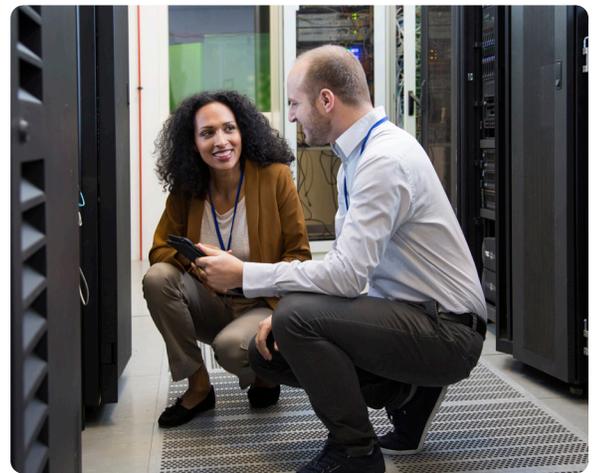


The Ready to Work Partnership Grant Evaluation: Technical Appendix for the Interim Impact Study of Four Employment Services Programs for the Long-Term Unemployed

Contract #: 1630DC-17-F-00013

January 2022



Prepared for:

U.S. Department of Labor
Employment and Training
Administration and Chief
Evaluation Office
200 Constitution Avenue, NW
Washington, DC 20210

Submitted by:

Jane Leber Herr
Jacob Alex Klerman
Karin Martinson
Elizabeth Copson

Abt Associates

6130 Executive Boulevard
Rockville, MD 20852

MEF Associates

1330 Braddock Place
Suite 220
Alexandria, VA 22314



This report was prepared for the U.S. Department of Labor (DOL) by Abt Associates, under contract number 1630DC-17-F-00013. The views expressed are those of the authors and should not be attributed to DOL, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the U.S. Government.

About this Report

The Ready to Work (RTW) Partnership Grants, operated between 2015 and 2019, were funded by the U.S. Department of Labor (DOL) to establish programs that might prove effective in preparing long-term unemployed and underemployed U.S. workers for employment in middle- and higher-level occupations. The RTW programs were to provide customized services that could include staff guidance on career and service planning, occupational training, work-based training, employment readiness, and job search assistance—but with considerable discretion in program design given to grantees.

To understand the impact of the RTW grant program on participants' earnings and employment, the RTW Evaluation, conducted by Abt Associates and MEF Associates for DOL's Employment and Training Administration, includes an experimental impact study as well as an implementation study. The evaluation assesses the programs implemented by four purposively selected RTW grantees.

This document includes the technical appendices for the Ready to Work Partnership Grant Evaluation's *Interim Impact Report*: "The Ready to Work Partnership Grant Evaluation: Findings from the Interim Impact Study of Four Employment Services Programs for the Long-Term Unemployed." The volume includes information on methodology and data sources, as well as detailed results.

Suggested Citation

Herr, J.L., Klerman, J.A., Martinson, K., and Copson, E. (2021). *The Ready to Work Partnership Grant Evaluation: Technical Appendix for the Interim Impact Study of Four Employment Services Programs for the Long-Term Unemployed*. Prepared for the U.S. Department of Labor. Rockville, MD: Abt Associates.

Contents

Appendix A: Additional Technical Information on Methodology	1
A.1 Regression Specification	1
A.2 Multiple Comparisons and Significance Testing	9
A.3 Cross-Grantee Analysis: Methods and Supplementary Results	12
Appendix B: Data Sources	17
B.1 Field Research	17
B.2 Survey Data	18
B.3 National Directory of New Hires	19
Appendix C: Survey Methods for the 18-Month Follow-Up Survey	25
C.1 Survey Development and Pre-Test	25
C.2 Survey Interview Timing and Sample Tracking	26
C.3 Interviewer Training	27
C.4 Data Collection Process	28
C.5 Adjustments to the Survey Release Timing	29
C.6 Response Rates	30
Appendix D: Definitions of Outcomes	32
D.1 Defining Outcomes on Participation in Employment-Related Activities	33
D.2 Defining Outcomes on Receipt of Education- and Employment-Related Supports	37
D.3 Defining Outcomes on Credential Receipt and Other Short-Term Outcomes	40
D.4 Defining Labor Market Outcomes Based on Survey Data	42
D.5 Defining Outcomes on Broader Measures of Well-Being	46
D.6 Defining Labor Market Outcomes Based on NDNH Data	48
Appendix E: Definitions of Baseline Measures	49
E.1 Study Sample Characteristics	49
E.2 Subgroup Identifiers	52
E.3 Candidate Covariates	53
E.4 Regression Covariates for the <i>Interim Impact Report</i>	55
Appendix F. Detailed Results for Chapter 3 (MTC)	58
F.1 Enrollment Process and Characteristics of the Study Sample	58
F.2 Impacts on Participation in Employment-Related Activities	64
F.3 Impacts on Receipt of Education- and Employment-Related Supports	74
F.4 Impacts on Credential Receipt and Other Short-Term Outcomes	76
F.5 Impacts on Labor Market Outcomes	78
F.6 Impacts on Broader Measures of Well-Being	84
F.7 Subgroup Impacts	85

Appendix G. Detailed Results for Chapter 4 (STW-T and JSA)	95
G.1 Enrollment Process and Characteristics of the Study Sample.....	98
G.2 Impacts on Participation in Employment-Related Activities.....	106
G.3 Impacts on Receipt of Education- and Employment-Related Supports.....	116
G.4 Impacts on Credential Receipt and Other Short-Term Outcomes.....	119
G.5 Impacts on Labor Market Outcomes.....	121
G.6 Impacts on Broader Measures of Well-Being.....	127
G.7 Subgroup Impacts	128
Appendix H. Detailed Results for Chapter 5 (FLH)	137
H.1 Enrollment Process and Characteristics of the Study Sample.....	137
H.2 Impacts on Participation in Employment-Related Activities.....	143
H.3 Impacts on Receipt of Education- and Employment-Related Supports.....	155
H.4 Impacts on Credential Receipt and Other Short-Term Outcomes.....	156
H.5 Impacts on Labor Market Outcomes.....	158
H.6 Impacts on Broader Measures of Well-Being.....	165
H.7 Subgroup Impacts	166
Appendix I. Detailed Results for Chapter 6 (Reboot NW)	175
I.1 Enrollment Process and Characteristics of the Study Sample.....	175
I.2 Impacts on Participation in Employment-Related Activities.....	181
I.3 Impacts on Receipt of Education- and Employment-Related Supports.....	192
I.4 Impacts on Credential Receipt and Other Short-Term Outcomes.....	194
I.5 Impacts on Labor Market Outcomes.....	196
I.6 Impacts on Broader Measures of Well-Being.....	203
I.7 Subgroup Impacts	204
References	213

List of Exhibits

Exhibit A.1-1: Take-up Rates for Calculating Treatment on the Treated (TOT) Estimators	3
Exhibit A.1-2: Treatment on the Treated Impact Estimates on Earnings, Employment, and Benefits Receipt	4
Exhibit A.3-1: Pairwise Tests of Impacts on Confirmatory and Secondary Outcomes, across Grantee Programs	16
Exhibit B-1: Data Sources for the Ready to Work Evaluation Impact Study	17
Exhibit B.3-1: Timing of Quarterly Outcome Data, by Random Assignment Quarterly Cohort	22
Exhibit B.3-2: Sample Sizes by Cohort and COVID-19 Status, by Grantee	23
Exhibit C.2-1: 18-Month Tracking Efforts	27
Exhibit C.6-1: Hierarchical AAPOR Final Classification	30
Exhibit D.1-1: Types of Structured Employment-Related Activities	33
Exhibit D.1-2: Outcomes on Participation in Structured Employment-Related Activities.....	34
Exhibit D.1-3: Outcomes on Field of Training for Occupational and Work-Based Training.....	35
Exhibit D.1-4: Outcomes on Content of Non-College-Based Occupational Training.....	35
Exhibit D.1-5: Outcomes on Monthly Attendance in Structured Employment-Related Activities	35
Exhibit D.1-6: Types of Job Search Assistance	36
Exhibit D.1-7: Outcomes on Job Search Assistance.....	36
Exhibit D.1-8: Types of General Skills Covered in Training	37
Exhibit D.1-9: Outcomes on Types of General Skills Covered in Training	37
Exhibit D.2-1: Outcomes on Funding Sources for Occupational Training.....	38
Exhibit D.2-2: Types of Supports Received	39
Exhibit D.2-3: Outcomes on Types of Supports Received	40
Exhibit D.3-1: Outcomes on Educational Attainment	40
Exhibit D.3-2: Outcomes on Confidence in Career Knowledge and Barriers to Employment.....	42
Exhibit D.4-1: Outcomes on Engagement in the Labor Force.....	43
Exhibit D.4-2: Outcomes on Characteristics of Current Job.....	43
Exhibit D.4-3: Outcomes on Connection between Training and Employment.....	46
Exhibit D.5-1: Outcomes on Income and Public Benefits Receipt.....	47
Exhibit D.5-2: Outcomes on Household Composition	47
Exhibit D.6-1: Outcomes on Earnings and Employment.....	48
Exhibit E.1-1: Sample Characteristics at Baseline.....	50
Exhibit E.2-1: Subgroup Identifiers	52

Exhibit E.3-1: Candidate Covariates Constructed from BIF Data 53

Exhibit E.3-2: Candidate Covariates Constructed from NDNH Data..... 55

Exhibit E.4-1: Regression Covariates for Impacts Reported in the *Interim Impact Report*..... 56

Exhibit F.1-1: MTC Enrollment Process 59

Exhibit F.1-2: Baseline Balance Testing – Study Sample, MTC..... 60

Exhibit F.1-3: Baseline Balance Testing – Full Sample at Random Assignment, MTC 62

Exhibit F.1-4: Comparison of Early Cohort versus Late Cohort, MTC..... 63

Exhibit F.2-1: Impacts on Any Structured Employment-Related Activity, MTC 65

Exhibit F.2-2: Distribution of Total Weeks of Any Structured Employment-Related Activity, MTC..... 65

Exhibit F.2-3: Impacts on Occupational Training, MTC 66

Exhibit F.2-4: Distribution of Total Weeks of Occupational Training, MTC 67

Exhibit F.2-5: Impacts on Work-Based Training, MTC 67

Exhibit F.2-6: Distribution of Total Weeks of Work-Based Training, MTC 69

Exhibit F.2-7: Impacts on Employment Readiness Courses, MTC 70

Exhibit F.2-8: Distribution of Total Weeks of Employment Readiness Courses, MTC..... 70

Exhibit F.2-9: Monthly Attendance in Any Structured Employment-Related Activity, MTC..... 71

Exhibit F.2-10: Monthly Attendance in Occupational Training, MTC 71

Exhibit F.2-11: Monthly Attendance in Work-Based Training, MTC..... 72

Exhibit F.2-12: Monthly Attendance in Employment Readiness Courses, MTC..... 72

Exhibit F.2-13: Receipt of Job Search Assistance, MTC..... 73

Exhibit F.2-14: Receipt of Assistance with Workplace Behaviors and Soft Skills, MTC..... 74

Exhibit F.3-1: Funding Sources for Occupational Training, MTC 75

Exhibit F.3-2: Receipt of Academic and Other Support Services, MTC..... 75

Exhibit F.4-1: Educational Attainment, MTC 76

Exhibit F.4-2: Types of Professional Credentials Received, MTC..... 77

Exhibit F.4-3: Confidence in Career Knowledge and Barriers to Employment, MTC..... 77

Exhibit F.5-1: Earnings and Employment, MTC 78

Exhibit F.5-2: Earnings and Employment for Sample Members Observed through 12 Quarters, MTC.... 79

Exhibit F.5-3: Engagement in the Labor Force, MTC 80

Exhibit F.5-4: Characteristics of Current Job, MTC..... 80

Exhibit F.5-5: Distribution of Industry of Employment, MTC..... 82

Exhibit F.5-6: Distribution of Occupation of Employment, MTC..... 83

Exhibit F.5-7: Connection between Training and Employment, MTC..... 84

Exhibit F.6-1: Income and Public Benefits Receipt, MTC 84

Exhibit F.6-2: Household Composition, MTC..... 85

Exhibit F.7-1: Subgroup Impacts, by Education Level: Program Services, MTC..... 85

Exhibit F.7-2: Subgroup Impacts, by Education Level: Educational Attainment, Earnings and Employment, and Benefits Receipt, MTC 87

Exhibit F.7-3: Subgroup Impacts, by Age: Program Services, MTC 87

Exhibit F.7-4: Subgroup Impacts, by Age: Educational Attainment, Earnings and Employment, and Benefits Receipt, MTC 89

Exhibit F.7-5: Subgroup Impacts, by Employment Status: Program Services, MTC..... 89

Exhibit F.7-6: Subgroup Impacts, by Employment Status: Educational Attainment, Earnings and Employment, and Benefits Receipt, MTC 91

Exhibit F.7-7: Subgroup Impacts, by Gender: Program Services, MTC 91

Exhibit F.7-8: Subgroup Impacts, by Gender: Educational Attainment, Earnings and Employment, and Benefits Receipt, MTC..... 93

Exhibit F.7-9: Subgroup Impacts, by Education Level: Quarterly Earnings for the Early Cohort, MTC..... 93

Exhibit G-1: Comparison of Unadjusted and Adjusted Service-Related Outcomes for JVS Program Group Members who Initially Reported Attending No Occupational Training or Employment Readiness Courses 96

Exhibit G.1-1: JVS RTW Programs Enrollment Process..... 100

Exhibit G.1-2: Baseline Balance Testing – Study Sample, STW-T and JSA 102

Exhibit G.1-3: Baseline Balance Testing – Full Sample at Random Assignment, STW-T and JSA..... 103

Exhibit G.1-4: Comparison of Early Cohort versus Late Cohort, STW-T and JSA 105

Exhibit G.2-1: Impacts on Any Employment-Related Activity, STW-T and JSA 106

Exhibit G.2-2: Impacts on Occupational Training, STW-T and JSA 107

Exhibit G.2-3: Impacts on Work-Based Training, STW-T and JSA 109

Exhibit G.2-4: Impacts on Employment Readiness Courses, STW-T and JSA..... 110

Exhibit G.2-5: Monthly Attendance in Any Structured Employment-Related Activity, STW-T and JSA..... 111

Exhibit G.2-6: Monthly Attendance in Occupational Training, STW-T and JSA 112

Exhibit G.2-7: Monthly Attendance in Work-Based Training, STW-T and JSA 112

Exhibit G.2-8: Monthly Attendance in Employment Readiness Courses, STW-T and JSA 113

Exhibit G.2-9: Receipt of Job Search Assistance, STW-T and JSA 113

Exhibit G.2-10: Receipt of Assistance with Workplace Behaviors and Soft Skills, STW-T and JSA 114

Exhibit G.3-1: Funding Sources for Occupational Training, STW-T and JSA 116

Exhibit G.3-2: Receipt of Academic and Other Support Services, STW-T and JSA 118

Exhibit G.4-1: Educational Attainment, STW-T and JSA 119

Exhibit G.4-2: Types of Professional Credentials Received, STW-T and JSA 120

Exhibit G.4-3: Confidence in Career Knowledge and Barriers to Employment, STW-T and JSA 120

Exhibit G.5-1: Earnings and Employment, STW-T and JSA 121

Exhibit G.5-2: Earnings and Employment for Sample Members Observed through 12 Quarters, STW-T and JSA 122

Exhibit G.5-3: Engagement in the Labor Force, STW-T and JSA 123

Exhibit G.5-4: Characteristics of Current Job, STW-T and JSA 123

Exhibit G.5-5: Distribution of Industry of Employment, STW-T and JSA 125

Exhibit G.5-6: Distribution of Occupation of Employment, STW-T and JSA 126

Exhibit G.5-7: Connection between Training and Employment, STW-T and JSA 127

Exhibit G.6-1: Income and Public Benefits Receipt, STW-T and JSA 127

Exhibit G.6-2: Household Composition, STW-T and JSA 128

Exhibit G.7-1: Subgroup Impacts, by Education Level: Program Services, STW-T and JSA 128

Exhibit G.7-2: Subgroup Impacts, by Education Level: Educational Attainment, Earnings and Employment, and Benefits Receipt, STW-T and JSA 130

Exhibit G.7-3: Subgroup Impacts, by Age: Program Services, STW-T and JSA 131

Exhibit G.7-4: Subgroup Impacts, by Age: Educational Attainment, Earnings and Employment, and Benefits Receipt, STW-T and JSA 132

Exhibit G.7-5: Subgroup Impacts, by Employment Status: Program Services, STW-T and JSA 133

Exhibit G.7-6: Subgroup Impacts, by Employment Status: Educational Attainment, Earnings and Employment, and Benefits Receipt, STW-T and JSA 134

Exhibit G.7-7: Subgroup Impacts, by Gender: Program Services, STW-T and JSA 135

Exhibit G.7-8: Subgroup Impacts, by Gender: Educational Attainment, Earnings and Employment, and Benefits Receipt, STW-T and JSA 136

Exhibit H.1-1: FLH Enrollment Process 138

Exhibit H.1-2: Baseline Balance Testing – Study Sample, FLH 139

Exhibit H.1-3: Baseline Balance Testing – Full Sample at Random Assignment, FLH 141

Exhibit H.1-4: Comparison of Early Cohort versus Late Cohort, FLH 142

Exhibit H.2-1: Impacts on Any Employment-Related Activity, FLH 144

Exhibit H.2-2: Distribution of Total Weeks of Any Structured Employment-Related Activity, FLH 145

Exhibit H.2-3: Impacts on Occupational Training, FLH 145

Exhibit H.2-4: Distribution of Total Weeks of Occupational Training, FLH..... 147

Exhibit H.2-5: Impacts on Work-Based Training, FLH 147

Exhibit H.2-6: Distribution of Total Weeks of Work-Based Training, FLH..... 149

Exhibit H.2-7: Impacts on Employment Readiness Courses, FLH..... 149

Exhibit H.2-8: Distribution of Total Weeks of Employment Readiness Courses, FLH 150

Exhibit H.2-9: Monthly Attendance in Any Structured Employment-Related Activity, FLH 151

Exhibit H.2-10: Monthly Attendance in Occupational Training, FLH..... 151

Exhibit H.2-11: Monthly Attendance in Work-Based Training, FLH..... 152

Exhibit H.2-12: Monthly Attendance in Employment Readiness Courses, FLH 152

Exhibit H.2-13: Receipt of Job Search Assistance, FLH 153

Exhibit H.2-14: Receipt of Assistance with Workplace Behaviors and Soft Skills, FLH 154

Exhibit H.3-1: Funding Sources for Occupational Training, FLH 155

Exhibit H.3-2: Receipt of Academic and Other Support Services, FLH 156

Exhibit H.4-1: Educational Attainment, FLH..... 156

Exhibit H.4-2: Types of Professional Credentials Received, FLH 157

Exhibit H.4-3: Confidence in Career Knowledge and Barriers to Employment, FLH 158

Exhibit H.5-1: Earnings and Employment, FLH 158

Exhibit H.5-2: Earnings and Employment for Sample Members Observed through 12 Quarters, FLH .. 159

Exhibit H.5-3: Engagement in the Labor Force, FLH 160

Exhibit H.5-4: Characteristics of Current Job, FLH..... 161

Exhibit H.5-5: Distribution of Industry of Employment, FLH..... 163

Exhibit H.5-6: Distribution of Occupation of Employment, FLH..... 164

Exhibit H.5-7: Connection between Training and Employment, FLH 165

Exhibit H.6-1: Income and Public Benefits Receipt, FLH..... 165

Exhibit H.6-2: Household Composition, FLH..... 166

Exhibit H.7-1: Subgroup Impacts, by Education Level: Program Services, FLH 166

Exhibit H.7-2: Subgroup Impacts, by Education Level: Educational Attainment, Earnings and Employment, and Benefits Receipt, FLH..... 168

Exhibit H.7-3: Subgroup Impacts, by Age: Program Services, FLH..... 168

Exhibit H.7-4: Subgroup Impacts, by Age: Educational Attainment, Earnings and Employment, and Benefits Receipt, FLH 170

Exhibit H.7-5: Subgroup Impacts, by Employment Status: Program Services, FLH 170

Exhibit H.7-6: Subgroup Impacts, by Employment Status: Educational Attainment, Earnings and Employment, and Benefits Receipt, FLH 172

Exhibit H.7-7: Subgroup Impacts, by Gender: Program Services, FLH..... 172

Exhibit J.7-8: Subgroup Impacts, by Gender: Educational Attainment, Earnings and Employment, and Benefits Receipt, FLH..... 174

Exhibit I.1-1: Reboot NW Enrollment Process..... 176

Exhibit I.1-2: Baseline Balance Testing – Study Sample, Reboot NW 177

Exhibit I.1-3: Baseline Balance Testing – Full Sample at Random Assignment, Reboot NW..... 179

Exhibit I.1-4: Comparison of Early Cohort versus Late Cohort, Reboot NW 180

Exhibit I.2-1: Impacts on Any Structured Employment-Related Activity, Reboot NW 182

Exhibit I.2-2: Distribution of Total Weeks of Any Structured Employment-Related Activity, Reboot NW 183

Exhibit I.2-3: Impacts on Occupational Training, Reboot NW 183

Exhibit I.2-4: Distribution of Total Weeks of Occupational Training, Reboot NW 185

Exhibit I.2-5: Impacts on Work-Based Training, Reboot NW 185

Exhibit I.2-6: Distribution of Total Weeks of Work-Based Training, Reboot NW 187

Exhibit I.2-7: Impacts on Employment Readiness Courses, Reboot NW 187

Exhibit I.2-8: Distribution of Total Weeks of Employment Readiness Courses, Reboot NW 188

Exhibit I.2-9: Monthly Attendance in Any Structured Employment-Related Activity, Reboot NW 189

Exhibit I.2-10: Monthly Attendance in Occupational Training, Reboot NW 189

Exhibit I.2-11: Monthly Attendance in Work-Based Training, Reboot NW 190

Exhibit I.2-12: Monthly Attendance in Employment Readiness Courses, Reboot NW 190

Exhibit I.2-13: Receipt of Job Search Assistance, Reboot NW 191

Exhibit I.2-14: Receipt of Assistance with Workplace Behaviors and Soft Skills, Reboot NW 192

Exhibit I.3-1: Funding Sources for Occupational Training, Reboot NW 193

Exhibit I.3-2: Receipt of Academic and Other Support Services, Reboot NW 193

Exhibit I.4-1: Educational Attainment, Reboot NW 194

Exhibit I.4-2: Types of Professional Credentials Received, Reboot NW 195

Exhibit I.4-3: Confidence in Career Knowledge and Barriers to Employment, Reboot NW 196

Exhibit I.5-1: Earnings and Employment, Reboot NW 196

Exhibit I.5-2: Earnings and Employment for Sample Members Observed through 12 Quarters, Reboot NW 197

Exhibit I.5-3: Engagement in the Labor Force, Reboot NW 198

Exhibit I.5-4: Characteristics of Current Job, Reboot NW 199

Exhibit I.5-5: Distribution of Industry of Employment, Reboot NW 201

Exhibit I.5-6: Distribution of Occupation of Employment, Reboot NW 202

Exhibit I.5-7: Connection between Training and Employment, Reboot NW 203

Exhibit I.6-1: Income and Public Benefits Receipt, Reboot NW 203

Exhibit I.6-2: Household Composition, Reboot NW 204

Exhibit I.7-1: Subgroup Impacts, by Education Level: Program Services, Reboot NW 204

Exhibit I.7-2: Subgroup Impacts, by Education Level: Educational Attainment, Earnings and
Employment, and Benefits Receipt, Reboot NW 206

Exhibit I.7-3: Subgroup Impacts, by Age: Program Services, Reboot NW 206

Exhibit I.7-4: Subgroup Impacts, by Age: Educational Attainment, Earnings and Employment, and
Benefits Receipt, Reboot NW 208

Exhibit I.7-5: Subgroup Impacts, by Employment Status: Program Services, Reboot NW 208

Exhibit I.7-6: Subgroup Impacts, by Employment Status: Educational Attainment, Earnings and
Employment, and Benefits Receipt, Reboot NW 210

Exhibit I.7-7: Subgroup Impacts, by Gender: Program Services, Reboot NW 210

Exhibit I.7-8: Subgroup Impacts, by Gender: Educational Attainment, Earnings and Employment,
and Benefits Receipt, Reboot NW 212

Appendix A: Additional Technical Information on Methodology

This appendix includes additional technical material about various aspects of the study's methods and analyses. Specifically, it describes both methods used in this *Interim Impact Report* and plans for the *Final Impact Report* to assess the impacts of each of the four Ready to Work (RTW) grantee programs included in the RTW Evaluation:

- Maryland Tech Connection (MTC), offered by the Anne Arundel Workforce Development Corporation (AAWDC);
- Skills to Work in Technology (STW-T) and Job Search Accelerator (JSA), offered by Jewish Vocational Service (JVS);
- Finger Lakes Hired (FLH), offered by RochesterWorks!; and
- Reboot Northwest (NW), offered by Worksystems Inc. (WSI).

Section A.1 below presents the regression specification, including discussions of the basic regression analysis for overall impacts (Section A.1.1), treatment on the treated impacts (Section A.1.2), estimation of subgroup impacts (Section A.1.3), selection of covariates (Section A.1.4), and treatment of missing data (Section A.1.5). Section A.2 describes the treatment of multiple comparisons. Section A.3 describes the cross-grantee analysis and presents some cross-grantee results that supplement the results reported in Chapter 7 of the *Interim Impact Report*.

A.1 Regression Specification

Estimation of program impacts, as described in detail below, are conducted separately for each of the four RTW grantee programs included in the evaluation. Chapter 7 of the *Interim Impact Report* presents some cross-grantee findings; Sections A.2.3 and A.3 discuss the statistical approach for those analyses.

A.1.1 Basic Regression Specification

Because this evaluation uses a random assignment design, a simple comparison of mean outcomes for program group and control group members for a given grantee's study sample would yield valid (i.e., unbiased and consistent) estimates of the causal impact of being offered the given RTW program. The evaluation provides more precise estimates of grantee-specific effects using linear regression to estimate impacts after controlling for a small number of baseline characteristics (used as covariates) among the sample of study members:¹

$$y_{g,i} = \alpha_g + D_{g,i}\delta_g + X_{g,i}\beta_g + \varepsilon_{g,i} \quad [\text{Eq. A.1}]$$

In Equation A.1, $y_{g,i}$ is the outcome variable (e.g., earnings) for study member i from grantee g . It is modelled as potentially varying with whether the study member was offered the program ($D_{g,i}$ is equal to one if i is a program group member, or zero if a control), the sample member's background characteristics $X_{g,i}$ (measured at random assignment), and a corresponding vector of coefficients β_g , and an idiosyncratic random error $\varepsilon_{g,i}$ (assumed to have expected value zero). The parameter of interest, δ_g , is the impact of being offered the RTW program at grantee g .

¹ Section A.1.4 discusses how those covariates are selected.

Note that α_g allows for systematic differences in earnings levels across grantees g ; for example, earnings are much higher in the San Francisco Bay Area (JVS) than in Upstate New York (RochesterWorks!). Likewise, the subscript g on β_g allows the relationship between baseline characteristics X and outcome y to vary by grantee; that is, the returns to education might be stronger in one local economy than in another.

Analysis proceeds using SAS (Statistical Analysis System) PROC SURVEYREG. Unlike PROC REG, PROC SURVEYREG computes appropriate standard errors for survey non-response weights (Richardson et al. 2019).² All statistical tests are two-sided.

As indicated above, and in line with standard practice of analysis of data associated with a design incorporating random assignment, the analysis uses linear regression as its main estimation approach both for continuous outcomes (e.g., earnings or hours worked) and for binary outcomes (e.g., any employment in a quarter, often called the linear probability model, Judkins and Porter, 2015).³ For continuous, count, and binary outcomes, the evaluation estimates the Equation A.1 model using weighted least squares regression so that the interpretation of impact estimates is comparable for the different types of outcomes (see Section A.1.5 for a discussion of weights). The use of weighted least squares regression for binary outcomes is consistent for percentage point impacts.

The evaluation reports regression coefficients corresponding to the impacts, δ_g . The other regression coefficients (α_g and β_g) are not of substantive interest because they do not reflect estimated program impacts, and are therefore not reported.

In the impact tables in Chapters 3 through 6 of the *Interim Impact Report*, the “Control Group Mean” column reports the (unadjusted) mean outcome for the control group, and the “Program Group Mean” reports the unadjusted control group mean plus the impact estimate.⁴ The standard error reported in the impact tables quantifies the precision of the impact estimate. The standard error is a function of the size of the sample, the multi-level structure of the model, and the variability of the outcome across study sample members after controlling for the selected covariates. A smaller standard error indicates a more precise estimate.

A.1.2 Treatment Effects for the Treated

The previous discussion concerns the standard random assignment estimator, namely the impact of being *offered* training through the RTW grant program, whether or not one starts or completes it. This is sometimes called the “Intention to Treat” (ITT) effect. For some purposes, it is also useful to know the impact of *receiving* the training, sometimes called the “Treatment on the Treated” (TOT) effect.

For each grantee, this evaluation uses a version of the original Bloom correction (Bloom 1984) to calculate the TOT impact estimate for the confirmatory outcome (average earnings in the fifth and sixth quarters after random assignment), as well as two of the secondary outcomes, employment in the fifth and

² Unlike SAS’s standard PROC REG, PROC SURVEYREG provides valid standard error estimates when using weights, such as sampling weights and survey non-response weights.

³ As is standard practice, the analysis uses ordinary least squares even for dependent variables that are bounded, such as hours and earnings (bounded below at zero).

⁴ See the text box **How to Read This Report’s Impact Tables** at the end of Chapter 2 of the *Interim Impact Report* for an explanation of how to read and interpret the impact tables in Chapters 3 through 6 of the *Interim Impact Report*.

sixth quarter and public benefits receipt (see Section A.2.2 for more on confirmatory and secondary outcomes).

In particular, for each outcome, the evaluation estimates two TOT impact estimators. The first is calculated as follows:

$$\delta'_g = \delta_g / r_g \quad [\text{Eq. A.2}]$$

where δ_g is the original (ITT) impact estimate, δ'_g is the corresponding TOT impact estimate, and r_g is the take-up rate for program group members at the given grantee—the proportion of the program group that ever attended any structured employment-related activities. In the Bloom correction, the standard error for the TOT impact estimator is likewise calculated by dividing the standard error for the original impact estimate by the take-up rate, r_g . This first TOT estimate can thus be viewed as the impact per treatment group member using any services.

The second TOT estimate is calculated in the same manner, but uses an alternate take-up rate to instead adjust for the *difference* in the take-up rate between members of the program and control group at the given grantee (Heckman et al. 2000). This TOT estimate can thus be viewed as the impact per additional person induced to use services as a result of the intervention. For most purposes, when similar services are available to the control group, this second TOT estimate is more appropriate.

For each of the four grantee programs, Appendix Exhibit A.1-1 reports the take-up rates used to calculate the TOT estimates. The second column, “program group take-up rate,” is used as r_g for the first TOT estimator. The last column, “program/control take-up rate difference,” is used as r_g for the second TOT estimator.

Exhibit A.1-1: Take-up Rates for Calculating Treatment on the Treated (TOT) Estimators

	Program Group Take-up Rate	Control Group Take-up Rate	Program/Control Take-up Rate Difference
Ever attended any structured employment-related activity			
Maryland Tech Connection (MTC, %)	75.1	44.2	30.9
Skills to Work in Technology (STW-T) and Job Search Accelerator (JSA, adjusted, %)	89.5	16.3	73.2
Finger Lakes Hired (FLH, %)	58.8	46.2	12.5
Reboot Northwest (NW, %)	89.1	70.5	18.5

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: Program and control group take-up rates, measured as the proportion who ever attended any structured employment-related activity, are as reported in Appendix Exhibits F.2-1 (MTC), G.2-1 (STW-T and JSA) using the value that adjusts for the survey response issue discussed in the opening of Appendix G, H.2-1 (FLH), and I.2-1 (Reboot NW). The values reported in the “Program Group Take-up Rate” and “Control Group Take-up Rate” columns reflect the “Program Group Mean” and “Control Group Mean” columns in the given appendix exhibit, respectively. The values reported in the “Program/Control Take-up Rate Difference” column reflect the “Impact (Difference)” column in the given appendix exhibit.

For each of the four grantee programs, Appendix Exhibit A.1-2 reports TOT impact estimates for the confirmatory outcome, average earnings in the fifth and sixth quarters after random assignment, as well as for employment in the fifth and sixth quarters, and public benefits receipt. These TOT estimates are calculated as in Equation A.2, using the take-up rates reported in Appendix Exhibit A.1-1. The first pair of columns reports the original impact estimates, which reflect the Intention to Treat (ITT) impact estimate. The second pair of columns reports the TOT impact estimates after adjusting for the program

group take-up rate. The third pair of columns reports the TOT impact estimates after adjusting for the difference in the take-up rate between the program and control groups.

Exhibit A.1-2: Treatment on the Treated Impact Estimates on Earnings, Employment, and Benefits Receipt

	Original (ITT) Estimator		Correcting for Program Group Take-Up Rate		Correcting for Program/Control Group Take-up Rate Difference	
	Impact Estimate	Standard Error	Impact Estimate	Standard Error	Impact Estimate	Standard Error
Average earnings in Q5 and Q6						
Maryland Tech Connection (MTC, \$)	-1,281**	537	-1,706**	715	-4,146**	1,738
Skills to Work in Technology (STW-T) and Job Search Accelerator (JSA, \$)	240	665	268	743	328	908
Finger Lakes Hired (FLH, \$)	13	537	22	913	103	4,262
Reboot Northwest (NW, \$)	-227	558	-255	626	-1,220	3,000
Ever employed during Q5 or Q6						
Maryland Tech Connection (MTC, %)	-0.5	2.7	-0.7	3.6	-1.6	8.7
Skills to Work in Technology (STW-T) and Job Search Accelerator (JSA, %)	-1.0	2.8	-1.1	3.1	-1.4	3.8
Finger Lakes Hired (FLH, %)	0.1	3.5	0.2	6.0	0.8	27.8
Reboot Northwest (NW, %)	-0.4	2.9	-0.4	3.3	-2.2	15.6
Received any public benefits last month						
Maryland Tech Connection (MTC, %)	4.3*	2.6	5.7*	3.5	13.9*	8.4
Skills to Work in Technology (STW-T) and Job Search Accelerator (JSA, %)	-2.1	1.7	-2.3	1.9	-2.9	2.3
Finger Lakes Hired (FLH, %)	-4.1	3.6	-7.0	6.1	-32.5	28.6
Reboot Northwest (NW, %)	-1.9	2.8	-2.1	3.1	-10.2	15.1

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization. 18-month follow-up survey for benefits receipt, measured as of survey interview.

NOTES: Original impact estimates for average earnings in Q5 and Q6 and ever employed during Q5 or Q6 as reported in Appendix Exhibits F.5-1 (MTC), G.5-1 (STW-T and JSA), H.5-1 (FLH), and I.5-1 (Reboot NW). Original impact estimates for receipt of any public benefits as reported in Appendix Exhibits F.6-1 (MTC), G.6-1 (STW-T and JSA), H.6-1 (FLH), and I.6-1 (Reboot NW).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

As is standard in such TOT analyses, the point estimates increase but statistical significance does not change. When considering ITT estimates (reported in the *Interim Impact Report* and here), there were no favorable and statistically significant impacts. Similarly, using either TOT concept, there are no favorable and statistically significant impacts.

A.1.3 Subgroup Impacts

The evaluation compares impacts for subgroups based on characteristics at the time of random assignment by (1) *education*: less than a bachelor's degree versus a bachelor's degree or more; (2) *age*: 49 or older versus younger than 49; (3) *employment status*: unemployed more than 12 months versus ever employed in the past 12 months (including those employed at application), and (4) *gender*: female versus male.⁵

The evaluation estimates subgroup impacts using:

$$y_{g,i} = \alpha_g + D_{g,i}\delta_g + k_{g,i}\vartheta_g + D_{g,i}k_{g,i}\gamma_{g,k} + X_{g,i}\beta_g + \varepsilon_{g,i} \quad [\text{Eq. A.3}]$$

⁵ The first three subgroups were pre-specified (prior to beginning analysis). The fourth (gender) was added based on comments from the evaluation's Technical Working Group.

where the program group indicator D is interacted with a subgroup indicator k . To explore the presence of heterogeneous impacts, the evaluation tests whether $\gamma_{g,k}$ equals zero. For example, if the estimate of $\gamma_{g,k}$ is statistically different from zero when k is an indicator for having a bachelor's degree or more, the evaluation will reject that the impact estimates are equal for both education levels.

The evaluation's general approach to reporting subgroup results is to proceed subgroup by subgroup. For each subgroup, the analysis begins by considering the test for differential impacts between the two groups (e.g., those individuals with at least a bachelor's degree, versus those without). Unless that test suggests a differential impact (i.e., unless $\gamma_{g,k} = 0$ can be rejected), the discussion in Chapters 3 through 6 of the *Interim Impact Report* does not present the subgroup results beyond noting the lack of a significant difference—even if there is evidence of an impact different from zero in one subgroup. The evaluation adopts this strategy because, in the absence of clear evidence of a differential impact, the impact estimate δ_g is a plausible estimate of the impact for both subgroups.⁶ (The evaluation reports all subgroup results in the grantee-specific appendices, Appendices F through I.)

A.1.4 Selecting Covariates

To maximize precision of the estimated impacts, separately for each grantee, the evaluation selects regression covariates using the SAS implementation of LASSO, the least absolute shrinkage and selection operator (Tibshirani 1996). This method identifies the set of covariates that provides the strongest effect on increasing the precision of the impact estimate while avoiding overfit that could offset the benefits of regression adjustment.⁷

The analysis runs LASSO separately for each grantee, each data source (the 18-month follow-up survey and the National Directory of New Hires [NDNH]), and each report (the *Interim Impact Report* and *Final Impact Report*). See Appendix B for detailed information on the data sources for this evaluation.

- To select covariates for survey-based outcomes for the *Interim Impact Report*, the evaluation runs LASSO on the secondary outcome (see Section A.2.2) of total hours of any structured employment-related activity. The evaluation uses the covariates chosen by this process for all survey-based outcomes for the report.
- To select covariates for NDNH-based outcomes for the *Interim Impact Report*, the evaluation runs LASSO on the confirmatory outcome for this report: average earnings in the fifth and sixth quarters after random assignment. The evaluation uses the covariates chosen by this process for all NDNH-based outcomes for the report.
- To select covariates for NDNH-based outcomes for the *Final Impact Report*, the evaluation will run LASSO on the confirmatory outcome for that report: average earnings in the fifth through tenth quarters after random assignment. The evaluation will use the covariates chosen by this process for all NDNH-based outcomes for that report. Note that the *Final Impact Report* will only use NDNH data.

For **survey outcomes**, the covariate selection process proceeds as follows:

1. Begin with all of the variables collected in the Baseline Information Form (BIF).

⁶ In addition, this approach serves as a rough correction for the multiple comparisons problem discussed in Section A.2.

⁷ The analysis does not adjust standard errors for this LASSO step's selection of covariates. Work by Judkins suggests that the bias to standard errors is minimal (Judkins 2019).

2. Starting from this full set of baseline variables, build a set of candidate covariates by removing some variables and combining and recoding others. For each candidate covariate, the evaluation groups observations with missing data with the omitted category, which is either the more common category for covariates with two groups or the middle category for covariates with three groups (see Appendix Exhibit E.3-1 for details on how these variables are defined). The text box **Baseline Characteristic Covariate Candidates** below lists the covariates run through LASSO; the analysis uses these candidate covariates for all four grantees.
3. For each grantee, the evaluation also includes three sets of variables as required covariates (i.e., “forces them in”) in the analysis:
 - a. Variables identifying the key subgroups defined at baseline: education (less than a bachelor’s degree versus a bachelor’s degree or more); age (49 or older versus 48 or younger); employment status (unemployed more than 12 months versus ever employed in the past 12 months, including those employed at application), and gender (female versus male).⁸
 - b. Dummy variables for each value of the level at which random assignment occurred for each grantee: by program site location for AAWDC and WSI, and by training program for JVS.^{9,10} For RochesterWorks!, random assignment was not stratified.
 - c. Candidate covariates for which a simple equivalence test suggested evidence of imbalance in the given grantee’s study sample (i.e., $p < .05$).¹¹
4. The analysis residualizes the dependent variable and the remaining candidate

Baseline Characteristic Covariate Candidates

- Race/ethnicity (binary; AAWDC: Black non-Hispanic vs. other; Other sites: White non-Hispanic vs. other)
- Speaks language other than English at home (binary)
- Age (categorical, <39, 39-48, >48)
- Other employed adult in the household (binary)
- Completed education (categorical, <BA, BA, >BA)
- Employment status at randomization (binary; unemployed more than 12 months vs. unemployed 12 or fewer months or employed)
- Minimum hourly wage willing to accept (categorical, by terciles)
- Receipt of any public assistance (binary; receives SNAP, TANF, or public housing/Section 8)
- Measure of willingness to work (binary; based on agreement with statements about willingness to take any job available, or to work part-time or an unpredictable schedule)
- Timing of random assignment (by roughly 6-month groups)

⁸ Because the evaluation also runs impacts separately for the “early cohort” (those randomly assigned through March 31, 2017), the evaluation also includes as a required covariate a variable identifying this cohort.

⁹ Midway through the sample accumulation period, JVS began randomizing applicants by training program.

¹⁰ For AAWDC only, the probability of assignment to the program group varied by program site (either 0.5 or 0.67). Program site is therefore also included as a required covariate for this grantee.

¹¹ Unbalanced covariates are identified separately by sample. For survey-based outcomes, the evaluation tests for equivalence using the sample of survey respondents only. For NDNH-based outcomes, the evaluation tests for equivalence in the full study sample.

covariates by regressing them against the set of required covariates identified in the step immediately above.¹²

5. The analysis runs LASSO without using survey weights, using these residualized variables and the required covariates.
6. For all survey-based outcomes, the analysis uses as covariates the required covariates plus additional candidates selected by LASSO using 10-fold cross-validation.

For **NDNH outcomes** reported in the *Interim Impact Report* and the *Final Impact Report*, the analysis uses an equivalent grantee-specific procedure with the following adjustments:

- The list of candidate covariates is expanded to include quarterly earnings and employment (i.e., any earnings) in each of the seven quarters preceding random assignment; and
- The employment status subgroup is defined on NDNH quarterly earnings rather than on the BIF-based variable on employment status at random assignment: any earnings observed in the four quarters before random assignment versus no earnings observed.

See Appendix B for a description of the BIF, and Appendix Section E.1 for a more detailed description of the baseline information collected in the BIF. See Appendix Section E.3 for a description of how the candidate covariates are constructed, and Appendix Exhibit E.4-1 for the list of covariates used for each grantee and data source in the *Interim Impact Report*.

A.1.5 Missing Data

This section discusses how the evaluation addresses missing data in the follow-up survey and NDNH data. See Appendix B for detail on the evaluation's data sources.

The analysis addresses **survey unit non-response** (missing data for sample members who did not respond to the survey) by creating non-response weights, which will be used in estimation of impacts for survey-based outcomes.¹³ Specifically, for each grantee, separately by treatment status (Puma et al. 2009), the evaluation estimates a logistic regression of survey response (an indicator of whether the given sample member responded to the survey), on all of the covariates that were required or candidates for LASSO. Using the predicted response probabilities—the predicted probability that a given sample member would respond given that member's characteristics—the analysis sorts the sample into five groups with equal numbers of survey respondents (Cochran 1968). This strategy is standard in survey weight construction. It avoids variance inflation due to extreme weight values. Each respondent in each group receives the same non-response weight, defined such that the sum of the weights is equal to the sum of the predicted response probabilities of respondents in that group.

With four exceptions, the analysis makes no further adjustment for **item non-response** (missing data for individual survey questions). In general, conditional on survey unit response, item non-response rates are

¹² This step proceeds by analogy with the Frisch-Waugh-Lovell theorem from econometrics. Specifically, residualizing isolates the variation in the remaining covariate candidates that is uncorrelated with variation in the covariates already being included in the model.

¹³ These analysis methods provide valid estimates of impact under the assumption that data are missing at random given the available covariates. This assumption is conventional in experimental studies.

low, with the exception of financial outcomes and several job characteristics outcomes, none of which is a focal survey outcome.¹⁴

1. For several survey questions, item non-response prompted a follow-up question asking for response ranges (e.g., an open-ended question asking how much the respondent earns, followed up by a categorical question asking whether the respondent's earnings falls within a given range). For respondents who offered only a categorical answer, the analysis imputes earnings using the mean of the open-ended responses offered by other respondents at that grantee with the same treatment status whose response fell within the range of that category.¹⁵
2. For the "Confidence in Career Knowledge" scale, built as the average response to seven underlying questions (see description in Appendix Section D.3.2), for item non-response of the seven individual elements, the analysis imputes the response using the mean across other respondents at that grantee with the given treatment status. If all seven underlying variables are missing, the analysis sets the scale as missing.
3. For total hours of a given employment-related activity (occupational training, work-based training, or employment readiness courses), built as the product of total weeks and hours per week of the given activity, if respondents offered sufficient information to identify one but not both of the underlying components, the analysis imputes the missing component using the average value for other respondents with the same treatment status who attended the same type of activity at the given grantee. (When the missing component is weeks of training, the average value is also imputed by completion status—whether the respondent completed the program, dropped out, or was still attending.) If respondents offered insufficient information to identify neither of the underlying components, the analysis does not impute total hours, treating the outcome as missing.
4. For annual earnings of employed respondents who report earnings per hour, the analysis calculates annual earnings using reported usual weekly hours worked and assuming 52 weeks worked per year. For respondents who reported a per-hour earnings value but did not report weekly hours worked, the analysis imputes weekly hours using the mean of weekly hours for other respondents who reported per-hour earnings at the given grantee and with the same treatment status.

Appendix D offers detailed descriptions of variable definitions, and notes which outcomes are subject to these imputations.

¹⁴ Among survey respondents for all four grantee study samples combined, responses on minimum wage willing to accept are missing for 27 percent, responses on own annual rate of pay are missing for 14 percent, and responses on own income in the last month are missing for 17 percent. For job characteristics, responses on whether respondent is on a career path is missing for 13 percent, and responses on benefits receipt (e.g., receipt of paid vacation or sick time) is missing for 6 percent. All other outcomes have missing rates of less than 5 percent, the vast majority at 3 percent or less.

¹⁵ For instance, for a control group member who did not respond to the initial earnings question but reported that their annual earnings fell between \$40,000 and \$50,000, the analysis imputes that member's earnings using the mean of reported actual earnings for other control group members at that grantee whose actual earnings were between \$40,000 and \$50,000.

For NDNH data, fewer than 2 percent of sample members *failed to match name and Social Security number (SSN) against Social Security Administration (SSA) master records*.¹⁶ For those sample members, the records cannot be passed to NDNH for matching and are therefore missing.¹⁷ The analysis drops these study members from the analysis for NDNH-based outcomes.

NDNH records that match to SSA data but *do not match to any earnings records*, overall or per quarter, are treated as having zero earnings and being not employed (overall, or in that quarter). For those sample members who were successfully matched, the evaluation has complete data from 7 quarters before random assignment through at least 6 quarters after random assignment for the *Interim Impact Report* and at least 13 quarters for the *Final Impact Report*.

Because of the minimal level of missing data for the NDNH, for three of the four grantee programs all NDNH-based outcomes are analyzed via ordinary least squares without weights. For AAWDC, because the probability of assignment to the program group varied across program sites, when estimating impacts for NDNH-based outcomes, the evaluation uses analysis weights equal to the inverse of the probability of assignment to the program group.¹⁸ The probability of assignment to the program group did not vary for the other three grantees.

A.2 Multiple Comparisons and Significance Testing

As with any study that assesses the overall effectiveness of an intervention, this evaluation must proceed with care given the risk of “multiple comparisons” problems. In a single hypothesis test, one traditionally rejects the null hypothesis of no impact using a 1, 5, or 10 percent statistical threshold (called the *p*-value).¹⁹ Yet even if all true impacts are zero—that is, if the given RTW program has *no true effect* on any outcomes—as the number of hypothesis tests increases, the likelihood of at least one test yielding a statistically significant result (and therefore rejecting the null hypothesis of no impact) increases rapidly to well above the stated 1, 5, or 10 percent threshold for a single test.²⁰ Such a multiple comparisons problem arises both when many research questions are asked for a single grantee program (e.g., different outcomes are examined for the same study sample) and when a single research question is examined across different grantee programs or for different subgroups (a single outcome with different study samples) (Schochet 2008).

This RTW Evaluation clearly has a multiple comparisons problem. There are four grantee programs and many outcomes. The evaluation therefore makes appropriate statistical adjustments for multiple

¹⁶ To collect data for the RTW study sample members, the U.S. Department of Health and Human Services’ Office of Child Support Enforcement (OCSE) performs a match to a record in the SSA database based on a combination of name and SSN before including that record in the NDNH database. Those sample members who are not matched in the SSA database are considered “missing” for these purposes, because their employment records are not available.

¹⁷ This includes three study members who were legal immigrants with permission to work in the United States but who had no SSN.

¹⁸ Due to this variation in the probability of assignment to the program group, analysis for AAWDC of survey-based outcomes uses weights equal to the product of the survey non-response weight and the inverse of the probability of assignment to the program group.

¹⁹ Namely, one accepts as statistically significant only those impact estimates that are sufficiently large that such an estimate would happen by chance only 1, 5, or 10 percent of the time, if the true impact were in fact zero.

²⁰ For example, even if all null hypotheses are true (i.e., there are no true effects), the chance of at least one test yielding a statistically significant impact estimate (at the 5 percent level) across four hypothesis tests is almost 20 percent (assuming that the tests are independent of one another).

comparisons. Conventionally, there are two broad strategies for addressing the multiple comparisons problem: (1) limit the number of hypothesis tests or (2) conduct statistical adjustments to take into account the higher likelihood of detecting a spuriously significant result because multiple hypothesis tests are involved. This evaluation adopts both approaches.²¹

A.2.1 Selecting a (Grantee-Specific) Confirmatory Outcome

Following Schochet (2009), the evaluation first addresses the multiple comparisons problem by designating a single grantee-specific outcome as “*confirmatory*” for each of the RTW impact reports. For the *Interim Impact Report*, the confirmatory outcome is average earnings in the fifth and sixth quarters after random assignment. For the *Final Impact Report*, the confirmatory outcome is average earnings in the fifth through tenth quarters. NDNH data will be the data source for the confirmatory outcomes in both reports.

A.2.2 Considering Secondary and Exploratory Outcomes

Though the discussions of the results in the *Interim Impact Report* and *Final Impact Report* focus on the impacts on the *confirmatory* outcomes defined above, the evaluation also reports the results of analyses of a wide range of other outcomes. Of these, the analysis classifies as “*secondary*” outcomes measures that reflect key expected short- and long-term outcomes central to the RTW grant program’s logic model (see Section 2.1 of the *Interim Impact Report*).

For the *Interim Impact Report*, the evaluation defines the following secondary outcomes. Unless otherwise noted, all outcomes are measured with data from the 18-month follow-up survey and measure activities completed in the first 18 months after random assignment:

- Any employment in the fifth or sixth quarter after random assignment (based on NDNH quarterly data);
- Total hours of any structured employment-related activity;²²
- Total hours of occupational training;
- Total hours of work-based training;
- Total hours of employment readiness courses;

²¹ The evaluation also considered the alternative of defining the confirmatory outcome (see Section A.2.2) by pooling data across the four grantee programs. By pooling the data, the evaluation would reduce the number of hypothesis tests from four (one per grantee) to one, and in that way address the multiple comparisons problem. Pooling the data also provides the advantage of increasing the overall power of the analysis, making it more likely to identify small treatment effects of the RTW grant program. The evaluation decided against this pooling strategy as the primary way to address multiple comparisons. This is because the RTW program did not reflect a single training regime, but instead a set of programs with varied, albeit generally similar, training methods with one common funding source. As such, primary interest is in the grantee-specific estimates.

Nevertheless, as discussed in Section A.3.2, the evaluation does estimate pooled impacts. Such pooled estimates have larger samples and can therefore detect smaller impacts. The evaluation uses them to assess whether the greater statistical power shows evidence that the RTW funding stream as a whole had favorable impacts on service receipt, earnings, employment, or receipt of public benefits, even if the individual grantee evaluations find no evidence of such impacts.

²² The evaluation also estimates impacts on total months of each of these activities as exploratory outcomes due to concerns of measurement error in reported weekly hours of training.

- Received any certificate, credential, license, or degree between random assignment and survey interview; and
- Receipt of any public benefits (e.g., Unemployment Insurance, Supplemental Nutrition Assistance Program/SNAP, or Temporary Assistance for Needy Families/TANF) in the month prior to survey interview.

The *Final Impact Report* will include impacts through at least 3.25 years (13 quarters) after random assignment. For that report, the evaluation will define a single secondary outcome: Any employment in the fifth through tenth quarter after random assignment (based on NDNH quarterly data). NDNH data are the sole data source for the final report.

For both the *Interim Impact Report* and *Final Impact Report*, all remaining outcomes are classified as “**exploratory**.” These exploratory analyses augment our understanding of the main impact estimates by providing insight about the magnitude, sign, and statistical significance of the main impact findings.

In addition, for the confirmatory and secondary outcomes, as well as for a handful of exploratory outcomes, the evaluation assesses impacts separately by the key subgroups defined in Section A.1.3. All subgroup analyses are treated as exploratory. As discussed in Section A.1.2, the evaluation also estimates TOT impact estimates for the confirmatory and two of the secondary outcomes.

Statistically significant secondary and exploratory findings are not used to determine the success of the grantee programs; only the estimated impact on the confirmatory outcome is used in this way. However, secondary and exploratory analyses address the study’s research questions, provide additional suggestive evidence on program effectiveness, and provide context for the confirmatory outcome.

A.2.3 Making a Multiple-Comparison Adjustment

As a second method for addressing the multiple comparisons problem, the evaluation uses the Bonferroni-Holm Family Wise error test to adjust for the four grantee-specific tests of the confirmatory outcome and each of the seven secondary outcomes. Specifically, following Gubits et al. (2014), the evaluation computes Bonferroni-Holm adjusted p -values using the following steps:

1. Let $p_{IMPACT1}^{raw}, p_{IMPACT2}^{raw}, p_{IMPACT3}^{raw}, p_{IMPACT4}^{raw}$ = the “raw” (i.e. unadjusted) p -values from the four grantee-specific tests of impact, in order from smallest to largest.
2. Then the Bonferroni-Holm adjusted p -values are computed as follows:
 - $p_{IMPACT1}^{adj} = \min(4 * p_{IMPACT1}^{raw}, 1)$
 - $p_{IMPACT2}^{adj} = \max(p_{IMPACT1}^{adj}, 3 * p_{IMPACT2}^{raw})$
 - $p_{IMPACT3}^{adj} = \max(p_{IMPACT2}^{adj}, 2 * p_{IMPACT3}^{raw})$
 - $p_{IMPACT4}^{adj} = \max(p_{IMPACT3}^{adj}, p_{IMPACT4}^{raw})$

Significance tests for the confirmatory and secondary impact estimates compare to these adjusted p -values with the thresholds of 1, 5, and 10 percent. This analysis establishes very strong evidence of program effectiveness, because it is based on a well-implemented randomized experimental design, coupled with an adjustment that takes into account the four tests conducted for the primary confirmatory outcomes across the four grantee programs.

A.3 Cross-Grantee Analysis: Methods and Supplementary Results

The evaluation's design described in Appendix A.1 deliberately focuses on generating separate estimates of the impact of the programs offered by each of the four purposively selected grantees. As such, any cross-grantee analyses need to be done with care. This section considers three approaches to considering the estimates for the four grantee programs together. These approaches, discussed in the three sections below, each address a slightly different policy question:

- Section A.3.1: *Considering the results for all four grantee programs together (and making the appropriate corrections for multiple comparisons), for which of them is there evidence of effectiveness?*
- Section A.3.2: *Is the RTW grant funding stream effective? That is, on average—across the four (evaluated) grantee programs—is there evidence of a favorable impact?*
- Section A.3.3: *Is there evidence that one grantee's program had more favorable impacts than another grantee's program (for any pair of the four grantees evaluated)?*

Each section below motivates the corresponding policy question, describes a method for addressing that policy question, and presents the results of applying that method. (The results for the first two approaches are summarized in this section and discussed in greater detail in Chapter 7 of the *Interim Impact Report*.)

For this evaluation, all three cross-grantee analyses provide very similar results to those found for each grantee program alone in the *Interim Impact Report*. For both the first and second analyses, those outcomes for which the impacts were statistically significant in the individual grantee analyses remain statistically significant in the cross-grantee analyses, and those outcomes for which no impacts were found in the individual grantee analyses remain insignificant in the cross-grantee evaluation. The third analysis likewise finds limited evidence of systematic differences in impacts across the four grantee programs.

A.3.1 Evidence of Any Impact

The analysis discussed in this section addresses the following policy question: *Considering the results for all four grantee programs together, for which of them is there clear evidence of effectiveness?* As discussed in Section A.2, assessing impacts across multiple grantees raises a multiple comparisons problem. For instance, suppose the evaluation deemed an RTW program effective if there were less than a 5 percent chance that the observed impact on a grantee-specific confirmatory outcome would result due to chance ($p < .05$). Because this evaluation presents result for four grantee programs, even if the true impact on the confirmatory outcome were zero for all four RTW programs, the chance that the evaluation would (spuriously) find an impact on at least one of the four confirmatory outcomes is not 5 percent, but nearly 20 percent.²³

As discussed in Section A.2.3, the evaluation therefore uses the Bonferroni-Holm correction to compute adjusted p -values corresponding to the Family-Wise Error Rate. Such adjusted p -values are computed for

²³ Formally, the probability of at least one spuriously significant impact is 18.5 percent, $p = .185 = 1 - (1 - .05)^4$. Namely, if the probability of an error is 5 percent for *each* of the four grantees, that means the chance of *avoiding* an error is 95 percent for each, $(1 - .05)$ in this calculation. Multiplying this per-grantee chance of avoiding an error to the fourth power because it applies at each of the four grantees, the probability of avoiding an error *across all four grantees* is 81.5 percent $(.815 = (1 - .05)^4)$. Thus the chance of *at least one error occurring across all four grantees* is 18.5 percent $(1 - .815)$, when the chance of an error occurring at *each grantee* is only 5 percent.

the confirmatory outcome as well as for each of the seven secondary outcomes—for each grantee program. Significance tests then compare these adjusted p -values to the threshold of 5 percent (or 10 percent, or 1 percent). This stricter test for significance answers the policy question: Considering the four grantee programs together, is there evidence that any of them was effective? And if so, which one(s)?

In most evaluations, introducing these stricter tests of whether a program had clear evidence of impact leads to fewer—often many fewer—statistically significant impacts. That is not the case for the results of the *Interim Impact Report*. Instead, as when considering the grantee programs separately, even when considering the results jointly there is strong evidence that several of the RTW programs increased hours of training and services received (see top panel of Exhibit 7-1 in the *Interim Impact Report*). Specifically, both considered separately (without correcting for four grantees) and correcting for four grantees, there is strong evidence that all four grantee programs increased service receipt and that three of the four programs increased receipt of any certificate, credential, license, or degree (all but RochesterWorks!® FLH program).

And because adjusting for multiple comparisons can only cause results to become less statistically significant, both separately (without correcting for four grantees) and correcting for four grantees, there is no evidence that any of the four grantee programs had a favorable impact on average earnings in the fifth or sixth quarter after random assignment (the grantee-specific confirmatory outcome), employment in the fifth or sixth quarter, or benefits receipt at follow-up (see bottom panel of Exhibit 7-1). See Section 7.1 of the *Interim Impact Report* for a more detailed discussion of these findings.

A.3.2 Impact of the Funding Stream

All four grantee programs included in this evaluation were designed in response to the RTW *Solicitation for Grant Applications* (DOL/ETA 2014). As discussed in Section 1.1 of the *Interim Impact Report*, the RTW SGA provided some guidance as to the nature and content of the grantee programs. (Nevertheless, as noted in the first section of each of the grantee-specific chapters in the *Interim Impact Report*, Chapters 3 to 6, the four grantees had divergent program models.) This section considers pooled estimates of the average impact of the four grantee programs included in the evaluation. Those estimates address the following policy question: *Is the RTW grant funding stream effective? That is, on average—across the four (evaluated) grantee programs—is there clear evidence of a favorable impact?*

Specifically, the evaluation computes the simple average of the four RTW program-specific estimates. The evaluation then computes the corresponding standard error, by noting that the variance of a weighted sum is the sum of the variances using the square of the weights:

$$\text{Var}\left(\sum_i (w_i x_i)\right) = \sum_i w_i^2 \text{Var}(x_i)$$

The evaluation uses a weight of $1/4$, namely treating each of the four estimates equally. Because the variance of an estimate is the square of its standard error (SE), the standard error for the pooled estimate is equal to

$$(1/4) \sqrt{SE_1^2 + SE_2^2 + SE_3^2 + SE_4^2}$$

where SE_g (for $g = 1$ through 4) represents the standard error for the corresponding impact estimate at site g .

The last two columns of Exhibit 7-1 in the *Interim Impact Report* present estimates and associated standard errors for the average impact of the RTW funding stream (see “Pooled/Impact”).²⁴ By effectively combining the four study samples into a single larger sample, such pooled impact estimates could potentially detect smaller impacts than could be detected for any single grantee program. In particular, pooled impact estimates provide smaller standard errors, and therefore could identify as statistically significant results that were previously too imprecise to distinguish from zero.

Considering the four grantees jointly, the evaluation finds strong evidence ($p < .01$) that the RTW grant funding stream had a favorably impact on service receipt, as expected given the pattern of mostly significant favorable impacts for the four grantee programs alone. In particular, the evaluation finds strong evidence of impact on hours of participation in structured employment-related activities overall; hours of participation in each of the three components (occupational training, work-based training, and employment readiness courses); and receipt of any certificate, credential, license, or degree (see Exhibit 7-1).

However, even with the greater precision offered by the pooled estimates, the evaluation finds no clear evidence that the RTW grant funding stream had a positive impact on average earnings in the fifth and sixth quarters after random assignment (the confirmatory outcome). The evaluation also finds no clear evidence of impact on employment in the fifth or sixth quarter, or receipt of public benefits. See Section 7.1 of the *Interim Impact Report* for more discussion.

A.3.3 Pairwise Tests

Finally, this section reports how the evaluation uses pairwise testing to address the following policy question: *Is there evidence that one grantee’s program had more favorable impacts than another grantee’s program (for any pair of the four grantees evaluated)?*

Exhibit A.3-1 below presents pairwise tests for the confirmatory and seven secondary outcomes for the *Interim Impact Report*. These tests are exploratory, so there is no correction for multiple comparisons. Given the large number of pairwise tests, some of the apparently statistically significant differences are likely spurious.

In the exhibit, Panel A reports the grantee program-specific impact estimates, with asterisks to indicate their single-grantee significance level. Panel B presents evidence on whether the impact for AAWDC’s MTC program equals the impact for JVS’s STW-T and JSA programs, for RochesterWorks!’s FLH program, or for WSI’s Reboot NW program. Panel C presents equivalent evidence for the remaining pairwise tests for STW-T/JSA: them versus FLH, and them versus Reboot NW. Panel D reports the last pairwise test, comparing the impact of FLH versus Reboot NW.

Ignoring multiple comparisons issues, this pairwise testing shows the following:

- There is no difference across any of the four grantee programs in impacts on hours of occupational training.

²⁴ Because the four grantees selected for this evaluation were purposively selected from among the 24 RTW grantees, these estimates should probably be treated as an upper bound on the impact of the RTW funding stream. Among the selection criteria was that the grantees appeared to be well run. On average one would expect programs offered by well-run grantees to have larger impacts than others. Thus, considering all 24 RTW grantee programs would likely yield a smaller estimate of the (average) impact of the RTW funding stream.

- MTC clearly had the largest impact on hours of work-based training. The impacts for the other three grantee programs are indistinguishable.
- Reboot NW clearly had the largest impact on hours of participation in an employment readiness course, followed by MTC.
- MTC and Reboot NW are indistinguishable in their impact on receipt of any certificate, credential, license, or degree. RochesterWorks! clearly had the smallest (zero) impact.
- MTC had much less favorable impacts than STW-T and JSA on earnings in the fifth and sixth quarters after random assignment and receipt of public benefits. Otherwise there are no clear differences in impacts on these outcomes across the grantee programs.
- There are no differences between programs in their impacts on employment in the fifth or sixth quarter after random assignment; all consistently have impacts near zero for this outcome.

Exhibit A.3-1: Pairwise Tests of Impacts on Confirmatory and Secondary Outcomes, across Grantee Programs

Outcome	[A]				[B]			[C]		[D]
	MTC	STW-T and JSA	FLH	Reboot NW	MTC = STW-T and JSA	MTC = FLH	MTC = Reboot NW	STW-T and JSA = FLH	STW-T and JSA = Reboot NW	FLH = Reboot NW
Hours attended:										
Any structured employment-related activity	171***	66***	76*	115***	***	*				
Any occupational training	50***	38**	56	46						
Any work-based training	96***	17*	7	20	***	***	***			
Employment readiness courses	24***	10***	7***	52***	**	***	***		***	***
Received any certificate, credential, license, or degree (%)	22***	10***	-2	13***	***	***	*	**		***
<i>Average earnings Q5 and Q6 (\$)</i>	<i>-1,281**</i>	<i>240</i>	<i>-13</i>	<i>-227</i>	*	*				
Ever employed during Q5 or Q6 (%)	-1	-1	0	-0						
Received any public benefits last month (%)	4	-2	-4	-2	**	*	*			

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for hours of training (through 18 months after random assignment), and for credential receipt and benefits receipt (measured as of survey interview). National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after random assignment.

NOTES: ***Confirmatory outcome is bolded and italicized***; all other outcomes are secondary outcomes. Exhibits in Chapters 3-6 of the *Interim Impact Report* present single-grantee test results; see grantee-specific exhibits for sample sizes and standard errors.

Statistical significance for impact estimates (Panel A) based on two-sided hypothesis tests. Statistical significance for pairwise testing (Panels B, C, and D) based on two-sided t-tests. Significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Appendix B: Data Sources

This appendix describes the data sources for the Ready to Work Evaluation’s impact study, summarized in Exhibit B-1. Section B.1 describes data sources for the evaluation’s field research, including program documents and interviews with program staff and partners. Section B.2 provides detail on the survey-based data sources, including the BIF and the 18-month follow-up survey. Section B.3 discusses the NDNH data, and the implications of the length of the random assignment period.

