Way2Work Maryland Demonstration

Impacts 24 Months After Enrollment

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Acronyms

ADHD	attention-deficit hyperactivity disorder
CRP	community rehabilitation provider
DORS	Department of Rehabilitation Services
IDEA	Individuals with Disabilities Education Act
IEP	individualized education program
ITT	intent to treat
LATE	local average treatment effect
LSS	local school system
MIAT	Maryland Interagency Team
OLS	ordinary least squares
RAPTER®	Random Assignment, Participant Tracking, Enrollment, and Reporting system
RCT	randomized controlled trial
SSI	Supplemental Security Income
SSDI	Social Security Disability Insurance
TA	technical assistance
UMD	University of Maryland
VR	vocational rehabilitation
WBLE	work-based learning experience
WIOA	Workforce Innovation and Opportunity Act
WWC	What Works Clearinghouse

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Executive summary

Way2Work Maryland (Way2Work) offered an innovative package of services to high school students with disabilities that emphasized work-based learning experiences (WBLEs). The Maryland Division of Rehabilitation Services (DORS) was one of five state vocational rehabilitation agencies to receive a five-year grant in 2016 from the U.S. Department of Education's Rehabilitation Services Administration (RSA) to implement demonstration projects based on WBLEs for students with disabilities. This report presents evidence on Way2Work's impacts up to two years after students enrolled.

DORS and the University of Maryland (UMD) developed and implemented the Way2Work program to include three major components: early referral to DORS, multiple work experiences, and service collaboration with integrated training and technical assistance. Between September 2017 and early January 2019, the program enrolled 401 high school students who had either an individualized education program (IEP) or Section 504 plan and were two years from graduation. All participants attended high schools in Maryland and voluntarily enrolled in Way2Work, with a parent or guardian providing informed consent. Way2Work provided services through high school graduation or for 16 to 24 months (depending on enrollment date). The COVID-19 pandemic affected the final four months of services for participants who enrolled in the second year of the program, as well as for a portion of the two-year follow-up period for participants who enrolled after June 2018.

The Way2Work impact evaluation relied on a randomized controlled trial design. Under this design, the program randomly offered some participants enhanced Way2Work services (the treatment group). Participants not selected for enhanced services received usual services, or the existing services available to high school students with disabilities (the control group). Data from multiple sources, including follow-up surveys with enrollees and parents conducted 24 months after enrollment, administrative data from DORS, and program enrollment data, provided insights on enrollee characteristics and outcomes.

Findings

We estimated Way2Work impacts across four domains (service, education, employment, and expectations for the future) that represent the main consideration of the program's outcomes, along with supplementary outcomes that may be of interest to policymakers and practitioners.

Service. As intended, the Way2Work program succeeded in increasing DORS engagement with participants, and almost all treatment group members used DORS-provided WBLEs. However, almost half of control group members also used services from DORS, though they did not do so at an intensity similar to that of the treatment group. Members of the treatment and control groups reported similar rates of use for most services and satisfaction with those services. These findings suggest that (1) control group members had ready access to transition-related services and (2) though Way2Work connected youth with DORS, its services might have been substitutes for other existing services, such as those provided by secondary and postsecondary schools.

Education. Way2Work did not affect postsecondary education and training outcomes, though it did result in more treatment group members than control group members completing high school within two years of program enrollment.

Employment. Way2Work did not affect employment outcomes as of 24 months after enrollment. Members of the treatment group were as likely as control group members to have engaged in paid

employment during the past year. Additionally, the treatment and control groups were equally likely to be employed or enrolled in postsecondary education at the time they completed the follow-up survey.

Expectations for the future. Nearly all youth and parents reported at enrollment that they expected the youth to be working at age 25, with similarly high expectations for other outcomes, and Way2Work did not have detectable impacts on these expectations.

Conclusion

Although DORS and UMD appear to have implemented the program well, Way2Work did not generate the intended effects. Below, we consider several possible explanations for the general lack of impacts.

The Way2Work service model does not lead to the intended short-term outcomes. Though DORS and UMD built the Way2Work model on the evidence and insights from other transition programs, it might not have produced the expected results as of 24 months after enrollment for at least three possible reasons. First, one or more aspects of the service model might not have been delivered with high enough intensity or quality to affect outcomes. Second, the model might benefit from including additional services beyond those offered. Third, the supporting evidence might be less applicable to youth in Maryland or system changes resulting from the Workforce Innovation and Opportunity Act or other factors that emerged made that evidence less relevant by the time of Way2Work's implementation.

Maryland has strong existing services for youth transition. Way2Work might not have produced impacts because the services it offered were not sufficiently different from the usual transition services available to youth with disabilities.

The COVID-19 pandemic dampened program output and impacts. The pandemic created a significant economic recession with concentrated effects at the types of jobs that transition-age youth typically have. These effects could have negatively affected treatment group members more than control group members. However, analyses of early and late enrollees suggest the pandemic did not strongly influence observed outcomes.

The impact evaluation lacked the statistical power needed to detect modest program impacts. The ability of an impact analysis to detect effects hinges on factors such as the size of the analysis sample. The program may have generated modest impacts, but the evaluation lacked the power to detect them.

The program's positive effects could be delayed. The program's effects could emerge as the enrollees become young adults rather than directly after they leave high school. However, most programs tend toward diminishing effects over time, so it seems unlikely that Way2Work will have positive effects in the long term.

Way2Work did not focus on the population of students with disabilities that would most benefit from the program. The package of Way2Work services might be best for students with more significant disabilities, rather than a broader population of students with IEPs or Section 504 plans.

Findings from the Way2Work evaluation might benefit from being viewed in the context of the other four programs funded by RSA to test WBLE models for students with disabilities, particularly whether any had impacts on employment. Such information might provide insight on which aspects of the WBLE models might have resulted in their intended outcomes. This comparison might also answer a larger question: what are the effects of WBLEs?

I. Introduction

Way2Work Maryland (Way2Work) offered an innovative package of services that emphasized the use of work-based learning experiences (WBLE) for high school students with disabilities. The Maryland Division of Rehabilitation Services (DORS) was one of five state vocational rehabilitation (VR) agencies to receive a five-year grant in 2016 from the U.S. Department of Education's Rehabilitation Services Administration (RSA) to implement demonstration projects based on WBLEs for students with disabilities. RSA funded these projects to understand the effects of different models of WBLEs on the outcomes of students with disabilities. WBLEs are one of the five required pre-employment transition services that VR agencies must offer under the Workforce Innovation and Opportunity Act (WIOA). DORS and the University of Maryland (UMD) designed and implemented Way2Work to reflect best practices in transition and promote postsecondary employment and education opportunities. This report presents evidence on the impacts of Way2Work up to 24 months after students enrolled in the program, which is just after they were expected to graduate from high school.

A. The transition policy context

For youth with disabilities, two critical pieces of legislation ensure publicly funded education and employment preparation: the Individuals with Disabilities Education Act (IDEA) and WIOA. Established in 1975, IDEA (P.L. 94-142) requires that public primary and secondary schools provide special education services for students with disabilities. All students who receive special education services under IDEA have an individualized education program (IEP) that describes the accommodations, supports, and services they need. Education professionals review each IEP annually to ensure it meets student needs. During the 2018–2019 academic year, more than 7.5 million youth received services through IDEA (U.S. Department of Education n.d.). Recent amendments to IDEA emphasize complementary elements such as transition planning.

In addition to IDEA, Section 504 of the Rehabilitation Act ensures access to education services for youth with disabilities. Signed in 1973 and amended several times since, the Rehabilitation Act of 1973 (P.L. 93-112) was the first significant legislation for people with disabilities in the United States. Section 504 of the Rehabilitation Act prohibits discrimination or exclusion from federally funded activities based on an individual's disability. Local school system (LSS) staff sometimes create Section 504 plans for certain students with disabilities. Because Section 504 defines disability more broadly than IDEA does, youth who do not qualify for an IEP may sometimes have a Section 504 plan. Similar to IEPs, Section 504 plans describe the accommodations, supports, and services for a student to reduce or eliminate barriers to accessing school activities.

Enacted in July 2014, WIOA (P.L. 113-128) reformed federal and state workforce development programs, including programs for people with disabilities. Most notably for disability employment policy, WIOA changed the services that VR programs offer transition-age youth with disabilities. VR agencies must allocate at least 15 percent of their federal matching grant funds to provide pre-employment transition services to students with disabilities (U.S. Department of Education, Rehabilitation Services Administration 2020b). State VR agencies can offer these services to youth potentially eligible for VR services who have not yet applied. WIOA recognizes five types of pre-employment transition services: WBLEs, job exploration counseling, transition or postsecondary education counseling, workplace readiness training, and self-advocacy instruction.

Youth with disabilities can leverage education and WBLEs—especially WBLEs offered during high school—to improve their long-term employment and education outcomes (Fraker et al. 2014; Hemmeter et al. 2015; Luecking 2009). A WBLE is an opportunity for youth to observe or perform job activities and receive mentorship in a real workplace setting. In addition to learning more about a career, WBLEs can enhance youth's soft skills such as communication, listening, and time management. WBLEs also connect academic learning to real-world practices and enhance youth's self-esteem (Rogers-Chapman and Darling-Hammond 2013).

State VR agencies sometimes collaborate with community rehabilitation providers (CRPs) and coordinate with secondary schools to provide transition services. CRPs are nongovernment organizations that offer services to people with disabilities and local employers to identify, initiate, and maintain employment. The services include pre-employment transition services, job coaching, career assessments, and supported employment services. Secondary schools offer transition and some pre-employment transition services to youth with IEPs or Section 504 plans, depending on what those plans specify.

B. The transitions from school to work for youth with disabilities

Transition to adulthood is a critical issue for youth. During adolescence, youth typically obtain skills and knowledge they can leverage to pursue employment and education opportunities in the future. The skills and knowledge that youth can acquire are wide ranging, including (but not limited to) academic knowledge, work-related experience, soft skills, and skills for independent living. If youth do not acquire the skills and knowledge necessary to pursue their career goals for adulthood, they might struggle or require additional time as adults to obtain employment that pays a living wage or complete the coursework necessary to earn a postsecondary degree or credential.

Relative to their non-disabled peers, youth with disabilities transitioning to adult life face unique barriers to obtaining the skills and knowledge they need to succeed. These barriers span several domains, such as employment, education, transportation, health care, living arrangements, and independent living. For example, youth who are unable to drive or use public transit independently because of a disability might be unable to commute regularly to work. Sometimes, youth with disabilities can overcome these barriers and successfully transition to adult life. However, they can often benefit from supports to achieve their transition goals. Family and friends might provide this assistance, but youth with disabilities also frequently receive supports and services from public agencies or private organizations. For instance, more than 118,000 youth under age 25 exited after receiving services from the federal-state vocational rehabilitation (VR) program in program year 2019, and 55 percent of them worked in the second quarter after their exits (U.S. Department of Education, Rehabilitation Services Administration 2020a).

Though many agencies and organizations offer supports to transition-age youth with disabilities, these services are typically fragmented and uncoordinated. For example, a youth might receive pre-employment transition services from the state VR agency at the same time as receiving skills training through special education services in the LSS. If the VR agency and LSS staff do not communicate about or work together on behalf of the youth, they might provide very similar—or opposing—services; both situations inefficiently allocate scarce resources. When different providers offer identical services to a youth, their overlap increases costs while providing limited additional value. Conversely, a lack of provider coordination can result in unaddressed needs if no agency or organization provides key services the youth requires. Finally, fragmentation creates barriers to service collaboration and coordination among providers that can impede youth from achieving their transition goals.

Whether working individually or in collaboration, providers often have limited real time data on services that youth use. Providing transition services to youth with disabilities is often time sensitive. If a youth does not receive transition services in a timely way to, for example, learn about certain career or postsecondary education opportunities, it can affect the career and education choices the youth makes in the short term, in turn affecting the youth's long-term outcomes. Hence, providers need recent, regularly updated information on what services a youth uses. A case management system can record this information, but staff must access these data to review and interpret them quickly. With youth using services from multiple providers, sharing data in real time becomes more complex because different providers likely use different case management systems. Collaborating providers must develop strategies for recording and sharing data that allow all involved to understand recent service use.

C. The Way2Work Maryland program and its evaluation

DORS and UMD developed and implemented the Way2Work program to improve the employment and education outcomes of transition-age youth with disabilities. Way2Work offered high school students enhanced, WBLE-focused transition services that addressed key challenges associated with transition service provision. The enhanced services included three major components: early referral to DORS services, multiple work experiences, and service collaboration with integrated training and technical assistance (TA). Between September 2017 and early January 2019, 401 high school juniors and seniors with either an IEP or Section 504 plan enrolled in the program. All participants attended LSS high schools in Maryland and voluntarily enrolled in Way2Work, with a parent or guardian[1] providing informed consent. Way2Work provided enhanced services through high school graduation, or between 16 to 24 months (depending on enrollment dates). The COVID-19 pandemic affected the final four months of services for participants who enrolled in the second year of the program, along with some of the follow-up period for participants who enrolled after June 2018.

DORS contracted with Mathematica to conduct an independent evaluation of Way2Work. The evaluation has two components: an implementation evaluation and an impact evaluation. The implementation evaluation used data from enrollment, a case management system, and qualitative interviews to characterize the services delivered to Way2Work participants (Martin et al. 2021). The impact evaluation uses a follow-up survey and DORS administrative data to measure the outcomes of treatment group members—those offered enhanced services—relative to control group members—those with access to usual services. The Way2Work impact evaluation relies on a randomized controlled trial (RCT) design. Under this design, the program randomly offered some participants enhanced Way2Work services. Considered the gold standard of program evaluation, an RCT allows for a rigorous evaluation that can isolate the program's causal effects. Participants not selected for enhanced services could access usual services, or the existing services available to high school students with disabilities. Randomization occurred at program enrollment before any offer of enhanced services.

In this report we evaluate whether Way2Work achieved its main objectives by answering four research questions:

1. Were Way2Work treatment group members more likely than control group members to receive the services intended?

[1] Throughout the report, we use "parents" to refer to "parents and guardians."

