of life circumstances and have varying needs and abilities. Some people come to SSB after a recent vision loss due to an accident or illness, while others may have lived their entire lives with little to no vision.

Those who recently lost their vision often go through a challenging adjustment period, during which many attend adjustment to blindness (ATB) training to learn the skills needed to adapt to life without sight. During ATB training, they learn a range of independent living skills including: mobility and travel skills such as how to get around with a white cane and use public transportation; home and personal management such as how to cook or manage money and medications; communication skills including reading and writing braille; and technology skills to use computers, accessible software and other electronic devices.[6]

People who have lived without vision for a longer period or are already living independently may not need ATB training. Instead, they may only need to learn a specific skill set to keep their current job or take their career further, such as learning a new

[6] ATB training is not covered by medical insurance, except very limited amounts in specific circumstances. Thus customers are left to pay out-of-pocket without SSB to help.

software program or obtaining a new credential.

All customers may choose to further their education or pursue specific vocational training. Depending on their career goals and prior education, some customers only need to take a couple of courses, while others enroll in full-time certificate or degree programs, ranging from occupational training to master's degrees. About 35 percent of customers from 2012 to 2016 left SSB with more education than when they arrived, with nearly 60 percent having completed at least some postsecondary education.

When training is complete, the customer is ready to enter the job market or take the next career step. At this point, the job placement team, or other contracted providers, offer additional support to customers who do not already have a job or are just learning to navigate the application process. In addition to finding employment opportunities for customers, job placement specialists can identify and coordinate accommodations on-site.

"When we work with our customers, we explain that they must be able to do everything that their sighted peers can do, although they may use different tools to do it," says Dave Smith, job placement specialist.

With the right tools, people with vision impairments can perform many of the same duties as those with full sight. Extra lighting or larger monitors are examples of simple accommodations that can make a big difference. Accessible software, such as JAWS, enables people to navigate a computer with keyboard and audible controls. Special headsets permit employees to simultaneously answer phones and listen to computer commands.

Technological advancements have led to more sophisticated equipment, such as desktop CCTVs that enlarge print materials, braille displays that allow people to read their computer screens, and braille note takers for students or employees to keep up in meetings.

Youth

Students as young as 14 can enroll and begin developing a foundation for career success. In fact, just over 35 percent of WDU customers from 2012 to 2016 were under 30 when they enrolled, with nearly 25 percent between the ages of 14 and 21.

During their time with SSB, youth work with specialized staff to explore career options, connect with mentors, develop their skills and gain work experience. Many students receive ATB training to learn the skills necessary to succeed in both their academic and professional careers. Students also can participate in summer enrichment programs that are geared to help build confidence and develop "soft skills" through networking and

TABLE 3

Administrative Data on the Visually Impaired in Minnesota

	2014 SSB Sample		2012-2016 SSB Sample	
Total Customers Served*	1,087	100.00%	1,991	100.00%
Blind	661	60.81%	1,178	59.17%
DeafBlind	70	6.44%	121	6.08%
Low Vision	314	28.89%	624	31.34%
Successful Closures	117	40.48%	586	41.12%
Unsuccessful Closures	172	59.52%	839	58.88%
Annual Income**	113	$26,240.85	556	$26,162.67

*Includes those who started an application and the eligibility process, but may have closed before reporting their vision condition.

**Prior to WIOA, customers who accepted unpaid positions, such as an unpaid family worker, were considered successful closures. Only those with income above $0 were included in the average.

Source: DEED, State Services for the Blind (SSB)

socializing, practicing travel techniques to get around on public transportation, and visiting postsecondary schools.

Following the passage of WIOA and its youth funding mandate, SSB began revamping its youth programming in 2015. In addition to the services listed above, the new transition team focuses on designing specialized services for students 14 to 21 years old through targeted outreach and collaborative efforts with partner organizations, including schools. SSB staff members are now more involved in students' education planning, helping to improve the transition to college and work.

New year-round afterschool programs allow youth to enhance social and life skills. Improved coordination with employers helps youth gain work experience and build resumes. The annual Career Expo connects youth with adult mentors in their fields of interest, while the Blind and Socially Savvy program helps boost confidence and self-esteem. Parents have reported watching their children transform, as their sense of independence flourishes after participating in these programs.

A key component of youth programming is self-advocacy, teaching kids at a young age how to talk about their disability, their needs, and how they are able to get the job done. When youth begin by talking to their teachers about their disability and necessary accommodations, they are more prepared to directly respond to employers when the time arises. SSB's philosophy is to hold young customers to high standards and teach them that they are capable of achieving their goals.

Successes and Challenges

SSB staff members strive to help all customers realize their full potential and become competitive job candidates who are as qualified as their sighted peers. WIOA regulations define a successful closure as a case that is closed because a customer obtains employment in a competitive integrated setting, and unsuccessful when closed for any other reason.

An unsuccessful closure does not mean that all effort was lost. Customers may be forced to stop participating due to unforeseen life circumstances, such as illness or relocation. They may decide to work with another agency or organization, or they may not be ready to make the life changes required to complete their program and begin working. Sometimes the hard work a customer puts in pays off months or years later when they find a job on their own, or they return to SSB to finish their work.

From 2012 to 2016, 41 percent of SSB customers closed their cases successfully. Of those cases, about 44 percent found full-time work, earning an average wage of $20.36 per hour, while 56 percent found part-time work earning an average of $14.05 per hour. Table 4 shows the top 10 industries where SSB customers found jobs and their average wages by industry.

