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Douglas County Youth Impact! Cost/Benefit Analysis Revised Edition: 2019 Dollars

Nebraska Center for Justice Research, University of Nebraska at Omaha

Ryan E. Spohn

University of Nebraska at Omaha, rspohn@unomaha.edu

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Douglas County Youth Impact! Cost/Benefit Analysis

Revised Edition: 2019 Dollars



June, 2020

**Dr. Ryan Spohn, Director
Nebraska Center for Justice Research**

The Nebraska Center for Justice Research is a multidisciplinary research center. The mission of the NCJR is to develop and sustain research capacity internal to the State of Nebraska, assist the Legislature in research, evaluation, and policymaking to reduce recidivism, promote the use of evidence-based practices in corrections, and improve public safety.

Context and Previous Research

The Nebraska Center for Justice Research at the University of Nebraska-Omaha conducted an evaluation of Youth Impact! which was completed in 2014. Youth Impact! is the Douglas County implementation of the Crossover Youth Practice Model, as developed by Georgetown University's Center for Juvenile Justice Reform. This project consisted primarily of: 1) a process evaluation, 2) an outcome evaluation, 3) a systems-impact analysis, and 4) a cost-benefit analysis. This evaluation suggested that the reduction in information silos across the juvenile justice and child welfare systems led to better decision-making because of interagency collaboration and information sharing, although agency professionals still faced many challenges (Wright, Spohn, Chenane, and Juliano 2017). Moreover, overall, the findings suggest that Youth Impact! dismisses or diverts crossover youth more often, closes delinquency cases more often, and results in more crossover youth living at home (as opposed to shelter, treatment center, correctional center, foster care, etc.) nine months after initial arrest as compared to a control group of crossover youth served prior to the implementation of the initiative (Wright, Spohn, and Campagna (Forthcoming)). Finally, the cost/benefit analysis suggested that Youth Impact! saved \$173,161 per year compared to the prior methods of serving crossover youth.

Five years later, Youth Impact! continues to represent an evidence-based intervention representing dedicated professionals from both the juvenile justice system and the child welfare system, focused on improving outcomes for youth involved in, or "crossing over," both systems. However, due to cost changes and modification in the implementation of the initiative, an updated cost-benefit analysis is warranted to inform the Youth Impact! Team and stakeholders regarding sustained cost savings of the initiative.

Costs and Cost-Savings from Youth Impact!

The following cost and benefit estimate addresses the annual cost of administering the Youth Impact! crossover youth program in Douglas County. These estimates represent "systems" costs and benefits which, as we describe below, are just the tip of the iceberg regarding the true costs of serious delinquency to society.

Our annual cost and benefit analysis includes cost/benefit estimates from the primary agencies that regularly participate in the Youth Impact! initiative. **Cost-savings stem from two primary sources: 1) savings to Probation due to youth that are diverted from the system and do not require probation supervision and, 2) savings in court costs due to youth who are diverted from the system and do not go to Juvenile Court.**

- It is estimated that the need for three full-time probation officers for high-risk youth are avoided as a result of the Youth Impact! initiative.
- We reached an estimate of \$1,561 in court costs per youth in Douglas County, so 75 youth diverted from the system on average per youth results in a savings estimate of \$117,075 annually.

Most agencies experienced costs of some kind associated with their participation in Youth Impact! The bulk of these costs are salary and benefits.

Total annual cost of administering YI! = \$200,070

Total estimated annual benefits = \$315,336



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Annual Net Benefit = \$115,266

The cost/benefit analysis contained in this report includes only costs and benefits associated with systems: the Douglas County juvenile justice system and child welfare system. It does not include minor expenses, such as travel to meetings, because similar expenses would occur in the absence of the crossover youth initiative. In addition to these system costs, existing literature provides estimates of at least three other types of costs of crime, which we do not include in the current cost-benefit analysis: 1) victim costs, 2) crime career costs, and 3) intangible costs. We provide some information regarding these other types of costs to highlight the fact that our analysis of system costs, although clearly indicating that Youth Impact! is cost effective, is a very conservative estimate of the cost-savings provided by Youth Impact!.

Cost to victims is another significant cost of delinquency. McCollister, French and Fang (2010) provide some estimates of tangible victim costs per crime type. Listed here are some of their estimates, translated into 2019 dollars.

<u>Type of Crime</u>	<u>Crime Victim Costs</u>
<i>Murder</i>	\$875,749
<i>Aggravated assault</i>	\$10,330
<i>Robbery</i>	\$3,918
<i>Motor vehicle theft</i>	\$7,260
<i>Household burglary</i>	\$1,617
<i>Larceny/theft</i>	\$570

Although many of the crimes listed above are more serious than the average crime or crimes committed by Douglas County crossover youth, they are crimes that become more likely if a crossover youth develops into a career criminal. The Youth Impact! initiative is specifically targeted at preventing further such penetration into either the juvenile delinquency or child welfare systems.

