

Business Success Center

The Economic Impact of the Christine Ann Domestic Abuse Services Domestic Violence Legal Assistance Project

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Executive Summary

This report explores the economic impact of a \$75,000 grant received by the Christine Ann Domestic Center. The grant was used to fund the *Domestic Violence Legal Assistance Project*, which provided legal representation in for individuals with limited financial resources who were seeking a projective injunction (or similar legal pursuit) against their partner. Participation in this program provided legal representation that individuals would have otherwise been unable to afford. This report examines the economic impact of this program along several dimensions. Summarizing the main findings:

- Overall the Domestic Violence Legal Assistance Project produced a return on investment (ROI) of:
 - 1 year ROI of 4.10,
 - 30 year ROI of 20.33.
- The economic returns stem from three sources:
 - 1. Increased Economic Activity
 - A total of \$126,547 in additional economic activity
 - 2. An increase of quality of life equivalent to \$335,700.
 - 3. A 31% increase in employment, producing a lifetime discounted value of \$1.21 million in additional earnings
- Fiscally, the program provides a positive net benefit
 - The initial outlay of \$75,000 produces direct cost savings and additional revenue to the State of Wisconsin totaling \$163,787
 - This implies a total positive net benefit to the State of \$88,787
- The program had significant effects on individual's:
 - Feelings of safety, for themselves, their children, and their families
 - Financial independence
 - Decreased use of government assistance programs

Our analysis highlights the strong impact that such a program has on victims of domestic violence, and how these benefits provide significant further economic value to the larger community. Indeed, the project provided a full impact of 20 times the initial \$75,000 investment, and proved to be cost beneficial for the government. These results provide strong support for further investments in similar projects and programs.

1 Introduction

The mission of the Christine Ann Center is to

Empower individuals and families through education, safety and support, and lead our community to reduce the incidents and the effects of domestic abuse and dating violence.

Recently, to promote their mission, the Center received a \$75,000 grant to provide legal representation for victims in domestic violence cases. This program is referred to as the Domestic Violence Legal Assistance Project, or DVLA project. In this report, we analyze and quantify the range of benefits of the program. Specifically, we examine the impact of the funding in the lives of those who received aide, as well as how the aide affected the Center's community. The analysis consists of two primary components: (i) Impact of individuals (and families) and (ii) economic and fiscal impact.

To analyze the program, the Center provided an initial survey to clients, and a post survey of clients who received aide through the grant. We used the survey results to analyze the effects of the grant. As a summary of the impact on individuals, discussed in Section 2, we find the clients' concern about their own, and their families, safety is greatly reduced after receiving support. Furthermore, they are more financially independent. This is seen by an increase in their employment, a 31% increase, a 14% increase in having their own bank account, and a 50% response rate stating their financial status has improved.

We detail the economic and fiscal impacts in Sections 3 and 4. In terms of the economic impact, we examine the immediate impact of the \$75,000 on total economic activity in the Fox Cities Regional Economy. All told, this initial investment produced a total of over \$126,000 in total economic activity in the local economy. In addition to this, we also quantify the impact of the DVLA project on individual quality of life and on employment gains among program participants. Quality of life improvements have a dollar equivalent estimated at \$355,700, while the 30 year discounted value of the employment gains among program participants is \$1.21 million. Given the

\$75,000 grant, we find a 1 year Return on Investment (ROI) of 4.10 and a 30 year ROI of 20.33.

Fiscally, we find the DVLA project provides the State of Wisconsin with a net overall benefit. Taking into account the additional tax revenue provided by the increased economic activity and employment gains, combined with the reduction in usage of government programs among program participants, the DVLA project provides total fiscal benefits to the State of \$163,787. This implies a **positive net cost** to the State of Wisconsin (net of the initial \$75,000) of \$88,787.

Thus, the economic and fiscal impacts are indeed substantial. It is important, however, to not lose focus of the unquantifiable impacts, as the following quotes from the surveys indicate:

I would have had no way to protect myself or my children w/o the program...Thank you! I am at a loss of words to express my gratitude!

or in explaining what a client appreciated most about the program, we see

The feeling of relief that I felt when speaking to my lawyer that everything would be taken care of by him. I was so impressed with how much he did to help me regardless of my financial status at home. He always reassured me the program is here to help me: not to worry.

The remaining sections describe each benefit in detail.

