

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our [Technical Documentation](#).

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

Case management for unemployment insurance claimants

Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Case managers work with Unemployment Insurance (UI) claimants in individual or group sessions to provide counseling, job search assistance or job retention services through orientations, assessments, interviews, or telephone calls. Case managers usually provide referrals to child care subsidies, transportation assistance, and other support services. They may also refer clients to education and training, particularly if job searches are unsuccessful. Case management may end when clients find employment, or continue with post-employment support services. UI programs usually provide these services to eligible dislocated workers, lasting anywhere from one week to three months.

Benefit-Cost Summary Statistics Per Participant

Benefits to:

Taxpayers	\$1,154	Benefit to cost ratio	\$19.84
Participants	\$2,542	Benefits minus costs	\$3,424
Others	\$0	Chance the program will produce	
Indirect	(\$91)	benefits greater than the costs	69 %
<u>Total benefits</u>	<u>\$3,606</u>		
<u>Net program cost</u>	<u>(\$182)</u>		
Benefits minus cost	\$3,424		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Labor market earnings associated with employment	\$2,542	\$1,154	\$0	\$0	\$3,697
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$91)	(\$91)
Totals	\$2,542	\$1,154	\$0	(\$91)	\$3,606

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

³"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

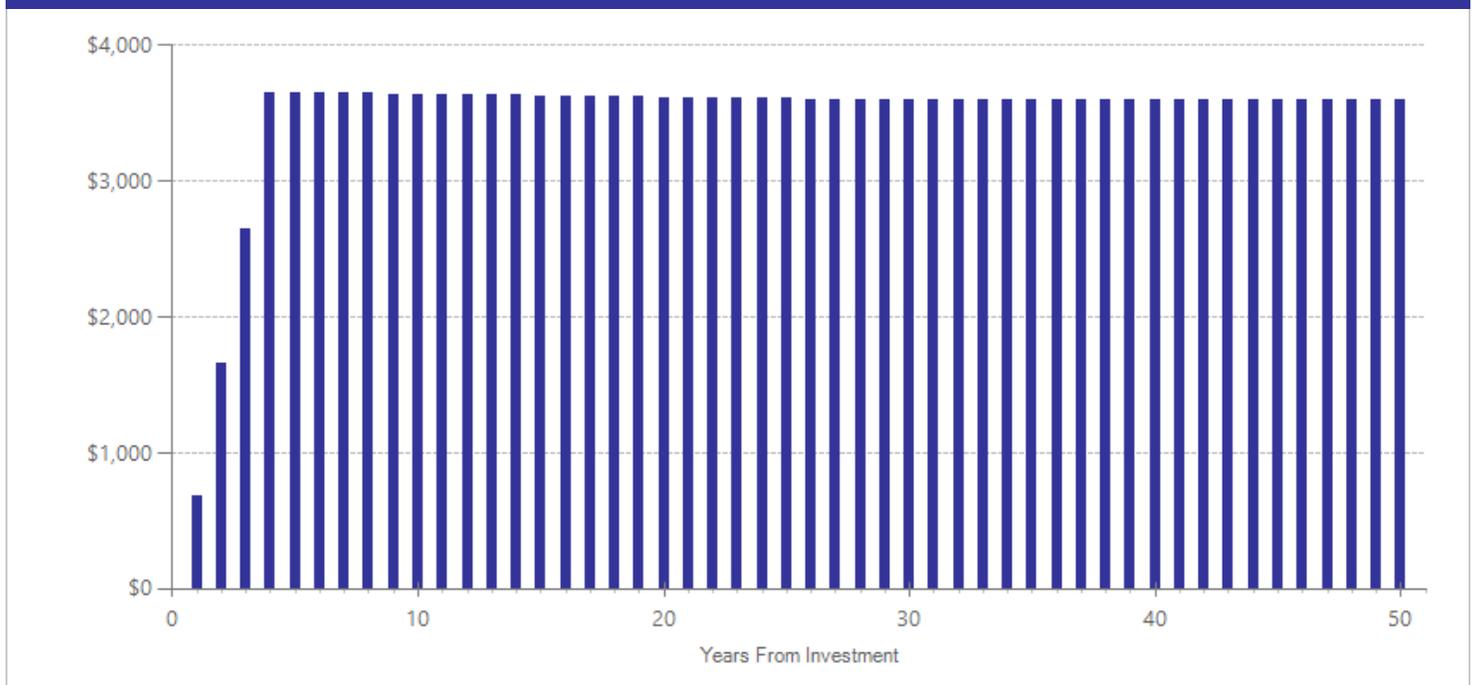
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$180	2014	Present value of net program costs (in 2015 dollars)	(\$182)
Comparison costs	\$0	2014	Cost range (+ or -)	75 %

Case management services typically last between one week and three months. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Black et al., 2003; Decker et al., 2000; Michaelides et al., 2012). Costs vary by study but may include central administration, staff salaries, staff benefits, recruitment, assessment services, job placement and retention services, short-term training provided by staff, transportation, and medical treatments.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our [Technical Documentation](#).

Detailed Annual Cost Estimates Per Participant



The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in non-discounted dollars to simplify the “break-even” point from a budgeting perspective. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach \$0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above \$0, the benefits of the program exceed the initial investment.

Meta-Analysis of Program Effects										
Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Earnings*	11	102201	0.036	0.015	42	0.000	0.014	43	0.036	0.019
Employment	13	209702	-0.002	0.007	42	0.000	0.014	43	-0.002	0.820

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our [Technical Documentation](#).

Citations Used in the Meta-Analysis

- Benus, J.M., Poe-Yamagata, E., Wang, Y., & Blass, E. (2008). *Reemployment and Eligibility Assessment (REA) study: FY 2005 Initiative*. Columbia, MD: IMPAQ International.
- Black, D.A., Smith, J.A., Berger, M.C., & Noel, B.J. (2003). Is the threat of reemployment services more effective than the services themselves? Evidence from random assignment in the UI System. *American Economic Review*, 93(4), 1313-1327.
- Decker, P.T., Olsen, R.B., Freeman, L., & Klepinger, D.H. (2000). *Assisting unemployment insurance claimants: The long-term impacts of the Job Search Assistance Demonstration*. U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service
- Dickinson, K.P., Kreutzer, S.D., & Decker, P.T. (1997). *Evaluation of Worker Profiling and Reemployment Services Systems: Report to Congress*. Menlo Park, CA: Social Policy Research Associates.
- Dickinson, K.P., Decker, P.T., Kreutzer, S.D., Heinberg, J.D., & Nicholson, W. (2002). Evaluation of WPRS systems. In R.W. Eberts, C.J. O’Leary, & S.A. Wandner (Eds.), *Targeting Employment Services* (pp. 69-90). Kalamazoo, MI: W.E. Upjohn Institute.
- Johnson, T.R., & Klepinger, D.H. (1991). *Evaluation of the impacts of the Washington Alternative Work Search Experiment: Final report*. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service.
- Michaelides, M., Poe-Yamagata, E., Benus, J., & Tirumalasetti, D. (2012). *Impact of the Reemployment and Eligibility Assessment (REA) Initiative in Nevada*. Washington, DC: U.S. Department of Labor, Employment and Training Administration.
- Poe-Yamagata, E., Benus, J., Bill, N., Carrington, H., Michaelides, M., & Shen, T. (2011). *Impact of the Reemployment and Eligibility Assessment (REA) Initiative*. Washington, DC: U.S. Department of Labor, Employment and Training Administration.

Training with work experience for adult welfare recipients

Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Adult TANF/AFDC recipients may receive job search and placement assistance, adult basic education, ESL and GED preparation, vocational training, or support services such as child care and housing support. All participants in these programs also receive some type of work experience, paid or unpaid. Most studies define the adult population to be age 18 and over. Treatment may be sequential, where participants first undergo training and then receive work experience, or follow individualized employment plans for each participant. These programs sometimes take the form of "welfare-to-work" programs, where participants must participate in employment activities to receive welfare benefits. Community organizations, welfare agencies, and federally or state-funded programs administered by state, county, or local government agencies typically provide these services. Programs last anywhere from two months to one year.