Exhibit B-1: Data Sources for the Ready to Work Evaluation Impact Study

Data Source	Data Items
Program documents	<ul style="list-style-type: none"> • Program context • Planned intervention
Interviews with program staff and partners	<ul style="list-style-type: none"> • Program context • Target group and recruitment • Organizational structure and key partnerships • Nature and content of program activities and services (and changes over time) • Lessons and sustainability plans
Baseline Information Form	<ul style="list-style-type: none"> • Demographic data • Employment history • Education history • Earnings and income • Public benefits receipt • Barriers to employment • Employment goals and expectations • Contact information
18-month follow-up survey	<ul style="list-style-type: none"> • Receipt of training (occupational training, work-based training, and employment readiness courses) • Receipt of training-related supports (e.g., tutoring, advising, tuition coverage) • Receipt of certificates, credentials, and degrees • Current employment status and barriers to employment • Current earnings • Current or most recent job characteristics (e.g., hours worked and work schedule, benefits, occupation, industry) • Public benefits receipt • Total income
National Directory of New Hires	<ul style="list-style-type: none"> • Earnings (reported quarterly, observed from 7 quarters before random assignment, to at least 6 quarters after random assignment) • Any employment (positive earnings within the quarter) • Job tenure

B.1 Field Research

The evaluation team conducted three rounds of site visits to the four grantees included in the RTW Evaluation. These site visits included in-person interviews with grantee program administrators, line staff, and organizational partners. The evaluation team also reviewed grantee documents, such as recruitment materials, course catalogs, and curricula. The impact analysis uses this field research to describe the programs. See Martinson et al. (2017) and Copson et al. (2020) for more detail.

B.1.1 Program Documents

As part of the RTW Evaluation's implementation study, the evaluation team collected various documents to better understand the grantees' RTW programs. The documents included copies of grantees' policy and procedures manuals, recruitment materials, blank versions of forms used during intake and ongoing meetings with program participants, and course catalogs, syllabi, and curricula (if available and applicable). In addition, the evaluation team reviewed their original grant applications. Together, these materials served as an important source of data on program design, operating strategies, and program context.

B.1.2 Interviews with Program Staff and Partners

Between 2016 and 2018, the evaluation team conducted three rounds of field research site visits to each of the four grantees included in the evaluation. These site visits were intended to document the nature of services available to the program participants. During these site visits, the team conducted semi-structured interviews with grantee administrators and staff in all grant-funded positions (including counselors, career coaches, and instructors) and with program partners (e.g., referral sources and other service providers).²⁵

Through the interviews, the evaluation team collected detailed information on a range of topics including the underlying program theory and goals; the local economic context in which the grant-funded program operated; program design and operations; organizational structure and key partnerships; recruitment and enrollment; the nature and content of training and support services; connections to employers; and implementation challenges and successes. In addition, the interviewees were asked about programmatic, institutional, and economic factors that might have facilitated or inhibited the successful implementation and operation of the program. Later site visits also focused on changes and developments in the provision of services, as well as issues regarding the sustainability of the grant program. Finally, during the site visits the evaluation team inquired about potential programs and services that the control group could access.

In addition to interviewing program staff, the evaluation team conducted interviews with key program partners such as American Job Centers, community colleges and other training providers, and employers. Through these interviews the evaluation documented the role the partners played in each grant-funded program—including the services they provided and how they interacted with program participants—and the ways in which the partners coordinated and collaborated with the grantee. Topics for interviews with employers included their roles in the design of the grant-funded program, particularly in curriculum development; any role they played in identifying and training program participants; and their experiences in placement, hiring, and post-program employment of participants.

B.2 Survey Data

The RTW Evaluation fielded two surveys: a BIF completed by applicants before they were randomly assigned, and a follow-up survey completed approximately 18 months after random assignment.

B.2.1 Baseline Information Form

At the time of their application to the given RTW program, but before random assignment occurred, each study member completed a Baseline Information Form (BIF). This form collected detailed demographic

²⁵ See Copson et al. (2020) for more detail on those interviews.

and socioeconomic characteristics including education history; employment history; current barriers to employment and views about work; current wages and earnings; public benefits receipt; and total income. In addition, the BIF collected detailed contact information for the study member and up to three additional contacts to assist with locating efforts for the follow-up survey.

The evaluation uses data collected in the BIF to describe the study samples for each grantee (see the first section of each of the grantee-specific chapters of the *Interim Impact Report*, Chapters 3 through 6),²⁶ to assess baseline balance between sample members randomized to the program group and control group (see the first section of each of the grantee-specific appendices, Appendices F through I), to create survey non-response weights (see Appendix Section A.1.5), to improve the precision of the impact estimates (see Appendix Section A.1.4), and to define subgroups (see Appendix Section A.1.3).

B.2.2 18-Month Follow-Up Survey

The follow-up survey was fielded starting 18 months after random assignment with all sample members for the four grantee programs included in the evaluation. For members of both the program and control groups, the survey collected information on receipt of training and related supports; receipt of job search assistance; completion of additional education and receipt of credentials; current employment status and barriers to employment; job characteristics (e.g., hours worked and usual work schedule); current earnings; receipt of public benefits; and total income.

The evaluation uses these survey responses to characterize the experiences of sample members and to measure outcomes 18 months after random assignment. See Appendix C for more detail on survey methods for the 18-month follow-up survey.²⁷

B.3 National Directory of New Hires

Following recent evaluation practice at DOL, the RTW Evaluation uses administrative data collected and housed in the National Directory of New Hires as the primary source of earnings and employment information for study members.²⁸ The NDNH, which is compiled and maintained by the Office of Child Support Enforcement (OCSE) in the U.S. Department of Health and Human Services, is a national database of new hire date, quarterly wages, and Unemployment Insurance data submitted to OCSE by State Directories of New Hires, employers, and state workforce agencies, augmented with federal government payroll information.

Because the NDNH captures information for all jobs covered by Unemployment Insurance, augmented with information on most federal jobs, it provides data for almost the full study sample, with information

²⁶ Because recruitment into the study sample was not stratified at any grantee, the unweighted mean sample characteristics are representative of eligible individuals who applied to enter the given grantee program.

²⁷ The survey questionnaire can be accessed through the following website:
https://www.reginfo.gov/public/do/PRAViewIC?ref_nbr=201605-1291-001&icID=221648.

²⁸ As discussed in Section 2.5 of the *Interim Impact Report*, the evaluation uses employer-reported NDNH administrative earnings data to build the confirmatory outcome instead of self-reported earnings from the 18-month follow-up survey. The survey data are considered lower quality than the NDNH data both because survey non-response can lead to bias, and because self-reported earnings are prone to recall errors.

on the vast majority of their jobs.²⁹ These records do not, however, include information for jobs that are “off the books,” or for other types of jobs for which workers do not receive a W-2, such as self-employment or work as an independent contractor, employment in service for relatives, domestic service, and some casual employment “not in the course of the employer’s business.”³⁰

The process for requesting and accessing data that DOL and OCSE established started with an initial request, which led to DOL and OCSE signing a preliminary agreement in September 2015, and a three-year Memorandum of Understanding (MOU) in August 2017. That MOU granted DOL/Abt access to the data and governs the treatment, retention, protection, and disposition of the data. In August 2020, DOL and OCSE signed a follow-on MOU to extend access to the NDNH data through the end of the RTW Evaluation.

Beginning in March 2016, Abt began quarterly submissions to OCSE of study members’ identifiers (name and SSN) to flag those members of the study sample. (See footnote 15 in Appendix Section A.1.5 for a description of this process.) OCSE then retains and sets aside data on these members of the study sample (saved in “match files”) for DOL’s future use for this evaluation, rather than deleting those members’ data after eight quarters per standard practice.

Starting in January 2018, DOL began receiving these match files from OCSE, first for all of the previously saved quarters, and then after each new quarterly submission of sample members’ names and SSNs. These match files include de-identified wage data for the RTW sample members, linked to an OCSE-created ID.

Abt sent OCSE a “pass through” file in December 2018 containing sample members’ background and baseline characteristics (collected in the BIF), as well as name and SSN. OCSE linked these data to the OCSE-created IDs via name and SSN, and returned this file to DOL/Abt with all identifiers stripped. The analysis is conducted by linking the baseline data from the pass through file to the match files containing the study members’ quarterly wage data.

The evaluation uses NDNH quarterly data on study members’ earnings, employment status (i.e., non-zero earnings), and (scrambled) employer IDs (to measure job tenure). In particular, for the *Interim Impact Report*, the analysis of NDNH data focuses primarily on quarterly employment and earnings through six quarters after random assignment. (This time period corresponds roughly to the follow-up period for the 18-month follow-up survey.) For the *Final Impact Report*, the analysis will focus on NDNH data through 10 quarters after random assignment, capturing information through at least 30 months (2.5 years) after random assignment, and one year beyond the follow-up period for the *Interim Impact Report*.

In order to achieve the target sample size for the evaluation (1,000 study members per grantee; see Section 2.3 of the *Interim Impact Report*), random assignment was conducted over a period of two and a half to three years, depending on the grantee (see Exhibit 2-2 in the *Interim Impact Report*). Due to this

²⁹ Because wage records must be matched to study members by SSN (see Appendix Section A.1.5), the evaluation might underestimate earnings if the SSN was reported incorrectly by the worker or employer to the state agency, or by the worker to RTW grantee staff.

³⁰ Although the NDNH lacks earnings information for these types of jobs, randomization should balance the pre-random assignment incidence of omitted earnings between the program and control groups. Since contract work is relatively more common in the IT sector (<https://blog.talentwave.com/research-reveals-the-top-10-industries-for-independent-workers>), and all four RTW grantees focused on IT, it is possible that the intervention changed the prevalence or magnitude of these types of earnings.

multi-year random assignment period, between March 2016 (the first quarterly submission to OCSE of sample members' names and SSNs) and September 2018 (the first submission after the last grantee ended random assignment), each quarterly submission file included an increasing number of sample members.

Exhibit B.3-1 below highlights the implications of the length of the random assignment period for the RTW Evaluation by illustrating the NDNH data captured for each cohort of sample members, defined by quarter of random assignment. The study sample overall extends from Cohort 1 (the first sample members randomly assigned in the third quarter of 2015, starting in July 2015 at WSI), to Cohort 13 (the last sample members randomly assigned in the third quarter of 2018, by RochesterWorks! ending in August 2018).

Reading Exhibit B.3-1 from left to right: For each cohort, the evaluation has data for seven quarters before random assignment (“B7” to “B1,” where B stands for “baseline”), shown in light blue. The quarter of random assignment (“RA”) is shown in black.³¹ The red cells depict the first 10 quarters after random assignment, the primary follow-up period for the *Final Impact Report*. The grey cells reflect quarters of data that extend beyond the 10th quarter for all but Cohort 13. The first black hatched line reflects the data used for the *Interim Impact Report*, through the first quarter of 2020, which reflects the sixth quarter after random assignment for Cohort 13. The second hatched line reflects data for the *Final Impact Report* through the first quarter of 2021, which reflects the 10th quarter after random assignment for Cohort 13.³²

Exhibit B.3-1 highlights the variation in length of follow-up for the early versus late sample members. At the time when Cohort 13 completed their sixth quarter after random assignment, the evaluation had 6 post-randomization quarters of NDNH data for them, but 18 post-randomization quarters for Cohort 1. Likewise, for the *Final Impact Report*, by March 2021 there will be 10 post-randomization quarters of NDNH data for Cohort 13, but 22 quarters for Cohort 1.

³¹ The quarter of random assignment is “quarter 0” (Q0).

³² Because states have four months to submit quarterly earnings records to the NDNH, each quarter of data is generally available for researchers starting approximately six months after the end of the quarter. For instance, complete data for the first quarter of 2021 (providing data through 10 quarters post random assignment for all sample members) will become available in approximately September 2021.

The key consequence of this timing is that the evaluation has NDNH data over a much longer term for earlier cohorts than for later cohorts. The evaluation takes advantage of this by specially reporting impacts for an “early cohort” of study members who were randomly assigned through the end of March 2017, consisting of Cohort 1 through Cohort 7. As shown in Panel A of Exhibit B.3-2, this early cohort makes up 54 percent of the AAWDC study sample, 48 percent of the JVS study sample, 59 percent of the RochesterWorks! sample, and 70 percent of the WSI sample.³³ The *Interim Impact Report* uses data through 12 quarters (3 years) for the early cohort, and the *Final Impact Report* will use data through 19 quarters (4.75 years) for the early cohort.

Exhibit B.3-2: Sample Sizes by Cohort and COVID-19 Status, by Grantee

Program	Full Sample	[A] Early Cohort (Cohorts 1-7)		[B] Full Sample: Affected by COVID-19 by Q10 (Cohorts 10-13)		[C] Early Cohort: Affected by COVID-19 by Q16 (Cohorts 4-7)	
		Sample Size	% of Full Sample	Sample Size	% of Full Sample	Sample Size	% of Early Cohort
AAWDC (MTC)	1,029	553	54%	250	24%	343	62%
JVS (STW-T and JSA)	993	479	48%	227	23%	335	70%
RochesterWorks! (FLH)	610	361	59%	141	23%	236	65%
Worksystems (Reboot NW)	980	683	70%	74	8%	420	61%

Exhibit B.3-1 also demonstrates the length of calendar time covered by these data. The six-quarter follow-up period for the *Interim Impact Report* covers from September 2015 (the start of the six-quarter follow-up period for Cohort 1) through March 2020 (the end of the six-quarter follow-up period for Cohort 13). Thus, the impacts discussed in the *Interim Impact Report* reflect outcomes that occurred over a period of almost five years, a period of consistent economic growth and falling unemployment rates. The follow-up period for the *Final Impact Report* extends another 1.75 years, through December 2021.

Note that the follow-up period of the *Interim Impact Report* ended just as COVID-19 began to emerge in the United States in late March 2020; thus, all data used for the report reflect the period before COVID-19. In particular, both the six-quarter follow-up period for the full sample and the twelve-quarter follow-up period for the early cohort end in the first quarter of 2020.

In contrast, the *Final Impact Report* will use data through the last quarter of 2021, and therefore will include the period after COVID-19 began to affect the U.S. economy. Given the evaluation’s almost three-year random assignment period, however, for the majority of sample members the ten-quarter follow-up period for the *Final Impact Report*’s confirmatory outcome ends before the second quarter of 2020, and thus *before* COVID-19.

Specifically, for all sample members randomly assigned through the third quarter of 2017 (Cohort 1 through Cohort 9), the follow-up period for the final impact analysis covers data through *at latest* the first

³³ Even though random assignment lasted six months longer for RochesterWorks! than for either AAWDC or JVS, RochesterWorks! enrolled a larger proportion of its study sample early in the random assignment period.

quarter of 2020. Only those members in Cohort 10 through 13 are therefore affected. As shown in Panel B of Exhibit B.3-2, this group makes up only 24 percent of the study sample at AAWDC, 23 percent of the study sample at JVS and RochesterWorks!, and 8 percent of the study sample at WSI. For these study members, the period from the 7th quarter forward—the period *after* the interim impact analysis—will be affected by the emergence of COVID-19. In contrast, COVID-19 affects the period from the 13th quarter forward for a much larger proportion of the early cohort, from 61 percent of the WSI early cohort to 70 percent of the JVS early cohort, as shown in Panel C of Exhibit B.3-2.

Appendix C: Survey Methods for the 18-Month Follow-Up Survey

This appendix summarizes data collection methods for the Ready to Work Evaluation’s 18-month follow-up survey. The survey sampling frame included the 3,612 individuals randomly assigned between July 2015 and August 2018, excluding sample members who withdrew after random assignment. Of these 3,612 sample members, the evaluation team completed interviews with 2,833 and collected partial interviews with an additional 15. On average, the interview occurred 19.5 months after random assignment and the survey achieved a 79 percent response rate.

This appendix is structured as follows. Section C.1 describes the development of the survey instrument. Section C.2 describes the timing of the start of interviewing for RTW sample members and tracking efforts to maintain contact with them over the 18-months prior to the survey. Section C.3 describes interviewer training. Section C.4 describes the data collection process for the follow-up survey, and Section C.5 describes adjustments made to the process in response to observed data collection patterns. Last, Section C.6 reports the response rates and average time to interview (see Section 2.6 of the *Interim Impact Report* for more detail).

C.1 Survey Development and Pre-Test

After the follow-up survey questionnaire was drafted, the evaluation team programmed the survey using Conformat’s survey design software, to be administered via computer-assisted personal interviewing (CAPI) and computer-assisted telephone interviewing (CATI). Given the survey length and complexity, especially question “loops” within the training section of the questionnaire, this programming required extensive testing and review.

To test the questionnaire, the evaluation team conducted a “pre-test” interview. To prepare for the pre-test, the team conducted a training with a single interviewer. The training began with an overview of the study, followed by a review of the questionnaire, question by question, with the interviewer reading each question and members of the team acting as the respondent. Explanations of key issues were provided when appropriate throughout. Last, the team and interviewer discussed the pre-test sample and schedule, along with security protocols, adverse events protocol (e.g., how to respond to a respondent who was distressed or in need of medical attention), and responses to sample members’ likely Frequently Asked Questions (FAQs).

Pre-test sample members were selected from a list of 13 volunteers affiliated with the four RTW grantees included in the evaluation who were not members of the study sample. The interviewer administered the survey by telephone between February 9 and February 28, 2017 with 8 of the 13 volunteers (no more than 9 could be conducted without receiving approval from the Office of Management and Budget, OMB). Each respondent received a \$40 check in appreciation for time spent completing the interview.

Based on the eight completed pre-tests, the average interview length of the initial draft of the 18-month follow-up survey was 1 hour and 17 minutes. In contrast, the projected survey time used to estimate average burden in the OMB submission was 40 minutes. The excess survey length stemmed primarily from respondents misinterpreting the level of detail sought in the education and training section loops.

Based on these results, the team adjusted the survey to clarify the information asked for in its loops and to shorten its length. The primary change was to clarify that questions in the training loop asked about training *programs*, rather than individual *courses*. For instance, before the clarification, rather than

respondents completing the question loop once per training program (e.g., a nursing program) as intended, some respondents had repeated the loop for each course taken as part of the program. After adjustments, the final survey length averaged 42 minutes.

C.2 Survey Interview Timing and Sample Tracking

This section describes the start of interviewing approximately 18 months after random assignment (Section C.2.1), and tracking efforts to maintain contact with members of the study sample between random assignment and the start of survey efforts (Section C.2.2).

C.2.1 Timing of the Start of Interviewing

Between July 2015 and August 2018, grantees used an online tool provided by the evaluation to enroll and randomly assign sample members. For surveying purposes, sample members were grouped by their month of random assignment into survey “cohorts.” (These monthly survey cohorts are different from the quarterly cohorts presented in Appendix Exhibit B.3-1 for the purpose of analyzing the NDNH quarterly data.)

For most survey cohorts, interview efforts began in the 18th month after random assignment; for instance, surveying began in July 2017 for the cohort randomly assigned in January 2016. Given the small number of sample members in the earliest and latest survey cohorts, however, the evaluation combined the earliest cohorts and the latest cohorts for surveying. In particular, the first three monthly cohorts (randomly assigned in July 2015 through September 2015), were combined with those randomly assigned in October 2015, and interviewed beginning in April 2017.³⁴ Similarly, the last five monthly cohorts (randomly assigned April 2018 through August 2018), which included only members of the RochesterWorks! study sample, were combined with the March 2018 survey cohort.³⁵

C.2.2 Sample Tracking

Because 18 months would pass between random assignment and the start of interviewing, the evaluation team used a tracking strategy to keep in touch with study members over that time. At random assignment, sample members completed the BIF, which collected their contact information as well as information for three additional contacts (see Appendix Section B.2.1 for more information on the BIF). In those intervening 18 months after random assignment, study members received a communication from the evaluation team approximately every three months to gather updated contact information and convey the purpose of the upcoming survey. Exhibit C.2-1 lists the types of tracking and their schedule relative to random assignment.

³⁴ Only WSI began random assignment in July 2015; the other three grantees began in mid- or late-August 2015. For all four grantees, initial cohorts were small as the grantees ramped up sample recruitment.

³⁵ Because of recruitment challenges at RochesterWorks!, random assignment for this grantee continued five months longer than at the other three grantees. The last five cohorts were also surveyed early because of a longer than anticipated average data collection period between the beginning and end of interviews for each cohort, and because OMB approval was ending January 31, 2020.

Exhibit C.2-1: 18-Month Tracking Efforts

Month after Enrollment	Mode	Content
1 month	Mail	Welcome packet
3 months	Text or email	
6 months	Mail	Postcard
9 months	Email	
12 months	Text or email	
15 months	Email	
18 months	Mail	Advance letter
Yearly in month of birth	Mail	Birthday card

In particular, within six weeks of random assignment, the evaluation team sent welcome packets to each new study member. This packet included a letter welcoming them to the study and a pamphlet reminding them about the follow-up survey and providing information on how to update their contact information. Each survey cohort also received a pre-notification letter one week before interviewing began to let them know interviewers from Abt Associates would be calling to ask for their participation in the survey. This helped legitimize the study and interviewer attempts to reach study members over the phone. The letter also reminded study members of the study objective and their valued participation. The evaluation team also created an online contact update form and a toll-free number, so study members could update their contact information and ask questions about the survey and the study.

Sample tracking began in August 2015 and ended in September 2019. All cohorts received eight tracking communications except for the last three cohorts, which did not receive the 15-month tracking email because they were interviewed early. Overall, participation in the tracking updates was fairly high. A total of 1,609 sample members, 45 percent of the full study sample, updated or confirmed their contact information at least once during the 18-month tracking period. Of the 1,609 sample members who made updates, 994 made at least one update to their personal contact information on their last tracking response.

C.3 Interviewer Training

In preparation for fielding the survey, the evaluation team led a first interviewer training on April 25, 2017, with four interviewers, one each in the local area of the four grantees. Three more training sessions were held as new interviewers joined (as additional interviewers or replacements) in July 2018, October 2018, and December 2018. In total, nine interviewers were trained for the RTW follow-up survey.

At the beginning of the training, members of the evaluation team explained the purpose and goals of the RTW Evaluation. In addition, the team covered general interviewing principles and unique study procedures and requirements for the RTW follow-up survey. The training reviewed the questionnaire thoroughly, including probing, section loops, anticipated respondent questions, and addressing ambiguity. Interviewers had access to the CAPI survey to gain familiarity with the questionnaire and performed practice interviews.

Each interviewer received a project cell phone and tablet and a host of supports, including voicemail scripts and templates, text message templates, Sorry I Missed You cards, flyers, and gift cards and receipts. They also received a manual as primary reference for the RTW follow-up survey. The manual included information about the RTW grant program and evaluation, using CAPI, administering the survey, tips on gaining respondents' cooperation, responses to FAQs, and responding to an adverse event.

After training, interviewers got time to complete test cases and read through the training material before beginning work. After interviewers were confident with the questionnaire, project material, and protocol, they began dialing cases.

C.4 Data Collection Process

Survey data collection began on April 26, 2017, and concluded on January 27, 2020. Interviewers were responsible for completing surveys over the phone and in person using CAPI on Abt’s data collection platform to complete phone and in-person interviews.

Each month, a new cohort of study sample members was released to the interviewers, including study member name, contact information (address, phone numbers, and email addresses), information on consent to text, and up to three secondary contacts. Survey respondents received a \$25 gift card in appreciation for their time completing the survey. Cards were mailed through USPS or given in person, depending on the mode of completion (phone versus in person). Each survey cohort was “closed” once the evaluation team determined that every sample member either had been interviewed or was unlikely to complete an interview based on their interview attempt history.

On average, each survey cohort was “in the field”—meaning the time between a cohort’s release for interview and its closing date—for 19 weeks, or more than four months. Thus, at any point in time, interviewers were attempting to contact sample members from multiple active cohorts. At all times, interviewers were working cases at different stages within the interview process; some cases were fresh and relatively easy to locate whereas some cases were exhausted and more difficult to locate.

The RTW survey protocol instructed interviewers to contact sample members through a combination of phone and in-person attempts. Interviewers were instructed to work cases strictly over the phone for approximately four to six weeks before beginning in-person locating efforts. Each phone number listed for the sample member, including alternate numbers, were given five attempts. If the respondent’s own information resulted in unsuccessful attempts, then secondary contacts provided by the respondent were attempted five times. Call attempts to study members and secondary contacts were staggered over different times of day and days of the week to maximize the chance of reaching the respondent.

If phone numbers in the sample record resulted in no leads, the interviewer worked closely with their field manager to try to get updated contact information. Accurint® searches were performed on cases with bad numbers (e.g., the phone number on file was disconnected or did not belong to the respondent). If the search located a new phone number, the interviewer attempted the new number until it was no longer viable. Interviewers also could use internet searches such as Whitepages.com and Google as part of their effort.

Refusal conversion was also attempted on “soft” refusals (e.g., the sample member was hesitant to complete at that time, but there was reason to believe that they would complete later), and interviewers left voicemail messages as needed. Interviewers were trained to document every attempt made so the team and subsequent interviewers had access to a history of attempts per case. Sample records were given adequate time to rest in between attempts, to avoid respondent burnout. After six weeks in the field, the team sent a “Trying to Reach You” email and text message to non-responders to reiterate the importance of the study and the interviewer’s attempts to reach them by phone.³⁶ In addition, cases were transferred

³⁶ Text messages were sent only to study members who gave permission to be texted.

across interviewers to determine whether another interviewer could complete the survey with the unresponsive sample member.

After phone attempts were exhausted, the interviewers began in-person locating by visiting the home address listed for the sample member. During the in-person visit the interviewer would try to get the sample member to complete the survey or set up an appointment to complete later. If the sample member was not reached at home, the interviewer would attempt to speak with neighbors or other household members to gather any new contact information. If someone other than the sample member answered the door, the interviewer would first confirm that the sample member lived at the residence; if so, the interviewer left a message and a project flyer and arranged to visit at a later date. If the interviewer confirmed that the address on file was not correct, they worked with the field manager to locate a secondary address for the sample member.

In-person visits were organized and completed at different times of day and days of the week. A study flyer and “Sorry I Missed You” postcard were left on the door when nobody was home. The study flyer and postcard had the interviewer’s direct phone number and the respondent’s user identification as reference and for ease of scheduling an appointment. Interviewers also mailed study flyers to sample members as needed. After in-person efforts concluded for a case, the interviewer paused contact attempts to avoid annoying the sample member. After a brief pause, the survey interviewer would periodically attempt to reach the sample member over the phone until the survey cohort was closed. Cases were closed and coded as “unlocatable” after deliberation between the team that the case was no longer viable.

If a sample member called the study hotline and asked to complete the survey after their cohort’s close date, then the team decided internally whether to allow the respondent to complete the interview, based on the time elapsed since the cohort was first released.³⁷ If permitted, the case was re-opened, and the survey was completed.

C.5 Adjustments to the Survey Release Timing

In the early part of data collection, the evaluation team noticed that control group cases were completing at a lower rate than program group cases in the WSI survey sample. Across all four grantees, control cases also required more time in the field than program cases within the same survey cohort. In response, beginning with sample members randomly assigned in July 2016, and released for interview in January 2018, the evaluation team began releasing control cases two weeks before program cases (e.g., releasing control group members on the 1st of the month, and program group members on the 15th). This adjustment was made for all four grantees.

Furthermore, in a study organized into survey cohorts, where new sample is released monthly, interviewers tend to be more confident in their approach when communicating with newly released cases, because they are not overwhelmed by numerous attempts as for older cases. The evaluation team also expected its decision to release new cases every two weeks to help interviewers stay engaged. Furthermore, releasing control cases earlier also allowed additional time in the field for these harder-to-

³⁷ For example, if the time since the cohort was closed was short, and the evaluation had not yet reached an 80 percent response rate for the given cohort, the evaluation team reopened those cases and attempted to complete the interview. If too much time had passed since the cohort closed, or the cohort had already hit the target 80 percent response rate, the evaluation team typically did not attempt to complete the interview.

reach cases. This helped the overall goals of achieving a high response rate and balancing completion rates between the control group and program group members within each cohort.

C.6 Response Rates

The RTW Evaluation conducted 2,848 interviews between April 2017 and January 2020, from a starting sample of 3,612 cases. Of these, 2,833 interviews were completed, and 15 were partially completed. The evaluation includes the 15 partial completes in the analysis, treating incomplete questions as item non-response (see Appendix Section A.1.5). Including completes and partial completes, this reflects a 79 percent response rate. Approximately 7 percent of surveys were completed in person, and the remaining were completed by phone. Exhibit C.6-1 reports the final classification for all 3,612 cases, including detail for those sample members who did not respond to the survey.

Exhibit C.6-1: Hierarchical AAPOR Final Classification

Response Rate = 78.4%		
Complete	2,833	78.4%
Partial complete	15	0.4%
Total interview	2,848	78.8%
Non-interview		
No interviewer available for needed language	1	0.0%
Refusals	304	8.4%
Dead	11	0.3%
Break-off	2	0.1%
Respondent away/unavailable	6	0.2%
Other	439	12.2%
Physically or mentally unable/incompetent	1	0.0%
Total non-interview	764	21.2%
Grand Total	3,612	100.0%

KEY: AAPOR is the American Association for Public Opinion Research, a professional organization of public opinion and research professionals.

Across the four grantees, the response rate ranged from 76 percent (WSI) to 81 percent (AAWDC). See Exhibit 2-3 in the *Interim Impact Report* for details on response rates by grantee and by treatment group. The response rate was statistically significantly higher (at the 5 percent level) among members of the program group than among members of the control group for the AAWDC and WSI study samples, but not for the JVS and RochesterWorks! study samples.³⁸ (The final difference in response rates between program and control group members in the WSI study sample was smaller than the response differences observed before the change in interview timing for control group members described in Section C.5.) To adjust for differential non-response, the analysis uses non-response weights. See Section A.1.5 for a discussion of construction of those weights.

On average, the survey was completed approximately 19.5 months after random assignment: from 19.1 months among survey respondents in the RochesterWorks!' study sample, to 19.7 months for survey respondents in the AAWDC study sample (see Exhibit 2-3 in the *Interim Impact Report*). The average

³⁸ At AAWDC the response rate was 84 percent among members of the program group and 77 percent among members of the control group. At WSI the response rate was 81 percent among members of the program group and 71 percent among members of the control group.

time to fielding was shorter for the RochesterWorks! study sample because the last five monthly cohorts were released for interview prior to 18 months after random assignment. In no grantee study sample did average time to survey completion differ between program group and control group, presumably in part due to the adjustment to release control group members early.

Appendix D: Definitions of Outcomes

This appendix provides information on how outcome variables for the *Interim Impact Report* are constructed for the Ready to Work Evaluation. (The *Final Impact Report* will include information on the set of outcomes included in that report.) Outcomes for the *Interim Impact Report* are constructed using data collected in the RTW 18-month follow-up survey and from administrative earnings data from the NDNH. (See Appendix B for detailed information on the data sources for this evaluation.) Outcomes constructed from data collected in the follow-up survey are measured over the first 18 months after random assignment, or between random assignment and survey interview (on average 19.5 months after random assignment; see Exhibit 2-3 in the *Interim Impact Report*).³⁹ Outcomes constructed using NDNH data are measured through 6 quarters after random assignment for the full sample, and through 12 quarters after random assignment for the early cohort (those randomly assigned by March 31, 2017).

In this appendix, Sections D.1 through D.5 describe the construction of outcomes for the *Interim Impact Report* based on data collected in the 18-month follow-up survey:⁴⁰ Corresponding to Section 2 of each of the grantee-specific chapters (Chapters 3 through 6 of the *Interim Impact Report*), Section D.1 discusses outcomes on participation in employment-related activities. Corresponding to Sections 3 and 4 of the grantee-specific chapters, the next two appendix sections describe the construction of outcomes related to receipt of education- and employment-related supports (Section D.2) and credential receipt and other short-term outcomes (Section D.3). Corresponding to Section 5 of the grantee-specific chapters, Section D.4 describes the construction of the subset of labor market outcomes based on survey data. Corresponding to Section 6 of the grantee-specific chapters, Section D.5 describes the construction of broader measures of well-being.

Finally, Section D.6 of this appendix describes the construction of labor market outcomes for the *Interim Impact Report* based on administrative data collected in the NDNH. These outcomes are reported in Section 5 of the grantee-specific chapters of the *Interim Impact Report*.

The core of each section in this appendix are subsections providing outcome-by-outcome definitions and detail. Outcomes that are confirmatory or secondary for the RTW Evaluation are indicated using **bold red text**. All other outcomes are exploratory. See Section 2.5 of the *Interim Impact Report* for more on the classification of outcomes into confirmatory, secondary, and exploratory. Conditional outcomes—those outcomes that are defined for only part of the study sample—are indicated using *italics*. See the text box **How to Read This Report's Impact Exhibits** in the *Interim Impact Report* (immediately preceding Chapter 3) for more on conditional outcomes.

³⁹ For the 7 percent of the RochesterWorks! survey respondents who were interviewed earlier than 18 months after random assignment (see Appendix Section C.2.1), all survey-based outcomes are measured from random assignment through survey interview. For all other grantees, no survey respondents were interviewed before 18 months.

⁴⁰ As discussed in Chapter 4 of the *Interim Impact Report* and in Appendix G, for analysis of the two RTW programs offered by JVS the evaluation constructs supplemental adjusted outcomes on service receipt, education- and employment-related supports, and credential receipt and other short-term outcomes because of evidence that survey respondents misunderstood the corresponding survey questions. See Appendix G for more detail on how these adjusted outcomes vary from the outcomes described in Sections D.1, D.2, and D.3.

D.1 Defining Outcomes on Participation in Employment-Related Activities

This section provides definitions and details on how variables are constructed for outcomes on participation in employment-related activities using data collected in the evaluation’s 18-month follow-up survey. Impacts on these outcomes are reported in the second section of each of the grantee-specific chapters in the *Interim Impact Report*, Chapters 3 through 6, or in the grantee-specific appendices in this document (Appendices F through I).

D.1.1 Participation in Structured Employment-Related Activities

The exhibits below provide information on how outcomes on participation in structured employment-related activities are constructed. Exhibit D.1-1 describes the types of structured employment-related activities: occupational training, work-based training, and employment readiness courses. Exhibit D.1-2 describes the outcomes measures for each type of structured employment-related activity; for example, total hours attended occupational training. The 81 outcomes are a combination of the nine participation outcomes listed in Exhibit D.1-2 defined for each of the nine activities or training types listed in Exhibit D.1-1. The RTW Evaluation defines as secondary for the *Interim Impact Report* the total hours attended outcomes of each of the following: (1) any structured employment-related activity, (2) any occupational training, (3) any work-based training, and (4) employment readiness courses.

Exhibit D.1-1: Types of Structured Employment-Related Activities

Activity or Training Type	Description
Any structured employment-related activity	Respondent attended any of the following activities (described in detail in the next three panels) in the first 18 months after random assignment: <ul style="list-style-type: none"> • Occupational training; • Work-based training; or • Employment readiness courses.
Occupational Training	
Any occupational training	Any of the two types of occupational training listed immediately below.
College-based occupational training	For-credit programs toward a college degree, including those offered online, at a community college, or at a 2- or 4-year college campus (not including recreational programs).
Non-college-based occupational training	Vocational or occupational training programs aimed at a specific job, trade, or occupation.
Work-Based Training	
Any work-based training	Any of the three types of work-based training listed immediately below.
Unpaid internship	A temporary position with an organization in which the respondent is not paid a wage or salary.
Paid internship	A temporary position with an organization in which the respondent is paid a wage or salary.
On-the-job training (OJT)	A longer-term paid position in which the employer receives a subsidy toward the respondent’s wages, with the expectation that the respondent will be trained and then hired by the employer at the end of training.
Employment Readiness Courses	
Employment readiness courses	Classes or workshops on general life skills, including study skills and workplace skills (sometimes called “soft skills”). These workshops or classes might focus on topics such as how to be a successful student, how to manage your time, how to work well within a team, how to manage your finances, career planning, and how to act professional.

Exhibit D.1-2: Outcomes on Participation in Structured Employment-Related Activities

Outcome	Description
Ever attended any activity or training	Attended at least one activity or training (of the given type listed in Exhibit D.1-1) in the first 18 months after random assignment, whether or not completed (binary).
Number of activities/training programs attended	Number of activities or trainings (of the given type) attended in the first 18 months after random assignment (continuous).
Total hours attended^{a,b,c} [Secondary outcome for the <i>Interim Impact Report</i>]	Number of hours attended (of the given activity or training type) in the first 18 months after random assignment (continuous). Constructed as the product of total weeks attended and usual hours per week of training of the given activity or training type for each spell. Equal to zero for survey respondents who attended no activity or training of the given type.
<i>Total hours, for attendees</i>	For those who attended at least one activity or training (of the given type) in the first 18 months after random assignment, number of hours attended (continuous). Outcome not defined (set to missing) for survey respondents who attended no activity or training of the given type.
Total weeks attended ^{a,d}	Number of weeks attended (of the given activity or training type) in the first 18 months after random assignment (continuous). Constructed from reported start and end dates of the given activity or training. Equal to zero for survey respondents who attended no activity or training of the given type.
<i>Total weeks, for attendees</i>	For those who attended at least one activity or training (of the given type) in the first 18 months after random assignment, number of weeks attended (continuous). Outcome not defined (set to missing) for survey respondents who attended no activity or training of the given type.
<i>Hours per week, for attendees</i>	For those who attended at least one activity or training (of the given type) in the first 18 months after random assignment, equal to total hours attended divided by total weeks attended (continuous). Outcome not defined (set to missing) for survey respondents who attended no activity or training of the given type.
Completed at least one activity or training program	Respondent completed at least one activity or training (of the given type) in the first 18 months after random assignment (binary).
Number of activities or training programs completed	Number of activities or trainings (of the given type) completed in the first 18 months after random assignment (continuous).

^a For survey respondents that did not respond to the initial open-ended question on usual hours per week of a given activity or training, the survey included a follow-up categorical question on ranges of usual weekly hours of the given activity. Likewise, for occupational training and employment readiness courses, but not for work-based training, for respondents that gave incomplete information on the start and end dates of a given training or activity, the survey included a follow-up categorical question on ranges of total weeks of the activity. For sample members who only provided the categorical information, the evaluation imputes hours per week or total weeks using the mean of values for other respondents at the given grantee within the same treatment group whose value fell within the range of the respondent’s categorical response. See Appendix Section A.1.5 for more detail.

^b When constructing total hours attended from weeks attended and usual hours per week, if one (but not both) of the two building blocks is missing, that value is imputed using the mean of total weeks or hours per week of the given activity or training type for other respondents at the given grantee within the same treatment group. (For weeks of training, values are also imputed by completion status for the given training or activity: completed, still attending, or dropped out.) Values are imputed separately for the two types of occupational training, and for the three types of work-based training (see descriptions below). If both building blocks are missing, the outcome is set to missing.

^c Maximum value of total hours attended set to 2,730 hours attended of the given activity or training type, equivalent to 78 weeks (18 months) at 35 hours per week.

^d Maximum value of total weeks attended set to 78 weeks (18 months) attended of the given activity or training type.

D.1.2 Field of Training and Content of Non-College-Based Occupational Training

The field of training outcomes listed in Exhibit D.1-3 vary for the four RTW grantees included in the evaluation based on their industries of focus. The field of training outcomes are defined for occupational and work-based training (not for employment readiness courses), as well as for any structured employment-related activity. All of these outcomes are set to zero for those survey respondents who completed no training of the given type in the first 18 months after random assignment.

Exhibit D.1-3: Outcomes on Field of Training for Occupational and Work-Based Training

Field of Training	Description
Received training in the following fields:	Respondent attended training in the following field in the first 18 months after random assignment:
1. Healthcare	1. Healthcare (AAWDC’s MTC program, and RochesterWorks! FLH program) (binary).
2. Information technology (IT)	2. Information technology (all four grantee programs) (binary).
3. Advanced manufacturing	3. Advanced manufacturing (AAWDC’s MTC program, RochesterWorks! FLH program, and WSI’s Reboot NW program) (binary).
4. Bioscience	4. Biosciences/biotechnology (AAWDC’s MTC program) (binary).

Exhibit D.1-4 provides information on the content of non-college-based occupational training attended. There are no corresponding outcomes for college-based occupational training because these survey questions were not asked for college-based training. These outcomes are set to zero for those who did not attend non-college-based occupational training in the first 18 months after random assignment.

Exhibit D.1-4: Outcomes on Content of Non-College-Based Occupational Training

Outcome	Description
Realistic work settings	Respondent attended any non-college-based occupational training program in the first 18 months after random assignment that provided a realistic setting in which to practice their skills; for example, opportunities to draw blood, change adult diapers, weld parts, or hook up local computer networks (binary).
Trips to potential employers	Respondent attended any non-college-based occupational training program in the first 18 months after random assignment that provided trips to potential employers; for example, to observe the work being done, to talk to current workers in the field, or to listen to employers talk about the skills they value in their future employees (binary).

D.1.3 Monthly Attendance in Any Structured Employment-Related Activity

Exhibit D.1-5: Outcomes on Monthly Attendance in Structured Employment-Related Activities

Outcome	Description
Ever attended any structured employment-related activities in the given month since random assignment	Respondent attended any occupational training, work-based training, or employment readiness course in the given month since random assignment (binary). Defined for month 1 through month 18 after random assignment, based on the date of random assignment (e.g., if randomly assigned on September 12, 2017, month 1 spans September 12 through October 11, 2017). Constructed based on reported dates of attendance in the given activity or training program.

Outcome	Description
Ever attended occupational training in the given month since random assignment	Respondent attended any occupational training in the given month since random assignment (binary).
Ever attended work-based training in the given month since random assignment	Respondent attended any work-based training in the given month since random assignment (binary).
Ever attended an employment readiness course in the given month since random assignment	Respondent attended any employment readiness course in the given month since random assignment (binary).

D.1.4 Job Search Assistance

The exhibits below provide information on how outcomes on types of job search assistance are defined. Exhibit D.1-6 describes the types of job search assistance; Exhibit D.1-7 describes the outcome measures defined for each type of job search assistance. The six outcomes are a combination of the two outcomes listed in Exhibit D.1-7, defined for each of the three types of job search assistance listed in Exhibit D.1-6.

Exhibit D.1-6: Types of Job Search Assistance

Job Search Assistance	Description
Career counseling	For example, tests to see what jobs the respondent was suited for, information about education or job training programs, information on how to change careers, or information about what jobs are available in the local area.
Job placement assistance	For example, assistance in searching for work, referrals to jobs or employers, or providing labor market information.
Job readiness training	For example, help with a resume, interviewing skills, and networking skills.

Exhibit D.1-7: Outcomes on Job Search Assistance

Outcome	Description
Received any	Respondent received the given type of job search assistance from an occupational training program, an employment readiness course, or another organization in the community at least once between random assignment and survey interview (binary).
Number of times received	Number of times respondent received the given type of job search assistance from an occupational training program or an employment readiness course between random assignment and survey interview (continuous).

D.1.5 Content of Training

The exhibits below provide information on how outcomes on the content of structured employment-related activities are defined. Exhibit D.1-8 describes types of general skills covered; Exhibit D.1-9 describes the outcome measures defined for each general skill. The 28 outcomes are a combination of the two outcomes listed in Exhibit D.1-9 defined for each of the 14 types of general skills listed in Exhibit

D.1-8. These outcomes are set to zero for those survey respondents who did not attend any structured employment-related activity between random assignment and survey interview.⁴¹

Exhibit D.1-8: Types of General Skills Covered in Training

General Skill	Description
Job Search Skills	
Career planning	Career planning.
Finding a job	Finding a job or moving to a new job.
Workplace Behaviors	
Critical thinking	Critical-thinking and problem-solving skills.
Working in groups	Working in groups.
Communicating well	Communicating well; for example, good listening and speaking skills.
Acting professional	Acting professional; for example, how to dress, show good attendance habits, and be respectful.
Soft Skills	
Time management	Managing time effectively.
Managing stress	Managing stress, anger, and frustration.
Staying motivated	Staying motivated.
Managing money	Managing money and personal finances.
Handling parenting	Handling parenting and other family responsibilities.
Help with problems	Finding help with problems at school, work, or home.
Academic Skills	
Study skills	Study skills, such as locating information, taking notes, and preparing for classes and exams.
Financial aid	Finding and applying for financial aid.

Exhibit D.1-9: Outcomes on Types of General Skills Covered in Training

Outcome	Description
Skill received a great deal of attention	Respondent attended any structured employment-related activity between random assignment and survey interview in which the respondent reported that the given general skill received “a great deal of attention” (binary).
Skill received at least some attention	Respondent attended any structured employment-related activity between random assignment and survey interview in which the respondent reported that the given general skill received either “some attention” or “a great deal of attention” (binary).

D.2 Defining Outcomes on Receipt of Education- and Employment-Related Supports

This section provides variable definitions and details on how variables are constructed for outcomes on receipt of education- and employment-related supports, using data collected in the evaluation’s 18-month

⁴¹ These outcomes are also defined (not set to zero) for any respondent who reported completing any certificate, license, or credential in addition to those received as part of a structured employment-related activity.

follow-up survey. Impacts on these outcomes are reported in the third section of each of the grantee-specific chapters in the *Interim Impact Report*, Chapters 3 through 6, or in the grantee-specific appendices in this document (Appendices F through I).

D.2.1 Funding Sources for Occupational Training

Unless otherwise noted, outcomes described in Exhibit D.2-1 are set to zero for those survey respondents who attended no occupational training.

Exhibit D.2-1: Outcomes on Funding Sources for Occupational Training

Outcome	Description
Own/Family Funding Sources	
Own or family earnings, savings, or loan	Respondent attended at least one occupational training program between random assignment and survey interview in which the cost of training was financed at least in part using any of their own or family resources listed below (binary).
<i>Own or family earnings, savings, or loan, if any occupational training</i>	For those respondents who attended any occupational training between random assignment and survey interview: Respondent attended at least one occupational training program in which the cost of training was financed at least in part using any of their own or family resources listed below (binary). Outcome not defined (set to missing) for survey respondents who attended no occupational training.
Types of own/family funding sources:	Respondent attended at least one occupational training program between random assignment and survey interview in which the cost of training was financed at least in part using any of the following five funding source:
1. Own earnings	1. The respondent's own earnings (binary).
2. Spouse/partner earnings	2. The earnings of the respondent's spouse or partner (binary).
3. Own or spouse/partner savings	3. The respondent's savings, or the savings of the respondent's spouse or partner (binary).
4. Financial help from parent/family member	4. Financial help from the respondent's parents or other family members (binary).
5. Loans in own name	5. Loans taken out in the respondent's name (binary).
Other Funding Sources	
Received financial support for occupational training from non-family sources	Respondent attended at least one occupational training program between random assignment and survey interview in which the cost of training was free or financed at least in part using any of the five non-family sources listed below (binary).
<i>Received any financial support for occupational training, if any occupational training</i>	For those respondents who attended any occupational training between random assignment and survey interview: Respondent attended at least one occupational training program in which the cost of training was free or financed at least in part using any of the five non-family sources listed below (binary). Outcome not defined (set to missing) for survey respondents who attended no occupational training.

Outcome	Description
Types of non-family funding sources:	Respondent attended at least one occupational training program between random assignment and survey interview in which the cost of training was financed at least in part using any of the following five funding sources:
1. Free training program	1. The training program was offered free of charge (binary).
2. Program provider	2. Financial support from the training provider (binary).
3. From an American Job Center	3. Financial support from an American Job Center/One-Stop career center or state unemployment/employment office (binary).
4. Pell grant or non-government grant	4. A Pell grant, other government grant or scholarship, or grant or scholarship from any non-government source, such as a community-based or non-profit organization, not including loans requiring repayment (binary).
5. Other	5. Financial support for the cost of training from the respondent's employer, or another source other than the sources listed above (binary).

D.2.2 Supports Received

The exhibits below provide information on how outcomes on receipt of academic and other support services are defined. Exhibit D.2-2 describes the types of academic and other support services; Exhibit D.2-3 describes the outcome measures defined for support services received. The four outcomes on academic support services are a combination of the two outcomes in the top panel of Exhibit D.2-3 defined for each of the two types of academic support services included in the top panel of Exhibit D.2-2. The six outcomes on other support services are a combination of the one outcome in the bottom panel of Exhibit D.2-3 defined for the six types of other support services included in the bottom panel of Exhibit D.2-2.

Exhibit D.2-2: Types of Supports Received

Supports Received	Description
Academic Support Services	
Academic advising	Academic advising; for example, one-on-one meetings with a counselor to discuss course selection and progress toward meeting academic goals.
Financial aid advising	Financial advising; for example, one-on-one meetings with a counselor to help determine whether the respondent has the financial resources to attend training, and support themselves and their family while in training.
Other Support Services	
Assistance with mental health	Assistance with mental health issues, either on-site or through referral to services elsewhere.
Clothes or uniforms	Clothes or uniforms such as work boots.
Assistance with childcare	Assistance with childcare.
Assistance with transportation	Assistance with transportation.
Tools	Tools; for example, equipment, hammers, calculators, or other physical things needed for training.
Assistance with other services	Assistance with other services such as housing or substance abuse, either on-site or through referral.

Exhibit D.2-3: Outcomes on Types of Supports Received

Outcome	Description
Academic Support Services	
Received any	Respondent attended at least one occupational training program or employment readiness course between random assignment and survey interview in which the respondent received the given academic support service at least once (binary).
Number of times received	Number of times respondent received the given support service while attending an occupational training program or employment readiness course between random assignment and survey interview (continuous).
Other Support Services	
Received any	Respondent received the given type of support service at least once between random assignment and survey interview, either from an occupational training or employment readiness course provider or from another organization in the community (binary).

D.3 Defining Outcomes on Credential Receipt and Other Short-Term Outcomes

This section provides variable definitions and details on how variables are constructed for outcomes on credential receipt and other short-term outcomes using data collected in the evaluation’s 18-month follow-up survey. Impacts on these outcomes are reported in the fourth section of each of the grantee-specific chapters in the *Interim Impact Report*, Chapters 3 through 6, or in the grantee-specific appendices in this document (Appendices F through I).

D.3.1 Educational Attainment

Exhibit D.3-1: Outcomes on Educational Attainment

Outcome	Description
Received any certificate, certification, license, or degree [Secondary outcome for the <i>Interim Impact Report</i>]	Received any occupational training certificate, professional certification, license, or college credential or degree between random assignment and survey interview (binary).
Occupational training certificate:	Among respondents who completed at least one non-college-based occupational training program between random assignment and survey interview. These two outcomes are set to zero for respondents who attended no non-college-based occupational training programs, including those who attended only a college-based occupational training program:
1. Received any	1. Indicator that the respondent was awarded at least one training certificate, license, or credential for completing the program (binary).
2. Number received	2. Number of certificates, licenses, or credentials earned (continuous).
College credits:	Among respondents who completed at least one college-based occupational training program between random assignment and survey interview. These two outcomes are set to zero for respondents who attended no college-based occupational training programs, including those who attended only a non-college-based occupational training program:
1. Received any	1. Indicator that the respondent earned any college credits (binary).
2. Number received	2. Number of college credits earned (continuous).

Outcome	Description
College credential:	Among respondents who completed at least one college-based occupational training program between random assignment and survey interview, measures indicating that the respondent was awarded the following college credential or degree. These three outcomes are set to zero for respondents who attended no college-based occupational training programs, including those who attended only a non-college-based occupational training:
1. Certificate	1. Diploma, certificate, or academic degree requiring less than a full year's worth of college credits, or requiring more than a full year's worth of college credits but less than an associate's degree (binary).
2. Associate's degree	2. Associate's degree (AA) (binary).
3. Bachelor's degree or higher	3. Bachelor's degree (BA/BS), master's degree (MA) or professional degree (e.g., MD, JD) (binary).
Professional certification or license:	Respondent reported by name receiving a professional certification awarded by the state or by an industry or professional association (e.g., showing the respondent is qualified to perform a specific job, such as Certified Medical Assistant or an IT certification). Does not include responses that provided insufficient detail to identify the type of certification or license, or that reported a type of certification that appears to require only a minimal amount of training (e.g., a CPR certification or OSHA workplace safety certification):
1. Received any	1. Indicator that the respondent was awarded at least one professional certification (binary).
2. Number received	2. Number of professional certifications received (continuous).
Employment readiness certificate	Among respondents who completed at least one employment readiness course between random assignment and survey interview, indicator that the respondent was awarded at least one training certificate, license, or credential after completing the course (binary). This outcome is set to zero for respondents who attended no employment readiness courses.

D.3.2 Confidence in Career Knowledge, and Barriers to Employment

Exhibit D.3-2: Outcomes on Confidence in Career Knowledge and Barriers to Employment

Outcome	Description
Confidence in Career Knowledge Scale	<p>Scale measuring confidence in career knowledge, based on respondents' level of agreement with the following seven statements (continuous, 1-4):</p> <ol style="list-style-type: none"> 1. I'm not sure how to accurately assess my abilities and challenges; 2. I know how to make a plan that will help me achieve my goals for the next five years; 3. I know how to get help from staff and teachers with an issue that might arise when I am at school; 4. I'm not sure what type of job is best for me; 5. I know the type of employer I want to work for; 6. I know the occupation I want to be in; and 7. I'm not sure what kind of education and training program is best for me. <p>For each of the seven statements above, respondents reported whether they strongly disagreed=1, disagreed=2, agreed=3, or strongly agreed=4. Responses for questions that were phrased as a negative were reversed so that the most positive outcome always received the highest score (e.g., a response of strongly disagree to "I'm not sure how to accurately assess my abilities and challenges" reversed to a value of 4.) The Confidence in Career Knowledge Scale is the average of these values across the seven statements.</p>
Barriers to Employment	
Childcare arrangements	Respondent reported that finding affordable, quality childcare limited their ability to work "very much" before the month of the survey interview (binary).
Transportation	Respondent reported that problems with transportation limited their ability to work "very much" before the month of the survey interview (binary).
Illness or health condition	Respondent reported that they had a physical, emotional, or other health condition that limited the kind or amount of work they could do between random assignment and before the month of the survey interview (binary).
Number of barriers	Number of barriers to employment reported (continuous, 0-3).
Minimum hourly wage willing to accept	Lowest hourly wage that the respondent is willing to accept (including thinking about the costs of taking the job, such as childcare and transportation) (continuous). This outcome is set to missing for respondents who reported a minimum of ≤\$5 or >\$100.

D.4 Defining Labor Market Outcomes Based on Survey Data

This section provides variable definitions and details on how variables are constructed for labor market outcomes using data collected in the evaluation's 18-month follow-up survey. Impacts on these outcomes are reported in the fifth section of each of the grantee-specific chapters in the *Interim Impact Report*, Chapters 3 through 6, or in the grantee-specific appendices in this document (Appendices F through I). (See Section D.6 for definitions of labor market outcomes constructed using NDNH data.)

D.4.1 Engagement in the Labor Force

Exhibit D.4-1: Outcomes on Engagement in the Labor Force

Outcome	Description
Employed	Respondent is currently working at a job for pay at survey interview, including any full- or part-time jobs, self-employment, temporary positions, odd jobs, side jobs (such as babysitting, gardening, or housekeeping), under-the-table jobs, business ventures, or other types of paid jobs (binary).
Unemployed	Respondent is without a job, looking for work, or on temporary layoff (waiting for callback), at survey interview (binary).
Out of the labor force:	Respondent is out of the labor force for any of the reasons listed below at survey interview:
1. Attending school/training	1. Attending school or a long-term training program (binary).
2. Maternity leave, sick, or disability	2. On maternity leave, sick, or unable to work because of a disability (binary).
3. Retired	3. Retired, or without a job and not looking for work (binary).
Number of jobs	Number of jobs held between random assignment and survey interview (continuous).

D.4.2 Characteristics of Current Job

Unless otherwise noted, all outcomes listed below are set to zero for those survey respondents who are not employed at survey interview. For example, for the outcome on whether a respondent's job offers health insurance, those who hold no job at the time of survey interview and those whose job at survey interview does not offer health insurance both are treated as not having employer-provided health insurance (set equal to zero), whereas only those who have a job at survey interview that offers health insurance are treated as having employer-provided health insurance (set equal to one). For respondents with more than one job at survey interview, respondents were asked to report on their "main" job, defined as the job where they worked the most hours or (if they worked the same number of hours at more than one job) the one where they had worked the longest.

Exhibit D.4-2: Outcomes on Characteristics of Current Job

Outcome	Description
Job field:	Field of respondent's current job at survey interview. The field of employment outcomes vary for the four RTW grantees included in the evaluation based on their industries of focus.
1. Healthcare	1. Respondent worked in a healthcare occupation (e.g., nursing) or industry (e.g., hospital), including in bioscience/biotechnology (MTC, FLH) (binary).
2. Information technology	2. Respondent worked in an information technology occupation (e.g., computer hardware engineer) or industry (e.g., software publishing) (binary).
3. Manufacturing	3. Respondent worked in a manufacturing occupation (AAWDC's MTC program, RochesterWorks! FLH program, WSI's Reboot NW program) (binary).
Job type:	Type of job held at survey interview:
1. Regular full-time or part-time	1. Employed as a regular full-time or part-time employee (binary).

Outcome	Description
2. Temporary help agency	2. Employed by a temporary help agency (binary).
3. Contracting company	3. Employed by a company that contracts out the respondent's services (binary).
4. Independent contractor or independent consultant	4. An independent contractor or independent consultant (binary).
5. Self-employed	5. Self-employed, including as a day laborer or freelance worker (binary).
6. Other	6. Other employee type, including working as an on-call employee (binary).
Rate of pay per year ^{a,b,c,d}	Rate of pay per year, before taxes and other deductions, at the respondent's current job at survey interview (continuous). Rate of pay per year constructed from respondent's reported earnings. For respondents who reported an hourly wage rather than an annual value, the hourly wage is transformed into an annual measure using usual weekly hours worked and assuming 52 weeks worked per year.
<i>Hourly wage, if employed^{a,b,d}</i>	Hourly rate of pay at the respondent's current job at survey interview (continuous). For those who reported an annual earnings measure (including those who provided only a categorical response to annual earnings, see above), the annual measure is transformed into an hourly wage using usual weekly hours worked and assuming 52 weeks worked per year. Outcome not defined (set to missing) for respondents who are not employed at survey interview.
Hours worked per week ^{c,e}	Number of hours worked in a typical week at the respondent's job at survey interview (continuous).
<i>Hours worked per week, if employed</i>	For those employed at survey interview, number of hours worked in a typical week at the respondent's job at survey interview (continuous). Outcome not defined (set to missing) for respondents who were not employed at survey interview.
Full-time	Respondent was working full-time in their current job at survey interview, defined as 35 or more hours per week, based on the number of hours worked in a typical week at the respondent's job at survey interview (binary).
<i>Full-time, if employed</i>	For those employed at survey interview, indicator that respondent was working full-time at their current job, defined as 35 or more hours per week (binary). Outcome not defined (set to missing) for respondents who were not employed at survey interview.
Part-time	Respondent was working part-time at their current job at survey interview, defined as less than 35 hours per week, based on the number of hours worked in a typical week at the respondent's job at survey interview (binary).
<i>Part-time, if employed</i>	For those employed at survey interview, indicator that respondent was working part-time at their current job, defined as less than 35 hours per week (binary). Outcome not defined (set to missing) for respondents who were not employed at survey interview.
Number of weeks at job ^f	Number of weeks of tenure at current job between random assignment and survey interview (continuous).
Job represented by a union	Respondent is covered or represented by a union in current job at survey interview (binary).
Job benefits:	Job benefits offered by respondent's current job at survey interview:

Outcome	Description
1. Health insurance	1. Health insurance (binary).
2. Paid vacation	2. Paid vacation days (binary).
3. Paid holiday	3. Paid holidays (binary).
4. Paid sick time	4. Paid sick days (binary).
5. Retirement/pension plan	5. A retirement or pension plan (binary).
Job schedule:	Respondent's usual work schedule at current job at survey interview:
1. Regular daytime schedule	1. Regular daytime schedule (binary).
2. Regular evening shift	2. Regular evening schedule (anytime between 2pm and midnight) (binary).
3. Regular night shift	3. Regular night shift (anytime between 9pm and 8am) (binary).
4. Rotating schedule	4. A rotating shift that changed periodically from day to evening or night (binary).
5. Irregular schedule	5. An irregular schedule arranged by the employer (binary).
6. Other schedule	6. Some other schedule, including a split shift consisting of two distinct periods each day (binary).
Job offers career advancement opportunities:	Respondents' level of agreement with the statement that their current job at survey interview offered many opportunities for career advancement:
1. Strongly agree	1. Respondent strongly agrees (binary).
2. Agree	2. Respondent agrees (binary).
3. Disagree	3. Respondent disagrees (binary).
4. Strongly disagree	4. Respondent strongly disagrees (binary).

^a Respondents could also report earnings per day, week, or 2 weeks; twice monthly or per month; per job; or in terms of a commission (e.g., commission plus per hour). For respondents who reported earnings per day, annual earnings are calculated as the product of the per-day value multiplied by 260 (5 days per week for 52 weeks), and the hourly wage is calculated as the per-day value divided by one-fifth of hours worked per week (assuming a 5-day work week). For respondents who reported earnings per week or per 2 weeks, annual earnings are calculated as the reported value times 52 (per week) or 26 (per 2 weeks), and the hourly wage is calculated as the reported value divided by hours worked per week (per week) or twice the hours worked per week (per 2 weeks). For respondents who reported earnings per month or twice monthly, annual earnings are calculated as the reported value times 12 (monthly) or 24 (twice monthly), and the hourly wage is calculated as the reported value divided by one 12th of hours worked per year (monthly) or divided by one 24th of hours worked per year (twice monthly), assuming hours worked per year is equal to 52 times hours worked per week. For respondents who reported a value per job or based on commission, annual earnings and the hourly wage is recorded as missing.

^b For respondents with missing data on hours worked per week, if needed for constructing the rate of pay per year or the hourly wage, the value is imputed using the average value for other respondents at the given grantee in the same treatment group who reported earnings in the same unit (e.g., as an annual measure, or as an hourly wage).

^c For survey respondents who did not respond to the initial open-ended question on earnings or hours worked per week, the survey included a follow-up categorical question on annual rate of pay or the usual weekly hours worked in the current job, respectively. For sample members who provided only the categorical information, the evaluation imputes the annual rate of pay or hours worked per week using the mean of values for other respondents at the given grantee within the same treatment group whose value fell within the range of the respondent's categorical response. See Appendix Section A.1.5 for more detail.

^d Hourly wage set to missing for values \leq \$5 per hour or $>$ \$250 per hour. For respondents who do not report earnings as an annual value (e.g., earnings per year), rate of pay per year also is set to missing if the corresponding hourly wage is \leq \$5 per hour or $>$ \$250 per hour.

^e Baseline data on usual hours worked per week are set to missing for reported values of 0 or values of greater than 60 (see Appendix Section E.1). No such values were reported for weekly hours worked in the 18-month follow-up survey.

^f Maximum value of number of weeks at job since random assignment set to 86 weeks (approximately 20 months).

D.4.3 Connection between Training and Employment

Exhibit D.4-3: Outcomes on Connection between Training and Employment

Outcome	Description
New job due to training or certificate	Respondent reported that they received a new job due to any occupational or work-based training attended between random assignment and survey interview (including if the work-based training turned into a permanent job), or any certificate or credential received between random assignment and survey interview (binary). (For non-college-based occupational and work-based training, respondent reported receiving a new job due to the training; for college-based occupational training, respondent reported subsequently obtaining a job in the given field of training.) Outcome set to zero for respondents who attended no occupational or work-based training.
<i>New job due to training or certificate, if any</i>	For respondents who attended any occupational or work-based training, or who received any certificate or credential, between random assignment and survey interview: Respondent reported that they received a new job due to the given training or certificate between random assignment and survey interview (binary). Outcome not defined (set to missing) for respondents who attended no occupational or work-based training, and did not receive any certificate or credential.
Training useful for that job	Among those who reported receiving a job due to an occupational or work-based training program between random assignment and survey interview, respondent reported that knowledge received from that training was useful for the job (binary). Outcome set to zero for respondents who did not attend occupational or work-based training.
Promotion due to training	Respondent reported that they received a promotion due to any non-college-based occupational training or work-based training attended between random assignment and survey interview (binary). Outcome set to zero for respondents who both did not attend non-college-based occupational training and did not attend work-based training.
Training useful after promotion	Among those who reported receiving a promotion due to a non-college-based occupational training or work-based training attended between random assignment and survey interview, respondent reported that knowledge received from that training was useful for the job promoted to (binary). Outcome set to zero for respondents who both did not attend non-college-based occupational training and did not attend work-based training.

D.5 Defining Outcomes on Broader Measures of Well-Being

This section provides variable definitions and details on how variables are constructed for outcomes on broader measures of well-being using data collected in the evaluation’s 18-month follow-up survey. Impacts on these outcomes are reported in the sixth section of each of the grantee-specific chapters in the *Interim Impact Report*, Chapters 3 through 6, or in the grantee-specific appendices in this document (Appendices F through I).

D.5.1 Income and Public Benefits Receipt

Exhibit D.5-1: Outcomes on Income and Public Benefits Receipt

Outcome	Description
Income	
Total own income before taxes last month ^{a,b}	Respondent's total personal income before taxes received in the month prior to survey interview (continuous). Respondents were asked to include income from all possible sources, such as earnings from self-employment, regular jobs, odd jobs, side jobs, or under-the-table jobs; income from pensions or Social Security, child support, rent, or interest and dividends; and benefits received such as Unemployment Insurance, welfare/TANF payments, food stamps/SNAP, or other public benefits.
Benefits Receipt	
Received any public benefits [Secondary outcome for the <i>Interim Impact Report</i>]	Respondent received any of the following forms of public benefits in the month prior to survey interview (binary): 1. Temporary Assistance for Needy Families (TANF); 2. Supplemental Nutrition Assistance Program (SNAP); 3. Unemployment Insurance (UI) benefits; 4. Supplemental Nutrition Program for Women, Infants, and Children (WIC); 5. Supplemental Security Income (SSI), Social Security Disability Insurance (SSDI), or other disability payment; 6. Section 8 or public housing; 7. General Assistance benefits; or 8. Trade Adjustment Assistance (TAA) or Alternative Trade Adjustment Assistance (ATAA) benefits.
Received the following type of public benefits:	Respondent received the following type of public benefits in the month prior to survey interview:
1. TANF	1. TANF (binary).
2. SNAP	2. SNAP (binary).
3. UI	3. UI (binary).
4. Other public benefits	4. WIC, SSI, SSDI, other disability payment, Section 8 or public housing, General Assistance benefits, or TAA/ATAA benefits (binary).

^a For survey respondents who did not respond to the initial open-ended question on own income, the survey included a follow-up categorical question on income ranges. For respondents who provided only a categorical response, the evaluation imputes income using the mean of responses from other respondents at the given grantee in the same treatment group whose income fell within that range. See Appendix Section A.1.5 for more detail.

^b The follow-up survey also asked about the total income of respondents' household, defining household members as individuals who lived with the respondent for at least half of the prior month and shared finances. The evaluation does not report this outcome.

