Assessing the Impacts of Ability One at Melwood





CREATED BY THE VIRGINIA TECH CENTER FOR ECONOMIC AND COMMUNITY ENGAGMENT AND THE VIRGINIA TECH INSTITUTE FOR POLICY AND GOVERNANCE. AUTHORS INCLUDE:

Sarah Lyon-Hill, Ph.D., Afroze Mohammed, Lara Nagle, David Moore, Ph.D., Hye-Jeong Seo, and Allison Ulakey







Executive Summary

During 2021 and 2022, Melwood commissioned the Virginia Tech Center for Economic and Community Engagement (CECE) and the Virginia Tech Institute for Policy and Governance (VTIPG) to conduct an impact study of their AbilityOne program. The research team designed a cost-benefit analysis to assess the return on investment (ROI) of the program and conducted a programmatic assessment that would inform how key components of the AbilityOne program contribute to public impact.

The Virginia Tech research team drew from existing industry and academic literature, interviews with AbilityOne stakeholders, and Melwood operational data to identify and estimate the Outcomes and impacts of the AbilityOne program. ROI findings represent a conservative estimate of programmatic impact, as many benefits of AbilityOne could not be quantified or included in the model. **The annual public impact of one AbilityOne employee is \$60,000.** This impact includes:

- **Fiscal Impact.** The livable wages provided through the AbilityOne program allow for a greater fiscal impact. Annual taxes collected by state and federal government agencies from AbilityOne employee income and regional spending equals \$9,655 per person.
- **Government Savings.** Full-time employment and livable wages also allow AbilityOne employees to reduce, go off of, or avoid signing up for government benefits such as Supplemental Security Income, Medicaid, SNAP, and state-run vocational rehabilitative services. Lower turnover rates among AbilityOne employees also save government money through fewer annual background checks. Scholarly consensus also suggests that the social networks and sense of purpose provided through AbilityOne work results in lower healthcare spending. Together, these outcomes result in an annual, per person government savings of \$38,354.
- **Gross Regional Product.** Finally, the additional purchasing power of AbilityOne employees equates to growth for the regional economy. AbilityOne employees who would otherwise be paid less in the private sector or be unemployed can support regional businesses and help their families. Because of the tight labor market, it is reasonable to assume that these individuals are not taking jobs from otherwise unemployed residents in the region. As a result, the increased labor income and regional spending contributes \$12,073 per person to gross regional product.

The annual cost of AbilityOne is represented by the congressional budget allocation to the AbilityOne Commission and the cost of AbilityOne contracts that go to Melwood. Note that a contract would have to be purchased regardless of AbilityOne. While the team's interviews with stakeholders revealed a perception that a traditional private contract might cost up to 20% less than a similarly scoped AbilityOne contract, the research team has not reviewed evidence of a difference with the exception of a 3.75% central non-profit agency fee permitted by the AbilityOne Commission. For the sake of argument and to be conservative, the research team has assumed a 3.75% - 20% cost differential for purposes of this cost benefit analysis. Should the cost differential actually be lower or non-existent, then the return on the federal government's investment would actually be greater than this study suggests.

The research team compared the return on investment for three scenarios: 1) the existing scenario with AbilityOne; 2) a scenario without AbilityOne where half of the individuals who work on AbilityOne

contracts find employment elsewhere and half no longer work due to the severity of their disability, limited access to on-the-job supportive resources, and other systemic barriers to employment; and 3) a scenario without AbilityOne where all AbilityOne employees are unemployed. Table ES-1 summarizes the findings, showing that the scenario with full employment through AbilityOne has greater returns.

Table ES-1. Return on Investment (ROI) Estimates by Scenario (Based on Melwood numbers)				
AbilityOne exists	\$1.35-\$1.51	\$1.94-\$9.71		
No AbilityOne and half of AbilityOne employees	\$1.17-\$1.20	\$1.17-\$1.20		
are employed elsewhere				
No AbilityOne and all current AbilityOne	\$1 to \$1 return if the co	st of the contract equaled		
employees are unemployed	the benefits provided through the work			

*Public cost difference between the AbilityOne program and the alternative (traditional private contracts) without AbilityOne

These impacts would not be possible without several programmatic components that enable AbilityOne employee success in the workplace. First, the expertise and in-depth knowledge of AbilityOne Non-Profit Agency (NPA) staff allows for more comprehensive vocational assessments and better support of AbilityOne employees. NPA staff specialize in supporting people with significant disabilities who would otherwise have difficulty finding and maintaining work. They are also knowledgeable about the landscape of services and opportunities for people with disabilities in addition to their own support services. Second, these programs target those with significant disabilities and help them to work seamlessly in traditional work environments so that many government clients only perceive the quality of work provided. Third, the training and support mechanisms that AbilityOne NPAs provide goes above and beyond typical vocational rehabilitative services, ensuring that AbilityOne employees succeed in their jobs. Finally, while the service occupations that AbilityOne provides are typically limited to certain fields, these occupations are needed in today's economy and can be a good match for many people with significant disabilities.

These different programmatic elements inherently contribute to the overall success of the AbilityOne program. As such, the recommendations below directly or indirectly contribute to public benefit.

- AbilityOne should continue to offer full-time, well-paid occupations and should increase benefits counseling.
- Congress and the AbilityOne Commission should develop more incentives for federal agencies and businesses to work with AbilityOne NPAs, giving NPAs more opportunities to leverage their expertise and support to a wider range of people with significant disabilities.
- AbilityOne NPAs should better communicate how they reinvest the net proceeds of AbilityOne contracts into necessary support services and the resulting benefits.
- The AbilityOne Commission and federal agencies [and NPAs] should help to grow the capacity of AbilityOne representatives (ABORs) across government agencies to better advocate for, evaluate and enhance AbilityOne employment initiatives for people with disabilities.
- The US AbilityOne Commission, SourceAmerica and NPAs should put systems in place to better evaluate AbilityOne in the future.

Acknowledgements



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As part of this study, we also interviewed individuals in many other organizations, who also were forthcoming and helpful with their perspectives on the AbilityOne program as well as the landscape of employment for people with disabilities. These organizations include:

Larysa Kautz is President & CEO of Melwood.

- Association of People Supporting Employment First
- Chimes, District of Columbia
- Crowell & Moring
- D.C. Department on Disability Services
- Didlake, Inc.
- Eli Lilly
- Goodwill of Greater Washington
- Head Start to Life, Inc.
- National Organization on Disability
- Rappahannock Goodwill Industries
- ServiceSource
- SourceAmerica
- U.S. Bureau of Engraving and Printing
- U.S. Department of Defense
- U.S. Food and Drug Administration
- Virginia Department for Aging and Rehabilitative Services
- VersAbility Resources

All photos in this report are provided courtesy of Melwood.

About the Authors

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Study Authors:

Sarah Lyon-Hill, Ph.D., Associate Director for Research Development, Virginia Tech Center for Economic and Community Engagement (<u>sarahlh@vt.edu</u>).

Afroze Mohammed, MBA, Associate Director for Strategic Alliances, Virginia Tech Center for Economic and Community Engagement (<u>afroze@vt.edu</u>).

Lara Nagle, MSLA, MURP, Community-Based Research Manager, Virginia Tech Institute for Policy and Governance (<u>lkn4187@vt.edu</u>).

David Moore, Ph.D., Research Scientist, Virginia Tech Institute for Policy and Governance (<u>dmoore@vt.edu</u>).

Allison Ulaky, BA and Candidate for MURP (2023). Graduate Assistant, Virginia Tech Center for Economic and Community Engagement.

Hye-jeong Seo, BS and Ph.D. Candidate in Planning, Governance, and Globalization. Graduate Assistant, Virginia Tech Center for Economic and Community Engagement.

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Introduction

The AbilityOne Program, administered by an independent federal agency, facilitates the employment of people who are blind or have significant disabilities so they may achieve their maximum employment potential. As one of the largest sources of employment for this population in the United States, AbilityOne has certified over 500 nonprofit organizations to "employ these individuals and provide quality products and services



Melwood employees work in a variety of occupations, such as custodial services.

to the Federal Government at a fair market price".¹ Like many government programs, AbilityOne has come under scrutiny by law makers and political analysts who question the program's cost effectiveness and its competitiveness with private companies and programs doing similar work. In 2021, the AbilityOne nonprofit, Melwood, contracted with Virginia Tech to conduct a cost-benefit analysis of Melwood's AbilityOne program. The goal was to assess the true cost of Melwood's AbilityOne program to the federal government and understand the broader benefits of this socio-economic program.

The Virginia Tech research team approached this research in three iterative phases. The first phase set a foundation for the research and development of the initial cost-benefit model. Between May and July 2021, the team gathered existing documents on the employment landscape of people with disabilities, the history and current trends of the AbilityOne program, and previous cost-benefit and impact studies on programs that employ people with disabilities. Additionally, the team conducted exploratory interviews with Melwood staff. The second phase of this research consisted of interviews with individuals outside of Melwood that would contribute to the assessment of the AbilityOne program, identify recommendations of how the program could increase its beneficial impacts, and inform the development and findings of the cost-benefit model. From July 2021 to January 2022, the research team conducted 25 interviews with Melwood staff (19%), peer NPAs (35%), critics and advocates within the larger AbilityOne ecosystem (27%), and a random selection of Melwood's government customers (19%).

As the research team gathered information through phases one and two, they were able to develop a list of benefits produced through the program, some of which were then quantified into key impacts cited in the literature and interviews. The research team was unable to capture all benefits in a quantitative form for the model due to limitations in research and the sheer challenges of objectively measuring certain impacts. Captured benefits contributed to understanding better the annual public

impact of the AbilityOne program. The program's return on investment was then compared to scenarios where AbilityOne did not exist and current AbilityOne employees were either employed elsewhere, or unemployed.

The following report begins with an overview of disability employment, AbilityOne, and previous work done to assess the impacts of disability workforce programs. It then describes the cost-benefit model developed through this process and the key findings. The programmatic assessment section then highlights key components that contribute to the overall benefits generated through the program. Finally, based on the interviews and cost-benefit analysis findings, the Virginia Tech team offers recommendations for how the program could continue to grow its benefits to the public, as well as a description of the limitations of this study.

Disability Employment, AbilityOne, and Previous Cost-Benefit Analyses

The definition of disability is a key factor in how and whether individuals with disabilities qualify for workforce and social service supports. However, definitions range from very narrow to broad. Under the Javits-Wagner-O'Day (JWOD) Act that established the U.S. AbilityOne Commission, the AbilityOne program serves those who are blind or significantly disabled, defined as a "person (other than a blind person) who has a significant physical or mental impairment (a residual, limiting condition resulting from an injury, disease, or congenital defect) which limits the person's functional capabilities (mobility, communication, self-care, self-direction, work tolerance or work skills) [so] that the individual is unable to engage in normal competitive employment over an extended period of time" (2015b, p. 3).

The Office of Disability Employment Policy reported 33.5% labor force participation rate for people with disabilities in 2020, compared to a 76% rate for people without disabilities (ODEP, 2021).¹ In fact, the U.S. Senate Committee on Health, Education, Labor, and Pensions noted in a 2012 report that the



Workers with disabilities can be successful in their careers with the appropriate supports.

country has "had great difficulty moving much beyond a 33 percent employment rate for Americans with disabilities in the last three decades" (p. 6). According to the Bureau of Labor Statistics, barriers to employment for people with disabilities include "a person's own disability, lack of education or training, lack of transportation, and the need for special features at the job... Among persons with a disability who were employed, over half experienced some difficulty completing their work duties because of their disability" (2020, n.p.). Poverty and disability are also closely intertwined, where "exposure to social and environmental risk factors for intellectual disability such as poverty, undernutrition, environmental toxins and infections" can increase likelihood of disability, and where disability status

¹ The Labor Force Participation Rate is equal to the labor force (sum of employed and unemployed) divided by the entire population ages 16-64 (civilian, non-institutionalized).

can make it more difficult to achieve socioeconomic stability and quality of life (Emerson, 2007).

