

## Youth Mentoring Programs (total costs)

### Program description:

Youth mentoring programs include school- and community-based programs such as Big Brothers/Big Sisters. A typical program matches an adult volunteer with a middle school-aged at-risk youth to meet one to four times per month for activities and guidance. This set of results includes our estimates for the cost of volunteer time.

Typical age of primary program participant: 13

Typical age of secondary program participant: N/A

### Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
						First time ES is estimated			Second time ES is estimated		
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
Crime	P	1	-0.07	0.06	0.27	-0.07	0.06	14	-0.07	0.06	24
High school graduation	P	2	0.28	0.38	0.27	0.09	0.38	18	0.09	0.38	18
Age of initiation (alcohol)	P	1	0.41	0.14	0.00	0.41	0.14	14	0.41	0.14	24
Age of initiation (other illicit drugs)	P	1	0.25	0.09	0.01	0.25	0.09	14	0.25	0.09	24
Grade point average	P	9	0.15	0.08	0.05	0.10	0.08	14	0.10	0.08	17

### Benefit-Cost Summary

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.	Program Benefits					Costs	Summary Statistics			
	Participants	Tax-payers	Other	Other Indirect	Total Benefits		Benefit to Cost Ratio	Return on Investment	Benefits Minus Costs	Probability of a positive net present value
	\$3,449	\$2,348	\$1,389	\$1,147	\$8,333		\$1.74	6%	\$3,534	58%

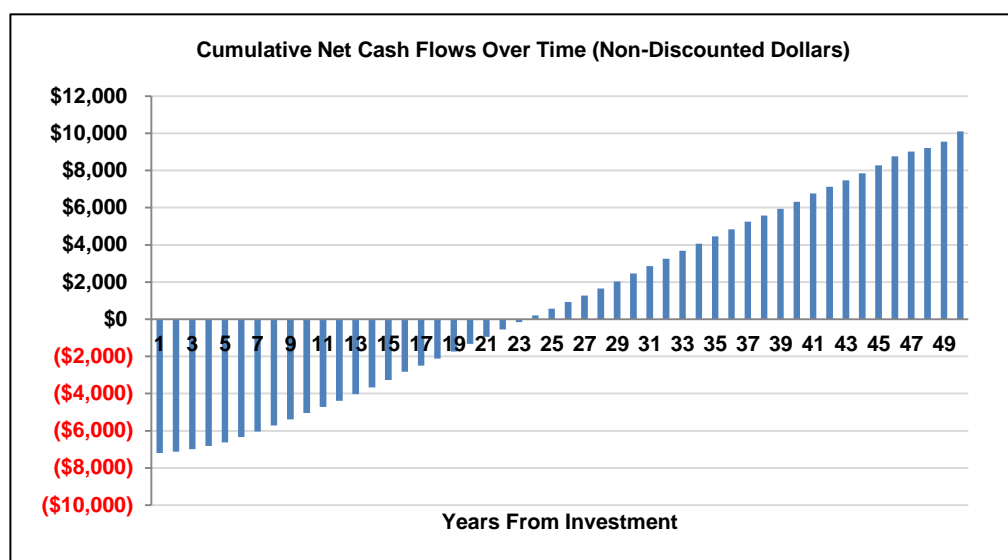
### Detailed Monetary Benefit Estimates

Source of Benefits	Benefits to:				
	Participants	Tax-payers	Other	Other Indirect	Total Benefits
Crime	\$0	\$504	\$1,788	\$253	\$2,545
Earnings via high school graduation	\$3,517	\$1,294	\$0	\$635	\$5,446
Property loss from alcohol disorder	\$0	\$0	\$1	\$0	\$1
Property loss from illicit drug disorder	\$1	\$0	\$2	\$0	\$2
Health care costs via education	-\$69	\$551	-\$402	\$259	\$338

### Detailed Cost Estimates

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 uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.	Program Costs			Comparison Costs			Summary Statistics	
	Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or - %)
	\$3,245	1	1992	\$0	1	1992	\$4,787	20%

Source: Cost estimates are based on Institute estimates derived from the Big Brothers/Big Sisters program, as described in J.B. Grossman and J.P. Tierney (1998). Does mentoring work? An impact study of the Big Brothers Big Sisters Program. Evaluation Review, 22(3): 403-426. Excluding the cost of using volunteers, the taxpayer-only cost was approximately \$1,000 in 1992.



### Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	0.5
2- Well-implemented comparison group design, often with many statistical controls.	0.5
3- Well-done observational study with many statistical controls (e.g., instrumental variables).	0.75
4- Random assignment, with some implementation issues.	0.75
5- Well-done random assignment study.	1.00
Program developer = researcher	0.5
Unusual (not "real-world") setting	0.5
Weak measurement used	0.5

### Studies Used in the Meta-Analysis

- Aiello, H. S. (1989). Assessment of a mentor program on self-concept and achievement variables of middle school underachievers. *Dissertation Abstracts International*, 49(07), 1699A.
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- DeSocio, J., VanCura, M., Nelson, L. A., Hewitt, G., Kitzman, H., & Cole, R. (2007). Engaging truant adolescents: Results from a multifaceted intervention pilot. *Preventing School Failure*, 51(3), 3-9.
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- Grossman, J. B., & Tierney, J. P. (1998). Does mentoring work? An impact study of the Big Brothers Big Sisters program. *Evaluation Review*, 22(3), 403-426.
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- Herrera, C., Grossman, J. B., Kauh, T. J., & McMaken, J. (2011). Mentoring in schools: An impact study of Big Brothers Big Sisters school-based mentoring. *Child Development*, 82(1), 346-361.
- Johnson, A. (1999, December). *Sponsor-a-Scholar: Long-term impacts of a youth mentoring program on student performance* (Document No. PR99-99). Princeton, NJ: Mathematica Policy Research.
- Reyes, O., & Jason, L. A. (1991). An evaluation of a high school dropout prevention program. *Journal of Community Psychology*, 19(3), 221-230.
- Schinke, S. P., Cole, K. C., & Poulin, S. R. (2000). Enhancing the educational achievement of at-risk youth. *Prevention Science*, 1(1), 51-60.