2. Were Way2Work treatment group members substantially more likely than control group members to achieve paid, competitive employment in career entry jobs or enroll in postsecondary education that will lead to careers?
3. Compared with control group members, were Way2Work treatment group members more satisfied with their career progress?
4. Were Way2Work treatment group members substantially more likely than control group members to obtain other outcomes, such as engaging in academic and career planning and expectations?

We estimate Way2Work impacts on five primary outcomes (use of DORS-funded WBLEs, postsecondary education enrollment, paid employment in the last year, a combined measure of paid employment and postsecondary education enrollment, and work expectations at age 25) across four domains (services, education, employment, and expectations for the future) that represent the main consideration of the program's effects, along with supplementary outcomes that may be of interest to policymakers and practitioners.

D. Contents of this report

In this report, we document the methods and findings of the Way2Work impact evaluation. In Chapter II, we provide background information that describes the Way2Work intervention and key findings from the implementation evaluation. Chapter III provides details about the impact evaluation methods and its components. Chapters IV through VII presents estimates of Way2Work's impacts on primary outcomes and selected supplementary outcomes. Each of these chapters covers a specific domain: services, employment, education, and expectations for the future. Chapter VIII concludes by summarizing key findings across chapters and discussing implications for policy and practice.

The report also contains several appendices with supplemental information. Appendix A describes in detail the methods used to estimate program impacts. Appendix B reports impacts for additional supplementary outcomes not included in the main report. Similarly, Appendix C contains mean or descriptive differences for other supplementary outcomes—usually survey questions with conditional responses. Appendix D contains impact analyses of primary outcomes by subgroup characteristics. To understand whether regression adjustment affected our interpretation of results, Appendix E presents unadjusted impacts for the primary outcomes. Finally, Appendix F contains local average treatment effect estimates for the primary outcomes, using WBLE status from DORS as a proxy for receiving intervention services.

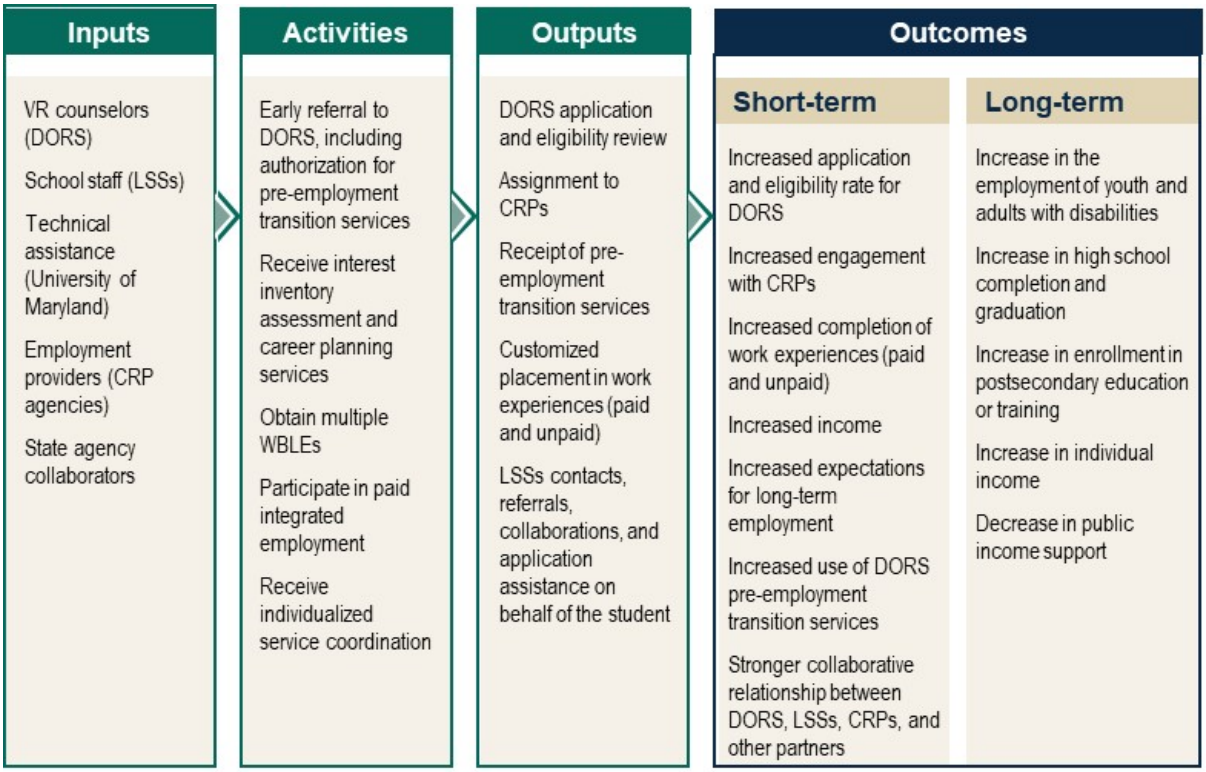
II. The Way2Work Program

The Way2Work program built on DORS services to provide treatment group youth with individualized services that featured WBLEs and intensive partner collaboration. In this chapter, we highlight the Way2Work model's main components and describe the study enrollment and random assignment processes. We also assess the results of random assignment by examining covariate balance between the treatment and control groups. For additional information about the program, we refer readers to the Way2Work implementation evaluation report (Martin et al. 2021).

A. Way2Work service model

Way2Work enhanced services differed from usual services in several ways. Way2Work expanded DORS services for students and youth with disabilities, creating an enhanced service model that offered services more quickly, increased exposure to work experiences, and fostered collaboration between staff in partnering agencies such as LSSs and CRPs. Way2Work staff began enrollment in September 2017 for the first cohort, with a second cohort beginning in July 2018. The program offered services to treatment group enrollees through high school graduation, or between 16 to 24 months (depending on their enrollment dates), as outlined in the program's logic model (Figure II.1). The program quickly referred treatment group youth to DORS so they could use DORS-funded pre-employment transition services in a timely manner. CRP staff worked with each Way2Work youth, in collaboration with staff from DORS and LSS, to arrange multiple WBLEs aligned with the youth's interests, skill sets, and goals. Way2Work also encouraged cross-agency collaboration that emphasized individualized services, training, TA, and problem solving to overcome service provision challenges.

Figure II.1. Way2Work's logic model



1. Early referral to DORS

The Way2Work model emphasized early engagement with DORS so treatment group youth could access pre-employment transition services. After DORS assessed a referral, the agency could authorize pre-employment transition services, including WBLEs. Youth with disabilities were eligible for pre-employment transition services while a student in secondary or postsecondary education. DORS offered five types of pre-employment transition services (Table II.1). Students can leverage these services to gain employment experience and prepare for life after high school.

Once DORS authorized the offer of pre-employment transition services to a treatment group youth, the Way2Work program matched the youth to a local CRP for services. Way2Work intended to match all treatment group youth to CRPs to ensure the efficient delivery of individualized pre-employment transition services that met the youth's needs, built their skills, and reflected their employment and education interests. Almost all Way2Work treatment group youth had a CRP assignment.

LSS staff sometimes facilitated the applications of treatment group youth for VR services under an IPE, though this was not a requirement of Way2Work. Youth who wanted additional VR services beyond pre-employment transition services, such as career, training, or transportation services, had to apply to DORS for such services. DORS staff reviewed the application to assess whether the youth was eligible before the youth could use those services.

Table II.1. Pre-employment transition services

Service	Description
Job exploration counseling	Counseling about occupations and industries, information, and assessments to assist students with setting career goals
Counseling on postsecondary education opportunities	Guidance on postsecondary education and training opportunities; information and advising on college, trade, and technical schools; assistance with applications and financial aid
Workplace readiness training	Job seeking guidance and soft skills training needed for work, assistance with resumes and interview skills, training in how to interact with employers and coworkers
Instruction in self-advocacy	Training on how to plan and pursue future goals and assert one's interests; might include training on individual rights, disability disclosure, self-determination, and accommodations requests
WBLEs	Real-world experiences with employers to learn about academic and career paths and acquire work-relevant skills

Source: Adapted from Workforce Innovation Technical Assistance Center n.d.; Maryland Department of Education Division of Rehabilitation Services n.d.; Darche et al. 2009.

2. Multiple work experiences

Work experiences were a central component of Way2Work. The program intended for each youth in the treatment group to have at least three work experiences while enrolled—including one paid by an employer. As presented in the implementation report, most treatment group members (92 percent) had at least one work experience while enrolled in the program; nearly three-quarters (74 percent) had at least two work experiences with at least one of them paid; and almost half (44 percent) had at least three experiences, one of which was paid (Martin et al. 2021). When matching treatment group youth to work experiences, Way2Work staff looked for integrated experiences aligned with youth's interests and skills.

Youth used these experiences to develop important soft skills and practical skills, assess their capacity for and interest in certain careers, and expand their professional networks.

Way2Work facilitated four types of work experiences: unpaid WBLEs, WBLEs with a DORS-paid stipend, paid WBLEs, and paid work. CRPs directly arranged most types of WBLEs, but treatment group youth arranged paid work. For CRP-arranged WBLEs, workplace agreements specified the parameters of the experience, including the duration, work schedule, learning objectives, on-site workplace readiness training needs, and performance expectations. Youth-organized paid work included any employment they obtained without direct CRP staff involvement. These experiences did not require workplace agreements or on-the-job follow-up supports from CRP staff.

3. Service collaboration and integrated training and TA

Staff involved with Way2Work frequently collaborated to offer services and supports. Much of the collaboration occurred through monthly Maryland Interagency Team (MIAT) meetings, which UMD required of each LSS. Attendance at MIAT meetings varied but typically included LSS, DORS, and CRP staff; UMD technical assistants; and representatives from other agencies that served transition-age youth with disabilities, such as state and local workforce centers and developmental disability agencies. At the meetings, staff discussed and monitored services used by treatment group youth, including ongoing contacts, cross-agency collaborations, referrals to other agencies, employment opportunities and contacts, and application assistance.

To ensure consistent implementation of services across LSSs, UMD staff also led trainings for and provided TA to service providers. UMD's training and TA team included transition specialists, VR counseling experts, and researchers with experience conducting WBLE initiatives for transition-age youth with disabilities. In addition to providing kickoff and onboarding training at the beginning of each of Way2Work's two enrollment cohorts, UMD provided ongoing support through activities such as fidelity monitoring, monthly support calls with LSSs, and ad hoc trainings with CRPs.

B. Enrollment and random assignment

The Way2Work impact evaluation relies on randomization to isolate the causal effects of the program. Using an algorithm programmed by Mathematica, Way2Work enrollment staff randomly assigned high school students (whose parent or guardian consented for the student to participate) into either the treatment group, which could access enhanced Way2Work services, or the control group, which could access usual services. The program recruited high school students who had an IEP or a Section 504 plan and were about two years from their predicted graduation (that is, they were planning to graduate with a high school diploma or certificate in 2019 or 2020 for each of the two enrollment cohorts). High school transition staff in each participating LSS used school records to identify eligible students to recruit. Way2Work staff then contacted interested students by sending an invitation letter and following up with phone calls and emails as well as group events held at local high schools, where Way2Work project staff described the intervention and enrolled students on site. Together with a parent, eligible students then met with UMD staff, who had them complete a baseline survey before random assignment.

In this section, we describe the characteristics of Way2Work enrollees, assess covariate balance across the experimental groups, and present any evidence for contamination of random assignment. Examining the characteristics of enrollees reveals who enrolled in the demonstration. Assessing covariate balance across experimental groups offers insight into the integrity of random assignment. Though balanced

experimental groups do not guarantee random assignment integrity, substantial covariate imbalance across groups could suggest problems with the random assignment process. In addition, examining covariate balance provides insight into which covariates could improve precision when estimating program impacts (even with well-balanced covariates across experimental groups). Finally, searching for and assessing any evidence of contamination identifies whether control group members incorrectly used Way2Work services.

Treatment group enrollee characteristics at baseline. Way2Work enrolled 200 students into the treatment group. About two-thirds of treatment group enrollees were male (Table II.2). At enrollment, 62 percent of treatment group youth were age 16 and 24 percent were age 17. Whites (62 percent) comprised the largest racial group, followed by Black (30 percent) and other races (9 percent). Five percent of enrollees were Hispanic. Almost all youth spoke English exclusively at home. For enrollees' parents, most had a postsecondary degree and were married. Attention-deficit hyperactivity order (ADHD) was the most common disabling condition, reported by 60 percent of enrollees. The next largest condition groups were specific learning disability (30 percent), other condition (29 percent), and speech or communication (27 percent). More than half of treatment group enrollees had conditions diagnosed between kindergarten and fifth grade. More than two-thirds (70 percent) of treatment group enrollees rated their current health as very good or excellent. Nearly all enrollees used special education services or had an IEP or Section 504 plan.[2] About one-third received free or reduced-price lunch in the 12 months before enrollment, and 13 percent of enrollees received Supplemental Security Income (SSI) payments or Social Security Disability Insurance (SSDI) benefits. Nineteen percent of treatment group youth used services from DORS when they enrolled in Way2Work.

Table II.2. Baseline characteristics of Way2Work enrollees

Variable	Treatment mean	Control mean	Difference
Number of participants	**200**	**201**	
Demographics (percentage)			
Sex			
Male	66.0	61.2	4.8
Female	34.0	38.8	-4.8
Age			
15 and younger	3.0	2.5	0.5
16	62.0	62.7	-0.7
17	23.5	20.9	2.6
18	2.5	5.0	-2.5
19 and older	9.0	9.0	0.0
Race			
Black	29.5	27.9	1.6
White	62.0	61.7	0.3
Other	8.5	10.4	-1.9

[2] Though IEP or Section 504 plan status was a requirement of enrollment into Way2Work, enrollment data for these statuses do not sum to 100. Enrolling students and parents self-reported whether the student had an IEP or Section 504 plan at the time of enrollment, and not all families may have been aware of their student's special education status.