Benefit-Cost Summary Statistics Per Participant

Benefits to:			
Taxpayers	\$3,781	Benefit to cost ratio	\$1.67
Participants	\$4,558	Benefits minus costs	\$2,770
Others	\$0	Chance the program will produce	
Indirect	(\$1,411)	benefits greater than the costs	78 %
<u>Total benefits</u>	<u>\$6,928</u>		
<u>Net program cost</u>	<u>(\$4,158)</u>		
Benefits minus cost	\$2,770		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Labor market earnings associated with employment	\$5,353	\$2,431	\$0	\$0	\$7,783
Public assistance	(\$378)	\$889	\$0	\$447	\$958
Food assistance	(\$417)	\$461	\$0	\$232	\$276
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$2,089)	(\$2,089)
Totals	\$4,558	\$3,781	\$0	(\$1,411)	\$6,928

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

³"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

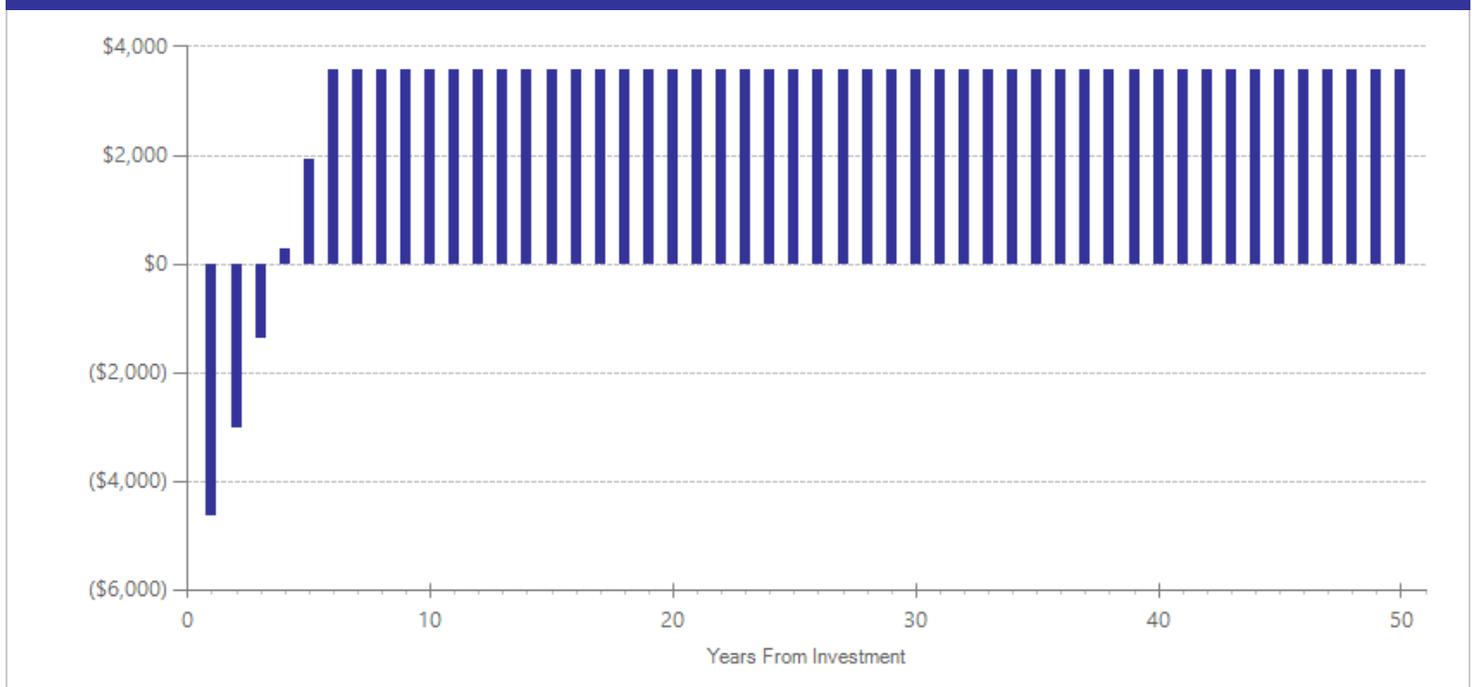
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$4,154	2014	Present value of net program costs (in 2015 dollars)	(\$4,158)
Comparison costs	\$0	2014	Cost range (+ or -)	43 %

These programs typically last between two months and one year. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Auspos et al., 1988; Bell & Orr, 1994; Blomquist, 1995; Bloom et al., 2000; Farrell, 2000; Freedman et al., 2000; Freedman et al., 1995; Hamilton et al., 1997; Riccio et al., 1986; Scrivener et al., 2002; Scrivener et al., 2001; Scrivener et al., 1998; Storto et al., 2000). Costs vary by study but may include administrative costs, employment services, case management, eligibility-related services, foregone earnings, tuition payments, allowances, support services such as transportation assistance and child care costs, and wage subsidies.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our [Technical Documentation](#).

Detailed Annual Cost Estimates Per Participant



The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in non-discounted dollars to simplify the “break-even” point from a budgeting perspective. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach \$0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above \$0, the benefits of the program exceed the initial investment.

Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Earnings*	36	95653	0.146	0.026	39	0.000	0.018	40	0.149	0.001
Employment	32	95650	0.091	0.014	39	0.000	0.018	40	0.094	0.001
Food assistance	19	42878	-0.055	0.010	39	0.000	0.018	40	-0.058	0.001
Public assistance	38	91383	-0.064	0.015	39	0.000	0.028	40	-0.065	0.001

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

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Citations Used in the Meta-Analysis

- Auspos, P., Cave, G., & Long, D. (1988). *Final report on the Training Opportunities in the Private Sector Program*. New York, NY: Manpower Demonstration Research Corporation.
- Bell, S.P., & Orr, L.L. (1994). Is subsidized employment cost effective for welfare recipients? Experimental evidence from seven state demonstration. *The Journal of Human Resources*, 29(1), 42-61.
- Bloom, D., Kemple, J.J., Morris, P., Scrivener, S., Verma, N., Hendra, R., . . . Walter, J. (2000). *The Family Transition Program : Final report on Florida's Initial Time-Limited Welfare Program*. New York, NY: Manpower Demonstration Research Corporation.
- Bloom, D., Miller, C., & Azurdia, G.L. (2007). *Results from the Personal Roads to Individual Development and Employment (PRIDE) Program in New York City*. New York, NY: Manpower Demonstration Research Corporation.
- Farrell, M. (2000). *Implementation, participation patterns, costs, and two-year impacts of the Detroit welfare-to-work program*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of the Assistant Secretary for Planning and Evaluation.
- Fein, D.J., Beecroft, E., & Blomquist, J.D. (1994). *Ohio Transitions to Independence Demonstration. Final Impacts for JOBS and Work Choice*. Cambridge, MA: Abt Associates.
- Freedman, S., Friedlander, D., Lin, W., & Schweder, A. (1996). *The GAIN evaluation: Five-year impacts on employment, earnings and AFDC receipt*. New York, NY: Manpower Demonstration Research Corporation.
- Freedman, S., Knab, J.T., Gennetian, L.A., & Navarro, D. (2000). *The Los Angeles Jobs-First GAIN Evaluation: Final report on a work first program in a major urban center*. New York, NY: Manpower Demonstration Research Corporation.
- Friedlander, D., Hoerz, G., Long, D., & Quint, J. (1985). *Final report on the Employment Evaluation*. New York, NY: Manpower Demonstration Research Corporation.
- Hamilton, G., Brock, T., Farrell, M., Friedlander, D., Harknett, K., Hunter-Manns, J-A., . . . Weissman, J. (1997). *Evaluating two welfare-to-work program approaches: Two-year findings on the labor force attachment and human capital development programs in three sites*. New York, NY: Manpower Demonstration Research Corporation.
- Jacobs, E., & Bloom, D. (2011). *Alternative employment strategies for hard-to-employ TANF recipients: Final results from a test of transitional jobs and preemployment services in Philadelphia*(OPRE Report 2011-19). Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Pawasarat, J., & Quinn, L.M. (1993). *Wisconsin welfare employment experiments: An evaluation of the WEJT and CWEP programs*. Milwaukee, WI: Employment and Training Institute, Division of Outreach and Continuing Education Extension, University of Wisconsin-Milwaukee.
- Riccio, J.A., Cave, G., Freedman, S., & Price, M. (1986). *Final report on the Virginia Employment Services Program*. New York, NY: Manpower Demonstration Research Corporation.
- Scrivener, S., Hamilton, G., Farrell, M., Freedman, S., Friedlander, D., Mitchell, M., . . . Schwartz, C. (1998). *Implementation, participation patterns, costs, and two-year impacts of the Portland (Oregon) welfare-to-work program*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of the Assistant Secretary for Planning and Evaluation.
- Scrivener, S., Walter, J., Brock, T., & Hamilton G. (2001). *Evaluating two approaches to case management: Implementation, participation patterns, costs, and three-year impacts of the Columbus welfare-to-work program*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of the Assistant Secretary for Planning and Evaluation.
- Scrivener, S., Hendra, R., Redcross, C., Bloom, D., Michalopoulos, C., & Walter J. (2002). *WRP: Final report on Vermont's Welfare Restructuring Project*. New York, NY: Manpower Demonstration Research Corporation.
- Storto, L., Hamilton, G., Schwartz, C., & Scrivener, S. (2000). *Oklahoma City's ET & E Program: Two-year implementation, participation, cost, and impact findings*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation.

Job search and placement Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Unemployed individuals conduct a supervised job search, attend job search workshops or participate in job clubs, similar to peer support groups for the unemployed. This intervention is very brief, lasting anywhere from a few hours in one day to two months. State Unemployment Insurance (UI) programs, employment departments, and welfare agencies usually provide these program services. UI claimants and TANF/AFDC recipients are the most common participants.