D.5.2 Household Composition

Exhibit D.5-2: Outcomes on Household Composition

Outcome	Description
Individuals	Number of individuals living in respondent's household at survey interview (continuous). Household members are defined as those who live together and share finances, including dependents.

Outcome	Description
Children under 12	Number of household members who are younger than age 12 at survey interview (continuous).

D.6 Defining Labor Market Outcomes Based on NDNH Data

This section provides variable definitions and details on how variables are constructed for labor market outcomes using administrative earnings data collected in the NDNH. Impacts on outcomes included in the *Interim Impact Report* are reported in the sixth section of each of the grantee-specific chapters, Chapters 3 through 6, or in the grantee-specific appendices in this document (Appendices F through I).

D.6.1 Quarterly Employment and Earnings

Exhibit D.6-1: Outcomes on Earnings and Employment

Outcome	Description
Earnings	
Average earnings in Q5 and Q6 [Confirmatory outcome for <i>Interim Impact Report</i>]	Average quarterly earnings during the fifth and sixth quarters (Q5 and Q6) after random assignment (continuous). The quarter of random assignment is deemed quarter 0.
<i>Average earnings in Q5 and Q6, if employed in Q5 or Q6</i>	For those employed in either Q5 or Q6, average earnings in Q5 and Q6 (continuous). Outcome not defined (set to missing) for those sample members who are not employed in either Q5 or Q6.
Cumulative earnings in Q1 through Q6	Total earnings from Q1 through Q6 after random assignment (18 months) (continuous).
Earnings in each of Q1 through Q12	Earnings in each of Q1 through Q12 after random assignment (continuous). Earnings in Q1 through Q6 defined for all study sample members; earnings in Q7 through Q12 defined for the early cohort only (those randomly assigned by March 31, 2017).
Employment	
Ever employed during Q5 or Q6 [Secondary outcome for the <i>Interim Impact Report</i>]	Employed in either Q5 or Q6 after random assignment (binary).
Ever employed during Q1 through Q6	Ever employed during Q1 through Q6 after random assignment (binary).
Employment in each of Q1 through Q12	Employment in each of Q1 through Q12 after random assignment (binary). Employment in Q1 through Q6 defined for all study sample members; employment in Q7 through Q12 defined for the early cohort only.
Number of quarters employed during Q1 through Q6	Number of quarters employed from Q1 through Q6 after random assignment (continuous).
Longest job tenure during Q0 through Q6	Greatest number of post-random assignment quarters employed with a single employer between Q0 and Q6 (continuous).

Appendix E: Definitions of Baseline Measures

This appendix provides information on how variables built from baseline data are constructed for the Ready to Work Evaluation. The majority of these variables are built from data collected in the Baseline Information Form (BIF) from study members immediately before random assignment (see Appendix Section B.2.1 for more detail on the BIF). The RTW Evaluation uses baseline information for four purposes: (1) to describe the study sample; (2) to check random assignment through baseline balance testing; (3) to define subgroups; and (4) as covariates to improve precision of impact estimates. This appendix describes the construction of each of these sets of variables.

In particular, Section E.1 describes the construction of baseline measures used to describe the study sample and to check random assignment by measuring balance between the program and control groups. Section E.2 describes the construction of the subgroups for the RTW Evaluation. Section E.3 describes the construction of the candidate covariates from which covariates are selected as controls for the impact estimate regressions. Last, Section E.4 lists the set of candidate covariates selected as regression controls for the *Interim Impact Report*. The *Final Impact Report* will include information on the set of candidate covariates selected as regression controls for the NDNH-based outcomes included in that report.

E.1 Study Sample Characteristics

Exhibit E.1-1 provides variable definitions and details for baseline measures used to describe the study sample and to measure baseline balance between the program group and control group. These variables correspond to sample characteristics reported in the first section of each of the grantee-specific chapters of the *Interim Impact Report* (Chapters 3 through 6) and to baseline balance tables reported in the first section of each of the grantee-specific appendices in this document (Appendices F through I). These variables are based on information collected in the BIF immediately before random assignment.^{42,43}

⁴² The Baseline Information Form can be accessed through the following website:
https://www.reginfo.gov/public/do/PRAICList?ref_nbr=201604-1205-006.

⁴³ The BIF also collected the following information: highest degree expected to complete; current enrollment status in any education or training; training or education other than that leading to the highest completed education level (Adult Basic Education; English as a second language; job training at a vocational, technical or trade school, or college courses other than those leading to the highest degree); housing status (e.g., own or rent); number of children living in the household; citizenship status; main reason for leaving most recent job (if not currently employed); months and years of experience in industry for which applying for training; total own and household income in the prior 12 months; and reasons for applying to the RTW program. The evaluation chose not to include these variables for describing the study sample because they were considered secondary in importance to the already sizeable set of characteristics used.

Exhibit E.1-1: Sample Characteristics at Baseline

Baseline Measure	Description
Demographics	
Gender	Respondent's gender (man or woman) (binary).
Race:	At random assignment, respondent considered themselves to be:
Asian	• Asian and no other race (binary).
Black or African-American	• Black or African-American and no other race (binary).
White	• White and no other race (binary).
American Indian or Alaska Native	• American Indian or Alaskan Native and no other race (binary).
Native Hawaiian or Other Pacific Islander	• Native Hawaiian or other Pacific Islander and no other race (binary).
Other or multiple races	• Another race, or more than one race from the list above (binary).
Hispanic ethnicity	Respondent is Spanish, Hispanic, or Latino origin (binary).
Speaks language other than English	Respondent spoke language other than English at home at random assignment (binary).
Age	Respondent's age at random assignment, in years (continuous).
Family and Household Structure	
Marital status:	Respondent's reported marital status at random assignment:
Married	• Married (binary).
Widowed/Divorced/Separated	• Widowed, divorced, or separated (binary).
Never married	• Never married (binary).
Living with a partner	• Living with a partner (binary).
Other employed adult in household	Respondent had at least one other employed adult (age 18 or older) living in the household at random assignment (binary).
One or more own children in household age six or younger	Respondent had at least one own child age six or younger living in the household at random assignment (binary).
Education	
Education level:	Respondent's highest degree or level of schooling completed at random assignment:
High school diploma or less	• High school diploma, GED, or 12th grade or less with no diploma (binary).
Some college credit but no degree	• Some college credit but no degree (binary).
Technical or associate's degree	• Technical/trade/vocational or associate's degree (binary).
Bachelor's degree	• Bachelor's degree (binary).
Master's degree or more	• Master's degree or higher degree (binary).
Employment and Earnings	
Employment status:	Respondent's employment status at random assignment:
Currently employed	• Currently working in one or more jobs or businesses (binary).
Currently unemployed, but employed in last 12 months	• Not currently working, but respondent had worked at one or more jobs or businesses during the last 12 months (binary).
Currently unemployed, and longer than 12 months since last employed	• It had been longer than 12 months since the respondent last worked at a job or business (binary).
Weekly earnings ^a	Respondent's weekly earnings at random assignment (continuous). Constructed as the product of the respondent's hourly wage at their main job (including tips, and before taxes and other deductions) and the usual weekly hours worked at the respondent's main job. Equal to zero for those who were not employed at random assignment.

Baseline Measure	Description
Weekly earnings, if employed	Respondent's weekly earnings at random assignment if employed (continuous). Not defined (set to missing) for those who were not employed at random assignment.
Minimum wage willing to accept ^b	Respondent's lowest hourly wage willing to accept at random assignment (continuous).
Public Benefits	
Received any public benefits	Respondent, or respondent's household, was receiving any of the four types of public benefits listed immediately below at random assignment (binary).
Supplemental Nutrition Assistance Program	Respondent was receiving SNAP (formerly known as Food Stamps) at random assignment (binary).
Temporary Assistance for Needy Families	Respondent was receiving TANF at random assignment (binary).
Section 8 or Public Housing assistance	Respondent's household was receiving Section 8 or Public Housing assistance at random assignment (binary).
Unemployment Insurance	Respondent was receiving UI at random assignment (binary).
Barriers to Employment	
Any barrier to employment	Respondent reported any of the three barriers to employment listed immediately below at random assignment (binary).
Health problem or disability limits ability to work	Respondent reported that at random assignment they had a health problem or disability that prevented the respondent from working or limited the kind or amount of work the respondent could do (binary).
Ability to work is very limited by lack of access to affordable quality childcare	Respondent reported that at random assignment their ability to work was very much limited because it was not easy to find affordable quality childcare for the hours needed (binary).
Ability to work is very limited by problems with transportation	Respondent reported that at random assignment their ability to work was very much limited by problems with transportation (car, public transit) (binary).
Felony conviction	Respondent was ever convicted of a felony before random assignment (binary).
Opinions about Willingness to Work	
Strongly agree: "I will take any job even if the pay is low"	At random assignment respondent reported that they strongly agreed that the following statement described their current situation: "I will take any job even if pay is low" (binary).
Strongly disagree: "I want only the kind of job that I trained for"	At random assignment respondent reported that they strongly disagreed that the following statement described their current situation: "I want only the kind of job I trained for" (binary).
Strongly agree: "I am willing to work part-time if no full-time offer is available"	At random assignment respondent reported that they strongly agreed that the following statement described their current situation: "I am willing to work part-time if no full-time offer is available" (binary).
Strongly agree: "I am willing to work unusual or unpredictable schedules"	At random assignment respondent reported that they strongly agreed that the following statement described their current situation: "I am willing to work unusual or unpredictable schedules" (binary).
Willingness to work summary measure (one or more of four statements above holds)	One or more of the four statements immediately above was true at random assignment (binary).

^a Weekly earnings set to missing if (i) the reported hourly wage is less than the minimum wage in the given state at the time of random assignment; (ii) the reported hourly wage is greater than the 99th percentile of responses among the given grantee study sample, with the 99th percentile threshold calculated separately by education level (less than a bachelor's degree, or a bachelor's degree or more); or (iii) the reported weekly hours worked is equal to 0 or greater than 60.

^b Minimum wage willing to accept set to missing for reported values \leq \$5 per hour or $>$ \$100 per hour.

E.2 Subgroup Identifiers

This section provides variable definitions and details for the subgroups for the RTW Evaluation. The evaluation pre-specified three subgroups (see Section 2.2 of the *Interim Impact Report*): (1) based on education: less than a bachelor’s degree versus a bachelor’s degree or more; (2) based on age: 49 or older versus 48 or younger; and (3) based on employment status: unemployed more than 12 months versus ever employed in the past 12 months (including those sample members employed at application). In addition, based on input from the evaluation’s Technical Working Group (TWG), the evaluation added a fourth subgroup, gender: women versus men. The evaluation estimates impacts on the confirmatory and secondary outcomes separately for each subgroup, defined based on sample characteristics at baseline.

Exhibit E.2-1 provides information on how the subgroup identifiers for the RTW Evaluation are defined and constructed. For *education*, *age*, and *gender* the subgroups are defined in the same way for estimating subgroup impacts on outcomes from both data sources—the 18-month follow-up survey and the NDNH (see Appendix B for more detail on data sources). For estimating subgroup impacts on *employment status*, however, the subgroup identifier differs for the two data sources. For survey-based outcomes, the subgroup identifier is constructed from data collected in the BIF; for NDNH-based outcomes, the identifier is instead constructed from data collected in the NDNH.⁴⁴

Exhibit E.2-1: Subgroup Identifiers

Subgroup	Description
Education (based on BIF data; used for both survey- and NDNH-based outcomes)	
Less than a bachelor’s degree	Respondent’s highest degree or level of schooling completed at random assignment was: <ul style="list-style-type: none"> • A high school diploma, GED, or 12th grade or less with no diploma; • Some college credit but no degree; or • A technical/trade/vocational or associate’s degree.
Bachelor’s degree or more	Respondent’s highest degree or level of schooling completed at random assignment was: <ul style="list-style-type: none"> • A bachelor’s degree; or • A master’s degree or higher degree.
Age (based on BIF data; used for both survey- and NDNH-based outcomes)	
48 or younger	Respondent’s age at random assignment (measured in years) was 48 or younger.
49 or older	Respondent’s age at random assignment (measured in years) was 49 or older.
BIF-Based Employment Status (used for survey-based outcomes only)	
Not long-term unemployed	At the time of random assignment, respondent was currently employed in one or more jobs or businesses, or was not currently working but had worked at one or more jobs or businesses during the prior 12 months.
Long-term unemployed	At the time of random assignment, respondent was unemployed, and it had been longer than 12 months since the respondent had last worked at a job or business.
NDNH-Based Employment Status (used for NDNH-based outcomes only)	
Not long-term unemployed	Respondent had positive earnings in at least one of the four quarters before the quarter of random assignment.

⁴⁴ The evaluation uses the NDNH-based subgroup identifier in place of the BIF-based variable when estimating subgroup impacts for NDNH-based outcomes because the NDNH data are reported by employers and therefore less likely to suffer from recall bias. The evaluation does not use the NDNH-based subgroup identifier for survey-based outcomes because the evaluation cannot link the NDNH data to the full set of survey outcomes.

Subgroup	Description
Long-term unemployed	Respondent had no earnings in the four quarters before the quarter of random assignment.
Gender (based on BIF data; used for both survey- and NDNH-based outcomes)	
Female	Respondent is female.
Male	Respondent is male.

Respondents with missing data for education are grouped with those with a bachelor's degree. There is no missing data on age. The one respondent with missing data on gender (at WSI) is grouped with men. For analysis of survey-based outcomes, respondents with missing data on baseline employment status, as reported in the BIF, are grouped with those who were employed or unemployed but had worked within the last 12 months. There is no missing data on the NDNH-based measure of employment status at random assignment.

E.3 Candidate Covariates

This section provides variable definitions and details for the candidate covariates for the RTW Evaluation. Most of the candidate covariates are constructed from data collected in the BIF. For outcomes based on data collected in the NDNH, the evaluation includes several additional candidate covariates constructed from NDNH data. As described in Appendix Section A.1.4, the evaluation uses LASSO to select the set of regression controls from these candidate covariates.

The exhibits below provide information on how the candidate covariates are defined and constructed. Exhibit E.3-1 lists the set of candidate covariates constructed from BIF data. Unless otherwise noted, these candidate covariates are used for selecting the set of regression covariates for both survey- and NDNH-based outcomes. Exhibit E.3-2 lists the set of candidate covariates constructed from NDNH data. These candidate covariates are used only when selecting the regression covariates for NDNH-based outcomes.

For the BIF-based candidate covariates, for binary variables, the evaluation codes any respondents with missing data as part of the category with the majority of sample members. For some candidate covariates, the majority group varies across grantees because of variation in sample characteristics across the four grantee study samples. For candidate covariates with three categories, the evaluation creates two dummy variables corresponding to the top and bottom categories; the evaluation groups respondents with missing data into the middle category. As discussed in Appendix Section A.1.5, for sample members who are included in the NDNH analyses, there is no missing data.⁴⁵

Exhibit E.3-1: Candidate Covariates Constructed from BIF Data

Candidate Covariate	Description
Race/ethnicity	<u>AAWDC</u> : Respondent is Black or African-American non-Hispanic versus Other (binary). Respondents with missing data are grouped with Black or African-American non-Hispanic. <u>Other grantees</u> : Respondent is White non-Hispanic versus Other (binary). Respondents with missing data are grouped with White non-Hispanic.

⁴⁵ The 2 percent of respondents whose name and SSN failed to match against the SSA master records are treated as unit non-response in the NDNH data and dropped from NDNH analyses. For those respondents who are successfully matched to the SSA master records, any quarters with missing earnings data are treated as not employed in that quarter (zero earnings).

Candidate Covariate	Description
Speaks language other than English	Respondent spoke language other than English at home at random assignment versus spoke English at home (binary). Respondents with missing data are grouped with those who spoke English at home.
Age	<p>Respondent's age at random assignment, in years, was (categorical):</p> <ul style="list-style-type: none"> • Less than 39, • 39 to 48, or • Greater than 48. <p>There are no respondents with missing data.</p>
Other employed adult in the household	<p>Respondent had at least one other employed adult living in the household at random assignment versus no other employed adults in the household.</p> <p><u>RochesterWorks!</u>: Respondents with missing data are grouped with those with no other employed adult living in the household.</p> <p><u>Other grantees</u>: Respondents with missing data are grouped with those with at least one other employed adult in the household.</p>
Completed education	<p>Respondent's highest degree or level of schooling completed at random assignment was (categorical):</p> <ul style="list-style-type: none"> • A high school diploma, GED, or 12th grade or less with no diploma; some college credit but no degree; or a technical/trade/vocational degree or associate's degree; • A bachelor's degree; or • A master's degree or higher degree. <p>Respondents with missing data are grouped with those with a bachelor's degree.</p>
Employment status at random assignment (for survey-based outcomes only)	At the time of random assignment respondent was unemployed for longer than 12 months versus employed or unemployed but had worked within the last 12 months (binary). Respondents with missing data are grouped with those who were employed or unemployed but had worked within the last 12 months.
Minimum wage willing to accept	<p>Calculated separately for each grantee's study sample, respondent's lowest hourly wage willing to accept at random assignment was within the following tercile of the distribution of reported values (categorical):</p> <ul style="list-style-type: none"> • Bottom tercile (<33rd percentile), • Middle tercile (≥33rd percentile and <66th percentile), or • Top tercile (≥66th percentile). <p>Those respondents with missing data are grouped with those in the middle tercile.</p>
Received any public benefits	Respondent was receiving SNAP, TANF, or Public Housing/Section 8 benefits at random assignment versus not receiving any of these public benefits (binary). Those respondents with missing data are grouped with those who did not receive public benefits.
Measure of willingness to work	<p>At the time of random assignment, one or more of the four statements below was true, versus none of the statements below was true (binary):</p> <ul style="list-style-type: none"> • Respondent strongly agreed that the following statement described their current situation: "I will take any job even if the pay is low." • Respondent strongly disagreed that the following statement described their current situation: "I want only the kind of job that I trained for." • Respondent strongly agreed that the following statement described their current situation: "I am willing to work part-time if no full-time offer is available." • Respondent strongly agreed that the following statement described their current situation: "I am willing to work unusual or unpredictable schedules."

Candidate Covariate	Description
Timing of random assignment	<p>Respondents with missing data for one or more of the four statements who did not agree with at least one of the statements are grouped with those for whom none of the statements was true.</p> <p><u>AAWDC and JVS</u>: Respondent was randomly assigned (categorical):</p> <ul style="list-style-type: none"> • August 2015 through March 2016 • April 2016 through September 2016 • October 2016 through March 2017 • April 2017 through September 2017 • October 2017 through March 2018 <p><u>RochesterWorks!</u>: Respondent was randomly assigned (categorical):</p> <ul style="list-style-type: none"> • August 2015 through March 2016 • April 2016 through September 2016 • October 2016 through March 2017 • April 2017 through December 2017 • January 2018 through August 2018 <p><u>WSI</u>: Respondent was randomly assigned (categorical):</p> <ul style="list-style-type: none"> • July 2015 through December 2015 • January 2016 through June 2016 • July 2016 through December 2016 • January 2017 through June 2017 • July 2017 through December 2017 <p>There are no respondents with missing data on date of random assignment.</p>

KEY: AAWDC is Anne Arundel Workforce Development Corporation; JVS is Jewish Vocational Service; WSI is Worksystems Inc.; GED is general educational development; SNAP is Supplemental Nutrition Assistance Program; TANF is Temporary Assistance for Needy Families.

Exhibit E.3-2: Candidate Covariates Constructed from NDNH Data

Candidate Covariate	Description
Earnings in each of the seven quarters prior to random assignment	<p>Respondent's earnings in each of the seven quarters prior to the quarter of random assignment (seven continuous variables).</p> <p>There are no respondents with missing data.</p>
Employment in each of the seven quarters prior to random assignment	<p>Respondent's employment status (ever employed) in each of the seven quarters prior to the quarter of random assignment (seven binary variables). Respondents with positive earnings in the given quarter are coded as employed; respondents with no earnings in the given quarter are coded as not employed.</p> <p>There are no respondents with missing data.</p>

E.4 Regression Covariates for the *Interim Impact Report*

This section reports the set of covariates that the evaluation uses when estimating the impacts discussed in the *Interim Impact Report*. (The *Final Impact Report* will include information on the set of candidate covariates selected as regression controls for the NDNH-based outcomes included in that report.) As explained in Appendix A.1.4, the evaluation uses LASSO to select the set of candidate covariates included as controls for the impact estimate regressions.

For each of the four grantees, the evaluation runs LASSO three times: (1) for survey-based outcomes for the *Interim Impact Report*, (2) for NDNH-based outcomes for the *Interim Impact Report*, and (3) for

NDNH-based outcomes for the *Final Impact Report*. (Because the evaluation conducts no additional surveying after the 18-month follow-up survey, there are no new survey-based outcomes for the *Final Impact Report*.)

In addition to the LASSO-selected covariates, the evaluation also includes a set of required covariates:

- The four subgroup identifiers (see Appendix Section E.2);
- An identifier for the early cohort (those randomly assigned by March 31, 2017);
- Dummy variables for each value of the level at which random assignment occurred for each grantee (by site for AAWDC and WSI, and by program course for JVS);
- Probability of assignment to the program group (for AAWDC only; the probability did not vary for the other grantees); and
- Any candidate covariates that are significantly different at the 5 percent level between the program group and control group in the given grantee study sample, using the sample of survey respondents for the survey-based outcomes, and the full sample for the NDNH-based outcomes.

Separately by data source and grantee, Exhibit E.4-1 lists the set of required covariates and the set of candidate covariates selected by LASSO for impacts reported in the *Interim Impact Report*.⁴⁶

Exhibit E.4-1: Regression Covariates for Impacts Reported in the *Interim Impact Report*

Grantee	Required Covariates	LASSO-Selected Covariates	
		Survey-Based Outcomes	NDNH-Based Outcomes
AAWDC	<ul style="list-style-type: none"> • Education subgroup • Age subgroup • Employment status subgroup • Gender subgroup • Early cohort identifier • Site location dummies (level of randomization) • Probability of random assignment to the program group (0.50 or 0.667) • Minimum wage willing to accept: bottom tercile⁴⁷ 	<ul style="list-style-type: none"> • Completed education: master's degree or more • Minimum wage willing to accept: top tercile • Received any public benefits • Randomly assigned Oct 2016–Mar 2017 	<ul style="list-style-type: none"> • Quarterly earnings prior to quarter of random assignment: <ul style="list-style-type: none"> 1st quarter prior 5th quarter prior 6th quarter prior

⁴⁶ When estimating “impacts” on pre-random assignment quarterly earnings and employment (see, for example, Appendix Exhibit F.5-1 for MTC), the analysis excludes as regressors the pre-random assignment quarterly earnings listed in Exhibit E.4-1.

⁴⁷ Significantly different between the AAWDC program group and control group in both the sample of survey respondents ($p = 0.020$) and in the full sample ($p = .021$). This variable is therefore forced in as a regressor for analyses of both survey- and NDNH-based outcomes.

Grantee	Required Covariates	LASSO-Selected Covariates	
		Survey-Based Outcomes	NDNH-Based Outcomes
JVS	<ul style="list-style-type: none"> • Education subgroup • Age subgroup • Employment status subgroup • Gender subgroup • Early cohort identifier • Program course dummies (level of randomization) 	<ul style="list-style-type: none"> • Age: greater than 48 • Received any public benefits 	<ul style="list-style-type: none"> • Minimum wage willing to accept: top tercile • Quarterly earnings prior to quarter of random assignment: 2nd quarter prior 4th quarter prior
Rochester-Works!	<ul style="list-style-type: none"> • Education subgroup • Age subgroup • Employment status subgroup • Gender subgroup • Early cohort identifier • Speaks language other than English at home (NDNH only)⁴⁸ 	<ul style="list-style-type: none"> • Minimum wage willing to accept: bottom tercile • Received any public benefits • Randomly assigned: Apr 2016–Sep 2016 Apr 2017–Dec 2017 	<ul style="list-style-type: none"> • Quarterly earnings prior to quarter of random assignment: 2nd quarter prior 3rd quarter prior 4th quarter prior
Worksystems Inc.	<ul style="list-style-type: none"> • Education subgroup • Age subgroup • Employment status subgroup • Gender subgroup • Early cohort identifier • Site location dummies (level of randomization) 	<ul style="list-style-type: none"> • Age: Less than 39 Greater than 48 • Minimum wage willing to accept: Bottom tercile Top tercile 	<ul style="list-style-type: none"> • Age: greater than 48 • Quarterly earnings prior to quarter of random assignment: 1st quarter prior 5th quarter prior 7th quarter prior

⁴⁸ Significantly different between the RochesterWorks! program group and control group in the full study sample ($p = .045$), but not in the sample of survey respondents ($p = .271$). This variable is therefore forced in as a regressor for the NDNH analyses, but not for the survey analyses.

Appendix F. Detailed Results for Chapter 3 (MTC)

This appendix provides additional detail for AAWDC's Maryland Tech Connection (MTC) program discussed in Chapter 3 of the *Interim Impact Report*. This appendix is organized by the sections of Chapter 3. The first section provides detailed information on the enrollment and random assignment process (Section F.1.1) and the characteristics of the MTC study sample (Section F.1.2). The appendix exhibits in the subsequent five sections (Sections F.2 through F.6) include rows for all outcomes listed in Appendix D, including those reported in the Chapter 3 exhibits, those outcomes discussed in Chapter 3 but not included in the Chapter 3 exhibits, and additional outcomes not discussed. These exhibits include additional detail beyond that shown in the Chapter 3 exhibits: outcome-specific sample size, *p*-value, and more significant digits.⁴⁹ For each of the confirmatory and secondary outcomes, Section F.7 then reports subgroup impact estimates.

F.1 Enrollment Process and Characteristics of the Study Sample

This section provides detailed information on the enrollment and random assignment process for applicants to AAWDC's MTC program (Section F.1.1), and additional detailed demographic characteristics of the study sample, including testing for baseline balance between those randomized to the program and control groups (Section F.1.2).

F.1.1 Enrollment and Random Assignment Process for MTC

Potential applicants to MTC first attended a one- to two-hour information session conducted by a Career Coach at a Career Center (Exhibit F.1-1). Career Coaches scheduled information sessions a few weeks in advance of the start of the next Career ReStart workshop and were advertised on the MTC website. The session provided information on the program's goals, content, and eligibility requirements. The Career Coach also described the RTW Evaluation and its use of random assignment in the enrollment process.

After attending an information session, interested applicants returned to the same Career Center to complete three computer-based assessments and meet individually with the Career Coach. The assessments were (1) Career Scope, to determine aptitude in the industries targeted by the grant; (2) Prove It!, to gauge knowledge of business etiquette; and (3) a screening for mental health and financial issues, developed by Arundel Lodge and the MD CASH Campaign, respectively.

Immediately following the assessments, applicants met one-on-one with the Career Coach, who reviewed their assessment results and their resume. The Career Coach determined whether MTC would be a good fit for the applicant, meaning the applicant was interested in a career in the industries included in the grant; had prior educational or professional experience related to those industries or demonstrated an aptitude for related skills, as assessed by Career Scope; and appeared committed to participating in the MTC program and finding a job.

At the conclusion of the appointment, if the Career Coach determined the applicant was both a good fit and eligible for MTC, the Coach described the study in greater detail. Applicants who agreed to be part of the study completed the study's consent form and Baseline Information Form (see Section B.2.2). Then the Career Coach randomly assigned applicants to either the program or control group. Those assigned to the program group received information about beginning the next Career ReStart workshop. Control

⁴⁹ For monetary outcomes, however, the appendix tables show the same number of significant digits as shown in the Chapter 3 exhibits.

group members received information on other, similar services available in the area, including any at the Career Center open to anyone. For more information on this process, see Martinson et al. 2017.

Exhibit F.1-1: MTC Enrollment Process

<p>Recruitment</p> 	<ul style="list-style-type: none"> Potential applicant learned about Maryland Tech Connection through the program website, a referral from a Career Center or partner organization, or outreach conducted by MTC staff. 	
<p>MTC Information Session</p> 	<ul style="list-style-type: none"> Potential applicant attended an MTC information session, scheduled a few weeks ahead of the next Career ReStart workshop, to learn about the program and the study and confirm interest in applying for the MTC program. 	 Potential applicant was not interested in pursuing MTC.
<p>Assessments</p> 	<p>Intake Appointment</p> <ul style="list-style-type: none"> Applicant completed three assessments: Career Scope; Provelt!®; and a mental health and financial screening. 	
<p>Meeting with Career Coach</p> 	<ul style="list-style-type: none"> Applicant met individually with the Career Coach to discuss the assessment results. Career Coach also reviewed the applicant's resume and assessed "fit" and eligibility for the MTC program. Applicant enrolled; completed the study's consent form and Baseline Information Form. 	 Was not eligible; not a good fit for the program.
	<p>Random Assignment</p> <ul style="list-style-type: none"> Career Coach conducted random assignment. Program group member–Career Coach provided information on beginning Career ReStart. 	 Did not consent; did not complete BIF.
		 Control group member–could not access MTC training and services.
<p>Career ReStart</p>	<p>Services Started</p> <ul style="list-style-type: none"> Two-week Career ReStart workshop typically began within a week or two after the intake appointment. 	

F.1.2 Characteristics of the Study Sample

Exhibit F.1-2 provides additional demographic information for the MTC study sample, and tests for differences in the characteristics of those members randomized to the program group versus control group. (A subset of the values reported in the “Study Sample Mean” column are reported in Exhibit 3-3 of the *Interim Impact Report*.⁵⁰) Exhibit F.1-3 reports the same information for the full sample at the time of random assignment. The *study sample* included in Exhibit F.1-2 and throughout the analysis (sometimes referred to as the “analytic sample”) is smaller than the *full sample* at random assignment included in Exhibit F.1-3 because the study sample excludes individuals who chose to withdraw from the study after

⁵⁰ Values reported in the “Study Sample Mean” column and Exhibit 3-3 may vary due to rounding. Whereas Appendix Exhibit F.1-2 reports average weekly earnings among all sample members (equal to zero for those who are not employed), Exhibit 3-3 reports average weekly earnings if employed.

having been randomly assigned (four members of the control group and one member of the program group).

Exhibit F.1-2 includes information on quarterly earnings and employment levels for the seven quarters before random assignment for members of the study sample.⁵¹ There is no corresponding information for the full sample (Exhibit F.1-3) because the study did not collect NDNH data for sample members who withdrew from the study.⁵²

Exhibit F.1-2: Baseline Balance Testing – Study Sample, MTC

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Gender (%)				
Women	52.6	51.5	53.8	-2.3
Men	47.4	48.5	46.2	2.3
Race (%)				
Asian	7.8	8.2	7.3	0.9
Black or African American	57.5	56.2	59.0	-2.8
White	29.5	30.9	27.9	3.0
American Indian or Alaska Native	1.0	1.1	0.9	0.2
Native Hawaiian or Other Pacific Islander	0.1	0.0	0.2	-0.2
Other or multiple races	4.1	3.6	4.7	-1.1
Hispanic ethnicity (%)	3.4	3.3	3.5	-0.2
Speaks language other than English at home (%)	29.5	28.0	31.1	-3.1
Age (%)				
24 years or younger	4.4	4.1	4.7	-0.6
25 to 34 years	15.5	15.2	15.7	-0.5
35 to 44 years	24.9	24.8	24.9	-0.1
45 to 54 years	31.0	32.2	29.7	2.5
55 years or older	24.3	23.7	24.9	-1.2
Average age (years)	45.2	45.3	45.0	0.2
Marital status (%)				
Married	44.9	44.8	45.1	-0.3
Widowed/divorced/separated	22.3	21.3	23.4	-2.1
Never married	31.3	32.1	30.5	1.6
Living with a partner	1.5	1.9	1.1	0.8
Other employed adult in household (%)	57.6	58.4	56.6	1.8
One or more own children in household age 6 or younger (%)	19.9	19.3	20.6	-1.3
Education level (%)				
High school diploma or less	7.9	7.1	8.8	-1.7
Some college credit but no degree	14.4	15.2	13.5	1.7
Technical or associate's degree	11.8	11.1	12.7	-1.6
Bachelor's degree	38.4	40.7	35.8	4.9
Master's degree or more	27.4	25.9	29.2	-3.3

⁵¹ Although for most sample members the study collected quarterly information from eight quarters before random assignment, depending on the timing of a sample member's random assignment relative to the timing of the next quarterly submission to OCSE, for some study members data was only available for seven prior quarters. (See Appendix Section B.3 for more information on the NDNH data collection process.) Appendix Exhibit F.1-2 only includes information for those quarters for which the study has complete data for the study sample (excepting the few study members with missing NDNH data, see Appendix Section A.1.5 for more detail on missing data).

⁵² The evaluation sent the first list of study sample identifiers to OCSE in March 2016, approximately eight months after the start of random assignment (see Appendix Section B.3 for more detail on how the NDNH data are collected). In that submission the evaluation only included sample members who remained in the study at that point, and therefore did not include those who had already withdrawn from the evaluation. Thus the study never collected NDNH data for the full sample at random assignment.

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Employment status (%)				
Currently employed	16.3	16.4	16.2	0.2
Currently unemployed, but employed in last 12 months	52.7	51.6	53.9	-2.3
Currently unemployed, and longer than 12 months since last employed	31.0	32.0	29.9	2.1
Weekly earnings (\$, equal to 0 if not employed)	59.4	58.9	60.0	-1.1
Minimum wage willing to accept (\$)	\$21.68	\$22.09	\$21.24	\$0.85
Receiving any public benefits (%)	42.7	42.1	43.4	-1.3
Receiving Supplemental Nutrition Assistance Program (SNAP)	22.1	23.2	21.0	2.2
Receiving Temporary Assistance for Needy Families (TANF)	1.6	1.6	1.7	-0.1
Receiving Section 8 or Public Housing assistance	3.1	3.9	2.3	1.6
Receiving Unemployment Insurance (UI)	24.0	23.2	24.9	-1.7
Any barriers to employment (health/childcare/transportation limitations, %)	10.7	9.9	11.6	-1.7
Health problem or disability limits ability to work	6.3	6.3	6.3	0.0
Ability to work is very limited by lack of access to affordable quality childcare	1.9	1.7	2.1	-0.4
Ability to work is very limited by problems with transportation	3.7	3.1	4.3	-1.2
Felony conviction (%)	1.7	1.7	1.7	0.0
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	9.3	10.6	7.9	2.7
Strongly disagree: "I want only the kind of job that I trained for"	9.2	8.1	10.4	-2.3
Strongly agree: "I am willing to work part-time if no full-time offer is available"	38.8	40.2	37.3	2.9
Strongly agree: "I am willing to work unusual or unpredictable schedules"	22.2	22.4	21.9	0.5
Willingness to work summary measure (one or more of four above statements hold) (%)	46.8	48.2	45.3	2.9
Earnings Before Random Assignment (RA):				
Q7 pre-RA (\$)	8,038	8,262	7,790	472
Q6 pre-RA (\$)	8,153	8,289	8,003	286
Q5 pre-RA (\$)	7,777	8,007	7,524	483
Q4 pre-RA (\$)	8,125	8,526	7,682	844
Q3 pre-RA (\$)	7,265	7,309	7,217	92
Q2 pre-RA (\$)	5,636	5,505	5,782	-277
Q1 pre-RA (\$)	2,726	2,580	2,888	-309
Employment Before Random Assignment (RA):				
Q7 pre-RA (%)	61.0	62.9	58.8	4.1
Q6 pre-RA (%)	62.3	63.6	60.9	2.7
Q5 pre-RA (%)	61.1	63.8	58.0	5.8
Q4 pre-RA (%)	60.6	60.8	60.3	0.5
Q3 pre-RA (%)	58.4	58.4	58.4	0.0
Q2 pre-RA (%)	50.8	49.6	52.1	-2.5
Q1 pre-RA (%)	37.9	36.9	38.9	-2.0

SOURCE: Baseline Information Form (BIF) and National Directory of New Hires (NDNH).

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. For pre-random assignment earnings and employment, measured in the NDNH, sample size of 1,022 includes 536 program group and 486 control group members. For all other outcomes, measured in the BIF, sample size of 1,029 includes 540 program group and 489 control group members. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

Exhibit F.1-3: Baseline Balance Testing – Full Sample at Random Assignment, MTC

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Gender (%)				
Women	52.7	51.6	53.9	-2.3
Men	47.3	48.4	46.1	2.3
Race (%)				
Asian	7.7	8.2	7.2	1.0
Black or African American	57.6	56.3	59.1	-2.8
White	29.4	30.8	27.9	2.9
American Indian or Alaska Native	1.0	1.1	0.9	0.2
Native Hawaiian or Other Pacific Islander	0.1	0.0	0.2	-0.2
Other or multiple races	4.1	3.6	4.7	-1.1
Hispanic ethnicity (%)	3.4	3.3	3.5	-0.2
Speaks language other than English at home (%)	29.5	28.0	31.1	-3.1
Age (%)				
24 years or younger	4.4	4.3	4.7	-0.4
25 to 34 years	15.5	15.2	15.8	-0.6
35 to 44 years	24.8	24.8	24.7	0.1
45 to 54 years	31.1	32.2	30.0	2.2
55 years or older	24.2	23.7	24.7	-1.0
Average age (years)	45.1	45.2	45.0	0.2
Marital status (%)				
Married	44.9	44.7	45.1	-0.4
Widowed/divorced/separated	22.2	21.2	23.4	-2.2
Never married	31.4	32.2	30.4	1.8
Living with a partner	1.5	1.9	1.1	0.8
Other employed adult in household (%)	57.6	58.4	56.6	1.8
One or more own children in household age 6 or younger (%)	19.9	19.3	20.6	-1.3
Education level (%)				
High school diploma or less	7.9	7.1	8.7	-1.6
Some college credit but no degree	14.4	15.4	13.4	2.0
Technical or associate's degree	11.8	11.0	12.6	-1.6
Bachelor's degree	38.5	40.6	36.2	4.4
Master's degree or more	27.4	25.8	29.1	-3.3
Employment status (%)				
Currently employed	16.2	16.4	16.1	0.3
Currently unemployed, but employed in last 12 months	52.9	51.7	54.2	-2.5
Currently unemployed, and longer than 12 months since last employed	30.9	32.0	29.7	2.3
Weekly earnings (\$, equal to 0 if not employed)	59.2	58.8	59.6	-0.8
Minimum wage willing to accept (\$)	\$21.64	\$22.09	\$21.17	\$0.92
Receiving any public benefits (%)	42.5	42.0	43.0	-1.0
Receiving Supplemental Nutrition Assistance Program (SNAP)	22.0	23.1	20.8	2.3
Receiving Temporary Assistance for Needy Families (TANF)	1.6	1.6	1.7	-0.1
Receiving Section 8 or Public Housing assistance	3.1	3.9	2.3	1.6
Receiving Unemployment Insurance (UI)	23.9	23.2	24.7	-1.5
Any barriers to employment (health/childcare/transportation limitations, %)	10.7	9.9	11.5	-1.6
Health problem or disability limits ability to work	6.3	6.3	6.3	0.0
Ability to work is very limited by lack of access to affordable quality childcare	1.9	1.7	2.1	-0.4
Ability to work is very limited by problems with transportation	3.6	3.1	4.2	-1.1
Felony conviction (%)	1.7	1.7	1.7	0.0
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	9.3	10.5	8.0	2.5
Strongly disagree: "I want only the kind of job that I trained for"	9.2	8.1	10.3	-2.2

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Strongly agree: "I am willing to work part-time if no full-time offer is available"	38.9	40.3	37.4	2.9
Strongly agree: "I am willing to work unusual or unpredictable schedules"	22.2	22.3	22.2	0.1
Willingness to work summary measure (one or more of four above statements hold) (%)	46.8	48.2	45.3	2.9

SOURCE: Baseline Information Form.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 1,034 includes 541 program group and 493 control group members. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

Exhibit F.1-4 compares the characteristics of the "early cohort" for the AAWDC study sample (those randomly assigned by March 31, 2017) to the characteristics of the "late cohort" (those randomly assigned after March 31, 2017).

Exhibit F.1-4: Comparison of Early Cohort versus Late Cohort, MTC

Baseline Characteristic	Study Sample Mean	Early Cohort Mean	Late Cohort Mean	Difference
Gender (%)				
Women	52.6	52.8	52.4	0.4
Men	47.4	47.2	47.6	-0.4
Race (%)				
Asian	7.8	8.1	7.4	0.7
Black or African American	57.5	54.6	60.9	-6.3*
White	29.5	32.2	26.3	5.9*
American Indian or Alaska Native	1.0	0.8	1.3	-0.5
Native Hawaiian or Other Pacific Islander	0.1	0.2	0.0	0.2
Other or Multiple Races	4.1	4.1	4.1	0.0
Hispanic ethnicity (%)	3.4	4.4	2.3	2.1
Speaks language other than English at home (%)	29.5	30.0	28.9	1.1
Age (%)				
24 years or younger	4.4	3.3	5.7	-2.4
25 to 34 years	15.5	15.0	16.0	-1.0
35 to 44 years	24.9	24.1	25.8	-1.7
45 to 54 years	31.0	32.4	29.4	3.0
55 years or older	24.3	25.3	23.1	2.2
Average age (years)	45.2	45.8	44.4	1.4
Marital status (%)				
Married	44.9	46.4	43.2	3.2
Widowed/divorced/separated	22.3	21.6	23.0	-1.4
Never married	31.3	30.8	31.9	-1.1
Living with a partner	1.5	1.1	2.0	-0.9
Other employed adult in household (%)	57.6	59.1	55.8	3.3
One or more own children in household age 6 or younger (%)	19.9	17.5	22.6	-5.1
Education level (%)				
High school diploma or less	7.9	7.9	7.8	0.1
Some college credit but no degree	14.4	15.3	13.3	2.0
Technical or associate's degree	11.8	10.2	13.8	-3.6
Bachelor's degree	38.4	39.4	37.3	2.1
Master's degree or more	27.4	27.2	27.8	-0.6
Employment status (%)				
Currently employed	16.3	13.6	19.3	-5.7*

Baseline Characteristic	Study Sample Mean	Early Cohort Mean	Late Cohort Mean	Difference
Currently unemployed, but employed in last 12 months	52.7	54.0	51.2	2.8
Currently unemployed, and longer than 12 months since last employed	31.0	32.3	29.5	2.8
Weekly earnings (\$, equal to 0 if not employed)	59.4	39.3	82.3	-43.1*
Minimum wage willing to accept (\$)	\$21.68	\$20.40	\$23.21	-\$2.81*
Receiving any public benefits (%)	42.7	42.5	42.9	-0.4
Receiving Supplemental Nutrition Assistance Program (SNAP)	22.1	24.4	19.6	4.8
Receiving Temporary Assistance for Needy Families (TANF)	1.6	2.1	1.1	1.0
Receiving Section 8 or Public Housing assistance	3.1	3.8	2.4	1.4
Receiving Unemployment Insurance (UI)	24.0	21.6	26.8	-5.2
Any barriers to employment (health/childcare/transportation limitations, %)	10.7	11.3	10.1	1.2
Health problem or disability limits ability to work	6.3	6.4	6.3	0.1
Ability to work is very limited by lack of access to affordable quality childcare	1.9	1.7	2.1	-0.4
Ability to work is very limited by problems with transportation	3.7	4.4	2.8	1.6
Felony conviction (%)	1.7	1.3	2.2	-0.9
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	9.3	10.2	8.2	2.0
Strongly disagree: "I want only the kind of job that I trained for"	9.2	10.1	8.2	1.9
Strongly agree: "I am willing to work part-time if no full-time offer is available"	38.8	38.6	39.1	-0.5
Strongly agree: "I am willing to work unusual or unpredictable schedules"	22.2	23.0	21.2	1.8
Willingness to work summary measure (one or more of four above statements hold) (%)	46.8	45.6	48.2	-2.6

SOURCE: Baseline Information Form.

NOTES: Reported difference may not equal the difference between the early cohort mean and late cohort mean because of rounding. Sample size of 1,029 includes 553 study members in the early cohort and 476 in the late cohort. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

F.2 Impacts on Participation in Employment-Related Activities

Exhibits F.2-1 through F.2-8 provide detailed results corresponding to Exhibits 3-4 and 3-5 in the *Interim Impact Report*. Exhibit F.2-1 reports impacts on any structured employment-related activities, and Exhibit F.2-2 plots the distribution of total weeks of any structured employment-related activities. Exhibit F.2-3 reports impacts on occupational training, including separately by college-based and non-college-based occupational training. Exhibit F.2-4 plots the distribution of total weeks of any occupational training. Exhibit F.2-5 reports impacts on work-based training, including separately for unpaid internships, paid internships, and on-the-job training (OJT). Exhibit F.2-6 plots the distribution of total weeks of any work-based training. Exhibit F.2-7 reports impacts on employment readiness courses, and Exhibit F.2-8 plots the distribution of total weeks of employment readiness courses.

Note that the exhibits plotting the distribution of total weeks of training reflect weeks completed as of 18 months after random assignment. As shown in Exhibit 3-6 in the *Interim Impact Report*, however, some study members remain in training at that point. For example, among the 6 percent of program group members who completed 54 to 99 weeks of any structured employment-related activity (see Exhibit F.2-2), 67 percent were still in training at 18 months after random assignment. Thus the values reported in these distributions underestimate the final amount of training completed by those sample members who were still in training after 18 months.

Exhibit F.2-1: Impacts on Any Structured Employment-Related Activity, MTC

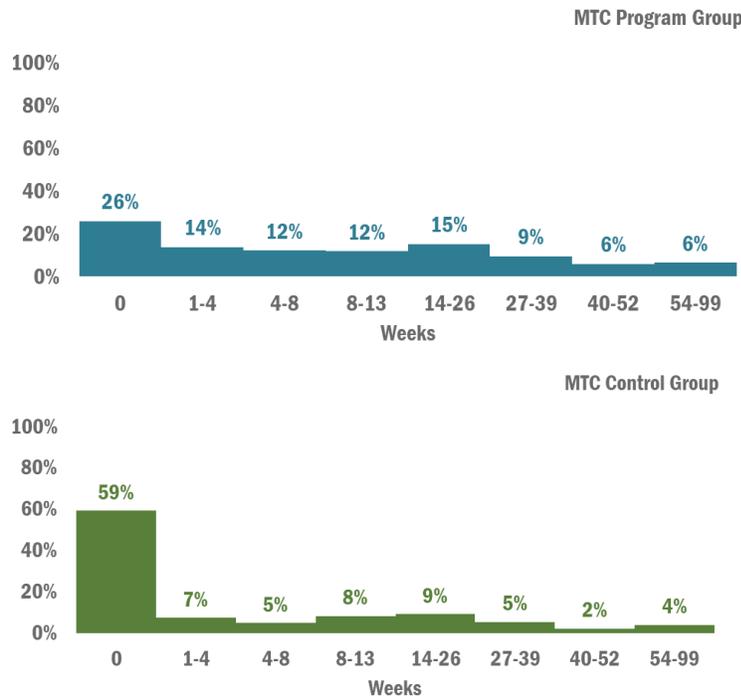
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Structured Employment-Related Activity								
Ever attended (%)	75.1	44.2	30.9***	3.3	<.001	70	450	371
Number of activities attended	1.5	0.7	0.8***	0.1	<.001	119	449	368
Total hours attended	301.0	129.9	171.1***	26.7	<.001	132	437	359
<i>Total hours, for attendees</i>	404.9	307.6	97.4**	39.2	.013	32	322	150
Total weeks attended	15.0	8.4	6.6***	1.3	<.001	79	424	350
<i>Total weeks, for attendees</i>	20.5	20.5	0.0	2.0	.991	0	309	141
<i>Hours per week, for attendees</i>	22.5	16.9	5.6***	1.7	.001	33	309	141
Completed at least one activity (%)	67.6	31.6	36.0***	3.4	<.001	114	438	359
Number of activities completed	1.2	0.4	0.7***	0.1	<.001	156	438	359
Any occupational or work-based training in:								
Healthcare (%)	6.4	4.2	2.2	1.6	.166	53	433	355
Information technology (%)	42.2	19.8	22.4***	3.2	<.001	113	433	357
Advanced manufacturing (%)	1.0	0.8	0.2	0.7	.723	31	431	358
Bioscience/biotechnology (%)	9.4	3.2	6.2***	1.6	<.001	197	443	367

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-2: Distribution of Total Weeks of Any Structured Employment-Related Activity, MTC



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibit F.2-3: Impacts on Occupational Training, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Occupational Training								
Ever attended (%)	62.0	36.9	25.2***	3.4	<.001	68	449	371
Number of training programs attended	0.9	0.5	0.4***	0.1	<.001	87	449	371
Total hours attended	151.5	101.4	50.1***	18.8	.008	49	440	364
<i>Total hours, for attendees</i>	266.8	284.8	-18.0	35.1	.608	-6	264	130
Total weeks attended	10.1	7.4	2.7**	1.1	.017	37	428	355
<i>Total weeks, for attendees</i>	18.3	21.8	-3.4	2.1	.108	-16	252	121
<i>Hours per week, for attendees</i>	17.4	15.6	1.8	1.4	.196	12	252	121
Completed at least one training program (%)	54.3	25.0	29.3***	3.3	<.001	117	442	365
Number of training programs completed	0.7	0.3	0.4***	0.1	<.001	147	442	365
Any occupational training in:								
Healthcare (%)	5.3	4.1	1.3	1.5	.398	31	439	362
Information technology (%)	39.3	18.6	20.8***	3.1	<.001	112	440	363
Advanced manufacturing (%)	0.2	0.5	-0.3	0.4	.448	-65	440	362
Bioscience/biotechnology (%)	7.6	3.1	4.5***	1.5	.003	143	449	370
College-Based Occupational Training								
Ever attended (%)	7.9	13.5	-5.6**	2.2	.012	-41	453	375
Number of training programs attended	0.1	0.1	-0.1**	0.0	.022	-40	453	375
Total hours attended	22.3	49.4	-27.1**	12.1	.025	-55	449	372
<i>Total hours, for attendees</i>	367.9	386.5	-18.5	93.1	.843	-5	29	47
Total weeks attended	1.5	3.3	-1.7**	0.8	.024	-53	440	364
<i>Total weeks, for attendees</i>	33.0	30.1	2.9	7.8	.715	9	20	39
<i>Hours per week, for attendees</i>	9.8	13.1	-3.4	2.9	.250	-26	20	39
Completed at least one training program (%)	3.2	3.8	-0.5	1.3	.690	-14	451	372
Number of training programs completed	0.0	0.0	-0.0	0.0	.925	-3	451	372
Any occupational training in:								
Healthcare (%)	1.0	1.0	-0.1	0.7	.911	-8	451	371
Information technology (%)	3.6	7.9	-4.3**	1.7	.011	-55	451	371
Advanced manufacturing (%)	0.2	0.0	0.2	0.2	.319	.	451	371
Bioscience/biotechnology (%)	1.0	1.3	-0.3	0.7	.675	-22	451	372
Non-College-Based Occupational Training								
Ever attended (%)	57.9	27.0	30.9***	3.3	<.001	114	449	372
Number of training programs attended	0.8	0.3	0.5***	0.1	<.001	143	449	372
Total hours attended	127.4	50.8	76.6***	14.9	<.001	151	442	365
<i>Total hours, for attendees</i>	232.8	198.8	34.0	32.0	.289	17	248	94
Total weeks attended	8.4	4.0	4.4***	0.9	<.001	109	434	363
<i>Total weeks, for attendees</i>	15.6	15.9	-0.3	2.0	.873	-2	240	92
<i>Hours per week, for attendees</i>	17.5	16.4	1.2	1.7	.491	7	240	92
Completed at least one training program (%)	52.7	21.7	31.1***	3.3	<.001	143	442	366
Number of training programs completed	0.7	0.3	0.4***	0.1	<.001	169	442	366
Any training offered:								
Realistic work settings (%)	43.2	18.0	25.1***	3.2	<.001	139	441	363
Trips to potential employers (%)	8.0	2.8	5.2***	1.5	<.001	184	436	365

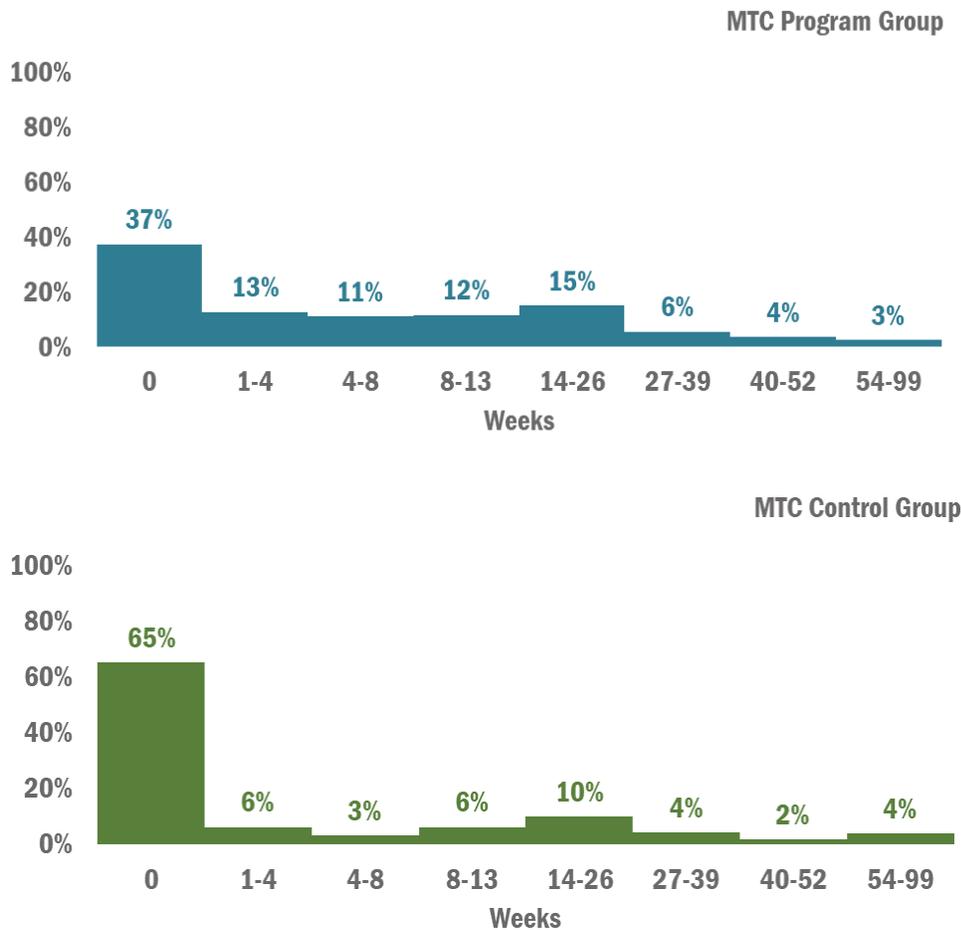
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any occupational training in:								
Healthcare (%)	4.2	3.2	1.0	1.3	.442	32	442	366
Information technology (%)	36.9	12.3	24.5***	2.9	<.001	199	442	366
Advanced manufacturing (%)	-0.0	0.5	-0.5	0.4	.163	-106	442	366
Bioscience/biotechnology (%)	7.1	2.1	5.0***	1.4	<.001	232	442	366

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-4: Distribution of Total Weeks of Occupational Training, MTC



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibit F.2-5: Impacts on Work-Based Training, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Work-Based Training								
Ever attended (%)	21.5	8.2	13.3***	2.5	<.001	161	452	373
Number of work-based trainings	0.2	0.1	0.2***	0.0	<.001	233	449	369

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Total hours attended	120.9	24.7	96.3***	17.0	<.001	390	449	369
<i>Total hours, for attendees</i>	547.3	344.4	203.0*	115.3	.081	59	90	25
Total weeks attended	3.5	0.6	2.9***	0.5	<.001	457	438	364
<i>Total weeks, for attendees</i>	14.2	10.7	3.5	3.5	.308	33	79	20
<i>Hours per week, for attendees</i>	33.4	33.2	0.2	3.1	.942	1	79	20
Completed at least one work-based training (%)	14.3	6.4	7.9***	2.1	<.001	123	447	369
Number of work-based trainings completed	0.2	0.1	0.1***	0.0	<.001	159	447	369
Any work-based training in:								
Healthcare (%)	2.2	0.0	2.2***	0.7	.001	.	446	366
Information technology (%)	9.2	2.3	6.8***	1.6	<.001	292	443	367
Advanced manufacturing (%)	0.8	0.5	0.3	0.6	.655	49	443	369
Bioscience/biotechnology (%)	4.7	1.6	3.1***	1.2	.008	189	444	371
Unpaid Internship								
Ever attended (%)	3.4	2.0	1.4	1.2	.247	69	451	373
Number of unpaid internships	0.0	0.0	0.0**	0.0	.034	207	451	370
Total hours attended	8.4	5.7	2.7	4.9	.571	49	451	370
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	14	3
Total weeks attended	0.4	0.2	0.2	0.2	.274	107	450	370
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	13	3
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	13	3
Completed at least one unpaid internship (%)	2.6	1.1	1.5	1.0	.144	132	451	370
Number of unpaid internships completed	0.0	0.0	0.0	0.0	.144	132	451	370
Any unpaid internship in:								
Healthcare (%)	0.2	0.0	0.2	0.2	.318	.	451	370
Information technology (%)	2.1	0.0	2.1***	0.7	.003	.	451	370
Advanced manufacturing (%)	0.3	0.0	0.3	0.3	.319	.	451	370
Bioscience/biotechnology (%)	0.2	0.0	0.2	0.2	.319	.	451	370
Paid Internship								
Ever attended (%)	13.4	3.8	9.7***	1.9	<.001	256	448	373
Number of paid internships	0.1	0.0	0.1***	0.0	<.001	268	445	372
Total hours attended	65.5	11.4	54.1***	11.8	<.001	475	445	372
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	54	13
Total weeks attended	1.9	0.3	1.6***	0.4	<.001	612	437	369
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	46	10
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	46	10
Completed at least one paid internship (%)	9.4	3.1	6.3***	1.7	<.001	206	445	372
Number of paid internships completed	0.1	0.0	0.1***	0.0	<.001	206	445	372
Any paid internship in:								
Healthcare (%)	1.5	0.0	1.5***	0.6	.008	.	445	372
Information technology (%)	5.0	1.3	3.7***	1.2	.003	278	445	372
Advanced manufacturing (%)	0.2	0.0	0.2	0.2	.321	.	445	372
Bioscience/biotechnology (%)	3.9	1.4	2.5**	1.0	.016	183	445	372
On-the-Job Training (OJT)								
Ever attended (%)	8.6	2.8	5.8***	1.6	<.001	209	443	368
Number of OJTs	0.1	0.0	0.1***	0.0	<.001	209	439	367
Total hours attended	49.0	7.6	41.4***	11.5	<.001	547	438	367
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	33	9
Total weeks attended	1.2	0.2	1.1***	0.3	<.001	625	435	365
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	30	7
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	30	7

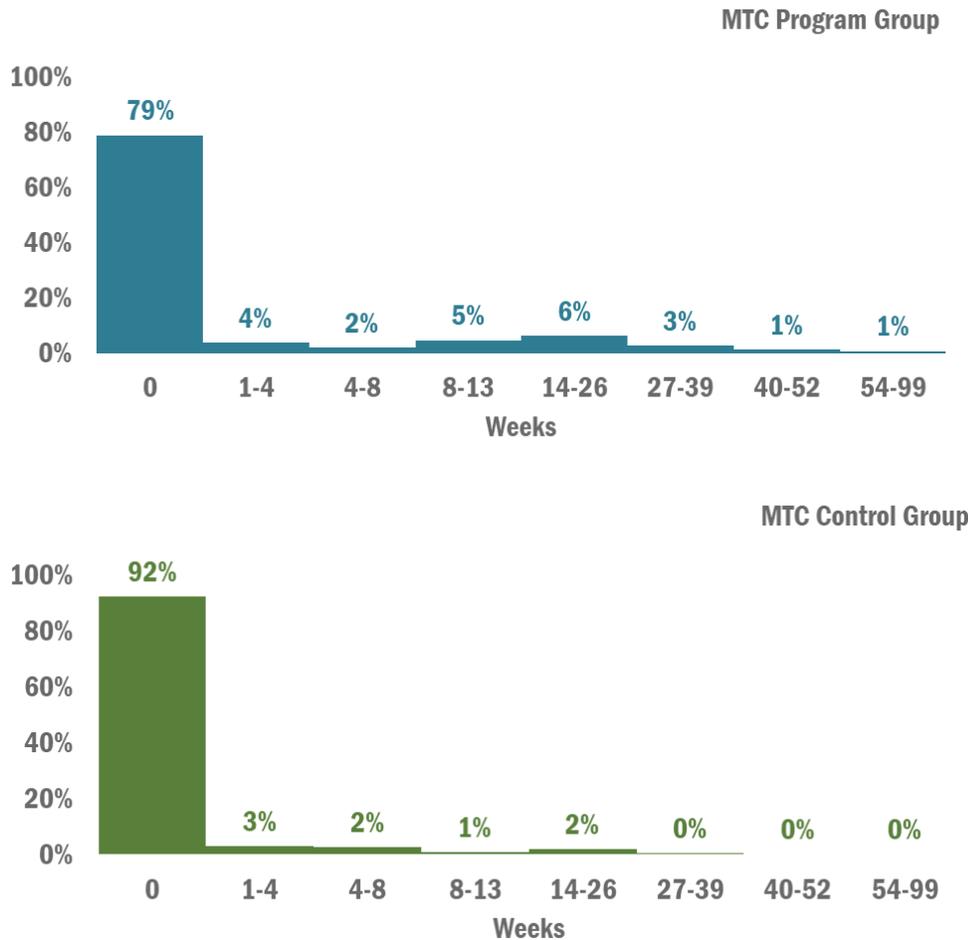
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Completed at least one OJT (%)	4.8	2.2	2.6*	1.3	.053	115	439	367
Number of OJTs completed	0.0	0.0	0.0*	0.0	.053	115	439	367
Any OJT in:								
Healthcare (%)	0.5	0.0	0.5	0.4	.164	.	439	367
Information technology (%)	3.3	1.0	2.3**	1.0	.024	231	439	367
Advanced manufacturing (%)	0.3	0.5	-0.3	0.4	.544	-51	439	367
Bioscience/biotechnology (%)	1.4	0.3	1.1*	0.6	.090	396	439	367

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any work-based training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Non-experimental results are not reported (NR) when 15 or fewer survey respondents of either the program or control group attended any training. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-6: Distribution of Total Weeks of Work-Based Training, MTC



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

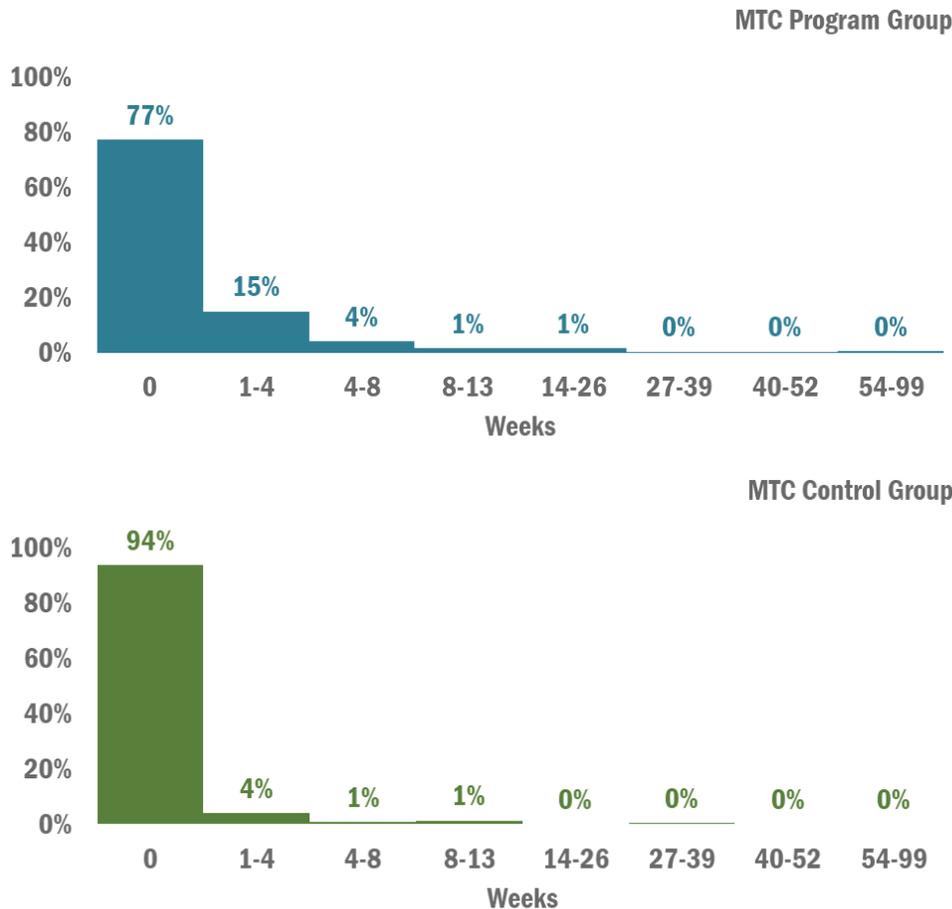
Exhibit F.2-7: Impacts on Employment Readiness Courses, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Readiness Courses								
Ever attended (%)	22.3	6.9	15.4***	2.4	<.001	225	450	373
Number attended	0.3	0.1	0.2***	0.0	<.001	204	450	373
Total hours attended	25.1	1.5	23.6***	4.5	<.001	1589	437	368
<i>Total hours, for attendees</i>	<i>131.7</i>	<i>26.0</i>	<i>105.8***</i>	<i>31.0</i>	<i><.001</i>	<i>407</i>	<i>88</i>	<i>20</i>
Total weeks attended	1.2	0.3	0.9***	0.3	.002	272	434	367
<i>Total weeks, for attendees</i>	<i>6.6</i>	<i>6.2</i>	<i>0.5</i>	<i>2.0</i>	<i>.805</i>	<i>8</i>	<i>85</i>	<i>19</i>
<i>Hours per week, for attendees</i>	<i>26.6</i>	<i>5.1</i>	<i>21.5***</i>	<i>2.2</i>	<i><.001</i>	<i>421</i>	<i>85</i>	<i>19</i>
Completed at least one activity (%)	19.3	4.7	14.6***	2.3	<.001	307	437	369
Number of activities completed	0.2	0.1	0.2***	0.0	<.001	213	437	369

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-8: Distribution of Total Weeks of Employment Readiness Courses, MTC



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibits F.2-9 through F.2-12 report impacts on monthly attendance in program activities for the first 18 months after random assignment, discussed but not shown in Section 3.2 of the *Interim Impact Report*. Exhibit F.2-9 reports impacts on monthly attendance in any structured employment-related activities through 18 months after random assignment. Exhibit F.2-10 reports impacts on monthly attendance in occupational training. Exhibit F.2-11 reports impacts on monthly attendance in work-based training. Exhibit F.2-12 reports impacts on monthly attendance in an employment readiness course.

