



# Ottawa County Cognitive Behavioral Therapy (CBT)

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Evaluation  
October 2009



## **2009 County Board of Commissioners**

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## I. INTRODUCTION

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One of the goals included in the Ottawa County Board of Commissioners' Strategic Plan is *to continually improve the County's organization and services through the implementation of an outcome-based performance measurement system*. The Planning and Performance Improvement Department assists the Board and Administration in achieving this goal by completing outcome-based evaluations for County programs.

The purpose of this evaluation report is to verify whether the Cognitive Behavioral Therapy (CBT) Program is administered efficiently and to determine whether beneficial, cost-effective outcomes are being achieved. This is accomplished by analyzing administrative and operational program components, as well as completion rates, recidivism rates, and cost.

## II. BACKGROUND

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The CBT Program is designed to teach probationers and parolees a set of cognitive (i.e. thinking) techniques that promote better decision-making in order to eliminate criminal behavioral patterns. The Program is a 12-week course that is modeled after the Commitment to Change Series written by Dr. Stanton E. Samenow, Ph.D (**Attachment A**). CBT was originally implemented in 2004 as part of the County's Gatekeeper initiative, which provided in-jail and post-jail programs for inmates and probationers.

Although a 2006 Evaluation of the Gatekeeper Program revealed administrative shortcomings, the CBT Program demonstrated potential benefits to offenders, specifically in a post-jail setting. Therefore, one of the recommendations from the 2006 Evaluation was that post-jail CBT instruction remains available to probationers if several improvements and modifications were made to the program. One of the recommended modifications was that the CBT Program be privatized to lower cost and improve the administration of the program.

After the improvements and modifications were implemented, a 2008 Evaluation of the revised CBT Program, which had been implemented in the Holland and Grand Haven District Courts, revealed that the privatization of instructional services resulted in a \$53,508 annual savings for the County. The 2008 Program had also achieved a 68.3% completion rate (the Gatekeeper completion rate was less than 50%) and was operating at 100% capacity.

These operational improvements that resulted from privatizing the Program in 2006 resulted in a recommendation to continue the CBT contract with Catholic Charities (formerly Catholic Social Services) and to conduct an outcome-based evaluation in 2009 to determine whether the Program is cost-effective. This evaluation report will determine whether the successful outcomes were achieved.

### III. EVALUATION

The performance measures for the CBT Program were developed by the Planning and Performance Improvement Department in collaboration with program administrators (**Attachment B – Strategic Outline**). The selected measures include, but are not limited to, the following: operating capacity, enrollment rates, completion rates, recidivism rates, and cost-effectiveness. This report also reviews the demographic characteristics of participants as well as a summary of self-reported feedback.

#### A. Operating Capacity and Enrollment Rates

Program operating capacity and enrollment rates are important measures for program administrators and County policy makers to review because they have a direct correlation to the program’s cost-effectiveness. Presently, five CBT groups<sup>1</sup> are operational with each group having a maximum enrollment of 14 participants. Combined, all five groups have a maximum capacity of 280<sup>2</sup> participants per year.

In order to determine if the program is operating at 100% capacity, twenty-one months of enrollment data were analyzed (i.e. February, 2007<sup>3</sup> through October, 2008). A change in program facilitators occurred in November, 2008 which temporarily interrupted instructional services. As a result, data collected after October, 2008 were not included in this analysis since they would have artificially deflated the program’s operating capacity.

Utilizing 453 participants who were enrolled in the CBT Program between February, 2007 and October, 2008, it was calculated that the program is operating at 93% capacity. The program had been operating at 100% during its first year of implementation as determined in a 2008 Evaluation.

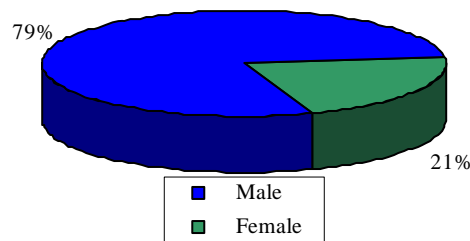
#### B. Demographic Characteristics

The typical demographic profile of a CBT Program participant is a 25 year old, single, white male who is employed full-time and has an alcohol-related conviction. The following tables (**Tables 1-11**) provide an overview of the demographic characteristics of 542 total participants enrolled between September 11, 2006 and January, 5, 2009. These characteristics<sup>4</sup> include: *Gender, Age, Ethnicity, Marital Status, Employment, and Criminal History*.

**Table 1**

Gender	
	CBT Participants
Male	78.8% (427)
Female	21.2% (115)
<b>Total</b>	<b>100.0% (542)</b>

Source: Probation and Community Corrections Department



<sup>1</sup> Three CBT groups are currently conducted in Holland and two groups are conducted in Grand Haven (one Holland group is an afternoon session; the remaining groups are evening sessions).  
<sup>2</sup> Calculated by multiplying the maximum number of participants per group (14) by the total number of groups that can be completed per year (20).  
<sup>3</sup> The CBT Program had just been implemented in September, 2006; therefore the first five months of data were not used to calculate operation capacity.  
<sup>4</sup> The characteristics of CBT participants are representative of the general probation population as determined in a 2007 Evaluation of Traditional Probation and Intensive Supervision Probation.

**Table 2**

**Age (at arrest)**

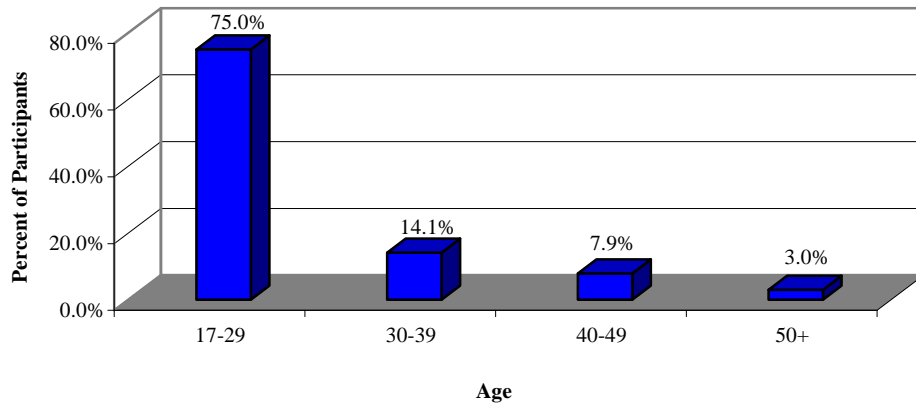
**CBT Participants**

17-29	75.0% (404)
30-39	14.1% (76)
40-49	7.9% (43)
50+	3.0% (16)
<b>Total<sup>1</sup></b>	<b>100.0% (539)</b>

**Average Age** **25.2**

Source: Probation and Community Corrections Department

1. Age at arrest was not available for 3 CBT parole participants



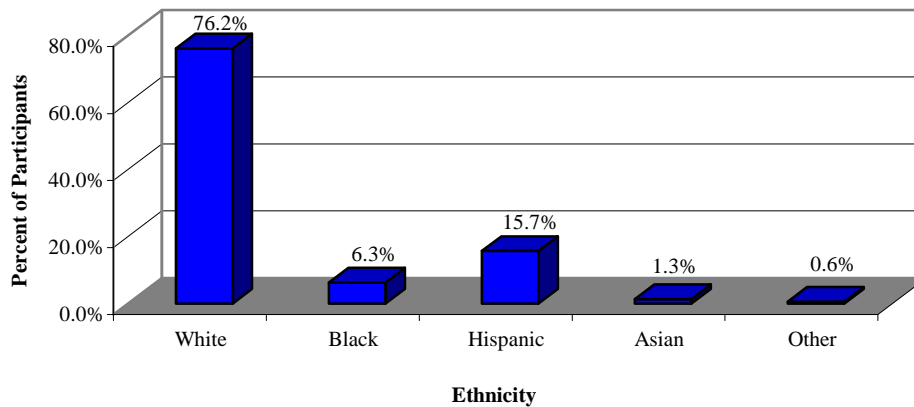
**Table 3**

**Ethnicity**

**CBT Participants**

White	76.1% (413)
Black	6.3% (34)
Hispanic	15.7% (85)
Asian	1.3% (7)
Other	0.6% (3)
<b>Total</b>	<b>100.0% (542)</b>

Source: Probation and Community Corrections Department



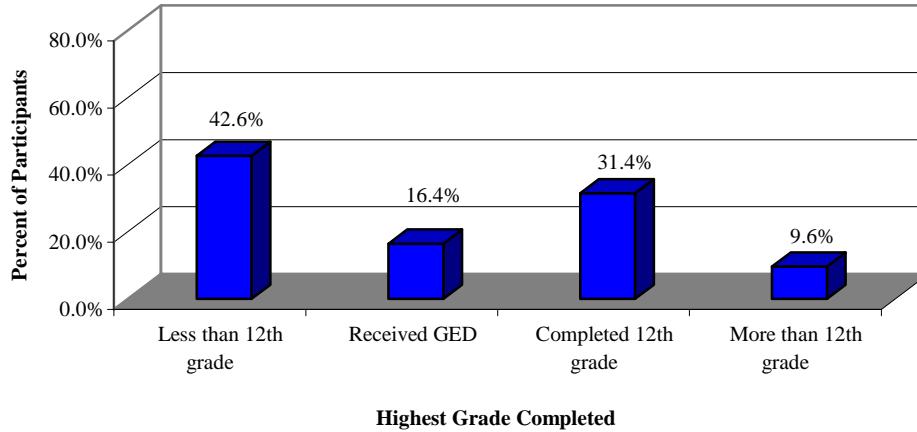
**Table 4**

**Highest Grade Completed (at program enrollment)**

	<b>CBT Participants</b>
Less than 12 <sup>th</sup> grade	42.6% (216)
Received GED	16.4% (83)
Completed 12 <sup>th</sup> grade	31.4% (159)
More than 12 <sup>th</sup> grade	9.6% (49)
<b>Total<sup>1</sup></b>	<b>100.0% (507)</b>

Source: Probation and Community Corrections Department

1. Educational attainment was not available for 35 CBT participants



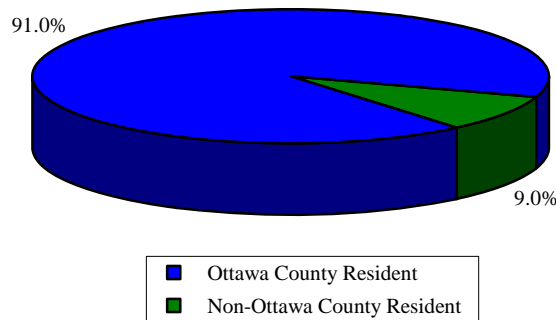
**Table 5**

**County of Residence (at program enrollment)**

	<b>CBT Participants</b>
Ottawa County Resident	91.0% (493) <sup>1</sup>
Non-Ottawa County Resident	9.0% (49)
<b>Total</b>	<b>100.0% (542)</b>

Source: Probation and Community Corrections Department

1. Participants who reside in the portion of the City of Holland within Allegan County were categorized as Ottawa County resident



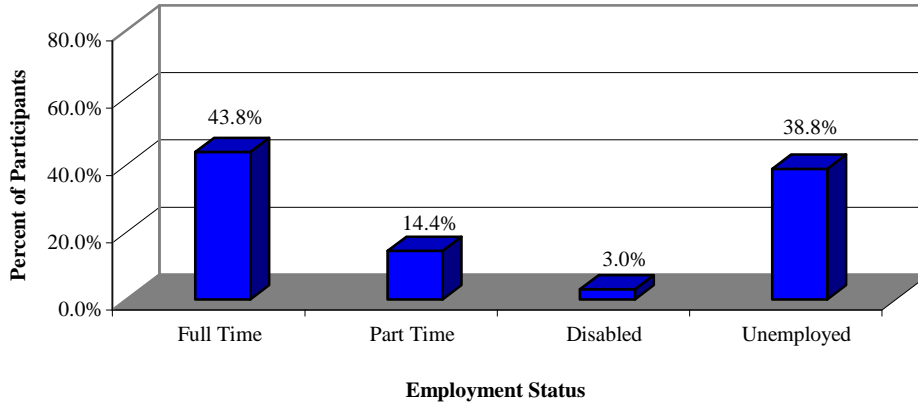
**Table 6**

**Employment Status (at program enrollment)**

	<b>CBT Participants</b>
Full Time	43.8% (237)
Part Time	14.4% (78)
Disabled	3.0% (16)
Unemployed	38.8% (210)
<b>Total<sup>1</sup></b>	<b>100.0% (541)</b>

Source: Probation and Community Corrections Department

1. Employment status was not available for 1 CBT participant



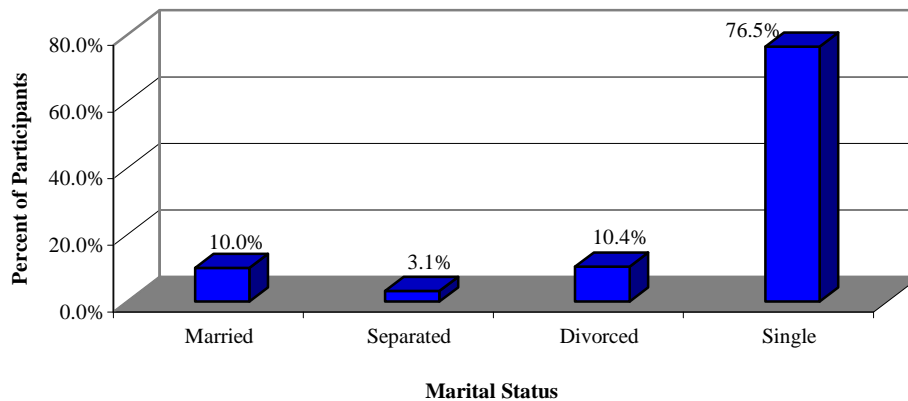
**Table 7**

**Marital Status (at program enrollment)**

	<b>CBT Participants</b>
Married	10.0% (54)
Separated	3.1% (17)
Divorced	10.4% (56)
Single	76.5% (414)
<b>Total<sup>1</sup></b>	<b>100.0% (541)</b>

Source: Probation and Community Corrections Department

1. Marital status was not available for 1 CBT participant



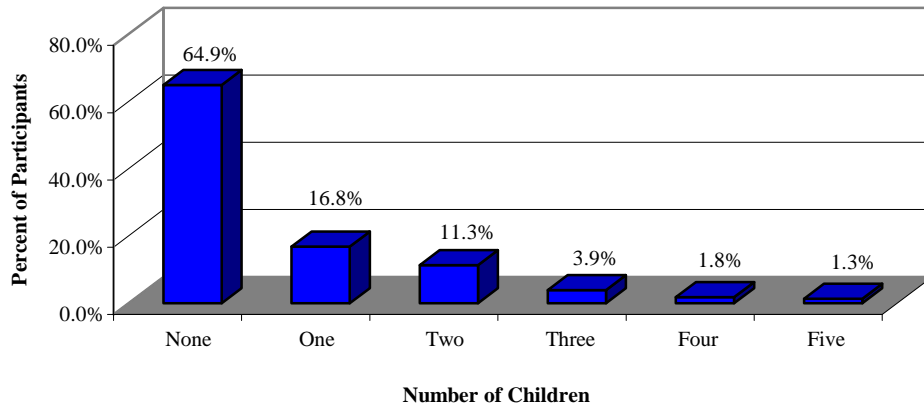


**Table 8**

**Number of Children (at program enrollment)**

	<b>CBT Participants</b>
No Children	64.9% (352)
One Child	16.8% (91)
Two Children	11.3% (61)
Three Children	3.9% (21)
Four Children	1.8% (10)
Five Children	1.3% (7)
<b>Total</b>	<b>100.0% (542)</b>