Variable	Treatment mean	Control mean	Difference
Hispanic or Latino	4.5	6.0	-1.5
Responding parent characteristics			
English is only spoken language in the household	96.4	95.5	1.0
Highest educational achievement			
Less than high school	5.5	6.5	-1.0
High school graduate (or equivalent)	21.5	18.4	3.1
Postsecondary degree	72.0	74.1	-2.1
Unknown	1.0	1.0	0.0
Relationship status			*
Single	15.0	8.0	7.0
Married	63.5	73.6	-10.1
Separated or divorced	20.5	17.4	3.1
Unknown	1.0	1.0	0.0
Condition and service receipt			
Diagnosed with this condition			
ADHD	60.0	58.2	1.8
Autism spectrum disorder	23.5	26.4	-2.9
Behavioral disorder or emotional disturbance	22.5	22.4	0.1
Hearing impairment	4.5	4.0	0.5
Specific learning disability	29.5	29.4	0.1
Intellectual disability	17.5	11.9	5.6
Speech or communication impairment	27.0	23.9	3.1
Physical or orthopedic impairment	9.5	10.0	-0.5
Visual impairment	8.0	9.5	-1.5
Other condition	28.5	26.9	1.6
Unknown condition	1.5	0.0	1.5
When disability or condition was first identified			
Birth	4.0	5.0	-1.0
Before kindergarten	29.5	27.4	2.1
Kindergarten to grade 5	51.0	51.2	-0.2
6–8 grade	9.5	10.0	-0.5
9–12 grade	1.5	4.5	-3.0
Received special education services or has an IEP or Section 504 plan	98.0	98.5	-0.5
Received free or reduced price school lunch in past 12 months	33.0	30.0	3.0
Received SSI or SSDI benefits because of a disability	13.1	13.4	-0.4
Received services from DORS	19.3	12.6	6.7
Employment			
Worked at a job or business with pay any time in the past year	46.5	37.8	8.7
Worked at a job or business without pay any time in the past year	9.5	6.5	3.0

Variable	Treatment mean	Control mean	Difference
Worked at time of Way2Work enrollment	30.0	17.9	12.1**
Worked at a school sponsored work-based learning activity in the past year	14.0	12.4	1.6
Hours per week worked at most recent job in the past year			
0 hours or not employed	44.0	55.7	-11.7
Less than 10 hours	19.5	15.4	4.1
10–20 hours	19.0	16.4	2.6
21–30 hours	11.5	6.0	5.5
More than 30 hours	5.0	5.0	0.0
Unknown	1.0	1.5	-0.5
Expectations and health			
Highest level of expected educational achievement			
Less than high school	1.0	1.5	-0.5
High school graduate or equivalent	21.5	17.4	4.1
Postsecondary degree	68.5	64.7	3.8
Technical or trade school	9.0	16.4	-7.4
Expects to be living at age 25			
With a parent or guardian, sibling, or other relative	19.0	18.9	0.1
On his or her own or with a spouse or partner	79.5	78.1	1.4
Other	5.2	2.8	2.3
No response	0.0	0.5	-0.5
Expectation about working at a paid job at age 25			
Definitely or probably will	99.0	98.0	1.0
Definitely or probably will not	1.0	2.0	-1.0
Enrollee's self-reported health			
Excellent or very good	70.0	67.7	2.3
Good	25.5	24.4	1.1
Fair or poor	4.5	8.0	-3.5
Way2Work characteristics	1.0	1.5	-0.5
Local school system			
Anne Arundel	13.0	12.9	0.1
Carroll	19.0	18.9	0.1
Cecil	5.5	6.0	-0.5
Charles	14.0	14.4	-0.4
Frederick	20.5	18.9	1.6
Harford	12.0	12.4	-0.4
Washington	5.5	6.0	-0.5
Worcester	10.5	10.4	0.1
Way2Work enrollment cohort			
Cohort 1	47.0	47.3	-0.3
Cohort 2	53.0	52.7	0.3

Source: Way2Work baseline survey.

*/**/*** Difference between treatment and control groups is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

Treatment group members often had work experiences before they enrolled and had high expectations as young adults. About half of treatment group enrollees worked in the year before enrollment: 47 percent worked at a job or business for pay, 10 percent worked without pay, and 14 percent worked in a school-sponsored WBLE. More than three-quarters of enrollees expected to achieve a postsecondary degree or complete a technical or trade school and nearly all (99 percent) enrollees expected they probably or definitely would be working at a paid job at age 25.

Of the eight participating LSSs, Frederick and Carroll enrolled the most treatment group youth (21 and 19 percent of the sample, respectively), whereas Cecil and Washington enrolled the fewest (6 percent each). The program had a nearly equal number of treatment group enrollees in the first and second program cohorts.

Balance between group characteristics. Enrollee characteristics were well balanced across treatment and control groups, with dissimilarities for only two enrollee characteristics. Parent relationship status differed across the treatment and control groups; parents of treatment group youth were less likely to be married (by 10 percentage points) than parents of control group youth. In addition, Way2Work treatment group youth were 12 percentage points more likely than control group members to be working at enrollment.

C. Contamination risk

Contamination occurs when control group members access services or benefits intended only for the treatment group members, which can affect the evaluation's ability to determine causal inference. When exploring the possibility of contamination, we consider whether control group members used any enhanced Way2Work services. We did not consider it to be contamination when a control group member enrolled in DORS or used pre-employment transition services because these options are available to all students with disabilities in Maryland. Instead, we searched for evidence that control group members either directly used the enhanced services meant only for treatment group members or that the enhanced services affected the experiences of control group members.

The evidence gathered for the implementation evaluation (Martin et al. 2021) suggests control group members did not use enhanced Way2Work services because of their own actions. Control group members could apply to DORS, access pre-employment transition services from CRPs, and obtain WBLEs separate from any involvement with the Way2Work program. Hence, control group members had limited incentive to actively seek DORS services through Way2Work because they could access those services in other ways. Even if interested in directly using enhanced services, control group members could not access those services without the cooperation of Way2Work staff.

The implementation analysis identified two potential sources of contamination. The adoption in some LSSs of MIAT-style caseload management practices for non-treatment group members was one source. Although all LSSs used the MIATs exclusively for treatment group members, two of the four LSSs that participated in the evaluation's site visits also created interagency transition committees to coordinate services for students with IEPs or Section 504 plans. Because the MIATs and interagency transition committees operated similarly, control group members who were part of the interagency transition committees could have indirectly benefited from the enhanced service coordination established for Way2Work. However, because the interagency transition committees discussed a group of students that

included but was much larger than the control group, the control group members could not have the attention from the interagency transition committees that treatment group members had from the MIATs. Thus, the difference in caseload sizes between the two groups may have limited the scope of any contamination.

Another potential source of contamination could arise from control group members working with CRPs that also served treatment group members. In a few LSSs, some CRPs served both treatment and control group members, with similar services offered across experimental groups. The lack of a firewall between treatment and control group members with the same CRPs raises concerns that control group members might have benefited from the knowledge, skills, and abilities of CRP staff trained to offer Way2Work services. However, even in these situations, control group members could not access services from a dedicated interagency team that connected the student to customized WBLEs.

Despite the issues described above, we believe the overall risk of contamination for the Way2Work evaluation is low. Way2Work accelerated and intensified transition services. Control group members had essentially no incentives or opportunities to engage in enhanced services and lacked the individual supports used by treatment group members. Though the actions of some LSSs and CRPs created opportunities for contamination, the scope and impact of these instances were likely limited. Additionally, UMD's TA focused exclusively on Way2Work staff and treatment group youth. Although this TA could have improved LSS, CRP, and DORS staff collaboration more broadly, the smaller Way2Work caseloads should have amplified the influence of the more intense TA and collaboration for treatment group youth.

III. Impact Evaluation Analytical Approach

A. Introduction

This chapter provides an overview of the data and methods we used to evaluate the impacts of Way2Work. Because Way2Work was an RCT, we used the exogenous variation created by random assignment to measure the program's causal impact on key outcomes. Data from multiple sources, including follow-up surveys with enrollees and parents conducted 24 months after enrollment, administrative data from DORS, and program enrollment data, provided insights on enrollee characteristics and outcomes. With these data, we estimated intent to treat (ITT), regression-adjusted impacts for five primary outcomes and more than 100 supplementary outcomes. We also conducted subgroup analyses, examined the robustness of our main findings, and reported mean differences for several outcomes of interest. Appendix A contains additional details about the methods.

B. Evaluation design

Random assignment underpins the entire Way2Work impact evaluation. After a parent provided consent, an algorithm randomly assigned each enrollee with equal probability to either the treatment or control group. Treatment group members used enhanced Way2Work services, whereas control group members used usual services (or those services already available to youth). Because enrollees had access to Way2Work by chance instead of by choice, any differences in outcomes between the treatment and control groups are likely due to Way2Work. Evidence from the implementation evaluation and an examination of balance between treatment and control group member characteristics strongly suggests the proper execution of random assignment, increasing our confidence that we can measure program impacts by examining differences in outcomes between the two experimental groups.

The vast majority of impact estimates in this report are ITT estimates. These estimates capture the mean impact of Way2Work among those who enrolled in the program, including those who did not receive services. ITT estimates reflect the effects of the intervention independent of the post-enrollment decisions of enrollees. To understand how key impacts varied on whether an enrollee used one or more quarters of WBLE services, we also calculated local average treatment effect (LATE) estimates for four of the five primary outcomes. This approach uses an instrumental variable to isolate the component of exogenous variation associated with receiving WBLE services. Appendix F contains the LATE estimates.

Almost all impacts included in the report are regression adjusted. Because Way2Work is an RCT, we could interpret the differences in mean outcomes across experimental groups as impacts. However, regression adjustment improves the precision of the impact estimates (relative to no adjustment) by accounting for variation correlated with enrollee baseline characteristics. We used ordinary least squares (OLS) models to estimate impacts for binary and continuous outcomes and a negative binomial model to estimate impacts for count outcomes.[3] The covariates included in the regression models were either assumed to be highly correlated with outcomes of interest or had some imbalance across experimental groups. For survey-based outcomes, we weighted parent and youth observations to account for survey nonresponse. To understand how regression adjustment affected the most critical impact estimates, Appendix E reports unadjusted impact estimates for the five primary outcomes.

[3] We also estimate logistic regressions to explore whether the main impact results for binary outcomes are sensitive to estimation using an OLS model.

In addition to regression-adjusted impact estimates, we report unadjusted mean differences for additional categorical outcomes in Appendix C. These outcomes did not lend themselves to regression-adjusted impact estimation, but the statistics might be of interest to certain stakeholders.

The Way2Work impact evaluation meets What Works Clearinghouse (WWC) group design standards without reservations. This rating is the highest given by WWC and is a strong indicator of a rigorous impact evaluation design. The Way2Work evaluation met WWC requirements by being an RCT, having low levels of sample attrition, and having at least one outcome that meets the criteria for a quality measure. Appendix A includes a description of how the Way2Work impact evaluation merits WWC's highest rating.

C. Data sources

The Way2Work impact evaluation relies on four data sources: follow-up surveys, DORS administrative data, enrollment data, and National Student Clearinghouse data. The majority of outcomes examined in this report relied on follow-up survey data. About 72 percent of parents and 70 percent of enrollees responded to a follow-up survey offered about 24 months after enrollment and completed approximately 25.8 months after enrollment on average. The youth survey contained different questions than the parent survey. The youth survey asked about services received, recent employment activity, recent education activity, and expectations. The parent survey also included questions about expectations but focused mostly on transition planning and activities.

The impact evaluation used DORS administrative data to examine several service outcomes. The vast majority of treatment group members used enhanced services through DORS. Though not referred to DORS by Way2Work, control group members may have also applied for and used services from DORS. Consequently, outcome measures constructed from DORS administrative data provide insight on services use. We analyzed the raw DORS administrative data to create variables capturing the VR services used by enrollees during the first eight full-calendar quarters after program enrollment. This period roughly corresponds to the 24-month period of the follow-up surveys. Of the 401 enrollees, 282 had DORS records; we assume the remainder did not use DORS services.

The third data source involved enrollment data collected from enrollees and their parents. These data included contact information, demographic information, employment and education status, services use, and expectations. By spanning several program-relevant topic areas, the enrollment data provide an understanding of enrollee and parent characteristics just before program services began. We used the baseline data to assess equivalence between the treatment and control groups at enrollment and construct the control variables for the impact analysis.

Finally, we relied on data from the National Student Clearinghouse for another perspective on postsecondary education outcomes. For the 244 enrollees who completed the 24-month follow-up survey and provided consent, we obtained data from the National Student Clearinghouse on their enrollment in two-year and four-year postsecondary education institutions. We created an aggregate measure of any such enrollment within 30 months of their starting Way2Work, with separate analyses for two-year and four-year institution enrollment. We employed a slightly longer period than 24 months to overlap the average time of the follow-up survey completion.

D. Outcomes

The impact evaluation's outcomes fall into four domains: services, employment, education, and other outcomes such as expectations. Examining services explores whether Way2Work meaningfully changed transition service patterns. If service patterns were similar across groups, it would likely minimize the program's ability to improve outcomes. Positive impacts in this domain would signal Way2Work successfully provided enhanced services to treatment group members that differed from the status quo.

The program's ultimate goal is to improve the long-term employment and education outcomes of transition-age youth with disabilities. However, waiting for long-term impacts to emerge is beyond the timeline of the project. As a proxy, we examined employment and education outcomes two years after enrollment to show the program's more immediate impact. Positive employment or earnings impacts would signal the program relatively quickly improved work-related outcomes. Positive education impacts would suggest youth with disabilities leveraged Way2Work for paths to postsecondary degrees and credentials.

The final domain we explored includes other, mostly expectation-related outcomes. Individual perceptions and expectations correlate with outcomes. If a youth with a disability thinks he or she cannot work even with supports and services, that person is less likely to take actions that may eventually lead to employment. For youth with disabilities, the expectations of their parents are also important. If parents do not expect their child to work or do not encourage their child to acquire workplace-related skills, youth will be less likely to pursue employment. One of Way2Work's objectives was to influence youth and parent expectations, convincing everyone of youth's ability to work and achieve other independence-related goals.