Exhibit F.2-9: Monthly Attendance in Any Structured Employment-Related Activity, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Structured Employment-Related Activity								
Ever attended any structured employment-related activities in the given month since random assignment:								
Month 1 (%)	26.3	11.5	14.8***	3.0	<.001	129	385	332
Month 2 (%)	28.6	14.3	14.3***	3.1	<.001	100	385	332
Month 3 (%)	29.3	14.6	14.7***	3.1	<.001	101	385	332
Month 4 (%)	31.6	13.4	18.3***	3.1	<.001	137	385	332
Month 5 (%)	31.6	15.0	16.6***	3.2	<.001	111	385	332
Month 6 (%)	33.3	15.2	18.1***	3.2	<.001	119	385	332
Month 7 (%)	28.3	13.2	15.1***	3.0	<.001	114	385	332
Month 8 (%)	26.7	13.5	13.2***	3.0	<.001	98	385	332
Month 9 (%)	25.9	11.9	14.0***	3.0	<.001	117	385	332
Month 10 (%)	22.5	12.5	9.9***	2.9	<.001	79	385	332
Month 11 (%)	20.3	13.5	6.8**	2.9	.019	51	385	332
Month 12 (%)	21.4	12.1	9.4***	2.9	.001	78	385	332
Month 13 (%)	21.1	12.4	8.8***	2.9	.002	71	385	332
Month 14 (%)	18.1	10.5	7.6***	2.7	.005	73	385	332
Month 15 (%)	17.0	10.9	6.0**	2.6	.022	55	385	332
Month 16 (%)	15.7	12.5	3.2	2.7	.230	26	385	332
Month 17 (%)	14.6	12.7	1.9	2.6	.467	15	385	332
Month 18 (%)	13.0	13.6	-0.6	2.6	.833	-4	385	332

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-10: Monthly Attendance in Occupational Training, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Occupational Training								
Ever attended occupational training in the given month since random assignment:								
Month 1 (%)	15.7	9.2	6.5***	2.4	.007	70	419	349
Month 2 (%)	21.8	12.4	9.4***	2.7	<.001	76	419	349
Month 3 (%)	25.0	12.9	12.1***	2.8	<.001	94	419	349
Month 4 (%)	25.9	12.4	13.5***	2.8	<.001	109	419	349
Month 5 (%)	24.5	13.1	11.4***	2.9	<.001	87	419	349
Month 6 (%)	26.5	12.6	13.8***	2.9	<.001	110	419	349
Month 7 (%)	21.8	11.6	10.2***	2.7	<.001	88	419	349
Month 8 (%)	20.0	12.7	7.3***	2.7	.008	57	419	349
Month 9 (%)	18.9	12.3	6.6**	2.7	.016	53	419	349
Month 10 (%)	16.7	11.9	4.8*	2.6	.070	40	419	349
Month 11 (%)	15.6	12.3	3.3	2.6	.197	27	419	349
Month 12 (%)	16.0	10.7	5.4**	2.5	.033	50	419	349
Month 13 (%)	13.9	11.2	2.6	2.5	.294	23	419	349

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Month 14 (%)	11.8	9.8	1.9	2.3	.403	20	419	349
Month 15 (%)	12.1	10.3	1.8	2.3	.424	18	419	349
Month 16 (%)	12.0	11.8	0.2	2.4	.944	1	419	349
Month 17 (%)	10.9	11.7	-0.8	2.3	.742	-7	419	349
Month 18 (%)	9.4	12.8	-3.4	2.3	.151	-26	419	349

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-11: Monthly Attendance in Work-Based Training, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Work-Based Training								
Ever attended work-based training in the given month since random assignment:								
Month 1 (%)	0.6	0.8	-0.2	0.6	.698	-30	438	364
Month 2 (%)	1.4	0.8	0.5	0.7	.470	66	438	364
Month 3 (%)	2.0	0.8	1.1	0.8	.185	132	438	364
Month 4 (%)	5.1	1.1	4.0***	1.2	<.001	359	438	364
Month 5 (%)	7.0	2.0	5.0***	1.4	<.001	257	438	364
Month 6 (%)	7.8	2.2	5.6***	1.5	<.001	247	438	364
Month 7 (%)	8.4	2.6	5.9***	1.6	<.001	229	438	364
Month 8 (%)	7.5	1.5	6.0***	1.4	<.001	399	438	364
Month 9 (%)	6.0	1.2	4.7***	1.3	<.001	381	438	364
Month 10 (%)	6.2	1.8	4.4***	1.5	.003	246	438	364
Month 11 (%)	5.1	1.9	3.3**	1.4	.018	174	438	364
Month 12 (%)	5.4	1.1	4.3***	1.3	.001	394	438	364
Month 13 (%)	6.6	0.3	6.3***	1.3	<.001	2249	438	364
Month 14 (%)	4.8	0.2	4.5***	1.1	<.001	1831	438	364
Month 15 (%)	4.5	0.2	4.2***	1.1	<.001	1711	438	364
Month 16 (%)	4.5	0.2	4.3***	1.1	<.001	1742	438	364
Month 17 (%)	4.3	0.5	3.8***	1.1	<.001	740	438	364
Month 18 (%)	3.9	0.5	3.4***	1.0	<.001	676	438	364

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-12: Monthly Attendance in Employment Readiness Courses, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Readiness Courses								
Ever attended an employment readiness course in the given month since random assignment:								
Month 1 (%)	11.8	1.6	10.3***	1.7	<.001	662	423	362
Month 2 (%)	6.5	1.8	4.7***	1.4	.001	266	423	362
Month 3 (%)	2.6	1.5	1.1	1.1	.297	74	423	362
Month 4 (%)	1.4	0.5	0.9	0.7	.199	169	423	362
Month 5 (%)	2.2	0.3	2.0**	0.8	.014	701	423	362
Month 6 (%)	2.1	0.9	1.1	0.9	.194	126	423	362

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Month 7 (%)	1.8	0.6	1.3*	0.8	.095	212	423	362
Month 8 (%)	1.8	0.6	1.3*	0.8	.095	212	423	362
Month 9 (%)	1.7	1.0	0.7	0.9	.460	64	423	362
Month 10 (%)	1.7	1.0	0.7	0.9	.460	64	423	362
Month 11 (%)	2.0	0.6	1.3	0.8	.110	217	423	362
Month 12 (%)	2.2	0.6	1.6*	0.9	.072	252	423	362
Month 13 (%)	1.9	0.9	1.0	0.9	.282	103	423	362
Month 14 (%)	2.2	0.6	1.6*	0.9	.074	250	423	362
Month 15 (%)	1.2	0.6	0.6	0.7	.430	91	423	362
Month 16 (%)	0.9	0.8	0.1	0.7	.897	11	423	362
Month 17 (%)	1.0	1.1	-0.0	0.7	.964	-3	423	362
Month 18 (%)	0.6	0.8	-0.2	0.6	.766	-23	423	362

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-13 provides detailed results corresponding to Exhibit 3-7 in the *Interim Impact Report*.

Exhibit F.2-13: Receipt of Job Search Assistance, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Type of Job Search Assistance Provided								
Career counseling								
Any (%)	51.9	29.2	22.6***	3.4	<.001	77	438	363
Number of times	1.1	0.2	0.9***	0.1	<.001	357	434	361
Job placement assistance								
Any (%)	41.1	24.8	16.4***	3.2	<.001	66	435	365
Number of times	1.3	0.3	1.0***	0.2	<.001	352	431	361
Job readiness training								
Any (%)	56.8	28.9	27.9***	3.4	<.001	96	440	365
Number of times	1.3	0.4	0.9***	0.2	<.001	262	437	361
Topics Addressed in Program								
Career planning (%)								
A great deal of attention	35.0	13.2	21.8***	2.9	<.001	165	454	371
At least some attention	66.9	28.4	38.5***	3.3	<.001	135	454	371
Finding a job (%)								
A great deal of attention	27.8	10.1	17.7***	2.7	<.001	176	451	370
At least some attention	55.6	24.6	31.0***	3.3	<.001	126	451	370

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.2-14 presents impacts on receipt of assistance with workplace behaviors and soft skills (discussed but not shown in Section 3.2 of the *Interim Impact Report*).

Exhibit F.2-14: Receipt of Assistance with Workplace Behaviors and Soft Skills, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Workplace Behaviors								
Critical thinking (%)								
A great deal of attention	33.8	19.9	13.9***	3.1	<.001	70	446	371
At least some attention	64.2	34.0	30.2***	3.4	<.001	89	446	371
Working in groups (%)								
A great deal of attention	29.0	14.2	14.8***	2.8	<.001	105	452	371
At least some attention	64.6	27.3	37.3***	3.3	<.001	137	452	371
Communicating well (%)								
A great deal of attention	31.3	16.8	14.5***	3.0	<.001	86	450	370
At least some attention	64.1	31.9	32.2***	3.4	<.001	101	450	370
Acting professionally (%)								
A great deal of attention	26.1	13.1	13.0***	2.7	<.001	99	452	371
At least some attention	60.6	28.1	32.5***	3.4	<.001	116	452	371
Soft Skills								
Time management (%)								
A great deal of attention	22.5	12.9	9.6***	2.7	<.001	74	450	371
At least some attention	58.6	27.5	31.1***	3.4	<.001	113	450	371
Managing stress, anger, and frustration (%)								
A great deal of attention	16.2	7.8	8.5***	2.3	<.001	109	451	371
At least some attention	47.0	16.6	30.4***	3.1	<.001	183	451	371
Staying motivated (%)								
A great deal of attention	26.6	9.7	16.8***	2.6	<.001	173	451	371
At least some attention	61.2	25.0	36.2***	3.3	<.001	145	451	371
Managing money (%)								
A great deal of attention	6.9	5.9	0.9	1.8	.601	15	452	370
At least some attention	30.1	13.8	16.3***	2.9	<.001	118	452	370
Handling parenting and other family responsibilities (%)								
A great deal of attention	5.5	2.1	3.3**	1.3	.013	156	449	369
At least some attention	18.8	7.4	11.4***	2.3	<.001	155	449	369
Help with problems at school, work, or home (%)								
A great deal of attention	11.5	7.7	3.9*	2.1	.066	50	450	370
At least some attention	40.7	17.0	23.7***	3.1	<.001	139	450	370
Academic Skills and Services								
Study skills (%)								
A great deal of attention	28.0	17.8	10.2***	3.0	<.001	57	451	370
At least some attention	57.2	28.8	28.4***	3.4	<.001	98	451	370
Finding/applying for financial aid (%)								
A great deal of attention	3.5	3.9	-0.4	1.4	.796	-9	449	370
At least some attention	18.6	11.9	6.7***	2.5	.007	56	449	370

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

F.3 Impacts on Receipt of Education- and Employment-Related Supports

Exhibit F.3-1 provides detailed results corresponding to Exhibit 3-8 in the *Interim Impact Report*.

Exhibit F.3-1: Funding Sources for Occupational Training, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Own/Family Funding Sources								
Own or family earnings, savings, or loan (%)	11.6	20.6	-9.0***	2.7	<.001	-44	442	365
<i>Own or family earnings, savings, or loan, if any occupational training (%)</i>	19.4	57.6	-38.2***	4.8	<.001	-66	266	131
Funding sources:								
Own earnings (%)	9.9	15.8	-5.9**	2.4	.015	-37	442	365
Spouse/partner earnings (%)	0.8	1.6	-0.8	0.8	.310	-51	449	369
Own or spouse/partner savings (%)	5.5	9.9	-4.4**	1.9	.025	-44	445	365
Financial help from parent/family member (%)	1.8	3.6	-1.8	1.2	.119	-51	441	365
Loans in own name (%)	4.4	8.1	-3.6*	1.9	.052	-45	442	365
Other Sources (Free or Subsidized Occupational Training)								
Received financial support for occupational training from non-family sources (%)	58.3	21.6	36.7***	3.2	<.001	170	445	365
<i>Received financial support for occupational training from non-family sources, if any occupational training (%)</i>	94.8	60.5	34.3***	4.5	<.001	57	269	131
Funding sources:								
Free training program (%)	22.2	9.3	12.9***	2.5	<.001	139	444	365
Program provider financial support (%)	12.5	4.9	7.6***	2.0	<.001	156	443	365
From an American Job Center/state unemployment office (%)	11.6	7.0	4.7**	2.1	.023	68	443	364
From a Pell grant or other non-governmental grant (%)	6.2	5.4	0.8	1.6	.605	16	449	369
Any other funding source (%)	36.3	6.4	29.9***	2.7	<.001	470	443	363

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.3-2 presents impacts on receipt of academic and other support services (discussed but not shown in Section 3.3 of the *Interim Impact Report*).

Exhibit F.3-2: Receipt of Academic and Other Support Services, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Academic Support Services								
Academic advising								
Any (%)	21.6	15.5	6.1**	2.8	.032	39	435	363
Number of times	0.6	0.4	0.2*	0.1	.057	46	434	362
Financial aid advising								
Any (%)	8.1	8.6	-0.5	2.0	.807	-6	440	373
Number of times	0.1	0.1	-0.0	0.0	.771	-8	440	373

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Tutoring								
Any (%)	5.4	5.2	0.2	1.5	.920	3	455	376
Number of times	0.3	0.3	0.0	0.1	.641	18	455	375
Other Support Services (%)								
Assistance with mental health (%)	5.6	6.1	-0.5	1.6	.772	-7	455	376
Clothes or uniforms (%)	4.0	1.6	2.4**	1.1	.038	145	455	376
Assistance with childcare (%)	1.0	1.5	-0.5	0.7	.525	-32	455	376
Assistance with transportation (%)	25.3	4.4	20.9***	2.3	<.001	472	442	371
Tools (%)	3.5	1.7	1.8*	1.0	.079	105	455	376
Assistance with other services (%)	7.2	2.7	4.5***	1.4	.002	171	455	376

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

F.4 Impacts on Credential Receipt and Other Short-Term Outcomes

Exhibit F.4-1 provides detailed results corresponding to Exhibit 3-9 in the *Interim Impact Report*.

Exhibit F.4-1: Educational Attainment, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Educational Attainment								
Received any certificate, certification, license, or degree (%)	47.3	25.1	22.1***	3.4	<.001	88	442	369
Occupational training certificate								
Received any (%)	43.5	19.0	24.5***	3.2	<.001	130	440	366
Number	0.7	0.2	0.4***	0.1	<.001	185	440	366
College credits								
Received any (%)	2.3	3.5	-1.2	1.2	.330	-33	448	371
Number	0.3	0.6	-0.3	0.3	.354	-45	448	371
College credential								
Certificate (%)	1.3	1.6	-0.4	0.9	.660	-23	451	372
Associate's degree (%)	0.5	0.5	0.0	0.5	.933	8	450	372
Bachelor's degree or higher (%)	0.9	0.3	0.6	0.6	.282	229	450	372
Professional certification or license								
Received any (%)	11.3	7.9	3.4	2.1	.104	43	455	376
Employment Readiness								
Employment readiness certificate								
Received any (%)	12.0	1.6	10.3***	1.7	<.001	638	434	368

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.4-2 provides detail on the types of professional certifications or licenses received between random assignment and follow-up (discussed but not shown in Section 3.4 of the *Interim Impact Report*). The exhibit presents the proportion of the study sample that received each type of certification or license, both overall and by treatment status. The last column reports the difference between treatment groups, and indicates whether the difference is statistically significant at the 5 percent level.

Exhibit F.4-2: Types of Professional Credentials Received, MTC

Professional Certification or License	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Information Technology				
Amazon Web Service (AWS)	0.8	1.3	0.3	1.0
A+	0.4	0.8	0.0	0.8
CompTia	5.1	7.5	2.6	4.9*
Cisco	0.4	0.3	0.5	-0.2
Other software certification (e.g., python, java oracle)	0.8	0.9	0.7	0.2
Project management in IT	0.3	0.7	0.0	0.7
Healthcare/Bioscience				
Certified nursing assistant (CNA)	0.2	0.0	0.5	-0.5
Home health aide, medication technician/aide	0.3	0.0	0.5	-0.5
EMT/EMS	0.1	0.0	0.2	-0.2
Phlebotomy	0.1	0.2	0.0	0.2
License/certification in mental health, social work, or massage	0.1	0.3	0.0	0.3
Biosciences- or biotechnology-related certification	0.4	0.6	0.3	0.3
Business				
Project management, supply chain, or facilities management (unrelated to IT or health/bioscience)	1.0	0.4	1.5	-1.1
License/certification in accounting, tax preparation, real estate, or similar	0.6	0.2	1.0	-0.8

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and the control group mean because of rounding. Sample size of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit F.4-3 provides detailed results for impacts on confidence in career knowledge and barriers to employment (discussed but not shown in Section 3.4 of the *Interim Impact Report*).

Exhibit F.4-3: Confidence in Career Knowledge and Barriers to Employment, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Confidence in career knowledge scale	1.7	1.6	0.0	0.0	.302	2	451	371
Barriers to employment								
Childcare arrangements (%)	6.0	7.5	-1.5	1.8	.403	-20	450	369
Transportation (%)	8.8	6.8	2.0	1.9	.296	30	450	369
Illness or health condition (%)	14.8	17.0	-2.3	2.5	.363	-13	448	367

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Number of barriers (range 0-3)	0.3	0.3	-0.0	0.0	.689	-5	450	370
Minimum hourly wage willing to accept (\$/hour)	27.16	27.67	-0.51	0.89	.567	-2	390	347

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

F.5 Impacts on Labor Market Outcomes

Exhibit F.5-1 provides detailed results corresponding to Exhibit 3-10 through Exhibit 3-12 in the *Interim Impact Report*.

Exhibit F.5-1: Earnings and Employment, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Earnings								
Average earnings in Q5 and Q6 (\$)	7,163	8,443	-1,281**	537	.017	-15	536	486
Average earnings in Q5 and Q6, if employed in Q5 or Q6 (\$)	10,128	11,657	-1,529**	623	.014	-13	388	352
Cumulative earnings in Q1-Q6 (\$)	34,083	40,043	-5,960**	2,515	.018	-15	536	486
Earnings Before Random Assignment (RA):								
Q8 pre-RA (\$)	8,234	7,856	378	711	.595	5	502	455
Q7 pre-RA (\$)	7,951	7,790	160	584	.784	2	536	486
Q6 pre-RA (\$)	7,982	8,003	-21	616	.973	-0	536	486
Q5 pre-RA (\$)	7,794	7,524	271	622	.663	4	536	486
Q4 pre-RA (\$)	8,275	7,682	593	790	.453	8	536	486
Q3 pre-RA (\$)	7,023	7,217	-194	632	.758	-3	536	486
Q2 pre-RA (\$)	5,375	5,781	-406	639	.525	-7	536	486
Q1 pre-RA (\$)	2,572	2,888	-316	397	.426	-11	536	486
Q0 (\$)	1,621	1,627	-7	229	.977	-0	536	486
Earnings After Random Assignment:								
Q1 (\$)	2,938	3,479	-541	352	.125	-16	536	486
Q2 (\$)	4,555	5,528	-973**	449	.031	-18	536	486
Q3 (\$)	5,913	6,665	-752	508	.139	-11	536	486
Q4 (\$)	6,353	7,486	-1,133**	531	.033	-15	536	486
Q5 (\$)	6,772	8,117	-1,345**	575	.019	-17	536	486
Q6 (\$)	7,554	8,769	-1,216**	545	.026	-14	536	486
Employment								
Ever employed during Q5 or Q6 (%)	71.9	72.4	-0.5	2.7	.847	-1	536	486
Ever employed during Q1-Q6 (%)	79.9	80.0	-0.1	2.4	.956	-0	536	486
Employment Before Random Assignment (RA):								
Q8 pre-RA (%)	61.8	57.4	4.4	2.8	.116	8	502	455
Q7 pre-RA (%)	61.8	58.8	3.0	2.6	.258	5	536	486
Q6 pre-RA (%)	62.3	60.9	1.4	2.5	.570	2	536	486
Q5 pre-RA (%)	63.1	58.0	5.0**	2.4	.034	9	536	486
Q4 pre-RA (%)	59.8	60.3	-0.5	1.9	.781	-1	536	486
Q3 pre-RA (%)	57.1	58.4	-1.3	2.0	.513	-2	536	486
Q2 pre-RA (%)	49.0	52.1	-3.0	2.4	.209	-6	536	486
Q1 pre-RA (%)	36.8	38.9	-2.0	2.7	.442	-5	536	486
Q0 (%)	35.6	38.1	-2.5	2.9	.397	-6	536	486

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment After Random Assignment:								
Q1 (%)	43.5	51.2	-7.7**	3.0	.010	-15	536	486
Q2 (%)	53.2	59.7	-6.4**	3.0	.030	-11	536	486
Q3 (%)	61.6	65.0	-3.4	2.9	.238	-5	536	486
Q4 (%)	63.4	66.7	-3.2	2.9	.266	-5	536	486
Q5 (%)	64.6	67.5	-2.9	2.9	.312	-4	536	486
Q6 (%)	68.6	68.1	0.5	2.8	.849	1	536	486
Number of quarters employed during Q1-Q6	3.5	3.8	-0.2*	0.1	.087	-6	536	486
Longest job tenure during Q0-Q6 (quarters)	3.1	3.3	-0.2	0.1	.220	-5	536	486

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through six quarters after random assignment.

NOTES: **Confirmatory outcomes are bolded and italicized.** Secondary outcomes are bolded; exploratory outcomes are neither bolded nor italicized. Outcomes in italics apply to the subset of sample members who were ever employed during Q5 or Q6, and are thus non-experimental. Where not italicized, outcomes apply to the full sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. Relative impact represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.5-2 provides information for the early cohort, providing detailed impact estimates on earnings and employment through Q12 (discussed but not shown in Section 3.5 of the *Interim Impact Report*).

Exhibit F.5-2: Earnings and Employment for Sample Members Observed through 12 Quarters, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Earnings								
Earnings in Q1 (\$)	2,172	2,928	-756**	381	.048	-26	290	259
Earnings in Q2 (\$)	3,776	4,685	-909*	523	.082	-19	290	259
Earnings in Q3 (\$)	5,208	6,144	-936	652	.152	-15	290	259
Earnings in Q4 (\$)	5,704	6,772	-1,068*	641	.097	-16	290	259
Earnings in Q5 (\$)	5,969	6,956	-987	664	.138	-14	290	259
Earnings in Q6 (\$)	6,884	7,332	-448	673	.506	-6	290	259
Earnings in Q7 (\$)	7,216	8,098	-882	754	.243	-11	290	259
Earnings in Q8 (\$)	7,306	8,635	-1,329*	755	.079	-15	290	259
Earnings in Q9 (\$)	7,382	8,783	-1,401*	750	.062	-16	290	259
Earnings in Q10 (\$)	8,410	8,189	221	754	.769	3	290	259
Earnings in Q11 (\$)	9,072	8,586	485	920	.598	6	290	259
Earnings in Q12 (\$)	8,747	8,414	333	787	.672	4	290	259
Employment								
Ever employed during Q1 (%)	42.6	49.0	-6.4	4.1	.116	-13	290	259
Ever employed during Q2 (%)	52.2	57.1	-4.9	4.1	.229	-9	290	259
Ever employed during Q3 (%)	59.5	63.7	-4.2	4.0	.292	-7	290	259
Ever employed during Q4 (%)	62.6	65.3	-2.7	4.0	.496	-4	290	259
Ever employed during Q5 (%)	63.3	64.1	-0.8	4.0	.839	-1	290	259
Ever employed during Q6 (%)	69.2	63.3	5.9	3.9	.134	9	290	259
Ever employed during Q7 (%)	72.3	66.8	5.5	3.8	.144	8	290	259
Ever employed during Q8 (%)	70.4	68.0	2.4	3.9	.531	4	290	259
Ever employed during Q9 (%)	69.5	69.1	0.4	3.9	.925	1	290	259
Ever employed during Q10 (%)	71.6	67.6	4.1	3.8	.289	6	290	259
Ever employed during Q11 (%)	72.0	66.8	5.2	3.9	.181	8	290	259
Ever employed during Q12 (%)	71.2	69.9	1.4	3.8	.717	2	290	259

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
---------	--------------------	--------------------	---------------------	----------------	---------	---------------------	---------------------	---------------------

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through twelve quarters after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.5-3 provides detailed results corresponding to Exhibit 3-13 in the *Interim Impact Report*.

Exhibit F.5-3: Engagement in the Labor Force, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Status at Follow-Up								
Employed (%)	72.2	73.8	-1.6	3.0	.599	-2	449	370
Unemployed (%)	18.4	13.1	5.4**	2.6	.038	41	446	369
Out of the labor force (%)	6.0	9.8	-3.8**	1.9	.043	-39	446	369
Attending school or long-term training program (%)	1.6	2.7	-1.2	1.1	.275	-42	446	369
Maternity leave, sick, or unable to work because of disability (%)	2.8	5.3	-2.5*	1.4	.072	-47	446	369
Retired (%)	1.6	1.8	-0.2	0.9	.825	-11	446	369
Number of jobs since random assignment	1.6	1.5	0.1	0.1	.117	9	443	365

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.5-4 provides detailed results corresponding to Exhibit 3-14 in the *Interim Impact Report*.

Exhibit F.5-4: Characteristics of Current Job, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Job Field								
Healthcare (%)	12.4	12.4	0.0	2.3	.984	0	444	363
Information technology (%)	24.5	20.4	4.1	2.9	.158	20	432	356
Manufacturing (%)	3.5	4.5	-0.9	1.5	.522	-21	432	356
Job Type								
Regular full-time or part-time employee (%)	54.3	59.5	-5.2	3.4	.129	-9	448	366
Employed by a temporary help agency (%)	2.0	2.2	-0.1	1.1	.895	-6	448	366
Employed by a company that contracts out your services (%)	2.3	1.5	0.8	1.0	.432	52	448	366
Independent contractor or independent consultant (%)	7.9	4.8	3.1*	1.7	.066	64	448	366
Self-employed, including freelancer and day laborer (%)	2.9	3.7	-0.8	1.3	.540	-22	448	366
Other (%)	2.7	1.8	0.9	1.0	.374	51	448	366

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Pay and Hours								
Rate of pay per year (\$)	31,649	34,776	-3,126	2,678	.243	-9	395	315
<i>Hourly wage, if employed (\$/hour)</i>	<i>23.64</i>	<i>26.98</i>	<i>-3.33**</i>	<i>1.55</i>	<i>.032</i>	<i>-12</i>	<i>261</i>	<i>218</i>
Hours worked per week	25.7	26.7	-1.0	1.3	.414	-4	444	363
<i>Hours worked per week, if employed</i>	<i>35.8</i>	<i>36.5</i>	<i>-0.6</i>	<i>0.9</i>	<i>.480</i>	<i>-2</i>	<i>314</i>	<i>267</i>
Full-time (35 or more hours per week, %)	53.7	56.2	-2.5	3.4	.470	-4	444	363
<i>Full-time, if employed (%)</i>	<i>75.1</i>	<i>76.7</i>	<i>-1.7</i>	<i>3.7</i>	<i>.651</i>	<i>-2</i>	<i>314</i>	<i>267</i>
Part-time (less than 35 hours per week, %)	18.0	17.1	0.9	2.8	.734	5	444	363
<i>Part-time, if employed (%)</i>	<i>24.9</i>	<i>23.3</i>	<i>1.7</i>	<i>3.7</i>	<i>.651</i>	<i>7</i>	<i>314</i>	<i>267</i>
Number of weeks at job since random assignment	32.8	35.0	-2.2	2.2	.317	-6	432	360
Job represented by a union (%)	5.6	6.5	-0.9	1.7	.611	-13	443	360
Job Benefits								
Offers health insurance (%)	47.6	53.8	-6.2*	3.5	.074	-12	444	362
Paid vacation (%)	44.5	52.0	-7.5**	3.5	.031	-14	444	365
Paid holiday (%)	45.7	49.6	-3.9	3.5	.264	-8	448	361
Paid sick time (%)	41.0	45.7	-4.7	3.5	.174	-10	441	358
Retirement/pension plan (%)	41.8	45.7	-3.9	3.5	.259	-9	440	359
Job Schedule								
Regular daytime schedule (%)	54.3	57.6	-3.3	3.4	.331	-6	449	366
Regular evening shift (%)	2.2	2.7	-0.5	1.1	.661	-17	449	366
Regular night shift (%)	3.2	1.8	1.4	1.1	.184	81	449	366
Rotating schedule (%)	4.0	2.6	1.4	1.2	.267	52	449	366
Irregular schedule (%)	4.3	5.5	-1.1	1.5	.472	-20	449	366
Other schedule (%)	4.0	3.3	0.7	1.3	.603	21	449	366
Career Opportunities								
Job offers career advancement opportunities:								
Strongly agree (%)	18.2	20.9	-2.7	2.8	.345	-13	429	355
Agree (%)	24.6	22.6	2.0	3.1	.515	9	429	355
Disagree (%)	15.1	17.6	-2.5	2.7	.357	-14	429	355
Strongly disagree (%)	12.6	11.6	1.1	2.4	.659	9	429	355

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who were employed at follow up, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibits F.5-5 and F.5-6 present the distribution of the field of employment at follow-up (in each exhibit, the last line reports the proportion not employed). Exhibit F.5-5 reports on the industry of employment; Exhibit F.5-6 reports on the occupation. The exhibits present the proportion of the study sample working in each field, both overall and by treatment status. In each exhibit, the last column reports the difference between treatment groups, and indicates whether the difference is statistically significant at the 5 percent level.

Exhibit F.5-5: Distribution of Industry of Employment, MTC

Industry of Employment	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Not employed	27.4	28.6	26.2	2.4
Information technology-related industries				
Computer system design and related services	10.9	11.7	10.2	1.5
Information industries, including software publishing, telecommunications, data processing/hosting and other information services	2.2	3.3	1.0	2.3*
Manufacturing- and advanced manufacturing-related industries				
Metal, machinery, computer and electronic/electrical equipment manufacturing	2.9	1.9	3.9	-2.0
Other manufacturing (e.g., wood/paper, chemicals, plastics, food/beverage, textiles/apparel)	2.3	2.0	2.7	-0.7
Architectural, engineering, and specialized design services	1.5	1.3	1.7	-0.4
Healthcare- and bioscience-related industries				
Healthcare services other than social assistance	6.1	6.8	5.4	1.4
Scientific research and development and management/scientific/technical consulting services	6.0	6.7	5.3	1.4
Other industries				
Accommodations, food services, personal services, and private household	1.3	1.0	1.5	-0.5
Administrative and support services	5.1	5.5	4.7	0.8
Construction, mining/oil and gas, utilities, agriculture, and waste management	1.4	1.4	1.3	0.1
Educational services	5.6	5.8	5.2	0.6
Finance, insurance, and real estate	3.6	2.8	4.4	-1.6
Professional, scientific, and technical services other than computer system design/architectural services/ scientific research (e.g., accounting/tax preparation, advertising/public relations)	2.2	2.3	2.1	0.2
Public administration	7.4	7.4	7.5	-0.1
Social assistance, and religious, grant-making, civic, professional, and similar organizations	4.1	2.9	5.4	-2.5
Transportation and warehousing	4.0	4.7	3.3	1.4
Wholesale and retail trade	6.3	5.1	7.6	-2.5
Other (e.g., arts/entertainment/recreation, management of companies/services, repair/maintenance)	1.7	1.4	2.0	-0.6

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit F.5-6: Distribution of Occupation of Employment, MTC

Occupation of Employment	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Not employed	27.4	28.6	26.2	2.4
Information technology-related occupations				
Computer and information systems managers	1.5	1.4	1.5	-0.1
Computer and mathematical occupations, and computer hardware engineers	16.2	17.8	14.7	3.1
Manufacturing- and advanced manufacturing-related occupations				
Architecture and engineering occupations, other than computer hardware engineers	2.1	1.7	2.5	-0.8
Assemblers, fabricators, and metal or plastic production workers	0.3	0.2	0.4	-0.2
All other production occupations	1.8	1.0	2.6	-1.6
Healthcare- and- and bioscience-related occupations				
Healthcare practitioners and technical occupations	2.7	2.1	3.3	-1.2
Healthcare support occupations	2.4	2.6	2.3	0.3
Life, physical, and social science occupations (including medical scientists)	3.4	2.7	4.2	-1.5
Other occupations				
Arts, design, entertainment, sports, and media	1.8	0.8	2.7	-1.9*
Business and financial operations and legal occupations	6.9	7.6	6.2	1.4
Community and social service occupations (including healthcare social workers)	2.2	2.2	2.2	0.0
Construction, installation and repair, extraction, farming, fishing, and forestry occupations	1.3	1.3	1.4	-0.1
Educational Instruction and library	2.8	3.6	2.0	1.6
Food preparation and service-related occupations, personal care service, protective service, and building and grounds cleaning and maintenance occupations	3.0	3.4	2.5	0.9
Managers (other than for computer/information systems)	5.6	5.1	6.0	-0.9
Office and administrative support occupations	7.9	8.2	7.6	0.6
Sales and related	4.1	3.2	5.0	-1.8
Transportation and material moving occupations	5.8	5.6	6.1	-0.5

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

Notes: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit F.5-7 provides detailed results on the relation between training and subsequent jobs (discussed but not shown in Section 3.5 of the *Interim Impact Report*).

Exhibit F.5-7: Connection between Training and Employment, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Connection between Training and Employment								
New job due to training or certificate (%)	19.5	11.7	7.8***	2.5	.002	67	445	366
<i>New job due to training or certificate, if any (%)</i>	29.3	26.2	3.0	4.4	.494	12	294	162
Training useful for that job (%)	18.8	11.5	7.3***	2.5	.004	63	438	362
Promotion due to training (%)	3.2	2.0	1.3	1.1	.249	66	442	366
Training useful after promotion (%)	3.1	1.9	1.2	1.1	.263	64	453	373

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training or received any other certificate, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

F.6 Impacts on Broader Measures of Well-Being

Exhibit F.6-1 provides detailed results corresponding to Exhibit 3-15 in the *Interim Impact Report*.

Exhibit F.6-1: Income and Public Benefits Receipt, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Income								
Total own income before taxes last month (\$)	2,509	2,681	-172	166	.301	-6	377	300
Benefits Receipt								
Received any public benefits last month (%)	21.2	16.9	4.3*	2.6	.093	26	438	359
Received TANF last month (%)	0.5	0.6	-0.1	0.5	.873	-14	439	359
Received SNAP last month (%)	13.1	11.2	1.9	2.1	.349	17	438	359
Received UI last month (%)	3.3	2.0	1.3	1.2	.274	65	438	359
Received other public benefits last month (%)	8.9	8.9	-0.0	2.0	.987	-0	440	359

KEY: SNAP is Supplemental Nutrition Assistance Program; TANF is Temporary Assistance for Needy Families; UI is Unemployment Insurance.

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.6-2 provides detailed results on family structure outcomes (there is no corresponding discussion or exhibit in Chapter 3 of the *Interim Impact Report*).

Exhibit F.6-2: Household Composition, MTC

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Individuals	2.6	2.7	-0.1	0.1	.542	-2	438	357
Children under 12	0.5	0.5	-0.0	0.1	.475	-9	437	357

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

F.7 Subgroup Impacts

This section provides detail on subgroup impacts for the confirmatory outcome, secondary outcomes, and several exploratory outcomes discussed in Chapter 3 of the *Interim Impact Report*. Exhibits F.7-1 and F.7-2 report differential impacts by education level at random assignment: less than a bachelor's degree versus a bachelor's degree or more. Exhibits F.7-3 and F.7-4 report differential impacts by age at random assignment: 49 or older versus 48 or younger. Exhibits F.7-5 and F.7-6 report differential impacts by employment status at random assignment: those unemployed more than 12 months versus those ever employed in the last 12 months (including those employed at application). Exhibits F.7-7 and F.7-8 report differential impacts by gender.

For each pair of subgroup impact exhibits, the first exhibit reports differential impacts on participation in and hours and weeks attended for the following: any structured employment-related activity, occupational training, work-based training, and employment readiness courses. The second subgroup exhibit reports differential impacts on educational attainment, average earnings in the fifth and sixth quarters after random assignment, employment in the fifth or sixth quarter after random assignment, and receipt of public benefits.

Exhibit F.7-1: Subgroup Impacts, by Education Level: Program Services, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Less than bachelor's degree	266	72	48	24***	6	<.001
Bachelor's degree or more	555	76	42	34***	4	<.001
Difference				10	7	.153
Total hours attended						
Less than bachelor's degree	255	301	188	113**	53	.032
Bachelor's degree or more	541	298	98	200***	30	<.001
Difference				87	61	.150
Total weeks attended						
Less than bachelor's degree	247	15	12	3	3	.238
Bachelor's degree or more	527	15	6	8***	1	<.001
Difference				5*	3	.076
Occupational Training						
Ever attended (%)						
Less than bachelor's degree	265	57	42	15**	6	.014
Bachelor's degree or more	555	64	34	30***	4	<.001

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				15**	7	.046
Total hours attended						
Less than bachelor's degree	255	175	145	30	39	.450
Bachelor's degree or more	549	138	78	60***	20	.002
Difference				30	43	.485
Total weeks attended						
Less than bachelor's degree	247	11	11	0	2	.876
Bachelor's degree or more	536	9	5	4***	1	.001
Difference				3	3	.199
Work-Based Training						
Ever attended (%)						
Less than bachelor's degree	267	22	13	9**	5	.045
Bachelor's degree or more	558	21	6	15***	3	<.001
Difference				6	6	.300
Total hours attended						
Less than bachelor's degree	263	101	40	61**	31	.048
Bachelor's degree or more	555	130	16	114***	21	<.001
Difference				53	38	.159
Total weeks attended						
Less than bachelor's degree	255	2	1	1**	1	.047
Bachelor's degree or more	547	4	0	4***	1	<.001
Difference				2**	1	.040
Employment Readiness Courses						
Ever attended (%)						
Less than bachelor's degree	268	22	4	18***	4	<.001
Bachelor's degree or more	555	23	8	14***	3	<.001
Difference				-3	5	.484
Total hours attended						
Less than bachelor's degree	266	23	1	23***	6	<.001
Bachelor's degree or more	539	26	2	24***	6	<.001
Difference				1	8	.896
Total weeks attended						
Less than bachelor's degree	265	1	0	1**	0	.013
Bachelor's degree or more	536	1	0	1**	0	.024
Difference				-0	1	.478

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey, measuring training through 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.7-2: Subgroup Impacts, by Education Level: Educational Attainment, Earnings and Employment, and Benefits Receipt, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Less than bachelor's degree	260	35	23	12**	6	.039
Bachelor's degree or more	551	53	26	27***	4	<.001
Difference				15**	7	.030
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Less than bachelor's degree	344	5,476	5,408	67	690	.922
Bachelor's degree or more	678	8,064	10,032	-1,968***	731	.007
Difference				-2,035**	1,008	.044
Ever employed during Q5 or Q6 (%)						
Less than bachelor's degree	344	72	64	8	5	.117
Bachelor's degree or more	678	72	77	-5	3	.145
Difference				-12**	6	.034
Benefits Receipt						
Receiving any public benefits (%)						
Less than bachelor's degree	262	28	26	2	5	.722
Bachelor's degree or more	535	17	12	6*	3	.060
Difference				4	6	.485

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 1022 includes 536 program group and 486 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.7-3: Subgroup Impacts, by Age: Program Services, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
48 or younger	453	76	45	31***	4	<.001
49 or older	368	74	43	31***	5	<.001
Difference				-1	7	.924
Total hours attended						
48 or younger	437	318	134	185***	37	<.001
49 or older	359	279	125	154***	38	<.001
Difference				-31	53	.563
Total weeks attended						
48 or younger	424	16	9	7***	2	<.001
49 or older	350	14	7	7***	2	<.001
Difference				0	3	.970
Occupational Training						
Ever attended (%)						
48 or younger	451	64	41	22***	5	<.001
49 or older	369	60	31	29***	5	<.001

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				6	7	.353
Total hours attended						
48 or younger	438	167	106	61**	26	.018
49 or older	366	131	95	36	26	.162
Difference				-25	36	.481
Total weeks attended						
48 or younger	425	11	9	3	2	.100
49 or older	358	8	6	3*	2	.073
Difference				-0	2	.993
Work-Based Training						
Ever attended (%)						
48 or younger	455	24	8	16***	3	<.001
49 or older	370	19	9	10***	4	.006
Difference				-6	5	.258
Total hours attended						
48 or younger	451	129	25	104***	24	<.001
49 or older	367	111	24	86***	25	<.001
Difference				-18	35	.610
Total weeks attended						
48 or younger	439	4	1	3***	1	<.001
49 or older	363	3	1	3***	1	<.001
Difference				-0	1	.644
Employment Readiness Courses						
Ever attended (%)						
48 or younger	457	21	4	16***	3	<.001
49 or older	366	25	10	14***	4	<.001
Difference				-2	5	.721
Total hours attended						
48 or younger	450	19	1	18***	5	<.001
49 or older	355	33	2	31***	8	<.001
Difference				13	9	.181
Total weeks attended						
48 or younger	449	1	0	1*	0	.081
49 or older	352	2	0	1***	1	.007
Difference				1	1	.161

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.7-4: Subgroup Impacts, by Age: Educational Attainment, Earnings and Employment, and Benefits Receipt, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
48 or younger	444	45	26	19***	5	<.001
49 or older	367	50	24	26***	5	<.001
Difference				7	7	.279
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
48 or younger	575	7,371	8,191	-820	638	.199
49 or older	447	6,904	8,786	-1,882**	913	.040
Difference				-1,062	1,113	.340
Ever employed during Q5 or Q6 (%)						
48 or younger	575	75	74	1	4	.681
49 or older	447	68	71	-3	4	.451
Difference				-5	5	.400
Benefits Receipt						
Receiving any public benefits (%)						
48 or younger	437	24	18	6*	3	.089
49 or older	360	17	15	2	4	.531
Difference				-3	5	.495

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 1022 includes 536 program group and 486 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.7-5: Subgroup Impacts, by Employment Status: Program Services, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Not long-term unemployed	571	76	44	32***	4	<.001
Long-term unemployed	250	72	45	27***	6	<.001
Difference				-5	7	.508
Total hours attended						
Not long-term unemployed	557	320	143	177***	35	<.001
Long-term unemployed	239	253	96	157***	39	<.001
Difference				-20	54	.710
Total weeks attended						
Not long-term unemployed	540	16	9	6***	2	<.001
Long-term unemployed	234	13	6	7***	2	<.001
Difference				1	3	.815
Occupational Training						
Ever attended (%)						
Not long-term unemployed	570	64	38	26***	4	<.001
Long-term unemployed	250	58	34	24***	6	<.001

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				-1	8	.848
Total hours attended						
Not long-term unemployed	561	159	116	42*	24	.085
Long-term unemployed	243	133	64	68**	27	.010
Difference				26	37	.473
Total weeks attended						
Not long-term unemployed	545	11	8	2	1	.102
Long-term unemployed	238	9	5	3**	2	.047
Difference				1	2	.631
Work-Based Training						
Ever attended (%)						
Not long-term unemployed	572	22	6	16***	3	<.001
Long-term unemployed	253	20	13	7	5	.134
Difference				-8	6	.147
Total hours attended						
Not long-term unemployed	568	132	24	108***	23	<.001
Long-term unemployed	250	96	27	69***	24	.005
Difference				-39	34	.261
Total weeks attended						
Not long-term unemployed	555	4	1	3***	1	<.001
Long-term unemployed	247	3	1	2***	1	.004
Difference				-1	1	.576
Employment Readiness Courses						
Ever attended (%)						
Not long-term unemployed	571	24	6	18***	3	<.001
Long-term unemployed	252	19	8	11**	4	.014
Difference				-7	5	.183
Total hours attended						
Not long-term unemployed	559	28	2	27***	6	<.001
Long-term unemployed	246	18	1	17**	7	.012
Difference				-10	10	.305
Total weeks attended						
Not long-term unemployed	557	1	0	1**	0	.010
Long-term unemployed	244	1	0	1*	1	.066
Difference				0	1	.856

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: "Long-term unemployed" includes study members who reported being unemployed for a year or more at baseline; "not long-term unemployed" includes study members who were unemployed for less than 12 months at baseline, or were employed. All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.7-6: Subgroup Impacts, by Employment Status: Educational Attainment, Earnings and Employment, and Benefits Receipt, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Not long-term unemployed	563	48	24	24***	4	<.001
Long-term unemployed	248	45	27	18***	6	.004
Difference				-6	7	.392
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Not long-term unemployed	294	5,109	6,385	-1,276	889	.152
Long-term unemployed	728	8,019	9,301	-1,282*	662	.053
Difference				-6	1,107	.996
Ever employed during Q5 or Q6 (%)						
Not long-term unemployed	294	52	58	-6	6	.303
Long-term unemployed	728	80	78	2	3	.585
Difference				8	6	.243
Benefits Receipt						
Receiving any public benefits (%)						
Not long-term unemployed	553	17	14	3	3	.297
Long-term unemployed	244	31	23	7	5	.166
Difference				4	6	.478

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: For educational attainment and benefits receipt, measured in the 18-month follow-up survey, "long-term unemployed" includes study members who reported being unemployed for a year or more at baseline; "not long-term unemployed" includes study members who were unemployed for less than 12 months at baseline, or were employed. For employment and earnings in quarters 5 and 6, measured in the NDNH, "long-term unemployed" includes study members with zero earnings in the four quarters before randomization (treating the quarter of randomization as quarter 0); "not long-term unemployed" includes study members with positive earnings in any of the four quarters before randomization. All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 1022 includes 536 program group and 486 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.7-7: Subgroup Impacts, by Gender: Program Services, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Women	441	73	44	29***	5	<.001
Men	380	78	45	33***	5	<.001
Difference				3	7	.604
Total hours attended						
Women	427	284	141	143***	35	<.001
Men	369	320	116	203***	40	<.001
Difference				60	52	.244
Total weeks attended						
Women	413	14	9	6***	2	.002
Men	361	16	8	8***	2	<.001

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				2	3	.387
Occupational Training						
Ever attended (%)						
Women	441	60	37	23***	5	<.001
Men	379	64	36	28***	5	<.001
Difference				5	7	.491
Total hours attended						
Women	433	146	107	39	26	.126
Men	371	158	95	63**	27	.019
Difference				24	37	.518
Total weeks attended						
Women	420	10	7	2	2	.154
Men	363	11	7	3**	2	.046
Difference				1	2	.666
Work-Based Training						
Ever attended (%)						
Women	442	22	9	13***	3	<.001
Men	383	21	7	14***	4	<.001
Difference				1	5	.862
Total hours attended						
Women	438	107	29	78***	20	<.001
Men	380	137	19	117***	27	<.001
Difference				40	33	.224
Total weeks attended						
Women	429	3	1	2***	1	<.001
Men	373	4	0	4***	1	<.001
Difference				1	1	.134
Employment Readiness Courses						
Ever attended (%)						
Women	440	22	6	16***	3	<.001
Men	383	22	8	15***	4	<.001
Difference				-2	5	.731
Total hours attended						
Women	430	29	1	27***	7	<.001
Men	375	21	2	20***	6	<.001
Difference				-8	9	.402
Total weeks attended						
Women	427	2	0	1***	0	.005
Men	374	1	0	0	0	.169
Difference				-1	1	.161

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit F.7-8: Subgroup Impacts, by Gender: Educational Attainment, Earnings and Employment, and Benefits Receipt, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Women	437	47	24	22***	5	<.001
Men	374	48	26	22***	5	<.001
Difference				-1	7	.933
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Women	549	6,366	8,059	-1,693**	702	.016
Men	473	8,110	8,912	-802	827	.333
Difference				892	1,085	.411
Ever employed during Q5 or Q6 (%)						
Women	549	71	69	3	4	.499
Men	473	73	77	-4	4	.294
Difference				-7	5	.220
Benefits Receipt						
Receiving any public benefits (%)						
Women	423	27	22	5	4	.160
Men	374	14	10	3	3	.345
Difference				-2	5	.687

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 831 includes 455 program group and 376 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 1022 includes 536 program group and 486 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

For the early cohort, Exhibit F.7-9 reports differential impacts on quarterly earnings by education level through 12 quarters after random assignment.

Exhibit F.7-9: Subgroup Impacts, by Education Level: Quarterly Earnings for the Early Cohort, MTC

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Earnings for Early Cohort through Quarter 12						
Earnings in Q1 (\$)						
Less than bachelor's degree	181	1,984	1,704	280	463	.545
Bachelor's degree or more	368	2,280	3,548	-1,268**	535	.018
Difference				-1,548**	730	.034
Earnings in Q2 (\$)						
Less than bachelor's degree	181	3,093	2,517	575	622	.356
Bachelor's degree or more	368	4,139	5,781	-1,643**	733	.025
Difference				-2,218**	987	.025
Earnings in Q3 (\$)						
Less than bachelor's degree	181	3,992	4,037	-45	753	.952
Bachelor's degree or more	368	5,833	7,209	-1,376	902	.128
Difference				-1,330	1,176	.259
Earnings in Q4 (\$)						

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Less than bachelor's degree	181	4,857	4,413	445	814	.585
Bachelor's degree or more	368	6,151	7,965	-1,815**	866	.037
Difference				-2,259*	1,185	.057
Earnings in Q5 (\$)						
Less than bachelor's degree	181	5,077	4,602	475	869	.585
Bachelor's degree or more	368	6,438	8,147	-1,709*	897	.057
Difference				-2,184*	1,256	.083
Earnings in Q6 (\$)						
Less than bachelor's degree	181	6,081	5,057	1,024	934	.273
Bachelor's degree or more	368	7,308	8,483	-1,175	895	.190
Difference				-2,199*	1,296	.090
Earnings in Q7 (\$)						
Less than bachelor's degree	181	6,029	5,931	97	947	.918
Bachelor's degree or more	368	7,829	9,194	-1,366	1,019	.181
Difference				-1,463	1,383	.290
Earnings in Q8 (\$)						
Less than bachelor's degree	181	5,897	6,233	-336	995	.736
Bachelor's degree or more	368	8,030	9,850	-1,820*	1,017	.074
Difference				-1,484	1,424	.298
Earnings in Q9 (\$)						
Less than bachelor's degree	181	6,130	6,943	-812	1,059	.443
Bachelor's degree or more	368	8,022	9,715	-1,692*	985	.086
Difference				-880	1,437	.541
Earnings in Q10 (\$)						
Less than bachelor's degree	181	7,123	6,201	922	1,168	.430
Bachelor's degree or more	368	9,070	9,194	-125	964	.897
Difference				-1,047	1,509	.488
Earnings in Q11 (\$)						
Less than bachelor's degree	181	7,547	6,252	1,295	1,151	.261
Bachelor's degree or more	368	9,852	9,767	85	1,253	.946
Difference				-1,210	1,703	.478
Earnings in Q12 (\$)						
Less than bachelor's degree	181	7,762	6,470	1,292	1,193	.279
Bachelor's degree or more	368	9,256	9,397	-140	1,014	.890
Difference				-1,432	1,561	.359

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through twelve quarters after random assignment.

NOTES: All outcomes in this table are exploratory. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Appendix G. Detailed Results for Chapter 4 (STW-T and JSA)

This appendix provides additional detail for JVS's Skills to Work in Technology (STW-T) and Job Search Accelerator (JSA) programs discussed in Chapter 4 of the *Interim Impact Report*. This appendix begins, however, with a discussion of an issue that arose with some survey responses for JVS sample members and how the evaluation adjusted outcomes related to service receipt due to the issue.

As it did for all grantees included in the RTW Evaluation, the 18-month follow-up survey asked respondents about their participation in occupational training and employment readiness courses after the date of random assignment. For JVS, counter to expectations, two considerations suggest that a significant portion of the program group respondents did not identify participation in the three technical skills training courses (Business Administration Bootcamp, Digital Marketing, or Salesforce) as occupational training, or the JSA course as an employment readiness course:

- Service receipt for the program group reported in the survey was substantially lower than indicated by JVS program records. As reported in the *RTW Implementation Report* (Copson et al. 2020), 93 percent of the program group participated in any of the RTW courses (that provided occupational skills training, employment readiness activities, or both) at JVS according to their program records, while 30 percent did so according to the survey. While survey and program administrative records often do not completely align, often due to recall or definitional issues, this level of discrepancy was not observed for other grantees.
- For program group members who reported in the survey that they did not participate in occupational training or in an employment readiness course (80 percent of all program group members who responded to the survey), an open-ended follow-up question asked if they attended any other courses during the follow-up period. For those who answered yes, the survey asked for the name of the course. This question was included for program group members as there was some expectation they would participate in some type of training or employment services because they were enrolling in the JVS RTW program at the time of random assignment. Analyses of these responses show that a large majority (86 percent) of program group members who reported that they did *not* participate in occupational training or an employment readiness course specifically named Business Administration Bootcamp, Digital Marketing, Salesforce Administration, or Job Search Accelerator as a course they attended since random assignment.

Given these considerations, the evaluation creates adjusted versions of the service receipt outcomes to supplement the original outcomes as defined in Appendix D. These adjusted outcomes are constructed using the steps described below. See, also, Exhibit G-1 for more detail on how the adjusted outcomes are constructed for those program group members that reported no occupational training and employment readiness courses, and were therefore asked the open-ended follow-up question on other training attended.

Exhibit G-1: Comparison of Unadjusted and Adjusted Service-Related Outcomes for JVS Program Group Members who Initially Reported Attending No Occupational Training or Employment Readiness Courses

Outcome	Unadjusted Value	Adjusted Value	Reason for Adjustment
Any Training or Employment-Related Activity			
Ever attended any occupational training	0	1 or 0	Adjusted to 1 if respondent reported attending Business Administration Bootcamp, Digital Marketing, or Salesforce Administration in the open-ended follow-up question; 0 otherwise.
Ever attended any employment readiness course	0	1 or 0	Adjusted to 1 if respondent reported attending Job Search Accelerator in the open-ended follow-up question; 0 otherwise.
Ever attended any structured employment-related activity	<u>If no work-based training:</u> 0 <u>If any work-based training:</u> 1	1 or 0	<u>If no work-based training:</u> Adjusted to 1 if respondent reporting attending Business Administration Bootcamp, Digital Marketing, Salesforce Administration, or Job Search Accelerator in the open-ended follow-up question; 0 otherwise. <u>If any work-based training:</u> Value remains as 1.
Amount of Training or Employment-Related Activity			
Amount of occupational training:	0	Missing or 0	Adjusted to missing if respondent reported attending Business Administration Bootcamp, Digital Marketing, or Salesforce Administration in the open-ended follow-up question, because detailed follow-on questions on service receipt (e.g., dates and hours attended, completion status) were skipped; 0 otherwise.
Number of training programs attended			
Total hours attended			
Total weeks attended			
Completed at least one training program			
Number of training programs completed			
Amount of employment readiness courses:	0	Missing or 0	Adjusted to missing if respondent reported attending Job Search Accelerator in the open-ended follow-up question, because detailed follow-on questions on service receipt (e.g., dates and hours attended, completion status) were skipped; 0 otherwise.
Number of courses attended			
Total hours attended			
Total weeks attended			
Completed at least one course			
Number of courses completed			
Amount of any structured employment-related activity:	<u>If no work-based training:</u> 0	Missing or 0/ various	<u>All:</u> Adjusted to missing if respondent reported attending Business Administration Bootcamp, Digital Marketing, Salesforce Administration, or Job Search Accelerator in the open-ended follow-up question, because detailed follow-on questions on service receipt (e.g., dates and hours attended, completion status) were skipped for occupational training and/or employment readiness courses; otherwise <u>If no work-based training:</u> 0 <u>If any work-based training:</u> various (unchanged).
Number of activities attended	<u>If any work-based training:</u> various		
Total hours attended			
Total weeks attended			
Completed at least one activity			
Number of activities completed			

Outcome	Unadjusted Value	Adjusted Value	Reason for Adjustment
Other Key Outcomes			
Any occupational training in IT	0	1 or 0	Adjusted to 1 if respondent reported attending Business Administration Bootcamp, Digital Marketing, or Salesforce Administration in the open-ended follow-up question; 0 otherwise.
Occupational training certificate: Received any Number	0	Missing	Adjusted to missing if respondent reported attending Business Administration Bootcamp, Digital Marketing, or Salesforce Administration in the open-ended follow-up question, because detailed follow-on questions on credential receipt for occupational training were skipped; 0 otherwise.
Received any certificate, certification, license, or degree	<u>If no work-based training: 0</u> <u>If any work-based training: 0 or 1</u>	Missing, 0, or 1	<u>All: Adjusted to missing if respondent reported attending Business Administration Bootcamp, Digital Marketing, or Salesforce Administration in the open-ended follow-up question, because detailed follow-on questions on credential receipt for occupational training were skipped; otherwise</u> <u>If no work-based training: 0</u> <u>If any work-based training: 0 or 1 (unchanged).</u>

- The evaluation constructs adjusted measures of ever attending occupational training, ever attending an employment readiness course, and ever attending any structured employment-related activity (see top panel of Exhibit G-1). The evaluation constructs an adjusted measure of ever attending occupational training that includes information for those program group members who initially reported no occupational training, but then indicated in the open-ended question that they participated in Business Administration Bootcamp, Digital Marketing, or Salesforce Administration. Likewise, the evaluation creates an adjusted measure of ever attending an employment readiness course that includes information for program group members who initially reported they did not participate in an employment readiness course, but then indicated in the open-ended question that they participated in Job Search Accelerator. The evaluation also creates an adjusted measure of ever attending any structured employment readiness activity that includes information for both those program group members who initially reported no occupational training, but then indicated in the open-ended question that they participated in Business Administration Bootcamp, Digital Marketing, or Salesforce Administration, and those program group members who initially reported they did not participate in an employment readiness course, but then indicated in the open-ended question that they participated in Job Search Accelerator.
- Because the open-ended question on programs attended after random assignment was not asked of control group members who initially reported attending no occupational training or employment readiness courses, the evaluation cannot make the same adjustment for control group members. Thus, the reported level of participation among the control group should be considered a lower bound, and the impact estimates on adjusted measures of service receipt may somewhat overestimate the impact of the JVS RTW programs on participation in employment-related activities.
- The evaluation also creates adjusted measures of the more detailed training outcomes, such as the amount of training (see second panel of Exhibit G-1) and certificate receipt (see third panel of Exhibit

G-1). For survey respondents who initially reported no participation in occupational training or an employment readiness course, the survey administration skipped all subsequent detailed questions on service receipt for the given type of training, such as dates of activities, weekly hours attended, and certificate or credential receipt. Thus, those program group members who initially reported no training, but subsequently reported participating in a JVS program in the open-ended response, were *not asked* these follow-on questions. For that reason, the unadjusted service-related outcomes for these respondents are all zero. For these service-related outcomes, the adjusted values are set to missing instead of zero because, while one can identify that these respondents attended a particular course through the open-ended response, the evaluation has no information to identify, for instance, how much training was attended and whether the respondent received a certificate for completing the training. See the second panel of Exhibit G-1 for more detail on how adjusted outcomes on amount of training are constructed; see the third panel of Exhibit G-1 for examples of how other key service-related outcomes are constructed. All remaining outcomes labeled “adjusted” in the exhibits in this appendix or in Chapter 4 of the *Interim Impact Report* (except as noted in the next bullet), are set to missing in a similar fashion as described in the bottom two panels of Exhibit G-1. These include outcomes on the content of training, access to funding for occupational training, receipt of education-related supports, and the connection between training and subsequent employment.

- Among the detailed training-related outcomes, the one exception to the rule above is field of training. For those respondents that reported attending Business Administration Bootcamp, Digital Marketing, or Salesforce Administration in the open-ended response, the evaluation can identify that they attended training in IT. On this measure, program members who responded they attended one of the courses is counted as receiving occupational training in IT (for detail, see third panel of Exhibit G-1).

The rest of this appendix is organized by the sections of Chapter 4 in the *Interim Impact Report*. The first section provides detailed information on the enrollment and random assignment process (Section G.1.1) and the characteristics of the JVS study sample (Section G.1.2). The exhibits in the subsequent five sections (Sections G.2 through G.6) include rows for all outcomes listed in Appendix D plus adjusted versions for service-related outcomes, including those reported in the Chapter 4 exhibits, those outcomes discussed in Chapter 4 but not included in the Chapter 4 exhibits, and additional outcomes not discussed. These tables include additional detail beyond that shown in the Chapter 4 exhibits: outcome-specific sample size, *p*-value, and more significant digits.⁵³ For each of the confirmatory and secondary outcomes, Section G.7 then reports subgroup impact estimates.

G.1 Enrollment Process and Characteristics of the Study Sample

This section provides detailed information on the enrollment and random assignment process for applicants to JVS’s RTW programs (Section G.1.1), and additional detailed demographic characteristics of the study sample, including testing for baseline balance between those randomized to the program and control groups (Section G.1.2).

G.1.1 Enrollment and Random Assignment Process for JVS RTW Programs

JVS held general information sessions weekly for the range of programs it offered, but attending one was not required for potential applicants to a JVS RTW program (Exhibit G.1-1). At the session, attendees completed an online application for the particular JVS RTW program in which they were interested, or

⁵³ For all monetary outcomes, however, the appendix tables show the same number of significant digits as shown in the Chapter 4 exhibits.

they submitted an interest form online if the program's next class was far enough in the future that its application was not yet available. Interested individuals who did not attend the information session could apply or submit an interest form online.

The online application asked about the applicant's background and related experiences, and provided information about the RTW Evaluation. Applications were specific to each JVS RTW program, but collected similar information. Grant-funded staff screened each application and made a preliminary determination of the applicant's fit based on eligibility criteria, prior related experience and skills, and interest in the IT industry.

After this initial screening, the next steps were program specific:

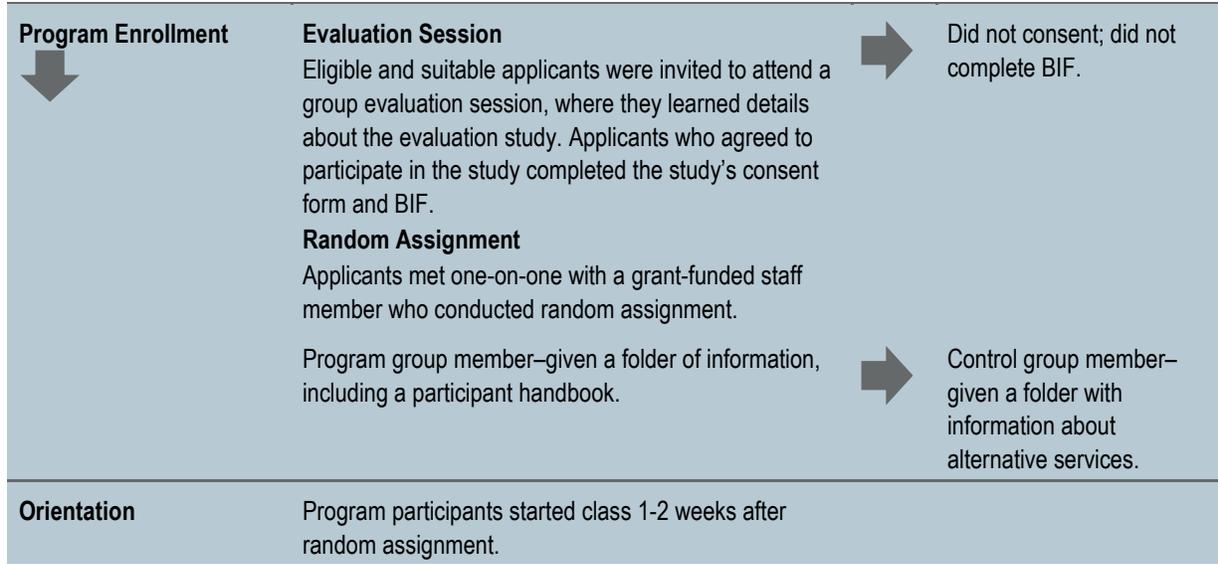
- ***Business Administration Bootcamp; Digital Marketing:*** Staff from the program conducted in-person interviews with the applicants to determine the appropriateness of the course in meeting their employment goals.
- ***Salesforce Administration:*** Applicants completed online technical assessments (which they could do from home). These assessments helped staff to gauge applicants' digital and computer literacy in such areas as Microsoft Excel, use of web browsers, and the internet. Those applicants achieving the requisite scores then recorded an online video interview in response to several pre-specified questions. This requirement allowed the applicant to demonstrate the minimum computer skills needed to attend the training.

Applicants who were a good fit for their program of interest attended a JVS RTW programs group session at JVS to learn about the evaluation. During the session, staff explained the study, reviewed the programs, and administered the informed consent form and Baseline Information Form (see Appendix Section B.2.1). Those who consented to be in the study were randomly assigned in a one-on-one setting. Program group members received a folder with information about the program, including when the class started (typically within a week or two). Control group members received a folder informing them of other trainings and services available at JVS and in the community.

Later in the grant period, JVS standardized and streamlined its enrollment process. For STW-T, JVS developed a scoring approach and used it for all three STW-T courses. First, staff conducted a phone interview with the applicant to determine his or her knowledge about the position and industry of interest (to identify applicants with definite job targets). An in-person group activity followed to gauge applicants' communication skills and ability to work in a cohort setting. Finally, during the group activity, applicants completed a technical assessment of their basic computer skills to determine whether they met the criteria for the specific course. The enrollment process for JSA included only the phone interview. For more information on this process, see Martinson et al. 2017.

Exhibit G.1-1: JVS RTW Programs Enrollment Process

<p>Recruitment</p> 	<p>Potential applicants learned about JVS RTW programs through JVS outreach efforts or from a JVS partner. They also could be referred internally if they came to JVS for other services.</p>	
<p>Information Session</p> 	<p>Potential applicants attended a group information session:</p> <ul style="list-style-type: none"> • If the program of interest was not scheduled to begin within the next month or two, applicants could attend a general JVS session and fill out an online interest form. • If the program of interest was beginning soon, applicants attended a session specific to the RTW programs, where they were directed to apply online for the upcoming class. <p>Some skipped this session and applied directly online.</p>	
<p>Online Application</p> 	<p>Applicants completed the online application specific to their program of interest. The online application collected background information, employment status, job goal, and anticipated barriers.</p> <p>Program Assistant or Program Coordinator screened each application for “fit” for the program.</p>	 Not a good fit.
<p>Assessments, Eligibility & Suitability</p> 	<p>Applicants had to meet the study criteria for unemployment status and describe a job target relevant to the program of interest.</p> <ul style="list-style-type: none"> • Business Administration Bootcamp—Needed to demonstrate interest and a relevant job target. Bachelor’s degree preferred. Eligible applicants were invited to attend an in-person interview with the Program Coordinator to assess suitability for the program. • Digital Marketing—Relevant marketing or sales background preferred. Bachelor’s degree preferred. Eligible applicants were invited to attend an in-person interview with a staff member to confirm suitability for the program. • Salesforce Administration—Needed to demonstrate related prior experience and/or background. Computer literacy required. Applicant completed four technical assessments of comfort with computers and applications. Bachelor’s degree preferred. Eligible applicants completed an online recorded interview to demonstrate their readiness for the program. 	 Not eligible. Not suitable/ready.