While people with disabilities face numerous challenges in securing and maintaining employment, Dean et al. (2019) describe how workforce programs can help to ensure valued outcomes in the disability field by promoting three policy goals: "(a) human dignity and autonomy, (b) personally satisfying human endeavor, and (c) human engagement. Within this framework, integrated employment and enhanced self-determination are critical outcomes for people with disabilities" (p. 111). Consistent on-the-job and wrap-around supports have also proven to be essential for strong job performance for people with significant disabilities. For example, employer engagement and community partnerships are necessary to address challenges that employees with disabilities face, such as lack of transportation to get to work or need for on-site job coaching. Transferable skills including problem-solving and goal setting, as implemented in models such as the Self-Determined Career Design Model (SDCDM), can also benefit people with disabilities over the long-term as they seek and retain employment (Dean et al., 2019).

A review of studies of competitive employment for people with disabilities also confirmed that the benefits of hiring people with disabilities included "improvements in profitability (e.g., profits and cost-effectiveness, turnover and retention, reliability and punctuality, employee loyalty, company image), competitive advantage (e.g., diverse customers, customer loyalty and satisfaction, innovation, productivity, work ethic, safety), inclusive work culture, and ability awareness" (Lindsay et al., 2018, p. 634). Workplaces that are universally inclusive of all employees, for example those that adopt universal design principles and offer job coaching to everyone, can more systematically accommodate those with disabilities into the workforce and may benefit those who choose not to formally report their disability, as well as workers without disabilities (Kaletta et al., 2012).

The AbilityOne Program

The AbilityOne program is one of the largest workforce development programs employing people with significant disabilities. The U.S. AbilityOne Commission, comprised of 15 presidential appointees, oversees two central nonprofit agencies that administer the program: SourceAmerica and National Industries for the Blind. For the purposes of this research, we focus solely on the population served by SourceAmerica, which administers programming for the significantly disabled. The nearly 500 NPAs in the SourceAmerica AbilityOne system are a diverse group of U.S. nonprofit organizations, which must 1) have a primary purpose of



Melwood participates in job fairs and other events to share information about its programs.

serving individuals with disabilities, 2) provide training and employment services to people with significant disabilities, and 3) ensure that no part of their net income may inure the benefit of any shareholder or private individual (SourceAmerica, 2022).

A 2017 report by *Mathematica Policy Research* provides some descriptive statistics for the SourceAmerica NPA network (Levere, Sevak & Stapleton, 2017). Of 494 NPAs at the time, 14% produced products only (sheltered employment), 60% provided services only (largely integrated employment) and 26% provided a mix of products and services. Thirty-five percent of NPAs were categorized as large (more than 200 workers), 47% as medium sized (50-199 workers) and 18% were small (fewer than 50 workers). This study focuses on Melwood, a large NPA in the Washington DC metro area, and examines service-only positions. These positions through Melwood offer "supported employment" to people with significant disabilities. Supported employment (SE) provides a mix of vocational rehabilitation, coaching, and other services based on individual need in an integrated employment setting.

AbilityOne contractors are subject to both the Service Contract Act (SCA), which requires that employees be paid the prevailing wage for their labor category plus a minimum health and welfare benefit, and Executive Order 14026, which requires federal contractors to pay a minimum wage of \$15/hr. Under new rules currently being considered, "under a Federal contract that is covered by both the SCA and Executive Order 14026, a worker performing contract work must be paid at the higher applicable wage rate" (Committee for Purchase from People Who are Blind or Severely Disabled, 2021).

Past Cost-Benefit Analyses for Disability Programs

Cost-benefit analysis (CBA) is a systematic way to determine what beneficial outcomes may be expected from the costs of program interventions, sometimes incorporating the opportunity costs of alternative interventions, no intervention, or the status quo. Variations of CBA include cost-effectiveness analysis (CEA) and return on investment (ROI). "On a national level, return on investment [ROI] is often a prominent factor in discussions about vocational rehabilitation services and their impact on society. These discussions may have wide implications on funding decisions, accessibility issues, and ultimately an impact on the employment of individuals with significant disabilities across the United States" (Bualam & Bias, 2011, p. 25).

Tracking participant outcomes can occur in a variety of ways, such as cross-sectional analysis (which considers the probability of employment and income at one or multiple points in time for people with disabilities who have participated in rehab versus those who have not); longitudinal analysis (which measures pre-post outcomes for individuals with disabilities who participate in a rehab program, which may not distinguish between gains made as a result of the program specifically or external to the program); and longitudinal analysis with a control group (which attempts to control for external gains that would have happened in the absence of a rehab intervention).

Selected Findings from Previous Studies

Studies have noted ways to assess net private benefit, net lifetime benefit (assuming the intervention has longer-term impacts for the client that outlast the costs of the program), and social benefits. In addition to the quantitative benefits calculated, for instance, Kenyon et al. (2005) conducted focus groups showing overall benefits were higher for those receiving vocational rehabilitative services than for those not receiving any program support. Benefits included higher rates of transferrable skills, increased self-esteem and sense of independence (i.e., expendable income, ability to care for others), reduction in the use of health services, and an increase in workforce involvement of caregivers.

Calculating the cost efficiency of supported employment for people with disabilities from the taxpayers' perspective, Cimera (2010) found that "the average supported employee with intellectual disabilities served by vocational rehabilitation agencies from 2002 to 2007 generated a per capita gross monthly benefit to taxpayers of \$769.54 (in 2008 dollars)" with an ROI of \$1.21 of benefits for every \$1.00 of costs (p. 23). There was little difference in cost-benefit outcomes for supported employees with and without secondary disability or health conditions. Over the 5-year period of the study, Cimera (2010) also found that cost efficiency did not change, suggesting that the policies and practices governing and funding supported employment did not substantially change during that period. "Another significant finding from the present research was that, on average, supported employees acquired more government subsidies after applying for vocational rehabilitation services than they received prior to applying for services," attributable partly to clients' increased awareness and access to professional assistance to apply for additional help (Cimera, 2010, p. 25). Nonetheless, the study concluded that supported employment was overwhelmingly cost efficient in most of the U.S. states and territories.

Benefits can also be estimated over the long-term (Bua-Iam & Bias, 2011). Using a random sample of West Virginia Division of Rehabilitation Services (WVDRS) consumers with significant disabilities, Bua-Iam & Bias (2011) calculated ROI based on administrative and service costs in contrast with wages, social security savings and taxes, as well as Medicare, federal, and state taxes. They determined that "the estimated cost of human capital investment on WVDRS consumers with significant disabilities (\$13,312,865) is more than fully recovered [by government] in less than one year of estimated earnings (\$25,898,305) generated by WYDRS consumers after exiting the VR [vocational rehabilitation] system. The \$1-to-\$1.95 ROI after the first year clearly validates the WVDRS program as being an efficient and accountable state-federal VR program" (p. 29). The ROI estimate improves to \$5.75 for every dollar spent over a 3-year period.



Melwood employees provide essential services to maintain a safe work environment for clients.

An average annual and hourly cost-benefit analysis of supported employment in Minnesota found generally positive outcomes for individuals, taxpayers and society. Lewis et al. (1992) studied 1,892 individuals with moderate to severe disabilities being served by 11 agencies offering habilitation training, on-site employment ["sheltered"], and community-based group and individual supported employment (SE). "The results indicate that all forms of SE are cost-effective when compared with habilitation training [one-on-one training], with annual returns for society averaging over \$2 for each \$1 invested in SE. When SE programs (i.e., both group and individual SE) are compared with on-site employment... positive results for society are indicated in 7 of the 11 agencies and in 15 of the 22 SE programs, with annual returns for most of the agencies as a group averaging between \$1.30 and \$4 for each \$1 invested" (Lewis et al., 1992, p. 83).

Lewis et al. (1992) also found that on-site, sheltered employment was costlier from a governmental perspective than community-based SE, though in some cases, on-site employment allowed employees with disabilities to maximize their annual disposable earnings. In contrast, other cost-benefit studies have found that SE is more expensive than other types of programs to run, such as sheltered workshops, habilitation and vocational training [Rogers, 1997]). However, Lewis et al. (1992) found that employees in SE experienced non-monetary benefits, such as community integration and increased self-confidence and autonomy, that the authors note were not sufficiently represented in the CBA.

Limitations of CBA

Overall, the inability to explicitly monetize intangible social and community benefits of workforce development programs, such as increased self-confidence and autonomy for individuals with disabilities, is a limitation of CBA. Generally, it is also advised that the program or intervention being analyzed for costs and benefits should also be stable and established in order to provide enough information to study the cost-benefit. Comparison across findings from different CBA studies can be problematic if the studies did not consider the same suite of variables, use the same accounting framework, or approach the question from the same perspective (individual, taxpayer, and/or societal) (Rogers, 1997).

Projections of future benefits are potentially inaccurate estimates because they may be based on multiple assumptions, such as how long an individual will remain employed following a vocational intervention, what medical or vocational services they will need, and how much they will be earning. Cost-benefit studies that assume zero earnings in lieu of the vocational intervention will likely overestimate the benefits because some individuals will find employment elsewhere. In any CBA study, assumptions and the accounting framework used must be clearly defined (Rogers, 1997).

Impacts of AbilityOne

Based on the interviews and other reports, the research team developed a cost-benefit model to understand the overall impacts of AbilityOne on "the public," in other words, impacts on taxpayers and their regional economy. In this study, we take a cross-sectional approach, exploring what happens to people with significant disabilities with and without AbilityOne at a given point in time (one year). AbilityOne is the largest collective source of employment for people with significant disabilities in the United States. Many interviewees suggested that without AbilityOne programming, other alreadystrained programs would not be able to absorb this population or meet their needs due to the severity of certain disabilities. In several circumstances, the service work provided through AbilityOne involves daily supervision and greater support than typical vocational rehabilitation or developmental disability services can offer. As such, this cost benefit analysis (CBA) models three scenarios:

- 1. A scenario without AbilityOne where those with significant disabilities work on an AbilityOne contract cannot find employment,
- 2. A more modest scenario without AbilityOne where half of those with significant disabilities who work on an AbilityOne contract find employment elsewhere and half no longer work due to the severity of their disability and limited access to on-the-job resources,
- 3. The existing scenario with AbilityOne.

The cost of AbilityOne is represented by the annual congressional budget allocation to the AbilityOne Commission and the cost of AbilityOne contracts that go to Melwood. In FY2021, the budget for the AbilityOne Commission was \$13.9 million, and the program ultimately serves more than 42,200 people who were blind or had a significant disability. If the budget were evenly spread across AbilityOne participants, that would be a cost of \$330 per person (US AbilityOne Commission, 2022).



Melwood employees work as a team to help maintain facilities.

The cost of AbilityOne contracts is very different from costs calculated in cost-benefit analyses of traditional vocational rehabilitative (VR) services described in the literature review. In those instances, the cost often covers the VR services alone, which are funded through government dollars. In the case of AbilityOne, the cost includes the cost of VR services (for some), other supports such as on-site training and case management, and the work done by AbilityOne contract employees for the service-purchasing government entity. If AbilityOne did not exist, a large portion of that cost would still exist through service contracts with traditional private contractors. According to AbilityOne legislation, program fee ceilings for AbilityOne nonprofits—or additional fees beyond the cost of the service—can be no more than 3.75% of the service cost. We have captured this fee as a unique cost of the program in our cost-benefit analysis. Interview testimony suggested a perception that the AbilityOne contracts cost up to 20% more than similarly-scoped traditional contracts. While no concrete evidence was presented to defend this claim, the research team assumed a cost differential for the sake of argument.