We separated all outcomes into two categories: primary and supplementary outcomes. Having two categories of outcomes addresses the issue of multiple comparisons (when the probability of detecting spurious impacts increases with the number of outcomes tested simultaneously). The primary outcomes for the impact evaluation include:

1. Two or more quarters with a DORS work-based learning experience
2. Enrolled in postsecondary education at the time of the follow-up survey
3. Worked in paid employment anytime in the past year
4. Enrolled in postsecondary education or working at the time of the follow-up survey
5. Definitely or probably expects to work for pay at age 25

Each domain contains at least one primary outcome; one primary outcome spans the employment and education domains to assess an enrollee's overall engagement. The primary outcomes represent the main assessment of Way2Work's effects. Not detecting impacts across these outcomes would suggest either Way2Work did not achieve its primary objectives or the program's impacts were not large enough for the impact analysis to detect. Each domain also encompasses multiple supplementary outcomes to explain program impacts on primary outcomes and provide insight into aspects of the domain.

E. Subgroup analyses

We performed several analyses to understand the variation of impacts for the primary outcomes across key subgroups. Because of the limited Way2Work sample size, we analyzed subgroups of policy interest and had a reasonable chance of detecting subgroup variation. We examined two subgroupings:

employment status in the 12 months before enrollment (worked versus did not work) and enrollment cohort (Cohort 1 versus Cohort 2). A modified version of the main OLS regression model estimated subgroup impacts (Appendix D).

Each subgroup we examined was of policy or program interest. Similarly, while employment status at program enrollment is likely a strong predictor of employment during the follow-up period, the program might have had more of an effect for those without prior employment experience. Because the outcomes of those who enrolled in Way2Work after June 2018 were potentially affected by the COVID-19 pandemic, we explored whether impacts varied by enrollment cohort.

IV. What Impacts Did Way2Work Have on Service Outcomes?

In this chapter, we present findings for Way2Work's impacts on service outcomes as captured in DORS administrative and survey data. Way2Work offered a package of services to improve employment and other outcomes. Examining the services that treatment and control group members used during the demonstration period shows whether the service use differed between groups and provides context for understanding other program impacts. Given the emphasis by Way2Work on early DORS referrals, multiple work experiences, and collaboration among and referrals to service providers, one might expect treatment group members to report more connections with DORS and other services than their counterparts in the control group. This chapter focuses on impacts for the primary outcome and selected supplementary outcomes. Table B.1 in Appendix B presents impact estimates for additional supplementary outcomes related to services.

As intended, the Way2Work program succeeded in impacting the primary and supplementary outcomes of DORS engagement with participants, and almost all treatment group members used DORS-provided WBLEs. However, almost half of control group members also used services from DORS, though they did not do so at an intensity similar to that of the control group. Although we do not know about the intensity of self-reported service use, members of the treatment and control groups reported similar rates of use for most services and satisfaction with those services.

These findings suggest the following for the Way2Work impact evaluation. First, control group members had ready access to the services they wanted that prepared them for school and work. Second, though Way2Work connected youth to DORS, the program may have substituted those services for other naturally existing services, such as those provided by secondary and postsecondary schools. Third, control group youth used more services related to postsecondary education schools or training programs.

A. Primary outcome: Two or more quarters with a DORS WBLE

The primary outcome for the service domain is whether an enrollee had two or more quarters with a DORS-funded WBLE. This measure aligns with Way2Work's goal for treatment group members to have three work experiences during the demonstration. Consistent with the program's intent, nearly all treatment group members (88 percent) had two or more quarters with a DORS WBLE (Table IV.1). This rate was more than four times higher than that for control group members (18 percent). The 70 percentage point difference was statistically significant.

Table IV.1. Impacts of Way2Work on service outcomes 24 months after enrollment

Variable	Treatment mean	Control mean	Impact (standard error)	Treatment N	Control N
Primary outcome					
Two or more quarters with a DORS WBLE (percentage)	87.5	17.9	69.6*** (3.7)	200	201
Supplementary outcomes					
Had a DORS case (percentage)	42.5	26.4	16.1*** (4.7)	200	201

Variable	Treatment mean	Control mean	Impact (standard error)	Treatment N	Control N
Used pre-employment transition services but did not open a DORS case (percentage)	51.2	14.4	36.7*** (4.4)	200	201
One or more quarters with a DORS WBLE (percentage)	91.6	21.4	70.2*** (3.7)	200	201
Number of quarters with a DORS WBLE	4.7	0.8	4.0*** (0.2)	200	201
Used any services (from DORS or other providers) (percentage)	91.5	91.4	0.1 (3.5)	130	145
Services used (any source) (percentage)					
Information and referral	62.7	59.5	3.2 (5.9)	130	145
Life skills	59.5	58.6	0.9 (6.3)	135	144
Finding or applying for a job	57.5	51.6	6.0 (6.1)	133	143
Activities to learn about what jobs match skills and interests	57.0	51.4	5.6 (6.1)	137	145
How to save and manage money	52.2	49.4	2.8 (6.1)	135	145
Self-advocacy training	41.2	43.8	-2.7 (6.0)	135	144
Learning about or getting into a school or training program	40.5	51.3	-10.8* (6.1)	136	143
Transportation to or from a workplace activity	32.1	33.5	-1.4 (5.8)	135	144
Help while working at a job	31.3	21.2	10.1* (5.5)	136	142
Job skills training	24.6	27.0	-2.3 (5.6)	133	142
Assistive technology	16.5	18.5	-2.1 (4.7)	134	142
Benefits counseling	14.0	24.9	-10.9** (4.8)	133	145
Other services to help work, go to school, or help family in other ways	4.5	6.5	-2.0 (3.0)	134	140
Very or somewhat satisfied with the services used to help advance in school or prepare for a job after school (percentage)	90.5	87.7	2.8 (3.7)	126	132
Very or somewhat successful in reaching goals (percentage)	75.2	73.8	1.5 (5.6)	127	134
In the past year, did not receive any needed help or services preparing for work or school (percentage)	10.6	16.3	-5.7 (4.1)	135	141

Source: Way2Work enrollee 24-month follow-up survey; DORS administrative data.

Note: Treatment means and impacts are regression adjusted to account for baseline characteristics. Standard errors appear in parentheses.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

DORS = Division of Rehabilitation Services; WBLE = work-based learning experience.

B. Supplementary outcomes

In this section, we highlight findings for supplementary outcomes under the services domain. The outcomes span three categories: other DORS service outcomes (from DORS administrative data), self-reported services used (from the 24-month follow-up survey), and the satisfaction with services and progress toward goals (also from the 24-month follow-up survey).

Other DORS service outcomes. Treatment group members had significantly higher rates of DORS services for all four supplementary outcomes that we examined (Table IV.1). Within the control group, 14 percent used pre-employment transition services without opening a case with DORS and 26 percent used services under a case with DORS. The Way2Work program increased these types of service use for the treatment group by 37 and 16 percentage points, respectively. Similar to the primary outcome of interest, 92 percent of treatment group members had one or more quarters with a DORS WBLE, compared to 21 percent of control group members. Finally, the number of quarters that enrollees used WBLE services from DORS was significantly higher for treatment group members (five quarters) than for control group members (one quarter).

Self-reported services used. In the follow-up survey, we asked respondents about the services they used. Treatment and control group members reported using one or more transition-related services at nearly the same rate (92 versus 91 percent, respectively; Table IV.1). About half or more of enrollees reported using the following services: information and referral, life skills, finding or applying for jobs, learning which jobs match one's skills and interests, and how to save or manage money. The listed services could have been offered by DORS or other entities, such as high schools or agencies serving people with disabilities. Of the 13 specific services in the survey, only 3 had significant differences in uptake between the two groups. About one-third of treatment group members had help while working at a job, a proportion 10 percentage points higher than the job assistance rate for control group members. Alternatively, compared to treatment group members, control group members were 11 percentage points more likely to access benefits counseling or to learn about or get into a school or training program.

Satisfaction with services and progress toward goals. We found no statistically significant differences across the remaining supplementary outcomes related to services, which capture enrollees' satisfaction with services and perceived progress toward their goals (see Table IV.1). Most enrollees (91 percent of treatment group members and 88 percent of control group members) were very or somewhat satisfied with the services they used to advance in school or prepare for a job after school. Roughly three-quarters of both groups also indicated that they were very or somewhat successful in reaching their goals. Finally, 11 percent of treatment group members and 16 percent of control group members reported having one or more unmet needs as they prepared for work or school during the year before their follow-up interview.

C. Subgroup analyses

Way2Work might have been more successful with enrollees who did not have recent work experience or who enrolled in the later cohort (Appendix D). Treatment group members who did not work in the 12

months before enrollment used WBLEs from DORS at rates that were 78 percentage points higher than those of the control group youth, compared with 62 percentage points among those who worked during that period ($p < 0.05$). The program also had a greater impact on this primary outcome for Cohort 2 enrollees (75 percentage points) than for Cohort 1 enrollees (63 percentage points) ($p < 0.10$). Way2Work might have therefore become more efficient over time, though this pattern could also be a function of the LSSs that participated in the second cohort but not the first.

V. What Impacts Did Way2Work Have on Education Outcomes?

This chapter describes Way2Work's impact on education outcomes. Youth with disabilities often attain lower levels of postsecondary education and employment relative to their nondisabled peers. For example, youth with IEPs in high school are relatively more likely than youth without IEPs to struggle academically, earn lower wages, and have lower expectations for postsecondary educational achievement (Lipscomb et al. 2017; Newman et al. 2011). These outcomes can affect adult employment because higher paying jobs often require postsecondary skills and training. Successfully completing a postsecondary program can also signal to employers that an individual is capable of working consistently to achieve an important goal. Because of these factors, Way2Work staff expected that the enhanced services used by treatment group members would lead to additional postsecondary training and education opportunities that matched their interests. This chapter focuses on impacts for the primary outcome and supplementary outcomes. In Table B.2 in Appendix B, we present impact estimates for additional supplementary outcomes under the education domain; in Table C.1 in Appendix C, we describe mean differences across experimental groups for other education-related outcomes.

Way2Work did not affect postsecondary education and training outcomes, though it did result in more youth completing high school within two years of program enrollment. Moreover, consistent with the finding in Chapter IV that control group members used more services related to postsecondary education and training than did treatment group members, the former reported taking more college or trade classes while in secondary school. The lack of positive effects on postsecondary education and training might reflect a service model in which Way2Work did not actively focus on this outcome. Though consistent with the program's logic model (Figure II.1), program services emphasized employment and work experiences; any needed training or education after secondary school would be identified through a youth's career goals and work experiences.

A. Primary outcome: Enrolled in postsecondary education

Way2Work had no statistically significant impact for the primary education outcome—enrollment in postsecondary education at the time of the 24-month follow-up survey. This outcome assesses whether an enrollee attended technical training, a two-year community college, or a four-year college at time of the interview. About 42 percent of treatment group members and 45 percent of control group members attended postsecondary education when interviewed (Table V.1). The three percentage point difference was not statistically significant.

B. Supplementary outcomes

We collected data on several other education outcomes relevant to Way2Work enrollees, including administrative data from the National Student Clearinghouse. These outcomes included education-specific measures, such as secondary education completion, enrollment in college or trade school courses, and academic and career planning.

Table V.1. Impacts of Way2Work on education and training outcomes 24 months after enrollment

Variable	Treatment mean	Control mean	Impact (standard error)	Treatment N	Control N
Primary outcome					
Enrolled in postsecondary education at time of interview (percentage)	42.0	45.3	-3.4 (6.0)	137	145
Supplementary outcomes					
Completed high school education (percentage)	94.0	86.0	8.0** (3.8)	137	145
Enrolled in school at time of interview (percentage)	45.7	49.8	-4.1 (6.1)	137	144
Took college or trade school courses while enrolled in high school (percentage)	21.2	29.6	-8.4 (5.2)	136	144
Academic and career planning (percentage agree or strongly agree)					
I know what skills and training I need for the job(s) I want	80.9	73.1	7.8 (5.0)	137	143
I know what types of jobs are best for me	78.6	75.6	3.0 (5.1)	137	144
I know where to go online to learn about different types of jobs and careers, as well as the education and training needed for them	77.3	74.3	2.9 (5.1)	137	145
I have a plan outlining the steps that need to be taken to obtain the job(s) I want	64.5	65.2	-0.7 (6.0)	137	144
I have taken steps, such as visited businesses or taken career surveys, to learn about different kinds of jobs	61.3	58.6	2.7 (6.0)	137	145
Enrolled in postsecondary education after enrolling in Way2Work[a] (percentage)	41.7	46.8	-5.1 (6.6)	119	125

Source: Way2Work enrollee 24-month follow-up survey; National Student Clearinghouse data for 30 months after enrollment.

[a] National Student Clearinghouse data.

Note: Treatment means and impacts are regression adjusted to account for baseline characteristics. Standard errors appear in parentheses.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

Education-specific measures. Way2Work had mixed impacts across the three education-specific supplementary outcomes (Table V.1). Though most enrollees completed high school by the time of the follow-up interview, treatment group members were eight percentage points more likely than control group members to complete high school. The program did not have statistically significant impacts on school enrollment at the time of interview. In addition, treatment group members were eight percentage points less likely than control group members to take postsecondary courses while still enrolled in high school. This result is just short of the $p < 0.10$ threshold for statistical significance ($p = 0.11$).

Academic and career planning. Enrollee attitudes about academic and career planning did not vary across experimental groups (Table V.1). Most enrollees believed they had the knowledge necessary to identify and pursue postsecondary education and career goals. Additionally, most youth thought they understood what skills and training are needed for careers, what types of jobs were best for them, and where they could learn about careers. More than half of enrollees reported having a plan with the steps needed to obtain a desired job or had taken steps to learn about career opportunities.

Postsecondary education enrollment from the National Student Clearinghouse. Way2Work did not have an impact on the postsecondary education enrollment of enrollees as measured in data from the National Student Clearinghouse. Less than half of treatment and control group members had any documented involvement in postsecondary education institutions in the roughly 30 months after enrollment.