Source: Probation and Community Corrections Department



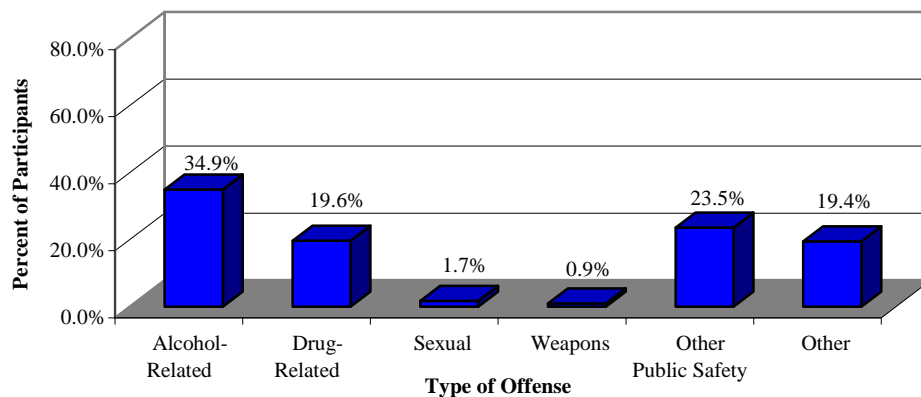
**Table 9**

**Offense Resulting in Program Enrollment**

	<b>CBT Participants</b>
Alcohol-Related	34.9% (189)
Drug-Related	19.6% (106)
Sexual Offense	1.7% (9)
Weapons Offense	0.9% (5)
Other Public Safety Offense <sup>1</sup>	23.5% (127)
Other Offense (Non-Public Safety) <sup>2</sup>	19.4% (105)
<b>Total<sup>3</sup></b>	<b>100.0% (541)</b>

Source: Probation and Community Corrections Department

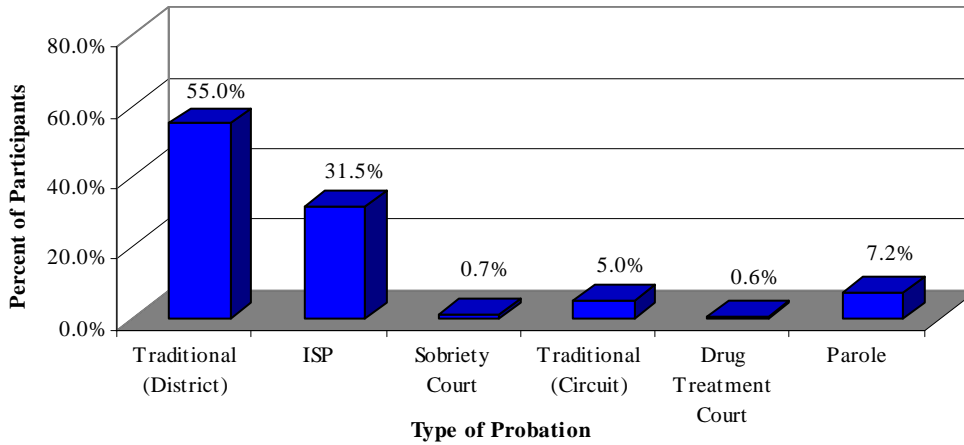
1. Other public safety offenses included: assault; domestic violence; MDOP
2. Other offenses included: disturbing the peace; DWLS; retail fraud; larceny
3. Initial offense was not available for 1 CBT parole participant



**Table 10**

Type of Probation		CBT Participants
<b>District Court</b>		
Traditional Probation		55.0% (298)
Intensive Supervision Probation (ISP)		31.5% (171)
Sobriety Court		0.7% (4)
<b>Total (District Court)</b>		<b>87.2% (473)</b>
<b>Circuit Court</b>		
Traditional Probation		5.0% (27)
Drug Treatment Court		0.6% (3)
Parole		7.2% (39)
<b>Total (Circuit Court)</b>		<b>12.8% (69)</b>
<b>Total</b>		<b>100.0% (542)</b>

Source: Probation and Community Corrections Department

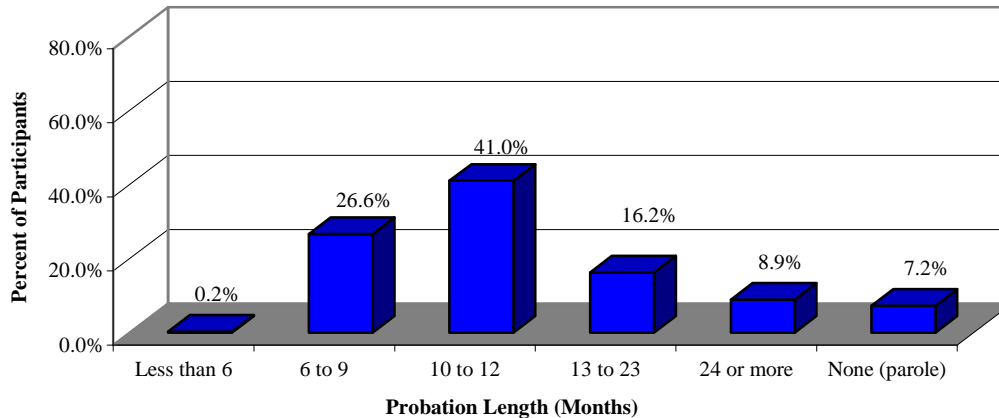


**Table 11**

Length of Probation Sentence		CBT Participants
Less than 6 months		0.2% (1)
6 – 9 months		26.5% (144)
10 – 12 months		41.0% (222)
13 – 23 months		16.2% (88)
24 months or more		8.9% (48)
Parole (no probation) <sup>1</sup>		7.2% (39)
<b>Total</b>		<b>100.0% (542)</b>

Source: Probation and Community Corrections Department

1. The number of months that parolees were sentenced to parole was not available. However, most parolees serve between 1-2 years on parole; a parole sentence of less than 6 months is rare.



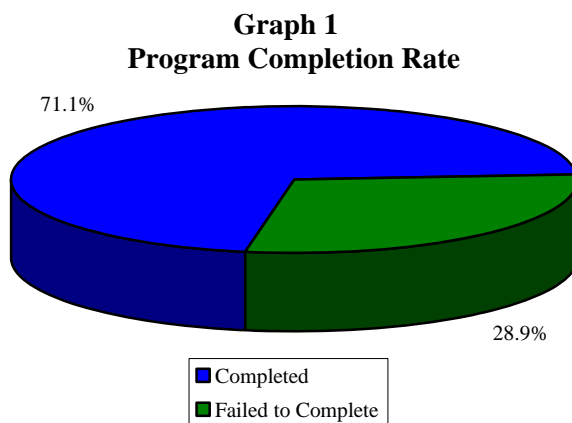
### C. Completion Rates

Completion rates are another important measure for program administrators and County policy makers to review because the rates can have a significant impact on a program's cost-effectiveness (e.g. high completion rates contribute to more cost-effective programming and greater comprehension of program material). Completion rates also provide an indication of whether a program is well suited for the types of individuals who are being enrolled.

The completion rate for the CBT Program is calculated from the records of 515 (95.0%) of the 542 total participants who enrolled in the program as of January 5, 2009. Because 27 (5%) of the 542 participants were enrolled in the program multiple times<sup>1</sup>, these participants were completely removed from the calculation to avoid double-counting them.

Of the 515 participants, 366 (71.1%) completed<sup>2</sup> the program and 149 (28.9%) failed to complete the program (**Graph 1**). In order to complete the CBT Program, a participant is required to attend a two-hour class each week for 12-weeks. Participants who miss more than 2 classes are automatically removed from the program and typically receive a probation violation. These individuals are categorized as someone who "fails to complete" the program.

The CBT completion rate (71.1%) is higher than the rate (68.3%) that was calculated as part of the 2008 Administrative Evaluation of the CBT Program. It is also higher than the CBT completion rate that was administered under the former Gatekeeper Program (50%).



The 2008 Evaluation of the CBT Program revealed that participants who were convicted of a drug or sexual offense had the lowest completion rate (50%) of all participants. As part of this evaluation, an assessment was conducted to determine if the completion rates of drug and sexual offenders had improved since 2008. This assessment confirmed that program completion rates for participants convicted of a drug offense improved to 65% and the completion rate for sexual offenders improved to 78% (**Table 12, Page 10**). With the exception of all but one category (i.e. alcohol-related), each type of offender had an increase in completion rate since the 2008 Evaluation.

<sup>1</sup> One (4%) of the 27 people who enrolled multiple times successfully completed the program twice, 8 (29%) failed the program twice, 17 (63%) failed once but completed the program on their second attempt, and one (4%) failed twice but successfully completed the program on their third attempt.

**Table 12**

<b>Completion Rate Comparison by Type of Criminal Offense</b>			
<b>Type of Offense</b>	<b>2008 Administrative Evaluation (Completion Rate)</b>	<b>2009 Outcome Evaluation (Completion Rate)</b>	<b>Percent Change</b>
Alcohol-Related	84.6%	79.9%	-5.6%
Drug-Related	50.0%	65.0%	30.0%
Sexual Offense	50.0%	77.8%	55.6%
Weapons Offense	---	80.0%	---
Other Public Safety Offense	58.1%	63.4%	9.1%
Other Offense (Non-Public Safety)	65.7%	69.5%	5.8%

Source: Probation and Community Corrections Department

### ***Successful Program Completion - Demographic Variables That Exhibit a Correlation***

An analysis of completion rates was prepared based on participant demographics to determine whether or not certain offender characteristic exhibited a correlation to program completion.

The demographic variables that were analyzed include the following: age, gender, ethnicity, educational attainment, criminal history, employment, marital status, number of dependant children, type of probation (e.g. Traditional Probation, ISP), length of probation sentence, location of court sentencing (e.g. Holland or Grand Haven), and location and time of CBT class.

The existence of a possible correlation was determined using a Chi-Square<sup>1</sup> or a Two-Independent Samples test<sup>2</sup> (i.e. t-test). A “p-value” of less than .05 signifies that a significant statistical correlation may exist. The tests indicate that two variables (*Educational Attainment and Type of Criminal Charge*) had a statistical correlation to program completion. These variables, as well as the p-value results, are provided in **Table 13**.

**Table 13**

<b>Correlation Between Participant Variables and Program Completion</b>		
<b>Variable</b>	<b>P value</b>	<b>Correlation to Program Completion</b>
<b>Educational Attainment</b> (n=483 <sup>1</sup> )	<b>p = 0.015</b>	Participants who completed high school or attended some college had the highest completion rates (78.4% and 78.7%, respectively).
<b>Type of Criminal Charge</b> (n=514 <sup>2</sup> )	<b>p = 0.028</b>	Participants who were convicted of an alcohol, sexual, or weapons-related crime had the highest completion rates (79.9%, 77.8% and 80.0%, respectively).

Source: Probation and Community Corrections Department

1. Educational attainment data were not available for 32 of the 515 participants.
2. Type of Criminal Charge was not available for 1 CBT participant.

A complete breakdown of these data, as well as the additional demographic characteristics which did not have a statistical correlation to program completion, are provided in the Appendix (**Attachment C**).

<sup>1</sup> A statistical method to test whether two (or more) categorical variables (e.g. male or female) are related.

<sup>2</sup> A statistical method to test whether two continuous variables (e.g. average age) are related.

## D. Recidivism

One of the most common variables used to measure the success of criminal justice programs is recidivism<sup>1</sup>. This is the rate at which participants commit crimes after being released from a program or incarceration. A program's recidivism rate may then be compared with the recidivism rates of other programs in order to determine which program is more effective.

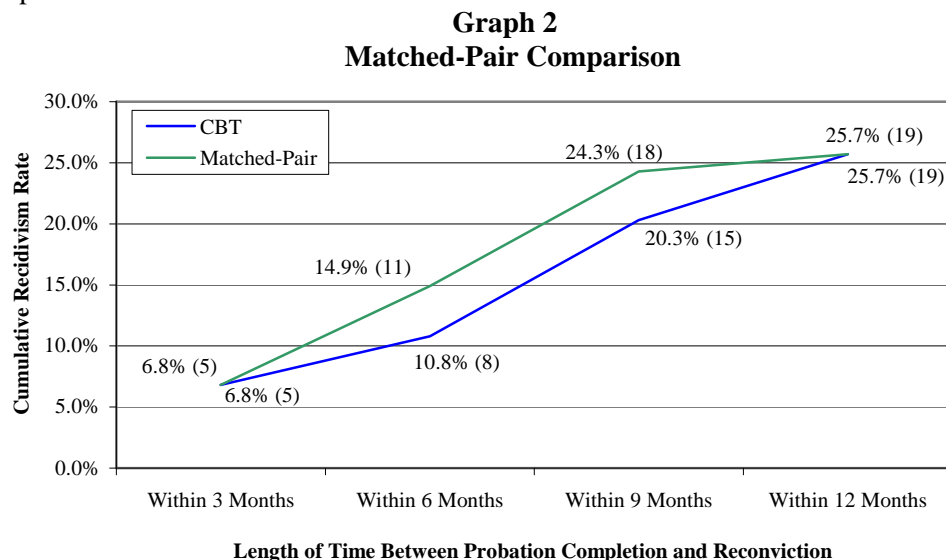
In this evaluation, the recidivism rate of District Court probationers who successfully completed the CBT program was compared to the recidivism rate of District Court probationers who did not participate in the CBT Program. An attempt was made to compare recidivism rates with probationers who successfully completed the former Gatekeeper CBT Program. However, only seven probationers had completed that program, which is not statistically sufficient to accurately calculate recidivism.

In order to achieve reliable comparisons between CBT participants and District Court probationers, a *Matched-pair Analysis* was conducted. This process individually pairs a CBT participant with a comparison group participant who has equivalent characteristics such as age, gender, ethnicity, criminal history, and type of probation (i.e. Traditional Probation or Intensive Supervision Probation).

The *Matched-pair Analysis* was conducted utilizing 74 (20.2%) of the 366 CBT participants who successfully completed the Program. Only 74 graduates could be included in the analysis since these were the only graduates who had completed their probation sentence at least twelve months before the recidivism analysis was conducted (April, 2009). Since it is recommended that a graduate be out of a program for a minimum of twelve months before conducting a recidivism analysis, the other 292 graduates could not be analyzed. A detailed overview of the methodological approaches utilized in the matched-pair selection process is provided in **Attachment D**.

The *Matched-pair Analysis* reveals that both CBT participants, and probationers who did not attend CBT, had a recidivism rate of 25.7% (i.e. 19 of 74 participants had recidivated) after twelve months (**Graph 2**). This rate was based solely on a graduate's first reconviction after successfully completing the program.