The research team captured both a 3.75% and 20% cost differential in the analysis. Should the cost differential actually be lower or non-existent, the return on the federal government's investment would actually be greater than this study suggests. Annual AbilityOne at Melwood contract costs are approximately \$70.2 million, which would make traditional private contract costs \$56.2 (assuming a 20% cost differential) or \$67.6 million (assuming a 3.75% cost differential). Table 1 on the next page shows a breakdown of the cost-benefit model for Melwood's AbilityOne program. In certain cases, the per person benefits could be applied to other AbilityOne program annually. Ultimately, one AbilityOne employee provides a public impact of \$60,082 or \$25,030 more than someone who works through a traditional state VR program. The AbilityOne program at Melwood provides between \$1.35 and \$1.51 for every \$1 invested (ROI), while a state program offers an ROI of \$1.17 to \$1.20. When considering the costs of AbilityOne versus other options, the difference in costs (or marginal investment) ranges from \$2.8 million to \$14.2 million. Comparing that to the benefits received through the program, return on marginal investment can be as high as \$9.71 for every dollar invested or as low as \$1.94 for every dollar invested.

	ANNUA	L PER PERS	ON IMPACT	TOTAL ANNU	JAL IMPACT (Assuming 639 employ	/ees annually)
	WITHOUT AE PROGR		WITH ABILITYONE PROGRAM	WITHOUT ABILITYONE PROGRAM		WITH ABILITYONE PROGRAM
IMPACTS (BENEFITS)	UNEMPLOYED	EMPLOYED	EMPLOYED WITH ABILITYONE		50% OF ABILITYONE EMPLOYEES ARE EMPLOYED ELSEWHERE AND THE REST ARE UNEMPLOYED	EMPLOYED WITH ABILITYONE
1) SSI dollars saved	\$ -	\$7,654	\$9,528	\$ -	\$2,445,453	\$6,088,392
2) Saved Medicaid dollars	\$ -	\$14,059	\$25,305	\$ -	\$4,491,691	\$16,170,087
3) SNAP dollars saved	\$ -	\$417	\$417	\$ -	\$133,084	\$247,424
4) VR services savings	\$ -	\$-	\$2,357		\$ -	\$376,563
5) Added contribution to regional GDP	\$ -	\$7,020	\$12,073	\$ -	\$2,242,890	\$7,714,647
6) Added fiscal impact due to AbilityOne employee greater purchasing power	\$ -	\$801	\$1,377	\$ -	\$255,920	\$879,903
7) Income tax fiscal impact	\$ -	\$4,875	\$8,278		\$1,557,455	\$5,289,523
8) Less strain on public healthcare system	\$ -	\$228	\$228	\$ -	\$72,796	\$145,592
9) Dollars saved due to less turnover	\$ -	\$ -	\$65	\$ -	\$ -	\$41,490
			TOTAL BENEFIT	S		
BENEFIT PROGRAM SAVINGS, TAXES GENERATED AND CONTRIBUTION TO REGIONAL GDP	\$ -	\$35,053	\$60,082	\$-	\$11,199289	\$38,750,297
WORK DONE THROUGH CONTRACT				\$56,162,031	\$56,162,031	\$56,162,031
			TOTAL COSTS			
A1 CONGRESSIONAL BUDGET ALLOCATION DIVIDED EVENLY \$286 AMONGST A1 EMPLOYEES		\$286			\$182,571	
ANNUAL CONTRACT COSTS		\$56,162,031-\$67,569,944 \$70,202,539		\$70,202,539		
Difference in contract costs (or 3.75% - 20% Cost Premium Associated with A1)			\$2,836,506-\$14,223,079			
RETURN ON INVESTMENT (For every \$1	invested)			\$1	\$1.17-\$1.20	\$1.35-\$1.51
RETURN ON MARGINAL INVESTMENT ASSOCIATED WITH ABILITYONE (where the \$3-\$14 million difference in A1 and private contract costs is the "marginal investment" required for the A1 program at Melwood)			\$1	\$1.17-\$1.20	\$1.94-\$9.81	

Table 1. Melwood's AbilityOne Cost-Benefit Model

Benefits from the AbilityOne program at Melwood are derived from a set of hypotheses developed and confirmed through interviews, literature, and annual administrative data provided by Melwood. The following is a list of those hypotheses and the resulting qualitative and quantifiable impacts on the public (Table 2). The research team then provides a description of each hypothesis and impact components, pulling from the interviews and literature. Additional information about impact calculations are in Appendix A. These benefits change depending on the given scenario; for instance, AbilityOne employees would generally be paid less through other employment or not paid at all if unemployed, resulting in fewer fiscal and economic benefits to the public.

BENEFITS	QUANTIFIED PUBLIC IMPACTS
 AbilityOne employees are on fewer governi benefits than they would be otherwise 	 Supplemental Security Income (SSI) saved due to less need by AbilityOne employees Medicaid dollars saved because AbilityOne employees are on employer's insurance SNAP benefits saved due to less need Money saved from fewer people signing up for state VR and DD services because they've joined AbilityOne program directly from school
2. By working in the federal government, with government wages, AbilityOne employees I greater purchasing power and greater econ and fiscal impact. They earn more than the would in a private sector job, and their employment through AbilityOne contracts result in less leakage for the regional econo	 Added fiscal impact from increased income taxes Added economic activity due to quality paid employment (greater purchasing power); Added fiscal impact due to greater purchasing power of AbilityOpe employees
 AbilityOne employees are mentally and phy healthier in the long-term because they are self-sufficient financially and physically 	I ess strain on nunlic healthcare system lising I
 Employers receive equal- or more-reliable a consistent work with AbilityOne employees 	
 AbilityOne employees' family members are able to work as well since they do not have take care of their family members as much 	
 Greater integration of AbilityOne employee society leads to less stigma faced by those intellectual and developmental disabilities 	•

TABLE 2. Described Benefits of AbilityOne and Possible Quantifiable Impacts

Benefit 1: AbilityOne employees are on fewer government benefits.

The consensus among NPAs interviewed was that AbilityOne employees are on fewer benefits, and most are completely off government benefits because they work full-time and have livable wages. NPAs estimated between 70 and 100 percent of their AbilityOne employees are full-time and on employer benefits such as healthcare and retirement. NPAs encourage employees to get off government benefits but do not mandate it because in some cases, given the type or severity of disability, staying on some government benefits makes sense. For instance, some benefits take time to reapply for and establish



Melwood employees work with AbilityOne employees to navigate government and private benefits

than others. Each NPA also described the benefits counseling they provide and point to lack of knowledge and understanding as a hurdle to getting off government benefits. One NPA representative explained, "Most folks don't want to lose their government benefits because they don't know the system. They're afraid they'll lose their medical coverage if they lose their government benefits. It's often an issue of educating employees about the system and their finances."

By comparing median quarterly earnings of AbilityOne employees at Melwood (FY18-20) with median quarterly earnings reported by the Rehabilitative Services Administration at its 13th General Session (RSA, 2021), it is evident that **people with disabilities working for AbilityOne earn median salaries 42% greater than the median salary of those who work elsewhere**. This greater income results in AbilityOne employees using fewer or no supplementary security income (SSI), Medicaid health insurance, or SNAP benefits. Moreover, interviews with different AbilityOne NPAs revealed that a minimum of 25% of people entering AbilityOne programs never sign up for or receive vocational rehabilitative services (VRS) elsewhere, saving state programs money. Table 3 lists per person savings from different government programs whether the individual is unemployed, working through a state workforce agency, or is employed with AbilityOne. The research team assumed that a person with a disability, entering into an AbilityOne contract, and using NPA services in lieu of state VRS services, would otherwise use VRS services.

	SSI savings	Medicaid Savings	SNAP Savings	Vocational Rehabilitative Services (VRS) Savings
Unemployed without AbilityOne	\$0	\$0	\$0	\$0
Employed without AbilityOne	\$7,654	\$14,059	\$417	\$0
Employed with AbilityOne	\$9,528	\$25,305	\$417	\$2,357

Benefit 2: AbilityOne employees earn higher wages than typical market wages, leading to greater purchasing power and a higher fiscal impact on the regional economy.

All AbilityOne advocates and NPAs emphasized that being employed through AbilityOne means not only government benefit savings, but also that these AbilityOne employees are contributing to federal and state governments through taxable income and valuable work that needs to be done. One NPA explained, "[critics] don't understand that [the AbilityOne] money is going to feed troops, clean programs, etc. The money is being paid for services regardless of AbilityOne provider or a non-AbilityOne provider, to do logistics, transport, food services, etc. [Other VR service organizations] wouldn't be able to just collect this money and put it towards other models that they like [if it were freed up from AbilityOne]." In other words, a contract for services would have to be created regardless of whether it is an AbilityOne contract or a traditional private firm contract. The investment in question really is the marginal cost difference between AbilityOne and a private contract, approximately 20% according to interviews.

The research team used the same income estimates as were used to calculate government benefit savings, first to calculate income tax revenue to the government and then to calculate regional spending impacts. To calculate the economic activity generated and fiscal impact of AbilityOne employee spending, the team used IMPLAN, a highly reputable input-output modeling software that estimates the ripple effects of dollars spent in a regional economy. Table 4 provides per person estimates of fiscal and economic spending impacts.

	Annual median income	Annual median contribution to Federal and State income taxes, Social Security, and Medicare (assuming 30% of income)	Tax Results from	Value-added in economic impact due to employee spending (contribution to GDP)
Unemployed	\$0	\$0	\$0	\$0
Employee without AbilityOne	\$16,088	\$4,875	\$801	\$7,020
Employee with AbilityOne	\$27,667	\$8,278	\$1,377	\$12,073

TABLE 4. Per Person Income and Regional Spending Impacts

Several NPAs and advocates also pointed out that any residual funds generated through AbilityOne are reinvested to support AbilityOne employees and others with disabilities through vocational rehabilitative services, developmental disability services, and day camps for those who cannot work. A representative from an NPA stated, "If not for AbilityOne, we would not be able to provide a [summer camp] program to 600 [youth]". In private sector contracting, residual funds would often go to shareholders or elsewhere. While the research team did not account for these savings in the CBA model, it should be acknowledged that this reinvestment could result in more public savings and savings to families who would otherwise pay for such services.

Benefit 3: AbilityOne employees are mentally and physically healthier in the long-term because they are more self-sufficient financially and physically.

Regular work offers a person a sense of purpose and usefulness, social connections, and physical and financial self-sufficiency. All of these can result in a mentally and physically healthier way of life and reduced need for healthcare services. One AbilityOne NPA explained AbilityOne's role and connection between work and health:

Quality employment is with an employer who is invested in supporting them and nurturing their growth to wherever that takes them. The individual feels connected, everyone wants to belong and feel like you're working for an employer who cares and has your best interests in mind and has your safety and wellbeing in mind. Most of the AbilityOne [contractors] are like that. They're not fly by night contractors, they're in it to serve their community not just for AbilityOne funding. Great connection there. These are stable opportunities generally; outpatient assistance is willingly provided. And the safety net aspect: if it doesn't work out [elsewhere] and you want to come back, there's that connection.

Many studies have established the association between employment status and health for the general population across many demographics (Yelin & Trupin, 2003; Thomas & Ellis, 2013; Ross & Mirowsky, 1995; McKee-Ryan et al., 2005). A small number of studies among them specifically focused on people with disabilities and reached the same conclusion that employed individuals with disabilities are healthier than those with a disability who are not employed (Turner & Turner, 2004; Marwaha & Johnson, 2004; Okoro et al., 2007). These studies discovered that employment leads to less frequent mental health symptoms for people with mental health illness, physical disabilities, or any disability.