Benefit-Cost Summary Statistics Per Participant

Benefits to:			
Taxpayers	\$1,491	Benefit to cost ratio	\$4.54
Participants	\$604	Benefits minus costs	\$1,829
Others	\$0	Chance the program will produce	
Indirect	\$250	benefits greater than the costs	67 %
<u>Total benefits</u>	<u>\$2,345</u>		
<u>Net program cost</u>	<u>(\$517)</u>		
Benefits minus cost	\$1,829		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Labor market earnings associated with employment	\$1,037	\$471	\$0	\$0	\$1,509
Public assistance	(\$433)	\$1,020	\$0	\$508	\$1,095
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$258)	(\$258)
Totals	\$604	\$1,491	\$0	\$250	\$2,345

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

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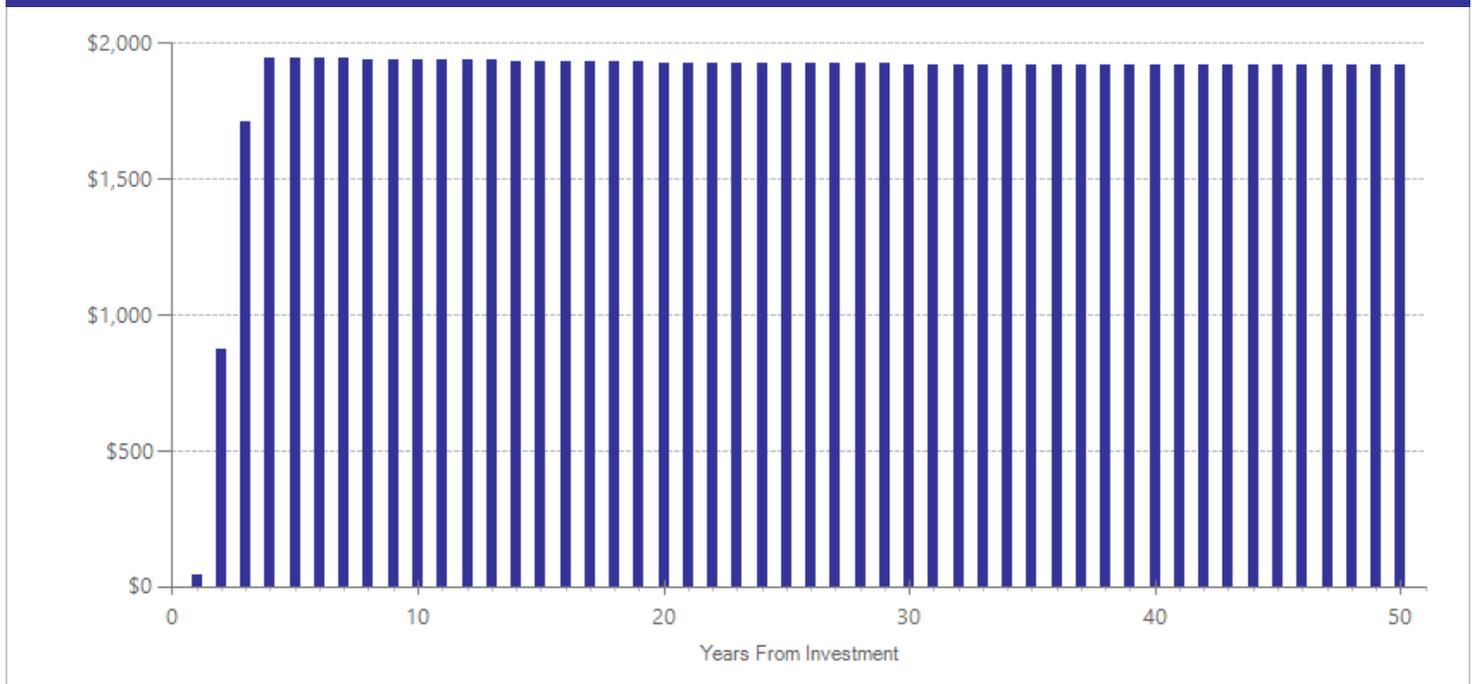
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$515	2014	Present value of net program costs (in 2015 dollars)	(\$517)
Comparison costs	\$0	2014	Cost range (+ or -)	56 %

Job search and placement services are typically provided for a brief period; between one day and two months. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Corson et al., 1985; Corson & Haimson, 1996; Friedlander et al., 1987; Goldman et al., 1986; Goldman et al., 1981; Vinokur et al., 1991; Wolfhagen & Goldman, 1983). Costs vary by study but may include administrative costs, operating costs, transportation payments, lunches, child care and work-related expenses, staff salaries, and sometimes small stipends for clients.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our [Technical Documentation](#).

Detailed Annual Cost Estimates Per Participant



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Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Earnings*	8	13539	0.038	0.024	38	0.000	0.017	40	0.038	0.103
Employment	9	14174	0.081	0.037	38	0.000	0.017	40	0.081	0.030
Public assistance	5	6841	-0.070	0.017	38	0.000	0.017	40	-0.070	0.001

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

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Citations Used in the Meta-Analysis

- Corson, W., & Haimson, J. (1996). *The New Jersey Unemployment Insurance Reemployment Demonstration Project: Six-year followup and summary report*. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service.
- Corson, W., Long, D., & Nicholson, W. (1985). *Evaluation of the Charleston Claimant Placement and Work Test Demonstration*. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service.
- Farabee, D., Zhang, S.X., & Wright, B. (2014). An experimental evaluation of a nationally recognized employment-focused offender reentry program. *Journal of Experimental Criminology*, 10(3), 309-322.
- Friedlander, D., Freedman, S., Hamilton, G., & Quint, J. (1987). *Final report on job search and work experience in Cook County*. New York, NY: Manpower Demonstration Research Corporation.
- Goldman, B., Friedlander, D., & Long, D. (1986). *The San Diego Job Search and Work Experience Demonstration: Final report*. New York, NY: Manpower Demonstration Research Corporation.
- Goldman, B.S. (1981). *Impacts of the Immediate Job Search Assistance Experiment: Louisville WIN Research Laboratory Project*. New York, NY: Manpower Demonstration Research Corporation.
- Klepinger, D.H., Johnson, T.R., Joesch, J.M., & Benus, J.M. (1997). *Evaluation of the Maryland Unemployment Insurance Work Search Demonstration: Final report*. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service.
- Mallar, C.D., & Thornton, C.V.D. (1978). Transitional aid for released prisoners: Evidence from the life experiment. *The Journal of Human Resources*, 13(2), 208-236.
- Vinokur, A.D., van Ryn, M., Gramlich, E.M., & Price, R.H. (1991). Long-term follow-up and benefit-cost analysis of the Jobs Program: A preventive intervention for the unemployed. *The Journal of Applied Psychology*, 76(2), 213-219.
- Vinokur, A.D., Price, R.H., & Schul, Y. (1995). Impact of the JOBS intervention on unemployed workers varying in risk for depression. *American Journal of Community Psychology*, 23(1), 39-74.
- Wolfhagen, C.F., & Goldman, B.S. (1983). *Job search strategies: Lessons from the Louisville WIN laboratory*. New York, NY: Manpower Demonstration Research Corporation.

Work experience Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Unemployed clients receive work experience, ranging from unpaid community service jobs to paid (partially or fully subsidized) jobs in the private, public, or nonprofit sector. Clients often participate in work experience after failing to find employment through job search and placement assistance. These programs sometimes take the form of “welfare-to-work” programs, where participants must participate in job searches or work experience to receive welfare benefits. For paid employment, employers may or may not be required to retain employees after wage subsidies end. Welfare agencies and community organizations typically provide these program services to TANF/AFDC recipients, offenders, or low-income* individuals, lasting anywhere from one month to one year.

*The low-income population may be defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps.

Benefit-Cost Summary Statistics Per Participant

Benefits to:			
Taxpayers	\$2,570	Benefit to cost ratio	\$1.87
Participants	\$1,547	Benefits minus costs	\$1,780
Others	\$0	Chance the program will produce	
Indirect	(\$283)	benefits greater than the costs	81 %
Total benefits	\$3,834		
Net program cost	(\$2,053)		
Benefits minus cost	\$1,780		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Labor market earnings associated with employment	\$2,378	\$1,080	\$0	\$0	\$3,457
Public assistance	(\$458)	\$1,078	\$0	\$540	\$1,160
Food assistance	(\$372)	\$412	\$0	\$207	\$247
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$1,030)	(\$1,030)
Totals	\$1,547	\$2,570	\$0	(\$283)	\$3,834

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²“Others” includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