G.1.2 Characteristics of the Study Sample

Exhibit G.1-2 provides additional demographic information for the JVS study sample, and tests for differences in the characteristics of those members randomized to the program group versus control group. (A subset of the values reported in the “Study Sample Mean” column are reported in Exhibit 4-2 of the *Interim Impact Report*.⁵⁴) Exhibit G.1-3 reports the same information for the full sample at the time of random assignment. The *study sample* included in Exhibit G.1-2 and throughout the analysis is smaller than the *full sample* at random assignment included in Exhibit G.1-3 because the study sample excludes individuals who chose to withdraw from the study after having been randomly assigned (10 members of the control group and 2 members of the program group).

Exhibit G.1-2 includes information on quarterly earnings and employment levels for the seven quarters before random assignment for members of the study sample.⁵⁵ There is no corresponding information for the full sample (Exhibit G.1-3) because the study did not collect NDNH data for sample members who withdrew from the study.⁵⁶

⁵⁴ Values reported in the “Study Sample Mean” column and Exhibit 4-2 may vary due to rounding. Whereas Appendix Exhibit G.1-2 reports average weekly earnings among all sample members (equal to zero for those who are not employed), Exhibit 4-2 reports average weekly earnings if employed.

⁵⁵ Although for most sample members the study collected quarterly information from eight quarters before random assignment, depending on the timing of a sample member’s random assignment relative to the timing of the next quarterly submission to OCSE, for some study members data was only available for seven prior quarters. (See Appendix Section B.3 for more information on the NDNH data collection process.) Appendix Exhibit G.1-2 only includes information for those quarters for which the study has complete data for the study sample (excepting the few study members with missing NDNH data, see Appendix Section A.1.5 for more detail on missing data).

⁵⁶ The evaluation sent the first list of study sample identifiers to OCSE in March 2016, approximately eight months after the start of random assignment (see Appendix Section B.3 for more detail on how the NDNH data are collected). In that submission the evaluation only included sample members who remained in the study at that point, and therefore did not include those who had already withdrawn from the evaluation. Thus the study never collected NDNH data for the full sample at random assignment.

Exhibit G.1-2: Baseline Balance Testing – Study Sample, STW-T and JSA

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Gender (%)				
Women	63.0	64.2	61.9	2.3
Men	37.0	35.8	38.1	-2.3
Race (%)				
Asian	24.0	24.5	23.5	1.0
Black or African American	11.5	12.3	10.7	1.6
White	52.8	51.6	53.9	-2.3
American Indian or Alaska Native	0.5	0.6	0.4	0.2
Native Hawaiian or Other Pacific Islander	0.7	0.8	0.6	0.2
Other or multiple races	10.5	10.1	10.9	-0.8
Hispanic ethnicity (%)	10.6	10.2	11.0	-0.8
Speaks language other than English at home (%)	38.6	39.4	37.9	1.5
Age (%)				
24 years or younger	2.6	1.8	3.5	-1.7
25 to 34 years	22.7	25.3	20.0	5.3*
35 to 44 years	23.1	22.5	23.6	-1.1
45 to 54 years	29.3	29.9	28.7	1.2
55 years or older	22.4	20.5	24.2	-3.7
Average age (years)	44.2	43.6	44.7	-1.1
Marital status (%)				
Married	39.6	41.1	38.1	3.0
Widowed/divorced/separated	15.3	13.9	16.8	-2.9
Never married	39.1	38.2	40.0	-1.8
Living with a partner	6.0	6.7	5.2	1.5
Other employed adult in household (%)	56.8	56.7	56.8	-0.1
One or more own children in household age 6 or younger (%)	10.5	11.1	9.9	1.2
Education level (%)				
High school diploma or less	3.7	3.2	4.1	-0.9
Some college credit but no degree	10.0	9.7	10.3	-0.6
Technical or associate's degree	6.8	5.8	7.8	-2.0
Bachelor's degree	49.4	50.1	48.7	1.4
Master's degree or more	30.1	31.2	29.1	2.1
Employment status (%)				
Currently employed	19.4	18.1	20.7	-2.6
Currently unemployed, but employed in last 12 months	46.6	47.6	45.7	1.9
Currently unemployed, and longer than 12 months since last employed	34.0	34.3	33.7	0.6
Weekly earnings (\$, equal to 0 if not employed)	75.2	64.8	85.8	-21.0
Minimum wage willing to accept (\$)	\$26.91	\$26.62	\$27.21	-\$0.59
Receiving any public benefits (%)	23.5	25.6	21.3	4.3
Receiving Supplemental Nutrition Assistance Program (SNAP)	9.2	10.2	8.1	2.1
Receiving Temporary Assistance for Needy Families (TANF)	1.2	1.2	1.2	0.0
Receiving Section 8 or Public Housing assistance	3.3	2.7	3.9	-1.2
Receiving Unemployment Insurance (UI)	15.2	16.5	13.8	2.7
Any barriers to employment (health/childcare/transportation limitations, %)	9.1	9.6	8.6	1.0
Health problem or disability limits ability to work	6.9	7.6	6.2	1.4
Ability to work is very limited by lack of access to affordable quality childcare	1.6	1.4	1.9	-0.5
Ability to work is very limited by problems with transportation	2.2	2.3	2.1	0.2
Felony conviction (%)	1.7	1.6	1.9	-0.3

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.6	6.3	6.9	-0.6
Strongly disagree: "I want only the kind of job that I trained for"	7.6	9.3	5.8	3.5*
Strongly agree: "I am willing to work part-time if no full-time offer is available"	37.6	35.8	39.5	-3.7
Strongly agree: "I am willing to work unusual or unpredictable schedules"	18.1	19.5	16.6	2.9
Willingness to work summary measure (one or more of four above statements hold) (%)	43.0	42.6	43.5	-0.9
Earnings Before Random Assignment (RA):				
Q7 pre-RA (\$)	6,516	6,115	6,932	-818
Q6 pre-RA (\$)	7,073	6,633	7,5278	-894
Q5 pre-RA (\$)	6,322	6,248	6,398	-150
Q4 pre-RA (\$)	6,598	6,259	6,948	-689
Q3 pre-RA (\$)	5,896	5,815	5,979	-164
Q2 pre-RA (\$)	4,797	4,905	4,686	219
Q1 pre-RA (\$)	3,507	3,441	3,575	-133
Employment Before Random Assignment (RA):				
Q7 pre-RA (%)	49.6	49.3	50.0	-0.7
Q6 pre-RA (%)	50.9	49.5	52.3	-2.8
Q5 pre-RA (%)	48.0	47.3	48.7	-1.4
Q4 pre-RA (%)	46.6	46.6	46.6	0.0
Q3 pre-RA (%)	44.4	45.8	42.8	3.0
Q2 pre-RA (%)	42.5	42.0	43.0	-1.0
Q1 pre-RA (%)	36.7	37.1	36.3	0.8

SOURCE: Baseline Information Form (BIF) and National Directory of New Hires (NDNH).

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. For pre-random assignment earnings and employment, measured in the NDNH, sample size of 965 includes 491 program group and 474 control group members. For all other outcomes, measured in the BIF, sample size of 993 includes 502 program group and 491 control group members. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

Exhibit G.1-3: Baseline Balance Testing – Full Sample at Random Assignment, STW-T and JSA

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Gender (%)				
Women	63.0	63.9	62.1	1.8
Men	37.0	36.1	37.9	-1.8
Race (%)				
Asian	23.9	24.4	23.4	1.0
Black or African American	11.3	12.2	10.5	1.7
White	52.9	51.8	54.0	-2.2
American Indian or Alaska Native	0.5	0.6	0.4	0.2
Native Hawaiian or Other Pacific Islander	0.7	0.8	0.6	0.2
Other or multiple races	10.6	10.1	11.1	-1.0
Hispanic ethnicity (%)	10.7	10.2	11.2	-1.0
Speaks language other than English at home (%)	38.6	39.4	37.9	1.5
Age (%)				
24 years or younger	2.6	1.8	3.4	-1.6
25 to 34 years	22.7	25.2	20.2	5.0
35 to 44 years	23.1	22.6	23.6	-1.0

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
45 to 54 years	29.2	29.8	28.5	1.3
55 years or older	22.5	20.6	24.4	-3.8
Average age (years)	44.2	43.6	44.7	-1.1
Marital status (%)				
Married	39.8	41.1	38.5	2.6
Widowed/divorced/separated	15.2	13.8	16.6	-2.8
Never married	39.0	38.3	39.8	-1.5
Living with a partner	5.9	6.7	5.1	1.6
Other employed adult in household (%)	56.8	56.7	56.8	-0.1
One or more own children in household age 6 or younger (%)	10.5	11.1	9.9	1.2
Education level (%)				
High school diploma or less	3.6	3.2	4.0	-0.8
Some college credit but no degree	9.9	9.6	10.1	-0.5
Technical or associate's degree	6.8	5.8	7.9	-2.1
Bachelor's degree	49.5	50.3	48.7	1.6
Master's degree or more	30.2	31.1	29.3	1.8
Employment status (%)				
Currently employed	19.4	18.3	20.4	-2.1
Currently unemployed, but employed in last 12 months	46.3	47.4	45.1	2.3
Currently unemployed, and longer than 12 months since last employed	34.4	34.3	34.4	-0.1
Weekly earnings (\$, equal to 0 if not employed)	75.0	65.8	84.3	-18.5
Minimum wage willing to accept (\$)	\$26.91	\$26.67	\$27.17	-\$0.50
Receiving any public benefits (%)	23.3	25.5	21.1	4.4
Receiving Supplemental Nutrition Assistance Program (SNAP)	9.1	10.2	7.9	2.3
Receiving Temporary Assistance for Needy Families (TANF)	1.2	1.2	1.2	0.0
Receiving Section 8 or Public Housing assistance	3.2	2.6	3.8	-1.2
Receiving Unemployment Insurance (UI)	15.1	16.5	13.8	2.7
Any barriers to employment (health/childcare/transportation limitations, %)	9.0	9.6	8.4	1.2
Health problem or disability limits ability to work	6.8	7.6	6.1	1.5
Ability to work is very limited by lack of access to affordable quality childcare	1.6	1.4	1.8	-0.4
Ability to work is very limited by problems with transportation	2.2	2.3	2.1	0.2
Felony conviction (%)	1.7	1.6	1.8	-0.2
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.7	6.5	7.0	-0.5
Strongly disagree: "I want only the kind of job that I trained for"	7.6	9.3	5.9	3.4*
Strongly agree: "I am willing to work part-time if no full-time offer is available"	37.4	35.8	39.1	-3.3
Strongly agree: "I am willing to work unusual or unpredictable schedules"	17.9	19.6	16.3	3.3
Willingness to work summary measure (one or more of four above statements hold) (%)	43.0	42.6	43.5	-0.9

SOURCE: Baseline Information Form.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 1,005 includes 504 program group and 501 control group members. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

Exhibit G.1-4 compares the characteristics of the “early cohort” for the JVS study sample (those randomly assigned by March 31, 2017) to the characteristics of the “late cohort” (those randomly assigned after March 31, 2017).

Exhibit G.1-4: Comparison of Early Cohort versus Late Cohort, STW-T and JSA

Baseline Characteristic	Study Sample Mean	Early Cohort Mean	Late Cohort Mean	Difference
Gender (%)				
Women	63.0	63.2	62.9	0.3
Men	37.0	36.8	37.1	-0.3
Race (%)				
Asian	24.0	20.9	27.0	-6.1*
Black or African American	11.5	10.3	12.6	-2.3
White	52.8	56.3	49.4	6.9*
American Indian or Alaska Native	0.5	0.4	0.6	-0.2
Native Hawaiian or Other Pacific Islander	0.7	1.1	0.4	0.7
Other or multiple races	10.5	11.0	10.0	1.0
Hispanic ethnicity (%)	10.6	10.3	10.9	-0.6
Speaks language other than English at home (%)	38.6	37.0	40.2	-3.2
Age (%)				
24 years or younger	2.6	2.1	3.1	-1.0
25 to 34 years	22.7	19.0	26.1	-7.1*
35 to 44 years	23.1	23.6	22.6	1.0
45 to 54 years	29.3	29.2	29.4	-0.2
55 years or older	22.4	26.1	18.9	7.2*
Average age (years)	44.2	45.5	43.0	2.5*
Marital status (%)				
Married	39.6	40.0	39.2	0.8
Widowed/divorced/separated	15.3	14.9	15.8	-0.9
Never married	39.1	38.4	39.8	-1.4
Living with a partner	6.0	6.7	5.3	1.4
Other employed adult in household (%)	56.8	57.0	56.5	0.5
One or more own children in household age 6 or younger (%)	10.5	9.1	11.7	-2.6
Education level (%)				
High school diploma or less	3.7	2.7	4.5	-1.8
Some college credit but no degree	10.0	10.5	9.5	1.0
Technical or associate’s degree	6.8	5.3	8.3	-3.0
Bachelor’s degree	49.4	51.9	47.0	4.9
Master’s degree or more	30.1	29.6	30.6	-1.0
Employment status (%)				
Currently employed	19.4	21.5	17.4	4.1
Currently unemployed, but employed in last 12 months	46.6	43.8	49.3	-5.5
Currently unemployed, and longer than 12 months since last employed	34.0	34.7	33.3	1.4
Weekly earnings (\$, equal to 0 if not employed)	75.2	85.5	65.6	19.9
Minimum wage willing to accept (\$/hour)	\$26.91	\$26.89	\$26.93	-\$0.04
Receiving any public benefits (%)	23.5	22.0	24.9	-2.9
Receiving Supplemental Nutrition Assistance Program (SNAP)	9.2	8.1	10.2	-2.1
Receiving Temporary Assistance for Needy Families (TANF)	1.2	0.8	1.6	-0.8
Receiving Section 8 or Public Housing assistance	3.3	2.7	3.8	-1.1
Receiving Unemployment Insurance (UI)	15.2	13.9	16.4	-2.5
Any barriers to employment (health/childcare/transportation limitations, %)	9.1	9.8	8.5	1.3

Baseline Characteristic	Study Sample Mean	Early Cohort Mean	Late Cohort Mean	Difference
Health problem or disability limits ability to work	6.9	7.8	6.1	1.7
Ability to work is very limited by lack of access to affordable quality childcare	1.6	1.3	2.0	-0.7
Ability to work is very limited by problems with transportation	2.2	2.4	2.0	0.4
Felony conviction (%)	1.7	1.9	1.6	0.3
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.6	8.1	5.2	2.9
Strongly disagree: "I want only the kind of job that I trained for"	7.6	6.7	8.5	-1.8
Strongly agree: "I am willing to work part-time if no full-time offer is available"	37.6	36.3	38.8	-2.5
Strongly agree: "I am willing to work unusual or unpredictable schedules"	18.1	15.8	20.2	-4.4
Willingness to work summary measure (one or more of four above statements hold) (%)	43.0	40.9	45.0	-4.1

SOURCE: Baseline Information Form.

NOTES: Reported difference may not equal the difference between the early cohort mean and late cohort mean because of rounding. Sample size of 993 includes 479 study members in the early cohort and 514 in the late cohort. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

G.2 Impacts on Participation in Employment-Related Activities

Exhibits G.2-1 through G.2-4 provide detailed results corresponding to Exhibits 4-3 and 4-4 in the *Interim Impact Report*. Exhibit G.2-1 reports impacts on any structured employment-related activities. Exhibit G.2-2 reports impacts on occupational training, including separately by college-based and non-college-based occupational training. Exhibit G.2-3 reports impacts on work-based training, including separately for unpaid internships, paid internships, and on-the-job training (OJT). Exhibit G.2-4 reports impacts on employment readiness courses.⁵⁷

Exhibit G.2-1: Impacts on Any Employment-Related Activity, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Structured Employment-Related Activity								
Ever attended (%)	29.6	16.3	13.3***	2.9	<.001	81	408	380
Ever attended (% , adjusted)	89.5	16.3	73.2***	2.4	<.001	448	409	380
Number of activities attended	0.5	0.2	0.3***	0.1	<.001	124	408	379
Number of activities attended (adjusted)	1.1	0.2	0.9***	0.0	<.001	427	409	380
Total hours attended	128.2	62.4	65.8***	19.9	.001	105	407	378
Total hours attended (adjusted)	319.3	62.4	256.9***	39.1	<.001	412	143	378
<i>Total hours, for attendees</i>	457.5	395.1	62.3	75.3	.409	16	123	60
Total weeks attended	6.1	3.6	2.5***	1.0	.010	69	397	370
Total weeks attended (adjusted)	16.4	3.6	12.8***	1.8	<.001	354	141	370

⁵⁷ Although for the other three grantee programs the evaluation plots total weeks of any structured employment related activity, as well as weeks of occupational training, work-based training, and employment readiness courses, the evaluation does not do so for the JVS RTW programs because of the survey response issue among the majority of program group members. As described in greater detail above, the outcomes on weeks of any structured employment related activity, occupational training, and employment readiness courses are missing for these program group members.

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
<i>Total weeks, for attendees</i>	23.3	25.8	-2.5	3.7	.503	-10	113	52
<i>Hours per week, for attendees</i>	23.7	14.4	9.3***	1.8	<.001	65	113	52
Completed at least one activity (%)	26.3	10.8	15.5***	2.7	<.001	144	407	377
Completed at least one activity (% adjusted)	65.2	10.8	54.4***	4.1	<.001	504	165	377
Number of activities completed	0.4	0.1	0.3***	0.0	<.001	178	407	377
Number of activities completed (adjusted)	1.0	0.1	0.9***	0.1	<.001	589	165	377
Any occupational or work-based training in:								
Information technology (%)	16.9	7.4	9.5***	2.2	<.001	128	406	378
Information technology (% adjusted)	60.4	7.4	53.0***	2.6	<.001	715	406	378

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Results marked "adjusted" reflect the inclusion of information collected during the 18-month survey interview as text responses of training types attended, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked "adjusted" are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.2-2: Impacts on Occupational Training, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Occupational Training								
Ever attended (%)	17.7	14.1	3.6	2.6	.163	26	409	382
Ever attended (% adjusted)	64.4	14.1	50.3***	2.8	<.001	356	409	382
Number of training programs attended	0.2	0.1	0.1**	0.0	.042	44	409	382
Number of training programs attended (adjusted)	0.7	0.1	0.5***	0.0	<.001	359	409	382
Total hours attended	84.2	45.9	38.3**	15.5	.014	83	408	381
Total hours attended (adjusted)	176.2	45.9	130.3***	25.5	<.001	284	218	381
<i>Total hours, for attendees</i>	477.7	331.8	145.9**	68.9	.036	44	74	53
Total weeks attended	4.2	3.0	1.2	0.9	.171	39	406	373
Total weeks attended (adjusted)	8.7	3.0	5.7***	1.4	<.001	190	216	373
<i>Total weeks, for attendees</i>	24.6	25.1	-0.5	4.3	.914	-2	72	45
<i>Hours per week, for attendees</i>	23.0	13.0	10.0***	1.8	<.001	77	72	45
Completed at least one training program (%)	15.4	9.1	6.3***	2.3	.007	69	408	381
Completed at least one training program (% adjusted)	32.2	9.1	23.2***	3.4	<.001	255	218	381
Number of training programs completed	0.2	0.1	0.1***	0.0	.006	73	408	381
Number of training programs completed (adjusted)	0.3	0.1	0.2***	0.0	<.001	261	218	381
Any occupational training in:								
Information technology (%)	12.3	6.5	5.8***	2.0	.004	89	406	381
Information technology (% adjusted)	59.2	6.5	52.7***	2.6	<.001	809	406	381

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
College-Based Occupational Training								
Ever attended (%)	3.4	4.7	-1.3	1.5	.368	-28	411	382
Ever attended (% , adjusted)	3.6	4.7	-1.1	1.5	.459	-23	411	382
Number of training programs attended	0.0	0.0	-0.0	0.0	.510	-22	411	382
Number of training programs attended (adjusted)	0.0	0.0	-0.0	0.0	.610	-17	411	382
Total hours attended	21.9	19.4	2.5	9.9	.799	13	410	381
Total hours attended (adjusted)	22.0	19.4	2.6	10.0	.794	13	409	381
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	13	16
Total weeks attended	1.7	1.3	0.4	0.7	.548	32	409	377
Total weeks attended (adjusted)	1.7	1.3	0.4	0.7	.545	32	408	377
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	12	12
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	12	12
Completed at least one training program (%)	1.7	1.7	-0.1	1.0	.951	-4	410	381
Completed at least one training program (% , adjusted)	1.7	1.7	-0.1	1.0	.954	-3	409	381
Number of training programs completed	0.0	0.0	-0.0	0.0	.951	-4	410	381
Number of training programs completed (adjusted)	0.0	0.0	-0.0	0.0	.954	-3	409	381
Any occupational training in:								
Information technology (%)	1.1	1.1	0.0	0.7	.960	3	410	381
Information technology (% , adjusted)	1.1	1.1	0.0	0.7	.959	4	409	381
Non-College-Based Occupational Training								
Ever attended (%)	15.3	9.4	5.9***	2.3	.010	63	409	382
Ever attended (% , adjusted)	61.8	9.4	52.4***	2.6	<.001	559	409	382
Number of training programs attended	0.2	0.1	0.1***	0.0	.007	74	409	382
Number of training programs attended (adjusted)	0.6	0.1	0.5***	0.0	<.001	536	409	382
Total hours attended	61.9	26.5	35.4***	11.3	.002	134	409	382
Total hours attended (adjusted)	126.7	26.5	100.2***	17.9	<.001	379	220	382
<i>Total hours, for attendees</i>	430.5	282.3	148.1**	58.5	.013	52	65	37
Total weeks attended	2.6	1.7	0.8	0.5	.124	49	408	378
Total weeks attended (adjusted)	5.2	1.7	3.5***	0.8	<.001	202	219	378
<i>Total weeks, for attendees</i>	15.7	20.4	-4.7	3.8	.219	-23	64	33
<i>Hours per week, for attendees</i>	26.7	14.2	12.5***	1.9	<.001	88	64	33
Completed at least one training program (%)	13.9	7.3	6.6***	2.1	.002	90	409	382
Completed at least one training program (% , adjusted)	29.0	7.3	21.7***	3.2	<.001	296	220	382
Number of training programs completed	0.1	0.1	0.1***	0.0	.003	90	409	382
Number of training programs completed (adjusted)	0.3	0.1	0.2***	0.0	<.001	292	220	382
Any training offered:								
Realistic work settings (%)	14.2	3.8	10.3***	2.0	<.001	269	408	375
Realistic work settings (% , adjusted)	29.4	3.8	25.6***	3.2	<.001	666	219	375
Trips to potential employers (%)	6.3	0.8	5.6***	1.3	<.001	734	407	381
Trips to potential employers (% , adjusted)	13.1	0.8	12.4***	2.3	<.001	1627	218	381

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any occupational training in:								
Information technology (%)	11.4	5.4	5.9***	1.9	.002	110	407	382
Information technology (% adjusted)	58.1	5.4	52.6***	2.5	<.001	971	407	382

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Non-experimental results are not reported (NR) when 15 or fewer survey respondents of either the program or control group attended any training. Results marked “adjusted” reflect the inclusion of information collected during the 18-month survey interview as text responses of training types attended, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked “adjusted” are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. “Relative impact” represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.2-3: Impacts on Work-Based Training, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Work-Based Training								
Ever attended (%)	11.6	2.3	9.4***	1.7	<.001	417	409	381
Number of work-based trainings	0.1	0.0	0.1***	0.0	<.001	611	409	379
Total hours attended	30.6	14.0	16.6*	8.7	.058	119	408	379
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	48	6
Total weeks attended	1.0	0.5	0.6*	0.3	.061	113	399	379
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	39	6
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	39	6
Completed at least one work-based training (%)	11.1	1.1	10.0***	1.6	<.001	893	409	379
Number of work-based trainings completed	0.1	0.0	0.1***	0.0	<.001	930	409	379
Any work-based training in:								
Information technology (%)	8.5	1.5	7.0***	1.5	<.001	481	408	379
Unpaid Internship								
Ever attended (%)	1.1	1.2	-0.0	0.8	.956	-4	409	381
Number of unpaid internships	0.0	0.0	0.0	0.0	.532	58	409	380
Total hours attended	2.3	2.6	-0.3	1.8	.889	-10	409	380
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	5	3
Total weeks attended	0.1	0.1	0.0	0.1	.900	10	409	380
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	5	3
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	5	3
Completed at least one unpaid internship (%)	1.2	0.6	0.5	0.7	.405	90	409	380
Number of unpaid internships completed	0.0	0.0	0.0	0.0	.315	124	409	380
Any unpaid internship in:								
Information technology (%)	0.7	0.6	0.1	0.6	.875	15	409	380
Paid Internship								
Ever attended (%)	9.9	1.1	8.9***	1.5	<.001	831	408	381
Number of paid internships	0.1	0.0	0.1***	0.0	<.001	1084	408	380
Total hours attended	27.3	11.3	15.9*	8.5	.062	140	407	380

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	40	3
Total weeks attended	0.9	0.4	0.5*	0.3	.087	125	398	380
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	31	3
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	31	3
Completed at least one paid internship (%)	9.6	0.5	9.1***	1.5	<.001	1797	408	380
Number of paid internships completed	0.1	0.0	0.1***	0.0	<.001	1797	408	380
Any paid internship in:								
Information technology (%)	8.0	0.8	7.1***	1.4	<.001	849	408	380
On-the-Job Training (OJT)								
Ever attended (%)	0.9	0.0	0.9**	0.4	.045		405	380
Number of OJTs	0.0	0.0	0.0**	0.0	.045		405	380
Total hours attended	1.2	0.0	1.2	0.9	.167		405	380
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	4	0
Total weeks attended	0.1	0.0	0.1	0.0	.105		405	380
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	4	0
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	4	0
Completed at least one OJT (%)	0.6	0.0	0.6*	0.4	.084		405	380
Number of OJTs completed	0.0	0.0	0.0*	0.0	.084		405	380
Any OJT in:								
Information technology (%)	0.0	0.0	0.0	0.0			405	380

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any work-based training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Non-experimental results are not reported (NR) when 15 or fewer survey respondents of either the program or control group attended any training. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.2-4: Impacts on Employment Readiness Courses, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Readiness Courses								
Ever attended (%)	9.5	3.1	6.4***	1.7	<.001	208	408	380
Ever attended (% , adjusted)	28.4	3.1	25.3***	2.3	<.001	821	408	380
Number attended	0.2	0.1	0.1***	0.0	.002	200	408	380
Number attended (adjusted)	0.3	0.1	0.3***	0.0	<.001	572	408	380
Total hours attended	12.9	2.4	10.5***	3.0	<.001	428	406	377
Total hours attended (adjusted)	16.1	2.4	13.6***	3.7	<.001	556	330	377
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	37	9
Total weeks attended	0.8	0.3	0.6***	0.2	.006	231	406	377
Total weeks attended (adjusted)	1.0	0.3	0.8***	0.2	.002	303	330	377
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	37	9
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	37	9
Completed at least one activity (%)	8.4	2.1	6.3***	1.5	<.001	298	407	378
Completed at least one activity (% , adjusted)	11.1	2.1	9.0***	2.0	<.001	429	331	378

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Number of activities completed	0.1	0.0	0.1***	0.0	.002	222	407	378
Number of activities completed (adjusted)	0.2	0.0	0.1***	0.0	<.001	335	331	378

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Non-experimental results are not reported (NR) when 15 or fewer survey respondents of either the program or control group attended any training. Results marked “adjusted” reflect the inclusion of information collected during the 18-month survey interview as text responses of training types attended, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked “adjusted” are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. “Relative impact” represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibits G.2-5 through G.2-8 report impacts on monthly attendance in program activities for the first 18 months after random assignment, discussed but not shown in Section 4.2 of the *Interim Impact Report*. Exhibit G.2-5 reports impacts on monthly attendance in any structured employment-related activities through 18 months after random assignment. Exhibit G.2-6 reports impacts on monthly attendance in occupational training. Exhibit G.2-7 reports impacts on monthly attendance in work-based training. Exhibit G.2-8 reports impacts on monthly attendance in an employment readiness course.

Exhibit G.2-5: Monthly Attendance in Any Structured Employment-Related Activity, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Structured Employment-Related Activity								
Ever attended any structured employment-related activities in the given month since random assignment:								
Month 1 (%)	17.0	2.4	14.6***	2.1	<.001	617	385	353
Month 2 (%)	17.0	3.5	13.5***	2.1	<.001	387	385	353
Month 3 (%)	16.6	4.3	12.3***	2.2	<.001	284	385	353
Month 4 (%)	15.7	4.6	11.2***	2.1	<.001	244	385	353
Month 5 (%)	12.7	4.9	7.8***	2.0	<.001	159	385	353
Month 6 (%)	11.0	4.4	6.6***	1.9	<.001	151	385	353
Month 7 (%)	9.7	4.3	5.4***	1.8	.003	124	385	353
Month 8 (%)	7.5	4.0	3.5**	1.7	.035	88	385	353
Month 9 (%)	6.7	3.7	3.0*	1.6	.062	80	385	353
Month 10 (%)	5.7	4.5	1.2	1.6	.451	27	385	353
Month 11 (%)	5.2	3.7	1.5	1.5	.329	41	385	353
Month 12 (%)	4.4	3.4	1.0	1.4	.508	28	385	353
Month 13 (%)	4.2	3.1	1.1	1.4	.439	35	385	353
Month 14 (%)	4.0	2.5	1.4	1.3	.286	56	385	353
Month 15 (%)	4.2	3.1	1.1	1.4	.430	36	385	353
Month 16 (%)	4.0	3.1	0.9	1.4	.514	29	385	353
Month 17 (%)	3.5	3.7	-0.1	1.4	.932	-3	385	353
Month 18 (%)	3.3	4.2	-0.9	1.4	.495	-22	385	353

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. “Relative impact” represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.2-6: Monthly Attendance in Occupational Training, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Occupational Training								
Ever attended occupational training in the given month since random assignment:								
Month 1 (%)	11.6	1.7	9.8***	1.7	<.001	567	398	360
Month 2 (%)	12.7	2.5	10.2***	1.8	<.001	406	398	360
Month 3 (%)	12.9	3.3	9.6***	1.9	<.001	289	398	360
Month 4 (%)	11.1	4.1	7.0***	1.9	<.001	171	398	360
Month 5 (%)	7.5	4.4	3.1*	1.7	.072	70	398	360
Month 6 (%)	3.9	4.1	-0.2	1.4	.900	-4	398	360
Month 7 (%)	4.1	3.8	0.3	1.4	.826	8	398	360
Month 8 (%)	3.6	3.8	-0.2	1.4	.861	-6	398	360
Month 9 (%)	3.3	3.8	-0.5	1.3	.711	-13	398	360
Month 10 (%)	3.0	4.9	-1.9	1.4	.191	-38	398	360
Month 11 (%)	2.8	3.8	-1.1	1.3	.428	-27	398	360
Month 12 (%)	2.6	3.6	-1.0	1.3	.438	-28	398	360
Month 13 (%)	2.8	3.3	-0.5	1.3	.710	-14	398	360
Month 14 (%)	3.0	2.7	0.3	1.2	.807	11	398	360
Month 15 (%)	3.0	3.3	-0.2	1.3	.848	-7	398	360
Month 16 (%)	2.9	3.3	-0.4	1.3	.731	-13	398	360
Month 17 (%)	2.5	3.6	-1.1	1.3	.369	-31	398	360
Month 18 (%)	2.3	4.2	-1.8	1.3	.154	-44	398	360

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.2-7: Monthly Attendance in Work-Based Training, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Work-Based Training								
Ever attended work-based training in the given month since random assignment:								
Month 1 (%)	0.0	0.0	0.0	0.0			399	379
Month 2 (%)	0.2	0.2	-0.1	0.3	.867	-23	399	379
Month 3 (%)	1.2	0.2	0.9	0.6	.117	385	399	379
Month 4 (%)	3.0	0.6	2.4**	0.9	.012	410	399	379
Month 5 (%)	4.4	0.6	3.8***	1.1	<.001	623	399	379
Month 6 (%)	6.3	0.8	5.5***	1.3	<.001	653	399	379
Month 7 (%)	5.2	1.1	4.0***	1.2	<.001	361	399	379
Month 8 (%)	3.1	0.8	2.3**	1.0	.015	297	399	379
Month 9 (%)	2.3	0.8	1.6*	0.9	.069	198	399	379
Month 10 (%)	1.7	1.1	0.6	0.8	.463	54	399	379
Month 11 (%)	1.4	0.8	0.6	0.8	.447	68	399	379
Month 12 (%)	0.9	0.8	0.0	0.7	.940	6	399	379
Month 13 (%)	0.7	0.8	-0.1	0.6	.836	-16	399	379
Month 14 (%)	0.7	0.8	-0.1	0.6	.836	-16	399	379
Month 15 (%)	0.5	0.8	-0.3	0.6	.593	-39	399	379
Month 16 (%)	0.3	0.8	-0.5	0.6	.343	-64	399	379
Month 17 (%)	0.3	0.6	-0.2	0.5	.620	-43	399	379
Month 18 (%)	0.2	0.6	-0.3	0.4	.467	-57	399	379

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
---------	--------------------	--------------------	---------------------	----------------	---------	---------------------	---------------------	---------------------

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.2-8: Monthly Attendance in Employment Readiness Courses, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Readiness Courses								
Ever attended an employment readiness course in the given month since random assignment:								
Month 1 (%)	6.9	1.1	5.8***	1.4	<.001	551	405	375
Month 2 (%)	5.7	1.1	4.6***	1.3	<.001	401	405	375
Month 3 (%)	4.2	1.1	3.1***	1.1	.006	269	405	375
Month 4 (%)	3.5	0.9	2.6**	1.0	.011	296	405	375
Month 5 (%)	2.8	1.1	1.7*	1.0	.081	148	405	375
Month 6 (%)	1.7	0.6	1.1	0.7	.125	186	405	375
Month 7 (%)	1.5	0.8	0.7	0.7	.366	78	405	375
Month 8 (%)	1.5	0.8	0.7	0.7	.361	80	405	375
Month 9 (%)	2.0	0.6	1.4*	0.8	.074	232	405	375
Month 10 (%)	1.7	0.3	1.4**	0.7	.039	549	405	375
Month 11 (%)	1.2	0.3	1.0	0.6	.114	370	405	375
Month 12 (%)	1.0	0.3	0.7	0.5	.203	268	405	375
Month 13 (%)	1.0	0.3	0.7	0.5	.203	268	405	375
Month 14 (%)	0.7	0.3	0.4	0.5	.360	172	405	375
Month 15 (%)	1.0	0.0	1.0**	0.5	.046		405	375
Month 16 (%)	1.2	0.0	1.2**	0.5	.026		405	375
Month 17 (%)	0.9	0.2	0.7	0.5	.207	294	405	375
Month 18 (%)	0.6	0.2	0.4	0.5	.381	177	405	375

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.2-9 provides detailed results corresponding to Exhibit 4-6 in the *Interim Impact Report*.

Exhibit G.2-9: Receipt of Job Search Assistance, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Type of Job Search Assistance Provided								
Career counseling								
Any (%)	21.0	7.4	13.5***	2.4	<.001	182	408	378
Number of times	0.9	0.2	0.7***	0.2	<.001	448	406	378
Number of times (adjusted)	2.5	0.2	2.3***	0.4	<.001	1455	143	378
Job placement assistance								
Any (%)	18.5	6.5	12.0***	2.3	<.001	185	408	375

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Number of times	0.7	0.2	0.5***	0.1	<.001	295	406	375
Number of times (adjusted)	2.0	0.2	1.8***	0.3	<.001	1010	143	375
Job readiness training								
Any (%)	24.5	7.0	17.4***	2.5	<.001	248	408	378
Number of times	1.8	0.1	1.8***	0.3	<.001	1790	406	378
Number of times (adjusted)	5.3	0.1	5.2***	0.7	<.001	5294	143	378
Topics Addressed in Program								
Career planning (%)								
A great deal of attention	16.6	1.1	15.5***	1.9	<.001	1376	403	380
A great deal of attention (adjusted)	33.8	1.1	32.6***	3.7	<.001	2903	169	380
At least some attention	48.4	4.5	43.9***	2.6	<.001	974	403	380
At least some attention (adjusted)	57.4	4.5	52.9***	4.0	<.001	1174	169	380
Finding a job (%)								
A great deal of attention	15.1	1.0	14.0***	1.8	<.001	1388	406	380
A great deal of attention (adjusted)	32.6	1.0	31.5***	3.6	<.001	3116	172	380
At least some attention	57.8	2.8	54.9***	2.6	<.001	1961	406	380
At least some attention (adjusted)	57.5	2.8	54.7***	3.9	<.001	1953	172	380

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Results marked “adjusted” reflect the inclusion of information collected during the 18-month survey interview as text responses of training types attended, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked “adjusted” are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. “Relative impact” represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.2-10 presents impacts on receipt of assistance with workplace behaviors and soft skills (discussed but not shown in Section 4.2 of the *Interim Impact Report*).

Exhibit G.2-10: Receipt of Assistance with Workplace Behaviors and Soft Skills, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Workplace Behaviors								
Critical thinking (%)								
A great deal of attention	10.8	1.6	9.2***	1.7	<.001	557	403	380
A great deal of attention (adjusted)	23.2	1.6	21.5***	3.3	<.001	1311	170	380
At least some attention	25.6	4.0	21.6***	2.4	<.001	536	403	380
At least some attention (adjusted)	45.3	4.0	41.3***	4.1	<.001	1024	170	380
Working in groups (%)								
A great deal of attention	15.4	1.0	14.4***	1.8	<.001	1411	407	380
A great deal of attention (adjusted)	32.4	1.0	31.4***	3.6	<.001	3080	173	380
At least some attention	69.0	7.4	61.6***	2.7	<.001	833	407	380

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
At least some attention (adjusted)	62.4	7.4	55.0***	4.0	<.001	744	173	380
Communicating well (%)								
A great deal of attention	15.9	1.3	14.6***	1.9	<.001	1135	408	380
A great deal of attention (adjusted)	33.8	1.3	32.6***	3.6	<.001	2526	173	380
At least some attention	63.0	6.0	57.0***	2.7	<.001	954	408	380
At least some attention (adjusted)	57.9	6.0	51.9***	4.0	<.001	868	173	380
Acting professionally (%)								
A great deal of attention	13.7	0.8	12.9***	1.7	<.001	1666	400	380
A great deal of attention (adjusted)	30.1	0.8	29.3***	3.5	<.001	3781	169	380
At least some attention	54.3	2.8	51.4***	2.6	<.001	1832	400	380
At least some attention (adjusted)	55.9	2.8	53.1***	4.0	<.001	1889	169	380
Soft Skills								
Time management (%)								
A great deal of attention	8.0	1.1	6.9***	1.4	<.001	659	403	380
A great deal of attention (adjusted)	17.1	1.1	16.1***	3.0	<.001	1528	169	380
At least some attention	44.4	3.4	41.0***	2.6	<.001	1199	403	380
At least some attention (adjusted)	47.8	3.4	44.4***	4.0	<.001	1298	169	380
Managing stress, anger, and frustration (%)								
A great deal of attention	8.0	0.5	7.5***	1.4	<.001	1498	404	380
A great deal of attention (adjusted)	17.4	0.5	16.9***	2.9	<.001	3391	171	380
At least some attention	25.6	1.5	24.1***	2.2	<.001	1610	404	380
At least some attention (adjusted)	43.9	1.5	42.4***	3.9	<.001	2834	171	380
Staying motivated (%)								
A great deal of attention	13.0	1.0	12.0***	1.7	<.001	1201	404	380
A great deal of attention (adjusted)	27.4	1.0	26.4***	3.4	<.001	2649	170	380
At least some attention	71.0	4.0	67.0***	2.5	<.001	1685	404	380
At least some attention (adjusted)	61.8	4.0	57.9***	3.9	<.001	1455	170	380
Managing money (%)								
A great deal of attention	1.3	0.0	1.3**	0.6	.026		406	380
A great deal of attention (adjusted)	3.1	0.0	3.1**	1.4	.025		172	380
At least some attention	7.7	0.3	7.4***	1.4	<.001	2900	406	380
At least some attention (adjusted)	12.6	0.3	12.3***	2.6	<.001	4808	172	380
Handling parenting and other family responsibilities (%)								
A great deal of attention	1.5	0.2	1.3*	0.7	.061	522	406	380
A great deal of attention (adjusted)	3.5	0.2	3.3**	1.5	.026	1358	173	380
At least some attention	7.2	0.8	6.4***	1.4	<.001	852	406	380
At least some attention (adjusted)	11.5	0.8	10.7***	2.5	<.001	1421	173	380
Help with problems at school, work, or home (%)								

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
A great deal of attention	5.4	0.5	4.9***	1.2	<.001	976	405	380
A great deal of attention (adjusted)	13.3	0.5	12.8***	2.6	<.001	2573	171	380
At least some attention	16.6	1.1	15.6***	1.9	<.001	1427	405	380
At least some attention (adjusted)	30.7	1.1	29.6***	3.6	<.001	2714	171	380
Academic Skills and Services								
Study skills (%)								
A great deal of attention	10.8	0.9	9.9***	1.6	<.001	1111	407	380
A great deal of attention (adjusted)	23.6	0.9	22.7***	3.3	<.001	2555	173	380
At least some attention	25.0	3.2	21.8***	2.3	<.001	685	407	380
At least some attention (adjusted)	41.5	3.2	38.4***	4.0	<.001	1205	173	380
Finding/applying for financial aid (%)								
A great deal of attention	1.5	0.0	1.5**	0.6	.014		407	380
A great deal of attention (adjusted)	3.5	0.0	3.5**	1.4	.014		173	380
At least some attention	5.4	0.5	4.8***	1.2	<.001	944	407	380
At least some attention (adjusted)	10.5	0.5	10.0***	2.4	<.001	1952	173	380

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Results marked "adjusted" reflect the inclusion of information collected during the 18-month survey interview as text responses of training types attended, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked "adjusted" are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

G.3 Impacts on Receipt of Education- and Employment-Related Supports

Exhibit G.3-1 provides detailed results corresponding to Exhibit 4-7 in the *Interim Impact Report*.

Exhibit G.3-1: Funding Sources for Occupational Training, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Own/Family Funding Sources								
Own or family earnings, savings, or loan (%)	3.7	9.1	-5.4***	1.8	.003	-59	408	381
Own or family earnings, savings, or loan (%), adjusted	8.5	9.1	-0.5	2.4	.828	-6	218	381
Own or family earnings, savings, or loan, if any occupational training (%)	23.3	65.5	-42.2***	8.3	<.001	-64	74	53
Funding sources:								
Own earnings (%)	2.5	5.6	-3.1**	1.4	.029	-55	406	379
Own earnings (%), adjusted	5.5	5.6	-0.1	1.9	.970	-1	216	379
Spouse/partner earnings (%)	0.8	2.0	-1.2	0.9	.160	-62	409	382
Spouse/partner earnings (%), adjusted	1.6	2.0	-0.4	1.2	.759	-19	219	382

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Own or spouse/partner savings (%)	2.4	7.3	-4.9***	1.6	.002	-67	409	382
Own or spouse/partner savings (% , adjusted)	5.8	7.3	-1.5	2.0	.458	-21	219	382
Financial help from parent/family member (%)	1.0	0.2	0.8	0.6	.162	347	408	381
Financial help from parent/family member (% , adjusted)	2.4	0.2	2.1*	1.1	.062	936	218	381
Loans in own name (%)	0.8	0.9	-0.1	0.7	.894	-10	408	381
Loans in own name (% , adjusted)	1.8	0.9	0.9	1.2	.422	110	218	381
Other Sources (Free or Subsidized Occupational Training)								
Received financial support for occupational training from non-family sources (%)	14.8	6.3	8.4***	2.1	<.001	132	408	382
Received financial support for occupational training from non-family sources (% , adjusted)	30.6	6.3	24.2***	3.3	<.001	382	218	382
<i>Received financial support for occupational training from non-family sources, if any occupational training (%)</i>	<i>81.4</i>	<i>45.0</i>	<i>36.5***</i>	<i>8.3</i>	<i><.001</i>	<i>81</i>	<i>74</i>	<i>54</i>
Funding sources:								
Free training program (%)	9.0	3.9	5.1***	1.7	.003	129	408	382
Free training program (% , adjusted)	18.2	3.9	14.3***	2.7	<.001	365	218	382
Program provider financial support (%)	4.2	1.6	2.6**	1.2	.024	168	407	382
Program provider financial support (% , adjusted)	8.7	1.6	7.2***	2.1	<.001	462	217	382
From an American Job Center/state unemployment office (%)	0.9	0.2	0.7	0.5	.180	306	407	382
From an American Job Center/state unemployment office (% , adjusted)	1.6	0.2	1.4*	0.9	.100	620	217	382
From a Pell grant or other non-governmental grant (%)	1.3	0.5	0.8	0.7	.236	163	409	382
From a Pell grant or other non-governmental grant (% , adjusted)	2.8	0.5	2.3*	1.3	.075	468	219	382
Any other funding source (%)	5.0	1.4	3.6***	1.2	.003	263	408	382
Any other funding source (% , adjusted)	10.4	1.4	9.1***	2.1	<.001	663	218	382

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
---------	--------------------	--------------------	---------------------	----------------	---------	---------------------	---------------------	---------------------

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Results marked "adjusted" reflect the inclusion of information collected during the 18-month survey interview as text responses of training types attended, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked "adjusted" are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.3-2 presents impacts on receipt of academic and other support services (discussed but not shown in Section 4.3 of the *Interim Impact Report*).

Exhibit G.3-2: Receipt of Academic and Other Support Services, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Academic Support Services								
Academic advising								
Any (%)	5.6	5.7	-0.2	1.7	.913	-3	406	378
Any (% , adjusted)	15.8	5.7	10.1***	3.3	.002	176	143	378
Number of times	0.1	0.1	-0.0	0.0	.879	-5	403	378
Number of times (adjusted)	0.4	0.1	0.2**	0.1	.023	172	140	378
Financial aid advising								
Any (%)	2.0	0.9	1.1	0.8	.179	116	408	378
Any (% , adjusted)	5.5	0.9	4.6**	1.9	.017	492	145	378
Number of times	0.0	0.0	0.0	0.0	.156	165	408	378
Number of times (adjusted)	0.1	0.0	0.1**	0.0	.035	634	145	378
Tutoring								
Any (%)	2.8	0.5	2.2**	0.9	.012	419	411	382
Any (% , adjusted)	7.9	0.5	7.3***	2.3	.001	1379	147	382
Number of times	0.2	0.1	0.2*	0.1	.061	318	411	382
Number of times (adjusted)	0.7	0.1	0.7***	0.2	.009	1096	147	382
Other Support Services (%)								
Assistance with mental health (%)	3.2	0.5	2.6***	0.9	.004	518	411	382
Clothes or uniforms (%)	0.8	0.5	0.3	0.5	.621	52	411	382
Assistance with childcare (%)	0.3	0.0	0.3	0.3	.316		411	382
Assistance with transportation (%)	1.0	1.7	-0.7	0.8	.356	-42	408	377
Tools (%)	1.4	0.5	0.9	0.7	.181	184	411	382
Assistance with other services (%)	0.0	0.5	-0.5	0.3	.162	-91	411	382

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Results marked "adjusted" reflect the inclusion of information collected during the 18-month survey interview as text responses of training types attended, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked "adjusted" are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

G.4 Impacts on Credential Receipt and Other Short-Term Outcomes

Exhibit G.4-1 provides detailed results corresponding to Exhibit 4-8 in the *Interim Impact Report*.

Exhibit G.4-1: Educational Attainment, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Educational Attainment								
Received any certificate, certification, license, or degree (%)	15.6	6.0	9.6***	2.2	<.001	159	409	382
Received any certificate, certification, license, or degree (%), adjusted	31.2	6.0	25.2***	3.3	<.001	419	226	382
Occupational training certificate								
Received any (%)	12.1	3.8	8.3***	1.9	<.001	218	409	382
Received any (%), adjusted	25.1	3.8	21.3***	3.1	<.001	562	220	382
Number	0.1	0.0	0.1***	0.0	<.001	230	409	382
Number (adjusted)	0.3	0.0	0.2***	0.0	<.001	583	220	382
College credits								
Received any (%)	0.6	1.5	-0.9	0.8	.278	-59	406	380
Received any (%), adjusted	0.6	1.5	-0.9	0.8	.278	-59	405	380
Number	0.1	0.4	-0.3	0.2	.120	-78	406	380
Number (adjusted)	0.1	0.4	-0.3	0.2	.120	-78	405	380
College credential								
Certificate (%)	0.2	0.3	-0.1	0.4	.805	-30	409	381
Certificate (%), adjusted	0.2	0.3	-0.1	0.4	.805	-31	408	381
Associate's degree (%)	0.2	0.0	0.2	0.2	.317		409	381
Associate's degree (%), adjusted	0.2	0.0	0.2	0.2	.317		408	381
Bachelor's degree or higher (%)	0.5	1.1	-0.5	0.7	.413	-52	409	381
Bachelor's degree or higher (%), adjusted	0.5	1.1	-0.5	0.7	.414	-51	408	381
Professional certification or license								
Received any (%)	7.9	1.4	6.5***	1.4	<.001	477	411	382
Employment Readiness								
Employment readiness certificate								
Received any (%)	2.5	1.0	1.5	0.9	.100	152	402	377
Received any (%), adjusted	3.3	1.0	2.3*	1.2	.052	231	326	377

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. Results marked "adjusted" reflect the inclusion of information collected during the 18-month survey interview as text responses of training types attended, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked "adjusted" are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.4-2 provides detail on the types of professional certifications or licenses received between random assignment and follow-up (discussed but not shown in Section 4.4 of the *Interim Impact Report*). The exhibit presents the proportion of the study sample that received each type of certification or license,

both overall and by treatment status. The last column reports the difference between treatment groups, and indicates whether the difference is statistically significant at the 5 percent level.

Exhibit G.4-2: Types of Professional Credentials Received, STW-T and JSA

Professional Certification or License	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Information Technology				
CompTia	0.2	0.4	0.0	0.4
Salesforce	3.9	6.9	0.9	6.0*
Other software certification (e.g., python, java oracle)	0.1	0.0	0.3	-0.3
Healthcare/Bioscience				
License/certification in mental health, social work, or massage	0.1	0.2	0.0	0.2
Business				
Project management, supply chain, or facilities management (unrelated to IT or health/bioscience)	0.1	0.0	0.2	-0.2
License/certification in accounting, tax preparation, real estate, or similar	0.1	0.2	0.0	0.2

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and the control group mean because of rounding. Sample size of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit G.4-3 provides detailed results for impacts on confidence in career knowledge and barriers to employment (discussed but not shown in Section 4.4 of the *Interim Impact Report*).

Exhibit G.4-3: Confidence in Career Knowledge and Barriers to Employment, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Confidence in career knowledge scale	1.9	2.0	-0.1***	0.0	<.001	-5	409	381
Barriers to employment								
Childcare arrangements (%)	1.4	1.5	-0.2	0.9	.855	-10	406	373
Transportation (%)	1.1	1.0	0.1	0.7	.892	10	409	379
Illness or health condition (%)	8.4	4.5	3.9**	1.7	.024	87	404	377
Number of barriers (range 0-3)	0.1	0.1	0.0*	0.0	.084	54	409	380
Minimum hourly wage willing to accept (\$/hour)	34.13	36.95	-2.82	2.06	.173	-8	150	109

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

G.5 Impacts on Labor Market Outcomes

Exhibit G.5-1 provides detailed results corresponding to Exhibit 4-9 through Exhibit 4-11 in the *Interim Impact Report*

Exhibit G.5-1: Earnings and Employment, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Earnings								
Average earnings in Q5 and Q6 (\$)	9,345	9,104	240	665	.718	3	491	474
Average earnings in Q5 and Q6, if employed in Q5 or Q6 (\$)	13,354	12,692	662	781	.397	5	350	340
Cumulative earnings in Q1-Q6 (\$)	41,139	44,138	-2,999	3,017	.320	-7	491	474
Earnings Before Random Assignment (RA):								
Q8 pre-RA (\$)	6,569	7,701	-1,133	854	.185	-15	485	467
Q7 pre-RA (\$)	6,084	6,932	-848	654	.195	-12	491	474
Q6 pre-RA (\$)	6,544	7,528	-984	803	.221	-13	491	474
Q5 pre-RA (\$)	6,153	6,398	-245	609	.687	-4	491	474
Q4 pre-RA (\$)	6,136	6,948	-812	762	.287	-12	491	474
Q3 pre-RA (\$)	5,717	5,979	-262	793	.741	-4	491	474
Q2 pre-RA (\$)	4,774	4,686	88	621	.888	2	491	474
Q1 pre-RA (\$)	3,387	3,575	-188	683	.783	-5	491	474
Q0 (\$)	1,546	1,859	-313	262	.232	-17	491	474
Earnings After Random Assignment:								
Q1 (\$)	2,517	3,950	-1,433***	396	<.001	-36	491	474
Q2 (\$)	5,103	5,692	-588	526	.264	-10	491	474
Q3 (\$)	6,790	7,540	-750	609	.219	-10	491	474
Q4 (\$)	8,038	8,748	-709	671	.290	-8	491	474
Q5 (\$)	8,959	9,244	-285	697	.683	-3	491	474
Q6 (\$)	9,730	8,964	766	697	.273	9	491	474
Employment								
Ever employed during Q5 or Q6 (%)	70.8	71.7	-1.0	2.8	.725	-1	491	474
Ever employed during Q1-Q6 (%)	83.3	79.1	4.2*	2.4	.076	5	491	474
Employment Before Random Assignment (RA):								
Q8 pre-RA (%)	50.7	50.1	0.6	2.9	.848	1	485	467
Q7 pre-RA (%)	49.5	50.0	-0.5	2.8	.858	-1	491	474
Q6 pre-RA (%)	49.4	52.3	-2.9	2.7	.267	-6	491	474
Q5 pre-RA (%)	46.9	48.7	-1.8	2.5	.466	-4	491	474
Q4 pre-RA (%)	46.2	46.6	-0.4	2.1	.837	-1	491	474
Q3 pre-RA (%)	45.3	42.8	2.5	2.2	.262	6	491	474
Q2 pre-RA (%)	41.4	43.0	-1.6	2.2	.472	-4	491	474
Q1 pre-RA (%)	36.8	36.3	0.5	2.4	.839	1	491	474
Q0 (%)	29.8	37.8	-8.0***	2.8	.004	-21	491	474
Employment After Random Assignment:								
Q1 (%)	40.3	49.4	-9.0***	3.0	.003	-18	491	474
Q2 (%)	57.1	57.2	-0.1	3.1	.971	-0	491	474
Q3 (%)	63.6	62.7	0.9	3.0	.766	1	491	474
Q4 (%)	62.9	65.6	-2.7	3.0	.360	-4	491	474
Q5 (%)	63.7	67.3	-3.6	2.9	.221	-5	491	474
Q6 (%)	66.6	64.8	1.8	2.9	.535	3	491	474
Number of quarters employed during Q1-Q6	3.5	3.7	-0.1	0.1	.357	-3	491	474
Longest job tenure during Q0-Q6 (quarters)	3.0	3.4	-0.4***	0.1	.010	-11	491	474

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
---------	--------------------	--------------------	---------------------	----------------	---------	---------------------	---------------------	---------------------

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through six quarters after random assignment.

NOTES: **Confirmatory outcomes are bolded and italicized**. **Secondary outcomes are bolded**; exploratory outcomes are neither bolded nor italicized. *Outcomes in italics* apply to the subset of sample members who were ever employed during Q5 or Q6, and are thus non-experimental. Where not italicized, outcomes apply to the full sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. Relative impact represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.5-2 provides information for the early cohort, providing detailed impact estimates on earnings and employment through Q12 (discussed but not shown in Section 4.5 of the *Interim Impact Report*).

Exhibit G.5-2: Earnings and Employment for Sample Members Observed through 12 Quarters, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Earnings								
Earnings in Q1 (\$)	2,416	3,841	-1,425***	526	.007	-37	237	231
Earnings in Q2 (\$)	4,639	5,552	-913	700	.193	-16	237	231
Earnings in Q3 (\$)	6,014	7,267	-1,253	787	.112	-17	237	231
Earnings in Q4 (\$)	7,317	8,512	-1,195	896	.183	-14	237	231
Earnings in Q5 (\$)	8,003	8,618	-614	927	.508	-7	237	231
Earnings in Q6 (\$)	8,694	8,291	404	954	.672	5	237	231
Earnings in Q7 (\$)	8,988	8,797	191	950	.841	2	237	231
Earnings in Q8 (\$)	9,252	9,638	-386	1,041	.711	-4	237	231
Earnings in Q9 (\$)	9,938	9,794	144	1,125	.898	1	237	231
Earnings in Q10 (\$)	9,645	9,807	-163	1,056	.878	-2	237	231
Earnings in Q11 (\$)	10,105	10,291	-186	1,046	.859	-2	237	231
Earnings in Q12 (\$)	10,566	10,953	-387	1,124	.731	-4	237	231
Employment								
Ever employed during Q1 (%)	42.4	48.5	-6.1	4.3	.162	-13	237	231
Ever employed during Q2 (%)	58.6	57.6	1.0	4.4	.814	2	237	231
Ever employed during Q3 (%)	65.1	62.3	2.8	4.3	.525	4	237	231
Ever employed during Q4 (%)	61.2	64.5	-3.3	4.3	.443	-5	237	231
Ever employed during Q5 (%)	61.3	64.1	-2.8	4.3	.520	-4	237	231
Ever employed during Q6 (%)	67.3	60.6	6.7	4.2	.116	11	237	231
Ever employed during Q7 (%)	64.5	64.1	0.5	4.2	.913	1	237	231
Ever employed during Q8 (%)	64.1	64.5	-0.4	4.2	.929	-1	237	231
Ever employed during Q9 (%)	63.1	63.6	-0.6	4.3	.896	-1	237	231
Ever employed during Q10 (%)	64.3	62.3	2.0	4.3	.643	3	237	231
Ever employed during Q11 (%)	64.4	64.9	-0.5	4.2	.904	-1	237	231
Ever employed during Q12 (%)	64.1	64.9	-0.8	4.2	.843	-1	237	231

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through twelve quarters after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.5-3 provides detailed results not discussed in Section 4.5 of the *Interim Impact Report*.

Exhibit G.5-3: Engagement in the Labor Force, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Status at Follow-Up								
Employed (%)	73.8	69.0	4.8	3.1	.124	7	409	380
Unemployed (%)	16.8	19.8	-3.0	2.7	.280	-15	409	380
Out of the labor force (%)	3.1	3.2	-0.1	1.2	.953	-2	409	380
Attending school or long-term training program (%)	0.5	0.9	-0.3	0.6	.610	-37	409	380
Maternity leave, sick, or unable to work because of disability (%)	0.5	0.6	-0.1	0.5	.892	-12	409	380
Retired (%)	2.1	1.8	0.3	0.9	.734	18	409	380
Number of jobs since random assignment	1.6	1.4	0.1	0.1	.278	8	395	352

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.5-4 provides detailed results corresponding to Exhibit 4-12 in the *Interim Impact Report*.

Exhibit G.5-4: Characteristics of Current Job, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Job Field								
Information technology (%)	30.6	20.0	10.5***	3.1	<.001	53	403	368
Job Type								
Regular full-time or part-time employee (%)	46.5	43.9	2.6	3.6	.468	6	409	380
Employed by a temporary help agency (%)	1.7	0.5	1.2	0.7	.102	250	409	380
Employed by a company that contracts out your services (%)	5.3	3.5	1.7	1.5	.234	49	409	380
Independent contractor or independent consultant (%)	11.2	8.7	2.5	2.1	.247	29	409	380
Self-employed, including freelancer and day laborer (%)	4.6	6.2	-1.6	1.6	.308	-26	409	380
Other (%)	4.6	6.1	-1.5	1.6	.339	-25	409	380
Pay and Hours								
Rate of pay per year (\$)	37,271	28,438	8,833***	2,763	.001	31	319	288
Hourly wage, if employed (\$/hour)	32.11	28.01	4.11**	1.72	.017	15	208	167
Hours worked per week	25.8	23.3	2.5**	1.3	.047	11	391	356
Hours worked per week, if employed	35.7	34.7	1.0	0.9	.243	3	285	238
Full-time (35 or more hours per week, %)	55.5	48.8	6.7*	3.6	.060	14	391	356
Full-time, if employed (%)	77.3	72.8	4.4	3.8	.244	6	285	238

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Part-time (less than 35 hours per week, %)	17.1	18.2	-1.1	2.8	.699	-6	391	356
<i>Part-time, if employed (%)</i>	22.7	27.2	-4.4	3.8	.244	-16	285	238
Number of weeks at job since random assignment	31.8	32.2	-0.4	2.3	.873	-1	366	320
Job represented by a union (%)	3.5	2.9	0.6	1.3	.618	22	401	377
Job Benefits								
Offers health insurance (%)	47.4	43.0	4.4	3.5	.214	10	403	378
Paid vacation (%)	43.9	41.8	2.0	3.5	.565	5	401	376
Paid holiday (%)	44.9	41.0	4.0	3.5	.264	10	403	376
Paid sick time (%)	28.0	24.0	4.0	3.3	.230	17	358	340
Retirement/pension plan (%)	39.0	36.1	2.9	3.5	.411	8	381	352
Job Schedule								
Regular daytime schedule (%)	57.0	49.2	7.8**	3.5	.026	16	409	380
Regular evening shift (%)	1.2	0.5	0.7	0.7	.262	154	409	380
Regular night shift (%)	0.1	0.9	-0.9*	0.5	.085	-93	409	380
Rotating schedule (%)	1.4	1.3	0.1	0.8	.902	8	409	380
Irregular schedule (%)	2.6	3.0	-0.5	1.2	.692	-15	409	380
Other schedule (%)	11.6	14.1	-2.4	2.4	.305	-17	409	380
Career Opportunities								
Job offers career advancement opportunities:								
Strongly agree (%)	6.2	2.9	3.3*	1.8	.072	112	281	272
Agree (%)	14.4	5.6	8.8***	2.6	<.001	156	281	272
Disagree (%)	35.1	41.4	-6.3	4.1	.125	-15	281	272
Strongly disagree (%)	5.7	6.7	-1.0	2.0	.622	-15	281	272

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who were employed at follow up, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibits G.5-5 and G.5-6 present the distribution of the field of employment at follow-up (in each exhibit, the last line reports the proportion not employed.) Exhibit G.5-5 reports on the industry of employment; Exhibit G.5-6 reports on the occupation. The exhibits present the proportion of the study sample working in each field, both overall and by treatment status. In each, the last column reports the difference between treatment groups, and indicates whether the difference is statistically significant.

Exhibit G.5-5: Distribution of Industry of Employment, STW-T and JSA

Industry of Employment	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Not employed	28.5	26.1	31.0	-4.9
Information technology-related industries				
Computer system design and related services	10.7	11.6	9.6	2.0
Information industries, including software publishing, telecommunications, data processing/hosting and other information services	2.7	2.6	2.8	-0.2
Other industries				
Accommodations, and food services, personal services, and private household	2.3	1.0	3.7	-2.7*
Administrative and support services	7.2	9.6	4.6	5.0*
Architectural, engineering, and specialized design services	1.6	1.8	1.4	0.4
Construction, mining/oil and gas, utilities, agriculture, and waste management	1.6	1.0	2.2	-1.2
Educational services	4.3	2.9	5.8	-2.9
Finance, insurance, and real estate	6.4	6.8	6.0	0.8
Healthcare services other than social assistance	3.5	3.6	3.4	0.2
Metal, machinery, computer and electronic/electrical equipment manufacturing	1.1	1.0	1.3	-0.3
Other manufacturing (e.g. wood/paper, chemicals, plastics, food/beverage, textiles/apparel)	2.4	1.6	3.2	-1.6
Professional, scientific, and technical services other than computer system design/architectural services/ scientific research (e.g. accounting/tax preparation, advertising/public relations)	3.5	3.8	3.2	0.6
Public administration	1.5	1.5	1.6	-0.1
Scientific research and development and management/scientific/technical consulting services	6.3	8.3	4.1	4.2*
Social assistance, and religious, grant-making, civic, professional, and similar organizations	7.3	8.5	6.0	2.5
Transportation and warehousing	2.9	1.5	4.4	-2.9*
Wholesale and retail trade	5.1	5.9	4.3	1.6
Other (e.g. arts/entertainment/recreation, management of companies/services, repair/maintenance)	2.1	1.7	2.6	-0.9

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit G.5-6: Distribution of Occupation of Employment, STW-T and JSA

Occupation of Employment ¹	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Not employed	28.5	26.1	31.0	-4.9
Information technology-related occupations				
Computer and information systems managers	1.0	1.2	0.9	0.3
Computer and mathematical occupations, and computer hardware engineers	8.9	10.6	7.1	3.5
Other occupations				
All production occupations other than assemblers, fabricators, and metal or plastic production workers	0.5	0.7	0.2	0.5
Architecture and engineering occupations, other than computer hardware engineers	0.9	1.1	0.7	0.4
Arts, design, entertainment, sports, and media	3.4	2.9	4.0	-1.1
Assemblers, fabricators, and metal or plastic production workers	0.0	0.0	0.0	0.0
Business and financial operations and legal occupations	13.2	15.1	11.4	3.7
Community and social service occupations (including healthcare social workers)	1.4	1.9	0.8	1.1
Construction, installation and repair, extraction, farming, fishing, and forestry occupations	0.6	0.5	0.8	-0.3
Educational instruction and library	2.8	1.9	3.7	-1.8
Food preparation and service-related occupations, personal care and service, protective service, and building and grounds cleaning and maintenance occupations	2.8	1.0	4.5	-3.5*
Healthcare practitioners and technical occupations	0.7	0.8	0.5	0.3
Healthcare support occupations	1.8	1.8	1.9	-0.1
Life, physical, and social science occupations (including medical scientists)	0.2	0.0	0.5	-0.5
Managers other than computer/information systems	12.1	12.4	11.7	0.7
Office and administrative support occupations	10.8	12.5	9.1	3.4
Sales and related	6.5	7.1	6.0	1.1
Transportation and material moving occupations	3.0	1.7	4.4	-2.7*

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit G.5-7 provides detailed results on the relation between training and subsequent jobs (discussed but not shown in Section 4.5 of the *Interim Impact Report*).