While there is no doubt that employment has a positive impact on individuals' health conditions in general, very few studies looked at the actual savings of healthcare costs caused by employment. Gibbons & Salkever (2019) estimate the causal effect of employment on mental health (MH) status and total MH costs for persons with severe mental illness (SMI). The study utilizes Maryland's Public Mental Health System (PMHS) health care claims data for 5,162 persons with SMI from 2006 through 2009. The results show that employment reduces total mental health costs on average by \$538 over 185 days, or \$2.91 per day. This study is one of the first that uses a methodology that establishes causation instead of correlation when estimating the effects of employment on mental health outcomes. The research team used the Gibbons & Salkever (2019) estimate of annual savings and applied it to the proportion of the healthcare



system that is public. According to the American Hospital Association (2022), 19% of hospitals are federal, state or local government hospitals. Accounting for inflation, annual healthcare cost savings are \$1,199 for an individual enrolled in AbilityOne. With 19% of these individuals using public healthcare, this trend translates to a public savings of \$228 per AbilityOne employee. These savings are likely higher than this estimate.

Benefit 4: Employers receive equal- or better-quality work because AbilityOne employees are more dedicated and have the support they need to ensure less employee turnover. Through interviews, many AbilityOne stakeholders discussed the perceived quality of the work provided by AbilityOne employees. Those interviewed also tended to say that AbilityOne streamlined the contracting process and was faster and easier than traditional contracting. Moreover, **government representatives cited low employee turnover as a benefit to their offices.** Below are some quotes:

Organizations like Melwood have proven it's as good or better, but many in the government stigmatize the quality of the work that is conducted by AbilityOne employees.

I've never had a bad experience. They do a great job and I believe they deliver on our scope of work requirement as prescribed. To the best of my knowledge, no complaints among the other staff. In fact, I believe it's welcomed that we have an AbilityOne contract, and they perform at a high level and provide us with a really great service... our agency personnel have warm feelings towards the AbilityOne staff and many of them understand the dynamic there. A lot of individuals may have a disabled person in their own life, so they appreciate a big agency can employ the disabled. Our management would agree with that, we are proud of that program.

Workers perform exceptionally, very dedicated employees who take pride in what they do for us for the program. Long-term employees, not much turnaround. Have had people on board for 25+ years.

Indeed, there is academic consensus that people with disabilities have lower turnover rates than their peers without disabilities. These lower turnover rates benefit employers through consistent quality work, less disruption during the workday, and additional monetary and logistical efficiencies (Adams-Shollenberger & Mitchell, 1996; Fredeen et al., 2013; Harlan & Robert, 1998; Ju, Roberts, & Zhang, 2013; Pisano & Austin, 2016; U.S. Department of Labor Office of Disability Employment, 1994). According to an analysis conducted by Boushey & Glynn (2012) reviewing 30 case studies in 11 research papers published between 1992 and 2007, businesses spend about one-fifth of an employee's annual salary to replace that worker. Table 5a shows the per person costs and dollars saved through AbilityOne based on the costs of replacing an employee by employer type and



AbilityOne employees provide services to several government agencies.

turnover rate, assuming the median income for Melwood's AbilityOne employees, \$27,320.

	Cost of replacing employee (20% of median income)	Turnover rate ²	Per person cost	Per person dollars saved
Non-AbilityOne Private Contractor (typical regional turnover for janitorial services)		68%	\$3,716	\$0
Employed without AbilityOne in 2020 (DARS/RSA)	\$5,464	44%	\$2,404	\$1,312
Employed with AbilityOne at Melwood		25%	\$1,366	\$2,350

TABLE 5a. Per Person Costs to Employer Due to Annual Employee Turnover

In the case of AbilityOne, these turnover costs typically fall on the NPA, so are not included in the CBA model. Even if AbilityOne did not exist, turnover costs would still be the responsibility of the contractor, not the federal employer. Nonmonetary costs that would fall on the government would be the logistical inefficiencies and nuisances that arise from new employees coming into a job. Monetary costs to the government would include the added security clearances needed for new employees, one item that can be readily quantified. As Table 4b illustrates, retaining an AbilityOne employee provides significant savings on average for annual background checks.

TABLE 5b. Per Person Federal Background Check Savings Due to Less Employee Turnover

	Cost of one background check	Turnover rate	Per person dollars saved
Non-AbilityOne Private Contractor (typical regional turnover for janitorial services)		68%	\$0
Employed without AbilityOne in 2020 (DARS/RSA)	\$151	44%	\$36
Employed with AbilityOne		25%	\$65

According to EMSI (2021), a well-recognized economic and labor market tool, the rate of turnover for janitorial employees (Janitors and Cleaners, Except Maids and Housekeeping Cleaners) in the Washington DC region is 68%. If we use Adams-Shollenberger & Mitchell (1996)'s 24% gap, we posit that the turnover rate for employees with disabilities in general is 44%. The turnover gap for AbilityOne employees was provided by Melwood.

² Adams-Shollenberger & Mitchell (1996) discovered that **janitors with intellectual disabilities employed by accredited rehabilitation facilities had a 24% lower turnover rate compared to workers without a disability (66% compared to 90% after 1 year)**. Although Adams-Shollenberger & Mitchell (1996) is a relatively old study conducted during a different economic situation, its 24% of turnover rate gap seems to be reasonable and conservative considering that other studies have similar turnover gap estimates. In addition, the study examined similar occupation types (janitorial workers) provided by the Melwood AbilityOne program.



AbilityOne employees have lower turnover rates, often because they prefer the livable wages and support services provided by Melwood

Critics of AbilityOne have explained that low turnover means that AbilityOne is not serving as a platform for integrating people with disabilities into the regular workforce. Instead, AbilityOne employees stay in the program. One interviewee questioned if low turnover was a symptom of people with disabilities not being able to find work elsewhere, referring to the lack of overall integration with society. This individual explained, "[I] would like to see [AbilityOne] tenure numbers go down [because] to me it is a sign of lack

of opportunities. We know they face prejudice through interviews and onboarding, so we hide behind the claim that they want to stay." Another reason for why AbilityOne employees may stay in AbilityOne jobs is that similar positions in the private sector have significantly lower wages and few employer benefits. Considering AbilityOne employees also have additional vocational support that they may not have otherwise, advocates of AbilityOne questioned the logic behind AbilityOne employees transitioning to a job with lower wages and fewer support mechanisms to help them maintain and perform a quality job. An NPA stakeholder additionally noted that many NPAs offer outplacement assistance where desired, but also respect employees' wishes to remain in AbilityOne:

AbilityOne requires outplacement assistance for those who are capable and desirous of outplacement assistance. Most NPAs provide this, it's very robust in some cases, for those who ask for it and seek it out.... I've been with [the NPA] for [more than thirty] years. I know folks we employ who are not comfortable with the outplacement concept and who don't want to leave the organization. They feel it's their employer and has been for many years and they're hesitant to move on. Very few employers other than AbilityOne are expected to move their employees out – most employers want to keep their employees and invest in training. If our employees want that from us, we want to provide it. If it's a stepping stone, we will help them do that to move on. There are plenty coming in after them for the same opportunities.

This NPA stakeholder also noted that those who no longer qualify as in need of AbilityOne supports through the annual attestation process can no longer be counted as disabled direct labor and they will be supported in finding an outplacement opportunity. However, if the individual wants to remain employed through AbilityOne, the NPA will allow that at the expense of lowering their direct labor ratio, which could become a compliance issue if the overall ratio falls below 75%.

Benefit 5: AbilityOne employees' family members are better able to work as well since they do not have to take care of their family members with disabilities as much. NPA representatives described AbilityOne as a respite and lifeline for many families of AbilityOne employees with disabilities. One NPA representative even described AbilityOne employees who supported ailing family members and helped provide for their households. The following statement represents a common opinion among interviewees:

With every AbilityOne person who is truly qualified, you are really benefiting the family along with them because they're finding full employment, something they are proud of. It gives relief financially and mentally to the families because they have good jobs that can lead to a pathway to a continued career, which they wouldn't have if they weren't on AbilityOne.

Nearly half (46%) of family caregivers spend over \$5,000/year on out-of-pocket caregiving costs, with 30% of those spending more than \$10,000/year (Caring.com, 2014). AARP (2021) specifically stated that caregivers spent on average \$7,242 of their own money on caregiving in 2021. This amount increases if the recipient of care also has mental health concerns, raising expenses to \$8,384. AARP (2021) also stated that by having two or more work related strains, such as taking paid/unpaid time off or having to work different or fewer hours, that annual caregiving expenses go up to \$10,525. This spending is often going into an industry with notoriously low wages and a tight labor pool; spending this money elsewhere in the economy would likely result in a greater multiplier effect and overall higher economic impact. The costs cited above also assume families pay. Some individuals with disabilities have supports through Medicaid and Community-based Services Waivers. If these services are no longer needed due to a person with a disability working, that represents a saving of public funds (not included in CBA analysis).

Family members often must reduce working hours, as a third of caregivers spend more than 30 hours a week on caregiving for a family member (Caring.com, 2014). Mudrazija (2019) is one of the few studies that details the opportunity costs of caregivers not working full time and how much is lost due to not working. Caregivers had a 9% lower likelihood of working and worked 2.1 fewer hours per week than non-caregivers (Mudrazija, 2019). Therefore, in 2013, the total estimated opportunity cost of not working due to caregiving (either for someone with IDD or an elder) is \$67 billion for the entire U.S. population (Mudrazija, 2019). Average costs per caregiver were \$5,251 lost and \$6,898 per care recipient lost due to not working (Mudrazija, 2019). The additional cost per U.S. resident due to these individuals not working is \$211, with taxes being lost due to their decreased employment or unemployment (Mudrazija, 2019). These costs can differ substantially based on age of caregiver, race/ethnicity, and educational level (Mudrazija, 2019). However, this shows that the opportunity cost of not working to be a caregiver can decrease large portions of one's income.

Per Person Savings from Family Members Who Can Now Work Thanks to AbilityOne

The majority of AbilityOne employees work full-time, which can free up a family member who would normally serve as an on-call caretaker, working part-time or not at all. In several instances, AbilityOne programs also tailor worktimes for AbilityOne employees to the needs of their family caretakers. As a result, these individuals and their time serve as additional capacity to the nation's workforce; their additional taxed income contributes to state and federal budgets.

Because this impact is more indirect than other impacts assessed in this study, the research team did not include it in the overall cost-benefit model. However, it is important to be aware that this is an additional impact. If drawn from Mudrazija's (2019) estimate, the annual opportunity cost of caregivers not working is \$6,108 in 2021 dollars. Deriving state and federal taxes from that estimate, the additional tax revenue from a caregiver of a full-time employee with a disability is \$794. Assuming only 60% of AbilityOne employees have a caregiver affected by their full-time employment, average annual fiscal impact would be \$476 per AbilityOne employee, or \$304,427 in total for employees at Melwood.

Benefit 6: Greater integration of AbilityOne employees into society leads to less stigma for those with intellectual and developmental disabilities.

NPAs report that the stigma surrounding disability is persistent throughout society. It is still a common belief that people with disabilities cannot do certain jobs, and the success stories about people with Down's Syndrome who graduate from college, for example, are tainted by the assumption that these individuals are not capable of graduating in the first place. As one stakeholder noted, "it's infantilizing to assume they can't - or to ask, can they really do it?" AbilityOne endeavors to provide enough structure for individuals with significant disabilities to work in integrated settings, which increases awareness and combats stigma among the general workforce regarding the capacity of individuals with disabilities to work. One government official described how AbilityOne employees shift this stigma, saying:



Melwood strives to educate clients and the general public about the importance of an inclusive workplace.

We are constantly fighting the perception that these individuals do not work at the same level as other employees... I have had experiences at different installations where the people who came to work every day were the severely disabled. You could count on them. They wanted the job and it was the other 'healthy' people that were calling in sick and not coming to work. It is like the old postal service motto: 'Neither snow nor rain nor heat nor gloom of night stays these couriers from the swift completion of their appointed rounds.' These people showed up for work every day.