The benefits of employment are far-reaching, extending beyond the customer. Many can become fully self-sufficient, getting off government assistance and living independently. Moreover, society experiences a return on investment. Employers benefit from their work, and their tax contributions are reinvested in schools and infrastructure.

As previously mentioned, some people come to SSB to retain their current job. In these cases, customers often only need help finding the right tools or refining skills.

SSB specialist Dacia VanAlstine recalls one customer on the brink of losing his retail job because he took too long to complete inventory. After assessing the situation, SSB staff provided him with a Ruby, a handheld video magnifier, and recommended that his manager use larger print for the inventory sheets. After making those simple adjustments, he cut his inventory time in half and kept his job.

Despite the help they receive from SSB, many customers still face challenges when seeking employment. As Figure 1 shows, customers who complete a postsecondary degree are more likely to get a job, but there is still a substantial portion of SSB customers who complete degrees and do not find jobs. Some customers who struggle to find work and face repeated rejections begin to feel helpless, give up and become what economists call "discouraged workers," leaving the workforce altogether.

Persistence can pay off, however, as Nichoel Schlender's story exemplifies. Schlender was born blind due to a congenital illness. Although she earned an associate degree and had computer skills, she was unemployed when she arrived at SSB.

Schlender enrolled in additional vocational training and worked with technology specialists to

TABLE 4

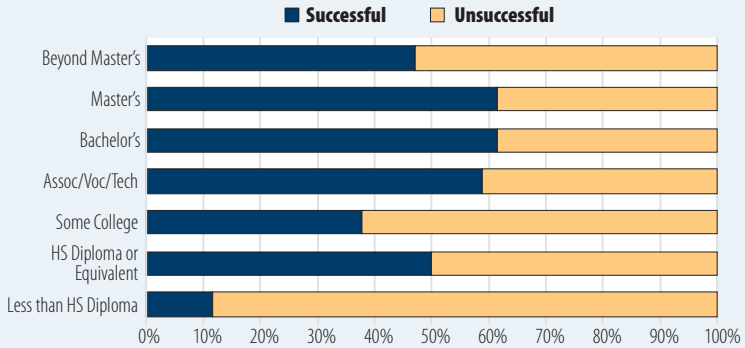
Top 10 Industries for SSB Customers

Industry	Percent	Wage
Office and Administrative Support	18.3	$12.81
Sales and Related Occupations	9.0	$12.12
Education, Training and Library	7.7	$23.83
Community and Social Services	6.3	$17.50
Business and Financial Operations	6.0	$23.04
Food Prep. and Serving	5.3	$10.15
Health Care Support	5.3	$15.14
Management	5.3	$30.48
Personal Care and Service	5.1	$12.05
Computer and Mathematical	3.9	$23.39

Source: DEED, State Services for the Blind (SSB)

FIGURE 1

2012 - 2016 SSB Customer Education Levels at Exit and Closure Type



Source: DEED, State Services for the Blind (SSB)

become more proficient on computers. But she still could not find work and landed in a sheltered workshop earning less than minimum wage. SSB staff helped her pursue more challenging work and eventually broke through to an employer, insisting that her braille proficiency made her perfect for a job.

Schlender has worked full time as a customer service representative at Ecolab for nearly 1½ years now. She receives benefits, earns a living wage and has received awards for both quality and attendance. She is grateful for her job at Ecolab, which allowed her to move out of low-income housing into a market-rate apartment that she loves and to socialize more with her new co-workers.

SSB customers face many of the same challenges that their sighted peers face when seeking employment, but their struggle is frequently exacerbated by accessibility issues and employer attitudes. Job postings often list seemingly unrelated minimum requirements that discourage qualified workers from applying, such as needing a valid driver's license or being able to see and hear. Pre-employment tests are often administered by employment agencies that do not provide accessible computers, and physical spaces can be difficult to navigate.

Unfortunately, society still has many misconceptions about what blind people can and cannot do. Employers and hiring managers who are unaware of the available tools and the abilities of blind people are not only missing out on competent employees, but may be excluding them.

Schlender encountered numerous employers who were resistant to letting SSB staff perform technology assessments and test software compatibility.

An understanding hiring manager can be a key factor, says SSB specialist Dave Smith. "It all comes down to the individual. If he or she previously encountered someone with a disability, then they are more likely to understand."

Conclusion

While much progress has been made to integrate people with disabilities into society and the workplace, much work needs to be done. Programs like SSB help people overcome personal barriers, but the data show that self-determination and training aren't enough. Policymakers and employers must help open doors for visually impaired people by making policy decisions and implementing practices based on data that are most appropriate for the population and context.

Large-scale, generalized data sets like the ACS can misrepresent the employment landscape for specific subgroups, like blind, DeafBlind and low vision Minnesotans. Agencies like SSB are excellent sources of information in such cases. Not only can SSB provide data and statistics on Minnesota's visually impaired population, but staff can help educate policymakers and employers on the employment barriers of visually impaired people and how organizations can become more accessible.

DEED and SSB encourage businesses to implement thoughtful recruiting strategies and invest in technology that creates a more accessible work environment. Removing barriers, such as unnecessary minimum requirements and inaccessible pre-tests, serves everyone better, as employers gain access to a larger pool of employees and provide access to those who did not previously have it. Technology investments pay off when positions are filled with efficient and effective employees.