2 Impact on individuals

To justify funding, we provide the economic and fiscal impact from the grant funding the DVLA project in Sections 3 and 4. Before quantitatively analyzing the effects of the project, it is again useful to note the impact it has on individuals' lives. For instance, a client noted in their post survey:

Please continue to bless others in need + keep this program around as long as you can. It is life changing! God blass you all! To quantify the many similar responses from clients, we analyze the program's impact on its clients' feelings of safety, its impact on their children, and its impact individuals' ability to become financial independent. To analyze the areas quantitatively, we rely on the initial and post surveys of the clients.

In terms of the surveys used, the initial survey given to participants totaled 58 with 50 respondents receiving services. Following the program, a post survey was administered with 32 respondents, or a 64% response rate of those participating. The questions for each survey are available upon request. It is important to note when interpreting the results below, there always exist some issues we are unable to control for, such as selection effects for example.

2.1 Individual & family safety

The impact of the program on participant safety is likely best measured by the differences in the initial and post surveys. The key comparisons are question 7 on the initial survey to question 3 on the post survey, and question 8 on the initial survey to question 4 on the post survey. Each question has multiple parts. As a result, we provide the difference in means of each during the initial and post surveys in Tables 1 and 2.

As can be see in Table 1, the respondents concern for their safety decreased significantly between the time of the initial survey and the time of the post survey. On a five point scale, concern over personal and family safety decreased by roughly 20%. Using a difference in means test with a small and unknown variance, we find the difference to be statistically significant. In other words, we can conclude with confidence that clients' feelings related to safety increased between the time of the initial survey to the time of the post survey.

Table 2 provides a deeper understanding of the clients' feeling of safety in particular situations. In the first three questions, we can say with significant confidence the respondents' feeling of safety increased between the initial and post survey. Specifically, the respondents generally felt safer in their residence, home alone at night, and walking alone in their local area at night. Feeling safe while waiting for public transport at night improved, but we cannot say with confidence the average

	Initial Survey	Post Survey	Post - Initial Surveys	Probability of No Change
Yourself	3.42	2.28	-1.14	0.001
	(1.55)	(1.44)		
Your Children	3.71	2.32	-1.38	0
	(1.49)	(1.49)		
Other family members	2.38	1.72	-0.65	0.051
	(1.6)	(1.22)		

Table 1: How concerned are you about your personal safety for

Note: Answers range from 1 (not at all concerned) to 5 (very concerned). Standard deviations are in parenthesis.

response is statistically different between the initial and post survey. The final two questions are provided for completeness as the are included in the survey questions. Since they do not allude to a time frame, however, they are not a good judge of how factors have changed.

2.2 Financial independence

Beyond safety, we also measure their growth toward agency by comparing their reliance on government programs in the initial survey relative to the post survey. The key comparisons are question 12 on the initial survey to question 8 on the post survey, and question 13 on the initial survey to question 9 on the post survey. As a result, we provide the difference in means of each in Table 3.

Finally, we also examine the clients' financial independence as measured by (i) whether they have a bank account, (ii) whether the account was under the client's control, (iii) whether the client was more likely to be employed in the post survey, and (iv) whether the clients feel their financial situation has improved over the last six months. For the first three measures, we compare questions 9, 11, 12 and 13 in the initial survey to questions 5, 7, 8, and 9 in the post survey, respectively.

Table 4 provides the clients' participation in government programs. Overall, we see a decline between the initial survey and post surveys. This is true for the first general question, as well as when aggregating across the 5 programs discussed in the survey. The difference is imprecisely measured, however, as can be seen in the relatively high probability of no change for each component. Overall, this result does suggests reduced reliance on government programs, an effect that

	Initial Survey	Post Survey	Post - Initial Surveys	Probability of No Change
I generally feel	3.46	4.25	0.79	0.001
safe in my residence.	(1.22)	(0.9)		
I feel safe when	3.23	3.97	0.74	0.003
home alone at night.	(1.18)	(1.05)		
I feel safe walking alone	2.91	3.39	0.48	0.076
in my local area at night.	(1.25)	(1.16)		
I feel safe waiting for public	2.71	2.97	0.26	0.331
transport alone at night.	(1.1)	(1.19)		
I have been in a situation where	3.91	3.84	-0.07	0.79
my safety was compromised.	(1.12)	(1.14)		
I have experienced anxiety or	4.02	3.97	-0.05	0.842
fear for my personal safety.	(1.14)	(1.09)		

Table 2: Check the option that corresponds to your current feelings about each of the statements.

Note: Answers range from 1 (strongly disagree) to 5 (strongly agree). Standard deviations are in parenthesis.