In a 2015 poll conducted by Shriver Media and Special Olympics International, the findings revealed that "more than half of Americans who have personal contact with someone with intellectual disabilities are increasingly accepting and positive. It also exposes that lack of contact has left a legacy of misinformation, dated stereotypes, ignorance and fear in the other nearly half of Americans" (Shriver Media, 2015, p. 1). These findings suggest that engaging with people with disabilities in a work environment can not only benefit the individual but also reframe coworkers' assumptions about the capacity of people with disabilities personally and professionally. Additionally, self-efficacy and thriving at work increase when an employee with disabilities feels included, individually and as part of a team (Zhu et al., 2019). Furthermore, placing individuals with disabilities on workforce boards, project design teams, and in other leadership positions can help to ensure employees with disabilities provide direct feedback on the design of services and improve the inclusivity of programs (Timmons et al., 2004).

Key Findings from the Cost-Benefit Analysis



OTHER PROGRAMMATIC BENEFITS (Not included in the CBA Model)

\mathcal{Q} **IMPACTS ON CAREGIVERS**

Without AbilityOne and other sources of supportive employment, many individuals with disabilities would rely on family caregivers, some of whom would not be paid and would not be employed elsewhere as a result. Mudrazija (2019) is one of the few studies that details the opportunity costs of caregivers not working full time and how much is lost due to not working. According to this source, caregivers had a 9% lower likelihood of working than noncaregivers. In 2021:





Average Tax Revenue from a Caregiver if Individual with Disability Works Full-Time



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Average Fiscal Impact if 60% of AbilityOne Melwood Employees Have a Caregiver Who Can Work

Nearly half (46%) of family caregivers spend over \$5,000/year on out-of-pocket caregiving costs, with 30% of those spending more than \$10,000/year. Family members often must reduce working hours, as 1/3 of caregivers spend more than 30 hours a week on caregiving for a family member (Caring.com, 2014). Families who work may instead have to pay for personal care assistants or adult day programs. If caregivers are not financially able, many of these expenses fall on the government, leading to more public spending. **Average Annual Expenses**



Annual Cost of Professional **Care Per Person**



\$38,000 Full-Time Personal Care Assistant

\$15,250 Full-Time Adult Day Program

E **IMPACTS ON EMPLOYERS**

According to an analysis conducted by Boushey & Glynn (2012) reviewing 30 case studies in 11 research papers published between 1992 and 2007, businesses spend about one-fifth of an employee's annual salary to replace that worker. In the case of AbilityOne, these turnover costs typically fall on the NPA. Assuming a median annual income for janitorial work of \$27,320, the annual cost and savings per person would vary by turnover rates.



Programmatic Assessment

AbilityOne NPAs described an environment that is tailored for helping employees with disabilities to gain employment, remove barriers that may arise, and prosper on the job. Several critical functions performed by NPAs to support employees are not directly billable to contracts. These include screening of potential candidates to ensure that they meet the Javits–Wagner–O'Day Act (JWOD) requirements, recruitment of candidates, and on-site vocational specialists to help employees succeed on the job. These functions are funded through reinvestment of margins NPAs receive from AbilityOne contracts. The research team determined that this reinvestment back into the employment programs to support employee success is largely why the program is successful in providing an annual economic impact of \$60,000 per AbilityOne



Melwood employees are often highly educated and trained to offer high quality, tailored support to AbilityOne employees

employee and a 9-30% greater return on investment compared to scenarios without AbilityOne.

Some highlights include:

- The service jobs analyzed through this research are in line with inclusive workplace policies and competitive integrated employment.
- NPAs have put into place processes to ensure that statutory and regulatory requirements for hiring people are being met, including initial screening for disabilities and determining ongoing eligibility. These processes and services fall outside the services described in AbilityOne contracts with employers.
- Understanding employees and providing adjustments or accommodations is integral to the employment process NPAs use for AbilityOne contracts. The focus is on how best to help an employee fulfill their responsibilities and succeed on the job. The extent and quality of assistance employees receive at the NPAs interviewed goes above and beyond what many private sector employers provide.
- Several NPAs have other benefits available that are valuable to employees with disabilities, with the goal of removing obstacles that employees may face. Examples of these benefits include providing transportation services for employees, the availability of funds to help employees with unexpected expenses, and one-on-one case management. Again, these services are not covered in AbilityOne contracts; rather they are implemented by NPAs to improve workers' experience and success on the job.
- NPAs leverage the knowledge they have of the landscape of services available to help people with disabilities, gained over decades in many cases, to help employees with disabilities, in areas including benefits counseling, additional job coaching services, and resources available in the community.

The efficiencies that result from these programmatic components help not just the employees involved, but also provide public benefit by enabling individuals with disabilities to lead richer lives. For a more detailed description of key program components influencing the overall impact of the AbilityOne, please see Appendix B.

Challenges to Calculating the Value of Socio-Economic Programs Like AbilityOne and Other Limitations

How do you assess the value of a program? Calculating the value or impact of a socio-economic program has two clear challenges. First, socio-economic programs are not solely put in place to generate money. So, it is difficult to assess them using models initially created for measuring the bottom line for private businesses. While numbers and cost-effectiveness can often speak more loudly and clearly to those interested in the bottom line, the dozens of intangible benefits cited by qualitative research and stakeholders are left out. This study was an attempt to incorporate as many benefits as possible in the cost-benefit model; however, given the limits of quantitative data, the research team had to make assumptions, use proxies, or capture smaller measures of impact than what the larger benefits of the program encompass. These estimates did not fully represent the larger benefits brought about by the AbilityOne program. This research is not exhaustive, but it illustrates the following benefits that cannot be quantified in the cost-benefit model:



Increasing awareness about job opportunities at Melwood.

- This model was a snapshot in time and leaves out the long-term effects of working in an integrated workplace, such as reduced stigma among coworkers, increased self-efficacy of individuals with disabilities, and greater long-term health resulting in greater healthcare savings.
- The benefits produced by a more integrated society such as fewer societal barriers to employment, less prejudice and more empathy among citizens, and more widespread participation in government and civil society.
- The benefits and cost savings to employers, such as increased efficiency due to lower employee turnover and improved productivity due to a more supportive workplace environment.
- The benefits to individuals and their families, including the pride individuals experience from participating in the workforce, greater financial and emotional stability, and greater ability to participate in society through work, volunteering, and recreation.

Yet, these nonmonetized benefits have arguably more significant, intrinsic impacts on individuals, employers, government, and society.

Second, the value of a program often depends on the vantage point or perspective of the individual. In this report, the cost-benefit model focused on impacts to the public, not individuals or employers. There are many benefits to individuals and employers alike that are listed in this report, but they are not

calculated in a way that captures the total benefits or returns-on-investments to these groups. Instead, the benefits are framed in a way to show money coming to or saved by government entities and money supporting the larger regional economy.

Particularly important in this case is the fact that the customer of the AbilityOne program, is also part of the government. However, since each agency oversees its own budgets, it may not account for the broader monetized benefits to "the government" of which it is a part. Rather, the government agency may consider the value of the work it is receiving and the cost of that work affecting its budget. Fortunately, as illustrated through interviews and surveys with employers and direct supervisors, many agencies also understand the broader socio-economic implications of the AbilityOne program and see themselves as playing a part in bringing those programmatic goals to fruition.

Other Limitations to the Study

Due to limited administrative data, time, and resources available, it was not possible to collect empirical data specific to Melwood for all potential costs and benefits. For example, adequate data regarding caregiver expenses for the families of AbilityOne employees, annual benefit spending by AbilityOne employee, and a quantitative estimate of the annual costs of a private contractor in lieu of AbilityOne were not available.

The interview sample was not representative of the entire AbilityOne ecosystem, in part due to the scope of the project, and potential nonresponse bias where stakeholders who were invited to participate declined to be interviewed.

Recommendations to Increase the Impacts of AbilityOne

AbilityOne should continue to offer full-time, well-paid occupations and increase benefits counseling efforts to ensure greater impact. The largest economic impacts from AbilityOne are derived from full-time, well-paid employment, which cannot happen without employees (and potentially families) having an informed understanding of the impact of their earnings on the receipt of public benefits. There may be part-time employees in the program who could move to full time employment with consistent benefits counseling provided at the start of their work and at periodic intervals. AbilityOne employees do not always understand the advantages of using employer benefits rather than relying on government benefits and the greater financial stability that can offer. In some cases, however, these advantages may not make sense or come to fruition, particularly for people with significant disabilities.

Develop more incentives for federal agencies and businesses to work with AbilityOne NPAs, giving NPAs more opportunities to leverage their expertise and support a wider range of people with significant disabilities. A key insight from interviews is that NPAs have a deep expertise in developmental disabilities and the employment of individuals with significant disabilities. This expertise is an important public asset that should be leveraged in other employment settings to increase the efficiency of hiring people with disabilities. The AbilityOne program should be expanded to include providing training and support to private government contractors to facilitate increasing employment of people with disabilities. One way of promoting these opportunities is for policymakers to consider mandating or at least moving more deliberately toward the 7% aspirational goal for federal contractors to hire people with disabilities. Mechanisms and incentives need to be established for government contractors to partner with NPAs who can provide their expertise in recruiting and hiring individuals with disabilities. NPAs could also fulfill employment subcontracts that provide the necessary on-the-job and wrap around supports for employees with significant disabilities.

Expand AbilityOne programming to occupations with higher paying wages. The types of jobs funded under the AbilityOne program should grow into areas beyond landscaping, logistics, facilities maintenance and management, and food services to better position individuals with disabilities to achieve greater financial stability if they seek employment outside of the AbilityOne program. A broader range of job types, including more administrative or information technology positions, could both expand the services (and funding) that could be provided under the AbilityOne program as well as increase the pool of candidates who would be interested in AbilityOne positions. With this expansion, there would be a learning curve for NPAs, who would need additional time to achieve competency in new fields.

AbilityOne NPAs should promote and market the substantial reinvestment of net proceeds into supportive services and the resulting benefits. A significant portion of the higher net proceeds attributed to AbilityOne pay for employee vocational support, assistance with navigating non-employment challenges, and other education services. These services are a key factor in guaranteeing the success of AbilityOne employees. Without these services, AbilityOne employees may not be able to maintain their employment or deliver the quality of work that government customers have come to

expect. As such, the sustainability of AbilityOne requires adequate proceeds in addition to other revenue streams.

Grow the capacity of AbilityOne representatives (ABORs) across government agencies to better advocate, evaluate and enhance AbilityOne employment initiatives for people with disabilities. ABORs serve as excellent go-betweens for AbilityOne NPAs and government employers. The clients with ABORs in their offices tended to better understand the multiple social and fiscal benefits arising from employing people with disabilities through AbilityOne. These positions facilitate greater communication and responsiveness to customer needs, and they increase advocacy for AbilityOne across the government. It is important to advocate for an active Cross-Agency ABOR team, established in 2020 by the Office of Federal Procurement Policy.

The AbilityOne commission, NPAs and Congress should agree upon a way to measure the success of the AbilityOne program. As discussed, one can take many different approaches to measuring the value of a program. Traditionally, impact assessments account for the cost effectiveness or bottom-line of a program. However, with socio-economic programs like AbilityOne, cost effectiveness of a service is only one, minor objective of the program. The more important goals are better measured by understanding the quality of employment received by AbilityOne employees, and their increased ability to integrate with and be fully active citizens of their communities, economies, and society at large. As such, coming to a consensus on how to measure success of the program is vital.

Put data systems in place to better evaluate AbilityOne impact in the future. Several data points were difficult to gather or did not exist, which led the research team to rely on assumptions based on literature and secondary data sources. In order to conduct a more accurate economic assessment, AbilityOne NPAs should create mechanisms for gathering and aggregating the following anonymized data per AbilityOne employee for a given fiscal year.

