VERMONT RESULTS FIRST INITIATIVE - PRELIMINARY RESULTS COMPARING the BENEFITS and COSTS of CRIME REDUCTION

Pew-MacArthur Results First Initiative

The Results First Initiative, a project of the John D. and Catherine T. MacArthur Foundation and the Pew Charitable Trusts, works with states to implement an innovative benefit-cost analysis approach that helps states invest in policies and programs that are proven to work and are cost effective. Results First provides Vermont with an econometric model that analyzes the estimated costs and benefits of current and potential investments in evidence-based programs. The model uses the best available research to predict the outcomes of each program, based on the state's unique population characteristics. It calculates the cost to produce these outcomes including separate projections for benefits that would accrue to taxpayers, through the reduction of criminal justice system resources used, and to society, through the reduction of victimizations.

The term "<u>Marginal Cost</u>" is used in this brief to describe how costs are calculated for Results First. The marginal cost is the amount the total agency budget changes when there is a small change in the workload of the agency as one additional person is being served. Although some Vermont programs calculated their marginal cost as zero, recidivism has a cost overall and reducing recidivism produces savings.

Data Sources

In order to use the Results First model in Vermont, it is necessary to gather a fair amount of data from a variety of sources. The Cost-Benefit Working Group compiled the costs of one additional offender entering the myriad steps of the Vermont criminal justice system in 2014. These costs were used to derive the potential benefits to tax pavers. Offender recidivism trends were calculated from Vermont Crime Information Center criminal histories. The costs of the programs currently offered in Vermont are based on Vermont specific data, while the cost of prospective programs not currently offered in Vermont were approximated using Washington State data. Washington State's actual or estimated costs are used by the Results First Model when state data is not available. The Joint Fiscal Committee provided funding for the work and has been instrumental in moving it forward.

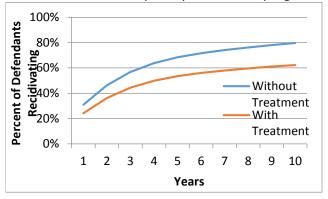
<u>Recidivism in Vermont</u> (calculated as any new conviction in Vermont during the 10 year follow up period)

- 63% of offenders with a prison sentence are convicted of a new crime in the following ten years.
- 41% of offenders with a sentence of supervision (probation) are convicted of a new crime in the following ten years.

(Note: VT data was obtained for defendants released or sentenced to probation from 2000-2004 and followed for 10 years.)

An Example of How Programming Can Help

Therapeutic Communities for offenders with cooccurring disorders are highly structured communities where offenders gain responsibility as they progress. In Washington State, the treatment costs \$3,717 per participant and the Results First model shows it can potentially net savings of \$5,520 through reducing each offender's chance of recidivating by 22% annually. Vermont could realize the same savings assuming the costs are similar as applied to the VT population. The graph below illustrates the effect of participation in this program.



Obtaining Vermont Program Costs

In order to get useful and reliable results with this initiative, determining the cost of current programs in Vermont is crucial. To obtain this information, service providers in Vermont were surveyed to obtain the costs of VT criminal justice programs. The Vermont calculations are reflected in Table 1. If an agency is interested an evidence-based program, Crime Research Group can calculate the costs and benefits anticipated in Vermont. Crime Research Group can also conduct evaluations on programs.

