

# Joint Legislative Audit and Review Committee (JLARC)



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December 1, 2004

To: JLARC Members  
 From: Deborah Frazier, Research Analyst  
 Subject: At Risk Youth Study - Interim Report #2  
 Preliminary Findings on Mechanisms to Stimulate Local Investment

## Summary

JLARC is presenting work in progress on identifying mechanisms to stimulate local investment in prevention programs for at risk youth that have been proven effective in generating more benefits than costs. These benefits are realized over a period of time. The longer the time period examined, the greater the value of the benefits.

### Our preliminary findings are:

- a self-interest based incentive exists for state and local governments to invest in proven programs;
- mechanisms exist that can be employed to arrive at a proportionate share approach to these investments, and the type of mechanism has implications for the amount of administrative support necessary to execute it; and,
- one size does not fit all – proportionate shares must be established for each program proven effective.

## Background

JLARC's At Risk Youth study will be completed in September, 2005. This study has two objectives:

- identify and describe prevention programs operating in Washington that have proven effective and found to produce savings, or that were cost neutral, to the state's budget; and
- evaluate and recommend public policy options available to legislators to encourage local government investment in programs deemed to be effective.<sup>1</sup>

This interim report addresses **preliminary findings related to the second objective.**

Legislators asked that we share our work in progress prior to the 2005 Legislative Session so that it could be considered during deliberations.

Our effort builds on recent work of the Washington State Institute for Public Policy (Institute). The Institute identified prevention programs for at risk youth operating in Washington and

<sup>1</sup> See SHB 1028 (2003).

# Joint Legislative Audit And Review Committee

At Risk Youth Study  
Interim Report #2  
December 1, 2004  
Page 2

elsewhere with rigorous outcome evaluations that measure at least one of seven outcomes identified in Washington statute. The Institute calculated the benefits and costs of these programs and found that benefits equaled or exceeded costs in 34. These programs are considered to have been proved effective.<sup>2</sup> **These 34 effective programs are the subject JLARC's At Risk Youth study.**

To identify potential mechanisms to stimulate local investment in effective prevention programs for at risk youth, at this early stage of the JLARC study, we have concentrated on assessing the benefits realized as a result of these preventive interventions. Our assumption is that understanding who benefits suggests options that the Legislature could employ to stimulate local investment in these programs.

## Understanding Benefit: Two Approaches

Throughout this report we will be referring to "benefit," by which we mean **avoided costs to the taxpayer**. While governments may choose to emphasize any or all of the seven outcomes when making investment decisions about effective prevention programs, for the purpose of this report we chose to focus on **crime**.

We selected **five effective programs** to illustrate the considerations we've identified for approaches to stimulating local investment. Because we have not completed the work to identify specific effective programs in Washington, and thus cannot provide specific cost and benefit information about those individual programs, we've chosen to not to identify the five programs used in our example.

The benefits/costs model that the Institute developed can identify the total benefit derived from **one avoided crime** for each intervention. **The benefit calculated for each avoided crime is based on costs that are avoided:** police and sheriffs' offices, superior courts and county prosecutors, juvenile detention with a local sentence, juvenile detention with a JRA sentence, etc. This total benefit for each avoided crime can be split into the shares realized by state and local governments.<sup>3</sup> We calculated this split for five of the programs identified by the Institute as effective.

### One Approach: Life Cycle Timeframe

Table 1 displays the results of this calculation for each of the five programs. The benefit figures in this example assume a life cycle approach, meaning that the avoided crime **benefit is calculated over the course of the lifetime of the program participant**.<sup>4</sup>

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<sup>2</sup> The Institute report may be obtained on line at <http://www.wsipp.wa.gov/rptfiles/04-07-3901.pdf>. The seven outcomes specified in RCW 70.190.010(4) are: crime, child welfare, education, teen pregnancy, substance abuse, suicide and domestic violence.

<sup>3</sup> This split can also be calculated for interventions that affect child welfare.

<sup>4</sup> This benefit is stated at net present value, which means that the dollar value of the avoided crime benefit in the future is adjusted for inflation to reflect today's value.

# Joint Legislative Audit And Review Committee

At Risk Youth Study  
Interim Report #2  
December 1, 2004  
Page 3

For example, program E shows a total benefit of \$20,648 for each crime avoided. When the total benefit is split between state and local government, we see that 69 per cent of the benefit of each avoided crime goes to the state, while 31 per cent goes to the local government. Similar percentages are shown for the other programs included in this interim report.

<b>Table 1</b>					
<b>Benefit per each crime avoided - Life Cycle</b>					
		State Share		Local Share	
Program	Total	Amount	Percent	Amount	Percent
A	\$ 27,461	19,144	70%	8,317	30%
B	\$ 25,062	17,271	69%	7,791	31%
C	\$ 28,336	19,821	70%	8,515	30%
D	\$ 25,062	17,271	69%	7,791	31%
E	\$ 20,648	14,175	69%	6,473	31%

<b>Table 2</b>					
<b>Benefit per each crime avoided - Five Year Timeframe</b>					
		State Share		Local Share	
Program	Total	Amount	Percent	Amount	Percent
A	\$ 9,281	6,278	68%	3,004	32%
B	\$ 8,556	5,672	66%	2,883	34%
C	\$ 14,833	10,294	69%	4,539	31%
D	\$ 8,556	5,672	66%	2,884	34%
E	\$ 344	222	65%	122	35%

This information suggests that both **state and local governments have an incentive to invest in this program that has been proven effective** since each party realizes real benefit from the intervention.