Crime career costs. Youth who become adults who engage in illegal activities do not contribute to the economy in the same fashion as adults who engage in legal, productive activities. For example, they pay no (or fewer) legal taxes and contribute less to the legal Gross Domestic Product (GDP). McCollister et al. (2010) estimated productivity losses associated with delinquents and criminals by calculating person-years served in prison as 2,080 hours that were not worked at the 2008 federal minimum wage rate of \$6.55. Although this wage rate is applicable for some individuals, others would have earned more than minimum wage, making these also conservatively low estimates. In the table below, these 2008 estimates are transformed into 2019 dollars.

<u>Type of Crime</u>	<u>Crime Victim Costs</u>
<i>Murder</i>	\$176,398
<i>Aggravated assault</i>	\$2,525
<i>Robbery</i>	\$5,073
<i>Motor vehicle theft</i>	\$656
<i>Household burglary</i>	\$808
<i>Larceny/theft</i>	\$194



As high as these cost estimates are, crime produces many additional costs to society as well. As Kleiman, Caulkins, and Gehred state, “Victimization costs are to crime costs as the tip is to the iceberg. These estimates keep invisible a whole mass of residual fear, avoidance behaviors, and social hostility,” (2014:15). They describe at least five other categories by which crime imposes costs on society. First, there are direct crime-avoidance costs (e.g. buying security cameras for a home or business). Next, there are second-order avoidance costs (e.g. a business moves out of a high-crime area, resulting in loss of jobs). Third, there is the cost of the fear of crime, such as undesired changes in behavior or reduced physical or psychological health. An entire literature has emerged in an attempt to capture these costs (for example, see Dolan and Peasgood 2007). Fourth, there is the cost of social hostility of citizens towards groups associated with crime and delinquency (e.g. young people, minorities, the indigent, the mentally ill) as well as the corresponding hostility of these groups if they feel ignored by the police or targeted by the police. Finally, there are the indirect and direct costs of law enforcement (Kleiman, Caulkins, and Gehred 2014). These costs are not included in the current analysis, but again suggest that the current estimates are extremely conservative.

Other cost/benefit research accepts that juvenile detention centers tend to serve as “schools of crime” where youth increase their “criminal capital” and become better delinquents and/or expand their delinquent networks (Nguyen et al. Forthcoming). This empirical research suggests that for every additional 30 days of incarceration, youth earn an additional \$172 in illegal wages per month upon release. In other words, youth detention has a real, explicit cost to society, in addition to the social, emotional, and health costs to the youth themselves.

Finally, research has estimated the cost-savings to society of keeping youth from engaging in a life of crime. For example, Mark Cohen and Alex Piquero conducted a cost analysis that produced estimates of saving a 14-year old high-risk juvenile from a life of crime range from \$2.6 to \$5.3 million dollars. Translated into 2019 dollars produces estimates of \$3.0 to \$6.3 million dollars in savings.

In conclusion, our estimate of over \$115,266 annually in system-savings is a conservative estimate because it does not include the expense of collateral costs of involvement in the justice system and the child welfare system. However, we argue that these broader estimates that can reach into the millions of dollars per individual should be considered with caution, as such high estimates of benefits can justify nearly any justice intervention if the “goodness” of the intervention is judged only from an economic or cost/benefit standpoint. For this reason, we stand by the more conservative estimate as a useful metric for assessing the worth of YI! in Douglas County. Moreover, this economic worth is matched by the communication channels and collaboration that is enhanced as a result of this initiative. **Consequently, we strongly endorse the Crossover Youth Practice Model as implemented in the Douglas County Youth Impact! initiative.** Although the estimate of cost-saving is lower than find in the previous cost/benefit analysis of Youth Impact!, this difference is likely due to the costs of full implementation of a mature initiative, as well as the investment necessary for implementing evidence-based practices.

A note on social discount rates. Social science cost/benefit analyses often include discount rates in order to reflect that money that we have now is more valuable than money we might have in the future, not only due to inflation, but also because we place a premium on benefits accrued sooner, rather than later (National Academies of Sciences, Engineering, and Medicine 2016).