Exhibit G.5-7: Connection between Training and Employment, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Connection between Training and Employment								
New job due to training or certificate (%)	11.0	2.7	8.3***	1.7	<.001	304	406	380
New job due to training or certificate (%), adjusted	21.9	2.7	19.2***	2.9	<.001	705	224	380
<i>New job due to training or certificate, if any (%)</i>	47.8	17.2	30.6***	7.4	<.001	178	90	60
Training useful for that job (%)	11.1	2.7	8.3***	1.7	<.001	305	405	379
Training useful for that job (%), adjusted	22.3	2.7	19.5***	2.9	<.001	715	222	379
Promotion due to training (%)	1.6	0.0	1.6**	0.6	.014		408	382
Promotion due to training (%), adjusted	3.2	0.0	3.2**	1.3	.012		219	382
Training useful after promotion (%)	1.6	0.0	1.6**	0.6	.014		409	382
Training useful after promotion (%), adjusted	1.6	0.0	1.6**	0.6	.014		409	382

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training or received any other certificate, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Results marked “adjusted” reflect the inclusion of information collected during the 18-month survey interview as text responses of training types completed, asked only of program group members who initially reported no training. See the opening section of Chapter 4 and Appendix G for more discussion. All outcomes that are not marked “adjusted” are constructed as described in Appendix D. Reported impact may not equal the difference between the reported program and control group means because of rounding. “Relative impact” represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

G.6 Impacts on Broader Measures of Well-Being

Exhibit G.6-1 provides detailed results corresponding to Exhibit 4-13 in the *Interim Impact Report*.

Exhibit G.6-1: Income and Public Benefits Receipt, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Income								
Total own income before taxes last month (\$)	3,150	2,862	287	187	.125	10	331	284
Benefits Receipt								
Received any public benefits last month (%)	5.8	7.9	-2.1	1.7	.207	-27	408	378
Received TANF last month (%)	0.3	0.2	0.0	0.4	.971	6	408	378
Received SNAP last month (%)	2.7	3.5	-0.8	1.1	.497	-22	407	379
Received UI last month (%)	1.8	2.4	-0.6	1.0	.556	-24	408	380
Received other public benefits last month (%)	2.0	4.5	-2.5**	1.2	.043	-55	408	379

KEY: SNAP is Supplemental Nutrition Assistance Program; TANF is Temporary Assistance for Needy Families; UI is Unemployment Insurance.

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Secondary outcomes are bolded; exploratory outcomes are not bolded. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.6-2 provides detailed results on family structure outcomes (there is no corresponding discussion or exhibit in Chapter 4 of the *Interim Impact Report*).

Exhibit G.6-2: Household Composition, STW-T and JSA

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Individuals	1.9	1.8	0.1	0.1	.228	5	400	368
Children under 12	0.2	0.2	0.0	0.0	.939	1	398	368

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

G.7 Subgroup Impacts

This section provides detail on subgroup impacts for the confirmatory outcome, secondary outcomes, and several exploratory outcomes discussed in Chapter 4 of the *Interim Impact Report*. Exhibits G.7-1 and G.7-2 report differential impacts by education level at random assignment: less than a bachelor's degree versus a bachelor's degree or more. Exhibits G.7-3 and G.7-4 report differential impacts by age at random assignment: 49 or older versus 48 or younger. Exhibits G.7-5 and G.7-6 report differential impacts by employment status at random assignment: those unemployed more than 12 months versus those ever employed in the last 12 months (including those employed at application). Exhibits G.7-7 and G.7-8 report differential impacts by gender.

For each pair of subgroup impact exhibits, the first exhibit reports differential impacts on participation in and hours and weeks attended for the following: any structured employment-related activity, occupational training, work-based training, and employment readiness courses. The second subgroup exhibit reports differential impacts on educational attainment, average earnings in the fifth and sixth quarters after random assignment, employment in the fifth or sixth quarter after random assignment, and receipt of public benefits.

Exhibit G.7-1: Subgroup Impacts, by Education Level: Program Services, STW-T and JSA

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Less than bachelor's degree	147	30	19	10	7	.132
Bachelor's degree or more	641	29	16	14***	3	<.001
Difference				3	8	.650

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Total hours attended						
Less than bachelor's degree	147	139	106	33	56	.560
Bachelor's degree or more	638	124	50	74***	20	<.001
Difference				41	59	.486
Total weeks attended						
Less than bachelor's degree	147	7	5	3	3	.345
Bachelor's degree or more	620	6	3	2**	1	.015
Difference				-0	3	.983
Occupational Training						
Ever attended (%)						
Less than bachelor's degree	147	17	17	1	6	.893
Bachelor's degree or more	644	18	13	4	3	.136
Difference				3	7	.610
Total hours attended						
Less than bachelor's degree	147	107	70	37	43	.388
Bachelor's degree or more	642	78	39	39**	17	.020
Difference				2	46	.972
Total weeks attended						
Less than bachelor's degree	147	6	4	2	2	.435
Bachelor's degree or more	632	4	3	1	1	.277
Difference				-1	3	.721
Work-Based Training						
Ever attended (%)						
Less than bachelor's degree	147	6	4	2	3	.558
Bachelor's degree or more	643	13	2	11***	2	<.001
Difference				9**	4	.021
Total hours attended						
Less than bachelor's degree	147	11	35	-24	21	.253
Bachelor's degree or more	640	35	8	27***	9	.004
Difference				51**	23	.024
Total weeks attended						
Less than bachelor's degree	146	0	1	-1	1	.290
Bachelor's degree or more	632	1	0	1***	0	.002
Difference				2**	1	.039
Employment Readiness Courses						
Ever attended (%)						
Less than bachelor's degree	147	14	4	10**	5	.025
Bachelor's degree or more	641	8	3	5***	2	.002
Difference				-5	5	.330
Total hours attended						
Less than bachelor's degree	146	21	3	18***	7	.009
Bachelor's degree or more	637	11	2	9**	3	.011
Difference				-10	8	.204
Total weeks attended						
Less than bachelor's degree	146	1	1	1	1	.250
Bachelor's degree or more	637	1	0	1**	0	.010
Difference				-0	1	.790

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey, measuring training through 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.7-2: Subgroup Impacts, by Education Level: Educational Attainment, Earnings and Employment, and Benefits Receipt, STW-T and JSA

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Less than bachelor's degree	147	15	7	8	5	.101
Bachelor's degree or more	644	16	6	10***	2	<.001
Difference				1	6	.793
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Less than bachelor's degree	198	7,048	5,216	1,832*	945	.053
Bachelor's degree or more	767	10,070	10,238	-168	799	.833
Difference				-2,000	1,239	.107
Ever employed during Q5 or Q6 (%)						
Less than bachelor's degree	198	73	68	5	6	.407
Bachelor's degree or more	767	70	73	-2	3	.432
Difference				-7	7	.270
Benefits Receipt						
Receiving any public benefits (%)						
Less than bachelor's degree	146	14	24	-11*	6	.080
Bachelor's degree or more	640	3	3	-0	1	.973
Difference				11*	6	.090

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 965 includes 491 program group and 474 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.7-3: Subgroup Impacts, by Age: Program Services, STW-T and JSA

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
48 or younger	463	28	18	10***	4	.007
49 or older	325	32	14	18***	4	<.001
Difference				7	6	.229
Total hours attended						
48 or younger	460	128	82	46	28	.108
49 or older	325	131	35	96***	26	<.001
Difference				50	39	.192
Total weeks attended						
48 or younger	449	6	4	2	1	.168
49 or older	318	6	2	3***	1	.007
Difference				1	2	.463
Occupational Training						
Ever attended (%)						
48 or younger	464	19	16	2	4	.508
49 or older	327	16	11	6	4	.140
Difference				3	5	.533
Total hours attended						
48 or younger	462	86	57	30	21	.159
49 or older	327	82	31	51**	24	.030
Difference				22	32	.497
Total weeks attended						
48 or younger	456	5	4	1	1	.490
49 or older	323	4	2	2	1	.141
Difference				1	2	.652
Work-Based Training						
Ever attended (%)						
48 or younger	464	10	4	6***	2	.005
49 or older	326	14	0	14***	3	<.001
Difference				7**	4	.035
Total hours attended						
48 or younger	461	31	24	7	14	.612
49 or older	326	31	0	31***	7	<.001
Difference				24	15	.111
Total weeks attended						
48 or younger	455	1	1	0	0	.685
49 or older	323	1	0	1***	0	<.001
Difference				1*	1	.068
Employment Readiness Courses						
Ever attended (%)						
48 or younger	463	8	1	7***	2	<.001
49 or older	325	12	6	6*	3	.055
Difference				-1	4	.832
Total hours attended						
48 or younger	463	10	2	9**	4	.016
49 or older	320	17	4	13**	5	.014
Difference				5	7	.455
Total weeks attended						
48 or younger	463	1	0	1***	0	.010

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
49 or older	320	1	0	1	0	.171
Difference				-0	0	.945

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.7-4: Subgroup Impacts, by Age: Educational Attainment, Earnings and Employment, and Benefits Receipt, STW-T and JSA

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
48 or younger	464	16	7	8***	3	.004
49 or older	327	16	4	11***	3	<.001
Difference				3	4	.460
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
48 or younger	573	10,577	9,760	816	886	.357
49 or older	392	7,599	8,198	-598	991	.546
Difference				-1,414	1,324	.286
Ever employed during Q5 or Q6 (%)						
48 or younger	573	73	77	-4	4	.228
49 or older	392	68	64	4	4	.394
Difference				8	6	.157
Benefits Receipt						
Receiving any public benefits (%)						
48 or younger	460	5	6	-2	2	.371
49 or older	326	8	10	-3	3	.380
Difference				-1	4	.807

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 965 includes 491 program group and 474 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.7-5: Subgroup Impacts, by Employment Status: Program Services, STW-T and JSA

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Not long-term unemployed	541	29	16	13***	3	<.001
Long-term unemployed	247	31	17	14**	5	.011
Difference				1	6	.932
Total hours attended						
Not long-term unemployed	541	111	47	65***	18	<.001
Long-term unemployed	244	162	95	67	46	.146
Difference				2	49	.960
Total weeks attended						
Not long-term unemployed	528	5	3	2**	1	.037
Long-term unemployed	239	8	4	3	2	.113
Difference				1	2	.618
Occupational Training						
Ever attended (%)						
Not long-term unemployed	543	18	15	4	3	.249
Long-term unemployed	248	17	13	4	5	.427
Difference				-0	6	.996
Total hours attended						
Not long-term unemployed	543	75	41	34**	17	.042
Long-term unemployed	246	103	55	48	32	.135
Difference				14	35	.692
Total weeks attended						
Not long-term unemployed	536	4	3	1	1	.469
Long-term unemployed	243	5	3	2	2	.227
Difference				2	2	.442
Work-Based Training						
Ever attended (%)						
Not long-term unemployed	541	11	2	9***	2	<.001
Long-term unemployed	249	14	4	10***	3	.004
Difference				1	4	.782
Total hours attended						
Not long-term unemployed	539	26	4	22***	6	<.001
Long-term unemployed	248	40	34	6	23	.790
Difference				-16	24	.508
Total weeks attended						
Not long-term unemployed	532	1	0	1***	0	.002
Long-term unemployed	246	1	1	0	1	.853
Difference				-1	1	.414
Employment Readiness Courses						
Ever attended (%)						
Not long-term unemployed	542	9	3	7***	2	<.001
Long-term unemployed	246	10	4	6*	3	.060
Difference				-1	4	.830
Total hours attended						
Not long-term unemployed	539	11	1	10***	3	<.001
Long-term unemployed	244	18	5	12*	7	.092
Difference				3	8	.712
Total weeks attended						
Not long-term unemployed	539	1	0	1***	0	.006

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Long-term unemployed	244	1	0	1	0	.266
Difference				-0	1	.837

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: "Long-term unemployed" includes study members who reported being unemployed for a year or more at baseline; "not long-term unemployed" includes study members who were unemployed for less than 12 months at baseline, or were employed. All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.7-6: Subgroup Impacts, by Employment Status: Educational Attainment, Earnings and Employment, and Benefits Receipt, STW-T and JSA

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Not long-term unemployed	543	17	6	11***	3	<.001
Long-term unemployed	248	14	6	7*	4	.059
Difference				-3	5	.455
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Not long-term unemployed	391	7,091	6,512	579	942	.539
Long-term unemployed	574	10,910	10,900	10	914	.991
Difference				-569	1,311	.665
Ever employed during Q5 or Q6 (%)						
Not long-term unemployed	391	56	55	2	5	.711
Long-term unemployed	574	81	84	-3	3	.368
Difference				-5	6	.423
Benefits Receipt						
Receiving any public benefits (%)						
Not long-term unemployed	539	6	6	-1	2	.738
Long-term unemployed	247	6	11	-5*	3	.094
Difference				-4	4	.240

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: For educational attainment and benefits receipt, measured in the 18-month follow-up survey, "long-term unemployed" includes study members who reported being unemployed for a year or more at baseline; "not long-term unemployed" includes study members who were unemployed for less than 12 months at baseline, or were employed. For employment and earnings in quarters 5 and 6, measured in the NDNH, "long-term unemployed" includes study members with zero earnings in the four quarters before randomization (treating the quarter of randomization as quarter 0); "not long-term unemployed" includes study members with positive earnings in any of the four quarters before randomization. All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 965 includes 491 program group and 474 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.7-7: Subgroup Impacts, by Gender: Program Services, STW-T and JSA

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Women	498	27	15	12***	4	<.001
Men	290	34	19	15***	5	.003
Difference				3	6	.674
Total hours attended						
Women	497	119	64	54**	26	.040
Men	288	145	59	86***	30	.005
Difference				32	41	.440
Total weeks attended						
Women	483	6	3	3**	1	.037
Men	284	7	4	2	2	.148
Difference				-0	2	.898
Occupational Training						
Ever attended (%)						
Women	501	17	13	3	3	.287
Men	290	20	16	4	4	.371
Difference				1	6	.918
Total hours attended						
Women	500	84	48	36*	21	.089
Men	289	85	43	43*	23	.061
Difference				7	31	.820
Total weeks attended						
Women	492	4	3	1	1	.202
Men	287	4	4	1	1	.596
Difference				-1	2	.722
Work-Based Training						
Ever attended (%)						
Women	499	10	2	8***	2	<.001
Men	291	14	3	11***	3	<.001
Difference				3	4	.472
Total hours attended						
Women	497	24	15	9	12	.456
Men	290	42	12	29**	12	.011
Difference				20	17	.239
Total weeks attended						
Women	490	1	0	0	0	.329
Men	288	1	1	1*	0	.066
Difference				0	1	.419
Employment Readiness Courses						
Ever attended (%)						
Women	498	9	2	6***	2	.002
Men	290	11	4	6**	3	.029
Difference				0	4	.996
Total hours attended						
Women	494	11	2	9***	3	.009
Men	289	17	4	13**	6	.032
Difference				4	7	.569
Total weeks attended						
Women	494	1	0	1***	0	.008

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Men	289	1	0	0	0	.258
Difference				-0	0	.703

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit G.7-8: Subgroup Impacts, by Gender: Educational Attainment, Earnings and Employment, and Benefits Receipt, STW-T and JSA

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Women	501	14	5	10***	3	<.001
Men	290	18	8	10**	4	.012
Difference				-0	5	.997
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Women	612	9,962	8,704	1,257	858	.143
Men	353	8,252	9,769	-1,517	1,037	.144
Difference				-2,774**	1,346	.040
Ever employed during Q5 or Q6 (%)						
Women	612	75	70	5	3	.145
Men	353	63	75	-11**	5	.016
Difference				-16***	6	.005
Benefits Receipt						
Receiving any public benefits (%)						
Women	496	6	8	-2	2	.260
Men	290	5	7	-2	3	.554
Difference				1	4	.843

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 793 includes 411 program group and 382 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 965 includes 491 program group and 474 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Appendix H. Detailed Results for Chapter 5 (FLH)

This appendix provides additional detail for RochesterWorks!’ Finger Lakes Hired (FLH) program discussed in Chapter 5 of the *Interim Impact Report*. This appendix is organized by the sections of Chapter 5. The first section provides detailed information on the enrollment and random assignment process (Section H.1.1) and the characteristics of the RochesterWorks! study sample (Section H.1.2). The exhibits in the subsequent five sections (Sections H.2 through H.6) include rows for all outcomes listed in Appendix D, including those reported in the Chapter 5 exhibits, those outcomes discussed in Chapter 5 but not included in the Chapter 5 exhibits, and additional outcomes not discussed. These exhibits include additional detail beyond that shown in the Chapter 5 exhibits: outcome-specific sample size, *p*-value, and more significant digits.⁵⁸ For each of the confirmatory and secondary outcomes, Section H.7 then reports subgroup impact estimates.

H.1 Enrollment Process and Characteristics of the Study Sample

This section provides detailed information on the enrollment and random assignment process for applicants to RochesterWorks!’s FLH program (Section H.1.1), and additional detailed demographic characteristics of the study sample, including testing for baseline balance between those randomized to the program and control groups (Section H.1.2).

H.1.1 Enrollment and Random Assignment Process for FLH

The enrollment process for FLH began with a pre-screening by the Education and Employment Specialists (EES) (Exhibit H.1-1). During the pre-screening, which generally occurred by telephone, the EES provided information about Finger Lakes Hired, determined whether the potential applicant would meet the eligibility criteria, and informally assessed whether he or she would be a good fit for the program (i.e., interested in the industry and committed to finding employment). If the individual was determined preliminarily eligible, the Specialist registered them for the weekly Finger Lakes Hired group orientation session.

At the orientation, the EES provided an overview of FLH, including eligibility requirements, industries and occupations available, and expectations of participants. These staff also reviewed services available through the RochesterWorks! Career Center, such as workshops. Finally, the staff provided information about the RTW Evaluation. FLH orientations took place once a week at the Career Center and lasted 60 to 90 minutes. EESs also had the flexibility to conduct these enrollment activities individually, if an interested potential applicant could not attend it.

The EES then met individually for 5 to 10 minutes with each potential applicant to confirm eligibility and develop a short, basic plan intended to help applicants consider next steps in their employment search should they not enroll in FLH. The plan identified job search or computer skills workshops and assessments such as ACT’s WorkKeys® at the Career Center.

After the one-on-one meetings, the EES explained the study to those who were eligible and interested. Applicants who consented to participate in the study complete the BIF (see Appendix Section B.2.1) and were randomly assigned. Program group members scheduled a meeting with the EES to occur typically

⁵⁸ For all monetary outcomes, however, the appendix tables show the same number of significant digits as shown in the Chapter 5 exhibits.

within a week. Control group members were referred to the Career Center where they could meet with Career Center staff to discuss the job search process and possible next steps such as attending workshops and updating their resume and cover letter. For more information on this process, see Martinson et al. 2017.

Exhibit H.1-1. FLH Enrollment Process

<p>Recruitment</p> 	<ul style="list-style-type: none"> • Program website; referral from RochesterWorks! Career Services Advisor, college, or another organization; mailing to UI claimants and SNAP recipients. 	
<p>Pre-Screening with Education and Employment Specialist</p> 	<ul style="list-style-type: none"> • Phone conversation to determine basic eligibility and assess fit. • Eligible candidates registered for weekly group orientation session. 	 Did not meet basic eligibility criteria.
<p>Finger Lakes Hired Orientation</p> 	<ul style="list-style-type: none"> • Information about Finger Lakes Hired program and Career Center workshops and services. • In one-on-one meeting, Education and Employment Specialist confirmed applicant’s eligibility and identified in brief plan Career Center activities available to the applicant should they not be enrolled in Finger Lakes Hired. 	 Was not eligible; not a good fit for program.
	<ul style="list-style-type: none"> • Applicant completed study’s consent form and BIF. <p>Random Assignment Program group member–scheduled first meeting with Education and Employment Specialist.</p>	 Refused consent form; did not complete BIF  Control group member–could access services in Career Center
<p>Initial Meeting with Education and Employment Specialist</p>	<p>Program Services Begin</p> <ul style="list-style-type: none"> • Each program group member returned to Career Center for assessment of his/her job interests. • Specialist helped identify employment goal, determined program services, and documented next steps in Employment Plan. 	

H.1.2 Characteristics of the Study Sample

Exhibit H.1-2 provides additional demographic information for the RochesterWorks! study sample, and tests for differences in the characteristics of those members randomized to the program group versus control group. (A subset of the values reported in the “Study Sample Mean” column are reported in Exhibit 5-3 of the *Interim Impact Report*.⁵⁹) Exhibit H.1-3 reports the same information for the full sample at the time of random assignment. The *study sample* included in Exhibit H.1-2 and throughout the analysis is smaller than the *full sample* at random assignment included in Exhibit H.1-3 because the study

⁵⁹ Values reported in the “Study Sample Mean” column and Exhibit 5-3 may vary due to rounding. Whereas Appendix Exhibit H.1-2 reports average weekly earnings among all sample members (equal to zero for those who are not employed), Exhibit 5-3 reports average weekly earnings if employed.

sample excludes individuals who chose to withdraw from the study after having been randomly assigned (five members of the control group).

Exhibit H.1-2 includes information on quarterly earnings and employment levels for the seven quarters before random assignment for members of the study sample.⁶⁰ There is no corresponding information for the full sample (Exhibit H.1-3) because the study did not collect NDNH data for sample members who withdrew from the study.⁶¹

Exhibit H.1-2: Baseline Balance Testing – Study Sample, FLH

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Gender (%)				
Women	55.0	57.7	52.3	5.4
Men	45.0	42.3	47.7	-5.4
Race (%)				
Asian	2.0	0.7	3.4	-2.7*
Black or African American	29.2	31.2	27.3	3.9
White	60.5	59.7	61.3	-1.6
American Indian or Alaska Native	0.2	0.0	0.3	-0.3
Native Hawaiian or Other Pacific Islander	0.0	0.0	0.0	0.0
Other or multiple races	8.1	8.4	7.7	0.7
Hispanic ethnicity (%)	7.5	6.6	8.3	-1.7
Speaks language other than English at home (%)	12.8	10.1	15.5	-5.4*
Age (%)				
24 years or younger	4.8	3.6	5.9	-2.3
25 to 34 years	17.7	17.9	17.5	0.4
35 to 44 years	17.2	17.9	16.5	1.4
45 to 54 years	29.5	29.6	29.4	0.2
55 years or older	30.8	30.9	30.7	0.2
Average age (years)	46.2	46.3	46.0	0.4
Marital status (%)				
Married	33.3	31.9	34.8	-2.9
Widowed/divorced/separated	20.6	21.4	19.7	1.7
Never married	41.3	41.4	41.1	0.3
Living with a partner	4.8	5.3	4.3	1.0
Other employed adult in household (%)	43.8	41.9	45.7	-3.8
One or more own children in household age 6 or younger (%)	14.5	16.9	12.1	4.8
Education level (%)				
High school diploma or less	16.4	16.6	16.2	0.4
Some college credit but no degree	20.2	20.2	20.1	0.1

⁶⁰ Although for most sample members the study collected quarterly information from eight quarters before random assignment, depending on the timing of a sample member's random assignment relative to the timing of the next quarterly submission to OCSE, for some study members data was only available for seven prior quarters. (See Appendix Section B.3 for more information on the NDNH data collection process.) Appendix Exhibit H.1-2 only includes information for those quarters for which the study has complete data for the study sample (excepting the few study members with missing NDNH data, see Appendix Section A.1.5 for more detail on missing data).

⁶¹ The evaluation sent the first list of study sample identifiers to OCSE in March 2016, approximately eight months after the start of random assignment (see Appendix Section B.3 for more detail on how the NDNH data are collected). In that submission the evaluation only included sample members who remained in the study at that point, and therefore did not include those who had already withdrawn from the evaluation. Thus the study never collected NDNH data for the full sample at random assignment.

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Technical or associate's degree	19.8	18.2	21.5	-3.3
Bachelor's degree	30.8	32.6	29.0	3.6
Master's degree or more	12.8	12.4	13.2	-0.8
Employment status (%)				
Currently employed	12.3	9.8	14.8	-5.0
Currently unemployed, but employed in last 12 months	61.0	62.7	59.3	3.4
Currently unemployed, and longer than 12 months since last employed	26.7	27.5	25.9	1.6
Weekly earnings (\$, equal to 0 if not employed)	21.9	16.3	27.8	-11.5
Minimum wage willing to accept (\$/hour)	\$17.18	\$16.91	\$17.45	-\$0.54
Receiving any public benefits (%)	52.7	53.0	52.5	0.5
Receiving Supplemental Nutrition Assistance Program (SNAP)	27.1	27.6	26.6	1.0
Receiving Temporary Assistance for Needy Families (TANF)	5.8	5.6	6.0	-0.4
Receiving Section 8 or Public Housing assistance	11.4	11.5	11.3	0.2
Receiving Unemployment Insurance (UI)	28.1	28.1	28.0	0.1
Any barriers to employment (health/childcare/transportation limitations, %)	16.7	14.7	18.8	-4.1
Health problem or disability limits ability to work	12.5	11.1	13.9	-2.8
Ability to work is very limited by lack of access to affordable quality childcare	1.9	1.0	2.7	-1.7
Ability to work is very limited by problems with transportation	3.2	3.4	3.1	0.3
Felony conviction (%)	5.9	7.2	4.6	2.6
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.4	7.3	5.5	1.8
Strongly disagree: "I want only the kind of job that I trained for"	10.9	8.9	12.9	-4.0
Strongly agree: "I am willing to work part-time if no full-time offer is available"	28.0	27.3	28.8	-1.5
Strongly agree: "I am willing to work unusual or unpredictable schedules"	14.7	15.4	14.0	1.4
Willingness to work summary measure (one or more of four above statements hold) (%)	38.4	37.9	38.9	-1.0
Earnings Before Random Assignment (RA):				
Q7 pre-RA (\$)	8,443	7,987	8,907	-920
Q6 pre-RA (\$)	8,098	7,941	8,258	-318
Q5 pre-RA (\$)	7,434	7,034	7,841	-807
Q4 pre-RA (\$)	7,252	7,014	7,495	-481
Q3 pre-RA (\$)	7,541	7,447	7,637	-190
Q2 pre-RA (\$)	6,124	6,467	5,776	691
Q1 pre-RA (\$)	3,293	3,092	3,498	-406
Employment Before Random Assignment (RA):				
Q7 pre-RA (%)	72.3	71.7	72.9	-1.2
Q6 pre-RA (%)	70.6	70.3	70.8	-0.5
Q5 pre-RA (%)	69.2	68.0	70.5	-2.5
Q4 pre-RA (%)	68.2	66.3	70.2	-3.9
Q3 pre-RA (%)	64.7	63.0	66.4	-3.4
Q2 pre-RA (%)	58.7	58.0	59.3	-1.3
Q1 pre-RA (%)	40.5	40.0	41.0	-1.0

SOURCE: Baseline Information Form (BIF) and National Directory of New Hires (NDNH).

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. For pre-random assignment earnings and employment, measured in the NDNH, sample size of 595 includes 300 program group and 295 control group members. For all other outcomes, measured in the BIF, sample size of 610 includes 307 program group and 303 control group members. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

Exhibit H.1-3: Baseline Balance Testing – Full Sample at Random Assignment, FLH

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Gender (%)				
Women	55.2	57.7	52.8	4.9
Men	44.8	42.3	47.2	-4.9
Race (%)				
Asian	2.0	0.7	3.3	-2.6*
Black or African American	29.0	31.2	26.8	4.4
White	60.8	59.7	61.9	-2.2
American Indian or Alaska Native	0.2	0.0	0.3	-0.3
Native Hawaiian or Other Pacific Islander	0.0	0.0	0.0	0.0
Other or multiple races	8.0	8.4	7.6	0.8
Hispanic ethnicity (%)	7.4	6.6	8.2	-1.6
Speaks language other than English at home (%)	12.8	10.1	15.5	-5.4*
Age (%)				
24 years or younger	4.7	3.6	5.8	-2.2
25 to 34 years	17.6	17.9	17.2	0.7
35 to 44 years	17.1	17.9	16.2	1.7
45 to 54 years	29.4	29.6	29.2	0.4
55 years or older	31.2	30.9	31.5	-0.6
Average age (years)	46.3	46.3	46.2	0.1
Marital status (%)				
Married	33.6	31.9	35.2	-3.3
Widowed/divorced/separated	20.6	21.4	19.7	1.7
Never married	41.1	41.4	40.8	0.6
Living with a partner	4.8	5.3	4.3	1.0
Other employed adult in household (%)	43.8	41.9	45.7	-3.8
One or more own children in household age 6 or younger (%)	14.5	16.9	12.1	4.8
Education level (%)				
High school diploma or less	16.3	16.6	15.9	0.7
Some college credit but no degree	20.0	20.2	19.8	0.4
Technical or associate's degree	19.8	18.2	21.4	-3.2
Bachelor's degree	30.7	32.6	28.9	3.7
Master's degree or more	13.2	12.4	14.0	-1.6
Employment status (%)				
Currently employed	12.2	9.8	14.6	-4.8
Currently unemployed, but employed in last 12 months	61.2	62.7	59.6	3.1
Currently unemployed, and longer than 12 months since last employed	26.6	27.5	25.8	1.7
Weekly earnings (\$, equal to 0 if not employed)	21.7	16.3	27.3	-11.0
Minimum wage willing to accept (\$/hour)	\$17.22	\$16.91	\$17.53	-\$0.62
Receiving any public benefits (%)	52.5	53.0	52.0	1.0
Receiving Supplemental Nutrition Assistance Program (SNAP)	26.9	27.6	26.1	1.5
Receiving Temporary Assistance for Needy Families (TANF)	5.8	5.6	5.9	-0.3
Receiving Section 8 or Public Housing assistance	11.3	11.5	11.1	0.4
Receiving Unemployment Insurance (UI)	28.0	28.1	27.9	0.2
Any barriers to employment (health/childcare/transportation limitations, %)	16.7	14.7	18.8	-4.1
Health problem or disability limits ability to work	12.6	11.1	14.0	-2.9
Ability to work is very limited by lack of access to affordable quality childcare	1.8	1.0	2.7	-1.7
Ability to work is very limited by problems with transportation	3.2	3.4	3.1	0.3
Felony conviction (%)	5.9	7.2	4.5	2.7

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.3	7.3	5.4	1.9
Strongly disagree: "I want only the kind of job that I trained for"	10.8	8.9	12.7	-3.8
Strongly agree: "I am willing to work part-time if no full-time offer is available"	28.1	27.3	29.0	-1.7
Strongly agree: "I am willing to work unusual or unpredictable schedules"	14.8	15.4	14.1	1.3
Willingness to work summary measure (one or more of four above statements hold) (%)	38.4	37.9	38.9	-1.0

SOURCE: Baseline Information Form.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 615 includes 307 program group and 308 control group members. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

Exhibit H.1-4 compares the characteristics of the "early cohort" for the RochesterWorks! study sample (those randomly assigned by March 31, 2017) to the characteristics of the "late cohort" (those randomly assigned after March 31, 2017).

Exhibit H.1-4: Comparison of Early Cohort versus Late Cohort, FLH

Baseline Characteristic	Study Sample Mean	Early Cohort Mean	Late Cohort Mean	Difference
Gender (%)				
Women	55.0	55.6	54.2	1.4
Men	45.0	44.4	45.8	-1.4
Race (%)				
Asian	2.0	1.4	2.9	-1.5
Black or African American	29.2	32.5	24.6	7.9*
White	60.5	55.8	67.2	-11.4*
American Indian or Alaska Native	0.2	0.3	0.0	0.3
Native Hawaiian or Other Pacific Islander	0.0	0.0	0.0	0.0
Other or multiple races	8.1	10.0	5.3	4.7*
Hispanic ethnicity (%)	7.5	8.9	5.3	3.6
Speaks language other than English at home (%)	12.8	13.9	11.2	2.7
Age (%)				
24 years or younger	4.8	7.5	0.8	6.7*
25 to 34 years	17.7	20.2	14.1	6.1
35 to 44 years	17.2	18.8	14.9	3.9
45 to 54 years	29.5	27.4	32.5	-5.1
55 years or older	30.8	26.0	37.8	-11.8*
Average age (years)	46.2	44.1	49.2	-5.1*
Marital status (%)				
Married	33.3	28.7	39.9	-11.2*
Widowed/divorced/separated	20.6	20.8	20.2	0.6
Never married	41.3	44.5	36.7	7.8
Living with a partner	4.8	5.9	3.2	2.7
Other employed adult in household (%)	43.8	40.7	48.3	-7.6
One or more own children in household age 6 or younger (%)	14.5	18.4	9.3	9.1*
Education level (%)				
High school diploma or less	16.4	17.5	14.9	2.6

Baseline Characteristic	Study Sample Mean	Early Cohort Mean	Late Cohort Mean	Difference
Some college credit but no degree	20.2	22.2	17.3	4.9
Technical or associate's degree	19.8	22.4	16.1	6.3
Bachelor's degree	30.8	27.7	35.3	-7.6*
Master's degree or more	12.8	10.2	16.5	-6.3*
Employment status (%)				
Currently employed	12.3	14.0	9.7	4.3
Currently unemployed, but employed in last 12 months	61.0	56.5	67.6	-11.1*
Currently unemployed, and longer than 12 months since last employed	26.7	29.5	22.7	6.8
Weekly earnings (\$, equal to 0 if not employed)	21.9	19.9	24.6	-4.6
Minimum wage willing to accept (\$/hour)	\$17.18	\$15.74	\$19.18	-\$3.44*
Receiving any public benefits (%)	52.7	52.1	53.6	-1.5
Receiving Supplemental Nutrition Assistance Program (SNAP)	27.1	33.1	18.5	14.6*
Receiving Temporary Assistance for Needy Families (TANF)	5.8	6.8	4.5	2.3
Receiving Section 8 or Public Housing assistance	11.4	12.9	9.3	3.6
Receiving Unemployment Insurance (UI)	28.1	21.6	37.4	-15.8*
Any barriers to employment (health/childcare/transportation limitations, %)	16.7	17.7	15.3	2.4
Health problem or disability limits ability to work	12.5	12.3	12.9	-0.6
Ability to work is very limited by lack of access to affordable quality childcare	1.9	2.3	1.2	1.1
Ability to work is very limited by problems with transportation	3.2	4.3	1.7	2.6
Felony conviction (%)	5.9	7.5	3.6	3.9*
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.4	6.5	6.2	0.3
Strongly disagree: "I want only the kind of job that I trained for"	10.9	11.3	10.3	1.0
Strongly agree: "I am willing to work part-time if no full-time offer is available"	28.0	29.9	25.3	4.6
Strongly agree: "I am willing to work unusual or unpredictable schedules"	14.7	16.7	12.0	4.7
Willingness to work summary measure (one or more of four above statements hold) (%)	38.4	40.2	35.8	4.4

SOURCE: Baseline Information Form.

NOTES: Reported difference may not equal the difference between the early cohort mean and late cohort mean because of rounding. Sample size of 610 Includes 361 study members in the early cohort and 249 in the late cohort. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

H.2 Impacts on Participation in Employment-Related Activities

Exhibits H.2-1 through H.2-8 provide detailed results corresponding to Exhibits 5-4 and 5-5 in the *Interim Impact Report*. Exhibit H.2-1 reports impacts on any structured employment-related activities, and Exhibit H.2-2 plots the distribution of total weeks of any structured employment-related activities. Exhibit H.2-3 reports impacts on occupational training, including separately by college-based and non-college-based occupational training. Exhibit H.2-4 plots the distribution of total weeks of occupational training. Exhibit H.2-5 reports impacts on work-based training, including separately for unpaid internships, paid internships, and on-the-job training (OJT). Exhibit H.2-4 plots the distribution of total weeks of work-based training. Exhibit H.2-4 reports impacts on employment readiness courses, and Exhibit H.2-2 plots the distribution of total weeks of employment readiness courses.

Note that the exhibits plotting the distribution of total weeks of training reflect weeks completed as of 18 months after random assignment. As shown in Exhibit 5-6 in the *Interim Impact Report*, however, some study members remain in training at that point. For example, among the 7 percent of program group members who completed 54 to 99 weeks of any structured employment-related activity (see Exhibit H.2-2), 38 percent were still in training at 18 months after random assignment. Thus the values reported in these distributions underestimate the final amount of training completed by those sample members who were still in training after 18 months.

Exhibit H.2-1: Impacts on Any Employment-Related Activity, FLH

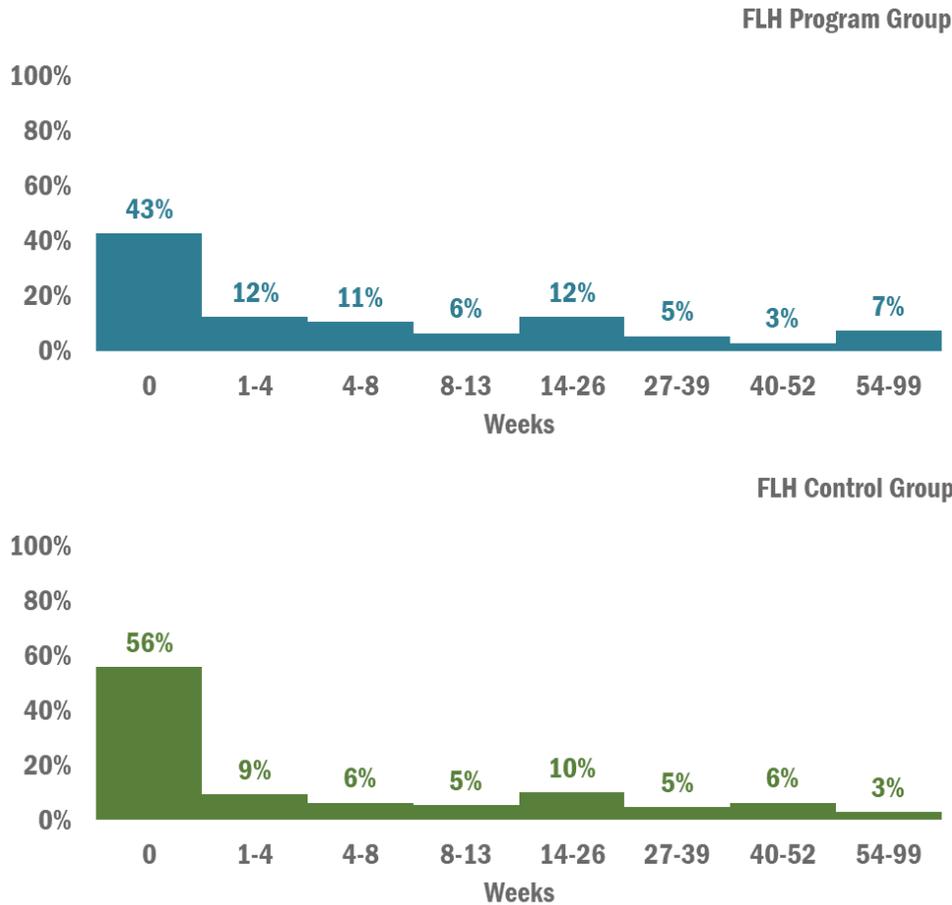
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Structured Employment-Related Activity								
Ever attended (%)	58.8	46.2	12.5***	4.3	.004	27	248	225
Number of activities attended	1.0	0.8	0.2	0.2	.139	30	248	225
Total hours attended	278.4	202.0	76.4*	43.8	.081	38	242	220
<i>Total hours, for attendees</i>	526.7	447.4	79.4	77.1	.304	18	136	95
Total weeks attended	12.2	9.0	3.2*	1.6	.050	36	238	217
<i>Total weeks, for attendees</i>	22.5	20.3	2.2	2.8	.435	11	132	92
<i>Hours per week, for attendees</i>	20.6	21.2	-0.7	1.9	.731	-3	132	92
Completed at least one activity (%)	49.9	38.7	11.2**	4.5	.013	29	243	220
Number of activities completed	0.7	0.6	0.1*	0.1	.082	26	243	220
Any occupational or work-based training in:								
Healthcare (%)	16.8	18.8	-2.0	3.3	.544	-11	246	225
Information technology (%)	9.6	5.9	3.7	2.5	.134	63	246	225
Advanced manufacturing (%)	3.2	2.1	1.1	1.5	.453	53	246	225

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-2: Distribution of Total Weeks of Any Structured Employment-Related Activity, FLH



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibit H.2-3: Impacts on Occupational Training, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Occupational Training								
Ever attended (%)	35.8	33.8	2.0	4.1	.628	6	249	226
Number of training programs attended	0.4	0.4	-0.0	0.1	.441	-10	249	226
Total hours attended	227.9	171.6	56.3	39.7	.157	33	246	225
<i>Total hours, for attendees</i>	665.1	511.7	153.4*	92.0	.097	30	83	71
Total weeks attended	8.7	7.4	1.3	1.4	.357	18	242	221
<i>Total weeks, for attendees</i>	25.4	23.0	2.4	3.1	.430	11	79	67
<i>Hours per week, for attendees</i>	25.4	22.7	2.7	2.3	.241	12	79	67
Completed at least one training program (%)	26.4	27.2	-0.7	4.0	.861	-3	246	225
Number of training programs completed	0.3	0.3	-0.0	0.0	.621	-8	246	225
Any occupational training in:								
Healthcare (%)	16.0	17.9	-1.9	3.2	.564	-10	246	225
Information technology (%)	8.8	5.5	3.4	2.4	.159	61	246	225
Advanced manufacturing (%)	2.1	2.1	0.1	1.3	.951	4	246	225

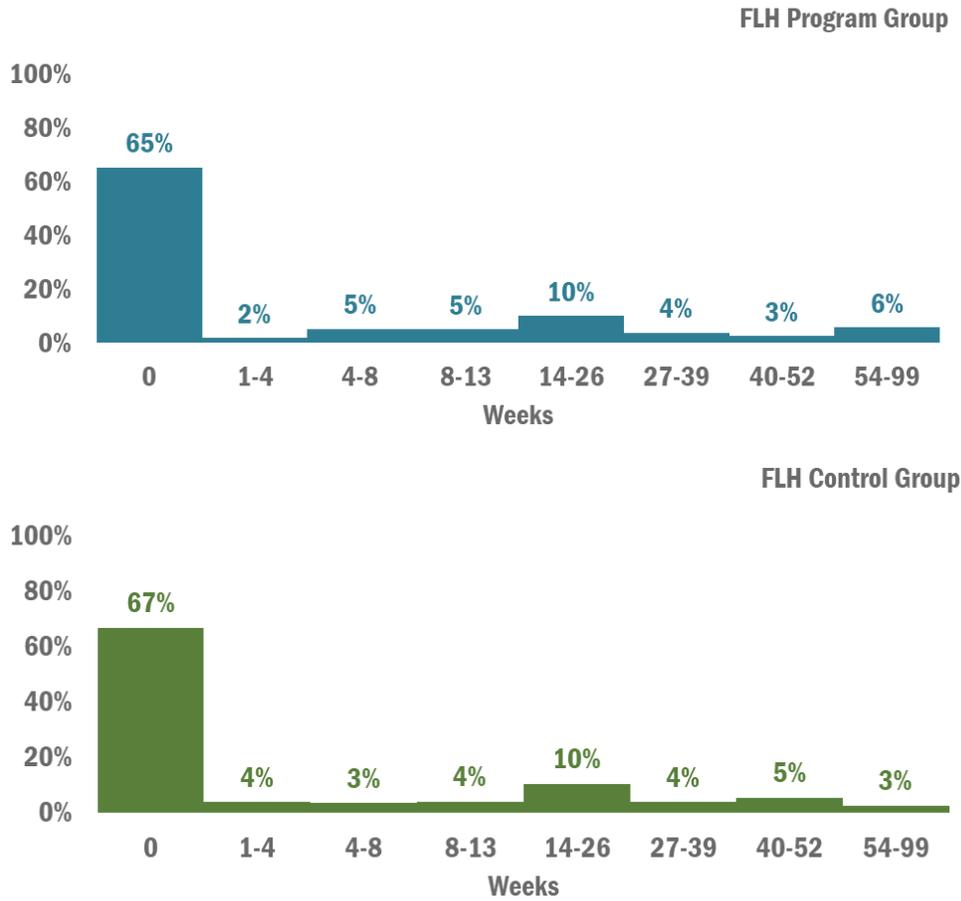
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
College-Based Occupational Training								
Ever attended (%)	5.6	9.0	-3.4	2.4	.167	-37	250	226
Number of training programs attended	0.1	0.1	-0.0	0.0	.133	-40	250	226
Total hours attended	50.2	47.8	2.4	21.6	.913	5	250	226
<i>Total hours, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	13	19
Total weeks attended	1.9	2.8	-0.9	0.9	.310	-32	249	226
<i>Total weeks, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	12	19
<i>Hours per week, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	12	19
Completed at least one training program (%)	2.0	1.8	0.2	1.3	.868	11	250	226
Number of training programs completed	0.0	0.0	0.0	0.0	.868	11	250	226
Any occupational training in:								
Healthcare (%)	1.8	3.3	-1.5	1.5	.318	-46	250	226
Information technology (%)	1.6	1.3	0.2	1.1	.824	19	250	226
Advanced manufacturing (%)	0.9	0.7	0.3	0.8	.723	43	250	226
Non-College-Based Occupational Training								
Ever attended (%)	31.5	27.2	4.2	4.1	.296	16	249	226
Number of training programs attended	0.3	0.3	-0.0	0.1	.940	-1	249	226
Total hours attended	177.5	123.6	53.9	34.6	.120	44	246	225
<i>Total hours, for attendees</i>	<i>614.7</i>	<i>459.2</i>	<i>155.5</i>	<i>100.3</i>	<i>.123</i>	<i>34</i>	<i>73</i>	<i>57</i>
Total weeks attended	6.7	4.6	2.1*	1.2	.066	47	243	221
<i>Total weeks, for attendees</i>	<i>22.5</i>	<i>18.0</i>	<i>4.5</i>	<i>3.0</i>	<i>.138</i>	<i>25</i>	<i>70</i>	<i>53</i>
<i>Hours per week, for attendees</i>	<i>26.1</i>	<i>24.9</i>	<i>1.1</i>	<i>2.7</i>	<i>.672</i>	<i>5</i>	<i>70</i>	<i>53</i>
Completed at least one training program (%)	24.8	25.3	-0.5	4.0	.903	-2	246	225
Number of training programs completed	0.3	0.3	-0.0	0.0	.583	-9	246	225
Any training offered:								
Realistic work settings (%)	27.7	22.0	5.7	3.9	.147	26	246	224
Trips to potential employers (%)	15.1	8.3	6.8**	3.0	.022	82	245	224
Any occupational training in:								
Healthcare (%)	15.1	15.6	-0.5	3.2	.864	-3	246	225
Information technology (%)	7.2	4.1	3.1	2.2	.150	75	246	225
Advanced manufacturing (%)	1.6	1.4	0.2	1.1	.842	16	246	225

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-4: Distribution of Total Weeks of Occupational Training, FLH



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibit H.2-5: Impacts on Work-Based Training, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Work-Based Training								
Ever attended (%)	7.8	6.7	1.1	2.4	.658	16	250	226
Number of work-based trainings	0.1	0.1	0.0	0.0	.862	7	250	226
Total hours attended	29.8	22.4	7.4	12.4	.553	33	250	226
<i>Total hours, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	19	15
Total weeks attended	1.4	1.2	0.2	0.7	.816	14	250	226
<i>Total weeks, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	19	15
<i>Hours per week, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	19	15
Completed at least one work-based training (%)	6.6	5.5	1.1	2.3	.619	21	250	226
Number of work-based trainings completed	0.1	0.1	0.0	0.0	.848	9	250	226
Any work-based training in:								
Healthcare (%)	3.5	4.1	-0.6	1.8	.736	-15	250	226
Information technology (%)	1.2	1.1	0.1	0.9	.898	11	250	226
Advanced manufacturing (%)	1.0	0.0	1.0	0.7	.161		250	226

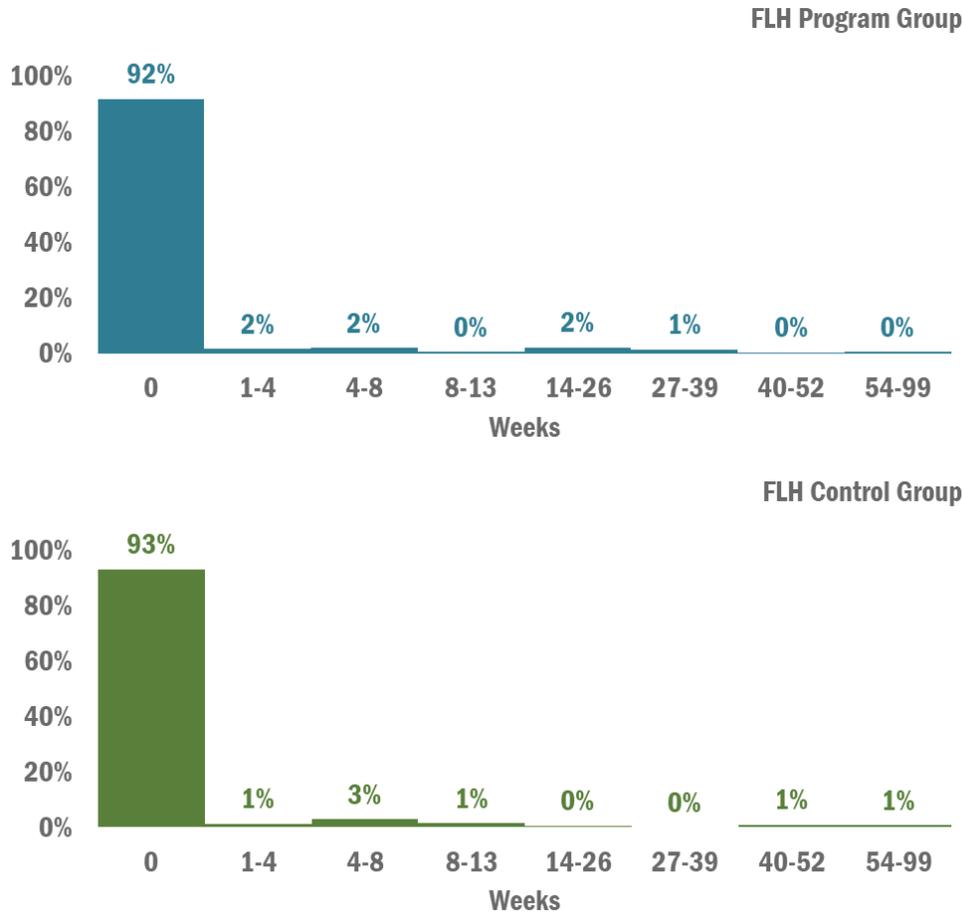
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Unpaid Internship								
Ever attended (%)	3.8	4.7	-0.9	1.9	.634	-20	250	226
Number of unpaid internships	0.0	0.1	-0.0	0.0	.474	-35	250	226
Total hours attended	9.8	14.1	-4.4	8.6	.608	-31	250	226
<i>Total hours, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	9	10
Total weeks attended	0.7	0.9	-0.2	0.7	.748	-22	250	226
<i>Total weeks, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	9	10
<i>Hours per week, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	9	10
Completed at least one unpaid internship (%)	3.0	4.3	-1.4	1.8	.452	-31	250	226
Number of unpaid internships completed	0.0	0.1	-0.0	0.0	.385	-44	250	226
Any unpaid internship in:								
Healthcare (%)	2.9	3.2	-0.3	1.7	.839	-11	250	226
Information technology (%)	0.1	0.7	-0.6	0.6	.315	-85	250	226
Advanced manufacturing (%)	0.0	0.0	0.0	0.0			250	226
Paid Internship								
Ever attended (%)	1.3	1.2	0.1	1.0	.937	7	250	226
Number of paid internships	0.0	0.0	0.0	0.0	.937	7	250	226
Total hours attended	2.6	7.3	-4.8	5.0	.343	-65	250	226
<i>Total hours, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	3	3
Total weeks attended	0.1	0.2	-0.1	0.2	.408	-60	250	226
<i>Total weeks, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	3	3
<i>Hours per week, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	3	3
Completed at least one paid internship (%)	0.9	0.4	0.6	0.8	.465	161	250	226
Number of paid internships completed	0.0	0.0	0.0	0.0	.465	161	250	226
Any paid internship in:								
Healthcare (%)	-0.0	0.5	-0.5	0.5	.316	-101	250	226
Information technology (%)	0.3	0.0	0.3	0.3	.320		250	226
Advanced manufacturing (%)	0.0	0.0	0.0	0.0			250	226
On-the-Job Training (OJT)								
Ever attended (%)	3.8	0.8	3.0**	1.4	.035	362	247	226
Number of OJTs	0.0	0.0	0.0**	0.0	.035	362	247	226
Total hours attended	17.7	0.9	16.8**	7.2	.020	1806	247	226
<i>Total hours, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	9	2
Total weeks attended	0.5	0.0	0.5**	0.2	.017	2230	247	226
<i>Total weeks, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	9	2
<i>Hours per week, for attendees</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>	9	2
Completed at least one OJT (%)	3.8	0.8	3.0**	1.4	.035	362	247	226
Number of OJTs completed	0.0	0.0	0.0**	0.0	.035	362	247	226
Any OJT in:								
Healthcare (%)	0.6	0.4	0.2	0.6	.741	50	247	226
Information technology (%)	0.8	0.4	0.4	0.7	.587	93	247	226
Advanced manufacturing (%)	1.0	0.0	1.0	0.7	.162		247	226

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any work-based training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Non-experimental results are not reported (NR) when 15 or fewer survey respondents of either the program or control group attended any training. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x

[impact / control group mean]); relative impact is blank if the control group mean is zero.
 Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-6: Distribution of Total Weeks of Work-Based Training, FLH



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibit H.2-7: Impacts on Employment Readiness Courses, FLH

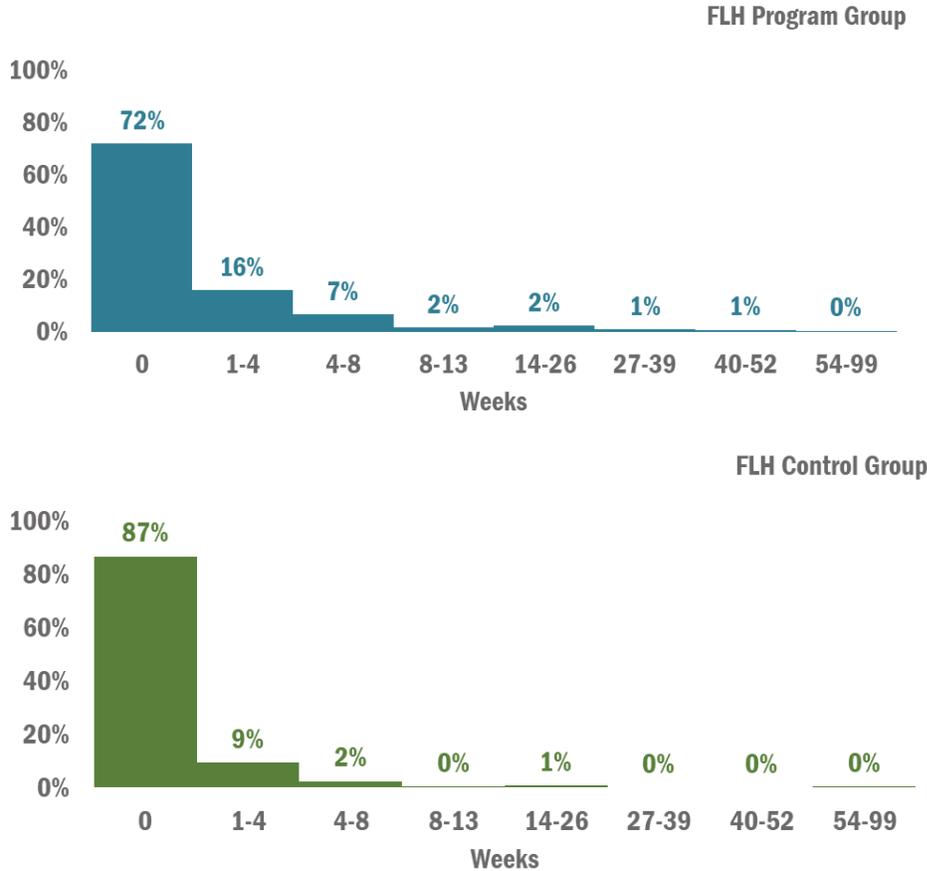
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Readiness Courses								
Ever attended (%)	28.1	14.8	13.2***	3.7	<.001	89	248	225
Number attended	0.6	0.3	0.3*	0.1	.055	98	248	225
Total hours attended	11.3	4.1	7.1***	2.7	.010	171	243	219
<i>Total hours, for attendees</i>	39.1	33.1	6.0	16.2	.710	18	64	27
Total weeks attended	1.8	0.7	1.1**	0.5	.043	155	239	219
<i>Total weeks, for attendees</i>	5.8	5.7	0.1	3.3	.966	2	60	27
<i>Hours per week, for attendees</i>	8.0	10.6	-2.6	2.6	.320	-24	60	27
Completed at least one activity (%)	25.4	11.6	13.8***	3.6	<.001	119	244	219
Number of activities completed	0.3	0.2	0.1***	0.1	.009	83	244	219

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and

impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-8: Distribution of Total Weeks of Employment Readiness Courses, FLH



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibits H.2-9 through H.2-14 report impacts on monthly attendance in program activities for the first 18 months after random assignment, discussed but not shown in Section 5.2 of the *Interim Impact Report*. Exhibit H.2-9 reports impacts on monthly attendance in any structured employment-related activities through 18 months after random assignment. Exhibit H.2-10 reports impacts on monthly attendance in occupational training. Exhibit H.2-11 reports impacts on monthly attendance in work-based training. Exhibit H.2-12 reports impacts on monthly attendance in an employment readiness course.

Exhibit H.2-9: Monthly Attendance in Any Structured Employment-Related Activity, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Structured Employment-Related Activity								
Ever attended any structured employment-related activities in the given month since random assignment:								
Month 1 (%)	27.0	18.7	8.3**	4.0	.037	44	236	215
Month 2 (%)	28.4	21.2	7.2*	4.0	.071	34	236	215
Month 3 (%)	26.9	19.7	7.2*	3.9	.063	37	236	215
Month 4 (%)	24.3	18.8	5.5	3.8	.145	29	236	215
Month 5 (%)	26.0	18.2	7.8**	3.8	.042	43	236	215
Month 6 (%)	24.3	15.6	8.7**	3.7	.019	56	236	215
Month 7 (%)	23.0	16.1	6.9*	3.7	.064	43	236	215
Month 8 (%)	23.4	16.2	7.2*	3.7	.054	45	236	215
Month 9 (%)	22.1	14.8	7.3**	3.7	.045	50	236	215
Month 10 (%)	20.7	13.4	7.2**	3.6	.044	54	236	215
Month 11 (%)	19.2	12.2	7.0**	3.5	.043	58	236	215
Month 12 (%)	18.2	9.5	8.7***	3.3	.008	92	236	215
Month 13 (%)	17.6	10.3	7.2**	3.2	.026	70	236	215
Month 14 (%)	16.6	10.6	6.0*	3.2	.062	57	236	215
Month 15 (%)	14.9	9.3	5.5*	3.1	.075	59	236	215
Month 16 (%)	12.5	8.3	4.3	2.9	.140	52	236	215
Month 17 (%)	10.4	9.2	1.2	2.8	.661	13	236	215
Month 18 (%)	10.0	7.6	2.4	2.7	.362	32	236	215

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-10: Monthly Attendance in Occupational Training, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Occupational Training								
Ever attended occupational training in the given month since random assignment:								
Month 1 (%)	10.9	12.3	-1.4	3.0	.639	-12	245	222
Month 2 (%)	16.5	17.3	-0.8	3.4	.817	-5	245	222
Month 3 (%)	18.8	17.7	1.1	3.5	.743	6	245	222
Month 4 (%)	18.1	17.2	0.9	3.4	.790	5	245	222
Month 5 (%)	17.8	16.3	1.6	3.4	.646	10	245	222
Month 6 (%)	17.6	15.0	2.6	3.4	.450	17	245	222
Month 7 (%)	16.8	15.9	0.9	3.5	.793	6	245	222
Month 8 (%)	17.3	15.4	1.9	3.5	.592	12	245	222
Month 9 (%)	17.2	14.2	3.0	3.5	.390	21	245	222
Month 10 (%)	16.5	11.8	4.7	3.3	.158	40	245	222
Month 11 (%)	14.6	9.4	5.1*	3.0	.091	54	245	222
Month 12 (%)	14.1	8.0	6.1**	2.9	.038	76	245	222
Month 13 (%)	13.4	7.4	6.1**	2.8	.030	82	245	222
Month 14 (%)	13.6	7.7	5.9**	2.9	.039	77	245	222
Month 15 (%)	11.1	7.1	4.0	2.7	.142	56	245	222
Month 16 (%)	9.8	6.7	3.1	2.6	.234	45	245	222

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Month 17 (%)	7.5	6.7	0.8	2.4	.755	11	245	222
Month 18 (%)	7.1	6.6	0.6	2.4	.810	9	245	222

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-11: Monthly Attendance in Work-Based Training, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Work-Based Training								
Ever attended work-based training in the given month since random assignment:								
Month 1 (%)	0.5	1.1	-0.6	0.9	.524	-53	250	226
Month 2 (%)	1.4	1.4	-0.0	1.2	.976	-3	250	226
Month 3 (%)	1.7	2.2	-0.4	1.4	.744	-20	250	226
Month 4 (%)	2.0	2.2	-0.2	1.4	.904	-8	250	226
Month 5 (%)	3.5	2.6	0.9	1.6	.561	36	250	226
Month 6 (%)	3.2	3.7	-0.4	1.7	.795	-12	250	226
Month 7 (%)	1.8	2.2	-0.4	1.3	.734	-20	250	226
Month 8 (%)	2.1	1.4	0.7	1.2	.553	51	250	226
Month 9 (%)	2.7	1.8	1.0	1.4	.480	55	250	226
Month 10 (%)	2.8	2.5	0.3	1.6	.835	13	250	226
Month 11 (%)	2.8	2.1	0.8	1.5	.616	37	250	226
Month 12 (%)	2.5	1.4	1.0	1.3	.426	74	250	226
Month 13 (%)	2.0	1.4	0.6	1.2	.630	42	250	226
Month 14 (%)	2.0	1.4	0.6	1.2	.630	42	250	226
Month 15 (%)	1.9	1.5	0.4	1.3	.763	25	250	226
Month 16 (%)	1.0	0.8	0.1	0.9	.881	16	250	226
Month 17 (%)	2.0	0.8	1.2	1.1	.281	138	250	226
Month 18 (%)	1.2	0.4	0.8	0.8	.291	224	250	226

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-12: Monthly Attendance in Employment Readiness Courses, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Readiness Courses								
Ever attended an employment readiness course in the given month since random assignment:								
Month 1 (%)	15.7	7.4	8.3***	2.9	.005	113	239	218
Month 2 (%)	11.6	4.0	7.6***	2.4	.002	189	239	218
Month 3 (%)	6.8	2.1	4.8**	1.9	.012	231	239	218
Month 4 (%)	4.8	0.9	3.9**	1.6	.014	426	239	218
Month 5 (%)	6.0	0.9	5.1***	1.8	.004	560	239	218
Month 6 (%)	5.4	0.4	5.0***	1.6	.002	1235	239	218

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Month 7 (%)	5.3	0.4	4.9***	1.6	.002	1213	239	218
Month 8 (%)	5.0	0.9	4.1**	1.6	.012	448	239	218
Month 9 (%)	3.1	0.4	2.7**	1.3	.034	669	239	218
Month 10 (%)	2.6	0.4	2.1*	1.1	.062	530	239	218
Month 11 (%)	3.2	0.9	2.3	1.4	.103	250	239	218
Month 12 (%)	2.3	0.4	1.9*	1.1	.097	470	239	218
Month 13 (%)	2.4	1.6	0.8	1.4	.575	50	239	218
Month 14 (%)	1.1	1.1	0.0	0.9	.975	3	239	218
Month 15 (%)	1.1	1.1	0.1	1.0	.954	5	239	218
Month 16 (%)	1.1	0.4	0.7	0.8	.363	177	239	218
Month 17 (%)	1.1	1.3	-0.2	1.0	.836	-16	239	218
Month 18 (%)	1.5	0.4	1.1	0.9	.205	280	239	218

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-13 provides detailed results corresponding to Exhibit 5-7 in the *Interim Impact Report*.

Exhibit H.2-13: Receipt of Job Search Assistance, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Type of Job Search Assistance Provided								
Career counseling								
Any (%)	56.5	44.8	11.7**	4.7	.013	26	245	220
Number of times	1.9	0.7	1.2***	0.4	.003	169	244	219
Job placement assistance								
Any (%)	52.3	39.0	13.2***	4.7	.005	34	245	223
Number of times	1.9	0.6	1.2***	0.4	<.001	192	244	222
Job readiness training								
Any (%)	58.6	43.9	14.7***	4.7	.002	34	244	222
Number of times	2.0	1.0	0.9*	0.5	.052	92	243	221
Topics Addressed in Program								
Career planning (%)								
A great deal of attention	27.5	16.2	11.3***	3.8	.003	69	247	227
At least some attention	47.6	34.9	12.6***	4.4	.004	36	247	227
Finding a job (%)								
A great deal of attention	28.7	17.4	11.3***	3.9	.004	65	247	227
At least some attention	46.6	33.2	13.4***	4.5	.003	40	247	227

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.2-14 presents impacts on receipt of assistance with workplace behaviors and soft skills (discussed but not shown in Section 5.2 of the *Interim Impact Report*).

Exhibit H.2-14: Receipt of Assistance with Workplace Behaviors and Soft Skills, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Workplace Behaviors								
Critical thinking (%)								
A great deal of attention	27.2	14.9	12.3***	3.7	<.001	82	248	227
At least some attention	44.7	35.1	9.6**	4.3	.026	27	248	227
Working in groups (%)								
A great deal of attention	26.8	15.9	10.9***	3.7	.003	68	248	227
At least some attention	47.1	36.8	10.4**	4.3	.016	28	248	227
Communicating well (%)								
A great deal of attention	31.1	19.0	12.1***	3.9	.002	64	248	227
At least some attention	50.6	39.6	11.0**	4.4	.012	28	248	227
Acting professionally (%)								
A great deal of attention	25.9	22.2	3.7	3.9	.340	17	248	227
At least some attention	49.3	35.8	13.5***	4.3	.002	38	248	227
Soft Skills								
Time management (%)								
A great deal of attention	18.7	10.8	7.9**	3.3	.017	73	248	226
At least some attention	43.6	32.6	10.9**	4.3	.012	33	248	226
Managing stress, anger, and frustration (%)								
A great deal of attention	15.4	7.7	7.6**	3.0	.010	98	248	227
At least some attention	37.3	30.3	7.0	4.3	.103	23	248	227
Staying motivated (%)								
A great deal of attention	18.8	13.0	5.8*	3.4	.086	45	248	226
At least some attention	46.2	35.8	10.3**	4.4	.021	29	248	226
Managing money (%)								
A great deal of attention	10.5	6.1	4.3*	2.6	.096	70	248	226
At least some attention	21.8	14.9	6.9*	3.5	.052	46	248	226
Handling parenting and other family responsibilities (%)								
A great deal of attention	7.3	4.1	3.2	2.2	.145	78	248	227
At least some attention	16.1	13.5	2.6	3.2	.417	19	248	227
Help with problems at school, work, or home (%)								
A great deal of attention	15.4	8.3	7.1**	2.9	.017	85	248	226
At least some attention	34.5	24.2	10.3**	4.0	.010	43	248	226
Academic Skills and Services								
Study skills (%)								
A great deal of attention	19.3	9.3	10.0***	3.2	.002	108	248	227
At least some attention	38.9	27.7	11.2***	4.1	.007	40	248	227
Finding/applying for financial aid (%)								
A great deal of attention	8.9	7.2	1.6	2.5	.522	22	248	227
At least some attention	27.0	20.0	7.0*	3.8	.066	35	248	227

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.3 Impacts on Receipt of Education- and Employment-Related Supports

Exhibit H.3-1 provides detailed results corresponding to Exhibit 5-8 in the *Interim Impact Report*.