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Projected	Total	Estimated	Net	Chance of
Change in	Benefits	Marginal	Benefits	Positive Net
VT	to	Cost	(VT)	Present
Recidivism ¹	Vermont ²	(based on		Value ³
		VT costs)		
-18.4%	\$15,409	\$10,549 ⁴	\$4,860	100%
-5.7%	\$4,919	05	\$4,919	100%
-25.3%	\$15,950	\$11,564 ⁶	\$4,368	86%
-16.1%	\$14,667	\$10,549 ⁷	\$4,018	81%
-16.3%	\$13,732	11,564 ⁸	\$2,168	80%
-24.8%	\$8,769	\$10,549 ⁹	(\$1,880)	24%
-27.8%	\$8,673	\$10,549 ¹⁰	(\$1,876)	3%
-22.8%	\$2,610	NA ¹²	NA	NA
-13.5%	\$6,582	NA	NA	NA
-17.6%	\$4,175	NA	NA	NA
-8.65%	\$4,054	NA	NA	NA
-5.2%	\$2,460	NA	NA	NA
-12.5%	NA	NA	NA	NA
-33.4%	NA	NA	NA	NA
	Change in VT Recidivism ¹ -18.4% -5.7% -25.3% -25.3% -16.1% -16.3% -24.8% -27.8% -22.8% -22.8% -13.5% -17.6% -8.65% -5.2% -12.5%	Change in VT Benefits to VT Recidivism ¹ Benefits to -18.4% \$15,409 -5.7% \$4,919 -25.3% \$15,950 -16.1% \$14,667 -16.3% \$13,732 -24.8% \$8,769 -27.8% \$8,673 -22.8% \$2,610 -13.5% \$6,582 -17.6% \$4,054 -5.2% \$2,460 -12.5% NA	Change in VT Benefits to Marginal Cost Recidivism ¹ Vermont ² (based on VT costs) -18.4% \$15,409 \$10,549 ⁴ -5.7% \$4,919 0 ⁵ -25.3% \$15,950 \$11,564 ⁶ -16.1% \$14,667 \$10,549 ⁷ -16.3% \$8,769 \$10,549 ⁹ -24.8% \$8,769 \$10,549 ¹⁰ -22.8% \$2,610 NA ¹² -13.5% \$6,582 NA -17.6% \$4,175 NA -8.65% \$4,054 NA -12.5% NA NA	Change in VT Recidivism1Benefits to Vermont2Marginal Cost (based on VT costs)Benefits (VT)-18.4%\$15,409\$10,5494\$4,860-5.7%\$4,91905\$4,919-25.3%\$15,950\$11,5646\$4,368-16.1%\$14,667\$10,5497\$4,018-16.3%\$13,73211,5648\$2,168-24.8%\$8,769\$10,5499(\$1,880)-27.8%\$8,673\$10,54910(\$1,876)-22.8%\$2,610NA12NA-13.5%\$6,582NANA-17.6%\$4,054NANA-5.2%\$2,460NANA-12.5%NANANA

Table 1: Estimated Benefits & Costs of Current & Prospective Adult Criminal Justice Programs in Vermont

Table 2:

Estimated Benefits & Costs of Programs Not Currently Offered in Vermont for Defendants with Substance Abuse

Programs Not Currently Offered In Vermont and	Projected	Total	Estimated	Net	Chance of
Modeled in Results First - Targeting Defendants with	Change in	Benefits	Cost (based	Benefits	Positive Net
Substance Abuse Needs	VT	to	on WA	(WA and	Value
	Recidivism	Vermont	costs)	VT)	
Outpatient/non-intensive drug treatment (community)	-9%	\$1,457	\$592	\$865	84%
Therapeutic communities for chemically dependent	-17.4%	\$2,992	\$2,464	\$528	72%
offenders (community)					
Inpatient/intensive outpatient drug treatment	-3%	\$1,162	\$941	\$221	60%
(community)					
Swift and certain/graduated sanction case	-30%	\$4,677	\$4,815	(\$138)	53%
management					
Other case management for substance abusing	-9%	\$1,728	\$4,840	(\$3,112)	1%
offenders					
Naltrexone treatment in addition to Probation ¹⁹	-61.4%	NA	NA	NA	NA
Naltrexone treatment for incarcerated individuals ²⁰	-48.2%	NA	NA	NA	NA
Methadone treatment in addition to Probation	-44.4%	NA	NA	NA	NA
Methadone treatment for incarcerated individuals ²¹	-31.8%	NA	NA	NA	NA

Table 3:

Estimated Benefits & Costs of Programs Not Currently Offered in Vermont for Defendants with Mental Health Needs

Programs Not Currently Offered In Vermont and Modeled in Results First - Targeting Defendants with Mental Health Needs	Projected Change in VT Recidivism	Total Benefits to Vermont	Estimated Cost (based on WA costs)	Net Benefits (WA and VT)	Chance of Positive Net Value
Therapeutic Communities for Co-Occurring Disorders (incarceration)	-21.8%	\$9,237	\$3,717	\$5,520	97%
Jail Diversion-Post Booking (community)	-2.3%	\$1,067 ²²	(\$4,701)	\$5,768	75%
Offender Re-entry supports for Dangerously Mentally III ²³	-51.8%	NA	NA	NA	NA

Table 4: Programs Not Offered in Vermont – Miscellaneous Programs

Programs Not Currently Offered In Vermont and Modeled in Results First - Miscellaneous Programs	Projected Change in VT Recidivism	Total Benefits to Vermont	Estimated Cost (based on WA costs)	Net Benefits (WA and VT)	Chance of Positive Net Value
Employment Training/Job Assistance in the Community	-9%	\$1,606	\$138	\$1,468	97%
Work Release	-5.3%	\$2,551	\$689	\$1,862	97%
Intensive Supervision (treatment)	-23%	\$4,426	\$8,021	(\$3,595)	0%
Day Reporting Centers	-20.1%	\$4,478	\$3,922	\$556	NA

⁵ The Department of Corrections reports that this program is self-funded and costs DOC no taxpayer dollars to run resulting in a marginal cost of zero.