			Post - Initial	Probability of
	Initial Survey	Post Survey	Surveys	No Change
Are you currently enrolled in a	0.64	0.53	-0.11	0.346
government benefits program?	(0.49)	(0.51)		
Specific Programs				
Food Assistance	0.47	0.44	-0.03	0.803
	(0.5)	(0.5)		
Medicaid	0.45	0.41	-0.04	0.706
	(0.5)	(0.5)		
Housing Assistance	0.12	0.16	0.04	0.653
	(0.33)	(0.37)		
Child Support	0.33	0.22	-0.11	0.268
	(0.47)	(0.42)		
Disability	0.05	0.06	0.01	0.839
	(0.22)	(0.25)		
Total	1.41	1.28	-0.13	0.665
	(1.34)	(1.4)		

Table 3: Enrollment in Government Benefit Programs

Note: Answers are either 0, not enrolled, or 1, enrolled. Standard deviations are in parenthesis.

			Post - Initial	Probability of
	Initial Survey	Post Survey	Surveys	No Change
Bank Account	0.93	0.94	0.01	0.903
	(0.26)	(0.25)		
Personal bank account	0.86	1	0.14	0.007
given bank account	(0.35)	(0)		
Employed	0.51	0.67	0.16	0.068
	(0.4)	(0.39)		

 Table 4: Financial Independence

Note: For the bank account questions, answers are either 0, do not have an account, or 1, have an account. For the employment question, if employed full time, then it is a 1, employed part-time is a 1/2, and not employed is a zero. Standard deviations are in parenthesis.

we further quantify below in Section 4.

To measure overall financial independence, rather than focusing exclusively on short-term government assistance needs, which can promote long-term financial independence (although not measured in the data available), we focus on more direct measures of financial independence in Table 4. We find the proportion with bank accounts increases slightly. We also find important, and statistically significant, improvements in clients having control of their banking needs, as well in employment. In particular, employment increases by 31%.

The final empirical result that should be articulated is how clients respond to the post survey question regarding their financial situation in the past 6 months (question 14). The question is on a scale of 1 to 6 where 1 is much worse, 3 is about the same, and 6 is much better. 50% of respondents reported improvements and 85% answered their financial status stayed the same or improved. Therefore, we see very positive indications of financial improvement on average. However, these results are tempered by the fact that 15% saw their financial status degrade with one of the 32 respondents (3%) reporting their financial status being "much worse." Aggregately, we can say with confidence the respondents financial status improved between the initial and post surveys.

3 Economic impact

The total impact of a program such as the DVLA project has many facets. Perhaps most straightforward is the additional economic activity generated by the injection of \$75,000 into the local economy. When the Christine Anne Center pays lawyers \$75,000 for their services, a multiplier effect occurs throughout our local economy. The law firm requires services and supplies from many other parts of our economy, and they use the \$75,000 to pay their salaries, as well as these additional services and supplies. For example, the law firm may purchase additional paper as part of their legal services to the program participants. When they pay for the paper, this generates additional income/revenue for the paper supplier. This paper supplier in turn purchases additional services and materials, and the process continues in this manner. Of course, some of the additional services/supplies are purchased via companies not in the Fox Cities Regional economy, implying that some of this additional economic activity "leaks" out of the regional economy. In the end, however, the additional \$75,000 in spending generated by the Christine Annne project generates a *multiple* of the initial investment in total additional activity.

Table 5 summarizes the economic impact from the program on the 21 major industries. The initial \$75,000 in funding produced an increase of \$126,548 in total additional economic activity to the Fox Cities Regional Economy.¹ This represents the total impact on economic activity. We can further break this impact down into several components. As a result of this additional economic activity, firms in the area increase their payments to workers. For example, if the law firm purchases additional supplies from a local Business supply store, this store has to potentially increase the number of hours worked by certain employees. This increase in wage payments is reflected in Table 5 in the "Labor Income" column. Thus, wages (Labor income) increased by a total of \$44,880 from the initial \$75,000 in program spending. Of course, in addition to labor income, the additional economic activity also generates increased profits for those firms affected. The column labeled "Total Income" incorporates the total increase in income, both wages and profits,

¹The Fox Cities Regional economy is defined as the area from Green Bay to Fond du Lac, incorporating Brown, Calumet, Fond du Lac, Outagamie, and Winnebago counties.

