

IDENTIFYING AND IMPLEMENTING POLICIES THAT IMPROVE OUTCOMES AND SAVE MONEY

WASHINGTON STATE INSTITUTE FOR PUBLIC POLICY

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IOM-NRC Forum
on Promoting
Children's
Cognitive,
Affective, and
Behavioral
Health

Washington,
DC

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Washington State Institute for Public Policy

Non-partisan research at legislative/board direction

Nature of the Institute

- ✓ Created by 1983 Legislature
- ✓ General purpose
- ✓ Legislative & Executive Board
- ✓ Projects assigned by bills or Board



Directions from the Legislature

- ✓ Crime
- ✓ Early/K-12 education
- ✓ Child abuse & neglect
- ✓ Substance abuse
- ✓ Mental health
- ✓ Health care
- ✓ Public health
- ✓ Developmental disabilities
- ✓ Teen births
- ✓ Employment, workforce training
- ✓ Public assistance, housing

Are there evidence-based policies that improve outcomes with a positive return on investment?

Our 3-step “investment advisor” research approach

1. **Evidence:** What works to improve outcomes; what does not?

We meta-analyze all rigorous evaluations of policies to improve public outcomes of legislative interest.

2. **Economics:** What is the return on investment?

We compute benefits, costs, and risk to the people of Washington State using a consistent framework.

3. **Portfolio:**

How would a combination of options affect statewide outcomes? What is the risk?

WSIPP "Consumer Reports" Lists

Evidence-based policy options ranked by return on investment

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Early Childhood Education for Low-Income Students: A Review of the Evidence and Benefit-Cost Analysis

The 2013 Washington State Legislature directed the Washington State Institute for Public Policy (WSIPP) to review "the research evidence on components of successful early education program strategies" for low-income children.¹ In this report, we present findings from our analysis of early childhood education (ECE) research.

We conducted this analysis by reviewing all credible evaluation studies from the United States and elsewhere. We systematically analyzed the studies to estimate whether various approaches to ECE have a cause-and-effect relationship with outcomes for low-income students. We then calculated whether the long-term monetary benefits of ECE investments outweigh the costs.

Research on ECE programs serving low-income children can provide insight on the effectiveness of Washington's own program, the Early Childhood Education and Assistance Program (ECEAP). The 2013 Legislature also directed WSIPP to "conduct a comprehensive retrospective outcome evaluation and return on investment analysis" of ECEAP. That evaluation will be completed by December 2014. The full legislative direction to WSIPP is in Exhibit 1 (next page).

In this report, we first describe WSIPP's approach to systematic research reviews and benefit-cost analysis. We then highlight our findings on the average effectiveness of ECE for low-income children.²

¹ Senate Bill 5904, Laws of 2013.
² We focus our analysis on programs for low-income children because Washington's ECEAP primarily serves this population.

Summary

WSIPP analyzed how various approaches to early childhood education (ECE) for low-income children impact student outcomes and whether benefits exceed costs. We examined three types of programs: state and district pre-kindergarten, the federal Head Start program, and "model" programs.

To investigate, we conducted a systematic review of research by collecting all studies we could find on the topic. We screened for scientific rigor and only analyzed studies with strong research methods.

We identified 49 credible evaluations of whether the three types of ECE for low-income children have a cause-and-effect relationship with student outcomes. The studies in our review measured academic as well as social and emotional development outcomes; a few studies also measured longer term outcomes including crime and teen births.

Our bottom-line findings: Our analysis shows that ECE for low-income children can improve outcomes. In scaled-up state, district, and federal programs, the long-term benefits have a relatively high probability of outweighing program costs. We find that the typical state program outperforms the federal Head Start program, but both have favorable results.

Unfortunately, scientifically rigorous research identifying specific ECE program components critical to producing improved outcomes is scarce. In this report we present preliminary evidence on the association between teacher degree attainment, classroom quality, and student outcomes.

Next steps: As directed by the 2013 Legislature, WSIPP is conducting a retrospective outcome evaluation of Washington State's Early Childhood Education and Assistance Program. Results will be available by December 2014.