- Basic employee data including annual earnings through AbilityOne, additional annual income, household composition, household income, annual taxes paid, additional services provided through AbilityOne NPA and outside of AbilityOne NPA (also cost of those services), turnover rate for all AbilityOne employees
- What federal and state program benefits AbilityOne employees are using and how much income those benefits provide annually
- Survey of perceived benefits of the AbilityOne program by AbilityOne employees. Benefits could
 include the extent to which employees feel more independent/self-sufficient physically and
 financially, whether they have a greater social network or experience less stigma on the job,
 whether they think they would be employed if not for AbilityOne, and the impacts on their
 family caregivers.
- Survey federal agencies contracting with AbilityOne, asking about perceived benefits of the program, AbilityOne employee social integration with others in the work environment, and savings due to less employee turnover.

Appendix A: Cost-Benefit Analysis Underlying Data and Methods

Below are descriptions of how each quantifiable CBA metric was calculated and the key assumptions and data driving each analysis. In many cases, per person data is not collected by Melwood. For instance, data about whether an AbilityOne employee is currently on social security income (SSI) or social security disability income (SSDI) and how much they are earning is collected or available. In these cases, the research team made assumptions based on documented policy.

Supplemental Security Income (SSI)

For this study, the research team assumes all AbilityOne personnel with disabilities would be eligible for SSI. A few may also be eligible for Social Security Disability Insurance (SSDI) as well; however, the majority of AbilityOne employees have congenital disabilities and only qualify for SSDI under certain, narrow conditions that would likely not apply in this case. According to the Social Security Administration (2021), the maximum monthly SSI benefit for an individual in 2021 was \$794. Considering that AbilityOne works with people with significant disabilities, the research team assumed that AbilityOne employees would be otherwise eligible for the maximum monthly benefit. The Social Security Administration also states that the first \$65 of monthly income of an employed individual qualifying for SSI is nondeductible; after the first \$65, SSI benefits are reduced by \$1 for every \$2 earned, even if benefits are reduced to \$0.

	Median Qtr. Earnings	Median monthly earnings	Monthly SSI benefit cost using \$794	Annual SSI cost based on maximum SSI benefit	Annual SSI savings
Unemployed without AbilityOne	N/A	N/A	\$794	\$9,528	\$0
Employed without AbilityOne	\$4,022	\$1,341	\$156.17	\$1,874	\$7 <i>,</i> 654
Employed with AbilityOne	\$6,917	\$2,306	\$0	\$0	\$9,528

TABLE 6. Per Person Annual Supplemental Security Income (SSI) Savings

Medicaid

People with disabilities qualify for Medicaid health insurance. Medicaid reported that 2019 per capita expenditure estimates for people with disabilities in Melwood's service area (Virginia, Maryland, and Washington DC) were \$28,117 on average (U.S. Centers for Medicare and Medicaid Services, 2019). To estimate average per person Medicaid savings, the research team took the average per person Medicaid expenditures for people with disabilities and multiplied by the proportion of population who would be on Medicaid. One hundred percent of the unemployed population with disabilities would likely use Medicaid, saving zero dollars. According to U.S. Census, 50% of people with disabilities working in this region used Medicaid, with annual per person costs to Medicaid being \$14,059 on average (U.S. Census, 2022). AbilityOne employees with disabilities at Melwood are covered by employer insurance; to be

conservative, the research team estimates that 10% still have Medicaid expenses and would have per person savings of \$25,305 on average.

Supplemental Nutrition Assistance Program (SNAP)

FY2019 SNAP Quality Control data shows that 3,959,000 households with non-elderly individuals with disabilities, or 19.6% of individuals with disabilities, benefit from SNAP. Their average monthly benefit was \$177 (USDA, 2021). To be eligible for SNAP benefits, a household with an elderly or disabled person must meet the net income test, provided in Table 7 below (USDA, 2020).

Household Size	Gross monthly income (130% of poverty)	Net monthly income (100% of poverty)
1	\$1,383	\$1,064
2	\$1,868	\$1,437
3	\$2,353	\$1,810
4	\$2,839	\$2,184
5	\$3,324	\$2,557
6	\$3,809	\$2,930
7	\$4,295	\$3,304
8	\$4,780	\$3,677
Each additional member	\$1,383	\$1,064

TABLE 7. Income Ceiling for SNAP Benefits by Household Size (USDA, 2020)

Even if AbilityOne employees lived by themselves, only 61 of the 639 people with disabilities working for AbilityOne during FY2019-FY2021 would qualify for SNAP benefits. Only 45 of 639 make less than 80% of \$1,064. It is likely that most AbilityOne employees live with one or more individuals, increasing the likelihood that most if not all AbilityOne employees would not qualify for SNAP benefits. If only 19.6% of AbilityOne employees with disabilities would qualify for SNAP if not with AbilityOne, the per person annual savings with AbilityOne would be \$417.

Vocational Rehabilitative Services (VRS)

When looking for the average annual cost of VR and DD services, the research team found average annual cost of VR services for Virginia but not Maryland or D.C. According to Virginia's State Rehabilitation Council 2020 Annual Report, the total amount spent on all clients in SFY20 was \$15.3 million. The average cost for a non-SWD (student-aged client with disability), successfully closed, was \$2,050 in FY20 and the average cost for an SWD, successfully closed, was \$2,466 in SFY20. Over \$10 million (65.3% of total expenditures) was spent on supported employment and job coach training services and just over \$1 million (7.0% of total expenditures) was spent on training, including tuition (DARS, 2020).

The research team took the average annual cost for VR for non-student-aged clients in Virginia, \$2,050, and adjusted for the cost-of-living index from the Council for Community and Economic Research (C2ER) in the Washington-Arlington-Alexandria, DC-VA-MD-WV metropolitan area to more accurately represent

costs in that region. The adjusted cost would be \$2,357 per person. Since NPAs estimated that 25% of AbilityOne employees do not even enter VR state systems, the annual savings to state governments is \$376,563 for Melwood AbilityOne employees (or 25% of 639 employees multiplied by \$2,357).

Economic Activity and Fiscal Impact Generated

The research team used the same income estimates as were used to calculate government benefit savings, first to calculate income tax revenue to the government and then to calculate regional spending impacts. Income taxes considered were:

- Federal Income Tax Rate: 12% for single filers making \$9,951-\$40,525
- State Income Tax Rates: have different ranges for Virginia, Maryland, and Washington DC. To be conservative, the research team assumed a 3% state income tax.
 - Virginia: 2-5.75%
 - o Maryland: 2-5.75%
 - Washington DC: 4-8.94%
- Social Security Withholding Rate for employees and employers is 6.2% each (12.4% for both)
- Medicare Withholding Rate for employees and employers is 1.45% (2.9% for both)

To calculate the economic activity generated and fiscal impact of AbilityOne employee spending, the team used IMPLAN, a highly reputable input-output modeling software that estimates the ripple effects of dollars spent in a regional economy.⁵ The key assumption for this calculation is that those who would have these government jobs without AbilityOne are already employed in other positions in the region or they live outside the region and would commute in for work. As such, the additional income of AbilityOne employees in the region would contribute to increasing overall GDP and government revenue for the region (Table 4). Considering the tight labor force environment of the past several years, this assumption seems reasonable.

Public Healthcare Savings

Many studies have established the association between employment status and health for the general population across many demographics (Yelin & Trupin, 2003; Thomas & Ellis, 2013; Ross & Mirowsky, 1995; McKee-Ryan et al., 2005). A small number of studies among them specifically focused on people with disabilities and reached the same conclusion that employed individuals with disabilities are healthier than those with a disability who are not employed (Turner & Turner, 2004; Marwaha & Johnson, 2004; Okoro et al., 2007). These studies discovered that employment leads to less frequent mental health symptoms for people with mental health illness, physical disabilities, or any disability.

While there is no doubt that employment has a positive impact on individuals' health conditions in general, very few studies looked at the actual savings of healthcare costs caused by employment. Hall, Kurth, & Hunt (2013) analyzed 2010 Medicaid and Medicare claims data to calculate healthcare costs for those in employed and not employed groups (Table 8). The analysis shows that the employed group had lower overall Medicaid and Medicare costs compared to the unemployed group (\$1,212.17 vs. \$1,558.46 per person per month). These results, however, do not necessarily imply a causal relationship – i.e., employment leads to healthcare cost savings—because other factors may also influence employment and/or medical costs that this study does not consider.

Medicaid and Medicare expenditures per member per month claimed in 2010	Employed (n=381)	Not Employed (n=395)
Outpatient	\$1,010.12	\$1,118.67
Inpatient	\$202.05	\$439.79
Total	\$1,212.17	\$1,558.46

TABLE 8. 2010 Medicare and Medicaid Expenditures (Per Person Per Month)

Source: Adapted from Hall, Kurth & Hunt (2013).

Bush et al. (2009) is the very first and only longitudinal study in the U.S. that explores the impact of employment on healthcare costs for individuals with disabilities. The study calculates annual costs of outpatient services and institutional stays for 187 participants and examines differences between a steady-work group (n=51) and a minimum work group (n=136) during a ten-year period. The model controls for education, age, previous work, and illness severity. Results show that the average cost per participant for outpatient services and institutional stays for minimum-work group exceeded that of the steady-work group by \$166,350 over ten years. One limitation for this study is that it cannot completely rule out an alternative explanation that the individuals in the steady-work group are less ill, have better motivation, or respond better to mental health treatments that could lead to employment as well as reduced medical costs. In other words, the relationship between employment status and medical cost savings may not be a causal relationship, just correlated.

To rule out the possibility of correlation instead of causation, Gibbons & Salkever (2019) estimate the causal effect of employment on mental health (MH) status and total MH costs for persons with severe mental illness (SMI), using full information maximum likelihood to confirm no significant endogeneity of employment. The study utilizes Maryland's Public Mental Health System (PMHS) health care claims data for 5,162 persons with SMI from September 1, 2006, through August 31, 2009. The results show that employment reduces total mental health costs on average by \$538 over the 185 days (the average number of days of employment), converted to \$2.91 per day. This is the first study to our knowledge that uses a statistical methodology that can examine causation instead of correlation in the estimation of the effects of employment on mental health outcomes for persons with SMI. Table 9 shows the large discrepancy of average savings on healthcare cost caused by employment among the three studies, possibly due to the different estimation methods, geographies, and inflation.

TABLE 9. Average Annual Per Person Healthcare Cost Savings Relat	ed to Employment

	Hall, Kurth, & Hunt (2013)	Bush et al. (2009)	Gibbons & Salkever (2019)
Annual healthcare cost	\$4,155.48	\$16,635	\$1,062
savings	(\$346.29 per month)	(\$166,350 per 10 years)	(\$2.91 per day)

While interviews and literature established a relationship between work and healthcare savings, the estimates provided did not distinguish between personal and public savings. Moreover, the extent of dollar savings is less important in this case than the reduced strain on the healthcare system itself. To

represent less strain on the public healthcare system, the research team used the Gibbons & Salkever (2019) estimate of annual savings and applied it to the proportion of the healthcare system that is government funded. According to the American Hospital Association (2022), 19% of hospitals are federal, state or local government hospitals. Accounting for inflation, annual healthcare cost savings are \$1,199 for an individual enrolled in AbilityOne. With 19% of these individuals using public healthcare, this trend translates to a public savings of \$228 per AbilityOne employee. These savings are likely higher than this estimate.

Turnover Savings

There is an academic consensus that employers hiring people with disabilities experience lower turnover rates than their peers. However, there is scant evidence in the literature that people with disabilities who became employed through supported employment programs have lower turnover rates than people with disabilities who were employed without support from those programs.