Industry	Total Economic Activity	Labor Income	Employment	Total Income
Agriculture, forestry, fishing, and hunting	510	97.5	0.0032925	195
Mining	37.5	7.5	0.000105	22.5
Utilities*	900	120	0.0010875	480
Construction	382.5	127.5	0.00228	202.5
Durable goods manufacturing	1447.5	270	0.0053325	562.5
Nondurable goods manufacturing	3667.5	585	0.0109725	1252.5
Wholesale trade	2880	802.5	0.012795	1950
Retail trade	4335	1440	0.056355	2887.5
Transportation and warehousing*	2107.5	637.5	0.0142125	1080
Information	2797.5	540	0.0095325	1620
Finance and insurance	6142.5	1365	0.0240525	3390
Real estate and rental and leasing	4132.5	652.5	0.030465	2835
Professional, scientific, and technical services	80407.5	31732.5	0.556035	50407.5
Management of companies and enterprises	1695	555	0.0059175	1020
Administrative and waste management services	3562.5	1425	0.0535425	2370
Educational services	502.5	217.5	0.00717	307.5
Health care and social assistance	5640	2392.5	0.05079	3375
Arts, entertainment, and recreation	540	225	0.010755	307.5
Accommodation	615	165	0.00693	390
Food services and drinking places	2040	630	0.0366225	1072.5
Other services*	2205	832.5	0.02556	1222.5
Households	-	60	0.0054225	60
Total	\$126,548	\$44,880	1	\$77,010

Table 5: Economic Impact-Project Spending

Note: The table was constructed using an input-output analysis of the Fox Cities Regional Economy utilizing RIMSII input-output multipliers calculated with data obtained from the Bureau of Economic Analysis (www.bea.gov).

generated in the Fox Cities Regional economy as a result of the DVLA project. Impressively, the initial \$75,000 generated a total of \$77,010 of additional income for the local economy.

Finally, all of this additional economic activity creates jobs within our economy. In total, 1 additional job was created in the local economy as a result of the initial \$75,000 investment. While this may appear small, it is actually quite significant given the relatively small dollar amount invested upfront. To help gain perspective, consider the income tax revenue stream generated by this additional job. Using data on the average tax liability of Wisconsin income tax filers, the average tax collection for an employed individual is around \$2,500.² Thus, in the course of a typical working life (30 years), the income tax revenue stream from this additional job created pays for the entire upfront investment.

²See https://www.revenue.wi.gov/DORReports/15intxst.pdf

While Table 5 shows the impact of the DVLA project on the Fox Cities Regional Economy, it does not address the broader impact that it has on the lives of the participants. In Section 2 we discuss how the DVLA project improves many different outcomes affecting participants quality of life. To place a dollar number on these improvements to quality of life, we use estimates provided in Logan, Walker, and Hoyt (2012) and Logan, Walker, Hoyt, and Faragher (2009). Domestic violence is well documented to have severe negative impacts on the quality of life of victims. It is associated with increased stress, reduced financial independence, and and many other mental and physical health issues. While placing a dollar value on these dimensions of quality of life does not capture their full effect, they do allow us to quantify some of the benefits of a program such as the DVLA project.

In a similar exercise, Logan, Walker, and Hoyt (2012) and Logan, Walker, Hoyt, and Faragher (2009) estimate a quality of life "cost" before victims receive a protective order equivalent to \$13,428 per person. To quantify the increase in quality of life attributable to the DVLA project we use the increase in the general feeling of safety from the first row Table 1. We use this measure as it represents the most precisely measured estimate that we found captured an overall level of anxiety associated with domestic violence. Using this measure implies a 33% increase in the quality of life, implying a "savings" of \$4,475 per individual in the aforementioned quality of life costs of stress associated with domestic violence. This implies a total quality of life gain of \$128,785 among all participants. It is also worth noting that this only represents a one year quality of life gain. The full quality of life gains certainly exceed this estimate, but we erred on the side of caution, focusing on only aspects we can precisely measure and quantify.

Finally, the gains in employment represent another important aspect of the DVLA project for quantifying the economic impact. From Table 4 we showed that participants in the DVLA project had a 31% increase in employment. To quantify the economic value of these gains in employment, we estimated a job with an hourly compensation rate of \$12.77, or \$22,342.54 per year, assuming a 35 hour work week for 50 weeks a year. The hourly compensation rate calculation is based on a wage regression accounting for an individual's age, gender, whether or not they are white,

whether they recently found a new job, and whether they graduated from High School. We also include benefits, assuming 30% of hourly compensation come in the form of benefits. Given that individuals separate (change from employed to unemployed) from their jobs at a rate of 12% per year, and using a 5% discount rate, the discounted value of the future to compensation generated from the clients who found jobs is \$152,207. As 16% of the clients found jobs, and there were 50 clients, then the clients' increased compensation on an aggregate basis was \$1.217 mil, or \$24,353 per participant. This calculation is made over a 30 year working period.