It is difficult to speculate how much variation in recidivism will occur in the future, but some disparity is likely as more CBT participants complete probation and more time elapses after completion.



<sup>1</sup> In this study, recidivism is any conviction, not including technical convictions (e.g. fishing without a license, littering, possession of illegal fireworks, other), that occur after successful probation completion.

The total number of reconvictions for the 74 CBT participants after twelve months was 26 (1.37 recidivism offenses per re-offender) and 29 reconvictions (1.53 recidivism offenses per re-offender) for the 74 probationers who did not attend CBT. Specific data regarding each of the recidivism offenses are included in the Appendix (**Attachment E**). Additionally, specific information relating to the first recidivism conviction following program completion is shown in **Table 14**.

**Table 14**

<b>Matched Pair Comparison</b>				
<b>First Recidivism Offense After Probation Completion</b>	<b>CBT Successful Participants (n = 74)</b>		<b>Probation Matched-Pairs (n = 74)</b>	
	Number	Percent of Total	Number	Percent of Total
Alcohol	3	4.1%	7	9.5%
Drug	3	4.1%	1	1.4%
Weapon	1	1.4%	1	1.4%
Sexual	0	0.0%	0	0.0%
Other Public Safety	3	4.1%	1	1.4%
Other (Non-Public Safety)	9	12.0%	9	12.0%
<b>Recidivism Rates (12 Months)</b>				
<b>Total Re-Offenders</b>	<b>19</b>	<b>25.7%</b>	<b>19</b>	<b>25.7%</b>

Source: AS400, Judicial Data Warehouse, Michigan State Police

***Recidivism - Demographic Variables That Exhibit a Correlation***

In addition to comparing recidivism rates among the matched-pairs, an analysis was conducted to determine if certain demographic characteristics of offenders exhibited a statistical correlation to recidivism. These demographic characteristics include age, gender, ethnicity, and criminal history.

In order to determine whether or not a statistical correlation exists, a Chi-Square or a Two-Independent Samples test (i.e. t-test) were performed. The existence of a possible correlation is substantiated when the calculated “p-value” of a variable is less than .05. The tests were applied to the 74 CBT participants who were included in the *Matched-pair Analysis*. The results of the analyses indicate that only one variable (i.e. age) has a statistical correlation to recidivism (**Table 15**).

A complete breakdown of these data, as well as the variables that did not have a statistical correlation to post-program recidivism, are provided in the Appendix (**Attachment F**).

**Table 15**

<b>Correlation Between Participant Variables and Post-Program Recidivism</b>		
<b>Variable</b>	<b>P value</b>	<b>Correlation to Post-Program Recidivism</b>
<b>Age (n=74)</b>	<b>p = 0.007</b>	Participants who had an average age of 21.6 (n=19) were more likely to recidivate than those participants who had an average age of 27.1 (n=55).

Source: Probation and Community Corrections Department, AS400, Judicial Data Warehouse, Michigan State Police

## E. Program Cost

Three factors related to program cost were reviewed for this evaluation. These factors are as follows: annual program cost; average cost per participant; and overall cost-effectiveness.

### *Annual Program Cost*

The total cost to administer the CBT Program during fiscal year 2008 was \$33,545 (**Table 16**). Of this total cost, \$4,542 (13.5%) was for program administration (i.e. fixed cost<sup>1</sup>) and \$29,003 (86.5%) was for contractual services and overhead expenses (i.e. variable cost). The cost to the County was \$8,545 (25.5% of total cost). As a comparison, the cost to the County for the previous Gatekeeper Program was \$61,296<sup>2</sup> (72.4% of total cost).

**Table 16**

<b>Privatized CBT Program Cost</b>			
	<b>Actual Cost</b> (fiscal year 2008)	<b>Projected Cost</b> (fiscal year 2010)	<b>Projected Cost</b> (fiscal year 2011)
<b><u>Program Expenses</u></b>			
Program Administration	\$4,542 <sup>1</sup>	\$4,744 <sup>1</sup>	\$4,871 <sup>2</sup>
Contracted Services	\$28,625 <sup>3</sup>	\$28,625 <sup>3</sup>	\$28,625 <sup>3</sup>
Overhead Expenses	\$378 <sup>4</sup>	\$378 <sup>4</sup>	\$378 <sup>4</sup>
<b>Total Program Cost</b>	<b>\$33,545</b>	<b>\$33,747</b>	<b>\$33,874</b>
<b><u>Program Reimbursements</u></b>			
PA 511 (Community Corrections Grant)	\$25,000	\$25,000	\$25,000
<b>Total Cost to the County</b>	<b>\$8,545</b>	<b>\$8,747</b>	<b>\$8,874</b>

Source: Fiscal Services Department, Probation and Community Corrections Department

1. Based on 5% of the Assistant Probation Director's annual time spent to administer the CBT Program.
2. Salary projections for FY 2011 based on a 2% increase in salary, 10% increase in medical benefits, and 5% increase each in dental and optical benefits.
3. This reflects the actual/projected cost of contractual services paid to Catholic Charities during fiscal years 2008 and 2010.
4. Two new program videos were purchased during fiscal year 2008 to replace the existing outdated videos. The total cost to purchase the videos (\$1,891) has been pro-rated over 5 years since Program Administrators anticipate replacing the videos every five years.

### *Cost Per Participant*

In order to accurately and effectively compare the cost of the privatized CBT Program to the Gatekeeper Program, it is necessary to determine the cost per participant and the cost of having a participant successfully complete the program.

The CBT Program's total cost per participant in fiscal year 2008 was \$130, and the cost for individuals who successfully completed was \$182 (**Table 17, Page 14**). The cost to the County was \$33 per participant and \$46 per successful completion. In comparison, the total County cost per participant of the former Gatekeeper CBT Program was \$417.

<sup>1</sup> Although program administration (i.e. salaries) are typically considered a fixed cost, if the program expands to serve more participants, this cost may become variable due to a corresponding increase in the total time necessary to administer the program.

<sup>2</sup> Source: 2008 CBT Program Evaluation.

**Table 17**

<b>Cost Per Participant</b>			
	<b>Privatized CBT Program</b>	<b>County Gatekeeper CBT Program</b>	<b>Savings as a Result of Privatizing CBT Program</b>
	<b>Actual Cost (fiscal year 2008)</b>	<b>Estimated Cost (fiscal year 2008)<sup>1</sup></b>	
<b>Total Cost Per Participant</b>			
Per Participant	\$130 <sup>2</sup>	\$576	\$446
Per Successful Completion	\$182 <sup>3</sup>	n/a	n/a
<b>Cost Per Participant (County)</b>			
Per Participant	\$33 <sup>2</sup>	\$417	\$384
Per Successful Completion	\$46 <sup>3</sup>	n/a	n/a

**Source: Fiscal Services Department, Probation and Community Corrections Department**

1. Based on the 2006 evaluation of the CBT Program that was administered as part of the Gatekeeper Program. This cost data has been adjusted for inflation utilizing the Bureau of Labor Statistics' Consumer Price Index.
2. Based on the average number (259) of participants enrolled in the program per year.
3. Based on the average number (184) of participants who can enroll in and complete the program per year. This number (184) is calculated by multiplying the average number of annual program enrollees (259) by the completion rate (71.1%) as identified in the Evaluation.

***Cost-effectiveness Analysis***

A *Cost-effectiveness Analysis* is designed to compare two or more alternative programs that have similar objectives in order to identify the program that results in the most effective results for the least cost. This type of analysis requires two separate cost factors to be analyzed. The first factor is the program cost per graduate and the second factor is the cost (i.e. prosecuting, sanctioning, and treatment) associated with a graduate who recidivates.

As we already know from earlier analysis, the cost to successfully complete the CBT program is \$182. The cost to complete Traditional or ISP Probation is the same for CBT participants and the matched-pair probationer because each participant is assigned to probation. Therefore, it was unnecessary to calculate this cost.

On the other hand, the cost associated with recidivism (i.e. post-program cost) was calculated for both CBT and matched-pair participants because each recidivism event has unique costs based on the type of crime that was committed. This post-program recidivism cost for CBT graduates was based on 19 (25.7%) individuals who recidivated. Their total recidivism cost was \$32,984, or \$446 per CBT participant. This post-program recidivism cost for the 19 (25.7%) matched-pair probationers who recidivated was \$52,216. This equates to a recidivism cost per matched-pair probationer of \$706.

By adding the program cost and recidivism (i.e. post-program) cost together it was determined that the total cost per CBT graduate was \$628 and the cost per matched-pair probationer was \$706 (**Table 18, Page 14**). It is important to note that although each probationer included in the analysis had the same recidivism rate after twelve months (25.7%), the matched-pair cost was higher since these offenders were convicted of more serious recidivism offenses than the CBT participants. This resulted in increased post-program expenses.

Therefore, this analysis shows that CBT is a more cost-effective programming option – at least for the types of individuals being enrolled in the CBT Program. A detailed table of the costs used in this analysis are provided in the Appendix (**Attachment G**).



**Table 18**

Cost Effectiveness (2008 Dollars)								
Total Cost (Tax-Funding <sup>1</sup> ) (n=74)				Total Cost (County-Funding Only) (n=74)				
Cost Per Completion (Tax-funded) <sup>2</sup>	Total Recidivism Cost <sup>3</sup>	Recidivism Cost Per Completion	Total Cost Per Completion (Tax-funded)	In Program Cost Per Completion (County-funded) <sup>2</sup>	Total Recidivism County Cost <sup>3</sup>	Recidivism Cost Per Completion	Total Cost Per Completion (County-funded)	
CBT Program	\$182	\$32,984	\$446	<b>\$628</b>	\$46	\$26,069	\$352	<b>\$398</b>
Matched-Pairs	\$0	\$52,216	\$706	<b>\$706</b>	\$0	\$37,903	\$512	<b>\$512</b>

Source: Fiscal Services Department, AS400, Judicial Data Warehouse, Michigan State Police

1. The tax-funded cost is the program cost paid by the state and/or county. This cost excludes fees paid by participants and private insurance, which in this case there were none.
2. Since each CBT and Matched-Pair participant completed Traditional Probation or ISP, the cost of that programming was not included in the analysis. Instead, the added cost to attend the CBT Program was included for the CBT participants.
3. These cost figures are based on 12-months of recidivism data.

## **F. Self-Reported Feedback**

The Planning and Performance Improvement Department facilitated focus group discussions with participants who went through the Program. These focus groups provided feedback regarding the level of impact the Program had on changing participants' thinking patterns and their propensity to commit new criminal acts. It also provided input about the influence of the program instructor, as well as general observations regarding the overall administration of the program.

Since December, 2008, five focus groups were facilitated. Of 91<sup>1</sup> total offenders who had enrolled in the Program, 44 (48% of total) had been randomly selected to participate in focus groups as a representative sample.

Comments from participants in the focus groups are overwhelmingly positive and indicate the Program is beneficial. Participants said that the group discussions allow them to learn from the diverse experiences of others and indicated that the small class size allows each person to have adequate time to share their thoughts and perspectives. They also provided positive comments about the new Program instructor

A complete compilation of responses from participants who were involved in the focus groups is provided in **Attachment H**.

<sup>1</sup> This represents the number of people who enrolled in the program from December 1, 2008 through March 5, 2009. These participants had the opportunity to complete the program by May 21, 2009 (i.e. date of last focus group).

## V. CONCLUSIONS AND RECOMMENDATIONS

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With the exception of a slight decline in enrollment, the CBT Program continues to be administered exceptionally well. The results of this evaluation are as follows:

	<u>2008 Evaluation</u>	<u>2009 Evaluation</u>
• Enrollment Rate	100%	93%
• Completion Rate	68%	71%
	<u>Privatized CBT</u>	<u>Gatekeeper CBT</u>
• Total Program Cost to County	\$8,545	\$61,296
• Total Cost Per Participant (Program)	\$130	\$576
• County Cost Per Participant (Program)	\$33	\$417

The results of this evaluation also revealed that CBT participants who successfully completed the program had the same recidivism rate as probationers who did not participate in CBT (25.7% after twelve months). However, those individuals who did not participate in the program committed more frequent and more serious offenses. As a result, their recidivism cost (i.e. post-program) was \$52,216 compared to \$32,984 for CBT graduates. When this cost is factored into the *Cost-effectiveness Analysis* it results in a lower per participant cost for the CBT Program. The total cost, which includes post-program recidivism cost, is \$628 for CBT graduates and \$706 for matched-pair probation graduates.

Additionally, as a result of continuing to contract with Catholic Charities to administer the CBT Program, the County saved nearly \$53,000 during fiscal year 2008. The cost to the County in fiscal year 2010 is projected to increase to \$8,747 (25.9% of total cost) and to \$8,874 (26.1% of total) in fiscal year 2011.

Therefore, based on the efficient administration of the program and the overall cost-effectiveness, CBT appears to be a positive programming option for those who participate in the program. The following recommendations are made:

**Recommendation 1: Continue the CBT Program and extend the contract with Catholic Charities to administer the Program for an additional two years (i.e. through fiscal year 2011). This recommendation is contingent upon the County's contribution being limited to an amount no greater than \$8,747 in fiscal year 2010 and \$8,874 in fiscal year 2011.**

**Recommendation 2: Complete a second outcome-based evaluation in June, 2011 to reassess completion rates, recidivism rates and cost-effectiveness.**

**Recommendation 3: Continue to promote the availability of the CBT Program to probation officers and judges in order to increase the enrollment rate to 100%.**

**Recommendation 4: Ensure that a back-up instructor is cross-trained and able to immediately facilitate the CBT Program in the event the current instructor is unable to teach the course. This will prevent interruptions to the program like that which occurred in 2008.**

**Recommendation 5: Continue collecting data for future evaluation purposes.**

## **Attachments**

## Attachment A

### Cognitive Behavioral Therapy Commitment to Change Series

The Commitment to Change Series is a widely popular, comprehensive learning program featuring Dr. Stanton E. Samenow, Ph.D. The series is comprised of 3 volumes, each consisting of 3 full-length parts, which can be shown separately, or used together to maximize the power of the program. Also includes daily learning plans with worksheets and assignments you can reproduce. Dr. Samenow skillfully interacts with convicted felons in a state correctional facility; these men and women become the heart of the program.

The focus of the program lies in correcting errors in thinking, subsequent behavior modification, and considering consequences *before* acting, so that lasting and positive change is possible.

#### **Phase I: Overcoming Errors in Thinking**

##### **Part 1: What are Errors in Thinking?**

Provides a vivid introduction to the basic concept: *The way we think has powerful influence on our lives*. The opening captures viewer interest as it portrays the "high" of crime and drug abuse, followed by the inevitable, painful consequences. Part 1 consists of three segments: "Why Change?" "I'm a Victim of Others," and "I'm a Victim of My Own Substance Abuse."

##### **Part 2: Two Crucial Errors**

Explores a common, destructive error: "I want it fast and easy." Long-term consequences are exposed in "Where does this thinking lead?", as incarcerated offenders compare their own painful experience to a different option: constant, honest effort over time. Men and women serving time reveal another crucial error: "No one was hurt." The errors and correctives are fully explored. The summary presents a responsible alternative: to become aware of consequences - and begin to work toward change.