- Janitorial workers with intellectual disability had a significantly higher retention rate compared to workers without disability (34% compared to 10% after 1 year) (Adams-Shollenberger & Mitchell, 1996).
- Employees with autism have dramatically lower turnover rates than neurotypical employees (Pisano & Austin, 2016).
- Individuals with disabilities had an 80% lower turnover rate than non-disabled (U.S. Department of Labor Office of Disability Employment, 1994).
- Many other studies support the lower turnover rates (Fredeen et al., 2013; Harlan & Robert, 1998; Ju, Roberts, & Zhang, 2013).

Lower turnover also results in additional monetary and logistical efficiencies. Lower turnover means less time spent on hiring and training. Turnover is a large expense for organizations. According to Boushey & Glynn (2012)'s analysis reviewing 30 case studies in 11 research papers published between 1992 and 2007, the authors concluded that businesses spend about one-fifth of an employee's annual salary to replace that worker. The costs of replacing a worker earning less than \$30,000 are estimated to be 16.1% of their annual salary, and the costs increase to 19.7% of the annual salary for workers earning less than \$50,000 and to 20.4% for those who are earning less than \$75,000 (Boushey & Glynn, 2012). Zivolich & Weiner-Zivolich (1997) also found that the Jobs Plus project of the Pizza Hut corporation saved more than \$8 million over a 6-year period due to reduced turnover rates after hiring people with disabilities.

In the case of AbilityOne, turnover costs typically fall on the NPA. Even if AbilityOne did not exist, turnover costs would still be the responsibility of the contractor. Nonmonetary costs that would fall on the government office would be the logistical inefficiencies and nuisances that arise from new employees coming into a job and adjusting to the learning curve. Monetary costs to the government would include the added security clearances needed for new employees. The National Agency Check with Inquiries (NACI) is the minimum level of investigation required for employment with the federal government. Standard investigations base billing-rate for a National Agency Check was \$151 in FY2020,

according to the National Background Investigation Bureau. This cost represents what individual agencies pay to conduct a standard background check.

As Table 10 illustrates, retaining an AbilityOne employee provides significant savings on average for annual background checks. Turnover rates were acquired through multiple sources. The research team identified the regional turnover rate for typical janitorial services through EMSI (2022). Shollenberger & Mitchell (1996) estimated the turnover rate gap between people with and without disabilities in janitorial services to be 24%. AbilityOne employees at Melwood have an average annual turnover rate of 25%.

	Cost of one background check	Turnover rate	Per person dollars saved
Non-AbilityOne Private Contractor (typical regional turnover for janitorial services)		68%	\$0
Employed without AbilityOne in 2020	\$151	44%	\$36
Employed with AbilityOne		25%	\$65

TABLE 10. Per Person Federal Background Check Savings Due to Less Employee Turnover

Caregiver Savings

There are studies that focus on the financial stress of caregiving (Heller et al., 1999; AARP, 2021; Mudrazija, 2019); however, these studies do not necessarily focus on caregivers specifically for those with significant disabilities. The literature is more broadly focused on caregiving in general, which can include elders, children with physical or developmental disabilities, or those with IDD or mental health issues. These studies state that family members who are caregivers experience economic strain due to having to work fewer hours, having less savings, accruing more debt, and being unable to pay bills. Without assistance or options for those that they are caring for, such as employment options, day programs, Medicaid, and others, the financial burden is significant for caregivers.

Opportunity Cost of Caregivers Not Working

Mudrazija (2019) is one of the few studies that details the opportunity costs of caregivers not working full time and how much is lost due to not working. Caregivers had a 9% lower likelihood of working and worked 2.1 fewer hours per week than non-caregivers (Mudrazija, 2019). Therefore, in 2013, the total estimated opportunity cost of not working due to caregiving (either for someone with IDD or an elder) is \$67 billion for the entire U.S. population (Mudrazija, 2019). Average costs per caregiver were \$5,251 lost and \$6,898 per care recipient lost due to not working (Mudrazija, 2019). The additional cost per U.S. resident due to these individuals not working is \$211, with taxes being lost due to their decreased employment or unemployment (Mudrazija, 2019).

Mudrazija also suggests that these numbers will only increase by 2050. Overall costs will increase to \$132 billion based on projected growth of population, cost per caregiver would be \$5,673, per care recipient \$7,454, and per U.S. resident \$325. These costs can differ substantially based on age of caregiver, race/ethnicity, and educational level (Mudrazija, 2019). However, this shows that the opportunity cost of not working to be a caregiver can decrease large portions of one's income.
Caregiving Expenses

Nearly half (46%) of family caregivers spend over \$5,000/year on out-of-pocket caregiving costs, with 30% of those spending more than \$10,000/year (Caring.com, 2014). Family members often must reduce working hours, as 1/3 of caregivers spend more than 30 hours a week on caregiving for a family member (Caring.com, 2014).

AARP (2021) specifically stated that in 2021, caregivers spent on average \$7,242 of their own money on caregiving expenses and on average, caregivers also spend a quarter of their annual income on caregiving, creating huge financial strain. This amount increases if the recipient of care also has mental health concerns, raising expenses to \$8,384 (AARP, 2021). AARP (2021) also stated that by having two or more work related strains, such as taking paid/unpaid time off, having to work different hours or fewer hours that annual caregiving expenses go up to \$10,525, as these individuals are sacrificing more of their work time to dedicate to caregiving, increasing the expenses that they are putting into caregiving.

Expense Type	Average Annual Expense
Average Annual Caregiver Expense	\$7,242
Household expenses	\$3,791
Caregiver personal spending (respite, travel, etc.)	\$1,058
Personal care expenses (for the recipient)	\$768
Recreation, education, legal, other expenses	\$400

TABLE 11. Average Annual Expense of Caregiving (AARP, 2021)

Table 11 shows that the largest expense is having the person being cared for at home, which could include rent, assisted living, home modifications, or relocation. It is possible that, by having persons with disabilities in employment and out of the house for the day, these costs could decrease.

Alternative Options Besides Employment

Families caring for adults with disabilities have unmet needs, including accessing information regarding future economic planning, case management, advocacy, respite care, and financial assistance (Heller et al., 1999). Other options than integrative employment could include personal care assistants, adult day programs, and institutional care, all coming at a cost to the families or government as well:

- Personal care assistants on average cost \$19/hour (costs range from \$14-27/hour) (Care.com 2018), equaling \$38,000/year if full-time (40 hours per week) for 50 weeks.
- Adult day programs on average cost \$61/day, equaling \$15,250/year if attending five days a week for 50 weeks (Care.com 2018).
 - However, this can range from \$31/day (\$7,750/year) to \$130/day (\$32,500/year) (Care.com 2018).
- Institutional care private room rates (not Medicaid reimbursed) are on average \$77,745/year (ranging from \$65,000-120,000/year) (Care.com 2018).

Although these costs may be substantial for families, these options provide families the opportunity to work and not have to give up their income for caregiving. However, the most affordable option would

be participating in integrated employment such as AbilityOne if it is a possible option, where family members with disabilities would also be getting paid and would be working, allowing caregivers to fully participate in their jobs as well.

Per Person Savings from Family Members Who Can Now Work Thanks to AbilityOne

The majority of AbilityOne employees work full-time, which can free up a family member who would normally serve as an on-call caretaker, working part-time or not at all. In several instances, AbilityOne programs also tailor work schedules for AbilityOne employees to the needs of their family caretakers. As a result, these individuals and their time serve as additional capacity to the nation's workforce; their additional taxed income contributes to state and federal coffers.

Because this impact is more indirect than other impacts assessed in this study, the research team did not include it in the overall cost-benefit model. However, it is important to be aware that this is an additional impact. If drawn from Mudrazija's (2019) estimate, the annual opportunity cost of caregivers not working is \$6,108 in 2021 dollars. Deriving state and federal taxes from that estimate, the additional tax revenue from a caregiver of a full-time employee with a disability is \$794. Assuming only 60% of AbilityOne employees have a caregiver affected by their full-time employment, average annual fiscal impact (added government income) would be \$476 per AbilityOne employee, or \$304,427 for 639 Melwood AbilityOne employees annually

Appendix B: Programmatic Components Contributing to AbilityOne's Economic Impact

Job Types

The NPAs interviewed provided most jobs in the AbilityOne program in the areas of food services, landscaping, and custodial services. Entry-level roles and transferrable skill development in these fields has made employment attainable for those with significant disabilities. Employees can apply the skills they've learned in the program to pursue self-employment by doing similar work, such as starting a landscaping business.

NPAs also are branching out into other areas such as logistics, asset management, warehouse operations and total facilities management, and IT services. These areas broaden the appeal of AbilityOne jobs to populations including those on the autism spectrum and disabled veterans.

Running Programs Efficiently and With a Customer Focus

While guided by a strong social mission, the NPAs interviewed highlighted the importance of running their programs efficiently. Understanding government contracting is important; the Chief Operating Officer (COO) of a large NPA noted that when he joined his organization, he was the only person on the team trained in government contracting. Another NPA executive noted that, "one thing that doesn't get considered very often, as a nonprofit, if you do AbilityOne or government contracting well, you can generate reasonable return, not an exorbitant but reasonable and appropriate level. As a nonprofit, we put that back into the program." According to several of the NPAs interviewed, these returns are reinvested into both supporting AbilityOne contracts and other programs for people with disabilities. NPA leadership emphasized their funding of vocational supports through returns (described in further detail later) to facilitate employee success on the job.

NPAs also leverage additional funding sources (in addition to internal investment) to support employees on the job. Some state vocational rehabilitation (VR) agencies provide time-limited coaching to employees as they start on the job. In Virginia, longer-term coaching services are supported by Community Service Boards, but funds are administered through the Virginia Department of Aging and Rehabilitative Services (DARS), the state's VR agency. Medicaid Waiver also funds long-term supports for candidates with intellectual and developmental disabilities (IDD). Medicaid Waiver and other long-term job coaching services defray the costs of supporting employees in AbilityOne employment programs. One NPA's vocational support budget is funded approximately 70% through internal sources and 30% from state or federal programs. Another organization emphasized that though some support may be available to employees from government sources, the help is not always available on time and their vocational team has to step in and solve problems for employees as needed. In addition, the vocational support provided by NPAs is critical to helping people who may not be eligible for job coaching through public funding sources.

Contracting

To gain an understanding of the customer experience, the research team requested to speak with Melwood customers and secured interviews with three. The agencies interviewed were satisfied with

the performance of Melwood on site and valued the presence of employees with disabilities at their facilities.

Agency procurement officials follow Federal Acquisition Regulations closely. While the decision to contract a particular service though AbilityOne is driven by the Federal Acquisition Regulations, most agency leadership interviewed understand and support AbilityOne's mission to provide employment to those with significant disabilities. They feel that they can acquire the services they need which are listed on the AbilityOne procurement list. In some ways, AbilityOne procurements are easier and more efficient than other procurement mechanisms.

Although price is not used as a selection criterion, the customer evaluates AbilityOne cost proposals against market rates and they explained that they are able to negotiate in good faith to achieve a fair and reasonable cost for the government. While price negotiations can sometimes be intense, the agencies are still able to ensure efficient use of taxpayer dollars in compliance with pay standards under the Service Contracting Act. AbilityOne contracting vehicles can be somewhat more expensive when NPAs go outside of their primary service competencies to more complex tasks, which may require additional training, but when they stay with their core competencies, AbilityOne providers have comparable price and performance characteristics compared to other types of vendors. Sometimes when the agency is facing a budget cut, scope reductions must be negotiated to reduce the contract price.

For AbilityOne and Small Business Administration (SBA) small business contracts (SBA provides another type of Socioeconomic Contracting [SEC] vehicle), one agency reported that they consider any small price premiums over fully competitive contracting processes to be justified by the social benefits. AbilityOne contractors and other SECs are expected to meet all contracting requirements just as other types of vendors do and they consistently meet all of those performance standards. The government agency utilizes many types of contracting vehicles and the AbilityOne contracts are efficient and not a source of concern compared to many others. As one stakeholder noted, "we may have to say, it's a little more expensive to hire an NPA – but you have to convince the government they shouldn't just be looking at price of the service. They also need to look at the cost generally speaking, rather than agency-specific costs."