Adult Criminal Justice PDF

For questions on benefit-cost results relating to Adult Criminal Justice, contact Elizabeth Drake.

Program name	Date of last literature review	Total benefits	Taxpayer benefits	Non-taxpayer benefits	Costs	Benefits minus costs (net present value)	Benefit to cost ratio	Odds of a positive net present value
Offender Re-entry Community Safety Program (dangerously mentally ill offenders)	Apr. 2012	\$57.765	\$19.087	\$38.677	(\$32.924)	\$24.840	\$1.75	93%
Electronic monitoring (radio frequency or global positioning systems)	Apr. 2012	\$23.085	\$5.617	\$17.468	\$1.093	\$24.178	n/e	100%
Therapeutic communities for offenders with co-occurring disorders	Dec. 2012	\$26.842	\$7.321	\$19.520	(\$3.628)	\$23.213	\$7.40	99%
Drug Offender Sentencing Alternative (for drug offenders)	Apr. 2012	\$23.441	\$6.068	\$17.373	(\$1.574)	\$21.867	\$14.89	99%
Correctional education (basic or post-secondary) in prison	Apr. 2012	\$22.539	\$5.875	\$16.664	(\$1.149)	\$21.390	\$19.62	100%
Vocational education in prison	Apr. 2012	\$21.131	\$5.585	\$15.546	(\$1.599)	\$19.531	\$13.21	100%
Outpatient/non-intensive drug treatment (incarceration)	Dec. 2012	\$18.452	\$4.797	\$13.655	(\$5.89)	\$17.863	\$3.34	100%
Mental health courts	Apr. 2012	\$20.211	\$5.522	\$14.689	(\$2.995)	\$17.217	\$6.75	100%
Inpatient/intensive outpatient drug treatment (incarceration)	Dec. 2012	\$17.900	\$4.748	\$13.152	(\$1.208)	\$16.692	\$14.82	100%
Case management: swift & certain/graduated sanctions for substance abusing offenders	Dec. 2012	\$19.385	\$5.430	\$13.955	(\$4.834)	\$14.551	\$4.01	97%
Risk Need & Responsivity supervision (for high and moderate risk offenders)	Dec. 2013	\$18.073	\$5.181	\$12.892	(\$4.949)	\$13.224	\$3.73	100%
Sex Offender treatment in the community	Dec. 2013	\$13.178	\$2.764	\$10.415	(\$1.614)	\$11.564	\$8.18	87%
Drug Offender Sentencing Alternative (for property offenders)	Dec. 2012	\$11.775	\$3.126	\$8.649	(\$1.572)	\$10.203	\$7.49	71%
Cognitive behavioral treatment (for high and moderate risk offenders)	Apr. 2012	\$10.364	\$2.677	\$7.687	(\$4.19)	\$9.945	\$24.72	99%
Therapeutic communities for chemically dependent offenders (community)	Dec. 2012	\$11.494	\$3.171	\$8.323	(\$2.463)	\$9.031	\$4.67	99%
Work release	Apr. 2012	\$7.550	\$2.012	\$5.538	(\$6.75)	\$6.875	\$11.19	96%
Therapeutic communities for chemically dependent offenders (incarceration)	Dec. 2012	\$10.794	\$3.323	\$7.471	(\$4.359)	\$6.435	\$2.48	98%
Employment training/job assistance in the community	Apr. 2012	\$5.949	\$1.502	\$4.447	(\$1.18)	\$5.811	\$43.26	99%
Outpatient/non-intensive drug treatment (community)	Dec. 2012	\$6.390	\$1.669	\$4.721	(\$5.89)	\$5.802	\$10.85	92%
Correctional industries in prison	Apr. 2012	\$6.859	\$1.931	\$4.929	(\$1.447)	\$5.412	\$4.74	98%
Sex Offender treatment during incarceration	Dec. 2013	\$10.378	\$2.570	\$7.808	(\$5.065)	\$5.315	\$2.05	82%
Intensive supervision (surveillance & treatment)	Apr. 2012	\$12.619	\$4.150	\$8.469	(\$8.031)	\$4.588	\$1.57	78%
Inpatient/intensive outpatient drug treatment (community)	Dec. 2012	\$3.746	\$1.050	\$2.696	(\$945)	\$2.801	\$3.96	79%
Drug courts	Apr. 2012	\$5.386	\$1.940	\$3.446	(\$4.271)	\$1.115	\$1.26	85%
Case management: not swift and certain for substance abusing offenders	Dec. 2012	\$4.059	\$1.614	\$2.446	(\$4.841)	(\$781)	\$0.84	45%
Intensive supervision (surveillance only)	Apr. 2012	(\$2.494)	(\$83)	(\$2.401)	(\$4.220)	(\$6.714)	n/e	10%
Domestic violence perpetrator treatment	Apr. 2012	(\$6.137)	(\$1.370)	(\$4.767)	(\$1.390)	(\$7.527)	n/e	19%
Prison								
For lower risk offenders, decrease prison average daily population by 250, by lowering length of stay by 3 months	Oct. 2013	(\$1.301)	(\$517)	(\$783)	\$5.642	\$4.341	\$4.34	98%
For moderate risk offenders, decrease prison average daily population by 250, by lowering length of stay by 3 months	Oct. 2013	(\$5.433)	(\$1.044)	(\$4.389)	\$5.633	\$200	\$1.04	52%
For high risk offenders, decrease prison average daily population by 250, by lowering length of stay by 3 months	Oct. 2013	(\$10.213)	(\$1.681)	(\$8.533)	\$5.641	(\$4.573)	\$0.55	17%
Police (results per-officer)								
Deploy one additional police officer with hot spots strategies	Oct. 2013	\$648.535	\$70.018	\$578.517	(\$92.597)	\$555.938	\$7.00	100%
Deploy one additional police officer with statewide average practices	Oct. 2013	\$573.700	\$61.637	\$512.063	(\$88.310)	\$485.390	\$6.50	100%

