

Data Driven Decisions

CHITTENDEN COUNTY TREATMENT COURT OUTCOME EVALUATION FINAL REPORT

Submitted to:

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**CHITTENDEN COUNTY
TREATMENT COURT

OUTCOME EVALUATION**

Submitted By

THE VERMONT CENTER FOR JUSTICE RESEARCH

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TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	I
Methodology	I
Summary of Conclusions	II
INTRODUCTION	1
CHITTENDEN COUNTY TREATMENT COURT	2
Overview.....	2
EVALUATION METHODOLOGY	2
RECIDIVISM.....	3
How is Recidivism Defined?.....	3
How was Recidivism Determined?	4
RESEARCH QUESTION 1: WHICH SUBJECTS WERE CONVICTED OF ADDITIONAL CRIMES AFTER THEIR PARTICIPATION IN THE CCTC?	5
Summary of Findings	5
Detailed Findings	5
RESEARCH QUESTION 2: WHEN WERE SUBJECTS ARRESTED AND CONVICTED?.....	7
Summary of Findings	7
Detailed Findings	7
RESEARCH QUESTION 3: WHAT CRIMES DID THEY COMMIT?	9
Summary of Findings	9
Detailed Findings	9
RESEARCH QUESTION 4: IN WHICH COUNTIES WERE THE SUBJECTS CONVICTED?	12
Summary of Findings	12
Detailed Findings	12
PARTICIPANT PROFILE COMPARISONS.....	14
Overview.....	14
Demographic Profile Comparisons – Summary of Findings	14
Demographic Profile Comparisons - Detailed Findings	15
Criminal History Profile Comparisons - Summary of Findings.....	20

Criminal History Profile Comparisons - Detailed Findings..... 20

Base Docket Case Profiles - Summary of Findings..... 25

Base Docket Case Profiles - Detailed Findings..... 25

RESEARCH QUESTION 5: ARE THERE DEMOGRAPHIC AND CRIMINAL HISTORY CHARACTERISTICS
THAT ARE IMPORTANT IN PREDICTING WHETHER PARTICIPANTS RECIDIVATE OR NOT?..... 31

 Regression Analysis - Summary of Findings 31

 Regression Analysis - Detailed Findings 31

LIMITATIONS35

CONCLUSIONS36

EXECUTIVE SUMMARY

In 2002, under Act 128, the Vermont Legislature established a pilot project to create drug court initiatives and begin implementing drug courts in three Vermont counties: Rutland, Chittenden, and Bennington. The Chittenden County Treatment Court (hereafter, the “CCTC”) was one of the drug courts established by Act 128, and began operating in January 2003. It was established as a pilot program for combating drug crimes, not only drug possession, but drug-related crimes, both misdemeanors and felonies, such as retail theft, burglaries, and grand larceny. Offenders identified as drug-addicted are referred to the court by law enforcement, probation officers and attorneys and put into a treatment program whose goal is to reduce drug dependency and improve the quality of life for offenders and their families. In most cases, after their successful completion of drug court, the original charges are dismissed or reduced. The benefits to society include reduced recidivism by the drug court participants, leading to increased public safety and reduced costs to taxpayers.

Methodology

An outcome evaluation attempts to determine the effects that a program has on participants. In the case of the CCTC the objective of this outcome evaluation was to determine the extent to which the CCTC reduced recidivism among program participants.

An indicator of post-program criminal behavior that is commonly used in outcome evaluations of criminal justice programs is the number of participants who recidivate -- that is, are convicted of a crime after they complete the program. An analysis of the criminal history records of the 150 subjects who were referred to the CCTC from January 12, 2003 to May 24, 2012, was conducted using the Vermont criminal history record of participants as provided by the Vermont Criminal Information Center (VCIC) at the Vermont Department of Public Safety. The Vermont criminal history records on which the recidivism analysis was based included all charges and convictions prosecuted in a Vermont Superior Court-Criminal Division that were available as of June 21, 2012. The criminal records on which the study was based do not contain federal prosecutions, out-of-state prosecutions, or traffic tickets.