C. Subgroup analyses

Way2Work did not have any differential impacts on the primary outcome for the education domain by the subgroups that we considered. The lack of impact on postsecondary education enrollment was consistent for enrollees no matter their prior work history or time of enrollment (Appendix D).

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VI. What Impacts Did Way2Work Have on Employment Outcomes?

This chapter describes Way2Work's impact on employment outcomes. For this evaluation, we measure employment using enrollee follow-up survey data collected about two years after program enrollment, a period relatively close to the end of the service delivery period for many enrollees and directly after they were expected to graduate high school. In addition, enrollees likely did not distinguish between employment and WBLEs paid by employers or through a DORS stipend because these experiences were qualitatively similar from the enrollees' points of view. Hence, the employment outcome measures partially reflect the treatment group's participation in program-associated work experiences in addition to employment. This chapter presents impacts for two primary outcomes and supplementary outcomes related to employment. Table C.2 in Appendix C describes mean differences across experimental groups for other outcomes not included in this chapter.

Way2Work did not affect employment outcomes as of 24 months after enrollment. The primary measures' magnitudes suggest that those in the treatment group held the same level of paid employment over the past year as the control group. Additionally, the treatment and control groups held the same levels of connections to employment or postsecondary education when they completed the follow-up survey. These findings indicate that Way2Work's service model did not connect youth to employment or education experiences at higher rates than they could have obtained through usual services. The program's lack of impacts on paid employment could be due to several factors, including the low staying power of Way2Work services, the small sample enrolled in the survey, the strong connections to services (Chapter IV), and the COVID-19 outbreak (especially for Cohort 2 enrollees). We consider these hypotheses in the concluding chapter (Chapter VIII).

A. Primary outcomes: Past year employment and working or enrolled in postsecondary school 24 months after enrollment

Way2Work did not affect the likelihood of working for pay in the year before the follow-up survey. Enrollees frequently reported having paid employment no matter the experimental group, despite the time period overlapping with Way2Work service provision and treatment group youth being more likely to have participated in DORS-provided WBLEs (Table VI.1). Most treatment (81 percent) and control (74 percent) group members worked in paid positions over the past year. However, the p-value for the paid employment impact estimate ($p = 0.12$) is just short of the threshold for statistical significance at 10 percent. The statistical significance of impact estimates for this primary outcome varies between the regression-adjusted and unadjusted models. The unadjusted results show that Way2Work had a statistically significant and positive impact on paid employment in the year before the follow-up survey (Appendix Table D.1). However, despite randomization, treatment group members were much more likely to work at enrollment than control group members were (see Table II.1). Because past employment is positively correlated with future employment, we might therefore expect that treatment group members would be more likely to work than control group members even without the influence of Way2Work. When we use regression analysis to control for baseline characteristics, we observe no statistically significant impacts. The statistical significance of impact estimates was consistent across regression-adjusted and unadjusted models for all other outcomes.

Way2Work also did not result in enrollees being more likely to work or attend postsecondary school 24 months after enrollment. Unlike the other primary outcomes, this outcome spans two domains: employment and education. We developed this outcome measure because we did not want to miss overall

career progress by examining employment and postsecondary education separately. At the time of the survey, most enrollees reported either working or being enrolled in postsecondary education—66 percent of treatment group members and 72 percent of control group members. The 6 percentage point difference between the two experimental groups was not statistically significant.

Table VI.1. Impacts of Way2Work on employment outcomes 24 months after enrollment

Variable	Treatment mean	Control mean	Impact (standard error)	Treatment N	Control N
Primary outcomes					
Worked in paid employment in the past year (percentage)	81.3	73.6	7.7 (4.9)	137	145
Enrolled in postsecondary education or working at the time of the interview (percentage)	66.4	71.9	-5.5 (5.6)	137	145
Supplementary outcomes					
Worked at any job (paid or unpaid) in the past year (percentage)	81.5	74.9	6.5 (4.8)	137	145
Worked at the time of the interview (percentage)					
In a paid job	43.1	46.5	-3.4 (5.9)	137	145
In an unpaid job	1.0	4.0	-2.9 (1.8)	137	145
Number of jobs in the past year	1.4	1.2	0.2 (0.1)	137	145

Source: Way2Work enrollee 24-month follow-up survey.

Note: Treatment means and impacts are regression adjusted to account for baseline characteristics. Standard errors appear in parentheses.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

B. Supplementary outcomes

Consistent with the findings for the primary outcomes, Way2Work did not affect supplementary employment outcomes (Table VI.1). Enrollees in both experimental groups reported levels of paid or unpaid employment of 75 percent or over in the year before the follow-up survey. At the time of the follow-up survey, fewer than half of enrollees participated in paid work. The share of enrollees in both treatment and control groups who held unpaid positions at the time of the survey was less than 5 percent. Youth in both treatment and control groups held approximately one job on average in the past year. Across all these outcomes, no differences between the treatment and control groups differed significantly.

C. Subgroup analyses

Way2Work had no differential impact on the two primary outcome measures for the employment domain for the subgroups we considered (Appendix D).

VII. What Impacts Did Way2Work Have on Expectations?

The expectations that youth and their parents have about their future employment, education, or living situation offer insight into their level of self-confidence and optimism about the future. Previous studies, such as those based on the National Longitudinal Transition Study 2012, suggest that high school students with disabilities have lower expectations for postsecondary work and educational attainment compared to their peers without an IEP (Lipscomb et al. 2017). The expectations of parents might also influence the eventual outcomes of youth. For example, evidence shows correlations between high expectations of parents about a youth's future and that youth's better long-term outcomes, such as post-school employment (Carter et al. 2012; Doren et al. 2012; Mazzotti et al. 2020).

In this chapter, we examine how Way2Work influenced the expectations of enrollees and their parents 24 months after enrollment. A key goal of Way2Work was to equip treatment group members for future success by providing hands-on work experiences to develop skills or explore interest areas in supportive environments. If the intervention was successful at doing this, youth in the treatment group should be relatively more self-confident and informed about their future plans. In addition, parent expectations might change after watching how service delivery, particularly work experiences, affected their enrollees. This chapter focuses on impacts for the primary outcome and select supplementary outcomes. Table C.3 in Appendix C describes mean differences across experimental groups for additional supplementary outcomes related to this domain.

Although Way2Work did not have detectable impacts on the expectations of treatment group youth and parents about the future, the rate of favorable responses across experimental groups aligns with the goal of Way2Work and VR agencies more broadly to build self-confidence in youth with disabilities. As noted, nearly all youth and parents reported at enrollment that they expected the youth to be working at age 25, with similarly high expectations for other outcomes. These findings at both times contradict earlier research with similar populations and raise the possibility that the youth and families who agreed to participate in Way2Work might have been highly focused or interested in employment and postsecondary education options, perhaps more so than the broader group of youth with IEPs or Section 504 plans. Although the evaluation team cannot definitively determine the source for these high expectations among enrollees, the findings reveal little opportunity for Way2Work to improve expectations through its services.

A. Primary outcome: Expects to work for pay at age 25

Across experimental groups, nearly all Way2Work enrollees (97 percent) believed they would definitely or probably work for pay at age 25 (Table VII.1). The 0.2 percentage point difference between the two groups is not statistically significant. One factor might have limited the ability of Way2Work to have a significant impact on this outcome. Youth's expectations between enrollment and 24 months later did not change because of the intervention. Most youth (98 percent) also reported at enrollment that they expected to be working at age 25 (Martin et al. 2021).

Table VII.1. Impacts of Way2Work on expectation outcomes 24 months after enrollment

Variable	Treatment mean	Control mean	Impact (standard error)	Treatment N	Control N
Primary outcome					
Expects to work for pay at age 25 (percentage)	97.0	97.2	-0.2 (2.1)	136	142
Supplementary outcomes					
Expects to earn enough to support himself/herself without financial help from family or government benefit programs (percentage)	65.5	71.0	-5.5 (5.5)	135	143
Expects to graduate from a college, technical school, or trade school (percentage)	76.5	74.0	2.6 (5.3)	135	143
Parent expects enrollee to work for pay at age 25 (percentage)	97.8	98.4	-0.6 (1.7)	138	143

Source: Way2Work enrollee 24-month follow-up survey; Way2Work parent 24-month follow-up survey.

Note: Treatment means and impacts are regression-adjusted to account for baseline characteristics. Standard errors appear in parentheses.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

B. Supplementary outcomes

Consistent with the finding for the primary outcome, Way2Work did not affect any of the supplementary outcomes for expectations (Table VII.1). About two-thirds or more of enrollees expected to earn enough to support themselves without financial help from family or government benefit programs. About three-quarters of enrollees also expected to graduate from college, technical school, or trade school. Similar to the enrollees themselves, almost all parents (98 percent for both experimental groups) thought their enrollee would definitely or probably work for pay at age 25. As with the primary outcome, expectations for youth and parents were similarly high at enrollment, limiting the program's ability to affect them. Almost all parents (98 percent) reported at enrollment that they expected the youth to be working at age 25, and youth had similarly high expectations for other outcomes at enrollment (Martin et al. 2021).

C. Subgroup analyses

Way2Work did not have any differential impacts on the primary outcome for the expectation domain by the subgroups that we considered. The lack of impact on expecting to work by age 25 was consistent for enrollees no matter their prior work history or time of enrollment (Appendix D).

VIII. Conclusion

Way2Work offered services to high school students with disabilities that emphasized WBLEs to promote their postsecondary employment and education opportunities. This report presents estimates of Way2Work's impacts 24 months after enrollment on the key outcomes the program sought to improve. We measured the effects of the program directly after youth graduated—or were expected to graduate—from high school. High school youth who enrolled in the treatment group participated in enhanced services during their last two years of high school (from 16 to 24 months before their high school graduation). As noted in the implementation report (Martin et al. 2021), Way2Work offered services as intended, connecting treatment group members to DORS and WBLEs while encouraging collaboration among service providers. Because of the randomization process, in which enrollees either had access to enhanced program services or usual services, the impact estimates reflect the effects of the program rather than the effects of other factors that might have influenced outcomes.

A. Summary of findings

Four research questions motivated the impact evaluation. We summarize the answers to each question below based on the findings of the impact analysis.

Were Way2Work treatment group members more likely than control group members to receive the services intended? Treatment group members were substantially more likely than control group members to use key Way2Work services. Administrative data from DORS showed that treatment group members participated in relatively more DORS-supported WBLEs—a core component of the Way2Work service model—along with other DORS-specific service outcomes. However, we found few differences between experimental groups on other measures of service use, indicating that treatment and control group members accessed similar transition services as they concluded high school.

Were Way2Work treatment group members more likely than control group members to achieve paid, competitive employment in career entry jobs or enroll in postsecondary education that will lead to careers? Way2Work did not have an impact on the three primary outcomes related to employment or education: postsecondary education enrollment 24 months after enrollment, working for pay in the year before completing the 24-month follow-up survey (which could include WBLEs paid either by DORS or an employer), and either working or attending postsecondary education 24 months after enrollment. The only statistically significant impact of Way2Work in the employment and education domain was on the supplementary outcome measuring high school completion; Way2Work increased the likelihood that youth attained a high school diploma.

Compared to the control group, were Way2Work treatment group members more satisfied with their career progress? Using enhanced Way2Work services did not increase youths' satisfaction with their career progress; both treatment and control group members were largely satisfied with the transition services they used. The program also did not affect whether enrollees believed they would achieve their goals related to service use.

Were Way2Work treatment group members more likely than control group members to obtain other outcomes, such as engaging in academic and career planning and expectations? The Way2Work program did not affect enrollees' expectations for employment, which were nearly universally positive before being offered enhanced services, offering limited room for improvement. Moreover, the program did not affect enrollees' academic and career planning.

B. Possible explanations for the findings

That the evaluation did not detect impacts on most key program outcomes raises questions about the ability of Way2Work to affect those outcomes relative to usual services. Although DORS and UMD appear to have implemented the program well, Way2Work did not generate the intended effects. Below, we consider several possible explanations for the general lack of Way2Work impacts.

The Way2Work service model does not lead to the intended short-term outcomes. The Way2Work model might not have resulted in the intended effects for at least three possible reasons. First, one or more aspects of the service model might not have been delivered with high enough intensity or quality to affect youth's transition outcomes. For example, the DORS model for WBLEs, which relied on CRPs to offer WBLEs to students with disabilities, might not have been as strong as intended, given some CRPs' inexperience offering services to this population, DORS changing its approach for CRP reimbursements during the demonstration, and inconsistent CRP take-up of stipend-paid work experiences. We did not design the evaluation to assess whether any single aspect of the model—such as DORS's approach to using CRPs for WBLEs or the MIAT used for collaboration—was more or less effective than other components. We assessed Way2Work as a package of services and can only speculate whether one or another aspect of the intervention failed to achieve the intended effects. Second, students might require other services beyond those offered through Way2Work, so the model might benefit from including additional services on top of those provided to achieve positive effects for youth. Although this explanation is plausible, treatment group members reported high satisfaction with services and identified few unmet needs. Third, DORS and UMD built the service model on the evidence and insights from other transition programs available at the time, so in theory the model should have led to positive impacts. It is possible that the evidence and insights were less applicable to youth in Maryland or that system changes resulting from WIOA or other factors that emerged over time made that evidence less relevant by the time Way2Work was implemented.

Maryland has strong existing services for youth transition. Way2Work might not have produced impacts because the services it offered were not sufficiently different from the usual transition services available to youth with disabilities. LSSs that volunteered to participate in the program often had prior experience with participating in transition-related demonstration projects and, by virtue of their interest in Way2Work, may have already developed and strengthened their transition services (as evidenced by the interagency transition committees organized by many LSSs). If usual services are robust, available, and effective—as they might have been for those LSSs' participating in the program—this status quo minimizes both the need for a new intervention and the potential for any intervention to have strong effects. Way2Work control group members reported using most transition-related services at the same rates as treatment group members. Both groups also reported similar overall satisfaction with the services they used. Our analysis of DORS administrative records showed that 41 percent of control group members used DORS services (albeit at lower intensity than treatment group members) and, of those, two-thirds applied for DORS services beyond pre-employment transition services. Though we did not measure service use intensity with the 24-month follow-up survey, these findings suggest strong use of usual transition services by control group members. If the DORS-based services provided by Way2Work did not greatly enhance overall service use, then we should not expect to see differences in outcomes across experimental groups.