##### **Part 3: Overcoming Errors in Thinking**

One final error demonstrates how change can begin. "It's okay to shut off fear," is the error examined. Shutting out fear can allow us to ignore the consequences of our destructive acts. A brief role play dramatizes a typical prison incident as we further explore the process of change. The summary includes realistic, practical ways to change our thinking.

#### **Phase II: Tactics - Habits that Block Change**

Correcting errors in thinking is basic. The other half is the behavior that results from these thoughts. Tactics are habitual ways of acting that keep people stuck in destructive lives. Tactics are ways to take control and build walls to shut out those who would help us. They block the most crucial step in change: Looking at ourselves. When clients become aware of Tactics and how they use them, change becomes possible. For staff, the leader's guide provides a fuller understanding of these tactics and opens the way for greater effectiveness.

##### **Part 4: Crucial Tactics Revealed**

Includes these Tactics: Attack: "You're the problem, not me." Diversion: "I'll change the subject." Minimizing: "It's no big deal."

## Attachment A

### **Parts 5: More Tactics**

Includes: Casing People Out : "I'll feed you what you want to hear." Generalizing: "Everybody does it. Why not me?" Silence: "I don't feel safe-I'll shut down (I'll take control)."

### **Part 6: Ways to Overcome Tactics**

In this section, the group takes a hard look at practical, step-by-step ways to move beyond Tactics and open the way toward a life that is truly free.

## **Phase III: The Power of Consequences**

The *Commitment to Change* Series continues with the newest addition, Volume III. In the tradition of the first two volumes, *The Power of Consequences* deals squarely with cognitive and behavioral change, for incarcerated individuals and/or substance abusers. This volume teaches viewers how to use the *Power of Consequences* as compelling motivation to stick with the difficult, day-by-day work of changing lifelong patterns. The group looks at the consequences of their past actions and comes to realize that before they acted there was, indeed, a moment of decision. In the end, viewers learn to draw upon mental images of impending consequences when faced with temptation, instead of shutting them out. Such skills are profound, and life-changing, especially for those incarcerated and/or with chemical dependencies.

### **Part 7: Facing Consequences**

It takes courage to face the pain our actions have caused. In a powerful role play, an offender and recovering addict looks squarely at the consequences of his actions: to victims, to his wife, his children, his community and others. He looks at the awful loss in his own life. He discovers that his pain can give him a *reason* to change - compelling motivation to stick with the difficult day-by-day work of changing life-long patterns.

### **Part 8: Moment of Decision**

People who stay clean and free *consider consequences* before acting; repeat offenders find a way to *shut them out*. The group at first resists that truth: "*I didn't think; I just acted.*" Yet, with a closer look, each person discovers that before destructive acts there was a moment of decision- *time* to make a choice. Each person found their own way to shut out thoughts of consequences: "I won't get caught," "I'll deal with it later," or "I'll just have one." Many discover that same "go-ahead" thought has been a lifelong pattern. That awareness opens a new opportunity for change.

### **Part 9: Remembering Consequences**

The group develops practical skills and effective tools. Noticing how we shut out consequences-what we say to ourselves to "go-ahead" and commit the crime or get high-provides a warning sign: an alarm that can tell us to slow down, and consider the consequences. Each person develops a potent reminder: a powerful image of negative consequences to call on when facing temptation. They explore the crucial tool of planning ahead. And they discover the value of using positive consequences, as they think through, "*What kind of person do I want to be-for myself and as a role model for my children?*"

## Attachment B

### STRATEGIC OUTLINE Cognitive Behavioral Therapy Program

Vision: To Provide A Post-Jail Cognitive Behavioral Therapy (CBT) Program For Probationers

TARGET POPULATION	Probationers and Parolees
TARGET POPULATION CHARACTERISTICS	<ul style="list-style-type: none"> <li>• Sentenced to a Minimum of 6 Months of Probation or Serving a Minimum of 6 Months on Parole</li> <li>• Residents of Ottawa County or within Court Jurisdiction</li> </ul>
GOALS & OBJECTIVES	<ul style="list-style-type: none"> <li>• Reduce Recidivism (Recidivism is defined as any new offense, not including technical violations (e.g. fishing without a license, expired license plate tags, littering, possession of illegal fireworks, other) after completion of the CBT Program)</li> </ul>
ACTIONS & PROGRAM COMPONENTS	<ul style="list-style-type: none"> <li>• Post-Jail Cognitive Behavioral Therapy (CBT) Programming</li> </ul>
SELF-REPORTED AND OUTPUT BASED MEASURES	<ul style="list-style-type: none"> <li>• Demographics (county of residence, age, gender, marital status, number of children, employment, education)</li> <li>• Sentencing Information (court, date/type of conviction, type/length of probation)</li> <li>• Programming (attendance, completion, number/types of referrals provided)</li> <li>• Focus Groups (graduates and non-graduates)</li> </ul>
OUTCOME BASED MEASURES	<ul style="list-style-type: none"> <li>• Recidivism (date of arrest, type of offense)</li> <li>• Cost Per Person and Cost Per Graduate (administration, overhead, program provider)</li> </ul>

**Participant Variables with Correlations to Program Completion**

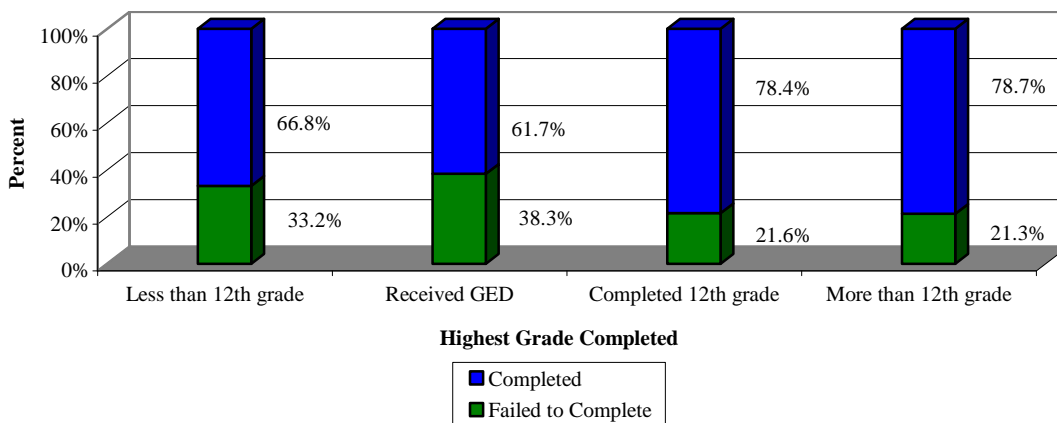
**Table 1**

Program Completion by Highest Grade Completed (at program enrollment)				
	Completed		Failed to Complete	
Less than 12 <sup>th</sup> grade	66.8%	(135)	33.2%	(67)
Received GED	61.7%	(50)	38.3%	(31)
Completed 12 <sup>th</sup> grade	78.4%	(120)	21.6%	(33)
More than 12 <sup>th</sup> grade	78.7%	(37)	21.3%	(10)
<b>Total<sup>1</sup></b>	<b>70.8%</b>	<b>(342)</b>	<b>29.2%</b>	<b>(141)</b>

**p = 0.015 (Statistically Significant)**

Source: Probation and Community Corrections Department

1. Educational attainment data were not available for 32 participants



**Table 2**

Program Completion by Offense Resulting in Program Enrollment				
	Completed		Failed to Complete	
Alcohol-Related	79.9%	(143)	20.1%	(36)
Drug-Related	65.0%	(67)	35.0%	(36)
Sexual Offense	77.8%	(7)	22.2%	(2)
Weapons Offense	80.0%	(4)	20.0%	(1)
Other Public Safety Offense <sup>1</sup>	63.4%	(78)	36.6%	(45)
Other Offense (Non-Public Safety) <sup>2</sup>	69.5%	(66)	30.5%	(29)
<b>Total<sup>3</sup></b>	<b>71.0%</b>	<b>(365)</b>	<b>29.0%</b>	<b>(149)</b>

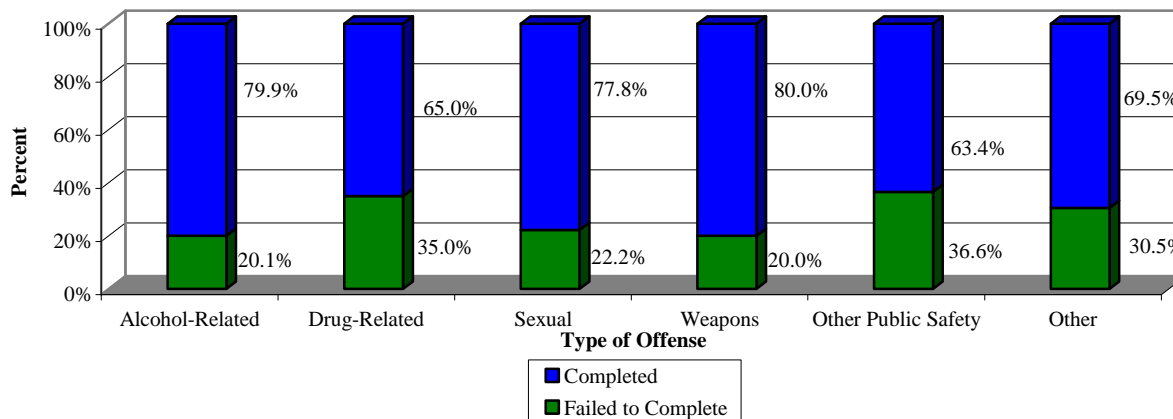
**p = 0.028 (Statistically Significant)**

Source: Probation and Community Corrections Department

1. Other public safety offenses included: assault; domestic violence; MDOP

2. Other offenses included: disturbing the peace; DWLS; retail fraud; larceny

3. Type of Offense was not available for 1 CBT participant



## Attachment C

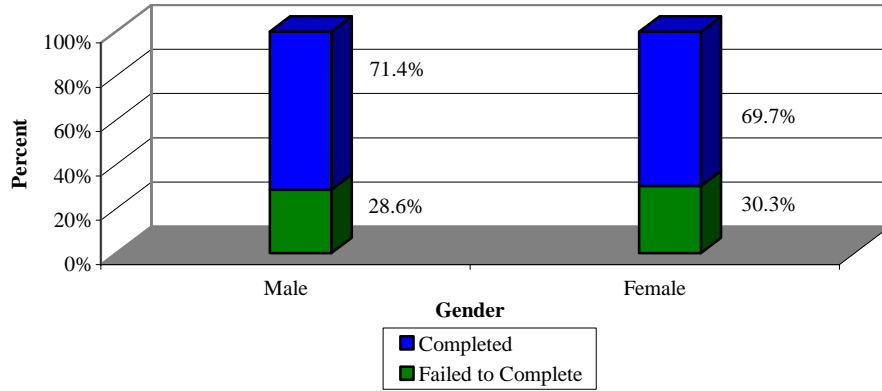
### Participant Variables without Correlations to Program Completion

**Table 3**

Program Completion by Gender			
	Completed		Failed to Complete
Male	71.4% (290)		28.6% (116)
Female	69.7% (76)		30.3% (33)
<b>Total</b>	<b>71.1% (366)</b>		<b>28.9% (149)</b>

**p = 0.728 (Not Statistically Significant)**

Source: Probation and Community Corrections Department



**Table 4**

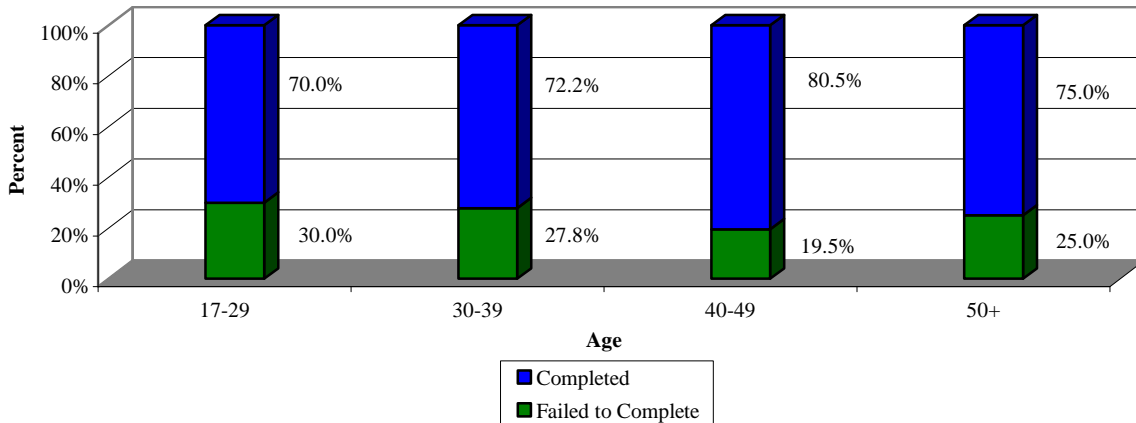
Program Completion by Age (at arrest)			
	Completed		Failed to Complete
17-29	70.0% (268)		30.0% (115)
30-39	72.2% (52)		27.8% (20)
40-49	80.5% (33)		19.5% (8)
50+	75.0% (12)		25.0% (4)
<b>Total<sup>1</sup></b>	<b>71.3% (365)</b>		<b>28.7% (147)</b>

**Average Age**                      **25.8**                      **24.2**

**p = 0.076 (Not Statistically Significant)**

Source: Probation and Community Corrections Department

1. Age at arrest was not available for 3 CBT participants





Participant Variables without Correlations to Program Completion

Table 5

Program Completion by Ethnicity				
	Completed		Failed to Complete	
White	70.0%	(287)	27.0%	(106)
Black	54.8%	(17)	45.2%	(14)
Hispanic	67.9%	(55)	32.1%	(26)
Other	70.0%	(7)	30.0%	(3)
<b>Total</b>	<b>71.1%</b>	<b>(366)</b>	<b>28.9%</b>	<b>(149)</b>