Summary of Conclusions

1. The research showed that the CCTC had a minimal effect at reducing recidivism rates of participants of the program. People who successfully graduated from the CCTC had a recidivism rate of 46.5% compared to 53.2% for participants who were unsuccessful at completing the CCTC. This observed difference, however, was found to be insignificant.

It is important to note, however, that a true control or comparison group, as found in experimental research designs, was not available for comparison. The recidivism pattern of the study participants is likely to be different from a control group whose members would not be exposed to the services provided by the CCTC program.

2. The research showed that the success rate, or the percentage of participants who remained conviction-free for the first year after leaving the program, was very positive. Over three-quarters of the graduates of the CCTC remained conviction-free during the period up to one year after leaving the program. The participants who were unsuccessful at completing the CCTC also showed a similar success rate of 77%.
3. The CCTC appears to be a promising approach for reducing the number and severity of reconvictions for participants who completed the program. The reconviction rate for the successful CCTC participants was almost half the rate for the participants that were unsuccessful (173 compared to 280 reconvictions per 100, respectively). CCTC graduates also had fewer felony reconvictions than did the subjects that did not complete the CCTC.
4. The CCTC recidivists tended to commit post-program crime in Chittenden County. For both study segments approximately three-quarters of their new convictions were prosecuted in Chittenden County.
5. Comparisons of demographic and criminal history profiles across study segments revealed that two characteristic -- *Base Docket Sentence Type* and *Age at Program Start* -- were shown to be differentiating variables of recidivism status. Discriminant analysis further showed these variables to be positively correlated to recidivism, or a more severe sentence and younger age at program start increased the probability to recidivate. However, the analysis also revealed that the correlations were not strong enough to result in a useful model that could be used as a predictor of recidivism.

INTRODUCTION

This outcome evaluation of the CCTC was designed to answer five questions associated with the post-project behavior of subjects who participated in the program from January 12, 2003 to May 24, 2012.

1. Which subjects were convicted of additional crimes after their participation in the CCTC?
2. For those subjects who were convicted of additional crimes after their participation in the CCTC, when were they convicted?
3. For those subjects who were convicted of additional crimes during after their participation in the CCTC, what crimes did they commit?
4. For those subjects who were convicted of additional crimes after their participation in the CCTC, in which counties were the subjects convicted?
5. Which demographic and criminal history characteristics are important in predicting whether or not participants in the CCTC recidivate?

In this evaluation, participant behavior was divided into two study groups – those who successfully graduated from the CCTC, and those who were terminated or withdrew before completing the CCTC.

This outcome evaluation was supported through funds provided by the Vermont Court Administrator's Office (CAO), however, the findings and conclusions expressed in this report are those of the authors and do not necessarily reflect the views of the CAO.

CHITTENDEN COUNTY TREATMENT COURT

January 2003 – March 2012

Overview

In 2002, under Act 128, the Vermont Legislature established a pilot project to create drug court initiatives and begin implementing drug courts in three Vermont counties: Rutland, Chittenden, and Bennington. The Chittenden County Treatment Court was one of the drug courts established by Act 128, and began operating in January 2003. It was established as a program for combating drug crimes, not only drug possession, but drug-related crimes, both misdemeanors and felonies, such as retail theft, burglaries and grand larceny. Offenders identified as drug-addicted are referred to the court by law enforcement, probation officers and attorneys and put into a treatment program whose goal is to reduce drug dependency and improve the quality of life for offenders and their families. In most cases, after their successful completion of drug court, the original charges are dismissed or reduced. The benefits to society include reduced recidivism by the drug court participants, leading to increased public safety and reduced costs to taxpayers.