³“Indirect benefits” includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

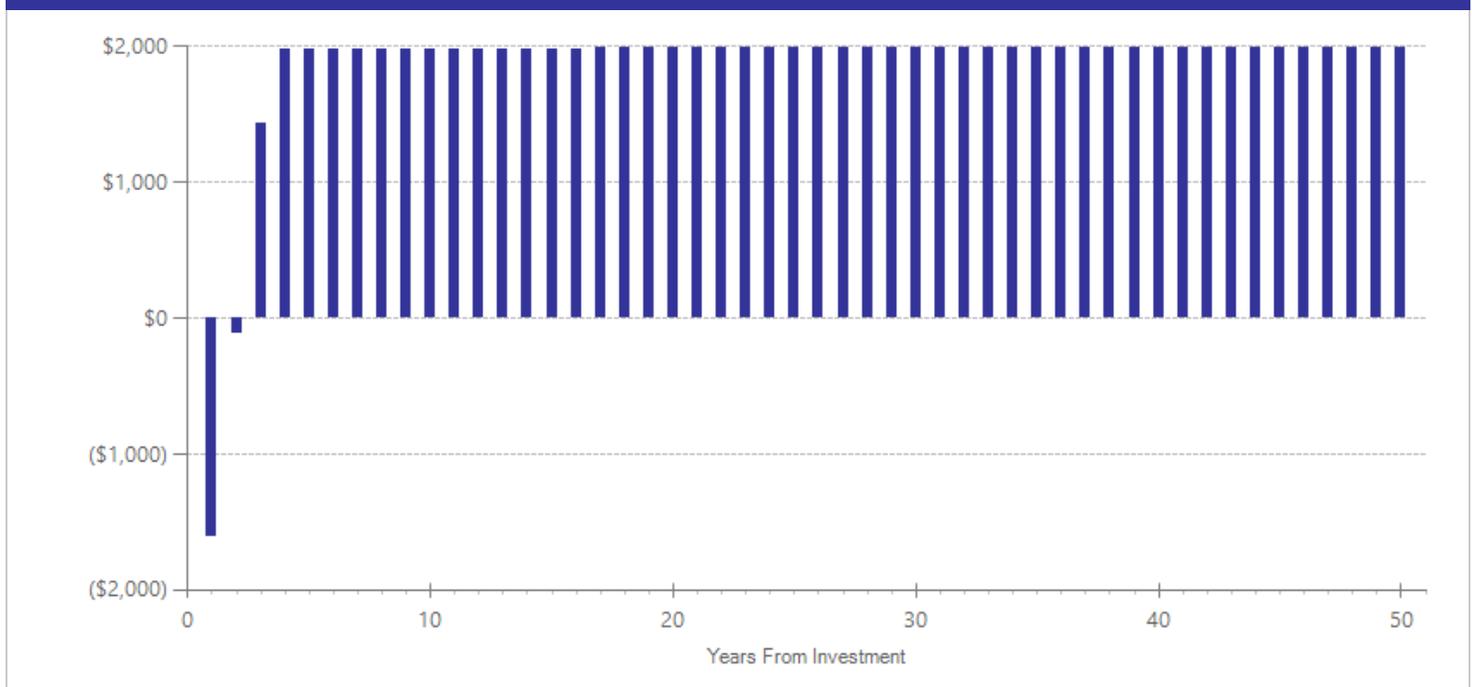
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$2,052	2014	Present value of net program costs (in 2015 dollars)	(\$2,053)
Comparison costs	\$0	2014	Cost range (+ or -)	62 %

These programs typically last anywhere from one month to one year. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Duncan et al., 2008; Freedman et al., 1988; Friedlander et al., 1987; Friedlander et al., 1986; Friedlander et al., 1985; Goldman et al., 1986; Hamilton & Friedlander, 1989; Redcross et al., 2012). Costs vary by study but may include costs of program registration, orientation, administration, operations, case management, wage subsidies, earnings supplements, health care, transportation, and child care subsidies.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our [Technical Documentation](#).

Detailed Annual Cost Estimates Per Participant



The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in non-discounted dollars to simplify the “break-even” point from a budgeting perspective. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach \$0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above \$0, the benefits of the program exceed the initial investment.

Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Earnings*	15	15792	0.091	0.026	35	0.000	0.001	37	0.091	0.001
Employment	14	14699	0.092	0.025	35	0.000	0.001	37	0.092	0.001
Food assistance	3	2222	-0.046	0.061	35	0.000	0.001	37	-0.046	0.446
Public assistance	13	14332	-0.074	0.018	35	0.000	0.001	37	-0.074	0.001

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our [Technical Documentation](#).

Citations Used in the Meta-Analysis

- Duncan, G., Miller, C., Classens, A., Engel, M., Hill, H., & Lindsay, C. (2008) *New Hope's eight-year impacts on employment and family income*. New York, NY: Manpower Demonstration Research Corporation.
- Freedman, S., Bryant, J., Cave, G., Bangser, M., Friedlander, D., Goldman, B., & Long, D. (1988). *Final report on the Grant Diversion Project*. New York, NY: Manpower Demonstration Research Corporation.
- Friedlander, D., Hoerz, G., Quint, J., & Riccio, J. (1985). *Final report on the WORK Program in two counties*. New York, NY: Manpower Demonstration Research Corporation.
- Friedlander, D., Erickson, M., Hamilton, G., & Knox V. (1986). *Final report on the Community Work Experience Demonstrations*. New York, NY: Manpower Demonstration Research Corporation
- Friedlander, D., Freedman, S., Hamilton, G., & Quint, J. (1987). *Final report on job search and work experience in Cook County*. New York, NY: Manpower Demonstration Research Corporation.
- Goldman, B., Friedlander, D., & Long, D. (1986). *The San Diego Job Search and Work Experience Demonstration: Final report*. New York, NY: Manpower Demonstration Research Corporation.
- Gordon, A., & James-Burdumy, S. (2002). *Impacts of the Virginia Initiative for Employment Not Welfare: Final report*. Princeton, NJ: Mathematica Policy Research, Inc.
- Hamilton, G., & Friedlander, D. (1989). *Saturation Work Initiative Model in San Diego: Final report*. New York, NY: Manpower Demonstration Research Corporation.
- Jacobs, E. (2012). *Returning to work after prison: Final results from the Transitional Jobs Reentry Demonstration*. New York, NY: Manpower Demonstration Research Corporation.
- Masters, S.H., & Maynard, R.A. (1981). *Volume 3 of the final report on the Supported Work Evaluation: The impact of supported work on long-term recipients of AFDC benefits*. New York, NY: Manpower Demonstration Research Corporation.
- Redcross, C., Millenky, M., Rudd, T., & Levshin, V. (2012). *More than a job: Final results from the Evaluation of the Center for Employment Opportunities (CEO) Transitional Jobs Program* (OPRE Report 2011-18). Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Training with work experience for adults, not targeting welfare recipients

Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Unemployed adults may receive job search and placement assistance, adult basic education, ESL and GED preparation, vocational training, or support services such as child care and housing support. All participants in these programs also receive some type of work experience, paid or unpaid. Most studies define the adult population to be age 18 and over. Treatment may be sequential, where participants first undergo training and then receive work experience, or follow individualized employment plans for each participant. Community organizations, Unemployment Insurance programs, or federally or state-funded programs administered by state, county, or local government agencies typically provide these services to dislocated workers or low-income individuals.* Programs last anywhere from two to 18 months.

*The low-income population may be defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps.

Benefit-Cost Summary Statistics Per Participant

Benefits to:			
Taxpayers	\$2,315	Benefit to cost ratio	\$1.24
Participants	\$4,842	Benefits minus costs	\$989
Others	\$0	Chance the program will produce	
Indirect	(\$2,030)	benefits greater than the costs	54 %
Total benefits	\$5,127		
Net program cost	(\$4,138)		
Benefits minus cost	\$989		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Labor market earnings associated with employment	\$4,860	\$2,207	\$0	\$0	\$7,068
Public assistance	(\$71)	\$166	\$0	\$85	\$181
Food assistance	\$52	(\$58)	\$0	(\$28)	(\$34)
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$2,087)	(\$2,087)
Totals	\$4,842	\$2,315	\$0	(\$2,030)	\$5,127

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

³"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

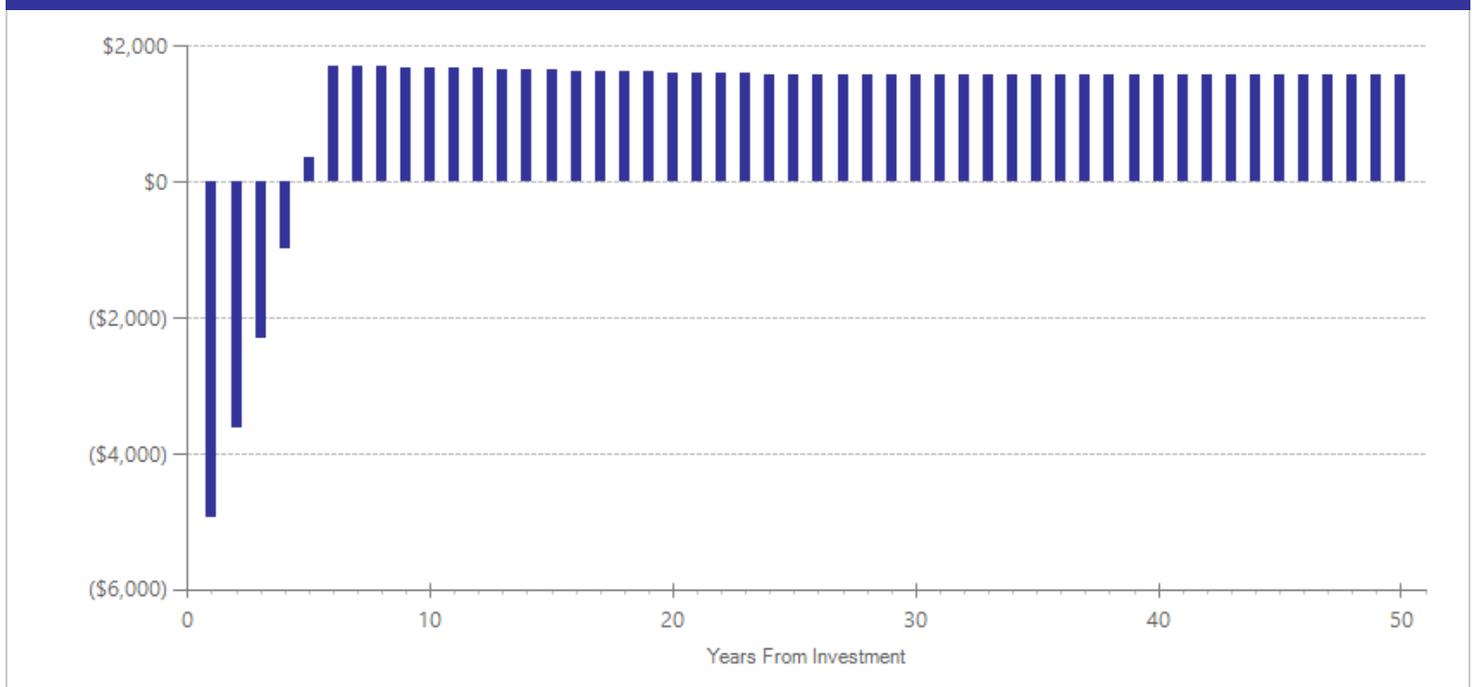
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$4,102	2014	Present value of net program costs (in 2015 dollars)	(\$4,138)
Comparison costs	\$0	2014	Cost range (+ or -)	66 %