The further in the future monetary benefits are likely to be realized, the larger the social discount of those future savings. Social discount rates can be thought of in the same fashion as compound interest. The benefit or cost per dollar can be calculated by $(1/(1 + r))^t$, where r equals the social discount rate and t equals time. For the current findings, if we adopt a common social discount rate of 3% per year and make the assumption that the costs of Youth Impact! occur approximately one year before benefits are realized, the estimated cost savings of \$115,266 per year are adjusted to: $1/(1 + .03)^1 \times \$115,266$, or \$111,909.

Future Research

Due to changes in child welfare contracts in the State of Nebraska, it was not feasible in the current study to quantify the monetary impact of Youth Impact! on child welfare outcomes such as type of placements and time to permanency. Evidence of these dollar amounts should become more readily available based on the work of the current private provider as their work progresses. Consequently, future research should include an updated outcome evaluation, process evaluation, and cost-benefit evaluation that more fully captures the effect of Youth Impact! on child welfare processes and outcomes, in addition to juvenile justice processes and outcomes.

In order to more fully interpret the impact of Youth Impact! on child welfare outcomes and child welfare costs, researchers would need (at minimum) the following information: 1) data on case-length and case outcomes for crossover youth served before the implementation of Youth Impact! (control group), 2) data on child welfare costs for corresponding case-lengths and case outcomes for crossover youth served before the implementation of Youth Impact!, 3) data on case-length and case outcomes for crossover youth served by Youth Impact! (treatment group), and 4) data on child welfare costs for corresponding case-lengths and case outcomes for crossover youth served by Youth Impact! This data would allow for a rigorous analysis of the manner in which Youth Impact! has impacted child welfare outcomes and child welfare costs in Douglas County.



Annual Benefits and Costs of the Youth Impact! of Douglas County Program (2019 dollars)

	County Attorney	Juvenile Assessment Center	Probation	DHHS	Boys Town	Court Costs	NFSN	Project Harmony	Promiseship	TOTAL
COSTS:										
<i>Salaries/ Benefits</i>	\$16,375 ^a	\$109,156 ^b	n/a	\$21,077 ^c	\$17,361	n/a	\$9,575 ^d	\$13,706 ^e	\$11,050 ^f	\$198,300
<i>Supplies/ Services</i>	n/a	n/a	n/a	n/a	\$458	n/a	n/a	n/a	n/a	\$458
<i>Other Costs</i>	n/a	n/a	n/a	n/a	\$1312 ^g	n/a	n/a	n/a	n/a	\$1289
Total Cost	\$16,375	\$109,156	n/a	\$21,077	\$19,131	n/a	\$9,575	\$13,706	\$11,050	\$200,070
BENEFITS:										
<i>Salaries/ Benefits</i>	n/a	n/a	\$198,261 ^h	n/a	n/a	n/a	n/a	n/a	n/a	\$198,261
<i>Supplies/ Services</i>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Other Benefits</i>	n/a	n/a	n/a	n/a	n/a	\$117,075 ⁱ	n/a	n/a	n/a	\$117,075
Total Benefit	n/a	n/a	\$198,261	n/a	n/a	\$117,075	n/a	n/a	n/a	\$315,336
NET BENEFIT	(\$16,375)	(\$109,156)	\$198,261	(\$21,077)	(\$19,131)	\$117,075	(\$9,575)	(\$13,706)	(\$11,050)	\$115,266



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^a Includes attorney and court clerk costs transformed to 2019 dollars.

^b Includes costs for diversion officer, data analyst, administrative and grant specialist, and JAC director, transformed to 2019 dollars.

^c Includes staff and administrator costs transformed to 2019 dollars.

^d Includes costs for father engagement specialist, youth advocate, mileage, and IT support, transformed to 2019 dollars.

^e Includes salary and benefit costs transformed to 2019 dollars.

^f Includes salary and benefit costs transformed to 2019 dollars.

^g Includes food and mileage costs transformed to 2019 dollars.

^h An estimated 50-75 youth are not entering the Probation system each year as a result of Youth Impact!. Due to child welfare involvement, these youth would likely fall into a “high supervision” range, requiring a caseload of 25 youth or less. Estimate is for salary and benefits for three fewer officers, transformed to 2019 dollars.

ⁱ Court costs are based on a NYC estimate of \$1,890 per youth in 2007 dollars

(<http://www.ibo.nyc.ny.us/iboreports/JJpath.pdf>). This is \$2,330 in 2016 dollars. The CNN cost-of-living calculator suggests that, with the exception of housing, most costs in NYC are about 1/3 higher than in Omaha. So, if we multiple that number by 67% to bring costs in-line with Omaha, we get an estimate of \$1,561 per youth. The probation estimate is that about 75 crossover youth per year are diverted from court processing, resulting in a savings of \$117,075 per year in court costs.

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