The COVID-19 pandemic dampened program output and impacts. The COVID-19 pandemic affected service delivery and follow-up for Cohort 2 enrollees. The pandemic created a significant economic recession with concentrated effects at low-wage jobs, including the types of jobs that transition-

age youth typically have (Inanc 2021). In March 2020—three months before services ended for Cohort 2 enrollees—DORS changed all service delivery to virtual and suspended employment placements, including WBLEs. These changes could have negatively affected treatment group members more than control group members, especially if the former relied on enhanced services from DORS and the latter used services from other providers that were not similarly curtailed. Hence, Cohort 2 treatment group members might have had a challenging time finding employment after ending their participation in the program.

Nonetheless, the analyses of the cohorts suggest the pandemic did not strongly influence inter-cohort differences in outcomes. Despite the pandemic's shortening of program services for Cohort 2, the program's impact on having two or more quarters with a DORS-funded WBLE was 12 percentage points larger for Cohort 2 enrollees relative to Cohort 1 enrollees. Thus, even with the pandemic interrupting DORS services, Cohort 2 enrollees were more likely to achieve a key DORS service delivery milestone. However, the program's impacts on primary employment outcomes were no different across the two cohorts. Though the pandemic might have dampened the impacts of Way2Work for Cohort 2 enrollees for employment and postsecondary education at the time of the follow-up survey, it did so similarly for both treatment and control group members. Similarly, ad hoc analyses of employment for Cohort 2 at the time of the follow-up interview (collected between September and December 2020) do not suggest any consistent differences in the responses between the treatment and control groups during this period (analyses not shown).

The impact evaluation lacked the statistical power needed to detect modest program impacts. The ability of an impact analysis to detect program effects hinges on several factors, including the size of the analysis sample. Way2Work enrolled 200 students into the treatment group and 201 into the control group. The power analysis conducted for the evaluation design report suggested that with 400 enrollees evenly divided between experimental groups, the main impact analysis could detect postsecondary education impacts of 11.4 percentage points or more and employment impacts of 14.0 percentage points or more (Honeycutt et al. 2017). However, the estimated employment and education impacts did not exceed 7.7 percentage points. It is possible that the program generated modest impacts, but the evaluation lacked the power to detect them. Detecting impacts of approximately 8 percentage points for paid employment using survey data, for example, would require an analysis sample of around 1,200 students.

The program's positive effects could be delayed. The program's effects could emerge later, as the enrollees become young adults. By offering treatment group members services and connecting them to DORS and other providers, the enrollees might be in better positions as they get older to leverage these services and obtain stronger outcomes as adults. However, even with strong initial impacts, most programs tend to have diminishing effects over time (for example, Schochet et al. 2008), so it seems unlikely that positive effects of Way2Work will emerge in the long term. Nonetheless, DORS could analyze administrative data on quarterly earnings and postsecondary education to assess Way2Work's impacts beyond 24 months after enrollment.

Way2Work did not focus on the students with disabilities who could benefit most from the program. The package of Way2Work services might be best for students with more significant disabilities or with more limited resources. Though Way2Work outreach targeted a broad population, the program might have attracted youth and families who were more interested in and motivated to participate in programs that offered employment-related services. The demographic characteristics presented in Chapter II show that most parents had attained some type of postsecondary education and were married, and Chapter VII showed that parents had high expectations on employment and education

for their youth. Thus, those who enrolled might be a select group from, and not representative of, the larger population of families of youth participating in special education services. WIOA requires that VR agencies offer pre-employment transition services to students with disabilities, and most agencies rely on IEPs or Section 504 plans as the requirement for identifying a student as having a disability. This approach might be too broad, especially if many such students work or go on to postsecondary education without these additional services.

C. Policy implications

Way2Work is one of five demonstration projects funded by RSA to test WBLE models for students with disabilities. DORS and UMD responded to RSA's requirements for the demonstration by designing a program based on best practices for offering services to students with disabilities, emphasizing early engagement with VR services, connecting youth to employers, employment experiences that matched youth's interests, and provider service collaboration. Findings from the Way2Work evaluation might benefit from being viewed in the context of the findings for the other four programs, particularly whether any had impacts on employment. Such information might provide insight on which aspects of the WBLE models might have resulted in their intended outcomes. This comparison might also answer a larger question: what are the effects of WBLEs? The changes that WIOA required of VR agencies—to allocate 15 percent of their federal funding to pre-employment transition services—raises concerns for VR administrators and other stakeholders about the outcomes of these services, particularly compared with usual or existing services. The impact evaluations for Way2Work and the other four demonstrations will provide initial evidence for one of these services, WBLEs.

The results from the Way2Work evaluation point to three future considerations to explore promoting postsecondary employment and education outcomes for youth with disabilities. First, the large number of services Way2Work youth used raises questions about the nature of those services and the level of coordination among providers. Can services be offered in more efficient ways? WIOA and IDEA require transition services to be coordinated across VR agencies, LSSs, workforce agencies, and other community providers. To what extent are services duplicated across these entities? To what extent are they missed? What are the characteristics of youth who are best served by these existing services, and which youth might benefit from additional or more intensive services? Second, RSA's interest in WBLE models could have emerged, in part, from the strong body of evidence connecting work experiences to outcomes. A focus on work experiences, however, might exclude other important services that could benefit youth with disabilities and their families. Finally, the field might consider employing more rigorous research to assess the outcomes of transition practices and confirm the findings on best practices, especially those derived from correlational analyses of nonexperimental survey data.

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Appendix A

Impact Evaluation Methods

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A. Introduction

This appendix summarizes the methodological details for the impact analysis. It describes how we measured baseline equivalence, estimated impacts, and accounted for various analytic issues. The analysis methods used for this report closely align with those outlined in the evaluation design report for Way2Work (Honeycutt et al. 2017). We describe when our methods diverged from the evaluation design report and why we made changes.

B. Testing baseline equivalence between experimental groups

Before conducting the impact analysis, we examined how random assignment created covariate balance across experimental groups. The impact analysis relies on the random assignment of enrollees to assert that differences in outcomes between experimental groups are solely attributable to the intervention. Theory suggests random assignment should create identical experimental groups in expectation. Nevertheless, there may be some chance variation across experimental groups within any random draw, especially with experimental groups as small as those for Way2Work. However, if there are many differences across experimental groups, it might signal that assignment was not randomized successfully.

In addition to assessing random assignment, examining covariate balance across experimental groups can improve our ability to detect program effects. If we identify imbalance for certain characteristics, we can control for those characteristics when estimating program impacts, thus improving the precision of our estimates.

How we assessed baseline equivalence differed by variable type. For binary and continuous variables, we used Student's t-test to evaluate differences in means between the treatment and control groups. For categorical outcomes, we computed χ^2 statistics to determine whether the enrollee distribution across categories was consistent between the two groups.

C. Estimating impacts

We created two types of impact estimates. The main impact estimates are intent to treat (ITT) estimates. ITT estimates measure the impact of Way2Work across all enrollees, regardless of their post-enrollment behavior, including what aspects of the intervention they used. We also created local average treatment effect (LATE) estimates for most of the primary outcomes. In contrast to the ITT estimates, the LATE estimates measure the impact of Way2Work among those who used at least one WBLE. We estimated all impact models in Stata 15.1.

1. Main analysis models

We used multivariate regression models to estimate most impacts for Way2Work. Regression-adjusted estimates are more precise than unadjusted estimates because they account for variation across exogenous characteristics. With more precision, we can detect smaller program impacts. Impact estimation for outcomes based on VR administrative data included all Way2Work enrollees, whereas estimation for outcomes that relied on follow-up survey data included only survey respondents.

The impact model specification varied by outcome variable type. For binary and continuous outcomes, we estimated impacts using an ordinary least squares (OLS) regression model with heteroskedastic-robust standard errors. The model is

$$y_i = \delta T_i + \beta X_i + \varepsilon_i \quad (1)$$

where y_i is the outcome for enrollee i, T_i is a treatment group status indicator, X_i is a vector of baseline characteristics, and ε_i is a random error term. Because of Way2Work's RCT design, the parameter δ represents the impact of Way2Work on outcome y.

We used a negative binomial regression model to estimate program impacts for count outcome variables. Because count variables can only take nonnegative integer values, there is no variable transformation that will result in a regression with a normally distributed error term, which is a critical assumption when estimating an OLS regression model. Consequently, a different approach is needed. Negative binomial regression models can analyze count data. For Way2Work, the negative binomial regression model specification is

$$\Pr(Y = y_i \mid \varphi_i) = \left(\frac{r(y_i + \alpha^{-1})}{r(\alpha^{-1}) r(y_i + 1)} \right) \left(\frac{1}{1 + \alpha \varphi_i} \right)^{\alpha^{-1}} \left(\frac{\alpha \varphi_i}{1 + \alpha \varphi_i} \right)^{y_i} \quad (2)$$

$$\varphi_i = \exp(\gamma T_i + \omega X_i + \mu_i) \quad (3)$$

where $\Gamma()$ is the gamma function and α is an overdispersion parameter that captures the variability in the outcome. The parameter γ captures the impact of Way2Work but is not directly interpretable (unlike the analogous OLS regression model parameter δ). To obtain interpretable impact estimates, we relied on Stata's "margins" command to calculate marginal effect of Way2Work across the enrollee baseline covariate distribution using the estimated negative binomial models.

The vector X contains two groups of baseline covariates (Table A.1). Most of the covariates in the vector are baseline characteristics that are likely correlated with program outcomes. These covariates include demographic characteristics, work history, expectations, indicators for LSS, and enrollment cohort. Because of the correlations with program outcomes, including these covariates in the regression models should improve the precision of our estimates, allowing us to detect smaller impacts. The remaining covariates in X are baseline characteristics that are imbalanced across the treatment and control groups. The covariates in this latter group include employment status at enrollment and the relationship status of responding parent. Incorporating these covariates into the regression models improves the precision of our impact estimates by controlling for covariate imbalance.

Table A.1. Baseline covariates included in the main regression models

Source	Variables
Baseline characteristics likely correlated with program outcomes	LSS (Anne Arundel, Carroll, Charles, Cecil, Frederick, Harford, Washington, Worcester); gender (male, female); race (white, nonwhite); Hispanic (yes, no); grade level at enrollment (10th; 11th, 12th, or other); was employed sometime in the 12 months before enrollment (yes, no); received free or reduced price lunch while in school (yes, no); expects to complete postsecondary education (yes, no); in excellent or very good health (yes, no); health conditions (ADHD, specific learning disability, serious emotional disturbance, all other conditions); cohort (Cohort 1, Cohort 2)
Variables with statistically significant differences between experimental groups	Employment status at enrollment (employed, not employed); relationship status of responding parent (single, married, separated or divorced, unknown)

ADHD=attention-deficit hyperactivity disorder.

2. LATE model

We estimated LATE impacts to understand how Way2Work affected outcomes among those who used at least one WBLE, which is arguably the central feature of the Way2Work intervention. We estimated each LATE model simultaneously using generalized method of moments and heteroskedastic-robust standard errors. However, the model is better conceptualized as a two-stage least squares regression. Our first stage assesses the probability of receiving one or more WBLEs as a function of treatment status—the exogenous instrumental variable—and the baseline covariates included in the main regression model.

$$WBLE_i = \kappa T_i + \rho X_i + v_i \qquad (4)$$

where *WBLE* is an indicator for whether someone participated in one or more DORS approved work-based learning experiences during the demonstration period.

In the second stage, we modeled the outcome on the predicted work-based learning experience receipt probability and baseline covariates.

$$y_i = \lambda \widehat{WBLE}_i + \zeta X_i + \eta_i \qquad (5)$$

where $\widehat{WBLE}$ is the predicted probability from the estimated Equation (4) of participating in one or more work-based learning experiences.

We estimated the LATE model using generalized method of moments instead of two-stage least squares because the two-stage least squares estimator is relatively inefficient asymptotically if heteroskedasticity is present. In addition, we did not estimate LATE for the two or more quarters with a WBLE outcome because that outcome is perfectly correlated with having one or more quarters with a WBLE.

Appendix E contains the LATE impact estimates.

3. Weights that account for nonresponse

When estimating impacts for survey-based outcomes, we weighted each observation to account for survey nonresponse. Accounting for survey nonresponse can ensure that the impact estimates for survey outcomes reflect the entire analysis sample, not just survey respondents. The nonresponse weights are the inverse of the probability of responding to the survey. We used a random forest algorithm—which uses treatment status and baseline characteristics as predictors—to calculate the survey response probabilities.

4. Accounting for missing data and enrollee withdraw

We addressed missing data based on how we used the data in the analysis and why the data were missing. If data were missing for a baseline characteristic used in the impact analysis as an explanatory variable, we used mean imputation to fill in the missing value. For outcome variables, we typically excluded from impact estimation enrollees with a missing value for the outcome. If an outcome had conditionally missing values, we examined mean differences instead of estimating impacts.

We also assessed whether enrollee withdrawals from Way2Work might affect impact estimation. Participation in Way2Work was voluntary and enrollees could withdraw from the program at any time. If an enrollee withdrew, he or she could request the deletion of his or her information from all Way2Work

data. Only three enrollees withdrew from the demonstration—two who died and one who moved out of Maryland. None of these withdrawals requested a purge the enrollee's data. We therefore included all three withdrawals in the ITT impact analyses. Because withdraws were very limited and we could include all in the analysis, we needed no special strategies or analyses for enrollee withdrawals.

D. Subgroup analyses

To understand how the impacts of Way2Work vary across key individual characteristics, we estimated impacts for two subgroups. The subgroups are employment status in the 12 months before enrollment and enrollment cohort (Cohort 1, who enrolled from 2017 to early 2018, and Cohort 2, who enrolled during the second half of 2018). For each subgroup, the categories are mutually exclusive. We estimated subgroup impacts for the five primary outcomes only because those outcomes constitute the main assessment of Way2Work's efficacy.