On average, these programs last about six months, although services may last anywhere from two to 18 months. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Corson & Haimson, 1996; Decker et al., 2000; Farrell, 2000; Hollenbeck, 2009; Hollenbeck & Huang, 2003; Schochet et al., 2012). Costs vary by study but may include administrative costs, employment services, case management, eligibility-related services, foregone earnings, tuition payments, allowances, support services such as transportation assistance and child care costs, and wage subsidies.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our [Technical Documentation](#).

Detailed Annual Cost Estimates Per Participant



The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in non-discounted dollars to simplify the “break-even” point from a budgeting perspective. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach \$0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above \$0, the benefits of the program exceed the initial investment.

Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Earnings*	17	59470	0.045	0.021	47	0.000	0.018	48	0.048	0.031
Employment	15	48173	0.079	0.066	47	0.000	0.018	48	0.082	0.239
Food assistance	6	14460	0.007	0.030	47	0.000	0.018	48	0.007	0.827
Public assistance	6	14984	-0.012	0.026	47	0.000	0.018	48	-0.014	0.627

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our [Technical Documentation](#).

Citations Used in the Meta-Analysis

- Bloom, H.S. (1990). *Back to work: Testing reemployment services for displaced workers*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Corson, W., & Haimson, J. (1996). *The New Jersey Unemployment Insurance Reemployment Demonstration Project: Six-year followup and summary report*. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service.
- Decker, P.T., & Thornton, C.V. (1995). The long-term effects of transitional employment services. *Social Security Bulletin*, 58(4), 71-81.
- Decker, P.T., Olsen, R.B., Freeman, L., & Klepinger, D.H. (2000). *Assisting Unemployment Insurance claimants: The long-term impacts of the Job Search Assistance Demonstration*. U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service.
- Hollenbeck, K., & Huang, W.-J. (2003). *Net impact and benefit-cost estimates of the workforce development system in Washington State*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Hollenbeck, K. (2009). *Return on investment analysis of a selected set of workforce system programs in Indiana*. Indianapolis, IN: Report submitted to the Indiana Chamber of Commerce Foundation.
- Maguire, S., Freely, J., Clymer, C., Conway, M., & Schwartz, D. (2010). *Tuning in to local labor markets: Findings from the Sectoral Employment Impact Study*. Philadelphia, PA: Public/Private Ventures.
- Miller, C., & Knox, V.W. (2001). *The challenge of helping low-income fathers support their children: Final lessons from Parents' Fair Share*. New York, NY: Manpower Demonstration Research Corporation.
- Mueser, P.R., Troske, K.R., & Gorislavsky, A. (2007). Using state administrative data to measure program performance. *The Review of Economics and Statistics*, 89(4), 761-783.
- Orr, L.L., Bloom, H.S., Bell, S.H., Doolittle, F., Lin, W., & Cave, G. (1996). *Does training for the disadvantaged work? Evidence from the National JTPA Study*. Washington, DC: The Urban Institute Press.
- Schochet, P.Z., D'Amico, R., Berk, J., Dolfin, S., & Wozny, N. (2012). *Estimated impacts for participants in the Trade Adjustment Assistance (TAA) Program under the 2002 amendments: Final report*. Washington, DC: U.S. Department of Labor, Employment and Training Administration.
- Wiegand, A., Sussell, J., Valentine, E., & Henderson, B. (2015). *Evaluation of the Reintegration of Ex-Offenders (RExO) Program: Two-year impact report*. Washington, DC: U.S. Department of Labor.

Case management for former welfare recipients Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Case managers work with former TANF/AFDC recipients, often in low-wage jobs, in individual or group sessions to provide counseling, job search assistance or job retention services through orientations, assessments, interviews, or telephone calls. Case managers often provide referrals to child care subsidies, transportation assistance, and other support services. They may also refer clients to education and training, particularly if job searches are unsuccessful. Welfare agencies and state employment departments provide program services for approximately one year.

Benefit-Cost Summary Statistics Per Participant

Benefits to:			
Taxpayers	\$391	Benefit to cost ratio	(\$0.32)
Participants	(\$24)	Benefits minus costs	(\$3,870)
Others	\$0	Chance the program will produce	
Indirect	(\$1,301)	benefits greater than the costs	19 %
Total benefits	(\$934)		
Net program cost	(\$2,936)		
Benefits minus cost	(\$3,870)		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Labor market earnings associated with employment	\$160	\$73	\$0	\$0	\$233
Public assistance	(\$92)	\$215	\$0	\$108	\$232
Food assistance	(\$93)	\$103	\$0	\$52	\$62
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$1,461)	(\$1,461)
Totals	(\$24)	\$391	\$0	(\$1,301)	(\$934)

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

³"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

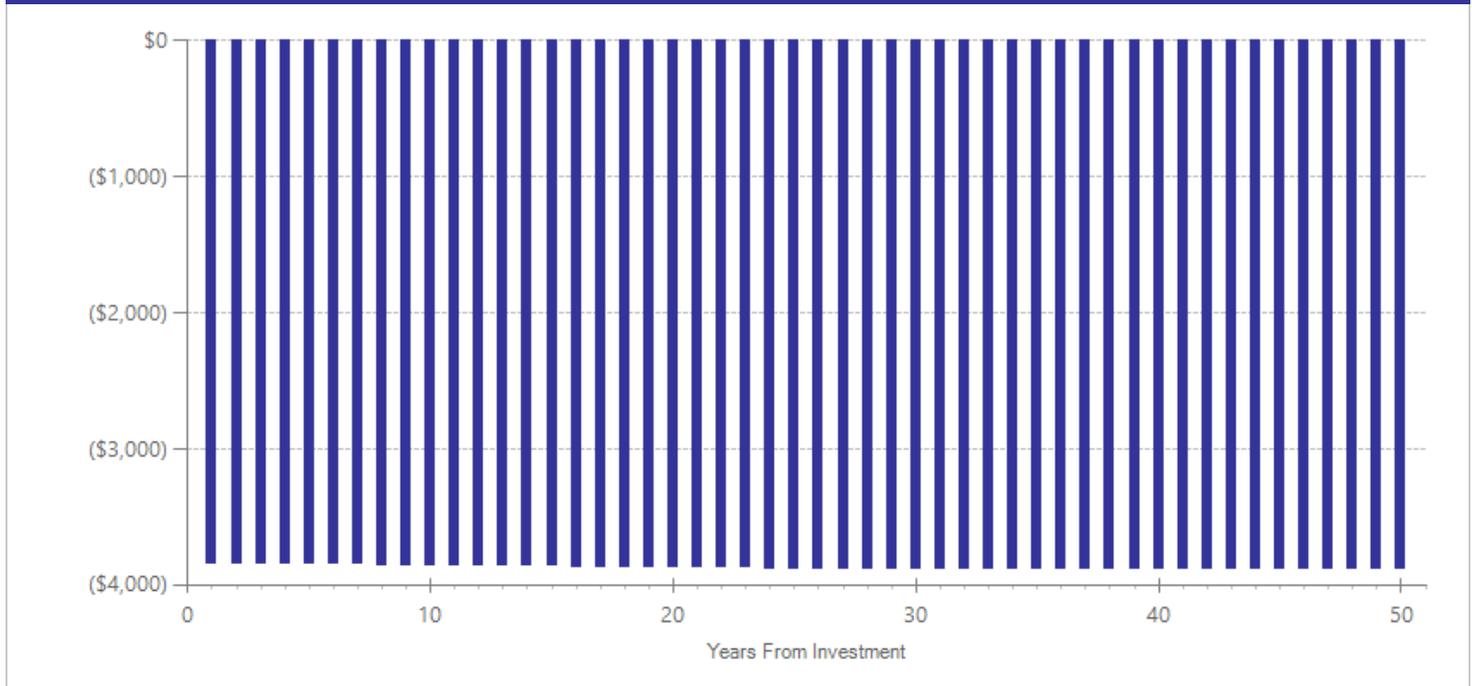
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$2,911	2014	Present value of net program costs (in 2015 dollars)	(\$2,936)
Comparison costs	\$0	2014	Cost range (+ or -)	99 %

Case management services typically last about one year. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Hamilton et al., 1996; Kemple et al., 1995; Kornfeld & Rupp, 2000; Miller et al., 2008; Roder & Scrivner, 2005). Costs vary by study but may include central administration, staff salaries, staff benefits, recruitment, assessment services, job placement and retention services, short-term training provided by staff, transportation, and medical treatments.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our [Technical Documentation](#).