To view details of all Adult Criminal Justice programs in a single pdf, click here.

Nurse Family Partnership: Return on Investment

Updated results for Washington State

Reduced child abuse & neglect		<ul style="list-style-type: none"> Lower CW system costs Lower victim costs 	\$1,096
Increased ed. attain. (mom & child)		<ul style="list-style-type: none"> Increased earnings 	\$24,131
Reduced crime (mom & child)		<ul style="list-style-type: none"> Lower CJ system costs Fewer victimizations 	\$5,333
Incr. K-12 resources		<ul style="list-style-type: none"> Higher K-12 costs 	-\$1,738
Other impacts		<ul style="list-style-type: none"> Lower public assistance Lower health care costs 	\$2,854
		Total benefits per-family	\$26,743
		Cost per-family	-\$9,788
		Net present value (NPV)	\$16,956

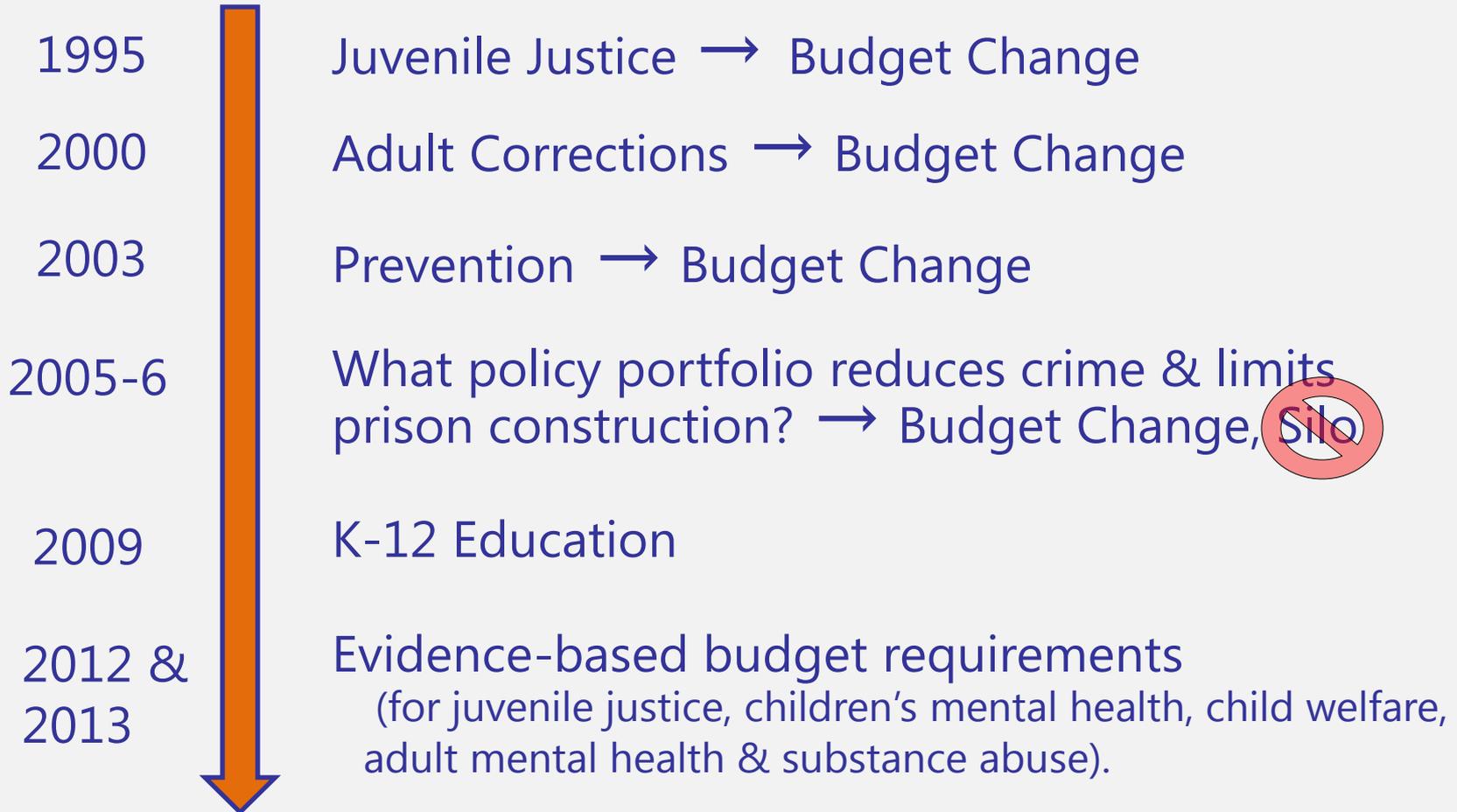
Selected Prevention and Treatment Programs

From WSIPP's current findings

Program	Monetary Benefits			Costs	Summary Statistics		
	Total	Tax-payer	Non Tax-payer		Benefits Minus Costs	Benefit to Cost Ratio	Odds of Negative Result
Nurse Family Partnership	\$26,743	\$9,463	\$17,281	\$9,788	\$16,956	\$2.73	24%
Preschool (for low-income)	\$29,210	\$9,058	\$20,151	\$6,974	\$22,236	\$4.20	9%
Guiding Good Choices	\$2,603	\$680	\$1,923	\$887	\$1,717	\$2.94	22%
Triple P —(system)	\$1,272	\$375	\$897	\$146	\$1,127	\$8.74	0%
Triple P —Level 4, group	\$2,077	\$732	\$1,345	\$383	\$1,694	\$5.42	0%
CBT for child trauma	\$10,985	\$3,071	\$7,915	\$324	\$11,309	n/e	0%
Multidim.Tx Foster Care	\$39,094	\$8,875	\$30,218	\$8,059	\$31,035	\$4.85	20%

Benefits and costs are life-cycle present values per participant, in 2012 dollars. Some programs achieve other benefits we cannot, at present time, monetize.

Using the ROI findings to craft state budgets: Washington's legislative milestones



THANK YOU

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