

## SafeCare Child Welfare

Benefit-cost estimates updated December 2017. Literature review updated August 2017.

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

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](#).

**Program Description:** Formerly known as Project 12-Ways, SafeCare (<http://safecare.publichealth.gsu.edu/>) is a manualized parent-training curriculum for parents who are at-risk or have been reported for child maltreatment. Trained professionals work with at-risk families in their home environments to improve parents' skills in several domains, such as planning and implementing activities with their children, responding appropriately to child behaviors, improving home safety, and addressing health and safety issues. SafeCare is generally provided in weekly home visits lasting from one to two hours. The program typically lasts 18-20 weeks for each family.

### Benefit-Cost Summary Statistics Per Participant

#### Benefits to:

|                            |                |                                 |         |
|----------------------------|----------------|---------------------------------|---------|
| Taxpayers                  | \$1,425        | Benefit to cost ratio           | \$20.25 |
| Participants               | \$1,944        | Benefits minus costs            | \$3,563 |
| Others                     | \$186          | Chance the program will produce |         |
| Indirect                   | \$192          | benefits greater than the costs | 92 %    |
| <b>Total benefits</b>      | <b>\$3,748</b> |                                 |         |
| <b>Net program cost</b>    | <b>(\$185)</b> |                                 |         |
| <b>Benefits minus cost</b> | <b>\$3,563</b> |                                 |         |

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2016). 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: <sup>1</sup>                      | Benefits to:   |                |                     |                       |                |
|---|----------------|----------------|---------------------|-----------------------|----------------|
|   | Participants   | Taxpayers      | Others <sup>2</sup> | Indirect <sup>3</sup> | Total          |
| Crime   | \$0            | \$76           | \$153               | \$38                  | \$266          |
| Child abuse and neglect                                     | \$46           | \$389          | \$0                 | \$195                 | \$630          |
| K-12 grade repetition                                       | \$0            | \$8            | \$0                 | \$4                   | \$11           |
| K-12 special education                                      | \$0            | \$69           | \$0                 | \$35                  | \$104          |
| Property loss associated with alcohol abuse or dependence   | \$0            | \$0            | \$0                 | \$0                   | \$0            |
| Health care associated with PTSD                            | \$12           | \$38           | \$47                | \$19                  | \$117          |
| Labor market earnings associated with child abuse & neglect | \$1,934        | \$878          | \$0                 | \$11                  | \$2,824        |
| Costs of higher education                                   | (\$49)         | (\$32)         | (\$15)              | (\$16)                | (\$112)        |
| Adjustment for deadweight cost of program                   | \$0            | \$0            | \$0                 | (\$93)                | (\$93)         |
| <b>Totals</b>   | <b>\$1,944</b> | <b>\$1,425</b> | <b>\$186</b>        | <b>\$192</b>          | <b>\$3,748</b> |

<sup>1</sup>In 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.

<sup>2</sup>"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.

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

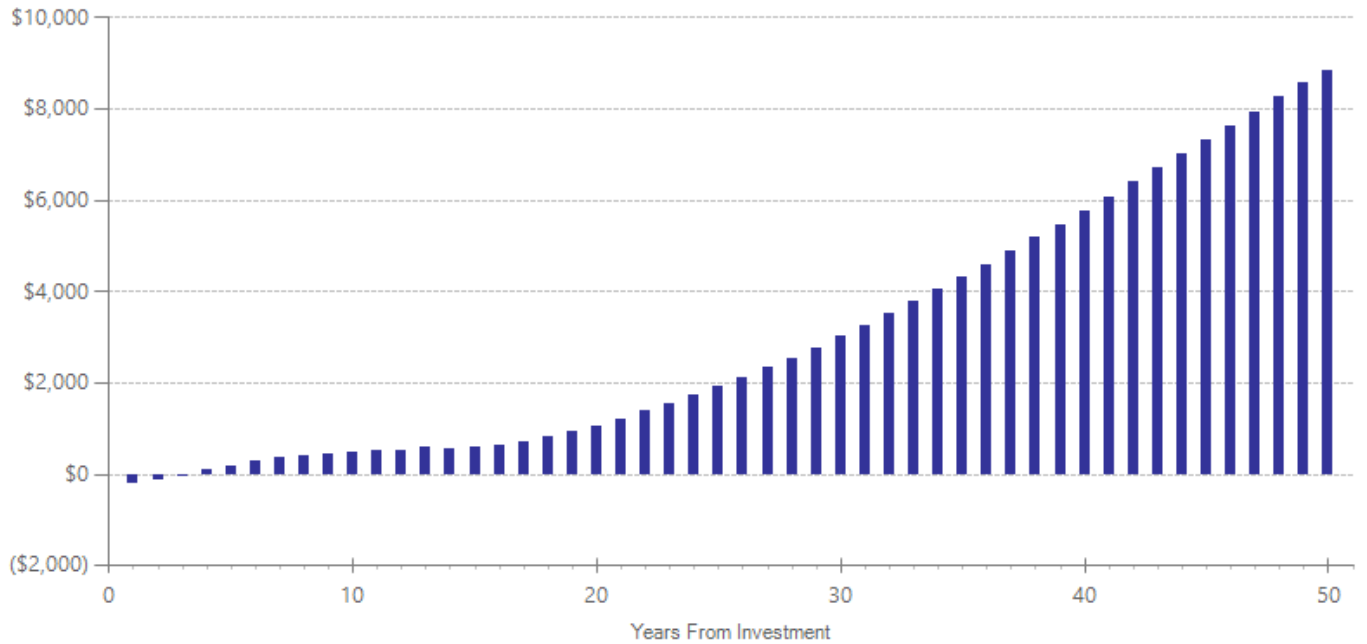
## Detailed Annual Cost Estimates Per Participant

|                  | Annual cost | Year dollars | Summary  |         |
|------------------|-------------|--------------|--|---------|
| Program costs    | \$1,950     | 2010         | Present value of net program costs (in 2016 dollars) | (\$185) |
| Comparison costs | \$1,780     | 2010         | Cost range (+ or -)                                  | 25 %    |

This program is typically delivered over an 18 to 20 week period. Costs for SafeCare provided by Washington DSHS, March 2012. Based on costs for 18 home visits per family, including supervision, coaching, and travel time, plus a \$60 per-family cost for services. In the evaluation of SafeCare described here, the results achieved by the intervention were achieved against a comparison group who received an equal number of home visits. However, the comparison group did not receive the manualized SafeCare curriculum, SafeCare health kits and handouts, or fidelity monitoring for the home visitors. Costs for the comparison group were computed by estimating a cost of \$100 for each family for these three components and subtracting that from the SafeCare cost.

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 |   |         |
| Child abuse and neglect | 1                   | 1079        | -0.113  | 0.058 | 7   | -0.113                      | 0.058 | 17  | -0.113  | 0.051   |

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

Chaffin, M., Hecht, D., Bard, D., Silovsky, J. F., & Beasley, W. H. (2012). A statewide trial of the safecare home-based services model with parents in child protective services. *Pediatrics*, 129(3) 509-515.

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