Exhibit H.3-1: Funding Sources for Occupational Training, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Own/Family Funding Sources								
Own or family earnings, savings, or loan (%)	7.8	19.3	-11.5***	3.1	<.001	-60	245	225
<i>Own or family earnings, savings, or loan, if any occupational training (%)</i>	22.2	57.8	-35.6***	7.5	<.001	-62	82	71
Funding sources:								
Own earnings (%)	5.8	15.5	-9.7***	2.9	<.001	-63	245	225
Spouse/partner earnings (%)	0.9	1.2	-0.3	1.0	.764	-25	249	226
Own or spouse/partner savings (%)	2.9	8.9	-6.0***	2.3	.009	-67	245	225
Financial help from parent/family member (%)	1.4	2.3	-0.9	1.4	.502	-40	245	225
Loans in own name (%)	2.9	10.1	-7.2***	2.4	.002	-71	245	224
Other Sources (Free or Subsidized Occupational Training)								
Received financial support for occupational training from non-family sources (%)	32.9	27.2	5.7	4.0	.154	21	245	225
<i>Received financial support for occupational training from non-family sources, if any occupational training (%)</i>	97.0	81.6	15.4***	5.1	.003	19	82	71
Funding sources:								
Free training program (%)	19.1	11.4	7.8**	3.3	.020	68	245	225
Program provider financial support (%)	6.6	6.5	0.1	2.4	.951	2	240	225
From an American Job Center/state unemployment office (%)	10.3	4.5	5.8**	2.4	.016	128	243	225
From a Pell grant or other non-governmental grant (%)	8.3	9.7	-1.4	2.6	.596	-14	249	226
Any other funding source (%)	15.6	9.4	6.1**	3.0	.045	65	244	224

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.3-2 presents impacts on receipt of academic and other support services (discussed but not shown in Section 5.3 of the *Interim Impact Report*).

Exhibit H.3-2: Receipt of Academic and Other Support Services, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Academic Support Services								
Academic advising								
Any (%)	21.4	16.3	5.1	3.6	.158	31	243	222
Number of times	0.9	0.4	0.5***	0.2	.006	115	243	222
Financial aid advising								
Any (%)	15.9	13.9	2.0	3.4	.558	14	247	224
Number of times	0.4	0.2	0.1	0.1	.154	59	247	223
Tutoring								
Any (%)	9.6	4.3	5.3**	2.4	.026	122	250	227
Number of times	0.8	0.3	0.5**	0.3	.039	181	250	227
Other Support Services (%)								
Assistance with mental health (%)	7.6	10.7	-3.1	2.7	.242	-29	250	227
Clothes or uniforms (%)	11.4	9.7	1.7	2.8	.541	18	250	227
Assistance with childcare (%)	3.5	0.8	2.7**	1.4	.048	351	250	227
Assistance with transportation (%)	10.9	7.8	3.1	2.6	.227	40	246	224
Tools (%)	5.5	4.5	1.0	2.0	.620	22	250	227
Assistance with other services (%)	4.3	4.4	-0.1	1.8	.969	-2	250	227

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.4 Impacts on Credential Receipt and Other Short-Term Outcomes

Exhibit H.4-1 provides detailed results corresponding to Exhibit 5-9 in the *Interim Impact Report*.

Exhibit H.4-1: Educational Attainment, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Educational Attainment								
Received any certificate, certification, license, or degree (%)	25.2	27.0	-1.8	4.0	.658	-7	246	225
Occupational training certificate								
Received any (%)	21.8	24.3	-2.5	3.9	.514	-10	246	225
Number	0.2	0.3	-0.1	0.0	.249	-19	246	225
College credits								
Received any (%)	2.1	1.4	0.6	1.2	.604	43	250	226
Number	0.7	0.3	0.4	0.4	.405	119	250	226
College credential								
Certificate (%)	1.7	0.4	1.3	1.0	.175	332	250	226
Associate's degree (%)	0.0	0.0	0.0	0.0			250	226
Bachelor's degree or higher (%)	0.0	0.4	-0.4	0.4	.320	-100	250	226
Professional certification or license								
Received any (%)	5.3	10.2	-4.9*	2.5	.052	-48	250	227
Employment Readiness								
Employment readiness certificate								
Received any (%)	7.3	4.8	2.5	2.3	.277	52	241	219

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.4-2 provides detail on the types of professional certifications or licenses received between random assignment and follow-up (discussed but not shown in Section 5.4 of the *Interim Impact Report*). The exhibit presents the proportion of the study sample that received each type of certification or license, both overall and by treatment status. The last column reports the difference between treatment groups, and indicates whether the difference is statistically significant at the 5 percent level.

Exhibit H.4-2: Types of Professional Credentials Received, FLH

Professional Certification or License	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Information Technology				
CompTia	0.5	0.4	0.7	-0.3
Microsoft (excluding training in Microsoft programs)	0.4	0.8	0.0	0.8
Other software certification (e.g., python, java oracle)	0.2	0.4	0.0	0.4
Healthcare/Bioscience				
Certified nursing assistant (CNA)	1.6	1.9	1.3	0.6
Nursing certification	2.3	0.4	4.3	-3.9*
Home health aide, medication technician/aide	0.6	0.4	0.9	-0.5
Phlebotomy	0.4	0.0	0.8	-0.8
License/certification in mental health, social work, or massage	0.4	0.0	0.8	-0.8
Manufacturing				
Manufacturing- or engineering- related certification	0.2	0.0	0.4	-0.4
Business				
License/certification in accounting, tax preparation, real estate, or similar	0.2	0.0	0.4	-0.4
Other				
Trades (e.g., welding, electrical)	0.2	0.4	0.0	0.4
Commercial driver's license (CDL)	0.8	0.8	0.7	0.1

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and the control group mean because of rounding. Sample size of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit H.4-3 provides detailed results for impacts on confidence in career knowledge and barriers to employment (discussed but not shown in Section 5.4 of the *Interim Impact Report*).

Exhibit H.4-3: Confidence in Career Knowledge and Barriers to Employment, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Confidence in career knowledge scale	1.6	1.7	-0.1	0.1	.330	-3	249	225
Barriers to employment								
Childcare arrangements (%)	5.1	5.6	-0.5	2.1	.810	-9	248	224
Transportation (%)	8.9	9.6	-0.7	2.6	.780	-8	249	225
Illness or health condition (%)	19.3	20.9	-1.6	3.8	.677	-8	248	224
Number of barriers (range 0-3)	0.3	0.4	-0.0	0.1	.605	-8	249	225
Minimum hourly wage willing to accept (\$/hour)	19.99	21.09	-1.09	0.92	.237	-5	230	211

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.5 Impacts on Labor Market Outcomes

Exhibit H.5-1 provides detailed results corresponding to Exhibit 5-10 through Exhibit 5-12 in the *Interim Impact Report*.

Exhibit H.5-1: Earnings and Employment, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Earnings								
Average earnings in Q5 and Q6 (\$)	6,518	6,505	13	537	.980	0	300	295
Average earnings in Q5 and Q6, if employed in Q5 or Q6 (\$)	8,611	8,683	-72	589	.903	-1	225	221
Cumulative earnings in Q1-Q6 (\$)	31,400	33,642	-2,242	2,624	.393	-7	300	295
Earnings Before Random Assignment (RA):								
Q8 pre-RA (\$)	7,024	8,209	-1,185	738	.109	-14	296	289
Q7 pre-RA (\$)	8,017	8,907	-890	720	.217	-10	300	295
Q6 pre-RA (\$)	8,006	8,258	-252	700	.718	-3	300	295
Q5 pre-RA (\$)	7,141	7,841	-700	645	.278	-9	300	295
Q4 pre-RA (\$)	7,139	7,495	-356	613	.562	-5	300	295
Q3 pre-RA (\$)	7,520	7,637	-117	767	.879	-2	300	295
Q2 pre-RA (\$)	6,517	5,776	742	826	.370	13	300	295
Q1 pre-RA (\$)	3,111	3,498	-387	656	.555	-11	300	295
Q0 (\$)	1,627	1,435	191	354	.589	13	300	295
Earnings After Random Assignment:								
Q1 (\$)	3,239	3,541	-302	437	.489	-9	300	295
Q2 (\$)	4,476	5,315	-839	543	.123	-16	300	295
Q3 (\$)	5,190	5,809	-619	545	.256	-11	300	295
Q4 (\$)	5,458	5,967	-509	522	.330	-9	300	295
Q5 (\$)	6,477	6,474	3	571	.996	0	300	295
Q6 (\$)	6,559	6,536	24	554	.966	0	300	295

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment								
Ever employed during Q5 or Q6 (%)	75.1	74.9	0.1	3.5	.967	0	300	295
Ever employed during Q1-Q6 (%)	82.8	84.1	-1.3	2.9	.659	-2	300	295
Employment Before Random Assignment (RA):								
Q8 pre-RA (%)	63.4	66.1	-2.7	3.5	.439	-4	296	289
Q7 pre-RA (%)	72.2	72.9	-0.7	3.1	.828	-1	300	295
Q6 pre-RA (%)	70.8	70.8	-0.0	3.0	.989	-0	300	295
Q5 pre-RA (%)	68.7	70.5	-1.8	2.9	.546	-2	300	295
Q4 pre-RA (%)	67.4	70.2	-2.8	2.2	.216	-4	300	295
Q3 pre-RA (%)	63.8	66.4	-2.7	2.6	.306	-4	300	295
Q2 pre-RA (%)	58.9	59.3	-0.4	3.0	.893	-1	300	295
Q1 pre-RA (%)	40.5	41.0	-0.5	3.6	.894	-1	300	295
Q0 (%)	35.7	40.0	-4.3	3.8	.259	-11	300	295
Employment After Random Assignment:								
Q1 (%)	53.9	57.3	-3.4	3.9	.388	-6	300	295
Q2 (%)	60.0	64.7	-4.7	3.8	.212	-7	300	295
Q3 (%)	64.5	68.1	-3.7	3.7	.327	-5	300	295
Q4 (%)	67.0	68.1	-1.1	3.7	.765	-2	300	295
Q5 (%)	68.3	70.5	-2.2	3.7	.547	-3	300	295
Q6 (%)	71.8	72.2	-0.4	3.6	.921	-0	300	295
Number of quarters employed during Q1-Q6	3.9	4.0	-0.2	0.2	.382	-4	300	295
Longest job tenure during Q0-Q6 (quarters)	3.3	3.5	-0.2	0.2	.280	-5	294	288

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through six quarters after random assignment.

NOTES: **Confirmatory outcomes are bolded and italicized**. **Secondary outcomes are bolded**; exploratory outcomes are neither bolded nor italicized. *Outcomes in italics* apply to the subset of sample members who were ever employed during Q5 or Q6, and are thus non-experimental. Where not italicized, outcomes apply to the full sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. Relative impact represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.5-2 provides information for the early cohort, providing detailed impact estimates on earnings and employment through Q12 (discussed but not shown in Section 5.5 of the *Interim Impact Report*).

Exhibit H.5-2: Earnings and Employment for Sample Members Observed through 12 Quarters, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Earnings								
Earnings in Q1 (\$)	2,477	2,884	-407	459	.376	-14	178	173
Earnings in Q2 (\$)	3,854	3,988	-134	644	.835	-3	178	173
Earnings in Q3 (\$)	5,003	4,181	822	613	.181	20	178	173
Earnings in Q4 (\$)	5,298	4,282	1,016*	610	.097	24	178	173
Earnings in Q5 (\$)	6,072	4,880	1,192*	688	.084	24	178	173
Earnings in Q6 (\$)	6,112	5,047	1,065*	641	.098	21	178	173
Earnings in Q7 (\$)	6,584	5,502	1,082	694	.120	20	178	173
Earnings in Q8 (\$)	6,568	5,763	804	697	.249	14	178	173
Earnings in Q9 (\$)	7,006	6,333	673	788	.393	11	178	173
Earnings in Q10 (\$)	6,550	6,348	203	742	.785	3	178	173
Earnings in Q11 (\$)	6,935	6,474	461	820	.574	7	178	173
Earnings in Q12 (\$)	6,639	6,478	162	774	.835	2	178	173

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment								
Ever employed during Q1 (%)	50.5	54.9	-4.4	5.2	.402	-8	178	173
Ever employed during Q2 (%)	61.2	63.6	-2.4	5.1	.638	-4	178	173
Ever employed during Q3 (%)	68.1	66.5	1.7	4.9	.735	3	178	173
Ever employed during Q4 (%)	68.8	64.7	4.0	5.0	.418	6	178	173
Ever employed during Q5 (%)	70.3	69.4	1.0	4.9	.843	1	178	173
Ever employed during Q6 (%)	73.1	71.7	1.4	4.8	.770	2	178	173
Ever employed during Q7 (%)	76.4	71.7	4.7	4.6	.310	7	178	173
Ever employed during Q8 (%)	75.1	72.3	2.8	4.7	.544	4	178	173
Ever employed during Q9 (%)	72.5	71.7	0.8	4.7	.866	1	178	173
Ever employed during Q10 (%)	73.2	72.3	0.9	4.7	.845	1	178	173
Ever employed during Q11 (%)	75.2	72.3	2.9	4.6	.530	4	178	173
Ever employed during Q12 (%)	70.9	72.3	-1.3	4.8	.780	-2	178	173

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through twelve quarters after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.5-3 provides detailed results not discussed in Section 5.5 of the *Interim Impact Report*.

Exhibit H.5-3: Engagement in the Labor Force, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Status at Follow-Up								
Employed (%)	71.1	73.5	-2.4	4.1	.567	-3	249	225
Unemployed (%)	14.2	16.6	-2.4	3.4	.482	-14	249	224
Out of the labor force (%)	10.6	7.8	2.8	2.7	.295	36	249	224
Attending school or long-term training program (%)	2.9	0.4	2.5**	1.2	.032	645	249	224
Maternity leave, sick, or unable to work because of disability (%)	4.8	4.2	0.6	1.9	.746	15	249	224
Retired (%)	2.8	3.2	-0.4	1.5	.804	-12	249	224
Number of jobs since random assignment	1.4	1.4	0.0	0.1	.913	1	247	225

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.5-4 provides detailed results corresponding to Exhibit 5-13 in the *Interim Impact Report*.

Exhibit H.5-4: Characteristics of Current Job, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Job Field								
Healthcare (%)	24.4	21.2	3.1	3.8	.410	15	249	225
Information technology (%)	10.2	16.7	-6.5**	2.9	.026	-39	248	225
Manufacturing (%)	7.9	6.6	1.3	2.4	.595	19	248	225
Job Type								
Regular full-time or part-time employee (%)	60.0	60.9	-0.9	4.5	.841	-1	248	225
Employed by a temporary help agency (%)	2.4	1.7	0.7	1.3	.606	41	248	225
Employed by a company that contracts out your services (%)	2.5	1.8	0.7	1.3	.566	43	248	225
Independent contractor or independent consultant (%)	2.4	2.8	-0.4	1.5	.797	-14	248	225
Self-employed, including freelancer and day laborer (%)	1.2	3.6	-2.4*	1.3	.074	-68	248	225
Other (%)	2.6	2.8	-0.2	1.4	.905	-6	248	225
Pay and Hours								
Rate of pay per year (\$)	27,175	26,211	964	2,277	.672	4	235	212
<i>Hourly wage, if employed (\$/hour)</i>	18.85	19.96	-1.12	1.00	.263	-6	161	150
Hours worked per week	26.9	25.0	1.9	1.7	.256	8	248	223
<i>Hours worked per week, if employed</i>	37.5	34.2	3.3***	1.1	.003	10	176	162
Full-time (35 or more hours per week, %)	58.3	48.9	9.4**	4.5	.037	19	248	223
<i>Full-time, if employed (%)</i>	80.2	66.8	13.4***	4.7	.005	20	176	162
Part-time (less than 35 hours per week, %)	12.7	24.3	-11.6***	3.6	.001	-48	248	223
<i>Part-time, if employed (%)</i>	19.8	33.2	-13.4***	4.7	.005	-40	176	162
Number of weeks at job since random assignment	34.1	34.9	-0.8	2.9	.787	-2	245	219
Job represented by a union (%)	6.3	5.6	0.7	2.2	.743	13	246	223
Job Benefits								
Offers health insurance (%)	52.7	47.9	4.9	4.5	.281	10	244	220
Paid vacation (%)	52.1	48.3	3.7	4.5	.408	8	245	225
Paid holiday (%)	56.4	53.0	3.4	4.5	.448	6	246	224
Paid sick time (%)	48.4	41.3	7.1	4.5	.114	17	244	222
Retirement/pension plan (%)	48.7	47.1	1.6	4.6	.730	3	238	218
Job Schedule								
Regular daytime schedule (%)	52.1	51.6	0.5	4.5	.908	1	249	225
Regular evening shift (%)	6.1	4.8	1.3	2.2	.532	28	249	225
Regular night shift (%)	3.6	2.6	1.1	1.6	.520	41	249	225
Rotating schedule (%)	0.9	3.1	-2.2	1.4	.111	-70	249	225
Irregular schedule (%)	4.4	6.8	-2.4	2.2	.274	-35	249	225
Other schedule (%)	3.9	4.6	-0.7	1.9	.718	-15	249	225
Career Opportunities								
Job offers career advancement opportunities:								
Strongly agree (%)	18.8	23.0	-4.2	3.8	.272	-18	247	219
Agree (%)	27.0	27.6	-0.6	4.2	.894	-2	247	219

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Disagree (%)	14.5	13.9	0.6	3.3	.850	4	247	219
Strongly disagree (%)	10.7	8.4	2.3	2.7	.395	27	247	219

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who were employed at follow up, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibits H.5-5 and H.5-6 present the distribution of the field of employment at follow-up (in each exhibit, the last line reports the proportion not employed.) Exhibit H.5-5 reports on the industry of employment; Exhibit H.5-6 reports on the occupation. The exhibits present the proportion of the study sample working in each field, both overall and by treatment status. In each, the last column reports the difference between treatment groups, and indicates whether the difference is statistically significant.

Exhibit H.5-5: Distribution of Industry of Employment, FLH

Industry of Employment	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Not employed	28.1	29.6	26.5	3.1
Information technology-related industries				
Computer system design and related services	4.5	5.0	3.9	1.1
Information industries, including software publishing, telecommunications, data processing/hosting and other information services	3.1	4.1	2.1	2.0
Manufacturing- and advanced manufacturing-related industries				
Metal, machinery, computer and electronic/electrical equipment manufacturing	7.5	6.0	8.9	-2.9
Other manufacturing (e.g. wood/paper, chemicals, plastics, food/beverage, textiles/apparel)	2.9	3.7	2.1	1.6
Architectural, engineering, and specialized design services	0.6	0.5	0.8	-0.3
Healthcare-related industries				
Healthcare services other than social assistance	16.0	15.8	16.2	-0.4
Other industries				
Accommodations, food services, personal services, and private household	2.4	2.3	2.6	-0.3
Administrative and support services	6.9	6.2	7.5	-1.3
Construction, mining/oil and gas, utilities, agriculture, and waste management	1.8	1.6	2.0	-0.4
Educational services	5.1	4.7	5.5	-0.8
Finance, insurance, and real estate	4.1	3.2	4.9	-1.7
Professional, scientific, and technical services other than computer system design/architectural services/ scientific research (e.g. accounting/tax preparation, advertising/public relations)	1.8	1.4	2.2	-0.8
Public administration	1.6	1.3	1.9	-0.6
Scientific research and development and management/scientific/technical consulting services	1.0	2.0	0.0	2.0*
Social assistance, religious, grant-making, civic, professional, and similar organizations	3.8	3.9	3.7	0.2
Transportation and warehousing	2.2	1.6	2.8	-1.2
Wholesale and retail trade	6.7	6.7	6.7	0.0
Other (e.g. arts/entertainment/recreation, management of companies/services, repair/maintenance)	0.8	1.2	0.4	0.8

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit H.5-6: Distribution of Occupation of Employment, FLH

Occupation of Employment	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Not employed	28.1	29.6	26.5	3.1
Information technology-related occupations				
Computer and information systems managers	0.9	0.7	1.2	-0.5
Computer and mathematical occupations, and computer hardware engineers	8.7	5.7	11.7	-6.0*
Manufacturing- and advanced manufacturing-related occupations:				
Architecture and engineering occupations, other than computer hardware engineers	2.1	1.4	2.8	-1.4
Assemblers, fabricators, and metal or plastic production workers	0.7	0.7	0.7	0.0
All other production occupations	3.0	3.8	2.2	1.6
Healthcare-related occupations				
Healthcare practitioners and technical occupations	7.0	5.8	8.2	-2.4
Healthcare support occupations	7.6	7.7	7.4	0.3
Other occupations				
Arts, design, entertainment, sports, and media	1.0	1.2	0.8	0.4
Business and financial operations and legal occupations	4.1	4.7	3.6	1.1
Community and social service occupations (including healthcare social workers)	1.6	2.1	1.2	0.9
Construction, installation and repair, extraction, farming, fishing, and forestry occupations	3.0	2.6	3.4	-0.8
Educational Instruction and library	2.1	2.1	2.0	0.1
Food preparation and service-related occupations, personal care and service, protective service, and building and grounds cleaning and maintenance occupations	5.4	4.2	6.6	-2.4
Life, physical, and social science occupations (including medical scientists)	0.4	0.7	0.0	0.7
Managers other than computer/information systems	6.1	7.0	5.2	1.8
Office and administrative support occupations	8.7	11.0	6.3	4.7
Sales and related	5.7	4.4	6.9	-2.5
Transportation and material moving occupations	4.0	4.8	3.2	1.6

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit H.5-7 provides detailed results on the relation between training and subsequent jobs (discussed but not shown in Section 5.5 of the *Interim Impact Report*).

Exhibit H.5-7: Connection between Training and Employment, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Connection between Training and Employment								
New job due to training or certificate (%)	16.8	17.1	-0.3	3.5	.922	-2	246	225
<i>New job due to training or certificate, if any (%)</i>	43.0	44.0	-0.9	7.5	.901	-2	100	84
Training useful for that job (%)	16.3	17.2	-0.9	3.5	.796	-5	246	224
Promotion due to training (%)	2.4	3.5	-1.1	1.7	.511	-32	246	225
Training useful after promotion (%)	1.8	3.5	-1.6	1.6	.318	-47	250	226

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training or received any other certificate, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.6 Impacts on Broader Measures of Well-Being

Exhibit H.6-1 provides detailed results corresponding to Exhibit 5-14 in the *Interim Impact Report*.

Exhibit H.6-1: Income and Public Benefits Receipt, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Income								
Total own income before taxes last month (\$)	2,500	2,406	94	170	.580	4	221	204
Benefits Receipt								
Received any public benefits last month (%)	26.6	30.7	-4.1	3.6	.260	-13	244	222
Received TANF last month (%)	3.9	1.5	2.4	1.6	.137	162	243	222
Received SNAP last month (%)	19.8	21.4	-1.6	3.3	.626	-7	244	222
Received UI last month (%)	1.2	3.1	-1.9	1.4	.179	-60	245	224
Received other public benefits last month (%)	13.1	12.0	1.1	3.0	.721	9	246	223

KEY: SNAP is Supplemental Nutrition Assistance Program; TANF is Temporary Assistance for Needy Families; UI is Unemployment Insurance.

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.6-2 provides detailed results on family structure outcomes (there is no corresponding discussion or exhibit in Chapter 5 of the *Interim Impact Report*).

Exhibit H.6-2: Household Composition, FLH

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Individuals	2.2	2.2	-0.0	0.1	.854	-1	245	221
Children under 12	0.3	0.4	-0.1	0.1	.246	-20	245	221

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

H.7 Subgroup Impacts

This section provides detail on subgroup impacts for the confirmatory outcome, secondary outcomes, and several exploratory outcomes discussed in Chapter 5 of the *Interim Impact Report*. Exhibits H.7-1 and H.7-2 report differential impacts by education level at random assignment: less than a bachelor's degree versus a bachelor's degree or more. Exhibits H.7-3 and H.7-4 report differential impacts by age at random assignment: 49 or older versus 48 or younger. Exhibits H.7-5 and H.7-6 report differential impacts by employment status at random assignment: those unemployed more than 12 months versus those ever employed in the last 12 months (including those employed at application). Exhibits H.7-7 and H.7-8 report differential impacts by gender.

For each pair of subgroup impact exhibits, the first exhibit reports differential impacts on participation in and hours and weeks attended for the following: any structured employment-related activity, occupational training, work-based training, and employment readiness courses. The second subgroup exhibit reports differential impacts on educational attainment, average earnings in the fifth and sixth quarters after random assignment, employment in the fifth or sixth quarter after random assignment, and receipt of public benefits.

Exhibit H.7-1: Subgroup Impacts, by Education Level: Program Services, FLH

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Less than bachelor's degree	251	67	54	13**	6	.029
Bachelor's degree or more	222	48	35	12*	6	.063
Difference				-1	9	.926
Total hours attended						
Less than bachelor's degree	242	346	257	89	66	.176
Bachelor's degree or more	220	188	128	60	57	.289
Difference				-29	88	.744
Total weeks attended						
Less than bachelor's degree	239	14	11	3	2	.182
Bachelor's degree or more	216	10	7	3	2	.160
Difference				0	3	.897
Occupational Training						
Ever attended (%)						
Less than bachelor's degree	251	43	43	-0	6	.964
Bachelor's degree or more	224	27	22	5	6	.380

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				5	8	.523
Total hours attended						
Less than bachelor's degree	247	304	229	76	63	.231
Bachelor's degree or more	224	127	96	32	43	.460
Difference				-44	77	.566
Total weeks attended						
Less than bachelor's degree	243	11	9	1	2	.507
Bachelor's degree or more	220	6	5	1	2	.520
Difference				-0	3	.941
Work-Based Training						
Ever attended (%)						
Less than bachelor's degree	251	7	8	-2	3	.619
Bachelor's degree or more	225	9	4	5	4	.193
Difference				6	5	.204
Total hours attended						
Less than bachelor's degree	251	16	21	-5	12	.687
Bachelor's degree or more	225	48	24	23	25	.355
Difference				28	29	.327
Total weeks attended						
Less than bachelor's degree	251	1	1	-0	1	.586
Bachelor's degree or more	225	2	1	1	2	.610
Difference				1	2	.518
Employment Readiness Courses						
Ever attended (%)						
Less than bachelor's degree	251	30	16	13**	6	.019
Bachelor's degree or more	222	26	13	13***	5	.010
Difference				0	8	.955
Total hours attended						
Less than bachelor's degree	242	12	4	8*	4	.058
Bachelor's degree or more	220	10	4	6*	3	.057
Difference				-2	5	.665
Total weeks attended						
Less than bachelor's degree	241	2	0	1**	1	.026
Bachelor's degree or more	217	2	1	1	1	.448
Difference				-1	1	.605

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey, measuring training through 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-2: Subgroup Impacts, by Education Level: Educational Attainment, Earnings and Employment, and Benefits Receipt, FLH

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Less than bachelor's degree	247	28	36	-8	6	.161
Bachelor's degree or more	224	22	15	6	5	.223
Difference				15*	8	.064
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Less than bachelor's degree	335	5,252	4,419	833	539	.123
Bachelor's degree or more	260	8,254	9,303	-1,048	1,016	.303
Difference				-1,881	1,153	.103
Ever employed during Q5 or Q6 (%)						
Less than bachelor's degree	335	76	74	2	5	.741
Bachelor's degree or more	260	75	76	-2	5	.744
Difference				-3	7	.645
Benefits Receipt						
Receiving any public benefits (%)						
Less than bachelor's degree	246	37	38	-1	5	.854
Bachelor's degree or more	220	13	21	-8	5	.104
Difference				-7	7	.314

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 595 includes 300 program group and 295 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-3: Subgroup Impacts, by Age: Program Services, FLH

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
48 or younger	220	63	60	3	6	.590
49 or older	253	54	32	22***	6	<.001
Difference				18**	9	.041
Total hours attended						
48 or younger	217	401	324	77	78	.322
49 or older	245	149	73	75*	41	.068
Difference				-2	89	.983
Total weeks attended						
48 or younger	212	16	14	2	3	.530
49 or older	243	9	4	5**	2	.010
Difference				3	3	.401

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Occupational Training						
Ever attended (%)						
48 or younger	220	43	49	-6	7	.363
49 or older	255	28	18	10*	5	.055
Difference				16*	8	.061
Total hours attended						
48 or younger	219	332	291	41	70	.563
49 or older	252	122	50	72*	37	.055
Difference				31	79	.697
Total weeks attended						
48 or younger	213	11	13	-1	3	.653
49 or older	250	6	2	4**	1	.010
Difference				5	3	.102
Work-Based Training						
Ever attended (%)						
48 or younger	220	10	9	1	4	.824
49 or older	256	5	4	1	3	.636
Difference				0	5	.951
Total hours attended						
48 or younger	220	46	31	16	23	.504
49 or older	256	13	14	-1	12	.952
Difference				-16	27	.552
Total weeks attended						
48 or younger	220	2	2	0	1	.880
49 or older	256	1	1	0	0	.801
Difference				-0	1	.953
Employment Readiness Courses						
Ever attended (%)						
48 or younger	220	25	13	12**	5	.031
49 or older	253	32	17	15***	5	.006
Difference				3	8	.709
Total hours attended						
48 or younger	215	12	2	11**	4	.017
49 or older	247	10	7	4	3	.272
Difference				-7	6	.225
Total weeks attended						
48 or younger	213	2	0	1**	1	.038
49 or older	245	2	1	1	1	.399
Difference				-1	1	.540

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-4: Subgroup Impacts, by Age: Educational Attainment, Earnings and Employment, and Benefits Receipt, FLH

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
48 or younger	219	31	36	-5	6	.469
49 or older	252	19	18	1	5	.811
Difference				6	8	.472
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
48 or younger	295	5,123	5,536	-412	591	.486
49 or older	300	7,918	7,481	438	896	.625
Difference				850	1,075	.429
Ever employed during Q5 or Q6 (%)						
48 or younger	295	75	76	-0	5	.963
49 or older	300	75	74	1	5	.919
Difference				1	7	.917
Benefits Receipt						
Receiving any public benefits (%)						
48 or younger	217	31	36	-5	6	.382
49 or older	249	22	25	-3	5	.476
Difference				1	7	.842

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 595 includes 300 program group and 295 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-5: Subgroup Impacts, by Employment Status: Program Services, FLH

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Not long-term unemployed	348	58	44	14***	5	.005
Long-term unemployed	125	60	52	8	9	.371
Difference				-6	10	.553
Total hours attended						
Not long-term unemployed	339	296	192	103**	50	.041
Long-term unemployed	123	232	231	1	89	.989
Difference				-102	102	.320
Total weeks attended						
Not long-term unemployed	334	13	8	5**	2	.011
Long-term unemployed	121	10	12	-1	3	.716
Difference				-6	4	.131
Occupational Training						
Ever attended (%)						
Not long-term unemployed	349	37	32	5	5	.263
Long-term unemployed	126	32	39	-7	9	.411

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				-12	10	.210
Total hours attended						
Not long-term unemployed	345	245	169	76*	45	.091
Long-term unemployed	126	180	179	1	82	.992
Difference				-75	93	.420
Total weeks attended						
Not long-term unemployed	340	10	7	3	2	.118
Long-term unemployed	123	6	8	-2	3	.385
Difference				-5	3	.122
Work-Based Training						
Ever attended (%)						
Not long-term unemployed	350	8	6	2	3	.579
Long-term unemployed	126	9	9	-0	5	.947
Difference				-2	6	.743
Total hours attended						
Not long-term unemployed	350	32	16	16	14	.266
Long-term unemployed	126	25	42	-17	26	.513
Difference				-33	30	.274
Total weeks attended						
Not long-term unemployed	350	1	1	1	1	.529
Long-term unemployed	126	1	2	-1	1	.449
Difference				-1	1	.326
Employment Readiness Courses						
Ever attended (%)						
Not long-term unemployed	348	27	15	13***	4	.003
Long-term unemployed	125	30	15	14*	8	.060
Difference				2	9	.856
Total hours attended						
Not long-term unemployed	339	9	4	5*	3	.065
Long-term unemployed	123	17	3	13*	7	.052
Difference				8	7	.254
Total weeks attended						
Not long-term unemployed	336	1	0	1**	0	.031
Long-term unemployed	122	3	1	1	2	.386
Difference				0	2	.782

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: "Long-term unemployed" includes study members who reported being unemployed for a year or more at baseline; "not long-term unemployed" includes study members who were unemployed for less than 12 months at baseline, or were employed. All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-6: Subgroup Impacts, by Employment Status: Educational Attainment, Earnings and Employment, and Benefits Receipt, FLH

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Not long-term unemployed	345	25	23	2	4	.686
Long-term unemployed	126	26	38	-12	8	.165
Difference				-14	10	.157
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Not long-term unemployed	139	2,811	3,911	-1,100	794	.166
Long-term unemployed	456	7,621	7,267	354	658	.591
Difference				1,454	1,033	.160
Ever employed during Q5 or Q6 (%)						
Not long-term unemployed	139	50	61	-11	8	.187
Long-term unemployed	456	83	79	4	4	.336
Difference				15	9	.111
Benefits Receipt						
Receiving any public benefits (%)						
Not long-term unemployed	345	24	26	-2	4	.597
Long-term unemployed	121	33	43	-10	8	.211
Difference				-8	9	.386

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: For educational attainment and benefits receipt, measured in the 18-month follow-up survey, "long-term unemployed" includes study members who reported being unemployed for a year or more at baseline; "not long-term unemployed" includes study members who were unemployed for less than 12 months at baseline, or were employed. For employment and earnings in quarters 5 and 6, measured in the NDNH, "long-term unemployed" includes study members with zero earnings in the four quarters before randomization (treating the quarter of randomization as quarter 0); "not long-term unemployed" includes study members with positive earnings in any of the four quarters before randomization. All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 595 includes 300 program group and 295 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit H.7-7: Subgroup Impacts, by Gender: Program Services, FLH

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Women	259	65	51	13**	6	.024
Men	214	52	40	12*	7	.081
Difference				-2	9	.860
Total hours attended						
Women	249	362	247	114*	65	.078
Men	213	185	154	31	57	.581
Difference				-83	86	.337
Total weeks attended						
Women	243	15	9	6**	2	.011
Men	212	9	9	0	2	.906
Difference				-5	3	.101

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Occupational Training						
Ever attended (%)						
Women	260	42	41	2	6	.789
Men	215	29	26	3	6	.671
Difference				1	8	.893
Total hours attended						
Women	257	298	217	81	60	.179
Men	214	148	122	26	48	.590
Difference				-55	77	.476
Total weeks attended						
Women	250	11	8	3	2	.132
Men	213	6	7	-1	2	.736
Difference				-4	3	.196
Work-Based Training						
Ever attended (%)						
Women	261	8	8	-0	3	.942
Men	215	8	5	3	4	.447
Difference				3	5	.556
Total hours attended						
Women	261	32	18	14	15	.332
Men	215	27	28	-1	21	.954
Difference				-16	26	.545
Total weeks attended						
Women	261	1	1	0	1	.472
Men	215	1	2	-0	1	.905
Difference				-1	2	.693
Employment Readiness Courses						
Ever attended (%)						
Women	259	32	12	20***	5	<.001
Men	214	23	18	5	6	.402
Difference				-15*	8	.055
Total hours attended						
Women	248	13	4	9**	4	.035
Men	214	10	4	5	4	.136
Difference				-3	5	.578
Total weeks attended						
Women	246	2	0	2**	1	.023
Men	212	1	1	0	1	.682
Difference				-1	1	.201

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. The total sample of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit J.7-8: Subgroup Impacts, by Gender: Educational Attainment, Earnings and Employment, and Benefits Receipt, FLH

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Women	257	29	34	-6	6	.299
Men	214	22	19	3	6	.581
Difference				9	8	.263
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Women	329	6,026	6,011	15	671	.982
Men	266	7,055	7,045	11	873	.990
Difference				-5	1,105	.997
Ever employed during Q5 or Q6 (%)						
Women	329	77	78	-1	5	.907
Men	266	73	72	1	5	.852
Difference				2	7	.828
Benefits Receipt						
Receiving any public benefits (%)						
Women	256	30	32	-3	5	.577
Men	210	23	29	-6	6	.300
Difference				-3	7	.656

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 477 includes 250 program group and 227 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 595 includes 300 program group and 295 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Appendix I. Detailed Results for Chapter 6 (Reboot NW)

This appendix provides additional detail for WSI’s Reboot Northwest (NW) program discussed in Chapter 6 of the *Interim Impact Report*. This appendix is organized by the sections of Chapter 6. The first section provides detailed information on the enrollment and random assignment process (Section I.1.1) and the characteristics of the WSI study sample (Section I.1.2). The exhibits in the subsequent five sections (Sections I.2 through I.6) include rows for all outcomes listed in Appendix D, including those reported in the Chapter 6 exhibits, those outcomes discussed in Chapter 6 but not included in the Chapter 6 exhibits, and additional outcomes not discussed. These exhibits include additional detail beyond that shown in the Chapter 6 exhibits: outcome-specific sample size, *p*-value, and more significant digits.⁶² For each of the confirmatory and secondary outcomes, Section I.7 then reports subgroup impact estimates.

I.1 Enrollment Process and Characteristics of the Study Sample

This section provides detailed information on the enrollment and random assignment process for applicants to WSI’s Reboot NW program (Section I.1.1), and additional detailed demographic characteristics of the study sample, including testing for baseline balance between those randomized to the program and control groups (Section I.1.2).

I.1.1 Enrollment and Random Assignment Process for Reboot NW

Potential applicants to Reboot NW met with a Career Coach, who determined their basic eligibility and assessed their interest in the Reboot NW program (Exhibit I.1-1). Those interested in the program attended a Reboot NW information session at one of the WorkSource centers. Group information sessions were held weekly or biweekly, for 45-90 minutes, though the schedule and length varied among the Career Coaches and was based on recruitment flow. During the information session, the Career Coach provided a general overview of the Reboot NW program, including program background, eligibility criteria, target industries, benefits, staff roles, and services provided. The Coach also introduced the evaluation and the random assignment process. Before leaving the session, attendees completed a questionnaire to assess “fit” for the program. This questionnaire requested information on demographics, educational background, recent employment history, wages, and target occupations.

Interested attendees scheduled a one-on-one follow-up session with a Career Coach where the Coach determined their eligibility and assessed their fit for the program. One of the central aspects of fit was an applicant’s level of interest and experience in IT or manufacturing, although demonstrating skills that could be applied to the IT and/or advanced manufacturing sectors could be sufficient.

For those determined to be eligible for Reboot NW, the Coach explained the study and obtained their consent to participate in it. Those who consented completed the BIF and were randomly assigned. Participants assigned to the program group signed an agreement to adhere to program expectations (i.e., consistent attendance and participation in required training activities) and to schedule career planning activities, “Career Mapping,” and an assessment. Participants assigned to the control group received a list of alternative services available at the WorkSource center and in the community. For more information on this process, see Martinson et al. 2017.

⁶² For all monetary outcomes, however, the appendix tables show the same number of significant digits as shown in the Chapter 6 exhibits.

Exhibit I.1-1: Reboot NW Enrollment Process

<p>Recruitment</p> <p>↓</p>	<p>Potential applicants learned about Reboot NW through the program website, a referral from WorkSource, a referral from another organization, or other outreach efforts.</p> <p>Basic eligibility and interest were assessed by the Coach or through an online eligibility questionnaire.</p>	<p>➔</p>	<p>Not likely to be eligible.</p>
<p>Information Session</p> <p>↓</p>	<p>Potential applicants attended a Reboot NW information session held at one of the WorkSource centers. Career Coach gave a presentation on program eligibility, program services, and the study. Attendees completed a Skills and Training Questionnaire.</p> <p>Interested attendees made an appointment with a Coach for an intake meeting.</p>		
<p>Follow-up Intake Meeting with Career Coach</p> <p>↓</p>	<p>Applicant attended an appointment with the Career Coach to complete the intake process. Career Coach confirmed eligibility and collected necessary documentation.</p> <p>Applicant completed the study's consent form and BIF.</p> <p>Career Coach randomly assigned each study participant. Program group member–signed Statement of Program Participation and Understanding and determined next steps.</p>	<p>➔</p> <p>➔</p> <p>➔</p>	<p>Not eligible.</p> <p>Refused consent form; did not complete BIF.</p> <p>Control group member–given a folder with information about alternative services.</p>
<p>Start Assessment and Career Planning Process</p>	<p>Program group member met one-on-one with Career Coach to complete an assessment (including “Career Mapping”) and developed an individualized Career Plan.</p>		

I.1.2 Characteristics of the Study Sample

Exhibit I.1-2 provides additional demographic information for the WSI study sample, and tests for differences in the characteristics of those members randomized to the program group versus control group. (A subset of the values reported in the “Study Sample Mean” column are reported in Exhibit 6-3 of the *Interim Impact Report*.⁶³) Exhibit I.1-3 reports the same information for the full sample at the time of random assignment. The *study sample* included in Exhibit I.1-2 and throughout the analysis is smaller than the *full sample* at random assignment included in Exhibit I.1-3 because the study sample excludes anyone who chose to withdraw from the study after having been randomly assigned (three members of the control group and four members of the program group).

⁶³ Values reported in the “Study Sample Mean” column and Exhibit 6-3 may vary due to rounding. Whereas Appendix Exhibit I.1-2 reports average weekly earnings among all sample members (equal to zero for those who are not employed), Exhibit 6-3 reports average weekly earnings if employed.

Exhibit I.1-2 includes information on quarterly earnings and employment levels for the seven quarters before random assignment for members of the study sample.⁶⁴ There is no corresponding information for the full sample (Exhibit I.1-3) because the study did not collect NDNH data for sample members who withdrew from the study.⁶⁵

Exhibit I.1-2: Baseline Balance Testing – Study Sample, Reboot NW

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Gender (%)				
Women	23.6	24.2	23.1	1.1
Men	76.4	75.8	76.9	-1.1
Race (%)				
Asian	8.0	9.2	6.8	2.4
Black or African American	5.6	6.9	4.4	2.5
White	76.9	73.5	80.3	-6.8*
American Indian or Alaska Native	0.9	1.1	0.7	0.4
Native Hawaiian or Other Pacific Islander	0.2	0.0	0.4	-0.4
Other or multiple races	8.4	9.2	7.4	1.8
Hispanic ethnicity (%)	7.7	7.8	7.6	0.2
Speaks language other than English at home (%)	18.8	19.6	18.0	1.6
Age (%)				
24 years or younger	3.8	3.4	4.1	-0.7
25 to 34 years	22.9	23.5	22.2	1.3
35 to 44 years	24.0	24.7	23.2	1.5
45 to 54 years	26.3	25.8	26.9	-1.1
55 years or older	23.1	22.5	23.6	-1.1
Average age (years)	43.9	43.8	44.0	-0.2
Marital status (%)				
Married	40.4	42.2	38.5	3.7
Widowed/divorced/separated	20.8	20.8	20.7	0.1
Never married	33.4	32.8	34.0	-1.2
Living with a partner	5.5	4.2	6.8	-2.6
Other employed adult in household (%)	54.3	53.3	55.2	-1.9
One or more own children in household age 6 or younger (%)	13.9	13.4	14.3	-0.9
Education level (%)				
High school diploma or less	13.2	13.7	12.6	1.1
Some college credit but no degree	19.7	21.0	18.4	2.6
Technical or associate's degree	15.2	14.1	16.4	-2.3
Bachelor's degree	37.4	36.3	38.5	-2.2
Master's degree or more	14.5	14.9	14.1	0.8

⁶⁴ Although for most sample members the study collected quarterly information from eight quarters before random assignment, depending on the timing of a sample member's random assignment relative to the timing of the next quarterly submission to OCSE, for some study members data was only available for seven prior quarters. (See Appendix Section B.3 for more information on the NDNH data collection process.) Appendix Exhibit I.1-2 only includes information for those quarters for which the study has complete data for the study sample (excepting the few study members with missing NDNH data, see Appendix Section A.1.5 for more detail on missing data).

⁶⁵ The evaluation sent the first list of study sample identifiers to OCSE in March 2016, approximately eight months after the start of random assignment (see Appendix Section B.3 for more detail on how the NDNH data are collected). In that submission the evaluation only included sample members who remained in the study at that point, and therefore did not include those who had already withdrawn from the evaluation. Thus the study never collected NDNH data for the full sample at random assignment.

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Employment status (%)				
Currently employed	18.3	19.4	17.2	2.2
Currently unemployed, but employed in last 12 months	50.4	49.6	51.2	-1.6
Currently unemployed, and longer than 12 months since last employed	31.3	31.0	31.5	-0.5
Weekly earnings (\$, equal to 0 if not employed)	49.3	52.9	45.6	7.3
Minimum wage willing to accept (\$/hour)	\$20.45	\$20.72	\$20.18	\$0.54
Receiving any public benefits (%)	48.4	48.8	48.0	0.8
Receiving Supplemental Nutrition Assistance Program (SNAP)	28.0	28.2	27.7	0.5
Receiving Temporary Assistance for Needy Families (TANF)	2.6	3.2	2.1	1.1
Receiving Section 8 or Public Housing assistance	2.6	2.9	2.3	0.6
Receiving Unemployment Insurance (UI)	25.4	26.1	24.7	1.4
Any barriers to employment (health/childcare/transportation limitations, %)	13.2	13.3	13.1	0.2
Health problem or disability limits ability to work	8.0	8.2	7.7	0.5
Ability to work is very limited by lack of access to affordable quality childcare	3.0	2.5	3.6	-1.1
Ability to work is very limited by problems with transportation	4.5	4.7	4.4	0.3
Felony conviction (%)	7.4	6.7	8.1	-1.4
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.2	7.0	5.3	1.7
Strongly disagree: "I want only the kind of job that I trained for"	3.8	3.8	3.8	0.0
Strongly agree: "I am willing to work part-time if no full-time offer is available"	31.9	31.4	32.3	-0.9
Strongly agree: "I am willing to work unusual or unpredictable schedules"	20.6	21.5	19.7	1.8
Willingness to work summary measure (one or more of four above statements hold) (%)	39.6	39.8	39.4	0.4
Earnings Before Random Assignment (RA):				
Q7 pre-RA (\$)	7,620	7,475	7,768	-293
Q6 pre-RA (\$)	7,350	7,436	7,264	173
Q5 pre-RA (\$)	7,156	7,190	7,121	68
Q4 pre-RA (\$)	6,909	6,870	6,949	-79
Q3 pre-RA (\$)	6,657	6,443	6,863	-421
Q2 pre-RA (\$)	4,863	5,069	4,655	415
Q1 pre-RA (\$)	2,387	2,453	2,319	134
Employment Before Random Assignment (RA):				
Q7 pre-RA (%)	59.4	58.7	60.0	-1.3
Q6 pre-RA (%)	57.7	55.6	59.8	-4.2
Q5 pre-RA (%)	58.4	56.0	60.9	-4.9
Q4 pre-RA (%)	55.3	54.4	56.3	-1.9
Q3 pre-RA (%)	53.0	51.1	54.9	-3.8
Q2 pre-RA (%)	45.8	46.2	45.3	0.9
Q1 pre-RA (%)	36.2	36.2	36.2	0.0

SOURCE: Baseline Information Form (BIF) and National Directory of New Hires (NDNH).

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. For pre-random assignment earnings and employment, measured in the NDNH, sample size of 972 includes 489 program group and 483 control group members. For all other outcomes, measured in the BIF, sample size of 980 includes 493 program group and 487 control group members. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

Exhibit I.1-3: Baseline Balance Testing – Full Sample at Random Assignment, Reboot NW

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Gender (%)				
Women	23.9	24.2	23.6	0.6
Men	76.1	75.8	76.4	-0.6
Race (%)				
Asian	8.0	9.2	6.7	2.5
Black or African American	5.6	6.8	4.3	2.5
White	77.0	73.7	80.4	-6.7*
American Indian or Alaska Native	0.9	1.1	0.7	0.4
Native Hawaiian or Other Pacific Islander	0.2	0.0	0.4	-0.4
Other or multiple races	8.3	9.2	7.4	1.8
Hispanic ethnicity (%)	7.8	7.7	7.8	-0.1
Speaks language other than English at home (%)	18.8	19.6	18.0	1.6
Age (%)				
24 years or younger	3.7	3.4	4.1	-0.7
25 to 34 years	22.9	23.5	22.2	1.3
35 to 44 years	24.1	24.7	23.5	1.2
45 to 54 years	26.2	25.8	26.7	-0.9
55 years or older	23.0	22.5	23.5	-1.0
Average age (years)	43.9	43.8	43.9	-0.2
Marital status (%)				
Married	40.4	42.4	38.4	4.0
Widowed/divorced/separated	20.6	20.7	20.6	0.1
Never married	33.5	32.8	34.2	-1.4
Living with a partner	5.4	4.2	6.7	-2.5
Other employed adult in household (%)	54.3	53.3	55.2	-1.9
One or more own children in household age 6 or younger (%)	13.9	13.4	14.3	-0.9
Education level (%)				
High school diploma or less	13.2	13.8	12.6	1.2
Some college credit but no degree	19.7	20.9	18.5	2.4
Technical or associate's degree	15.3	14.4	16.3	-1.9
Bachelor's degree	37.3	36.0	38.7	-2.7
Master's degree or more	14.5	15.0	14.0	1.0
Employment status (%)				
Currently employed	18.3	19.3	17.3	2.0
Currently unemployed, but employed in last 12 months	50.4	49.6	51.1	-1.5
Currently unemployed, and longer than 12 months since last employed	31.3	31.1	31.5	-0.4
Weekly earnings (\$, equal to 0 if not employed)	48.9	52.4	45.4	7.0
Minimum wage willing to accept (\$/hour)	\$20.45	\$20.70	\$20.20	\$0.50
Receiving any public benefits (%)	48.4	48.8	47.9	0.9
Receiving Supplemental Nutrition Assistance Program (SNAP)	28.0	28.3	27.8	0.5
Receiving Temporary Assistance for Needy Families (TANF)	2.6	3.2	2.1	1.1
Receiving Section 8 or Public Housing assistance	2.6	2.9	2.3	0.6
Receiving Unemployment Insurance (UI)	25.3	26.1	24.5	1.6
Any barriers to employment (health/childcare/transportation limitations, %)	13.3	13.3	13.4	-0.1
Health problem or disability limits ability to work	8.0	8.2	7.9	0.3
Ability to work is very limited by lack of access to affordable quality childcare	3.1	2.5	3.8	-1.3
Ability to work is very limited by problems with transportation	4.5	4.6	4.4	0.2
Felony conviction (%)	7.4	6.9	8.0	-1.1

Baseline Characteristic	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.2	7.1	5.3	1.8
Strongly disagree: "I want only the kind of job that I trained for"	3.8	3.8	3.8	0.0
Strongly agree: "I am willing to work part-time if no full-time offer is available"	32.0	31.6	32.4	-0.8
Strongly agree: "I am willing to work unusual or unpredictable schedules"	20.6	21.6	19.6	2.0
Willingness to work summary measure (one or more of four above statements holds) (%)	39.6	39.8	39.4	0.4

SOURCE: Baseline Information Form

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 987 includes 497 program group and 490 control group members. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

Exhibit I.1-4 compares the characteristics of the "early cohort" for the WSI study sample (those randomly assigned by March 31, 2017) versus the characteristics of the "late cohort" (those randomly assigned after March 31, 2017).

Exhibit I.1-4: Comparison of Early Cohort versus Late Cohort, Reboot NW

Baseline Characteristic	Study Sample Mean	Early Cohort Mean	Late Cohort Mean	Difference
Gender (%)				
Women	23.6	23.6	23.7	-0.1
Men	76.4	76.4	76.3	0.1
Race (%)				
Asian	8.0	7.2	9.8	-2.6
Black or African American	5.6	6.0	4.9	1.1
White	76.9	77.5	75.6	1.9
American Indian or Alaska Native	0.9	1.1	0.3	0.8
Native Hawaiian or Other Pacific Islander	0.2	0.2	0.3	-0.1
Other or multiple races	8.4	8.0	9.1	-1.1
Hispanic ethnicity (%)	7.7	7.6	8.0	-0.4
Speaks language other than English at home (%)	18.8	18.5	19.4	-0.9
Age (%)				
24 years or younger	3.8	2.6	6.4	-3.8*
25 to 34 years	22.9	22.0	24.9	-2.9
35 to 44 years	24.0	23.6	24.9	-1.3
45 to 54 years	26.3	28.3	21.9	6.4*
55 years or older	23.1	23.6	21.9	1.7
Average age (years)	43.9	44.5	42.4	2.1*
Marital status (%)				
Married	40.4	43.1	34.2	8.9*
Widowed/divorced/separated	20.8	19.7	23.1	-3.4
Never married	33.4	31.5	37.6	-6.1
Living with a partner	5.5	5.7	5.1	0.6
Other employed adult in household (%)	54.3	54.5	53.8	0.7
one or more own children in household age 6 or younger (%)	13.9	13.5	14.8	-1.3
Education level (%)				
High school diploma or less	13.2	12.0	15.9	-3.9

Baseline Characteristic	Study Sample Mean	Early Cohort Mean	Late Cohort Mean	Difference
Some college credit but no degree	19.7	18.9	21.6	-2.7
Technical or associate's degree	15.2	15.8	13.9	1.9
Bachelor's degree	37.4	38.0	36.1	1.9
Master's degree or higher	14.5	15.4	12.5	2.9
Employment status (%)				
Currently employed	18.3	19.5	15.6	3.9
Currently unemployed, but employed in last 12 months	50.4	50.7	49.8	0.9
Currently unemployed, and longer than 12 months since last employed	31.3	29.8	34.6	-4.8
Weekly earnings (\$, equal to 0 if not employed)	49.3	53.9	38.9	15.1
Minimum wage willing to accept (\$/hour)	\$20.45	\$20.27	\$20.81	-\$0.54
Receiving any public benefits (%)	48.4	48.1	49.2	-1.1
Receiving Supplemental Nutrition Assistance Program (SNAP)	28.0	27.5	29.1	-1.6
Receiving Temporary Assistance for Needy Families (TANF)	2.6	2.3	3.4	-1.1
Receiving Section 8 or Public Housing assistance	2.6	2.4	3.1	-0.7
Receiving Unemployment Insurance (UI)	25.4	25.6	24.8	0.8
Any barriers to employment (health/childcare/transportation limitations, %)	13.2	12.3	15.3	-3.0
Health problem or disability limits ability to work	8.0	8.2	7.4	0.8
Ability to work is very limited by lack of access to affordable quality childcare	3.0	2.6	4.1	-1.5
Ability to work is very limited by problems with transportation	4.5	3.8	6.2	-2.4
Felony conviction (%)	7.4	6.2	9.9	-3.7*
Opinions about willingness to work (%):				
Strongly agree: "I will take any job even if the pay is low"	6.2	5.8	6.8	-1.0
Strongly disagree: "I want only the kind of job that I trained for"	3.8	3.7	4.1	-0.4
Strongly agree: "I am willing to work part-time if no full-time offer is available"	31.9	30.2	35.6	-5.4
Strongly agree: "I am willing to work unusual or unpredictable schedules"	20.6	20.2	21.4	-1.2
Willingness to work summary measure (one or more of four above statements holds) (%)	39.6	36.7	46.1	-9.4*

SOURCE: Baseline Information Form.

NOTES: Reported difference may not equal the difference between the early cohort mean and late cohort mean because of rounding. Sample size of 980 includes 683 study members in the early cohort and 297 in the late cohort. Statistically significant differences at the $p < .05$ level (using two-sided t-tests) are indicated with a * in the "Difference" column.

I.2 Impacts on Participation in Employment-Related Activities

Exhibits I.2-1 through I.2-8 provide detailed results corresponding to Exhibits 6-4 and 6-5 in the *Interim Impact Report*. Exhibit I.2-1 reports impacts on any structured employment-related activities overall, and Exhibit I.2-2 plots the distribution of total weeks of any structured employment-related activities. Exhibit I.2-3 reports impacts on occupational training, including separately by college-based and non-college-based occupational training. Exhibit I.2-4 plots the distribution of total weeks of occupational training. Exhibit I.2-5 reports impacts on work-based training, including separately for unpaid internships, paid internships, and on-the-job training (OJT). Exhibit I.2-6 plots the distribution of total weeks of work-based training. Exhibit I.2-7 reports impacts on employment readiness courses, and Exhibit I.2-8 plots the distribution of total weeks of employment readiness courses.

Note that the exhibits plotting the distribution of total weeks of training reflect weeks completed as of 18 months after random assignment. As shown in Exhibit 6-6 in the *Interim Impact Report*, however, some study members remain in training at that point. For example, among the 18 percent of program group members who completed 54 to 99 weeks of any structured employment-related activity (see Exhibit I.2-2), 67 percent were still in training at 18 months after random assignment. Thus the values reported in these distributions underestimate the final amount of training completed by those sample members who were still in training after 18 months.