We chose these subgroups for two reasons. First, because each subgroup reflects characteristics that might influence how enrollees respond to the intervention, program impacts could vary substantively by subgroup. Estimating impacts for these subgroups enabled us to explore that variation. Second, the analysis sample was well-partitioned across both subgroups. The smaller a subgroup is, the more difficult it is to detect significant subgroup impacts. Given the limited size of the Way2Work analysis sample, detecting significant impacts for a small subgroup is especially difficult. By selecting subgroups with more balanced representation, we improved the probability of detecting subgroup impacts. Table A.2 contains more details on and justifies the selection of each subgroup.

Table A.2. Subgroups and rationale for their analysis

Subgroup indicator[a]	Rationale
Was employed sometime in the 12 months before enrollment—employed (50 percent) vs. not employed (50 percent)	Program outcomes might vary by employment status before enrollment because participants with existing connections to the labor force likely had fewer barriers to employment than participants who had not worked before.
Enrollment cohort—Cohort 1 (47 percent) vs. Cohort 2 (53 percent)	Cohort status might have affected outcomes in two non-complementary ways. First, program services, activities, and practices might have been more fully developed for enrollees in Cohort 2 than those in Cohort 1. Second, the COVID-19 pandemic occurred in part of the follow-up period for Cohort 2 enrollees, but not any of the follow-up period for Cohort 1 enrollees, thus potentially depressing outcomes, particularly those involving employment.

[a] The entries in parentheses show the percentage of Way2Work enrollees in the corresponding subgroup arms.

We estimated subgroup impacts using a modified version of the main OLS regression model. For a binary subgroup, the model is:

$$y_i = \vartheta S_{gi} + \theta S_{gi} T_i + \xi T_i + \tau X_i + \upsilon_i \qquad (6)$$

where S_{gi} is an indicator for being in subgroup g. For the grade level subgroup analysis, we add two terms to Equation (4) that capture contributions from the third subgroup. The parameter θ is the marginal impact of Way2Work for enrollees in subgroup g. We estimated the model using the entire analysis sample or all survey respondents—not a subset of enrollees. The vector X includes the same covariates as

the main OLS regression model except for the subgroup indicator variable for $_g$. To determine whether impacts vary across subgroups, we tested whether θ is statistically different from zero.

E. Presentation of impact estimates

We report several statistics with each impact estimate. To help readers contextualize our estimates, we report the outcome mean for the treatment and control group. The control group mean is calculated directly from the data, whereas the treatment group mean is regression adjusted. The impact estimate is the difference between the treatment and control group outcome means. We report each impact estimate with a heteroskedasticity-robust standard error that indicates the precision of the estimate. To identify significant impact estimates, we tested whether each one is statistically different from zero. We report whether the impact estimate's *p*-value was below key thresholds and highlight in the text and tables those impacts with *p*-values below 10 percent. Because we derived most outcome measures from survey data and respondents sometimes do not reply to all questions, the sample size for each impact analysis varied slightly. We report the treatment and control group sample sizes with each regression result to show how the sample size varied.

In Appendix D, we also present simple impact estimates—differences in treatment and control group means—for the primary outcomes. Because of the demonstration's RCT design, differences in mean outcomes across experimental groups are valid impact estimates. Despite being less precise than the main regressions-adjusted impact estimates, simple impact estimates can reveal whether the main measures of Way2Work's efficacy are sensitive to regression model selection.

F. Multiple comparisons

Simultaneously considering the results of several statistical tests—known as multiple comparisons—creates methodological challenges. A Type 1 error rate threshold—the false positive rate threshold indicated by the statistical significance level—is often used to assess statistical tests. When we consider several independent statistical tests together, the joint error rate is higher than the error rate of the individual tests. The more statistical tests considered together, the larger the disparity between the joint and individual error rates.

The multiple comparison issue implies that the more statistical tests we perform for the impact evaluation, the more likely we will find statistically significant impact estimates that are not true impacts. Though there are methods to address the multiple comparisons issue by adjusting the p-values of the individual tests, these methods can also increase the Type 2 error rate—the rate of detecting false negatives (Schochet 2008). With the unavoidable challenge of detecting program impacts using the somewhat small Way2Work sample, the evaluation should avoid further decreasing our ability to detect impacts by increasing the Type 2 error rate. Consequently, we did not adjust the p-values of any individual tests to account for multiple comparisons.

Instead, we addressed the multiple comparisons issue by pre-specifying five primary outcomes across the four outcome domains. The outcomes are:

- Two or more quarters with a DORS WBLE,
- Enrolled in postsecondary education at the time of the follow-up survey,
- Worked in paid employment anytime in the past year,

- Enrolled in postsecondary education or working at the time of the follow-up survey, and
- Definitely or probably expects to work for pay at age 25.

These outcomes are the main assessment of Way2Work's efficacy. By choosing a limited set of outcomes for the main assessment, we minimized the effects of the multiple comparisons issue. In other words, the joint error rate for the primary outcomes is very similar to the error rate chosen for the individual statistical tests. The selected primary outcomes also closely resemble the preliminary primary outcomes described in the evaluation design report. All non-primary outcomes are considered supplementary. Though important to understanding the effects of the intervention, the supplementary outcomes do not constitute the main assessment of Way2Work's efficacy. Because of the many supplementary outcomes, the probability (in expectation) of having a false positive impact is substantively greater than the error rate for the individual statistical tests.

G. What Works Clearinghouse Evaluation Design Rating

An important objective of the Way2Work evaluation design is to achieve the highest What Works Clearinghouse (WWC) evaluation design rating, which is that the design meets WWC group design standards without reservations. Achieving this rating is a strong indicator of a rigorous evaluation design and thus provides confidence in the validity of the findings. To receive the highest design rating, an evaluation must (1) be an RCT, (2) have low levels of sample attrition, and (3) have at least one outcome that meets criteria for a quality measure.[4]

The Way2Work evaluation meets WWC standards for an RCT. The WWC standards require that an RCT assigns each study enrollee to a treatment or control group entirely by chance with a nonzero probability. For Way2Work, we randomly assigned each enrollee with equal probability to either the treatment group or control group using an algorithm within our modular, web-based management information system known as RAPTER®. The random assignment algorithm in RAPTER® ensures randomizing study enrollees properly. Furthermore, Table II.1 reveals strong baseline covariate balance between treatment and control group members after random assignment. Though not definitive proof, the baseline covariate balance between treatment and control groups is evidence that we conducted random assignment correctly. Between understanding the algorithm responsible for random assignment and observing strong baseline covariate balance, we are confident in the integrity of random assignment.

We must also meet the WWC standards for attrition. Attrition occurs when the evaluation lacks an outcome variable for a study enrollee. Certain levels of attrition can compromise the comparability of the treatment and control groups, potentially biasing estimates of the intervention's outcomes. WWC standards examine two types of attrition: overall attrition—the rate of attrition for the entire sample—and differential attrition—the difference in rates of attrition for the treatment and control groups. Both types of attrition must be low to achieve the highest WWC design rating, which the standards refer to as "tolerable levels of potential bias for both the optimistic and cautious sets of assumptions."

Examining both overall and differential attrition, all data for the Way2Work evaluation meet WWC's criteria for low sample attrition. For outcomes measured using DORS administrative data, we have no missing data because either an enrollee used the DORS services as captured by DORS administrative data or the enrollee did not. However, most outcomes for the Way2Work evaluation are taken from the youth and parent follow-up surveys, which experienced attrition. Of the 401 Way2Work enrollees, we

[4] For more details on WWC standards, please see What Works Clearinghouse™ Standards Handbook, Version 4.1 (ed.gov)

completed follow-up surveys for 290 parents and 282 enrollees, representing response rates of 72.3 percent and 70.3 percent, respectively. With differential attrition, the survey had a 0.4 percentage point difference in the response rates for the parents or guardians of treatment and control group members. Similarly, we observed a 3.7 percentage point difference in the youth response rates for treatment and control group members. Given (a) the overall attrition rates for parents and youth (29 percent) and (b) the differential attrition rates for both parents and youth being below the respective 4.5 and 4.3 percentage point thresholds set by WWC (Table A.3), the follow-up survey data meet the criteria for low sample attrition.

Table A.3. Overall and differential attrition for Way2Work follow-up survey data

	Way2Work		What Works Clearinghouse standards	
	Overall attrition	Differential attrition	Overall attrition	Differential attrition cautious boundary
Parent survey	27.32%	0.36 pp	27%	4.5 pp
Youth survey	29.32%	3.66 pp	29%	4.3 pp

To receive the highest rating, WWC standards also require that at least one outcome meet review requirements and be free of confounding factors. One of our primary outcomes—having two or more quarters with a DORS WBLE—meets review requirements and is free of confounding factors. The measure has face validity because it is clearly defined and the content it assesses aligns with its definition. Because DORS administrative data record WBLE receipt and all enrollees can receive DORS-funded WBLEs, the measure is recorded in the same manner for both groups and not overaligned. In addition, strong baseline covariate balance suggests all baseline characteristics are present across both experimental groups. With these observations, we are confident that no component of the study design or feature of implementation for this measure is perfectly aligned or confounded with either experimental group.

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Appendix B

Regression-Adjusted Impact Estimates for Additional Supplementary Outcomes

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Table B.1. Impacts of Way2Work on other service outcomes by 24 months after enrollment

Variable	Treatment mean	Control mean	Impact	Treatment N	Control N
Used this type of service from Division of Rehabilitation Services (DORS) (percentage)					
Job exploration services	30.2	19.4	10.8** (4.2)	200	201
Workplace readiness training	22.6	15.9	6.7* (3.7)	200	201
Counseling on postsecondary opportunities	7.1	3.0	4.2** (2.1)	200	201
Self-advocacy training	6.6	9.0	-2.3 (2.7)	200	201
Counseling services	20.9	17.9	3.0 (3.9)	200	201
Other services	14.4	13.4	0.9 (3.4)	200	201
Number of quarters receiving this type of service from DORS					
Job exploration services	0.9	0.4	0.5*** (0.1)	200	201
Workplace readiness training	0.7	0.3	0.3*** (0.1)	200	201
Counseling on postsecondary opportunities	0.1	0.1	0.0 (0.0)	200	201
Self-advocacy training	0.1	0.2	-0.0 (0.1)	200	201
Counseling services	0.7	0.8	-0.1 (0.2)	200	201
Other services	0.3	0.3	0.0 (0.1)	200	201
Cost of DORS services (dollars)	5,465.7	2,203.9	3,261.7*** (448.4)	189	82
Closed a DORS case while employed in a competitive integrated setting (percentage)	5.1	4.5	0.6 (2.2)	200	201
Used services from (percentage)					
DORS	46.5	28.8	17.8*** (5.9)	137	145
An agency serving people with disabilities (other than DORS)	21.5	18.6	2.9 (5.1)	137	145
An American Job Center	1.8	0.0	1.8 (1.3)	137	145
A high school or other secondary school	41.5	45.7	-4.2 (6.1)	137	145

Variable	Treatment mean	Control mean	Impact	Treatment N	Control N
A postsecondary school	7.8	20.8	-13.0*** (4.0)	137	145
Some other place	32.0	35.1	-3.1 (5.9)	137	145
Specific services used (percentage)					
Took tours of workplaces	32.9	27.3	5.6 (5.8)	133	143
Participated in a job shadow	35.6	30.2	5.5 (5.9)	133	143
Interviewed someone about their job	23.5	16.8	6.7 (5.1)	136	143
Regularly talked one-on-one with someone about jobs	40.1	38.4	1.7 (6.1)	134	142
Regularly talked as part of a group with someone from outside of school about jobs	31.3	25.6	5.7 (5.7)	135	145
Had a paid internship or apprenticeship	32.8	14.7	18.1*** (5.4)	132	143
Had an unpaid internship or apprenticeship	17.9	15.4	2.6 (4.9)	135	144
Worked in a school-based enterprise	13.1	9.3	3.8 (4.1)	134	139
Specific services needed but not used (percentage)					
Discovering job interests/job skills	1.8	6.0	-4.1* (2.3)	137	145
Career counseling	0.3	4.5	-4.3** (1.7)	137	145
Learning how to look for a job	3.1	5.1	-2.0 (2.1)	137	145
Job shadowing	4.4	3.0	1.4 (2.1)	137	145
An apprenticeship or internship	3.3	2.2	1.0 (1.8)	137	145
Help finding a job	2.3	7.9	-5.6** (2.7)	137	145
Support on the job, such as job coaching	3.5	6.6	-3.2 (2.5)	137	145
Help getting into school or training	0.9	3.7	-2.8* (1.5)	137	145
Understanding Social Security Administration or other benefits	2.9	3.0	-0.1 (1.9)	137	145
Computer literacy classes	1.3	2.2	-0.8 (1.6)	137	145

Variable	Treatment mean	Control mean	Impact	Treatment N	Control N
Problem solving	0.2	1.5	-1.3 (1.2)	137	145
Financial literacy training	3.3	2.9	0.4 (1.9)	137	145
Referral to another agency	-0.1	1.5	-1.6 (1.1)	137	145
Transportation services	2.7	5.0	-2.3 (2.5)	137	145
Health-related services	0.3	2.1	-1.8* (1.1)	137	145
Case management	0.7	1.5	-0.8 (1.2)	137	145
Other services	2.4	2.9	-0.5 (2.0)	137	145

Source: Way2Work enrollee 24-month follow-up survey; Division of Rehabilitation Services administrative data.