**p = 0.164 (Not Statistically Significant)**

Source: Probation and Community Corrections Department

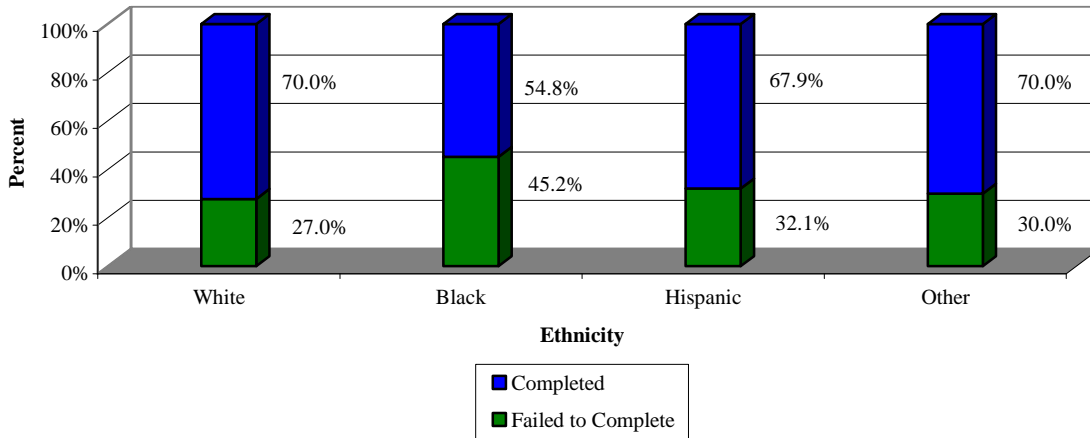
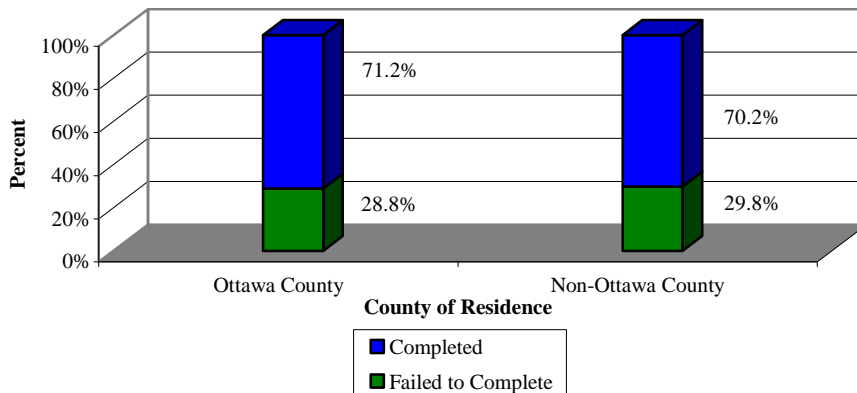


Table 6

Program Completion by County of Residence				
	Completed		Failed to Complete	
Ottawa County Resident	71.2%	(333)	28.8%	(135)
Non-Ottawa County Resident	70.2%	(33)	29.8%	(14)
<b>Total</b>	<b>71.1%</b>	<b>(366)</b>	<b>28.9%</b>	<b>(149)</b>

**p = 0.892 (Not Statistically Significant)**

Source: Probation and Community Corrections Department



**Participant Variables without Correlations to Program Completion**

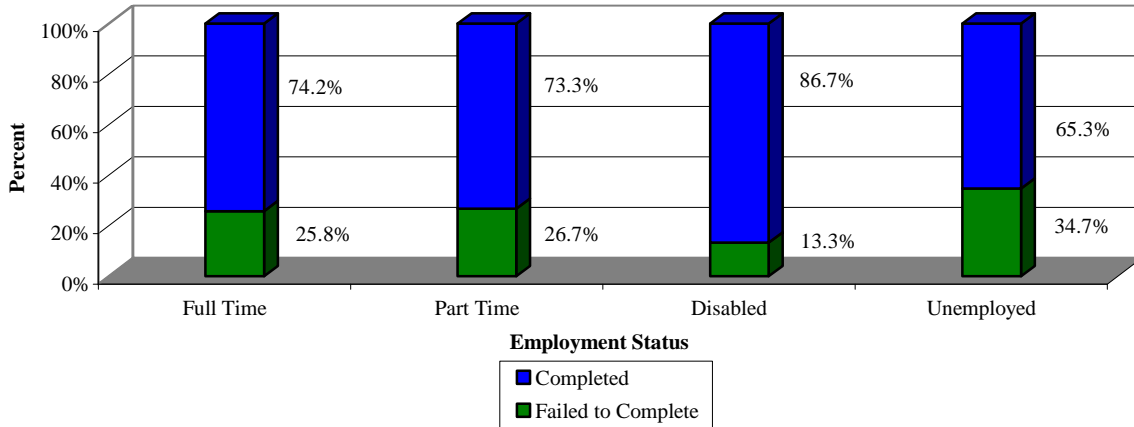
**Table 7**

Program Completion by Employment Status (at program enrollment)				
	Completed		Failed to Complete	
Full Time	74.2%	(167)	25.8%	(58)
Part Time	73.3%	(55)	26.7%	(20)
Disabled	86.7%	(13)	13.3%	(2)
Unemployed	65.3%	(130)	34.7%	(69)
<b>Total<sup>1</sup></b>	<b>71.0%</b>	<b>(366)</b>	<b>29.0%</b>	<b>(149)</b>

**p = 0.101 (Not Statistically Significant)**

Source: Probation and Community Corrections Department

1. Employment status was not available for 1 CBT participant



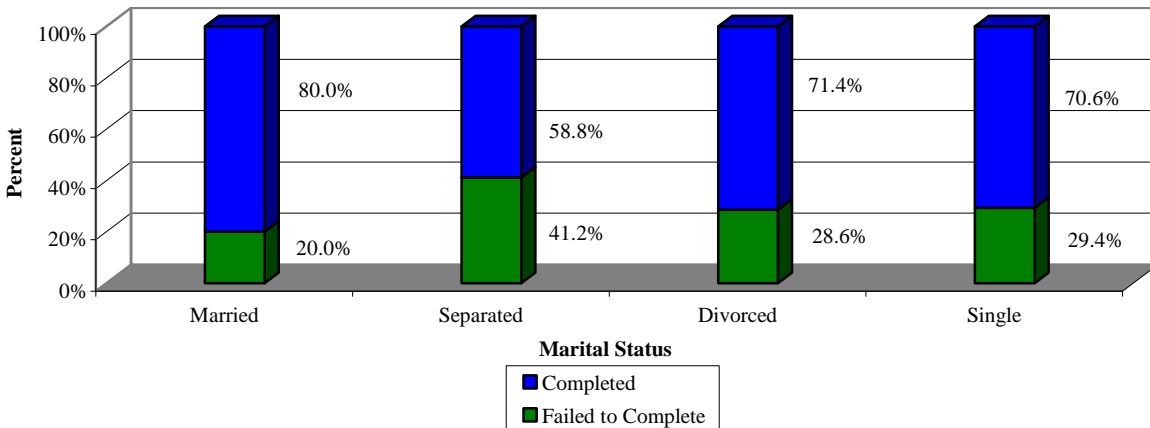
**Table 8**

Program Completion by Marital Status (at program enrollment)				
	Completed		Failed to Complete	
Married	80.0%	(40)	20.0%	(10)
Separated	58.8%	(10)	41.2%	(7)
Divorced	71.4%	(40)	28.6%	(16)
Single	70.6%	(276)	29.4%	(115)
<b>Total<sup>1</sup></b>	<b>71.2%</b>	<b>(366)</b>	<b>28.8%</b>	<b>(148)</b>

**p = 0.357 (Not Statistically Significant)**

Source: Probation and Community Corrections Department

1. Marital status was not available for 1 CBT participant



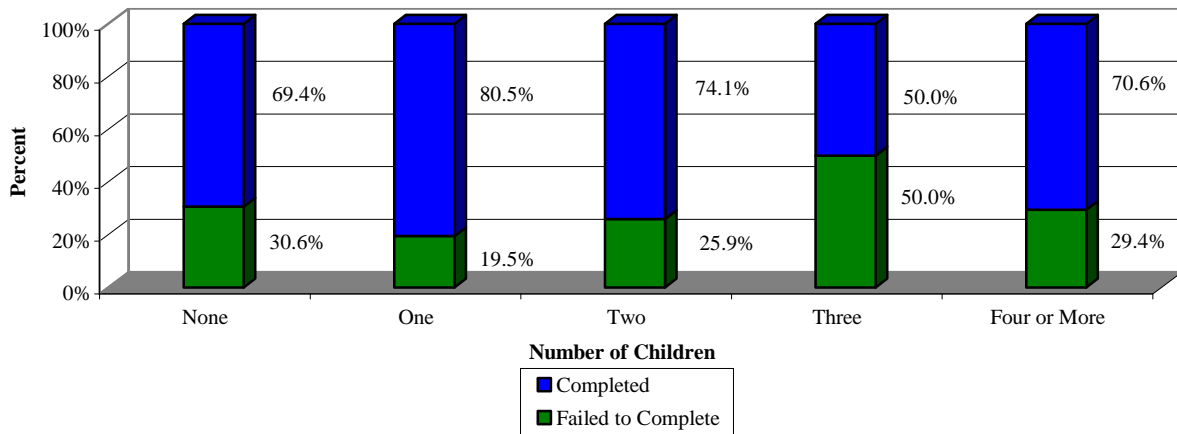
**Participant Variables without Correlations to Program Completion**

**Table 9**

Program Completion by Number of Children (at program enrollment)				
	Completed		Failed to Complete	
No Children	69.4%	(231)	30.6%	(102)
One Child	80.5%	(70)	19.5%	(17)
Two Children	74.1%	(43)	25.9%	(15)
Three Children	50.0%	(10)	50.0%	(10)
Four or More Children	70.6%	(12)	29.4%	(5)
<b>Total</b>	<b>71.1%</b>	<b>(366)</b>	<b>28.9%</b>	<b>(149)</b>

**p = 0.067 (Not Statistically Significant)**

Source: Probation and Community Corrections Department

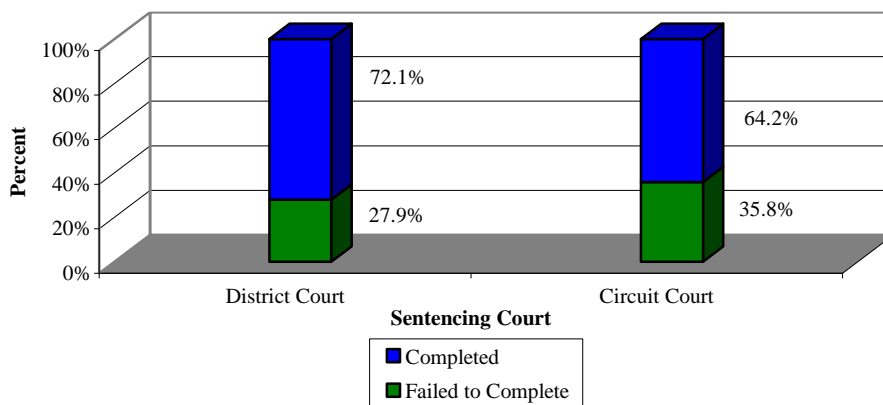


**Table 10**

Program Completion by Sentencing Court				
	Completed		Failed to Complete	
District Court	72.1%	(323)	27.9%	(125)
Circuit Court	64.2%	(43)	35.8%	(24)
<b>Total</b>	<b>71.1%</b>	<b>(366)</b>	<b>28.9%</b>	<b>(149)</b>

**p = 0.182 (Not Statistically Significant)**

Source: Probation and Community Corrections Department



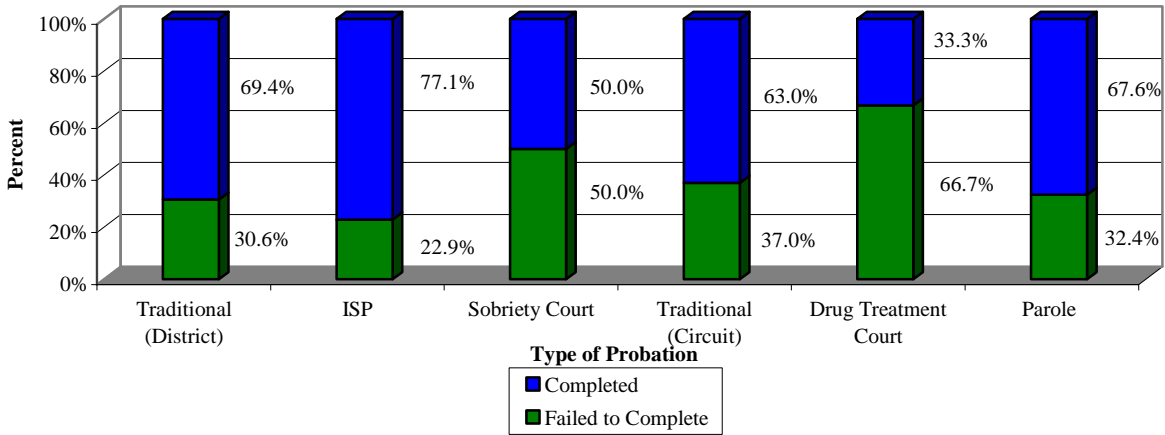
**Participant Variables without Correlations to Program Completion**

**Table 11**

Program Completion by Type of Probation				
	Completed		Failed to Complete	
Traditional (District Court)	69.4%	(193)	30.6%	(85)
Intensive Supervision (District Court)	77.1%	(128)	22.9%	(38)
District Sobriety Court	50.0%	(2)	50.0%	(2)
Traditional (Circuit Court)	63.0%	(17)	37.0%	(10)
Circuit Court Drug Treatment Court	33.3%	(1)	66.7%	(2)
Parole	67.6%	(25)	32.4%	(12)
<b>Total</b>	<b>71.1%</b>	<b>(366)</b>	<b>28.9%</b>	<b>(149)</b>

**p = 0.197 (Not Statistically Significant)**

Source: Probation and Community Corrections Department

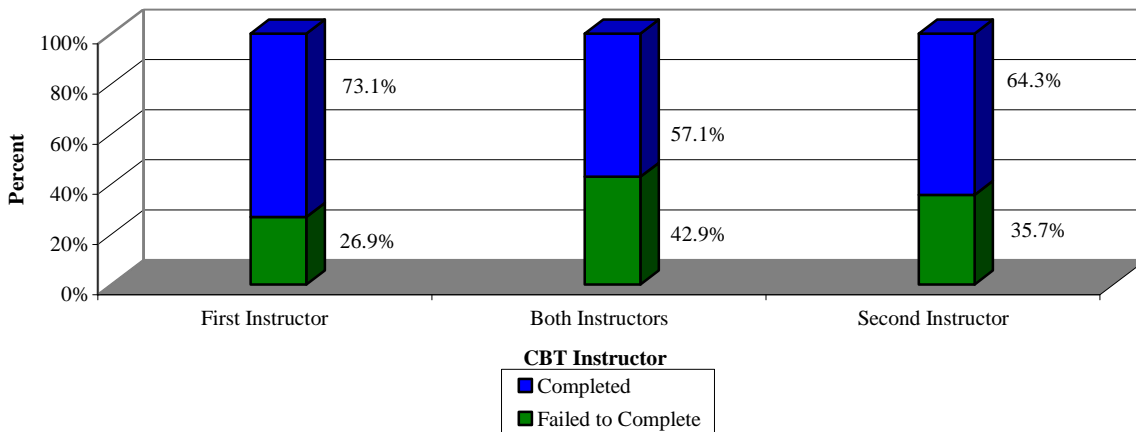


**Table 12**

Program Completion by CBT Instructor				
	Completed		Failed to Complete	
First Instructor	73.1%	(315)	26.9%	(116)
Both Instructors	57.1%	(24)	42.9%	(18)
Second Instructor	64.3%	(27)	35.7%	(18)
<b>Total</b>	<b>71.1%</b>	<b>(366)</b>	<b>28.9%</b>	<b>(149)</b>

