

# **WSIPP's Approach to Benefit-Cost Analysis**

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# Washington State Institute for Public Policy

- Created by the Legislature in 1983
- Public service agency administered by TESC
- Projects assigned via legislative bills or Board of Directors
- Mission to produce practical research for the legislature

## Governed by a Board of Directors

- 8 legislators
- 2 legislative staff directors
- 2 Governor's representatives
- 4 University representatives

# Goals of WSIPP's benefit-cost analysis

Are there policies demonstrated to improve outcomes with a positive return on investment?

1. **Evidence:** What works to improve outcomes; what does not?
2. **Economics:** What do we predict the expected effects of the program will be in Washington?
3. **Risk:** What is the likelihood that a program or policy will at least "break even?"

# Evidence: What does research tell us?

## Meta-analysis of research on specific programs

- Standardized approach
- Consider all published evidence we can find
- Apply consistent standards of rigor (causal evidence)
- Combine evidence statistically
- Estimate how much change we would expect

# Economics: What is the BCA?

## WSIPP's benefit-cost analysis

- Standardized approach
- Use results from a meta-analysis (or outcome evaluation)  
How much change can we expect?
- Apply consistent valuation of outcomes, e.g.,  
Crime  
Labor market earnings  
Health care costs
- Consider risk of each investment  
How likely to “break even”?

# WSIPP's BCA

- **Per-participant basis:** What are the costs and benefits for each person who *participates*?
- **Societal perspective:** Who benefits from this investment?
  - ✓ Participants (e.g., labor market earnings)
  - ✓ Taxpayers (e.g., avoided system costs)
  - ✓ Others (e.g., avoided victimizations)
- **Lifetime horizon:** How will benefits and costs accrue over the life cycle?

# Projecting change over time

1. Measured by program evaluations
2. Meta-analysis of evidence of relationships between early changes results and later-in-life outcomes
3. WSIPP estimates of effect decay based on meta-analysis

# Website: WSIPP.WA.GOV

- Information on over 500 programs across 11 areas
- Some such as Early Childhood Education are currently ongoing in Washington
- Some have never been implemented in Washington
- Information on programs without benefit-cost results or programs without rigorous evaluations on there as well



# Where to find our benefit-cost results

## Public Health & Prevention

PDF

For questions on benefit-cost results relating to Public Health & Prevention, contact [Eva Westley](#).

Program name (click on the program name for more detail)	Date of last literature review	Total benefits	Taxpayer benefits	Non-taxpayer benefits	Costs	Benefits minus costs (net present value)	Benefit to cost ratio	Chance benefits will exceed costs
<b>School-based</b>								
Positive Action	Sep. 2018	\$34,215	\$8,388	\$25,827	(\$1,048)	<b>\$33,167</b>	\$32.65	<b>94 %</b>
School-based programs to increase physical activity	Nov. 2015	\$16,942	\$3,746	\$13,196	(\$487)	<b>\$16,456</b>	\$34.81	<b>67 %</b>
Mentoring: School-based by teachers or staff	May. 2018	\$19,839	\$4,563	\$15,276	(\$3,421)	<b>\$16,418</b>	\$5.80	<b>70 %</b>
Caring School Community (formerly Child Development Project)	Apr. 2018	\$11,358	\$2,595	\$8,764	(\$1,085)	<b>\$10,273</b>	\$10.47	<b>60 %</b>
Good Behavior Game	Mar. 2018	\$9,923	\$2,707	\$7,216	(\$158)	<b>\$9,765</b>	\$62.73	<b>77 %</b>
Promoting Alternative Thinking Strategies (PATHS)	Jun. 2015	\$8,245	\$1,793	\$6,452	(\$373)	<b>\$7,872</b>	\$22.09	<b>62 %</b>
Coping and Support Training (CAST)	Aug. 2017	\$7,530	\$2,378	\$5,152	(\$475)	<b>\$7,055</b>	\$15.86	<b>81 %</b>
Sunshine Circle Model	Aug. 2018	\$5,293	\$1,706	\$3,587	(\$162)	<b>\$5,131</b>	\$32.61	<b>91 %</b>
Seattle Social Development Project <b>UPDATED</b>	Mar. 2019	\$8,743	\$2,505	\$6,239	(\$3,899)	<b>\$4,845</b>	\$2.24	<b>56 %</b>
School-Wide Positive Behavioral Interventions and Supports (SWPBIS)	Jan. 2018	\$4,848	\$1,184	\$3,665	(\$642)	<b>\$4,206</b>	\$7.55	<b>70 %</b>
Communities in Schools	Sep. 2018	\$3,649	\$885	\$2,764	(\$261)	<b>\$3,388</b>	\$14.01	<b>56 %</b>
Project EX	Dec. 2014	\$2,887	\$653	\$2,234	(\$62)	<b>\$2,825</b>	\$46.40	<b>88 %</b>

# Where to find our benefit-cost results

## Detailed Monetary Benefit Estimates Per Participant

Affected outcome:	Resulting benefits: <sup>1</sup>	Benefits accrue to:				Total
		Taxpayers	Participants	Others <sup>2</sup>	Indirect <sup>3</sup>	
Test scores	Labor market earnings associated with test scores	\$2,626	\$6,169	\$3,254	\$0	\$12,050
Smoking before end of middle school	Health care associated with smoking	(\$1)	\$0	(\$1)	(\$1)	(\$3)
	Mortality associated with smoking	\$0	\$0	\$0	\$0	\$0
Cannabis use before end of middle school	Criminal justice system	\$5	\$0	\$11	\$2	\$18
	Health care associated with cannabis abuse or dependence	\$1	\$0	\$1	\$0	\$3
Alcohol use before end of middle school	Property loss associated with alcohol abuse or dependence	\$0	\$0	\$0	\$0	\$0
	Mortality associated with alcohol	\$0	\$0	\$0	\$0	\$0
Program cost	Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$550)	(\$550)
<b>Totals</b>		<b>\$2,631</b>	<b>\$6,169</b>	<b>\$3,265</b>	<b>(\$548)</b>	<b>\$11,517</b>

# Benefits and limitations of benefit-cost analysis

## ✓ Benefits

- Provides additional information beyond “Is this program effective?”
- Appeals to policymakers on both sides of the aisle
- Offers basis for comparison within policy areas

## ✓ Limitations

- Time- and labor-intensive
- Findings are specific to inputs (e.g., Washington state)
- Only as good as the underlying research
- Not exhaustive (can't measure or monetize everything)
- Need feedback loop for reality check

# Questions?

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