Another Approach: A Five Year Timeframe

Table 2 displays the results of an alternative to calculating the benefit of each avoided crime based on predictions about participant behavior over a lifetime. The benefit figures in this example assume a five year timeframe, meaning that the **avoided crime benefit is calculated over only the first five years after the intervention.**<sup>5</sup>

Again looking at program E, there's a significant change in the amount of the total benefit for each crime avoided. Using the life cycle approach, the benefit is calculated at over \$20,000 per avoided crime. Using the five year timeframe, this figure is reduced to \$344. Why? Program E targets elementary school age children. This population commits few crimes, and very few serious crimes, until after the five year period. Therefore, less benefit is derived during the calculation period for each avoided crime.

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<sup>5</sup> For this example, unlike the life cycle approach, the future value of the avoided crime benefit is not adjusted for inflation to current value because of the short timeframe.

# Joint Legislative Audit And Review Committee

At Risk Youth Study  
Interim Report #2  
December 1, 2004  
Page 4

The percentage split between state and local government also changes using the five year timeframe, but not as dramatically as the total benefit. In this example we see that 65 per cent of the benefit of each avoided crime goes to the state, while 35 per cent goes to the local government, while the life cycle approach yielded a split of 69 per cent /31 per cent respectively. Why? The costs that are avoided for the younger population are more likely to be local.

For the other four programs in the interim report exercise, less dramatic but notable shifts in total benefit calculated also occurred, with similar effects on the proportionate share calculation.

This illustration shows that, while a **shorter timeframe may provide more confidence** in the calculations because of the limited time frame involved, it **presents concerns in assessing the total benefit derived** from an investment in proven prevention programs for at risk youth. These concerns are more pronounced for those programs that are interventions for younger participants.

Could a two year timeframe be employed? For some programs, where the intervention begins at age 14 or 15, some benefit would be realized as a result of the intervention during the first two years. However, in a **two year timeframe, this benefit would be relatively small** by comparison with either the life cycle approach or the five year timeframe.

## Two Mechanisms for Investment

Information about the benefit that accrues from preventive interventions for at risk youth can be used to establish proportionate shares of investments in effective programs.

This investment could take the form of:

- a **match rate**, where each party would pay for program costs up front, proportionately to the benefit received, or,
- a **reimbursement**, where either the state or local government bears 100 percent of the program cost and is then reimbursed by the other party for the proportionate share of the benefit.

For either method, the two parties would **negotiate a funding formula** that establishes how avoided costs are defined to determine the percentage share. For instance, are both operating and capital costs included? Are all of the cost items included, or only courts and detention costs? How frequently will the cost information be updated? How, and by whom? How many total program “slots” can the parties afford to invest in? For the reimbursement method, is the payment a lump sum, or does it occur over time?

The **advantages** of these approaches to joint investment in effective prevention programs for at risk youth by the state and local governments are **familiarity and relative ease of administration**. Both government entities are experienced in working with matching programs; in this case, unlike most matching programs, the match rates have an empirical basis. Administratively, once negotiations are completed and the formula components are known, the proportionate shares calculation for the match rate approach requires little effort. The reimbursement method adds a level of complexity to administration, since it requires accounting for and accomplishing the reimbursements.

A **disadvantage** of both approaches is that some local governments will not have the **money to invest up front** in the match, or, to bear 100 per cent of the costs and be reimbursed by the state. For

# Joint Legislative Audit And Review Committee

At Risk Youth Study  
Interim Report #2  
December 1, 2004  
Page 5

example, police and sheriff force strength cannot be adjusted incrementally for each crime avoided. Some number of crimes must be avoided over some period of time before the full benefit of the intervention is realized, and force strength adjusted. State government would have a similar experience; for example, the number of beds needed in juvenile rehabilitation institutions cannot be adjusted for each avoided crime. However, state government would have more flexibility to adjust funding levels for these beds since avoided crimes would be aggregated at the state level.

## Preliminary Findings

The JLARC At Risk Youth study is in progress. To understand potential local investment mechanisms for prevention programs that generate more benefits than cost, we've focused on the benefit realized by state government and local government. These benefits are realized over a period of time. **The longer the time period examined, the greater the value of the benefits.** Based on our work to date, our interim report preliminary findings are:

- a self-interest based incentive exists for state and local governments to invest in proven programs;
- mechanisms exist that can be employed to arrive at a proportionate share approach to these investments, and the type of mechanism has implications for the amount of administrative support necessary to execute it; and,
- one size does not fit all – proportionate shares must be established for each program proven effective.

## Next Steps

JLARC will continue working to identify investment mechanisms for effective at risk youth prevention programs operating in Washington. We will identify the state/local benefit split for crime and child welfare outcomes, and, the return on investment in these outcomes for each program. We will find and evaluate existing mechanisms to stimulate local investment in other Washington programs, and, mechanisms that may be in place in private, federal or other states' or localities' programs. Complete findings related to both study objectives will be presented to the Committee in September 2005.

## Contacts

Please direct questions about the JLARC study to Deborah Frazier, 786-5186 (frazier.deborah@leg.wa.gov). If you have questions about the Institute study, contact Steve Aos at 586-2740 (saos@wsipp.wa.gov).