**p = 0.056 (Not Statistically Significant)**

Source: Probation and Community Corrections Department



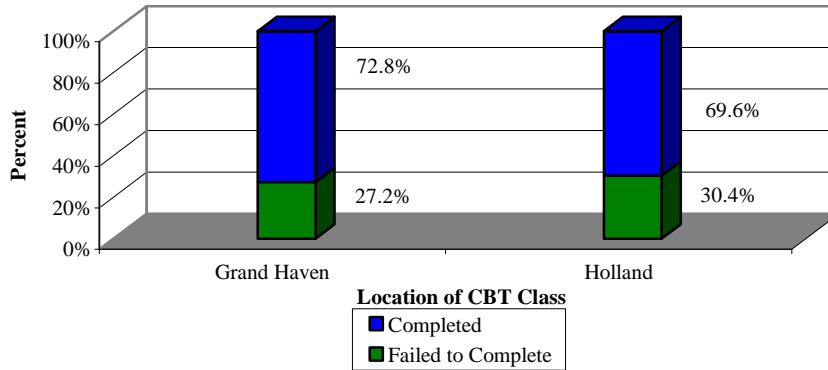
**Participant Variables without Correlations to Program Completion**

**Table 13**

Program Completion by Location of CBT Class				
	Completed		Failed to Complete	
Grand Haven	72.8%	(171)	27.2%	(64)
Holland	69.6%	(195)	30.4%	(85)
<b>Total</b>	<b>71.1%</b>	<b>(366)</b>	<b>28.9%</b>	<b>(149)</b>

**p = 0.436 (Not Statistically Significant)**

Source: Probation and Community Corrections Department



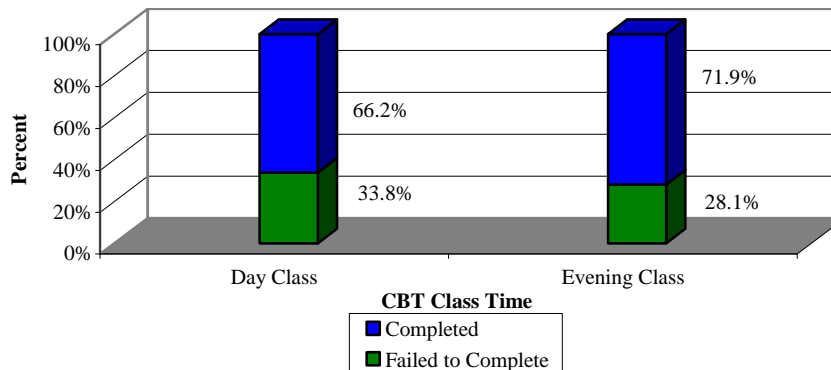
**Table 14**

Program Completion by CBT Class Time				
	Completed		Failed to Complete	
Day Class	66.2%	(49)	33.8%	(25)
Evening Class	71.9%	(225)	28.1%	(88)
<b>Total<sup>1</sup></b>	<b>70.8%</b>	<b>(274)</b>	<b>29.2%</b>	<b>(113)</b>

**p = 0.335 (Not Statistically Significant)**

Source: Probation and Community Corrections Department

1. CBT Class Time was not tracked until June, 2007. As a result, these data were not available for 128 participants



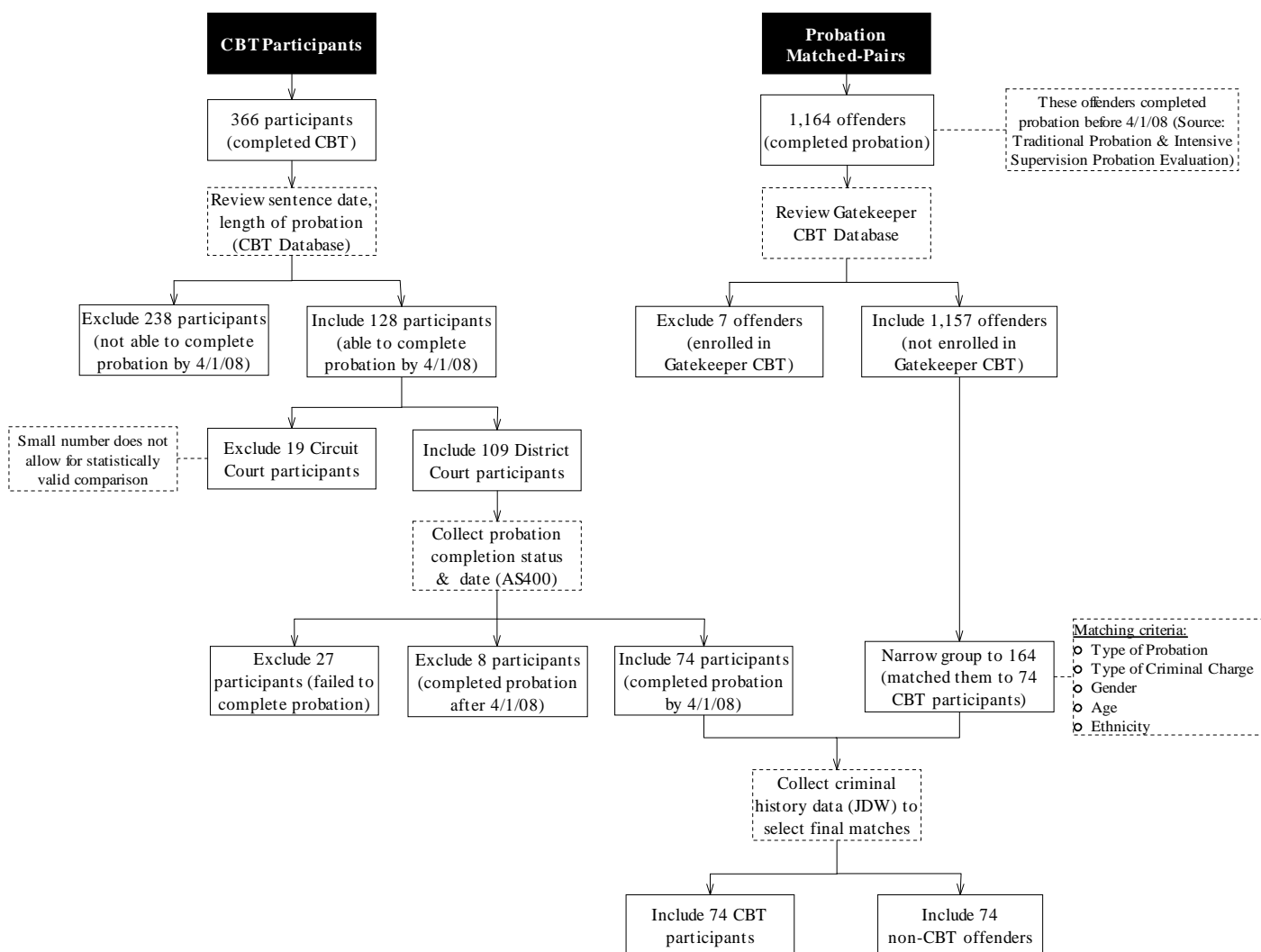
**EVALUATION METHODOLOGY**

The following information pertains to the methodology used in this Evaluation to select matched-pair offenders and to collect and verify program data.

**Selection of Matched-Pairs**

A matched-pair comparison group recidivism analysis was conducted for this Evaluation that compared District Court probationers who attended CBT to those who did not attend CBT. Based on the definition of recidivism, offenders who failed to complete their probation sentence successfully were eliminated from inclusion in the comparison groups. Also, in order to ensure that the recidivism data were comparable, each person included in the comparison groups had been out of probation for at least 12 months<sup>1</sup>. The following flow chart illustrates the steps in the selection process.

**Matched-Pair Selection Flow Chart**



<sup>1</sup> Since the recidivism analysis was conducted in April, 2009, each person included in the comparison groups had to complete probation by 4/1/08.

## Attachment D

Chi-Square<sup>1</sup> and Two-Independent Samples<sup>2</sup> (i.e. t-test) tests were utilized to determine if there was any statistical difference between the identified matched pairs. The demographic characteristics utilized to match CBT participants with a non-CBT probationer are identified in **Table 1**. The Chi-Square and Two-Independent Samples test (i.e. t-test) revealed that there were no significant statistical differences between the matched-pairs.

**Table 1**

Demographic Comparison Between CBT and Probation Matched Pairs				
	CBT	Probation Matched Pair	Statistical Difference (p-value)	
<b>Type of Probation</b>	58% Traditional 42% ISP	58% Traditional 42% ISP	p = 1.000	No Statistical Difference
<b>Type of Criminal Charge</b>	50% Alcohol-Related 16% Drug-Related 19% Other Public Safety	45% Alcohol-Related 20% Drug-Related 23% Other Public Safety	p = 0.789	No Statistical Difference
<b>Gender</b>	78% Male 22% Female	78% Male 22% Female	p = 1.000	No Statistical Difference
<b>Ethnicity</b>	77% White	76% White	p = 0.608	No Statistical Difference
<b>Average Age at Arrest</b>	25.7	26.3	p = 0.727	No Statistical Difference
<b>Average Number of Prior Convictions</b>	3.01	2.93	p = 0.842	No Statistical Difference
<b>Average Number of Prior Misdemeanor Convictions</b>	2.70	2.76	p = 0.881	No Statistical Difference

Source: Probation and Community Corrections Department, Judicial Data Warehouse

### Data Collection and Verification

The Planning and Performance Improvement Department utilized a data verification system that consisted of multiple control procedures to ensure program data were complete and accurate prior to conducting any analysis. As part of this system, the Department worked in conjunction with program administrators to clearly identify all data variables required to assess the performance and effectiveness of the program. These output and outcome-based data variables were included on a data collection *Superform* designed to be completed manually by program staff for each CBT participant. During the data collection period, random samples of participant data were periodically reviewed to make certain the required evaluation data were complete. If missing data were identified, program administrators were contacted and, when necessary, trainings were conducted with program staff.

Program cost data were provided primarily by the County's Fiscal Services Department. CBT program staff also identified the percent of time dedicated to the program on an annual basis. These percentages were utilized to calculate the program's total annual cost. The program cost data included in this evaluation were verified by the County's Fiscal Services Department.

<sup>1</sup> A statistical method to test whether two (or more) categorical variables (e.g. male or female) are related.

<sup>2</sup> A statistical method to test whether two continuous variables (e.g. average age) are related.

## Attachment D

Recidivism data were obtained from the County's criminal justice system database (AS400), the Michigan State Police Criminal History database (LEIN), and the State Supreme Court's Judicial Data Warehouse (JDW). A description of each recidivism data source is provided below:

### ***County's Criminal Justice System Database (AS400)***

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The AS400 contains data for any criminal offense that occurs within the jurisdiction of the Ottawa County courts. The recidivism data from the AS400 were obtained through an automated query of the system that was created by the County's Information Technology Department. Upon entering an offender's name, date of birth, and probation completion date into the application, the system identified the offenders who had a criminal charge on or after the probation completion date, the date of each criminal charge, the type of charge, the judgment of each charge, and the resulting sentence for each judgment. In addition, the application identified any offender who could not be located in the AS400 as the result of a misspelled name or incorrect date of birth. When this occurred, a manual review of the AS400 was conducted and the information was corrected.

### ***Michigan State Police Criminal History Database (LEIN)***

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The LEIN database contains data from all 83 Michigan counties for felony and serious misdemeanor offenses that are punishable by over 93 days in jail. Recidivism data were obtained from LEIN by submitting a file to the State Police that identified an offender's name, date of birth, gender, ethnicity, and probation completion date. Upon processing the request file, the State Police provided a file that identified the offenders who had a criminal charge on or after the probation completion date, the date of each criminal charge, the type of charge, the judgment of each charge, and the resulting sentence for each judgment.

### ***State Supreme Court's Judicial Data Warehouse (JDW)***

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The JDW contains criminal, civil, and domestic data from 80 Michigan Counties. Recidivism data were obtained from JDW through a name search application. Similar to the AS400 and LEIN, the JDW identified the date of each criminal charge, the type of charge, the judgment of each charge, and the resulting sentence for each judgment. Data obtained from the JDW were filtered to exclude civil infractions, divorce, landlord tenant cases, and any other non-criminal cases.

Data collected on the study participants and the comparison group were compiled in a Microsoft Access database and then exported into SPSS 15.0 for statistical analysis. Data cleaning involved recoding free-entry text variables into categorical variables, such as type of criminal offense, and calculating new variables from existing ones, such as age at arrest from date of birth and date of arrest. The primary statistical analyses included frequencies for descriptive purposes and the Chi-Square and Two-Independent Samples test (i.e. t-test) for determining statistical significance. These quantitative statistical analyses were utilized to evaluate the program's output and outcome-based measures.

In addition to analyzing quantitative data for this evaluation, the Planning and Performance Improvement Department also assessed qualitative data that were obtained through focus group interviews with CBT participants. A total of five focus groups were conducted with 44 participants who were enrolled in the program from December 1, 2008 through March 5, 2009. These confidential focus groups were conducted independent of the CBT Program in order to obtain the participant's perspective of various aspects of the program (e.g. the influence of the program instructor, as well as general observations regarding program administration).