⁶ The costs are derived from total program budget for the Community High school divided by the total number of graduates in both the Vocational and High School Programs. Costs do not reflect the recent reorganization of the Community High School of Vermont. Source: DOC Vantage Report:

http://doc.vermont.gov/about/reports/department-of-corrections-budget-documents/fy-2016-doc-vantagereports-final/view p. 5

⁷ Costs are derived from the 2009 NPC Evaluation and in consultation with the CAO Treatment Court Coordinator. Since the marginal cost for probation as reported by DOC is zero, it raises the cost to run the program with probationers.

⁸ Costs do not reflect the recent reorganization of the Community High School of Vermont. The new costs for FY'16 are not yet available. Source: DOC Vantage Report: <u>http://doc.vermont.gov/about/reports/department-of-corrections-budget-documents/fy-2016-doc-vantage-reports-final/view</u> p. 5

⁹ Costs are derived from the 2009 NPC Evaluation and in consultation with the CAO Treatment Court Coordinator. ¹⁰ Costs are derived from the 2009 NPC Evaluation and in consultation with the CAO Treatment Court Coordinator.

¹¹ Original projections of the Windham Electronic Monitoring program using Results First showed a positive impact. The program has been implemented in lieu of detention and is currently being evaluated. The VT costs are in the process of being determined. The initial benefit-cost projection was completed in 2013 and can be found here: http://leg.state.vt.us/jfo/issue_briefs_and_memos/Electronic_Monitoring_Issue_Brief.pdf

¹² N/A pertains to programs where there is not enough information to run the benefit-cost model at this time.

¹³ The DUI Court participated in a process evaluation in 2015. A benefit-cost analysis has not been completed.

¹⁴ This program is equivalent to the Second Chance Offender Re-entry Grant received by DOC in 2014. The program is currently in the early stages of implementation.

¹⁵ Vermont costs have not been determined. The annual budget is \$350,000. Source: DOC Vantage Report: <u>http://doc.vermont.gov/about/reports/department-of-corrections-budget-documents/fy-2016-doc-vantage-reports-final/view</u> p. 149

¹⁶ Vermont costs have not been determined. Annual budget is \$6.3 million. Source: DOC Vantage Report <u>http://doc.vermont.gov/about/reports/department-of-corrections-budget-documents/fy-2016-doc-vantage-reports-final/view</u> P. 150

¹⁷ Vermont costs have not been determined. The annual budget (including non-restorative justice programs) is \$2.5 million.

¹⁸ Costs are paid by participants. The benefit-cost analysis cannot be completed at this time because the program has not yet been added to the Results First model by WA/Pew.

¹⁹ The trade name for Naltrexone is Vivitrol. Neither VT nor WA have readily accessible cost estimates for Medication-assisted Treatment (MAT).

²⁰ The Vermont Department of Health has recently received a Federal grant for a pilot to provide Vivitrol to inmates re-entering the community. It is unknown at this time if this program is the same program as those in the Results First model and so has not been moved to the Vermont table yet.

²¹ DOC continues to provide inmates with MAT if they are expected to be released in 30 days or less and in many facilities that is the continued practice. In the demonstration sites, the Northwest and Chittenden facilities, DOC extended the period up to 90 days. It is unknown at this time if this program is the same program as those in the Results First model and so has not been moved to the Vermont table yet.

²² Benefits include expected benefits for earnings and decreased hospitalization. Those benefits are based on WA data.

²³ WA has not yet developed cost estimates for this program.

¹ This is calculated by applying the effect size to Vermont recidivism patterns. This is reported as an annual rate.

² The benefits include those to VT taxpayers and benefits to victims from avoided crimes and the associated costs.

³ When the benefit-cost analysis is repeated 10,000 times with small random variation in inputs, this is the chance of net positive benefits.

⁴ The costs are derived from the 2009 NPC Evaluation of the Rutland Treatment Court and in consultation with the Court Administrator's Office Treatment Court Coordinator.