Detailed Annual Cost Estimates Per Participant



The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in non-discounted dollars to simplify the “break-even” point from a budgeting perspective. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach \$0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above \$0, the benefits of the program exceed the initial investment.

Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Earnings*	7	3393	0.025	0.024	32	0.000	0.014	33	0.025	0.309
Employment	7	3377	0.019	0.030	32	0.000	0.014	33	0.019	0.517
Food assistance	7	4396	-0.012	0.021	32	0.000	0.103	33	-0.012	0.578
Public assistance	7	4396	-0.015	0.021	32	0.000	0.014	33	-0.015	0.482

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our [Technical Documentation](#).

Citations Used in the Meta-Analysis

- Molina, F., van Dok, M., Hendra, R., Hamilton, G., & Cheng W.-L. (2009). *Findings for the Eugene and Medford, Oregon, models: Implementation and early impacts for two programs that sought to encourage advancement among low-income workers*. New York, NY: Manpower Demonstration Research Corporation.
- Rangarajan, A., & Novak, T. (1999). *The struggle to sustain employment: The effectiveness of the Post Employment Services Demonstration*. Princeton, NJ: Mathematica Policy Research.
- Scrivener, S., Azurdia, G., & Page, J. (2006). *Results from the South Carolina ERA site*. New York, NY: Manpower Demonstration Research Corporation.

Case management for welfare recipients or low-income individuals Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Case managers work with TANF/AFDC recipients or low-income* individuals in individual or group sessions to provide counseling, job search assistance or job retention services through orientations, assessments, interviews, or telephone calls. Case managers usually provide referrals to child care subsidies, transportation assistance, and other support services. They may also refer clients to education and training, particularly if job searches are unsuccessful. Case management may end when clients find employment, or continue with post-employment support services. Nonprofit organizations, local welfare agencies, or for-profit employment companies usually provide these program services, lasting anywhere from one month to two years.

* The low-income population may be defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps.

Benefit-Cost Summary Statistics Per Participant

Benefit-Cost Summary Statistics Per Participant			
Benefits to:			
Taxpayers	\$246	Benefit to cost ratio	(\$0.33)
Participants	\$167	Benefits minus costs	(\$3,885)
Others	\$0	Chance the program will produce	
Indirect	(\$1,378)	benefits greater than the costs	17 %
<u>Total benefits</u>	<u>(\$965)</u>		
<u>Net program cost</u>	<u>(\$2,919)</u>		
Benefits minus cost	(\$3,885)		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Labor market earnings associated with employment	\$203	\$92	\$0	\$0	\$295
Public assistance	(\$91)	\$213	\$0	\$106	\$229
Food assistance	\$54	(\$60)	\$0	(\$30)	(\$36)
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$1,454)	(\$1,454)
Totals	\$167	\$246	\$0	(\$1,378)	(\$965)

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

³"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

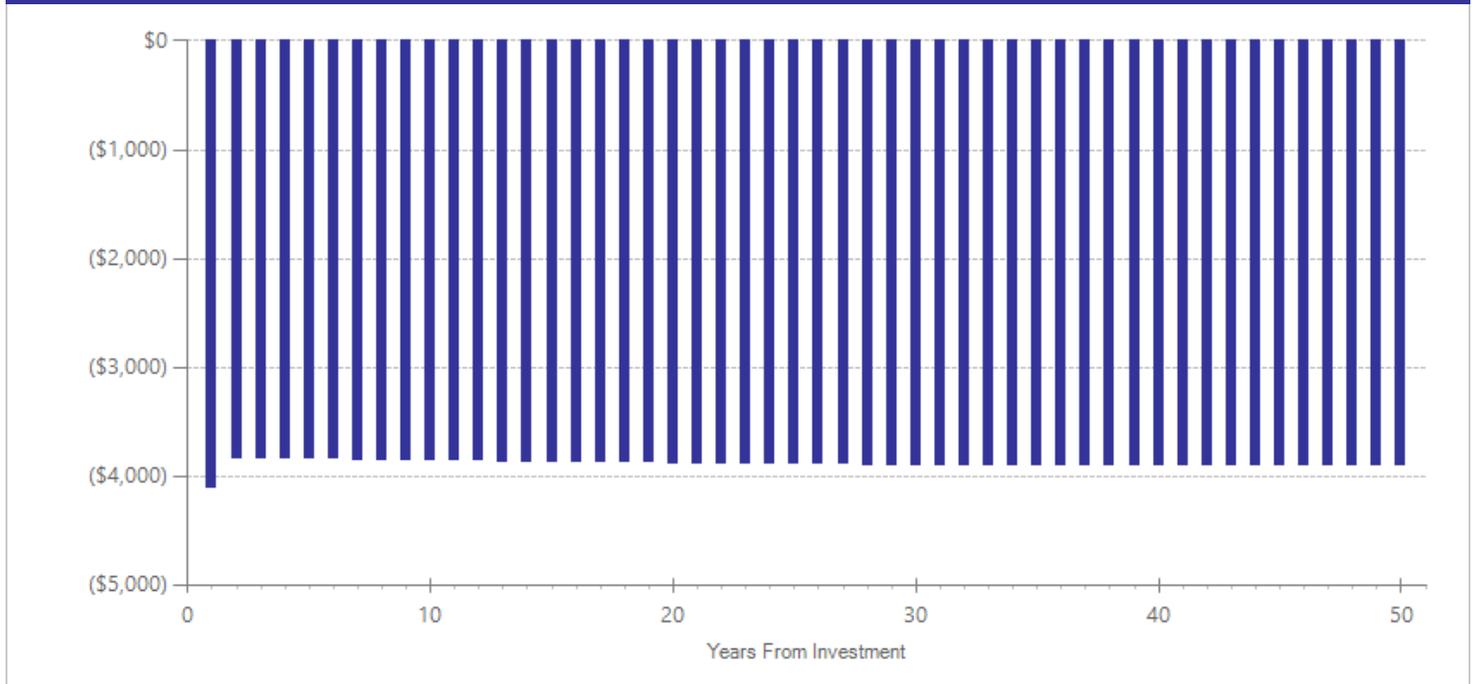
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$2,911	2014	Present value of net program costs (in 2015 dollars)	(\$2,919)
Comparison costs	\$0	2014	Cost range (+ or -)	99 %

On average, case management services last about a year, but can range from one month to two years. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Hamilton et al., 1996; Kemple et al., 1995; Kornfeld & Rupp, 2000; Miller et al., 2008; Roder & Scrivner, 2005). Costs vary by study but may include central administration, staff salaries, staff benefits, recruitment, assessment services, job placement and retention services, short-term training provided by staff, transportation, and medical treatments.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our [Technical Documentation](#).

Detailed Annual Cost Estimates Per Participant



The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in non-discounted dollars to simplify the “break-even” point from a budgeting perspective. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach \$0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above \$0, the benefits of the program exceed the initial investment.

Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Earnings*	16	30680	0.015	0.009	35	0.000	0.014	36	0.015	0.096
Employment	15	26520	0.032	0.018	35	0.000	0.014	36	0.032	0.085
Food assistance	10	22854	0.007	0.016	35	0.000	0.014	36	0.007	0.688
Public assistance	11	25001	-0.015	0.020	35	0.000	0.014	36	-0.015	0.469

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our [Technical Documentation](#).