Note: Treatment means and impacts are regression adjusted to account for baseline characteristics. Standard errors appear in parentheses.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

Table B.2. Impacts of Way2Work on other education and training outcomes 24 months after enrollment

Variable	Treatment mean (percentage)	Control mean (percentage)	Impact	Treatment N	Control N
Highest degree completed is college, technical school, or trade school	1.7	0.0	1.7 (1.1)	137	145
In the past year, enrollee learned about					
Working in a team	55.8	59.6	-3.9 (6.0)	135	144
Making decisions	67.6	65.8	1.8 (5.7)	135	144
Handling conflict	63.6	66.7	-3.1 (5.6)	137	144
Enrollee received special education services or had an individualized education program	75.0	70.9	4.1 (5.2)	142	144
Enrollee had a Section 504 plan	7.6	12.2	-4.6 (3.5)	144	145
Enrollee had a transition planning meeting to help plan what he or she might do after high school	79.8	75.4	4.4 (4.9)	145	145
Parent or guardian helped the enrollee prepare for life after high school through the following activities					
Attended a career day or job fair	45.9	41.0	4.9 (5.9)	141	142
Arranged to attend a program or take a tour of a college campus	62.7	64.6	-1.9 (6.0)	141	140
Arranged to sit in on or take a college class	46.6	46.9	-0.3 (6.1)	141	144
Arranged to participate in an internship or apprenticeship related to career goals	41.0	35.1	5.9 (6.0)	137	142
Arranged to work or volunteer in a job related to career goals	55.5	48.8	6.7 (6.1)	141	141
Searched the internet for college options or read college guides	66.3	69.2	-2.9 (5.8)	140	137
Talked with a high school counselor about options for life after high school	66.6	68.1	-1.5 (5.6)	139	144
Talked about options with a counselor hired by family to help the enrollee prepare for college admission	14.3	20.1	-5.9	141	140
Arranged to take a course to prepare for a college admission exam such as the SAT or ACT	33.4	36.2	-2.8	138	141

Variable	Treatment mean (percentage)	Control mean (percentage)	Impact	Treatment N	Control N
Type of postsecondary institution enrollee attended[a]					
Four-year institution	9.9	7.9	2.0 (3.9)	119	125
Two-year institution	36.3	42.9	-6.6 (6.3)	119	125

Source: Way2Work enrollee 24-month follow-up survey; Way2Work parent 24-month follow-up survey; National Student Clearinghouse data for 30 months after enrollment.

[a] National Student Clearinghouse data.

Note: Treatment means and impacts are regression adjusted to account for baseline characteristics. Standard errors appear in parentheses.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

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Appendix C

Unadjusted Mean Differences for Additional Supplementary Outcomes

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Table C.1. Way2Work education outcomes by experimental group 24 months after enrollment

Variable	Treatment mean (percentage)	Control mean (percentage)	Difference
Sample size	137	145	
School enrollment status at time of interview			
High school	2.9	2.1	0.7
High school that serves only students with disabilities	0.8	0.0	0.8
School that provides occupational or technical training, usually for less than two years	5.0	2.3	2.7
Two-year college	27.8	35.2	-7.4
Four-year college	8.6	8.2	0.4
Another type of school	0.8	2.0	-1.3
Not enrolled in school at time of interview	54.2	50.2	4.0
Expectations for educational achievement			
Less than high school	4.8	6.5	-1.8
High school diploma	19.7	19.5	0.2
Technical or trade school	15.4	7.1	8.3
Two-year college	21.6	25.4	-3.8
Four-year college	27.7	29.7	-2.0
Master's, PhD, or other advanced degree	10.8	11.8	-1.0
Highest degree or level of school completed			
Some high school, no diploma	8.4	13.3	-4.9
High school with diploma	81.7	79.0	2.7
Trade/technical/vocational training	1.5	0.0	1.5
Some college	8.4	7.0	1.4
Associate degree	0.0	0.0	0.0
Bachelor's degree	0.0	0.0	0.0
Any other type of degree or schooling	0.0	0.7	-0.7
Enrollee's role in transition planning			
There was no transition planning	17.9	24.9	-7.0
Did not participate in planning activities	0.8	2.4	-1.6
Present in discussions but participated very little or not at all	10.8	11.7	-1.0
Provided some input	40.7	37.9	2.8
Took a leadership role	27.1	21.6	5.5
Unknown	2.4	0.9	1.5
At the transition planning meeting			
There was no transition planning meeting	17.9	24.9	-7.0
Enrollee's interests, strengths, and preferences were discussed	11.8	12.2	-0.4
Staff from a community service agency took part	3.9	4.0	-0.1

Variable	Treatment mean (percentage)	Control mean (percentage)	Difference
Enrollee received information on education, careers, or community living options for when he or she leaves high school	11.0	10.2	0.7

Source: Way2Work enrollee 24-month follow-up survey; Way2Work parent 24-month follow-up survey.

Note: The reported difference is the difference in means between the treatment and control groups.

Table C.2. Way2Work employment outcomes 24 months after enrollment by experimental group

Variable	Treatment mean	Control mean	Difference
Sample size	137	145	
Worked and most recent job was paid (percentage)	78.8	63.3	15.5***
Most recent job occupation was (percentage)			
Office administration	7.2	5.3	1.9
Personal care and services	18.3	16.5	1.8
Installation, repair, construction, and production	6.0	7.1	-1.0
Food preparation and service	15.5	14.4	1.1
Health care support	6.0	5.4	0.5
Sales and related services	20.3	16.4	3.9
Education, instruction, and library services	1.4	4.1	-2.7
Grounds keeping and maintenance	4.3	2.9	1.4
Other occupation	2.2	1.3	0.8
Did not work recently	18.8	26.4	-7.6
Primary duties at most recent job (percentage)			
Elderly or youth care provider	10.2	6.2	4.0
Maintenance, repair, or production tasks	5.9	4.8	1.1
Customer service	29.9	32.5	-2.6
Inventory management	4.9	4.3	0.6
Manual labor	2.8	3.6	-0.7
Cleaning	6.0	2.1	3.9
Food preparation and cooking	9.8	7.8	2.0
Office administrative tasks	5.1	2.0	3.1
Assistant (non-administrative tasks)	2.8	2.7	0.2
Other tasks	3.5	4.9	-1.3
Did not work recently	19.0	29.3	-10.3
Number of hours worked per week at most recent job or the time of interview	20.8	23.3	0
Employed at the time of interview (percentage)	44.9	50.4	-5.5
Worked and most recent job was part of a school-sponsored activity (percentage)	9.7	11.8	-2.1
Worked and was very or somewhat satisfied with most recent job (percentage)	71.5	65.2	6.3
Hourly wage at most recent paid job or the time of interview[a]	$12.84	$13.18	$-0.34
Worked and had this benefit at the most recent paid job (percentage)			
Health insurance	11.3	8.9	2.4
Paid vacation	13.4	7.1	6.3*
Paid holiday	12.1	9.8	2.4
Paid sick leave	10.6	7.1	3.4

Variable	Treatment mean	Control mean	Difference
Retirement benefits	7.0	5.9	1.1
Dental benefits	5.5	3.7	1.8
Worked and used this support at the most recent paid job (percentage)			
Work equipment	21.1	18.5	2.6
Transportation	18.1	22.4	-4.3
Assistive technology	6.0	7.0	-0.9
An accommodation	35.8	35.7	0.2
Other help	4.4	5.5	-1.0
Top three reasons left most recent job (of those who worked) (percentage)			
The job ended	16.1	4.0	12.0***
Going to school	5.6	3.5	2.2
Other reasons not listed	8.2	13.6	-5.3

Source: Way2Work enrollee 24-month follow-up survey.

Note: The reported difference is the difference in means between the treatment and control groups.

*/**/*** Difference in means is significantly different from zero at the .10/.05/.01 levels, respectively, using joint tests for differences between the two groups. These tests compare means for continuous variables, proportions for binary variables, and distributions for multi-valued categorical variables. Significance thresholds are not adjusted for multiple comparisons.

[a] Calculation omits hourly wages less than $7.50 or more than $80.

Table C.3. Way2Work expectations 24 months after enrollment by experimental group

Variable	Treatment mean (percentage)	Control mean (percentage)	Difference
Sample size	137	145	
Expects to be living at age 25			
With a parent or guardian	22.4	28.8	-6.3
With a sibling or other relative	4.4	2.7	1.7
On his or her own or with spouse or partner	66.5	64.9	1.7
In a group home or institution	1.5	0.8	0.7
In another living situation	5.1	2.8	2.3
Unknown expectation	1.7	2.3	-0.5
Parent or guardian expects enrollee to definitely or probably earn enough to support self without financial help from family or government benefit programs	71.8	64.5	7.3
Parent or guardian expects the enrollee to be living at age 25			
With a parent or guardian	49.6	47.4	2.2
With a sibling or other relative	5.1	4.4	0.7
On his/her own or with spouse or partner	38.9	42.6	-3.7
In a group home or institution	1.4	1.4	-0.0
In another living situation	5.1	4.2	0.9
Unknown expectation	0.0	0.0	0.0

Source: Way2Work enrollee 24-month follow-up survey; Way2Work parent 24-month follow-up survey.

Note: The reported difference is the difference in means between the treatment and control groups.

*/**/*** Difference in means is significantly different from zero at the .10/.05/.01 levels, respectively, using joint tests for differences between the two groups. These tests compare means for continuous variables, proportions for binary variables, and distributions for multi-valued categorical variables. Significance thresholds are not adjusted for multiple comparisons.

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Appendix D

Impacts of Way2Work on Primary Outcomes by Subgroups

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Table D.1. Impacts of Way2Work on primary outcomes 24 months after enrollment by subgroups

Variable	Treatment mean (percentage)	Control mean (percentage)	Impact	Treatment N	Control N	*p*-value of differences across LSSs
Employment status in 12 months before enrollment						
Employed						
Two or more quarters with a DORS WBLE	86.7	24.7	61.9*** (5.7)	112	89	0.029
Enrolled in postsecondary education at time of interview	42.3	40.1	2.2 (8.4)	79	63	0.384
Worked in paid employment in the past year	91.0	85.8	5.2 (6.0)	79	63	0.618
Enrolled in postsecondary education or working at the time of interview	73.6	72.5	1.0 (7.6)	79	63	0.276
Expects to work for pay at age 25	97.1	98.5	-1.3 (2.7)	79	61	0.628
Not employed						
Two or more quarters with a DORS WBLE	90.3	12.5	77.8*** (4.5)	88	112	
Enrolled in postsecondary education at time of interview	41.0	49.4	-8.4 (8.7)	58	82	
Worked in paid employment in the past year	74.5	64.1	10.4 (8.1)	58	82	
Enrolled in postsecondary education or working at the time of interview	59.9	71.4	-11.5 (8.4)	58	82	
Expects to work for pay at age 25	97.1	96.3	0.8 (3.3)	57	81	
Enrollment cohort						
Cohort 1						
Two or more quarters with a DORS WBLE	82.2	18.9	63.2*** (5.7)	94	95	0.094

Variable	Treatment mean (percentage)	Control mean (percentage)	Impact	Treatment N	Control N	*p*-value of differences across LSSs
Enrolled in postsecondary education at time of interview	41.5	40.6	0.9 (8.5)	72	74	0.469
Worked in paid employment in the past year	78.3	76.3	2.0 (7.0)	72	74	0.239
Enrolled in postsecondary education or working at the time of interview	69.9	72.2	-2.3 (7.9)	72	74	0.567
Expects to work for pay at age 25	97.4	97.4	-0.0 (3.0)	72	74	0.940
Cohort 2						
Two or more quarters with a DORS WBLE	92.2	17.0	75.2*** (4.6)	106	106	
Enrolled in postsecondary education at time of interview	42.1	50.0	-7.9 (8.6)	65	71	
Worked in paid employment in the past year	84.6	70.9	13.7** (6.9)	65	71	
Enrolled in postsecondary education or working at the time of interview	62.8	71.7	-8.9 (8.1)	65	71	
Expects to work for pay at age 25	96.6	97.0	-0.4 (3.5)	64	68	

Source: Way2Work enrollee 24-month follow-up survey.

Note: Treatment means and impacts are regression adjusted to account for baseline characteristics. Standard errors appear in parentheses.

*/**/*** Difference in means is significantly different from zero at the .10/.05/.01 levels, respectively, using joint tests for differences between the two groups. These tests compare proportions for binary variables. Significance thresholds are not adjusted for multiple comparisons.

Appendix E

Unadjusted Impacts of Way2Work on Primary Outcomes

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Table E.1. Unadjusted impacts of Way2Work on primary outcomes 24 months after enrollment

Outcome	Treatment mean (percentage)	Control mean (percentage)	Impact	Treatment N	Control N
Services: Two or more quarters with a Division of Rehabilitation Services WBLE	88.5	17.9	70.6*** (3.5)	200	201
Education: Enrolled in postsecondary education at time of interview	41.4	45.3	-3.9 (5.9)	137	145
Employment: Worked in paid employment in the past year	84.0	73.6	10.4** (4.8)	137	145
Employment and education: Enrolled in postsecondary education or working at the time of interview	66.3	71.9	-5.6 (5.6)	137	145
Expectations: Expects to work for pay at age 25	96.2	97.2	-1.0 (2.2)	136	142

Source: Way2Work enrollee 24-month follow-up survey; Division of Rehabilitation Services administrative data.

Note: Standard errors appear in parentheses.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

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Appendix F

Local Average Treatment Effect Impacts

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Table F.1. Local average treatment effect impacts of Way2Work on primary outcomes 24 months after enrollment

Outcome	Treatment mean (percentage)	Control mean (percentage)	Impact	Treatment N	Control N
Services: Two or more quarters with a DORS WBLE	99.0	0.0	99.0*** (2.9)	229	172
Education: Enrolled in postsecondary education at time of interview	42.6	47.3	-4.7 (7.9)	165	117
Employment: Worked in paid employment in the past year	86.5	75.8	10.7 (6.5)	165	117
Employment and education: Enrolled in postsecondary education or working at the time of interview	67.2	74.8	-7.6 (7.4)	165	117
Expectations: Expects to work for pay at age 25	97.1	97.4	-0.3 (2.7)	163	115

Source: Way2Work enrollee 24-month follow-up survey; Division of Rehabilitation Services administrative data.

Note: Standard errors appear in parentheses.

*/**/*** Impact estimate is significantly different from zero at the .10/.05/.01 levels, respectively, using a two-tailed t-test. Significance thresholds are not adjusted for multiple comparisons.

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