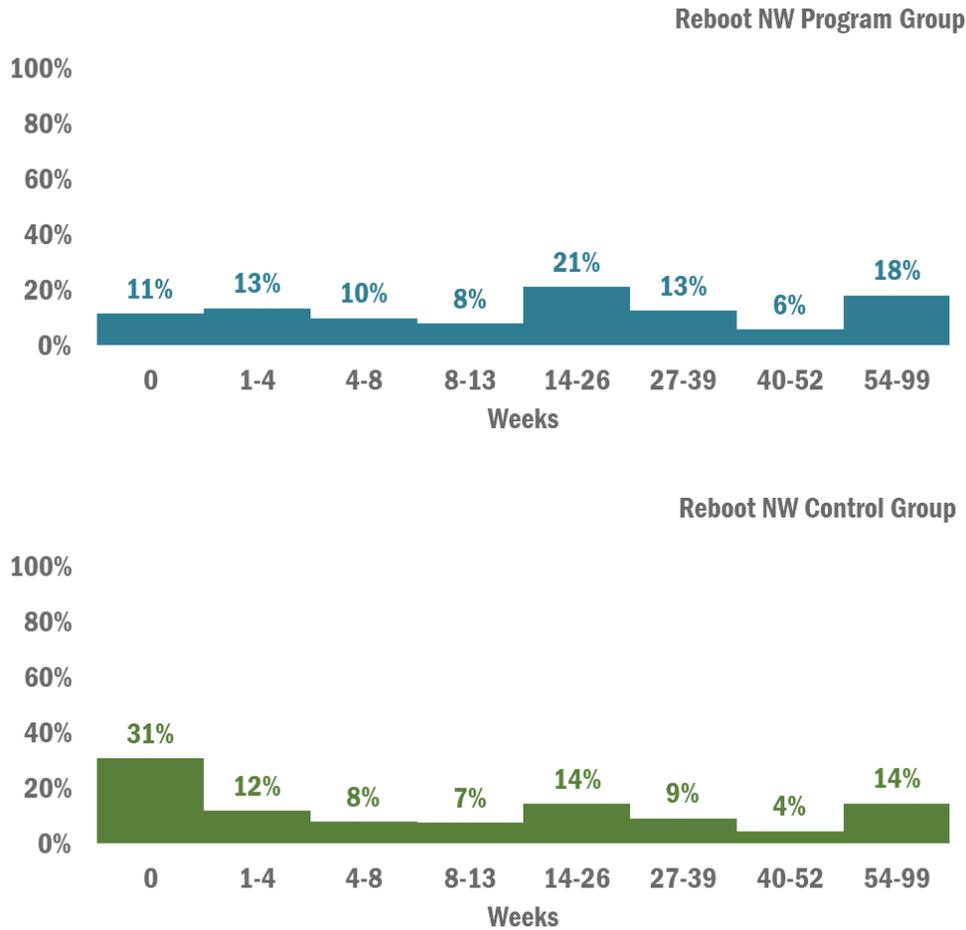
Exhibit I.2-1: Impacts on Any Structured Employment-Related Activity, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Structured Employment-Related Activity								
Ever attended (%)	89.1	70.5	18.5***	3.0	<.001	26	399	342
Number of activities attended	3.1	1.9	1.2***	0.3	<.001	64	399	342
Total hours attended	503.1	387.6	115.5***	44.1	.009	30	395	340
<i>Total hours, for attendees</i>	<i>570.0</i>	<i>550.8</i>	<i>19.2</i>	<i>52.3</i>	<i>.714</i>	<i>3</i>	<i>352</i>	<i>239</i>
Total weeks attended	25.1	19.2	6.0***	1.9	.001	31	388	328
<i>Total weeks, for attendees</i>	<i>28.4</i>	<i>27.7</i>	<i>0.7</i>	<i>2.1</i>	<i>.736</i>	<i>3</i>	<i>345</i>	<i>227</i>
<i>Hours per week, for attendees</i>	<i>23.3</i>	<i>32.8</i>	<i>-9.5</i>	<i>7.8</i>	<i>.223</i>	<i>-29</i>	<i>345</i>	<i>227</i>
Completed at least one activity (%)	82.8	60.0	22.8***	3.4	<.001	38	393	336
Number of activities completed	1.9	1.2	0.8***	0.1	<.001	63	393	336
Any occupational or work-based training in:								
Information technology (%)	51.2	39.9	11.3***	3.7	.002	28	390	340
Advanced manufacturing (%)	12.3	9.7	2.6	2.3	.278	26	389	342

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-2: Distribution of Total Weeks of Any Structured Employment-Related Activity, Reboot NW

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibit I.2-3: Impacts on Occupational Training, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Occupational Training								
Ever attended (%)	69.6	57.9	11.7***	3.6	.001	20	398	346
Number of training programs attended	1.2	0.9	0.2*	0.1	.059	22	398	346
Total hours attended	355.6	309.9	45.7	38.4	.235	15	395	345
<i>Total hours, for attendees</i>	535.7	536.4	-0.7	54.3	.990	-0	276	198
Total weeks attended	18.0	15.1	2.9*	1.7	.092	19	388	327
<i>Total weeks, for attendees</i>	26.6	27.3	-0.8	2.3	.741	-3	269	180
<i>Hours per week, for attendees</i>	28.8	24.4	4.4	6.9	.523	18	269	180
Completed at least one training program (%)	57.2	45.1	12.1***	3.7	.001	27	395	344
Number of training programs completed	0.8	0.6	0.2***	0.1	.002	33	395	344
Any occupational training in:								
Information technology (%)	47.8	37.9	9.9***	3.6	.006	26	394	344
Advanced manufacturing (%)	10.8	8.9	1.9	2.2	.387	22	394	344

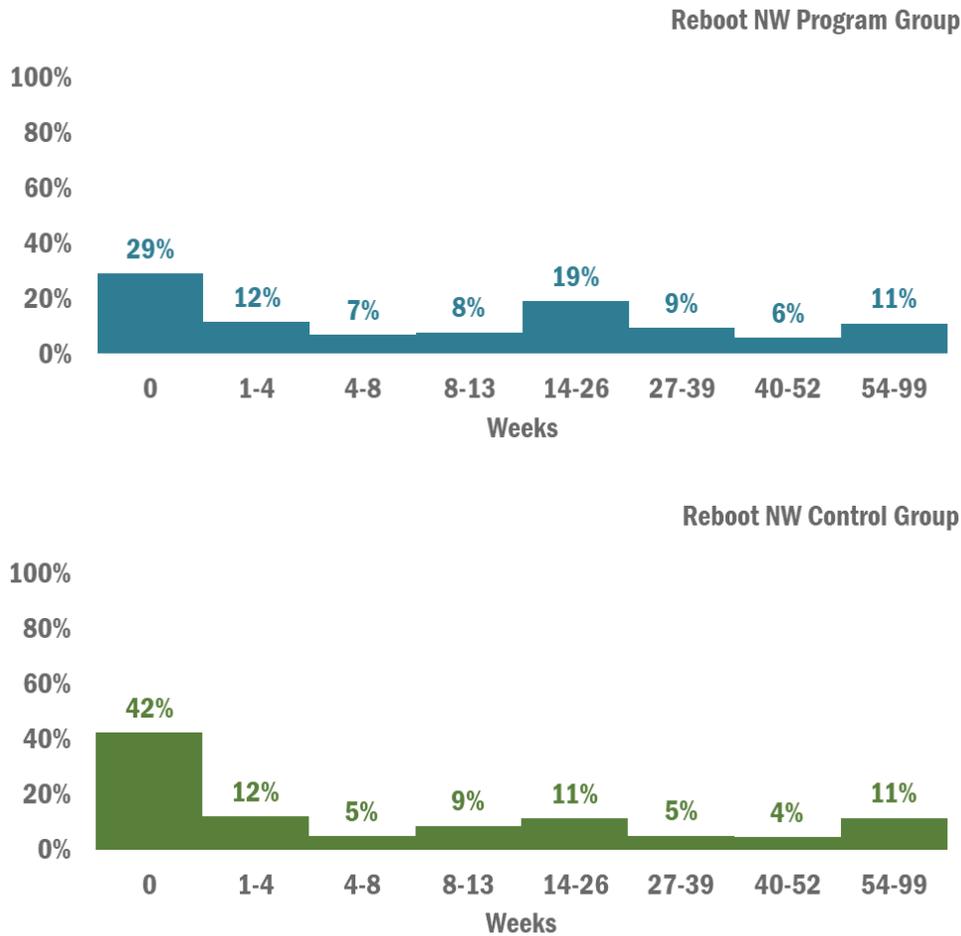
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
College-Based Occupational Training								
Ever attended (%)	19.6	21.3	-1.7	3.0	.571	-8	398	345
Number of training programs attended	0.2	0.3	-0.0	0.0	.358	-14	398	345
Total hours attended	147.2	158.1	-10.9	31.9	.733	-7	398	345
<i>Total hours, for attendees</i>	<i>830.7</i>	<i>742.7</i>	<i>88.0</i>	<i>110.3</i>	<i>.426</i>	<i>12</i>	<i>78</i>	<i>71</i>
Total weeks attended	7.6	7.6	-0.0	1.4	.989	-0	389	334
<i>Total weeks, for attendees</i>	<i>43.9</i>	<i>41.2</i>	<i>2.7</i>	<i>4.6</i>	<i>.560</i>	<i>7</i>	<i>69</i>	<i>60</i>
<i>Hours per week, for attendees</i>	<i>18.4</i>	<i>25.2</i>	<i>-6.7</i>	<i>6.1</i>	<i>.269</i>	<i>-27</i>	<i>69</i>	<i>60</i>
Completed at least one training program (%)	10.3	13.3	-2.9	2.4	.229	-22	398	345
Number of training programs completed	0.1	0.2	-0.0	0.0	.259	-23	398	345
Any occupational training in:								
Information technology (%)	10.2	10.3	-0.2	2.3	.947	-1	398	345
Advanced manufacturing (%)	5.5	5.0	0.5	1.7	.767	10	398	345
Non-College-Based Occupational Training								
Ever attended (%)	55.4	40.0	15.4***	3.6	<.001	38	397	345
Number of training programs attended	0.9	0.7	0.2**	0.1	.024	35	397	345
Total hours attended	207.1	152.3	54.8**	25.5	.032	36	393	344
<i>Total hours, for attendees</i>	<i>374.0</i>	<i>381.7</i>	<i>-7.7</i>	<i>48.2</i>	<i>.872</i>	<i>-2</i>	<i>219</i>	<i>139</i>
Total weeks attended	10.4	7.3	3.1***	1.1	.006	42	393	336
<i>Total weeks, for attendees</i>	<i>18.6</i>	<i>19.0</i>	<i>-0.4</i>	<i>2.1</i>	<i>.859</i>	<i>-2</i>	<i>219</i>	<i>131</i>
<i>Hours per week, for attendees</i>	<i>23.4</i>	<i>23.4</i>	<i>-0.0</i>	<i>1.5</i>	<i>.989</i>	<i>-0</i>	<i>219</i>	<i>131</i>
Completed at least one training program (%)	50.6	33.5	17.1***	3.6	<.001	51	394	345
Number of training programs completed	0.7	0.5	0.2***	0.1	<.001	53	394	345
Any training offered:								
Realistic work settings (%)	48.7	31.5	17.2***	3.5	<.001	55	388	345
Trips to potential employers (%)	16.5	9.7	6.8***	2.5	.007	69	388	340
Any occupational training in:								
Information technology (%)	39.8	28.3	11.5***	3.4	<.001	41	394	345
Advanced manufacturing (%)	5.5	3.9	1.6	1.6	.315	41	393	345

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-4: Distribution of Total Weeks of Occupational Training, Reboot NW



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibit I.2-5: Impacts on Work-Based Training, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Work-Based Training								
Ever attended (%)	19.5	13.7	5.8**	2.8	.036	42	399	347
Number of work-based trainings	0.2	0.1	0.1**	0.0	.043	44	397	347
Total hours attended	81.6	62.0	19.6	18.2	.282	32	397	347
<i>Total hours, for attendees</i>	439.4	453.3	-13.8	86.8	.873	-3	77	46
Total weeks attended	3.1	2.5	0.6	0.7	.363	26	395	347
<i>Total weeks, for attendees</i>	16.9	18.0	-1.1	3.3	.750	-6	75	46
<i>Hours per week, for attendees</i>	28.8	28.8	0.1	2.4	.974	0	75	46
Completed at least one work-based training (%)	16.5	12.0	4.5*	2.6	.085	37	397	347
Number of work-based trainings completed	0.2	0.1	0.0	0.0	.105	37	397	347
Any work-based training in:								
Information technology (%)	13.7	8.6	5.0**	2.4	.032	58	393	343
Advanced manufacturing (%)	2.7	2.3	0.3	1.2	.791	14	392	345

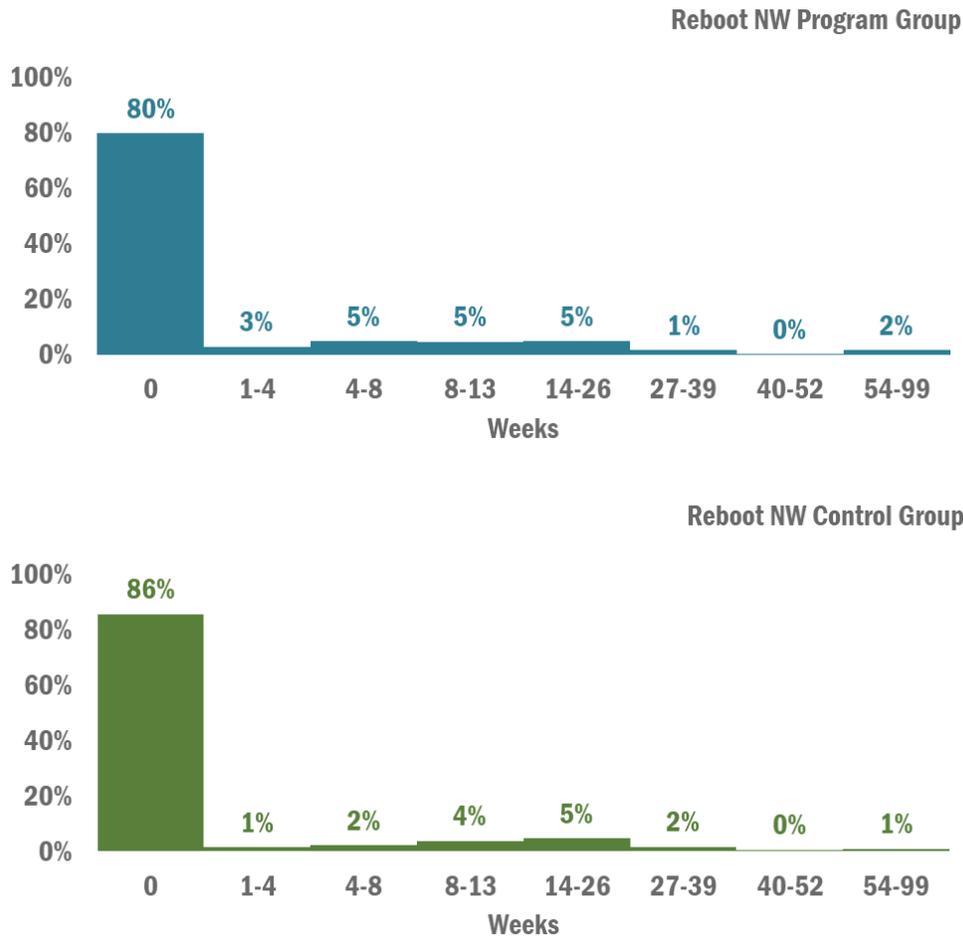
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Unpaid Internship								
Ever attended (%)	7.8	3.9	3.9**	1.7	.023	99	398	346
Number of unpaid internships	0.1	0.0	0.0**	0.0	.028	97	397	346
Total hours attended	19.6	9.3	10.3*	5.5	.060	111	397	346
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	31	14
Total weeks attended	0.8	0.4	0.4*	0.3	.093	108	397	346
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	31	14
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	31	14
Completed at least one unpaid internship (%)	6.8	3.4	3.4**	1.6	.032	101	397	346
Number of unpaid internships completed	0.1	0.0	0.0**	0.0	.027	108	397	346
Any unpaid internship in:								
Information technology (%)	6.8	3.6	3.1*	1.6	.052	86	397	346
Advanced manufacturing (%)	0.0	0.0	0.0	0.0			397	346
Paid Internship								
Ever attended (%)	8.5	6.6	1.8	2.0	.362	28	398	346
Number of paid internships	0.1	0.1	0.0	0.0	.565	18	397	346
Total hours attended	39.1	38.9	0.1	15.5	.993	0	397	346
<i>Total hours, for attendees</i>	515.2	587.9	-72.7	178.2	.685	-12	33	22
Total weeks attended	1.7	1.4	0.3	0.6	.632	20	397	346
<i>Total weeks, for attendees</i>	24.5	21.5	3.0	7.0	.672	14	33	22
<i>Hours per week, for attendees</i>	24.6	30.1	-5.5	3.9	.168	-18	33	22
Completed at least one paid internship (%)	6.2	5.8	0.4	1.8	.837	6	397	346
Number of paid internships completed	0.1	0.1	0.0	0.0	.952	2	397	346
Any paid internship in:								
Information technology (%)	5.4	3.7	1.7	1.6	.278	47	397	346
Advanced manufacturing (%)	0.9	0.9	0.0	0.7	.967	3	397	346
On-the-Job Training (OJT)								
Ever attended (%)	5.2	3.6	1.7	1.5	.282	47	385	336
Number of OJTs	0.1	0.0	0.0	0.0	.343	41	384	336
Total hours attended	23.9	14.4	9.6	8.8	.279	66	384	336
<i>Total hours, for attendees</i>	NR	NR	NR	NR	NR	NR	19	11
Total weeks attended	0.6	0.7	-0.1	0.3	.776	-14	382	336
<i>Total weeks, for attendees</i>	NR	NR	NR	NR	NR	NR	17	11
<i>Hours per week, for attendees</i>	NR	NR	NR	NR	NR	NR	17	11
Completed at least one OJT (%)	4.4	3.2	1.2	1.5	.408	37	384	336
Number of OJTs completed	0.0	0.0	0.0	0.0	.408	37	384	336
Any OJT in:								
Information technology (%)	2.5	1.6	0.9	1.1	.386	59	384	336
Advanced manufacturing (%)	1.7	1.5	0.3	1.0	.787	18	384	336

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any work-based training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Non-experimental results are not reported (NR) when 15 or fewer survey respondents of either the program or control group attended any training. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-6: Distribution of Total Weeks of Work-Based Training, Reboot NW



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibit I.2-7: Impacts on Employment Readiness Courses, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Readiness Courses								
Ever attended (%)	60.3	28.6	31.6***	3.4	<.001	110	399	340
Number attended	1.8	0.8	1.0***	0.2	<.001	120	399	340
Total hours attended	64.9	13.1	51.8***	9.2	<.001	396	393	333
<i>Total hours, for attendees</i>	109.9	48.1	61.8***	16.8	<.001	129	236	93
Total weeks attended	5.0	2.6	2.5***	0.8	.003	96	385	326
<i>Total weeks, for attendees</i>	9.3	10.0	-0.7	2.1	.748	-7	228	86
<i>Hours per week, for attendees</i>	19.3	5.5	13.8***	1.4	<.001	249	228	86
Completed at least one activity (%)	56.9	23.2	33.7***	3.4	<.001	145	389	333
Number of activities completed	0.9	0.4	0.5***	0.1	<.001	122	389	333

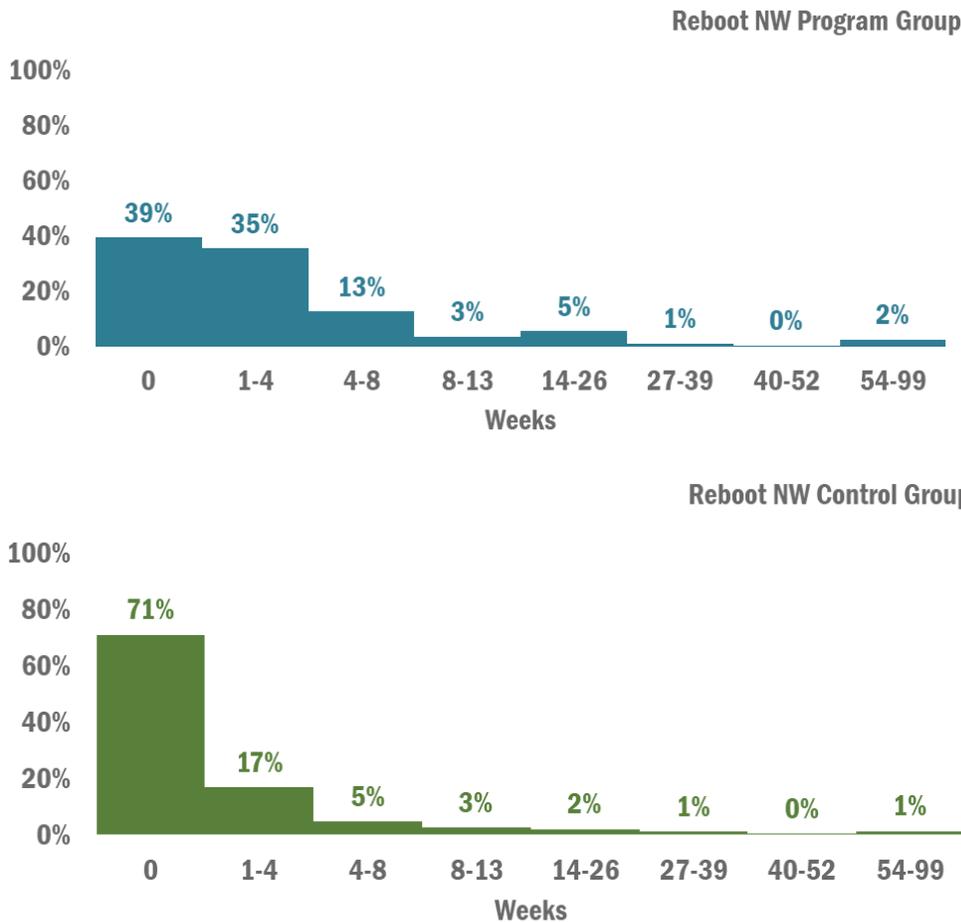
Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
---------	--------------------	--------------------	---------------------	----------------	---------	---------------------	---------------------	---------------------

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. *Outcomes in italics* apply to the subset of survey respondents who attended any training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-8: Distribution of Total Weeks of Employment Readiness Courses, Reboot NW



SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

Exhibits I.2-9 through I.2-12 report impacts on monthly attendance in program activities for the first 18 months after random assignment, discussed but not shown in Section 6.2 of the *Interim Impact Report*. Exhibit I.2-9 reports impacts on monthly attendance in any structured employment-related activities through 18 months after random assignment. Exhibit I.2-10 reports impacts on monthly attendance in occupational training. Exhibit I.2-11 reports impacts on monthly attendance in work-based training. Exhibit I.2-12 reports impacts on monthly attendance in an employment readiness course.

Exhibit I.2-9: Monthly Attendance in Any Structured Employment-Related Activity, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Any Structured Employment-Related Activity								
Ever attended any structured employment-related activities in the given month since random assignment:								
Month 1 (%)	60.9	42.2	18.8***	3.7	<.001	45	373	328
Month 2 (%)	64.5	45.5	19.0***	3.8	<.001	42	373	328
Month 3 (%)	62.1	42.0	20.1***	3.8	<.001	48	373	328
Month 4 (%)	56.3	41.2	15.1***	3.8	<.001	37	373	328
Month 5 (%)	51.7	37.9	13.8***	3.8	<.001	36	373	328
Month 6 (%)	47.7	35.5	12.2***	3.7	.001	34	373	328
Month 7 (%)	43.6	35.1	8.5**	3.7	.021	24	373	328
Month 8 (%)	41.1	31.8	9.2**	3.6	.011	29	373	328
Month 9 (%)	36.1	29.4	6.7*	3.5	.059	23	373	328
Month 10 (%)	33.4	27.8	5.7	3.5	.103	20	373	328
Month 11 (%)	34.5	26.2	8.3**	3.4	.016	32	373	328
Month 12 (%)	33.4	24.9	8.5**	3.4	.013	34	373	328
Month 13 (%)	31.3	27.3	4.0	3.5	.252	14	373	328
Month 14 (%)	28.3	26.0	2.3	3.4	.491	9	373	328
Month 15 (%)	26.2	22.4	3.8	3.3	.239	17	373	328
Month 16 (%)	23.8	23.0	0.8	3.2	.798	4	373	328
Month 17 (%)	23.7	21.4	2.3	3.2	.461	11	373	328
Month 18 (%)	23.1	20.6	2.5	3.1	.427	12	373	328

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-10: Monthly Attendance in Occupational Training, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Occupational Training								
Ever attended occupational training in the given month since random assignment:								
Month 1 (%)	31.4	29.2	2.2	3.5	.530	7	392	344
Month 2 (%)	42.5	36.6	5.9	3.7	.105	16	392	344
Month 3 (%)	47.9	35.8	12.1***	3.7	.001	34	392	344
Month 4 (%)	43.5	34.7	8.8**	3.7	.017	25	392	344
Month 5 (%)	40.7	32.4	8.4**	3.6	.020	26	392	344
Month 6 (%)	37.5	28.4	9.1***	3.5	.009	32	392	344
Month 7 (%)	32.7	27.1	5.6*	3.4	.099	21	392	344
Month 8 (%)	30.1	25.4	4.7	3.3	.158	18	392	344
Month 9 (%)	25.8	24.1	1.7	3.2	.603	7	392	344
Month 10 (%)	22.7	23.1	-0.4	3.1	.890	-2	392	344
Month 11 (%)	23.5	21.8	1.7	3.1	.589	8	392	344
Month 12 (%)	21.2	21.1	0.1	3.0	.983	0	392	344
Month 13 (%)	20.8	22.8	-2.1	3.1	.498	-9	392	344
Month 14 (%)	19.4	20.9	-1.5	3.0	.618	-7	392	344
Month 15 (%)	18.9	18.3	0.5	2.9	.857	3	392	344
Month 16 (%)	17.5	19.2	-1.7	2.9	.555	-9	392	344

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Month 17 (%)	17.3	17.5	-0.2	2.8	.938	-1	392	344
Month 18 (%)	16.9	17.4	-0.6	2.8	.845	-3	392	344

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-11: Monthly Attendance in Work-Based Training, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Work-Based Training								
Ever attended work-based training in the given month since random assignment:								
Month 1 (%)	2.4	3.1	-0.7	1.2	.561	-23	395	347
Month 2 (%)	3.2	3.6	-0.4	1.4	.780	-11	395	347
Month 3 (%)	2.8	4.5	-1.7	1.4	.226	-38	395	347
Month 4 (%)	4.2	5.1	-0.9	1.6	.586	-17	395	347
Month 5 (%)	4.8	5.5	-0.7	1.7	.658	-14	395	347
Month 6 (%)	5.5	6.1	-0.5	1.8	.759	-9	395	347
Month 7 (%)	6.5	7.0	-0.5	1.9	.793	-7	395	347
Month 8 (%)	6.9	5.4	1.5	1.8	.414	27	395	347
Month 9 (%)	7.1	4.7	2.4	1.8	.182	50	395	347
Month 10 (%)	5.7	4.3	1.4	1.7	.385	34	395	347
Month 11 (%)	5.5	3.5	2.0	1.6	.196	58	395	347
Month 12 (%)	6.7	3.1	3.6**	1.6	.026	113	395	347
Month 13 (%)	5.1	3.2	1.8	1.5	.217	57	395	347
Month 14 (%)	4.5	3.2	1.3	1.4	.362	41	395	347
Month 15 (%)	4.0	2.9	1.1	1.4	.417	39	395	347
Month 16 (%)	3.5	1.7	1.8	1.2	.116	110	395	347
Month 17 (%)	4.5	1.4	3.1**	1.2	.011	222	395	347
Month 18 (%)	3.8	1.4	2.4**	1.2	.042	171	395	347

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-12: Monthly Attendance in Employment Readiness Courses, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Readiness Courses								
Ever attended an employment readiness course in the given month since random assignment:								
Month 1 (%)	39.5	16.0	23.4***	3.2	<.001	146	382	331
Month 2 (%)	29.7	11.0	18.7***	2.8	<.001	171	382	331
Month 3 (%)	20.1	9.2	10.9***	2.5	<.001	118	382	331
Month 4 (%)	16.3	8.1	8.2***	2.4	<.001	101	382	331
Month 5 (%)	15.1	6.4	8.7***	2.2	<.001	135	382	331
Month 6 (%)	12.9	6.8	6.1***	2.2	.005	89	382	331
Month 7 (%)	12.3	7.0	5.3**	2.2	.015	76	382	331

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Month 8 (%)	10.3	5.4	5.0**	2.0	.014	93	382	331
Month 9 (%)	10.0	4.6	5.4***	1.9	.005	118	382	331
Month 10 (%)	9.4	4.3	5.0***	1.9	.008	117	382	331
Month 11 (%)	9.7	4.0	5.7***	1.9	.002	143	382	331
Month 12 (%)	8.9	4.5	4.3**	1.9	.021	95	382	331
Month 13 (%)	8.5	4.5	4.0**	1.8	.031	88	382	331
Month 14 (%)	7.9	4.9	3.0*	1.8	.099	62	382	331
Month 15 (%)	7.2	4.3	2.9*	1.7	.096	67	382	331
Month 16 (%)	6.7	4.7	2.0	1.8	.244	43	382	331
Month 17 (%)	6.2	4.9	1.3	1.7	.466	26	382	331
Month 18 (%)	5.7	4.6	1.1	1.7	.496	25	382	331

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-13 provides detailed results corresponding to Exhibit 6-7 in the *Interim Impact Report*.

Exhibit I.2-13: Receipt of Job Search Assistance, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Type of Job Search Assistance Provided								
Career counseling								
Any (%)	69.2	43.0	26.3***	3.6	<.001	61	396	339
Number of times	4.1	1.7	2.4***	0.6	<.001	138	392	332
Job placement assistance								
Any (%)	63.9	47.1	16.8***	3.7	<.001	36	392	339
Number of times	3.8	2.7	1.1	0.7	.102	40	390	333
Job readiness training								
Any (%)	79.4	56.1	23.3***	3.4	<.001	42	397	341
Number of times	4.6	2.3	2.3***	0.6	<.001	100	396	334
Topics Addressed in Program								
Career planning (%)								
A great deal of attention	34.7	15.2	19.5***	3.2	<.001	128	382	340
At least some attention	78.8	45.2	33.6***	3.5	<.001	74	382	340
Finding a job (%)								
A great deal of attention	40.7	17.4	23.3***	3.3	<.001	134	389	340
At least some attention	73.4	42.3	31.0***	3.6	<.001	73	389	340

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.2-14 presents impacts on receipt of assistance with workplace behaviors and soft skills (discussed but not shown in Section 6.2 of the *Interim Impact Report*).

Exhibit I.2-14: Receipt of Assistance with Workplace Behaviors and Soft Skills, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Workplace Behaviors								
Critical thinking (%)								
A great deal of attention	33.4	28.4	5.0	3.5	.148	18	388	346
At least some attention	65.7	47.7	18.0***	3.6	<.001	38	388	346
Working in groups (%)								
A great deal of attention	35.4	19.7	15.7***	3.3	<.001	80	394	345
At least some attention	77.9	43.8	34.0***	3.4	<.001	78	394	345
Communicating well (%)								
A great deal of attention	34.7	16.6	18.1***	3.2	<.001	109	392	344
At least some attention	74.7	44.6	30.0***	3.5	<.001	67	392	344
Acting professionally (%)								
A great deal of attention	30.0	16.5	13.5***	3.1	<.001	82	393	344
At least some attention	71.3	40.4	30.9***	3.5	<.001	77	393	344
Soft Skills								
Time management (%)								
A great deal of attention	14.5	9.2	5.4**	2.4	.027	59	382	345
At least some attention	56.6	31.6	24.9***	3.6	<.001	79	382	345
Managing stress, anger, and frustration (%)								
A great deal of attention	12.2	7.7	4.5**	2.3	.045	59	386	342
At least some attention	44.4	24.4	20.0***	3.4	<.001	82	386	342
Staying motivated (%)								
A great deal of attention	21.8	11.2	10.6***	2.7	<.001	95	391	342
At least some attention	63.6	34.0	29.6***	3.6	<.001	87	391	342
Managing money (%)								
A great deal of attention	4.6	4.4	0.2	1.6	.914	4	390	341
At least some attention	24.6	13.7	10.9***	2.9	<.001	80	390	341
Handling parenting and other family responsibilities (%)								
A great deal of attention	2.7	2.3	0.3	1.2	.797	13	389	339
At least some attention	13.2	5.9	7.3***	2.2	<.001	124	389	339
Help with problems at school, work, or home (%)								
A great deal of attention	18.9	13.3	5.6**	2.8	.046	42	385	340
At least some attention	52.2	34.0	18.2***	3.6	<.001	54	385	340
Academic Skills and Services								
Study skills (%)								
A great deal of attention	25.6	13.2	12.4***	2.9	<.001	94	391	340
At least some attention	52.2	33.5	18.7***	3.6	<.001	56	391	340
Finding/applying for financial aid (%)								
A great deal of attention	12.7	7.0	5.7**	2.3	.011	82	386	339
At least some attention	36.6	21.9	14.7***	3.3	<.001	67	386	339

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

I.3 Impacts on Receipt of Education- and Employment-Related Supports

Exhibit I.3-1 provides detailed results corresponding to Exhibit 6-8 in the *Interim Impact Report*.

Exhibit I.3-1: Funding Sources for Occupational Training, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Own/Family Funding Sources								
Own or family earnings, savings, or loan (%)	25.7	33.0	-7.3**	3.4	.031	-22	397	344
<i>Own or family earnings, savings, or loan, if any occupational training (%)</i>	37.8	57.2	-19.5***	4.6	<.001	-34	278	197
Funding sources:								
Own earnings (%)	17.7	23.8	-6.1**	3.0	.043	-26	396	343
Spouse/partner earnings (%)	4.9	5.7	-0.7	1.7	.664	-13	398	346
Own or spouse/partner savings (%)	18.5	22.0	-3.5	3.0	.235	-16	396	346
Financial help from parent/family member (%)	3.1	5.4	-2.4	1.6	.137	-43	396	343
Loans in own name (%)	7.6	9.5	-1.8	2.1	.389	-19	394	343
Other Sources (Free or Subsidized Occupational Training)								
Received financial support for occupational training from non-family sources (%)	67.4	49.9	17.5***	3.6	<.001	35	398	346
<i>Received financial support for occupational training from non-family sources, if any occupational training (%)</i>	96.9	86.3	10.6***	2.7	<.001	12	279	199
Funding sources:								
Free training program (%)	12.0	13.7	-1.8	2.5	.476	-13	397	345
Program provider financial support (%)	17.5	18.6	-1.1	2.9	.708	-6	386	341
From an American Job Center/ state unemployment office (%)	51.1	23.5	27.6***	3.4	<.001	117	397	345
From a Pell grant or other non-governmental grant (%)	8.8	9.3	-0.5	2.2	.833	-5	398	346
Any other funding source (%)	13.8	14.3	-0.5	2.6	.846	-3	395	345

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero. Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.3-2 presents impacts on receipt of academic and other support services (discussed but not shown in Section 6.3 of the *Interim Impact Report*).

Exhibit I.3-2: Receipt of Academic and Other Support Services, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Academic Support Services								
Academic advising								
Any (%)	44.0	32.1	12.0***	3.6	<.001	37	396	328
Number of times	3.1	1.7	1.5***	0.4	.001	89	395	328

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Financial aid advising								
Any (%)	32.7	16.6	16.1***	3.1	<.001	97	397	334
Number of times	1.1	0.4	0.6***	0.2	<.001	143	396	334
Tutoring								
Any (%)	17.3	11.9	5.4**	2.6	.040	46	400	347
Number of times	2.2	1.2	1.0*	0.6	.093	80	399	346
Other Support Services (%)								
Assistance with mental health (%)	12.7	9.4	3.3	2.3	.142	35	400	347
Clothes or uniforms (%)	12.1	6.9	5.3**	2.1	.014	77	400	347
Assistance with childcare (%)	2.0	0.6	1.4*	0.8	.076	247	400	347
Assistance with transportation (%)	47.7	19.7	28.0***	3.3	<.001	143	398	336
Tools (%)	15.1	8.7	6.4***	2.4	.007	74	400	347
Assistance with other services (%)	3.8	3.4	0.4	1.4	.782	11	400	347

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

I.4 Impacts on Credential Receipt and Other Short-Term Outcomes

Exhibit I.4-1 provides detailed results corresponding to Exhibit 6-9 in the *Interim Impact Report*.

Exhibit I.4-1: Educational Attainment, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Educational Attainment								
Received any certificate, certification, license, or degree (%)	53.7	40.5	13.2***	3.7	<.001	33	393	341
Occupational training certificate								
Received any (%)	44.5	26.8	17.7***	3.5	<.001	66	393	342
Number	0.7	0.4	0.2***	0.1	<.001	58	393	342
College credits								
Received any (%)	8.5	10.6	-2.2	2.2	.334	-20	390	336
Number	5.2	5.5	-0.4	1.8	.838	-7	390	336
College credential								
Certificate (%)	4.5	4.4	0.2	1.6	.918	4	396	344
Associate's degree (%)	4.1	4.3	-0.2	1.6	.909	-4	395	344
Bachelor's degree or higher (%)	0.4	1.5	-1.1	0.8	.159	-71	395	344
Professional certification or license								
Received any (%)	17.7	10.2	7.5***	2.5	.003	73	400	347
Employment Readiness								
Employment readiness certificate								
Received any (%)	31.9	8.7	23.2***	2.9	<.001	268	358	325

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.4-2 provides detail on the types of professional certifications or licenses received between random assignment and follow-up (discussed but not shown in Section 6.4 of the *Interim Impact Report*). The exhibit presents the proportion of the study sample that received each type of certification or license, both overall and by treatment status. The last column reports the difference between treatment groups, and indicates whether the difference is statistically significant at the 5 percent level.

Exhibit I.4-2: Types of Professional Credentials Received, Reboot NW

Professional Certification or License	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Information Technology				
Amazon Web Service (AWS)	0.4	0.5	0.3	0.2
A+	0.5	1.1	0.0	1.1*
CompTia	2.5	4.1	0.9	3.2*
Cisco	1.1	1.3	0.9	0.4
Salesforce	0.1	0.0	0.2	-0.2
Microsoft (excluding training in Microsoft programs)	1.5	1.0	2.1	-1.1
Other software certification (e.g., python, java oracle)	0.5	0.8	0.2	0.6
Project management in IT	0.5	0.7	0.3	0.4
Healthcare/Bioscience				
Certified nursing assistant (CNA)	0.1	0.0	0.2	-0.2
EMT/EMS	0.1	0.3	0.0	0.3
License/certification in mental health, social work, or massage	0.3	0.0	0.6	-0.6
Biosciences- or biotechnology-related	0.4	0.2	0.6	-0.4
Manufacturing				
Manufacturing- or engineering-specific project management	1.2	2.1	0.4	1.7*
Other manufacturing- or engineering- related certification	0.2	0.5	0.0	0.5
Business				
Project management, or supply chain or facilities management (unrelated to IT or health)	1.7	2.4	1.0	1.4
Lean Six Sigma management certification (unrelated to IT or health)	0.2	0.4	0.0	0.4
License or certification in accounting, tax preparation, real estate or similar	0.4	0.2	0.6	-0.4
Other				
Trades (e.g., welding, electrical)	1.9	2.5	1.3	1.2
Commercial driver's license (CDL)	0.8	0.7	0.9	-0.2

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and the control group mean because of rounding. Sample size of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit I.4-3 provides detailed results for impacts on confidence in career knowledge and barriers to employment (discussed but not shown in Section 6.4 of the *Interim Impact Report*).

Exhibit I.4-3: Confidence in Career Knowledge and Barriers to Employment, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Confidence in career knowledge scale	1.7	1.8	-0.1*	0.0	.074	-4	399	346
Barriers to employment								
Childcare arrangements (%)	6.4	5.2	1.2	1.7	.499	23	396	344
Transportation (%)	7.7	8.4	-0.7	2.0	.711	-9	392	343
Illness or health condition (%)	22.0	23.7	-1.7	3.1	.585	-7	375	331
Number of barriers (range 0-3)	0.3	0.4	-0.0	0.0	.742	-4	400	346
Minimum hourly wage willing to accept (\$/hour)	25.13	25.11	0.02	0.89	.982	0	343	302

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

I.5 Impacts on Labor Market Outcomes

Exhibit I.5-1 provides detailed results corresponding to Exhibit 6-10 through Exhibit 6-12 in the *Interim Impact Report*.

Exhibit I.5-1: Earnings and Employment, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Earnings								
Average earnings in Q5 and Q6 (\$)	7,441	7,668	-227	558	.684	-3	489	483
Average earnings in Q5 and Q6, if employed in Q5 or Q6 (\$)	10,525	10,767	-242	639	.705	-2	345	344
Cumulative earnings in Q1-Q6 (\$)	34,809	36,210	-1,401	2,455	.568	-4	489	483
Earnings Before Random Assignment (RA):								
Q8 pre-RA (\$)	7,176	7,058	118	621	.849	2	450	442
Q7 pre-RA (\$)	7,897	7,768	129	673	.848	2	489	483
Q6 pre-RA (\$)	7,845	7,264	582	645	.367	8	489	483
Q5 pre-RA (\$)	7,600	7,121	479	576	.406	7	489	483
Q4 pre-RA (\$)	7,312	6,948	364	651	.577	5	489	483
Q3 pre-RA (\$)	6,887	6,863	24	846	.977	0	489	483
Q2 pre-RA (\$)	5,373	4,655	718	668	.283	15	489	483
Q1 pre-RA (\$)	2,589	2,319	269	325	.407	12	489	483
Q0 (\$)	1,355	1,357	-2	170	.990	-0	489	483
Earnings After Random Assignment:								
Q1 (\$)	2,779	3,162	-384	344	.265	-12	489	483
Q2 (\$)	4,580	4,864	-284	434	.513	-6	489	483
Q3 (\$)	5,907	6,067	-160	496	.747	-3	489	483
Q4 (\$)	6,661	6,781	-119	507	.814	-2	489	483
Q5 (\$)	7,143	7,544	-401	600	.505	-5	489	483
Q6 (\$)	7,739	7,793	-53	598	.929	-1	489	483
Employment								
Ever employed during Q5 or Q6 (%)	70.8	71.2	-0.4	2.9	.878	-1	489	483
Ever employed during Q1-Q6 (%)	81.3	79.5	1.8	2.5	.460	2	489	483

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Before Random Assignment (RA):								
Q8 pre-RA (%)	53.4	51.6	1.8	3.1	.550	4	450	442
Q7 pre-RA (%)	60.0	60.0	-0.0	2.8	.998	-0	489	483
Q6 pre-RA (%)	56.8	59.8	-3.0	2.7	.275	-5	489	483
Q5 pre-RA (%)	57.4	60.9	-3.4	2.6	.188	-6	489	483
Q4 pre-RA (%)	56.4	56.3	0.0	2.2	.984	0	489	483
Q3 pre-RA (%)	53.1	54.9	-1.7	2.3	.459	-3	489	483
Q2 pre-RA (%)	47.8	45.3	2.5	2.5	.337	5	489	483
Q1 pre-RA (%)	37.4	36.2	1.2	2.7	.654	3	489	483
Q0 (%)	36.3	38.3	-2.0	3.0	.494	-5	489	483
Employment After Random Assignment:								
Q1 (%)	45.9	50.7	-4.9	3.1	.121	-10	489	483
Q2 (%)	54.5	58.0	-3.5	3.1	.259	-6	489	483
Q3 (%)	59.7	61.9	-2.2	3.1	.471	-4	489	483
Q4 (%)	62.1	62.9	-0.8	3.0	.782	-1	489	483
Q5 (%)	64.9	65.8	-0.9	3.0	.756	-1	489	483
Q6 (%)	66.7	65.6	1.1	3.0	.718	2	489	483
Number of quarters employed during Q1-Q6	3.5	3.7	-0.1	0.1	.430	-3	489	483
Longest job tenure during Q0-Q6 (quarters)	3.1	3.3	-0.1	0.1	.290	-4	489	483

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through six quarters after random assignment.

NOTES: **Confirmatory outcomes are bolded and italicized.** **Secondary outcomes are bolded;** exploratory outcomes are neither bolded nor italicized. *Outcomes in italics* apply to the subset of sample members who were ever employed during Q5 or Q6, and are thus non-experimental. Where not italicized, outcomes apply to the full sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. Relative impact represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.5-2 provides information for the early cohort, providing detailed impact estimates on earnings and employment through Q12. The first panel provides additional detail corresponding to results shown in Exhibit 6-13 in the *Interim Impact Report*; the second panel reports results that are discussed but not shown in Section 6.5 of the *Interim Impact Report*.

Exhibit I.5-2: Earnings and Employment for Sample Members Observed through 12 Quarters, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Earnings								
Earnings in Q1 (\$)	2,950	2,731	219	402	.586	8	341	336
Earnings in Q2 (\$)	4,859	4,592	268	526	.611	6	341	336
Earnings in Q3 (\$)	6,268	5,603	665	588	.259	12	341	336
Earnings in Q4 (\$)	6,653	6,345	308	583	.598	5	341	336
Earnings in Q5 (\$)	7,137	7,258	-121	721	.867	-2	341	336
Earnings in Q6 (\$)	7,955	7,087	868	668	.194	12	341	336
Earnings in Q7 (\$)	8,554	8,104	450	698	.519	6	341	336
Earnings in Q8 (\$)	9,102	7,893	1,208*	708	.088	15	341	336
Earnings in Q9 (\$)	10,344	8,729	1,614*	973	.097	18	341	336
Earnings in Q10 (\$)	9,652	8,594	1,058	745	.156	12	341	336
Earnings in Q11 (\$)	10,306	8,962	1,344*	771	.082	15	341	336
Earnings in Q12 (\$)	11,134	9,150	1,985**	817	.015	22	341	336

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment								
Ever employed during Q1 (%)	47.9	49.1	-1.2	3.8	.750	-2	341	336
Ever employed during Q2 (%)	55.1	57.4	-2.3	3.7	.531	-4	341	336
Ever employed during Q3 (%)	60.3	61.9	-1.6	3.7	.674	-3	341	336
Ever employed during Q4 (%)	62.7	62.5	0.2	3.7	.954	0	341	336
Ever employed during Q5 (%)	64.4	66.4	-2.0	3.6	.582	-3	341	336
Ever employed during Q6 (%)	68.1	64.6	3.5	3.6	.331	5	341	336
Ever employed during Q7 (%)	70.3	68.2	2.2	3.5	.544	3	341	336
Ever employed during Q8 (%)	69.8	68.5	1.3	3.5	.706	2	341	336
Ever employed during Q9 (%)	72.1	69.0	3.1	3.5	.375	4	341	336
Ever employed during Q10 (%)	70.1	69.3	0.7	3.5	.833	1	341	336
Ever employed during Q11 (%)	72.3	72.3	0.0	3.4	.995	0	341	336
Ever employed during Q12 (%)	71.8	70.8	1.0	3.4	.783	1	341	336

SOURCE AND FOLLOW-UP PERIOD: National Directory of New Hires; through twelve quarters after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.5-3 provides detailed results discussed but not shown in Section 6.5 of the *Interim Impact Report*.

Exhibit I.5-3: Engagement in the Labor Force, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Employment Status at Follow-Up								
Employed (%)	72.8	74.2	-1.4	3.2	.670	-2	398	346
Unemployed (%)	15.1	12.0	3.1	2.5	.206	26	396	346
Out of the labor force (%)	9.2	10.6	-1.4	2.2	.532	-13	396	346
Attending school or long-term training program (%)	4.3	5.1	-0.9	1.6	.578	-17	396	346
Maternity leave, sick, or unable to work because of disability (%)	2.3	1.4	0.9	1.0	.374	62	396	346
Retired (%)	2.6	4.0	-1.4	1.3	.294	-35	396	346
Number of jobs since random assignment	2.2	2.1	0.1	0.2	.759	3	393	342

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.5-4 provides detailed results corresponding to Exhibit 6-14 in the *Interim Impact Report*.

Exhibit I.5-4: Characteristics of Current Job, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Job Field								
Information technology (%)	30.0	30.9	-0.9	3.3	.786	-3	395	342
Manufacturing (%)	14.4	14.8	-0.4	2.6	.887	-3	396	344
Job Type								
Regular full-time or part-time employee (%)	53.5	58.3	-4.9	3.6	.177	-8	394	346
Employed by a temporary help agency (%)	2.3	2.0	0.3	1.0	.758	16	394	346
Employed by a company that contracts out your services (%)	3.4	4.7	-1.3	1.4	.346	-28	394	346
Independent contractor or independent consultant (%)	5.2	2.4	2.9**	1.4	.037	121	394	346
Self-employed, including free-lancer and day laborer (%)	6.1	4.5	1.6	1.7	.354	34	394	346
Other (%)	2.1	2.3	-0.2	1.1	.888	-7	394	346
Pay and Hours								
Rate of pay per year (\$)	33,550	33,365	184	2,363	.938	1	365	316
<i>Hourly wage, if employed (\$/hour)</i>	25.18	24.60	0.58	1.10	.600	2	254	223
Hours worked per week	26.7	27.0	-0.3	1.4	.819	-1	393	342
<i>Hours worked per week, if employed</i>	36.8	36.6	0.2	0.9	.801	1	288	252
Full-time (35 or more hours per week, %)	56.0	56.3	-0.3	3.7	.926	-1	393	342
<i>Full-time, if employed (%)</i>	77.0	76.2	0.8	3.7	.819	1	288	252
Part-time (less than 35 hours per week, %)	16.6	17.6	-1.0	2.8	.727	-6	393	342
<i>Part-time, if employed (%)</i>	23.0	23.8	-0.8	3.7	.819	-4	288	252
Number of weeks at job since random assignment	34.0	35.2	-1.2	2.3	.605	-3	388	339
Job represented by a union (%)	5.4	6.2	-0.8	1.7	.655	-13	388	342
Job Benefits								
Offers health insurance (%)	51.0	54.3	-3.3	3.7	.381	-6	376	337
Paid vacation (%)	46.8	50.6	-3.8	3.7	.308	-7	388	331
Paid holiday (%)	45.8	49.7	-4.0	3.7	.286	-8	381	331
Paid sick time (%)	49.3	54.5	-5.2	3.8	.170	-10	380	324
Retirement/pension plan (%)	40.9	44.0	-3.1	3.8	.417	-7	370	316
Job Schedule								
Regular daytime schedule (%)	56.2	58.9	-2.7	3.6	.450	-5	397	346
Regular evening shift (%)	4.1	4.1	-0.0	1.5	.979	-1	397	346
Regular night shift (%)	1.3	1.5	-0.2	0.9	.816	-14	397	346
Rotating schedule (%)	1.2	1.2	-0.0	0.8	.999	-0	397	346
Irregular schedule (%)	5.8	4.7	1.1	1.7	.502	24	397	346
Other schedule (%)	4.2	3.7	0.4	1.4	.766	11	397	346
Career Opportunities								
Job offers career advancement opportunities:								
Strongly agree (%)	20.5	18.8	1.6	3.1	.594	9	357	312
Agree (%)	28.5	25.8	2.8	3.5	.431	11	357	312

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Disagree (%)	12.2	14.3	-2.1	2.7	.450	-14	357	312
Strongly disagree (%)	8.8	12.5	-3.7	2.4	.128	-29	357	312

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who were employed at follow up, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibits I.5-5 and I.5-6 present the distribution of the field of employment at follow-up (in each exhibit, the last line reports the proportion not employed.) Exhibit I.5-5 reports on the industry of employment; Exhibit I.5-6 reports on the occupation. The exhibits present the proportion of the study sample working in each field, both overall and by treatment status. In each, the last column reports the difference between treatment groups, and indicates whether the difference is statistically significant.

Exhibit I.5-5: Distribution of Industry of Employment, Reboot NW

Industry of Employment	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Not employed	26.1	26.3	25.8	0.5
Information technology-related industries				
Computer system design and related services	14.4	15.5	13.4	2.1
Information industries, including software publishing, telecommunications, data processing/hosting and other information services	2.5	2.1	2.9	-0.8
Manufacturing- and advanced manufacturing-related industries				
Metal, machinery, computer and electronic/electrical equipment manufacturing	13.2	12.6	13.8	-1.2
Other manufacturing (e.g. wood/paper, chemicals, plastics, food/beverage, textiles/apparel)	2.7	3.3	2.2	1.1
Architectural, engineering, and specialized design services	2.6	2.7	2.6	0.1
Other industries				
Accommodations, food services, personal services, and private household	1.9	2.0	1.9	0.1
Administrative and support services	5.6	5.3	5.8	-0.5
Construction, mining/oil and gas, utilities, agriculture, and waste management	4.1	4.3	3.9	0.4
Educational services	6.1	6.0	6.2	-0.2
Finance, insurance, and real estate	3.9	3.6	4.2	-0.6
Healthcare services other than social assistance	1.9	2.1	1.8	0.3
Professional, scientific, and technical services other than computer system design/architectural services/ scientific research (e.g. accounting/tax preparation, advertising/public relations)	1.0	0.8	1.2	-0.4
Public administration	1.8	2.2	1.4	0.8
Scientific research and development and management/scientific/technical consulting services	1.6	2.0	1.1	0.9
Social assistance, and religious, grant-making, civic, professional, and similar organizations	1.4	1.2	1.5	-0.3
Transportation and warehousing	3.6	3.7	3.5	0.2
Wholesale and retail trade	5.9	4.9	7.0	-2.1
Other (e.g. arts/entertainment/recreation, management of companies/services, repair/maintenance)	1.6	1.6	1.5	0.1

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit I.5-6: Distribution of Occupation of Employment, Reboot NW

Occupation of Employment	Study Sample Mean	Program Group Mean	Control Group Mean	Difference
Not employed	26.1	26.3	25.8	0.5
Information technology-related occupations				
Computer and information systems managers	1.6	1.1	2.2	-1.1
Computer and mathematical occupations, and computer hardware engineers	23.0	24.3	21.7	2.6
Manufacturing- and advanced manufacturing-related occupations				
Architecture and engineering occupations, other than computer hardware engineers	5.4	6.1	4.6	1.5
Assemblers, fabricators, and metal or plastic production workers	4.3	4.8	3.7	1.1
All other production occupations	3.9	3.7	4.1	-0.4
Other occupations				
Arts, design, entertainment, sports, and media	2.1	1.4	2.7	-1.3
Business and financial operations and legal occupations	4.7	5.3	4.1	1.2
Community and social service occupations (including healthcare social workers)	0.4	0.3	0.6	-0.3
Construction, installation and repair, extraction, farming, fishing, and forestry occupations	3.1	2.5	3.7	-1.2
Educational instruction and library	2.5	2.5	2.5	0.0
Food preparation and service-related occupations, personal care and service, protective service, and building and grounds cleaning and maintenance occupations	3.9	3.9	3.9	0.0
Healthcare practitioners and technical occupations	0.1	0.2	0.0	0.2
Healthcare support occupations	0.8	0.7	0.9	-0.2
Life, physical, and social science occupations (including medical scientists)	0.3	0.3	0.2	0.1
Managers other than computer/information systems	5.3	5.9	4.6	1.3
Office and administrative support occupations	4.1	4.1	4.1	0.0
Sales and related	3.3	2.8	3.7	-0.9
Transportation and material moving occupations	5.2	3.6	6.9	-3.3*

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

Notes: Reported difference may not equal the difference between the program group mean and control group mean because of rounding. Sample size of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. Table reports the weighted distribution, applying the survey non-response weights. Statistically significant differences at the $p < 0.05$ level (using two-sided t-tests) are indicated with a * in the 'Difference' column.

Exhibit I.5-7 provides detailed results on the relation between training and subsequent jobs (discussed but not shown in Section 6.5 of the *Interim Impact Report*).

Exhibit I.5-7: Connection between Training and Employment, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Connection between Training and Employment								
New job due to training or certificate (%)	33.0	26.4	6.6*	3.4	.052	25	385	343
<i>New job due to training or certificate, if any (%)</i>	43.6	41.2	2.4	4.4	.588	6	291	219
Training useful for that job (%)	33.0	26.2	6.8**	3.4	.048	26	383	338
Promotion due to training (%)	4.2	3.7	0.5	1.4	.734	13	390	345
Training useful after promotion (%)	3.8	3.4	0.4	1.4	.767	12	399	347

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. *Outcomes in italics* apply to the subset of survey respondents who attended any occupational training or received any other certificate, and thus are non-experimental. Where not italicized, outcomes apply to the full survey sample, and impact estimates are experimental. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

I.6 Impacts on Broader Measures of Well-Being

Exhibit I.6-1 provides detailed results corresponding to Exhibit 6-15 in the *Interim Impact Report*.

Exhibit I.6-1: Income and Public Benefits Receipt, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Income								
Total own income before taxes last month (\$)	2,776	2,869	-93	167	.578	-3	345	297
Benefits Receipt								
Received any public benefits last month (%)	16.5	18.4	-1.9	2.8	.491	-10	396	344
Received TANF last month (%)	1.0	0.4	0.6	0.6	.319	159	396	345
Received SNAP last month (%)	11.1	14.6	-3.5	2.5	.160	-24	394	344
Received UI last month (%)	3.8	2.5	1.3	1.3	.307	51	396	344
Received other public benefits last month (%)	4.8	5.1	-0.4	1.6	.811	-7	398	345

KEY: SNAP is Supplemental Nutrition Assistance Program; TANF is Temporary Assistance for Needy Families; UI is Unemployment Insurance.

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: **Secondary outcomes are bolded**; exploratory outcomes are not bolded. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., $100 \times [\text{impact} / \text{control group mean}]$).

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.6-2 provides detailed results on family structure outcomes (there is no corresponding discussion or exhibit in Chapter 6 of the *Interim Impact Report*).

Exhibit I.6-2: Household Composition, Reboot NW

Outcome	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value	Relative Impact (%)	Program Sample Size	Control Sample Size
Individuals	2.5	2.3	0.1	0.1	.224	6	390	341
Children under 12	0.3	0.3	0.0	0.1	.489	12	390	341

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey; as of survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. "Relative impact" represents impacts as a percentage of the corresponding control group mean (i.e., 100 x [impact / control group mean]); relative impact is blank if the control group mean is zero.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

I.7 Subgroup Impacts

This section provides detail on subgroup impacts for the confirmatory outcome, secondary outcomes, and several exploratory outcomes discussed in Chapter 6 of the *Interim Impact Report*. Exhibits I.7-1 and I.7-2 report differential impacts by education level at random assignment: less than a bachelor's degree versus a bachelor's degree or more. Exhibits I.7-3 and I.7-4 report differential impacts by age at random assignment: 49 or older versus 48 or younger. Exhibits I.7-5 and I.7-6 report differential impacts by employment status at random assignment: unemployed more than 12 months versus ever employed in the last 12 months (including those employed at application). Exhibits I.7-7 and I.7-8 report differential impacts by gender.

For each pair of subgroup impact exhibits, the first exhibit reports differential impacts on participation in and hours and weeks attended for the following: any structured employment-related activity, occupational training, work-based training, and employment readiness courses. The second subgroup exhibit reports differential impacts on educational attainment, average earnings in the fifth and sixth quarters after random assignment, employment in the fifth or sixth quarter after random assignment, and receipt of public benefits.

Exhibit I.7-1: Subgroup Impacts, by Education Level: Program Services, Reboot NW

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Less than bachelor's degree	333	88	70	17***	5	<.001
Bachelor's degree or more	408	90	71	20***	4	<.001
Difference				2	6	.701
Total hours attended						
Less than bachelor's degree	331	588	495	93	76	.219
Bachelor's degree or more	404	428	292	135***	48	.005
Difference				42	90	.640
Total weeks attended						
Less than bachelor's degree	318	26	22	4	3	.129
Bachelor's degree or more	398	24	17	7***	2	.002
Difference				3	4	.454
Occupational Training						
Ever attended (%)						
Less than bachelor's degree	334	64	61	3	5	.563
Bachelor's degree or more	410	75	55	19***	5	<.001

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				16**	7	.023
Total hours attended						
Less than bachelor's degree	333	398	398	1	66	.993
Bachelor's degree or more	407	319	233	86**	42	.041
Difference				86	78	.275
Total weeks attended						
Less than bachelor's degree	313	18	18	0	3	.948
Bachelor's degree or more	402	18	13	5**	2	.014
Difference				5	4	.158
Work-Based Training						
Ever attended (%)						
Less than bachelor's degree	335	21	20	1	5	.764
Bachelor's degree or more	411	18	8	10***	3	.003
Difference				8	6	.135
Total hours attended						
Less than bachelor's degree	333	107	88	19	32	.551
Bachelor's degree or more	411	59	39	20	18	.271
Difference				1	36	.979
Total weeks attended						
Less than bachelor's degree	331	4	4	-0	1	.862
Bachelor's degree or more	411	3	1	1*	1	.069
Difference				2	1	.256
Employment Readiness Courses						
Ever attended (%)						
Less than bachelor's degree	332	63	27	36***	5	<.001
Bachelor's degree or more	407	58	30	28***	5	<.001
Difference				-8	7	.253
Total hours attended						
Less than bachelor's degree	326	82	13	70***	18	<.001
Bachelor's degree or more	400	49	14	36***	7	<.001
Difference				-34*	20	.087
Total weeks attended						
Less than bachelor's degree	316	5	1	4***	1	<.001
Bachelor's degree or more	395	5	4	1	1	.309
Difference				-3	2	.131

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey, measuring training through 18 months after random assignment.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 972 includes 489 program group and 483 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.7-2: Subgroup Impacts, by Education Level: Educational Attainment, Earnings and Employment, and Benefits Receipt, Reboot NW

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Less than bachelor's degree	330	48	43	5	6	.384
Bachelor's degree or more	407	58	38	21***	5	<.001
Difference				16**	8	.037
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Less than bachelor's degree	462	6,092	5,751	341	548	.534
Bachelor's degree or more	510	8,601	9,340	-739	956	.440
Difference				-1,080	1,119	.335
Ever employed during Q5 or Q6 (%)						
Less than bachelor's degree	462	73	72	1	4	.811
Bachelor's degree or more	510	68	70	-2	4	.670
Difference				-3	6	.641
Benefits Receipt						
Receiving any public benefits (%)						
Less than bachelor's degree	332	22	26	-4	5	.393
Bachelor's degree or more	408	12	12	-0	3	.999
Difference				4	6	.480

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 972 includes 489 program group and 483 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.7-3: Subgroup Impacts, by Age: Program Services, Reboot NW

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
48 or younger	445	88	70	18***	4	<.001
49 or older	296	91	72	19***	5	<.001
Difference				1	6	.830
Total hours attended						
48 or younger	442	534	408	126**	57	.028
49 or older	293	457	357	100	71	.160
Difference				-26	91	.775
Total weeks attended						
48 or younger	433	26	18	8***	2	<.001
49 or older	283	24	21	3	3	.300
Difference				-4	4	.258
Occupational Training						
Ever attended (%)						
48 or younger	443	72	64	9*	5	.062
49 or older	301	66	50	17***	6	.004

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				8	7	.276
Total hours attended						
48 or younger	440	419	333	86*	52	.096
49 or older	300	261	278	-17	57	.769
Difference				-103	76	.180
Total weeks attended						
48 or younger	424	21	15	6**	2	.013
49 or older	291	14	15	-1	3	.642
Difference				-7*	3	.050
Work-Based Training						
Ever attended (%)						
48 or younger	445	23	17	6	4	.108
49 or older	301	15	9	5	4	.173
Difference				-1	5	.867
Total hours attended						
48 or younger	444	72	69	3	20	.878
49 or older	300	97	52	45	37	.224
Difference				42	44	.337
Total weeks attended						
48 or younger	442	3	3	-0	1	.915
49 or older	300	4	2	2	1	.170
Difference				2	2	.233
Employment Readiness Courses						
Ever attended (%)						
48 or younger	444	55	22	34***	4	<.001
49 or older	295	67	38	28***	6	<.001
Difference				-5	7	.461
Total hours attended						
48 or younger	439	47	10	37***	6	<.001
49 or older	287	93	17	76***	22	<.001
Difference				39*	23	.090
Total weeks attended						
48 or younger	431	4	2	2**	1	.033
49 or older	280	7	4	4**	2	.043
Difference				2	2	.320

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 972 includes 489 program group and 483 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.7-4: Subgroup Impacts, by Age: Educational Attainment, Earnings and Employment, and Benefits Receipt, Reboot NW

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
48 or younger	440	54	44	10**	5	.042
49 or older	297	53	35	18***	6	.002
Difference				8	8	.287
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
48 or younger	593	7,325	7,704	-379	697	.586
49 or older	379	7,627	7,616	11	932	.991
Difference				390	1,166	.738
Ever employed during Q5 or Q6 (%)						
48 or younger	593	70	74	-4	4	.265
49 or older	379	73	68	5	5	.258
Difference				9	6	.115
Benefits Receipt						
Receiving any public benefits (%)						
48 or younger	445	15	16	-1	4	.756
49 or older	295	18	21	-3	5	.479
Difference				-2	6	.714

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 972 includes 489 program group and 483 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.7-5: Subgroup Impacts, by Employment Status: Program Services, Reboot NW

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Not long-term unemployed	520	90	70	19***	4	<.001
Long-term unemployed	221	88	71	17***	6	.002
Difference				-2	7	.779
Total hours attended						
Not long-term unemployed	516	485	385	101*	52	.053
Long-term unemployed	219	543	394	149*	83	.074
Difference				49	98	.621
Total weeks attended						
Not long-term unemployed	507	26	20	6**	2	.011
Long-term unemployed	209	24	17	6**	3	.044
Difference				1	4	.857
Occupational Training						
Ever attended (%)						
Not long-term unemployed	521	72	57	15***	4	<.001
Long-term unemployed	223	65	60	5	7	.484

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				-10	8	.194
Total hours attended						
Not long-term unemployed	518	358	305	53	46	.248
Long-term unemployed	222	351	321	30	72	.681
Difference				-23	86	.786
Total weeks attended						
Not long-term unemployed	504	19	15	4*	2	.062
Long-term unemployed	211	15	14	0	3	.891
Difference				-4	4	.330
Work-Based Training						
Ever attended (%)						
Not long-term unemployed	523	18	13	5	3	.107
Long-term unemployed	223	22	15	7	5	.175
Difference				2	6	.745
Total hours attended						
Not long-term unemployed	521	72	64	8	21	.710
Long-term unemployed	223	104	57	46	34	.178
Difference				39	39	.326
Total weeks attended						
Not long-term unemployed	521	3	3	0	1	.751
Long-term unemployed	221	4	2	2	1	.251
Difference				1	2	.418
Employment Readiness Courses						
Ever attended (%)						
Not long-term unemployed	520	59	32	27***	4	<.001
Long-term unemployed	219	64	21	43***	6	<.001
Difference				16**	8	.037
Total hours attended						
Not long-term unemployed	512	55	16	39***	7	<.001
Long-term unemployed	214	88	6	82***	24	<.001
Difference				43*	25	.086
Total weeks attended						
Not long-term unemployed	502	5	3	2	1	.107
Long-term unemployed	209	5	1	4***	1	.003
Difference				3	2	.135

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: "Long-term unemployed" includes study members who reported being unemployed for a year or more at baseline; "not long-term unemployed" includes study members who were unemployed for less than 12 months at baseline, or were employed. All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 972 includes 489 program group and 483 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.7-6: Subgroup Impacts, by Employment Status: Educational Attainment, Earnings and Employment, and Benefits Receipt, Reboot NW

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Not long-term unemployed	516	54	40	14***	4	.002
Long-term unemployed	221	52	41	11	7	.101
Difference				-3	8	.743
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Not long-term unemployed	291	5,428	4,990	438	971	.652
Long-term unemployed	681	8,241	8,751	-509	685	.457
Difference				-947	1,195	.428
Ever employed during Q5 or Q6 (%)						
Not long-term unemployed	291	57	55	2	6	.770
Long-term unemployed	681	76	78	-1	3	.676
Difference				-3	7	.648
Benefits Receipt						
Receiving any public benefits (%)						
Not long-term unemployed	519	15	15	0	3	.998
Long-term unemployed	221	19	25	-6	6	.275
Difference				-6	7	.337

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: For educational attainment and benefits receipt, measured in the 18-month follow-up survey, "long-term unemployed" includes study members who reported being unemployed for a year or more at baseline; "not long-term unemployed" includes study members who were unemployed for less than 12 months at baseline, or were employed. For employment and earnings in quarters 5 and 6, measured in the NDNH, "long-term unemployed" includes study members with zero earnings in the four quarters before randomization (treating the quarter of randomization as quarter 0); "not long-term unemployed" includes study members with positive earnings in any of the four quarters before randomization. All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 972 includes 489 program group and 483 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.7-7: Subgroup Impacts, by Gender: Program Services, Reboot NW

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Any Structured Employment-Related Activity						
Ever attended (%)						
Women	183	91	68	22***	6	<.001
Men	558	89	71	17***	3	<.001
Difference				-5	7	.488
Total hours attended						
Women	182	530	401	129	92	.161
Men	553	495	384	111**	51	.029
Difference				-18	106	.869
Total weeks attended						
Women	178	26	21	5	4	.169
Men	538	25	19	6***	2	.004

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Difference				1	4	.829
Occupational Training						
Ever attended (%)						
Women	183	70	57	13*	7	.060
Men	561	69	58	11***	4	.007
Difference				-2	8	.825
Total hours attended						
Women	182	373	286	87	77	.260
Men	558	350	317	33	45	.464
Difference				-54	91	.554
Total weeks attended						
Women	179	18	15	3	3	.332
Men	536	18	15	3	2	.169
Difference				-1	4	.891
Work-Based Training						
Ever attended (%)						
Women	184	20	13	7	6	.190
Men	562	19	14	5*	3	.092
Difference				-2	6	.763
Total hours attended						
Women	184	96	94	2	47	.961
Men	560	77	52	25	19	.193
Difference				23	51	.657
Total weeks attended						
Women	183	4	3	1	2	.745
Men	559	3	2	1	1	.374
Difference				0	2	.975
Employment Readiness Courses						
Ever attended (%)						
Women	183	63	34	29***	7	<.001
Men	556	59	27	32***	4	<.001
Difference				4	8	.661
Total hours attended						
Women	181	60	19	41***	12	<.001
Men	545	66	11	55***	11	<.001
Difference				14	16	.385
Total weeks attended						
Women	177	5	4	1	2	.526
Men	534	5	2	3***	1	.002
Difference				2	2	.447

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey. Weeks and hours of training measured as of 18 months after randomization; all other survey-based outcomes measured as of the survey interview.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 972 includes 489 program group and 483 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

Exhibit I.7-8: Subgroup Impacts, by Gender: Educational Attainment, Earnings and Employment, and Benefits Receipt, Reboot NW

Outcome/Subgroup	Sample Size	Program Group Mean	Control Group Mean	Impact (Difference)	Standard Error	p-Value
Educational Attainment						
Received any certificate, credential, license, or degree (%)						
Women	181	51	43	9	7	.256
Men	556	54	40	15***	4	<.001
Difference				6	9	.477
Earnings and Employment						
Average earnings in Q5 and Q6 (\$)						
Women	229	8,757	7,702	1,055	1,386	.447
Men	743	7,040	7,658	-619	600	.303
Difference				-1,673	1,520	.271
Ever employed during Q5 or Q6 (%)						
Women	229	75	68	6	6	.295
Men	743	70	72	-2	3	.453
Difference				-9	7	.201
Benefits Receipt						
Receiving any public benefits (%)						
Women	181	22	19	3	6	.593
Men	559	15	18	-3	3	.273
Difference				-7	7	.323

SOURCE AND FOLLOW-UP PERIOD: 18-month follow-up survey for educational attainment and benefits receipt; measured as of survey interview. National Directory of New Hires for average earnings in Q5 and Q6 and ever employed during Q5 or Q6, measured through six quarters after randomization.

NOTES: All outcomes in this table are exploratory. Reported impact may not equal the difference between the reported program and control group means because of rounding. For outcomes measured in the 18-month follow-up survey, the total sample of 747 includes 400 program group and 347 control group members who completed the 18-month follow-up survey. For outcomes measured in the National Directory of New Hires, the total sample of 972 includes 489 program group and 483 control group members.

Statistical significance based on two-sided hypothesis tests; significance levels are as follows: *** = 1 percent; ** = 5 percent; * = 10 percent.

References

- Bloom, H. S. (1984). "Accounting for no-shows in experimental evaluation designs." *Evaluation Review*, 8, 225–246.
- Copson, Elizabeth, Karen Martinson, Sam Elkin, Bright Sarfo, Tresa Kappil, Carly Morrison, and Cara Sierks. 2020. *Providing Employment Services to the Long-Term Unemployed: Implementation and Sustainability of the Programs in the Ready to Work Partnership Grant Evaluation*. Rockville, MD: Abt Associates.
- Cochran, W. G. 1968. "The Effectiveness of Adjustment by Subclassification in Removing Bias in Observational Studies." *Biometrics* 24: 295–313.
- DOL/ETA [U.S. Department of Labor, Employment and Training Administration]. 2014. *Notice of Availability of Funds and Solicitation for Grant Applications for H-1B Ready to Work Partnership Grants* (Solicitation for Grant Applications, SGA/DFA PY-13-07). Washington, DC: Authors. https://www.doleta.gov/grants/pdf/SGA_DFA_PY_13_07.pdf.
- Gubits, Daniel, Winston Lin, Stephen Bell, and David Judkins. 2014. *BOND Implementation and Evaluation: First- and Second-Year Snapshot of Earnings and Benefit Impacts for Stage 2*. Submitted to the Social Security Administration. Bethesda, MD: Abt Associates.
- Heckman, Janes, Neil Hohmann, Jeffrey Smith, and Michael Koo. 2000. "Substitution and dropout bias in social experiments: A study of an influential social experiment." *The Quarterly Journal of Economics*, 115(2): 651-694.
- Judkins, D. R. (2019). *Covariate selection in small randomized studies*. In *JSM Proceedings, Bayesian Statistics Section*. Alexandria, VA: American Statistical Association. 2159-2164.
- Judkins, David R. and Kristin E. Porter. 2015. "Robustness of ordinary least squares in randomized clinical trials," *Statistics in Medicine*, 35(11): 1763-1773.
- Martinson, Karin, Copson, Elizabeth., Glen Schneider, Sam Elkin, Bright Sarfo, Tresa Kappil, Claire Ma, Carly Morrison, and Audra Nakas. 2017. *Evaluation of the Ready to Work Partnership Grant Program: Findings from the Implementation Study of Four Training Programs for Long-Term Unemployed Workers*. Submitted to the U.S. Department of Labor Employment and Training Administration. Bethesda, MD: Abt Associates.
- Puma, Michael J., Robert B. Olsen, Stephen H. Bell, and Cris Price. 2009. *What to Do When Data Are Missing in Group Randomized Controlled Trials*. NCEE 2009-0049. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Richardson, Sabrina, Tuo Lin, Yangyi Li, Manfei Xu, Valerie Stander, and Xin M. Tu. 2019. "Guidance for Use of Weights: An Analysis of Different Types of Weights and Their Implications When Using SAS PROCs." *General Psychiatry*, 32(1).
- Schochet, Peter Z. 2008. *Technical Methods Report: Guidelines for Multiple Testing in Experimental Evaluations of Educational Interventions*. Washington, DC: National Center for Education Evaluation

and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

http://ies.ed.gov/ncee/tech_methods/.

Schochet, Peter Z. 2009. “An Approach for Addressing the Multiple Testing Problem in Social Policy Impact Evaluations.” *Education Review* 33 (6): 9–149.

<http://erx.sagepub.com/content/33/6/539.full.pdf+html>.

Tibshirani, Robert. (1996). “Regression Shrinkage and Selection via the lasso.” *Journal of the Royal Statistical Society. Series B (Methodological)* 58 (1): 267–288.