Citations Used in the Meta-Analysis

- Anderson, J., Freedman, S., & Hamilton, G. (2009). *Results from the Los Angeles Reach for Success Program*. New York, NY: Manpower Demonstration Research Corporation.
- Bloom, D., Hendra, R., & Page, J. (2006). *Results from the Chicago ERA site*. New York, NY: Manpower Demonstration Research Corporation.
- Hamilton, W.L., Burstein, N.R., Baker, A.J., Earle, A., Gluckman, S., Peck, L., & White, A. (1996). *The New York State Child Assistance Program: Five-year impacts, costs, and benefits*. Cambridge, MA: Abt Associates.
- Kemple, J.J., Friedlander, D., & Fellerath, V. (1995). *Project Independence: Benefits, costs, and two-year impacts of Florida's JOBS program*. New York, NY: Manpower Demonstration Research Corporation.
- Kornfeld, R., & Rupp, K. (2000). The net effects of the Project NetWork return-to-work case management experiment on participant earnings, benefit receipt, and other outcomes. *Social Security Bulletin*, 63(1), 12-33.
- Martinson, K., & Hendra, R. (2006). *Results from the Texas ERA Site*. New York, NY: Manpower Demonstration Research Corporation.
- Miller, C., Martin, V., Hamilton, G., Cates, L., & Deitch, V. (2008). *Findings for the Cleveland Achieve Model: Implementation and early impacts of an employer-based approach to encourage employment retention among low-wage workers*. New York, NY: Manpower Demonstration Research Corporation.
- Miller, C., van Dok, M., Tessler, B.L., & Pennington, A. (2012). *Strategies to help low-wage workers advance: Implementation and final impacts of the Work Advancement and Support Center (WASC) Demonstration*. New York, NY: Manpower Demonstration Research Corporation.
- Navarro, D., Freedman, S., & Hamilton, G. (2007). *Results from two education and training models for employed welfare recipients in Riverside, California*. New York, NY: Manpower Demonstration Research Corporation.
- Navarro, D., Azurdia, G.L., & Hamilton, G. (2008). *A comparison of two job club strategies: The effects of enhanced versus traditional job clubs in Los Angeles*. New York, NY: Manpower Research Demonstration Corporation.
- Roder, A., & Scrivner, S. (2005). *Seeking a sustainable journey to work: Findings from the National Bridges to Work Demonstration*. Philadelphia, PA: Public/Private Ventures.

Training, no work experience Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Participants receive job search and placement assistance, adult basic education, ESL and GED preparation, vocational training, or support services such as child care and housing support. Training targets occupations as diverse as electromechanics, nursing, and construction, among many others. Some of these programs take place at community colleges, targeting adults who failed to graduate high school, while others occur at proprietary trade schools and colleges. Community-based organizations and welfare agencies may also provide these program services. They typically target TANF/AFDC recipients, dislocated workers, or low-income* individuals, lasting anywhere from one month to two years.

*The low-income population may be defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps.

Benefit-Cost Summary Statistics Per Participant

Benefits to:			
Taxpayers	\$2,308	Benefit to cost ratio	\$0.44
Participants	\$5,602	Benefits minus costs	(\$4,661)
Others	\$0	Chance the program will produce	
Indirect	(\$4,274)	benefits greater than the costs	38 %
Total benefits	\$3,636		
Net program cost	(\$8,297)		
Benefits minus cost	(\$4,661)		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Labor market earnings associated with employment	\$5,481	\$2,489	\$0	\$0	\$7,970
Public assistance	\$38	(\$90)	\$0	(\$46)	(\$97)
Food assistance	\$82	(\$91)	\$0	(\$46)	(\$55)
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$4,182)	(\$4,182)
Totals	\$5,602	\$2,308	\$0	(\$4,274)	\$3,636

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

³"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

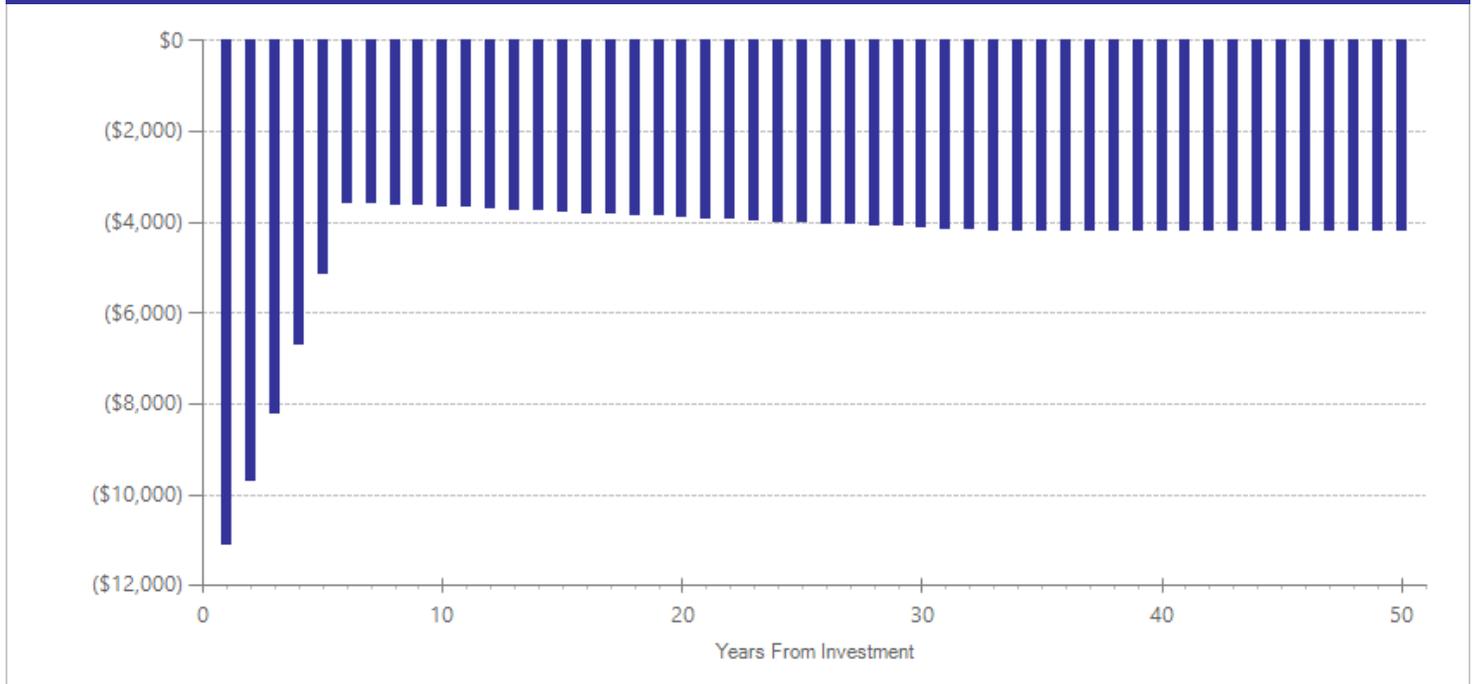
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$8,284	2014	Present value of net program costs (in 2015 dollars)	(\$8,297)
Comparison costs	\$0	2014	Cost range (+ or -)	31 %

These programs typically last anywhere from one month to two years. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Bloom et al., 2002; Burghardt et al., 1992; Cave et al., 1993; Hollenbeck & Huang, 2014; Hollenbeck & Huang, 2006; Hollenbeck & Huang, 2003). Costs vary by study but may include foregone earnings, foregone tax receipts, tuition payments if any, support services such as transportation and child care, medical/dental services, and safety net services.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our [Technical Documentation](#).

Detailed Annual Cost Estimates Per Participant



The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in non-discounted dollars to simplify the “break-even” point from a budgeting perspective. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach \$0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above \$0, the benefits of the program exceed the initial investment.

Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Earnings*	41	289201	0.062	0.013	37	0.000	0.032	38	0.062	0.001
Employment	41	289201	0.085	0.024	37	0.000	0.032	38	0.085	0.001
Food assistance	25	171188	0.011	0.008	37	0.000	0.032	38	0.011	0.163
Public assistance	25	169101	0.006	0.008	37	0.000	0.032	38	0.006	0.446

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our [Technical Documentation](#).

Citations Used in the Meta-Analysis

- Black, D.A., Smith, J.A., Berger, M.C., & Noel, B.J. (2003). Is the threat of reemployment services more effective than the services themselves? Evidence from random assignment in the UI System. *American Economic Review*, 93(4), 1313-1327.
- Bloom, D., Scrivener, S., Michalopoulos, C., Morris, P., Hendra, R., Adams-Ciardullo, D., . . . Vargas, W. (2002). *Jobs First: Final report on Connecticut's welfare reform initiative*. New York, NY: Manpower Demonstration Research Corporation.
- Bloom, H.S., Riccio, J.A., & Verma, N. (2005). *Promoting work in public housing: The effectiveness of Jobs-Plus: Final report*. New York, NY: Manpower Demonstration Research Corporation.
- Burghardt, J.A., Rangarajan, A., Gordon, A., & Kisker, E. (1992). *Evaluation of the Minority Female Single Parent Demonstration: Volume I*. New York, NY: Rockefeller Foundation.
- Cave, G., Bos, H., Doolittle, F., & Toussaint, C. (1993). *JOBSTART: Final report on a program for school dropouts*. New York, NY: Manpower Demonstration Research Corporation.
- Fein, D., & Beecroft, E. (2006). *College as a job advancement strategy: Final report on the New Visions Self-Sufficiency and Lifelong Learning Project*. Bethesda, MD: Abt Associates.
- Hollenbeck, K., & Huang, W.-J. (2014). *Net impact and benefit-cost estimates of the workforce development system in Washington State* (Upjohn Institute Technical Report No. 13-029). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Hollenbeck, K., & Huang, W.-J. (2006). *Net impact and benefit-cost estimates of the workforce development system in Washington State*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Hollenbeck, K., & Huang, W.-J. (2003). *Net impact and benefit-cost estimates of the workforce development system in Washington State*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Jacobs, E., & Bloom, D. (2011). *Alternative employment strategies for hard-to-employ TANF recipients: Final results from a test of transitional jobs and preemployment services in Philadelphia* (OPRE Report 2011-19). Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Maguire, S., Freely, J., Clymer, C., Conway, M., & Schwartz, D. (2010). *Tuning in to local labor markets: Findings from the Sectoral Employment Impact Study*. Philadelphia, PA: Public/Private Ventures.
- Milkman, R.H. (1985). *Employment services for ex-offenders field test: Detailed research results* (Document No. NCJ 099807). McLean, VA: The Lazar Institute.
- Miller, C., Bos, J. M., Porter, K.E., Tseng, F.M., & Abe, Y. (2005). *The challenge of repeating success in a changing world: Final report on the Center for Employment Training replication sites*. New York, NY: Manpower Demonstration Research Corporation.
- Molina, F., Cheng, W.-L., & Hendra, R. (2008). *Results from the Valuing Individual Success and Increasing Opportunities Now (VISION) program in Salem, Oregon*. New York, NY: Manpower Demonstration Research Corporation.
- Navarro, D., van Dok, M., & Hendra, R. (2007). *Results from the Post-Assistance Self-Sufficiency (PASS) program in Riverside, California*. New York, NY: Manpower Demonstration Research Corporation.
- Smith, T., Christensen, K., & Cumpton, G. (2015). *An evaluation of local investments in workforce development*. Austin, TX: Ray Marshall Center for the Study of Human Resources.