## Attachment E

### Type of Reconviction Offenses (Matched-Pair Analysis)

PACC Code	Description of Reconviction	CBT Participants	Probation Matched-Pairs
<b>Alcohol Offenses</b>			
257.624A	Alcohol – Open Container in Motor Vehicle	(3.8%) 1	(0.0%) 0
257.625(1)	OWI – Alcohol and Drugs	(0.0%) 0	(6.9%) 2
257.6251-A	Operating While Intoxicated	(0.0%) 0	(13.8%) 4
257.6256D	Operating While Intoxicated – 3 <sup>rd</sup> Offense	(0.0%) 0	(3.4%) 1
436.17031A	Alcohol – Purchase/Consume/Possess by Minor	(11.6%) 3	(0.0%) 0
750.141A	Allow Alcohol Consumption by Minor	(0.0%) 0	(3.4%) 1
<b>Sub-Total</b>		<b>(15.4%) 4</b>	<b>(27.5%) 8</b>
<b>Drug Offenses</b>			
15-14(B)	Zeeland Drug Paraphenalia	(0.0%) 0	(3.4%) 1
333.74032D	Possession of Marijuana	(7.7%) 2	(13.8%) 4
333.74042D	Use of Marijuana	(7.7%) 2	(0.0%) 0
<b>Sub-Total</b>		<b>(15.4%) 4</b>	<b>(17.2%) 5</b>
<b>Weapons Offenses</b>			
20-12(A)	Intent to Use Weapon Against Another	(3.8%) 1	(0.0%) 0
750.226	Dangerous Weapon – Carry with Unlawful Intent	(0.0%) 0	(3.4%) 1
<b>Sub-Total</b>		<b>(3.8%) 1</b>	<b>(3.4%) 1</b>
<b>Sexual Offenses</b>			
750.520D1A	Criminal Sexual Conduct – 3 <sup>rd</sup> Degree	(0.0%) 0	(3.4%) 1
<b>Sub-Total</b>		<b>(0.0%) 0</b>	<b>(3.4%) 1</b>
<b>Other Public Safety Offenses</b>			
28.729	Sex Offender – Fail to Register	(3.8%) 1	(3.4%) 1
750.356A2A	Breaking and Entering Vehicle to Steal	(3.8%) 1	(0.0%) 0
750.81D1	Police Officer – Assault/Resist/Obstruct	(7.7%) 2	(3.4%) 1
750.812	Domestic Violence	(7.7%) 2	(0.0%) 0
<b>Sub-Total</b>		<b>(23.0%) 6</b>	<b>(6.9%) 2</b>
<b>Other Offenses (Non-Public Safety)</b>			
20-3(10)(B)	False Statement to an Officer	(0.0%) 0	(3.4%) 1
257.311	Operating Without License on Person	(3.8%) 1	(3.4%) 1
257.904-E	Allow Unlicensed Driver To Operate	(0.0%) 0	(3.4%) 1
257.9041B	DWLS (Drive with License Suspended)	(11.6%) 3	(6.9%) 2
257.9041C	DWLS – 2 <sup>nd</sup> Offense	(7.7%) 2	(3.4%) 1
500.3102	Motor Vehicle – Operate without Insurance	(3.8%) 1	(10.4%) 3
750.17	Disturbing the Peace	(3.8%) 1	(0.0%) 0
750.1743A	Embezzlement – \$200 to \$1000	(0.0%) 0	(3.4%) 1
750.356D	Retail Fraud – 2 <sup>nd</sup> Degree	(3.8%) 1	(0.0%) 0
750.356D4	Retail Fraud – 3 <sup>rd</sup> Degree	(7.7%) 2	(0.0%) 0
750.3564A	Larceny – \$200 to \$1000	(0.0%) 0	(3.4%) 1
750.36	Larceny in a Building	(0.0%) 0	(3.4%) 1
<b>Sub-Total</b>		<b>(42.3%) 11</b>	<b>(41.3%) 12</b>
<b>Total</b>		<b>(100.0%) 26</b>	<b>(100.0%) 29</b>

Source: AS400, Judicial Data Warehouse, Michigan State Police

## Attachment F

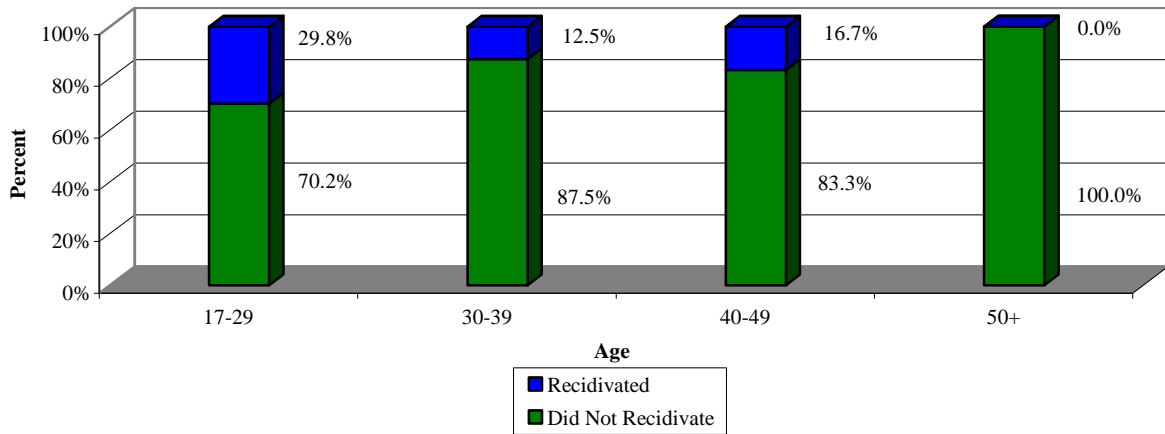
### Participant Variables with Correlations to Post-Program Recidivism

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**Table 1**

Post-Program Recidivism by Age (at arrest)				
	Recidivated		Did Not Recidivate	
17-29	29.8%	(17)	70.2%	(40)
30-39	12.5%	(1)	87.5%	(7)
40-49	16.7%	(1)	83.3%	(5)
50+	0.0%	(0)	100.0%	(3)
<b>Total<sup>1</sup></b>	<b>25.7%</b>	<b>(19)</b>	<b>74.3%</b>	<b>(55)</b>
<b>Average Age</b>	<b>21.6</b>		<b>27.1</b>	
<b>p = 0.007 (Statistically Significant)</b>				

Source: Probation and Community Corrections Department, AS400, JDW, LEIN



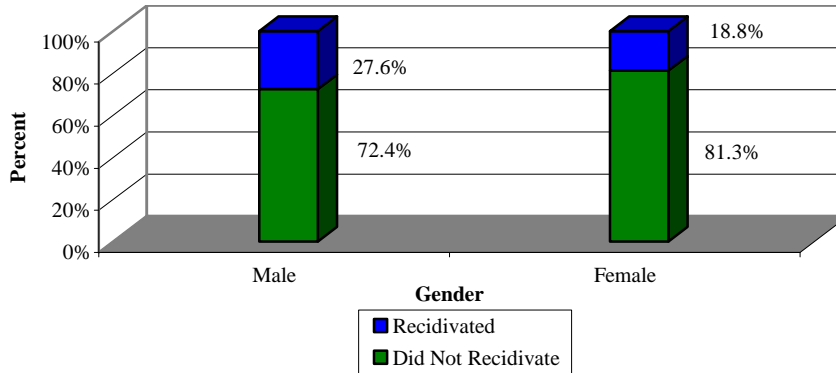
## Attachment F

# Participant Variables without Correlations to Post-Program Recidivism

**Table 2**

Post-Program Recidivism by Gender				
	Recidivated		Did Not Recidivate	
Male	27.6%	(16)	72.4%	(42)
Female	18.7%	(3)	81.3%	(13)
<b>Total</b>	<b>25.7%</b>	<b>(19)</b>	<b>74.3%</b>	<b>(55)</b>
<b>p = 0.474 (Not Statistically Significant)</b>				

Source: Probation and Community Corrections Department, AS400, JDW, LEIN

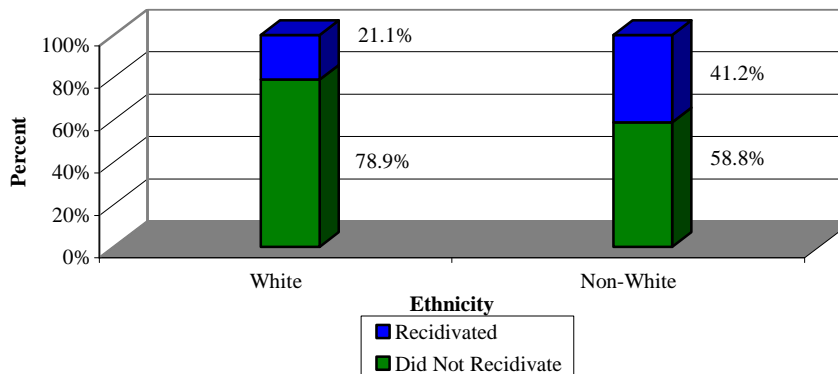


**Table 3**

Post-Program Recidivism by Ethnicity				
	Recidivated		Did Not Recidivate	
White	21.1%	(12)	78.9%	(45)
Non-White <sup>1</sup>	41.2%	(7)	58.8%	(10)
<b>Total</b>	<b>25.7%</b>	<b>(19)</b>	<b>74.3%</b>	<b>(55)</b>
<b>p = 0.096 (Not Statistically Significant)</b>				

Source: Probation and Community Corrections Department, AS400, JDW, LEIN

1. In order to increase the validity of the Chi-Square analysis, several ethnicity categories were combined. Non-White Ethnicity includes: Black, Hispanic, Asian, and Other



## Attachment F

# Participant Variables without Correlations to Post-Program Recidivism

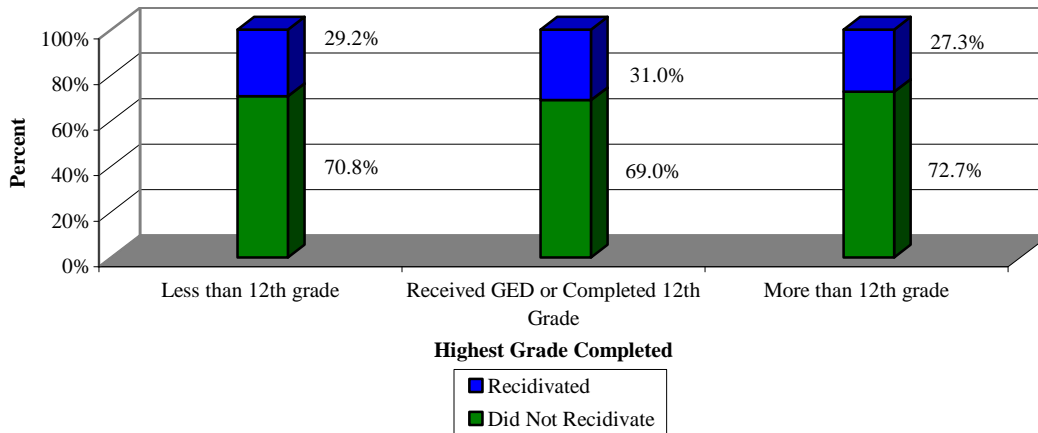
**Table 4**

Post-Program Recidivism by Educational Attainment (at program enrollment)				
	Recidivated		Did Not Recidivate	
Less than 12 <sup>th</sup> grade	29.2%	(7)	70.8%	(17)
Received GED or Completed 12 <sup>th</sup> Grade <sup>1</sup>	31.0%	(9)	69.0%	(20)
More than 12 <sup>th</sup> grade	27.3%	(3)	72.7%	(8)
<b>Total<sup>2</sup></b>	<b>29.7%</b>	<b>(19)</b>	<b>70.3%</b>	<b>(45)</b>

**p = 0.971 (Not Statistically Significant)**

Source: Probation and Community Corrections Department, AS400, JDW, LEIN

1. In order to increase the validity of the Chi-Square analysis, these educational attainment categories were combined
2. Educational attainment data were not available for 10 participants



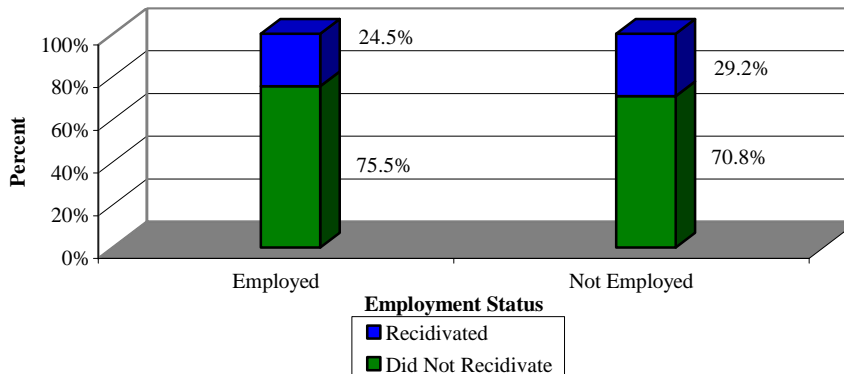
**Table 5**

Post-Program Recidivism by Employment Status (at program enrollment)				
	Recidivated		Did Not Recidivate	
Employed <sup>1</sup>	24.5%	(12)	75.5%	(37)
Not Employed <sup>1</sup>	29.2%	(7)	70.8%	(17)
<b>Total<sup>2</sup></b>	<b>26.0%</b>	<b>(19)</b>	<b>74.0%</b>	<b>(54)</b>

**p = 0.669 (Not Statistically Significant)**

Source: Probation and Community Corrections Department, AS400, JDW, LEIN

1. In order to increase the validity of the Chi-Square analysis, employment status categories were combined. Employed includes participants employed Full Time or Part Time, while Not Employed includes participants who are disabled or unemployed
2. Employment status was not available for 1 CBT participant



## Attachment F

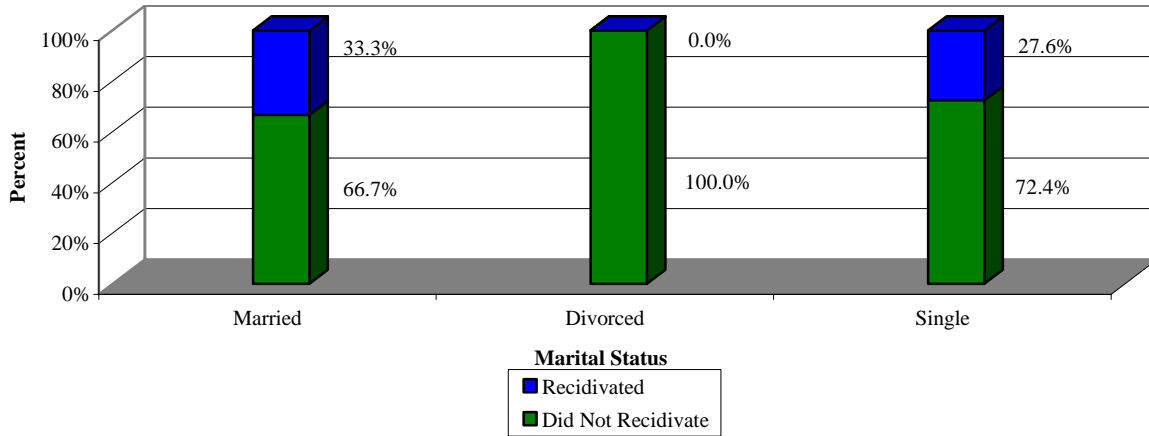
### Participant Variables without Correlations to Post-Program Recidivism

**Table 6**

Post-Program Recidivism by Marital Status (at program enrollment)				
	Recidivated		Did Not Recidivate	
Married	33.3%	(3)	66.7%	(6)
Divorced	0.0%	(0)	100.0%	(7)
Single	27.6%	(16)	72.4%	(42)
<b>Total</b>	<b>25.7%</b>	<b>(19)</b>	<b>74.3%</b>	<b>(55)</b>

**p = 0.246 (Not Statistically Significant)**

Source: Probation and Community Corrections Department, AS400, JDW, LEIN



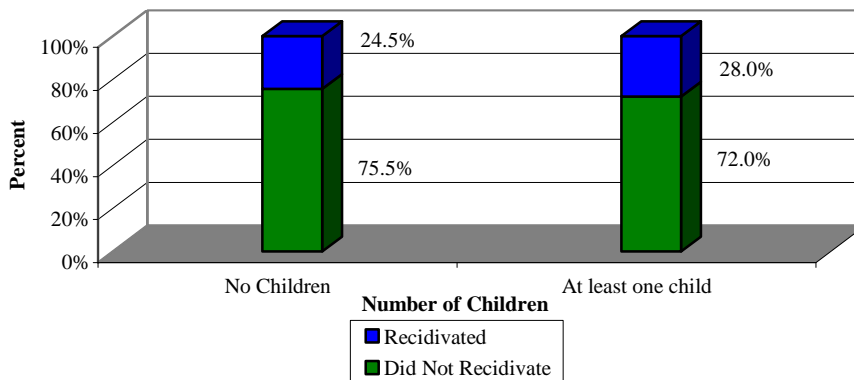
**Table 7**

Post-Program Recidivism by Number of Children (at program enrollment)				
	Recidivated		Did Not Recidivate	
No Children	24.5%	(12)	75.5%	(37)
At least one child <sup>1</sup>	28.0%	(7)	72.0%	(18)
<b>Total</b>	<b>25.7%</b>	<b>(19)</b>	<b>74.3%</b>	<b>(55)</b>