Recruitment

There are many interactions between AbilityOne NPAs and state vocational rehabilitation (VR) agencies. Of particular importance is that in many states, VR is a major source of candidate referrals for AbilityOne jobs. The landscape for VR referrals changed after the passage of the Workforce Innovation and Opportunity Act (WIOA). The changing landscape of how state agencies treat AbilityOne jobs has created uncertainty for NPAs, as well as higher costs for recruiting in states where the VR agency does not refer candidates to NPAs, requiring the NPAs to develop recruitment channels elsewhere to fill jobs.

In states in which VR does refer to AbilityOne NPAs, including Maryland, Virginia, and Washington, D.C. of particular importance in Melwood's service area, there is a close relationship between NPAs and VR. One VR counselor noted that he considered which clients would be a good fit for the program: those

who need higher levels of support are good candidates for AbilityOne jobs due to the greater job support provided, as well as candidates who are willing to forgo public benefits for increased income: "if someone wants their full [government sponsored] benefits, I wouldn't suggest AbilityOne unless they want to consider losing their benefits."

Several NPAs cited their reputation and longevity of providing services in their communities as a means of recruiting candidates. One agency estimated that 70% of referrals come from VR and 30% from word of mouth.

Vocational Rehabilitation and Competitive Integrated Employment (CIE)

Several NPAs noted the changes created by the Workforce Innovation and Opportunity Act (WIOA) and specifically, its definition of Competitive Integrated Employment (CIE). Some state VR agencies made overall determinations that AbilityOne jobs did not meet CIE requirements. Others took a more case-by-case approach, sometimes visiting specific NPA sites before making decisions. NPA executives emphasized the negative impact on individuals with disabilities and their families if state VR did not apprise candidates of AbilityOne jobs, which previously had been on the menu of job options, denying these people beneficial employment opportunities. VR clients were not told about what AbilityOne jobs exist, and many did not know enough about AbilityOne opportunities to ask their VR counselors for information about these jobs.

NPAs that operate in states that do not consider AbilityOne jobs as CIE use other methods, such as job fairs and advertisements, to recruit candidates and to contend with turnover, to keep operations running. These other forms of recruitment incur additional costs for the NPA.

Screening Candidates to Ensure Compliance

One of the NPAs described how their processes begin with screening of candidates to ensure that their hiring would comply with the JWOD law. To ensure that employees have a disability, the NPA collects and reviews documentation of disability and makes the determination of whether the candidate qualifies for the program: "We have to collect this documentation, review it, assess it, make sure they are a qualified applicant/candidate. We look at the documentation through a lens of eligibility and regulatory compliance." This NPA maintains a structured outreach and recruitment team that understands the requirements that people must meet to qualify for AbilityOne jobs. This NPA also coordinates referrals with partners such as VR and Community Service Boards (CSBs), as well as fields candidates from job fairs and other referral sources. NPAs in the AbilityOne program noted that their assistance extends to helping candidates fill out job applications for their open positions, something that would rarely be offered by other employers.

AbilityOne employee populations sometimes intersect with other vulnerable populations regarding criminal records and propensity for petty crime due to environmental and situational contexts related to poverty, education levels, the nature of the disability, and/or lack of access to resources. One stakeholder believed that in contrast to other training providers and employers, AbilityOne NPAs provide the structure and legitimacy required for government customers to confidently hire employees with disabilities who may have trouble obtaining security clearances due to their disability, in addition to addressing issues such as past criminal records. For the purposes of obtaining a security clearance for

individuals who cannot take a polygraph due to their disability, for example, "AbilityOne creates a safe space for government to deviate from norms because they know the disability is documented.... And AbilityOne providers are better at walking someone through background checks." NPAs have built the infrastructure needed to address unique circumstances regarding hiring people with a wide spectrum of disabilities, helping them to navigate anything from a criminal history to establishing their security clearance for a job.

On the Job Performance and Integration

One Melwood government customer reported that they value the AbilityOne personnel and consider them to be dedicated contributors with a strong work ethic. There are collegial relationships between government agency staff and AbilityOne staff. AbilityOne staff are integrated into the building operations, although they focus on achieving their contractual requirements rather than working under the direction of agency staff. They maintain high ratings and there have never been any significant problems with performance.

A second Melwood government customer relayed that the AbilityOne employees do a very good job. They have been dedicated while working during the COVID-19 pandemic. AbilityOne employees tend to stay a long time with low turnover, which the customer considers a strength. There has never been a complaint. Agency staff and AbilityOne employees socialize in common areas and enjoy each other's company. AbilityOne employees are treated like a part of the agency team.

A third customer explained that AbilityOne contracts have been in place for a long time across multiple NPA vendors and the agency has experienced impressive performance with the scope of work being delivered as required, with no complaints. Many agency staff have family or other people they care about that have disabilities and they appreciate the fact that a large agency provides good jobs for this population. The agency conveyed that they have far more issues with other non-disabled contractor staff than they have ever had with AbilityOne employees. Any issues, should they occasionally arise, are generally resolved quickly and easily. There is a general level of friendly interaction between AbilityOne employees and agency staff, who are sympathetic to the AbilityOne mission and work to support the NPA contractors to ensure positive performance.

On-the-Job Supports & Accommodations

Once a candidate is hired, there are steps taken to help them succeed on the job. The HR manager at one NPA noted their supervisors conduct detailed observations of employees: "One of the observations we make is relative to the person and performance and their disability; if someone needs to take breaks, how will we accommodate what we are observing? We look at the individual – it's a one to one." Another NPA has a team of VR specialists assigned to each new employee to document any limitations related to mobility, self-care, work skills and other factors, to determine what adjustments or accommodations need to be made for the employee to do their job.

These assessments both inform the nature of accommodations an employee may need and receive on the job, but they also inform the annual Individual Eligibility for Employment (IEE) process, required under AbilityOne to assess an employee's continuing eligibility to be employed under the program.

As described above, the employment process begins with detailed evaluations. Following that point, employees receive continuing attention on the job, designed to ensure that they receive the support they need to succeed. According to the CEO of an NPA that was interviewed,

I've seen that where you have on-site management and supervisors who are invested in the individuals and the program, the mission of the organization and AbilityOne, that is key. That is where the rubber meets the road, they will go the extra mile, work with the individual, they will feel supported, encouraged and empowered and grow. There may be cyclical mental health issues, worsening of the disability, behavioral or training issues, or the job has changed so the individual is having a difficult time – in all of those cases, we would convene supervisors, managers, rehab staff to try to support that individual. Whether it's additional training, hands on, side by side support, change in schedule for the person, etc., we would try to provide it so the person remains employed.

NPAs have different systems to support employees. Some have specialized staff that provide continuing on-the job vocational support. In these agencies, the coaching supports are different from the supervisory structure. The director of vocational supports in one NPA noted that they make regular site visits and that "our regular check-ins are more critical because if the employee doesn't feel comfortable talking to the supervisor, they may feel comfortable talking to us. We encourage operations staff to call us. If there is disciplinary action, the rehab (team) can provide more context. We talk through the issue; we want to make sure all things are considered when supporting the person." Another NPA noted that there "may be consequences, but [we] don't want to throw them away if they make a mistake."

In another NPA, this support is provided by both Human Resources (HR) and the supervisory team.

We do not have anyone with the title of job coach, but it's baked into our system. We have trainers who go out, supervisors know that sometimes you must show employees multiple times to understand. We see a lot more situations that we have to deal with because of our disabled population, sometimes it falls into drama, we see more of that. For some, their age mentality is young, so we get behaviors associated with that. It makes much more intensive work for HR to navigate through, to counsel and coach employees and managers.

Another interviewee highlighted that the "touchstone of AbilityOne is going above and beyond 'reasonable accommodation' – for someone with a mental health diagnosis, if they struggle with coming to work on time due to medication changes, for example – [the NPA] will work with them to figure out a solution, change their start time, be more understanding of blips like this. AbilityOne is required to accommodate these issues," in contrast to private employers.

Other Supports

NPAs also pay attention to other challenges to employment. One NPA provides transportation to help employees get to their job sites at military bases by providing transportation from the gate of the base to the job location. This NPA has purchased vans and hired drivers. This NPA also looks beyond job training:

My team does a wonderful job of looking at the bigger picture, at what's outside of work that's impacting work. Homelessness, transportation, etc. Outside of the scope. We do a wonderful job of making referrals and connecting people to those additional resources to food banks or shelters. We can't expect people to perform their best if other challenges are happening. We dissect what is happening and try to fix that. Working alongside Operations staff to provide that perspective, they [employees] are comfortable talking to us. We provide supports holistically.

Two NPAs specifically called out funds they have for employee assistance. One has a "Caring Fund" that helps employees who may be having trouble with meeting expenses for items such as utilities, mortgage payments, medical expenses, and other items; payments are sent directly to the vendor. Similarly, another NPA has a "barrier removal fund" to help employees with life expenses they may have trouble meeting.

As an illustration of their focus on employees with disabilities, an NPA selected a health maintenance organization (HMO) to provide employee health care because they thought a "one-stop shop" would make life easier for employees with disabilities. They also provide "life coaches" for all employees to navigate issues including finding housing, childcare, affordable resources and other supports for daily living. These resources are used more heavily by employees on AbilityOne contracts.

Obtaining New Employment Opportunities

Helping employees find their way to other opportunities, within the AbilityOne program or outside it, is a service provided by several of the NPAs. One NPA has a program called "Advance Yourself" to help employees think through what they want to do in their careers and consider how to get there. Help is provided with resumes and job preparation but not with contacting employers.

At another NPA, support for employees seeking another position can be either focused on an internal promotion within the AbilityOne program or an external opportunity. For employees who want internal advancement, efforts are made to identify matches between employee skills and internal opportunities. When employees want external opportunities, a referral to their state VR agency is made. According to an NPA executive, they provide a soft-landing if the employee tries another job and then wants to return to the NPA: "We'll help someone find another job and if it doesn't work out, we'll take you back to your previous position or something similar. The criticism that people are 'trapped' in AbilityOne jobs couldn't be further from the truth; we provide a safety net if it doesn't work out, and there isn't a long period of falling into poverty."

Benefits Counseling

Providing some type of benefits counseling is a service offered by several of the NPAs. Different sources of funding are used to provide this service. Some are authorized by their state VR agencies to do so; another NPA operated benefits planning and assistance grants for the Social Security Administration (SSA); a third employed used internal funds to hire certified Work Incentive Specialist Advocates (WISA) to help employees understand the impacts of wage levels on benefits. If an NPA did not provide the service internally, they referred employees to organizations that could. NPAs help employees who want to increase their earnings and cease relying on entitlements while at the same time being sensitive to

the concerns of employees who want to retain benefits and ensure that their earnings levels do not put them at risk of losing them. **Employee autonomy in making such decisions is key.**

An interview conducted with a representative of DARS illustrated how Virginia encourages deliberate consideration of compensation and benefits. This individual recommended a broader role for AbilityOne NPAs in this area. For funding over certain amounts, VR requires a "Work World" analysis in which people receiving VR services receive an assessment with three cases: 1) one example of what it would look like if they were completely off cash benefits; 2) one example of the individual were working part time; 3) one example of the individual working part time with other work incentives. The cases are shown side-by-side, so that whatever level the employee starts at after leaving VR, they understand their options and the impact of earnings on benefits. This representative also encourages AbilityOne NPAs to become Employment Networks (ENs) that can provide Ticket to Work Services. Given that full-time employees with jobs under AbilityOne program can earn an income that is high enough to disqualify them from most benefit programs, Ticket to Work services can help employees move in this direction if they are willing to do so.

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