Training with work experience for youth

Workforce Development

Benefit-cost estimates updated December 2016. Literature review updated November 2015.

Program Description: Youth ages 16-24 may receive job search and placement assistance, adult basic education, ESL and GED preparation, vocational training, or support services such as child care and housing support. All participants in these programs also receive some type of work experience, paid or unpaid. Treatment may be sequential, where participants first undergo training and then receive work experience, or follow individualized employment plans for each participant. Community organizations, welfare agencies, and federally or state-funded programs administered by state, county, or local government agencies typically provide these services to low-income youth.* We do not include programs that target youth still attending high school, so these participants are often high school dropouts. Programs may last anywhere from two to ten months.

*The low-income population may be defined in a variety of ways, including all workers in the 25th percentile of hourly wages, individuals at or below 130% of the federal poverty line, individuals at or below 200% of the federal poverty line, or an income that meets eligibility requirements for welfare or food stamps

Benefit-Cost Summary Statistics Per Participant

Benefits to:			
Taxpayers	\$675	Benefit to cost ratio	(\$0.34)
Participants	\$15	Benefits minus costs	(\$9,856)
Others	\$205	Chance the program will produce	
Indirect	(\$3,389)	benefits greater than the costs	32 %
Total benefits	(\$2,494)		
Net program cost	(\$7,362)		
Benefits minus cost	(\$9,856)		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2015). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our [Technical Documentation](#).

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to: ¹	Benefits to:				
	Participants	Taxpayers	Others ²	Indirect ³	Total
Crime	\$0	\$86	\$205	\$43	\$335
Labor market earnings associated with employment	\$163	\$74	\$0	\$0	\$238
Public assistance	(\$281)	\$661	\$0	\$332	\$712
Food assistance	\$132	(\$146)	\$0	(\$73)	(\$87)
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$3,692)	(\$3,692)
Totals	\$15	\$675	\$205	(\$3,389)	(\$2,494)

¹In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

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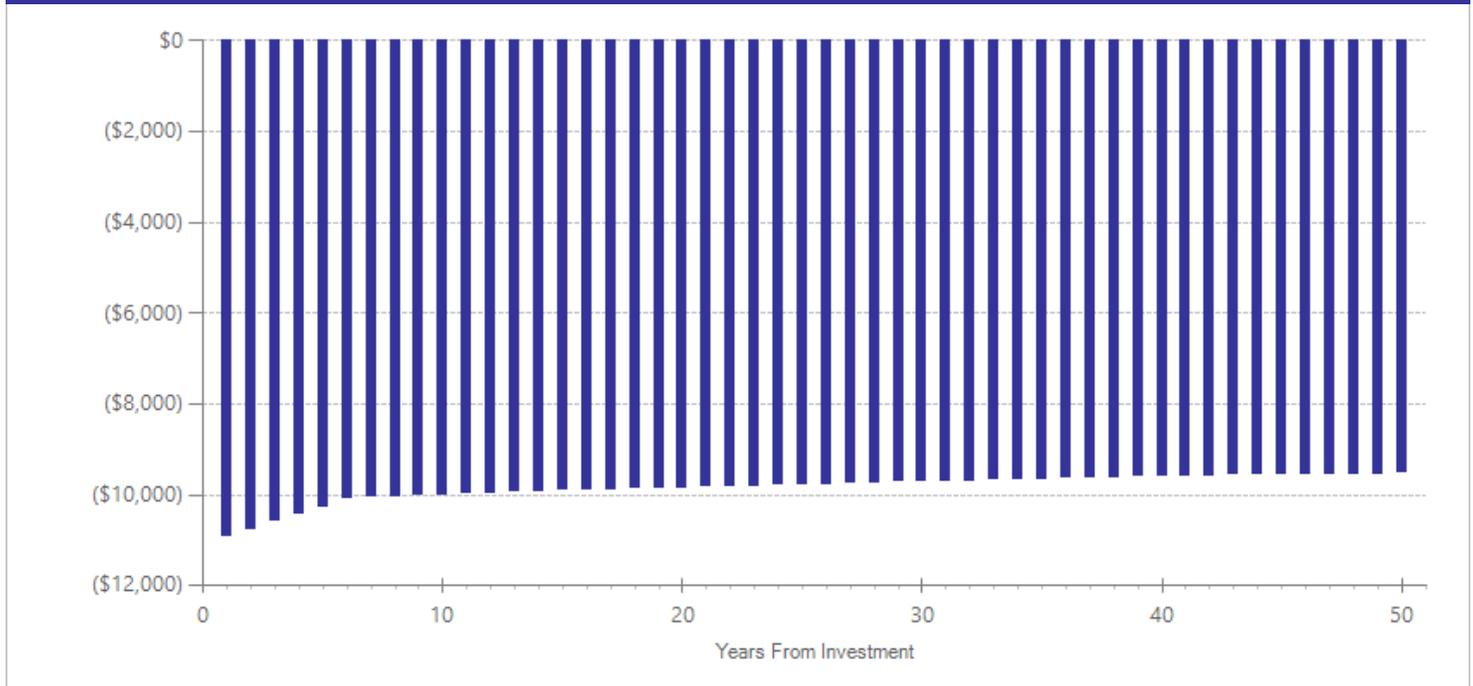
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$7,356	2014	Present value of net program costs (in 2015 dollars)	(\$7,362)
Comparison costs	\$0	2014	Cost range (+ or -)	48 %

These programs typically last between two and ten months. We estimated the average annual cost of treatment per participant using data from studies in our meta-analysis that report cost estimates (Hollenbeck & Huang, 2003; Kerachsky et al., 1985; Orr et al., 1996; Quint et al., 1997). Costs vary by study but may include administrative costs, employment services, case management, eligibility-related services, foregone earnings, tuition payments, allowances, support services such as transportation assistance and child care costs, and wage subsidies.

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Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects model)	
			First time ES is estimated			Second time ES is estimated			ES	p-value
			ES	SE	Age	ES	SE	Age		
Crime	5	5479	-0.030	0.030	25	-0.030	0.030	35	-0.049	0.097
Earnings*	9	11129	0.001	0.025	25	0.000	0.018	26	0.004	0.882
Employment	6	7923	0.006	0.053	25	0.000	0.018	26	0.012	0.840
Food assistance	7	6474	0.018	0.022	25	0.000	0.018	26	0.016	0.455
Public assistance	8	7887	-0.048	0.022	25	0.000	0.018	26	-0.063	0.003

* The effect size for this outcome indicates percentage change, not a standardized mean difference effect size.

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- Hollenbeck, K., & Huang, W.-J. (2003). *Net impact and benefit-cost estimates of the workforce development system in Washington State*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Kerachsky, S., Thornton, C., Bloomenthal, A., Maynard, R., & Stephens, S. (1985). *Impacts of transitional employment for mentally retarded young adults: Results of the STETS Demonstration*. New York, NY: Manpower Demonstration Research Corporation.
- Mallar, C.D., Kerachsky, S., Thornton, C., Donihue, M., Jones, C., Long, D., . . . Schore, J. (1980). *The lasting impacts of Job Corps participation*. Washington, DC: U.S. Department of Labor, Employment and Training Administration, Office of Youth Programs.
- Orr, L.L., Bloom, H.S., Bell, S.H., Doolittle, F., Lin, W., & Cave, G. (1996). *Does training for the disadvantaged work? Evidence from the National JTPA Study*. Washington, DC: The Urban Institute Press.
- Price, C., Williams, J., Simpson, L., Jastrzab, J. & Markovitz, C. (2011). *National evaluation of Youth Corps: Findings at follow-up*. Cambridge, MA: Abt Associates.
- Quint, J.C., Bos, J.M., & Polit, D.F. (1997) *New Chance: Final report on a comprehensive program for young mothers in poverty and their children*. New York, NY: Manpower Demonstration Research Corporation.

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Washington State Institute for Public Policy

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