**p = 0.744 (Not Statistically Significant)**

Source: Probation and Community Corrections Department, AS400, JDW, LEIN

1. In order to increase the validity of the Chi-Square analysis, several "Number of Children" categories were combined



## Attachment F

### Participant Variables without Correlations to Post-Program Recidivism

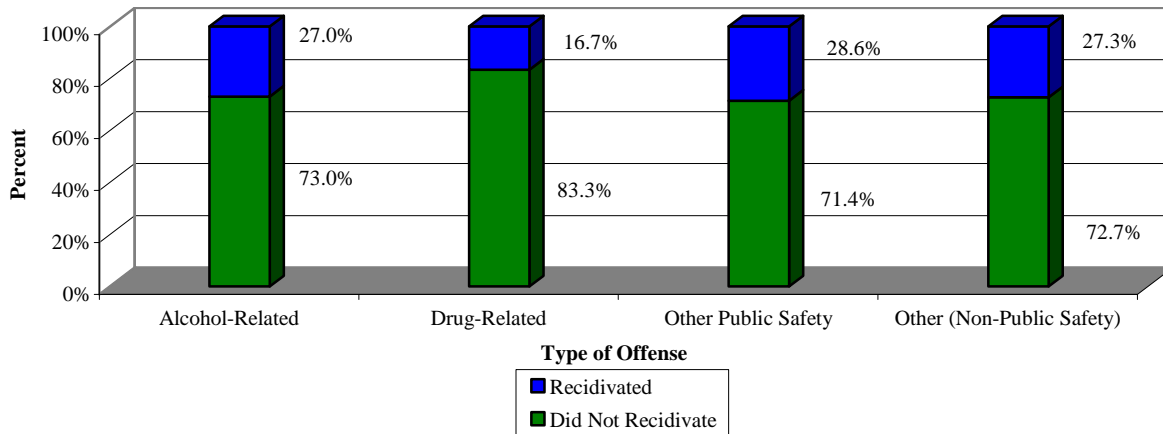
**Table 8**

Post-Program Recidivism by Offense Resulting in Program Enrollment				
	Recidivated		Did Not Recidivate	
Alcohol-Related	27.0%	(10)	73.0%	(27)
Drug-Related	16.7%	(2)	83.3%	(10)
Other Public Safety Offense <sup>1</sup>	28.6%	(4)	71.4%	(10)
Other Offense (Non-Public Safety) <sup>2</sup>	27.3%	(3)	72.7%	(8)
<b>Total</b>	<b>25.7%</b>	<b>(19)</b>	<b>74.3%</b>	<b>(55)</b>

**p = 0.891 (Not Statistically Significant)**

Source: Probation and Community Corrections Department, AS400, JDW, LEIN

1. Other public safety offenses included: assault; domestic violence; MDOP
2. Other offenses included: disturbing the peace; DWLS; retail fraud; larceny

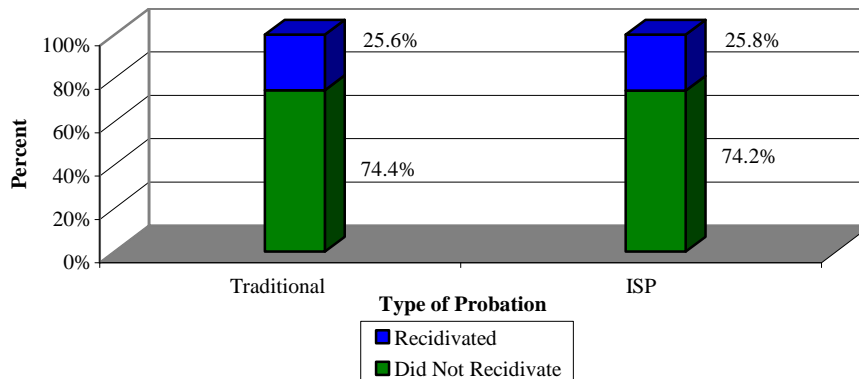


**Table 9**

Post-Program Recidivism by Type of Probation				
	Recidivated		Did Not Recidivate	
Traditional Probation (District Court)	25.6%	(11)	74.4%	(32)
Intensive Supervision Probation (District Court)	25.8%	(8)	74.2%	(23)
<b>Total</b>	<b>25.7%</b>	<b>(19)</b>	<b>74.3%</b>	<b>(55)</b>

**p = 0.983 (Not Statistically Significant)**

Source: Probation and Community Corrections Department, AS400, JDW, LEIN



Attachment F

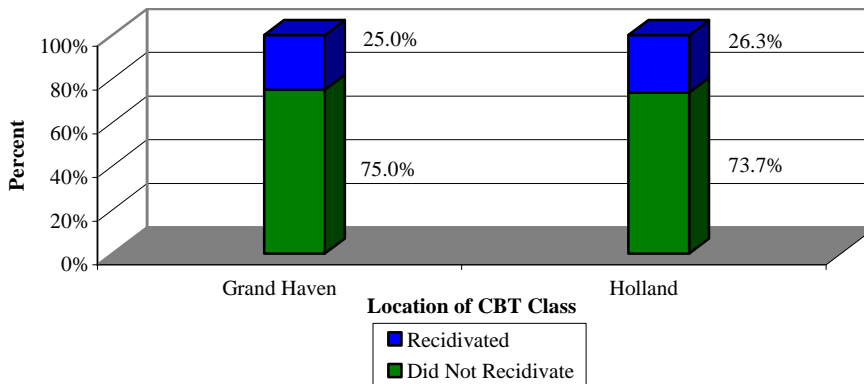
**Participant Variables without Correlations to Post-Program Recidivism**

Table 10

Post-Program Recidivism by Location of CBT Class				
	Recidivated		Did Not Recidivate	
Grand Haven	25.0%	(9)	75.0%	(27)
Holland	26.3%	(10)	73.7%	(28)
<b>Total</b>	<b>25.7%</b>	<b>(19)</b>	<b>74.3%</b>	<b>(55)</b>

**p = 0.897 (Not Statistically Significant)**

Source: Probation and Community Corrections Department, AS400, JDW, LEIN



## Attachment G

### 12-Month Cost-Effectiveness Analysis (2008 Dollars)

		CBT Participants			Matched-Pairs			
			Average Cost Per Person	Total Cost		Average Cost Per Person	Total Cost	
Program Cost	Number of Participants	74	\$182 <sup>1</sup>	\$13,468	74	\$0 <sup>2</sup>	\$0	
	Recidivism Rate	Number of Re-Offenders <sup>3</sup>	19		19			
		Total Number of Re-Convictions	26		29			
Cost Resulting From Recidivism	<u>Reconviction Program</u>	<u>Number</u>			<u>Reconviction Program</u>	<u>Number</u>		
		Traditional Probation	4	\$2,011 <sup>4</sup>	\$8,044	7	\$2,011 <sup>4</sup>	\$14,077
		ISP Probation	3	\$4,930 <sup>4</sup>	\$14,790	2	\$4,930 <sup>4</sup>	\$9,860
		Circuit Court Probation	24 (months)	\$182 <sup>5</sup>	\$4,368	69 (months)	\$182 <sup>5</sup>	\$12,558
		No Program (Court Cost Only)	15	\$176 <sup>6</sup>	\$2,640	9	\$176 <sup>6</sup>	\$1,584
		No Program (Jail Cost) <sup>7</sup>	68 (days)	\$46.20	\$3,142	306 (days)	\$46.20	\$14,137
		<b>Total Recidivism Cost</b>			<b>\$32,984</b>			<b>\$52,216</b>
Total Cost	<b>Total CBT Program and Recidivism Cost</b>			<b>\$46,452</b>	<b>Total Program and Recidivism Cost</b>		<b>\$52,216</b>	
	<b>Average CBT Program and Recidivism Cost Per Person</b>			<b>\$628</b>	<b>Average Program and Recidivism Cost Per Person</b>		<b>\$706</b>	
	<b>Average CBT Program and Recidivism Cost to County Per Person<sup>8</sup></b>			<b>\$398</b>	<b>Average Program and Recidivism Cost to County Per Person<sup>8</sup></b>		<b>\$512</b>	

<sup>1</sup> This reflects the total cost of the CBT Program per successful completion.

<sup>2</sup> Since each CBT and Matched-Pair participant completed Traditional Probation or ISP, the cost of that programming was not included in the analysis. Instead, the added cost to attend the CBT Program was included for the CBT participants.

<sup>3</sup> The recidivism rate is 25.7% for CBT Participants and 25.7% for Matched-Pair Probationers who did not attend CBT. This rate is calculated by dividing the number of re-offenders by the number of participants. All offenses, except technical violations (e.g. fishing without a license), that occurred within the first 12 months after probation completion were included.

<sup>4</sup> This taxpayer cost was developed as part of an August 2007 Traditional and ISP Probation Evaluation and includes salaries and fringes of probation officers, judges, prosecutors, defense attorneys, and probation department support staff; overhead expenses; and jail cost. The cost figures from the August 2007 Evaluation have been adjusted for inflation utilizing the Bureau of Labor Statistics' Consumer Price Index Calculator. The amount paid with County dollars is \$1,993 for Traditional Probation and \$4,210 for ISP Probation.

<sup>5</sup> This is the average cost for one month of Circuit Court Probation. This cost was obtained from the Michigan Department of Corrections' 2005 Annual Report and has been adjusted for inflation utilizing the Bureau of Labor Statistics' Consumer Price Index Calculator.

<sup>6</sup> This is the cost to process a recidivator through court in which the recidivator receives only a jail sentence, fines, and/or restitution (e.g. no court program sentence received). This cost includes salaries and fringes of judges, prosecutors, and defense attorneys and was determined in conjunction with each of these stakeholders. The amount paid with County dollars is \$155.

<sup>7</sup> This is the jail cost for those recidivators who were not ordered to participate in a program, but were sentenced to serve jail time.

<sup>8</sup> Based on the amount of each "Average Cost Per Person" that is paid with County dollars.



## Attachment H

### Cognitive Behavioral Therapy Self-Reported Feedback

The following is summary of comments that were received from CBT Program participants. Because the participants of each focus group often provided similar feedback, not every is listed.

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**Question: Was the program helpful? If yes, how was the program helpful?**

- The group interaction was helpful because I was able to work things out by talking and listening to others
- It was helpful to hear about other people's experiences in jail. I have never been to jail and I realized how close I came to being locked up. It was a real eye-opener.
- The videos were helpful because I could easily relate to the people who were in them
- It was helpful when Chris stopped the videos to discuss the issues that were just seen. I find myself thinking about the discussion that stemmed from the "Omar and Pete" video a lot
- The exercises in the workbook were helpful
- The exercise where I had to say 10 good things about myself was helpful
- It was helpful because it got me caring about my future
- It was helpful because it taught me how to change my way of thinking

**Question: What didn't you like about the program and why?**

- It was hard to fit the program into my schedule. This was just one of the many classes that I had to attend as part of my probation sentence
- I thought the program was boring. I didn't gain a lot from the experience
- No bathroom breaks
- It was hard to have a serious discussion because many of the younger participants were always talking amongst themselves
- The "28 Days" movie was not helpful

**Question: What was your attitude towards the program when you first started?**

- Three months is a long time
- It was a good break from my kids
- It wasn't good. It's hard to have a good attitude when you are being ordered to do something
- Not another requirement

**Question: Has your attitude towards the program changed? If yes, how and when did it change?**

- I started to have a more positive attitude about 6 weeks in to the program
- I knew I had to be here, so I made the best out of a bad situation
- My attitude changed when I realized that good information was being presented

**Question: What is the single most important thing you learned from the program and why?**

- I can be confident in myself without using drugs
- Think before acting
- Consequences
- I'm not alone; other people are dealing with the same problems
- How to deal with issues when they occur and before they become a problem
- Discipline

## Attachment H

### Cognitive Behavioral Therapy Self-Reported Feedback

**Question: Have you been to other programs? If yes, is this program better or worse?**

*Most participants have been to other programs such as OAR, Reality Counseling, AA, and Community Service. Some of the comments are provided below:*

- CBT is better because of the topics that are presented
- CBT is better because the class runs smoothly
- CBT is better because there is group discussion
- CBT is better because it is free to attend
- CBT is not better or worse than other programs; it's just a different way to present the same material

**Question: Do you think the length of the program was too short, just right, or too long and why?**

- I think 12 weeks is just right. It sounds like a lot, but it went by quickly
- I think 12 weeks is too long. The material could have been covered in 5 weeks
- I think it would be better to attend two or three sessions per week in order to complete the program in a shorter span of time (4 or 6 weeks instead of 12 weeks)
- I think the length of each class should be decreased to one hour (from two hours). This would keep the class more focused

**Question: Do you think the class size (maximum of 14) was too small, just right, or too large and why?**

- I think this was the perfect class size. There was a good mix of people who were in the program for many different reasons
- I think the class size was just right. I felt more comfortable than with a large group and this allowed me to really open up and participate in the discussions. Also, it gave each person more time to share their thoughts and perspectives
- I think the class size was just right because it made it easy to have good discussions
- I think this was a great class size because you get to know everyone and feel comfortable with them

**Question: Did you like the instructor? What did/didn't you like?**

- Chris is genuinely concerned and willing to help
- Chris went out of his way to help us find jobs
- Chris made us feel comfortable. He never looked down on us or made us feel ashamed
- Chris has a lot of energy which is required in order to listen and provide input to each person
- Chris was honest about his past. It was easy to relate to him because he wasn't just reciting information that he read in a book
- Chris was good at introducing topics. I liked how he wrote several topics on a board and allowed us to choose the topics that we wanted to discuss
- Chris is a bit of a pushover. He should have been able to weed out the troublemakers

**Question: Do you think you will need a follow-up program to reinforce the ideas and concepts you learned in this program?**

- No, I think once is enough
- No, this class served as the follow-up program to reinforce the things that I already knew, but wasn't using

## Attachment H

### Cognitive Behavioral Therapy Self-Reported Feedback

**Question: Do you think the program could be improved? How could it be improved?**

*Most participants indicated that the program was operating well and no improvements were necessary. A few suggestions for improvement are provided below:*

- I think the classes should be either all male or all female. I didn't feel like I could be as open as I wanted since there were females in the class
- Better access to bathrooms (Holland FIA building)
- One or two additional videos would be good since they were so helpful
- We could use a better TV in this room, preferably one that is not on the floor (Grand Haven)
- Move the class to a different setting. The courthouse is not a pleasant setting for most of us

**Question: Do you feel that this program will help you stay out of trouble in the future or would just being on probation have been enough?**

- This class was very helpful. I definitely needed something to slow me down
- Probation alone would not have been enough because I've been through it before and now I'm back
- I'm in this program because of a Probation Violation. It was much more helpful than sitting in jail for a week
- It's hard to know, but I think that you get more from coming to the class than not coming to the class
- I learned a lot from taking this class. But, one class is not going to keep a person out of the system. It's up to the individual to make that decision



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