 Source
 1 year
 30 year

 Economic Activity
 \$126,548

 Quality of Life
 \$128,785

 Increased Employment
 \$178,500
 \$1,217,656

 Total 1 year gain
 \$307,285

 Total 30 year gain
 \$1,524,697

Table 6: 1-year and 30-year Economic Gains

Note: The Total 30-year gain includes the 1-year gain.

Table 6 summarizes the 1 and 30 year economic impact of the DVLA project. These imply a 1-year Return on Investment (ROI) of 4.10 and a 30-year ROI of 20.33.

4 Fiscal impact

Table 7 displays the fiscal impact of the initial \$75,000 investment in the DVLA project. This table shows the benefits to the State of Wisconsin via either a reduction in government spending (labeled 'Savings') or an increase in tax revenues (labeled 'Additional Revenue'). Recall from Section 3 in Table 5, the DVLA project generated a total of \$126,548 in additional economic activity, or total spending. This additional spending, which occurs in Wisconsin (Fox Cities specifically) creates additional sales tax revenue for the state. Using the current 5% sales tax rate, the first row of Table 7 shows this amounts to \$6,327 in additional tax revenue. In addition, from Table 5 the initial \$75,000 investment in the DVLA project creates an additional \$77,010 in Total Income (generated in Wisconsin). Using the current average WI income tax rate (total income tax revenue/total taxable

income), this produces the income tax revenue listed in the second row of Table 5 of \$3,404.

Source	Savings	Additional Revenue	Total
Sales Tax	-	\$6,327	\$6,327
Income Tax from Economic Activity	-	\$3,404	\$3,404
Government Benefit Programs	\$51,549	-	\$51,549
Income Tax from New Employment	-	\$53,810	\$53,810
Sales Tax from New Employment	-	\$48,696	\$48,696
Total	-	-	\$163,787

 Table 7: First Year Cost Savings and Additional Revenue Generation

Fiscally, in addition to the aforementioned increased tax revenue, their also exist savings from reduced use of government welfare programs. In Table 3 we show the impact of the DVLA project on participation in government programs. Given this reduction, 64% to 53% usage, combined with average spending per-participant in Wisconsin, this implies a total reduction of \$51,549 in government program spending as a result of the DVLA project.³

The first three rows of Table 7 summarize the "immediate" fiscal impact of the DVLA project. In addition to this immediate fiscal impact, recall from Section 2 that the DVLA project resulted in increased employment among program participants. Using the income and consumption generated by this income stream, we calculated further tax revenue gains for the State of Wisconsin. Sales tax revenue is calculated at the current 5% rate, assuming that 80% of income is consumption.⁴ The income tax revenue is calculated similarly to the estimates above.

In total, the State of Wisconsin gains a total of \$163,787 in additional revenue and expenditure savings. This implies a net benefit (net of the initial \$75,000) of \$88,787. That is, the State of Wisconsin actually gains revenue from the initial \$75,000.

³The data on average spending per-participant were taken from the Medicaid and CHIP Payment Access Commission, www.macpac.gov, and the U.S. Department of Agriculture Food and Nutrition Service, www.fns.usda.gov.

⁴This represents a conservative estimate given the relatively low income which typically results in a ratio of consumption to income close to 1. We used a lower estimate to account for any "leakages" in consumption from Wisconsin.

Conclusion

The DVLA project provided legal representation to victims of domestic abuse. We analyzed the economic, fiscal, and individual level impact of the \$75,000 grant. Our findings show a large impact, producing a ROI of 20.33 over a 30 year period, and a 1 year ROI of 4.10. The program produced noticeable additional economic activity in the Fox Cities Regional Economy, increased employment among program participants by 31% and decreased reliance on government programs. More importantly, the program had very strong effects on individual's quality of life. Feelings of safety were significantly higher after participation, as was financial independence. In total, the additional tax revenue and decreased usage of government programs makes the program a **net revenue gain** for the State of Wisconsin of nearly \$90,000. Our results show the strong impact programs such as DVLA have not only on local economies, but more importantly on the individual's affected by domestic violence. These results provide strong support for future investments in similar projects.

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