“In the typical drug court program, participants are closely supervised by a judge who is supported by a team of agency representatives operating outside their traditional roles. The team typically includes a drug court coordinator, case managers, substance abuse treatment providers, District/State’s Attorneys, Public Defenders, law enforcement officers, and parole and probation officers who work together to provide needed services to drug court participants. District/State’s Attorneys and Public Defenders hold their usual adversarial positions in abeyance to support the treatment and supervision needs of program participants. Drug court programs blend the resources, expertise and interests of a variety of jurisdictions and agencies.”¹

EVALUATION METHODOLOGY

An outcome evaluation attempts to determine the effects that a program has on participants. In the case of the CCTC the objective of this outcome evaluation was to determine the extent to which the program reduced recidivism among its participants.

An indicator of post-program criminal behavior that is commonly used in outcome evaluations of criminal justice programs is the number of participants who recidivate -- that is, are convicted of a crime after they complete the program. In the case of this study, participants were considered to have recidivated if they were reconvicted of any crime prosecuted in a Vermont Superior Court-Criminal Division; including violations of probation and motor vehicle offenses,

¹Vermont Drug Courts: Rutland County Adult Drug Court Cost Evaluation Final Report, NPC Research, January 2009.

after successful completion or termination from the CCTC.

This evaluation included two study segments – subjects who successfully completed the CCTC program (n=71), and a segment that was terminated or withdrew from the program (n=79). During the study period, 47% of CCTC participants (71 of 150) successfully graduated from the program.

An analysis of the criminal history records of the 150 subjects who were referred to the CCTC from January 12, 2003 to May 24, 2012, was conducted using the Vermont criminal history records of the participants as provided by the Vermont Criminal Information Center at the Vermont Department of Public Safety. The Vermont criminal history records on which the recidivism analysis was based included all charges and convictions prosecuted in a Vermont District Court that were available as of June 21, 2012. The criminal records on which the study was based do not contain federal prosecutions, out-of-state prosecutions, or traffic tickets.

RECIDIVISM

How is Recidivism Defined?

Since recidivism is usually the primary measure of interest when evaluating the effectiveness of programs such as the CCTC, it is important to consider the manner in which recidivism is defined, and how the definition affects the interpretation of study results. The Vermont Legislature in “The War on Recidivism” Act of 2011, ordered the Department of Corrections to calculate recidivism as:

“[T]he rate of recidivism based upon offenders who are sentenced to more than one year of incarceration, who, after release from incarceration, return to prison within three years for a conviction for a new offense or a violation of supervision resulting, and the new incarceration sentence is at least 90 days.”²

Analysis using this definition of recidivism for the CCTC study indicates that only five subjects, belonging to the terminated/withdrew group, can be classified as recidivists within this definition. This analysis results in a post-program recidivism rate of 6.3% for this study segment, and no recidivists among those who successfully completed the CCTC.

Despite the extremely low recidivism rate for the CCTC derived from Vermont’s statutory definition of recidivism, project administrators requested that a more rigorous definition for recidivism be used for this analysis. It was determined that a “zero tolerance” standard for recidivism would be adopted such that any CCTC participant who was convicted of any crime prosecuted in a Vermont Superior Court-Criminal Division, including violations of probation and motor vehicle offenses, after program completion or termination would be considered a recidivist.

² <http://www.leg.state.vt.us/docs/2012/Acts/ACT041.pdf> Section 5, Subsection b(1).

How was Recidivism Determined?

In order to determine which subjects recidivated, a recidivism clock start date was set for each subject, dependent on whether they successfully graduated from the CCTC, or were unsuccessful at completing the CCTC and were terminated or withdrew.

For those participants that had **successfully completed** the CCTC, their recidivism clock started on their “Program Completion Date”, which was included in the participant description data provided by the CAO. If a Program Completion date was not available, the recidivism clock was started on the “Sentencing Date” which was also provided in the participant description data. If the sentencing date was not available, then the recidivism clock was started on the “Disposition Date” of the base docket case (the case that resulted in the subject’s referral to the CCTC) from VCIC criminal history records. For subjects who were **terminated or withdrew** from the CCTC, the recidivism clock was started on the “Program End Date,” which was provided in the participant description data from the CAO.

Based on each subject’s recidivism start date and their criminal records from VCIC, a subject was considered a recidivist if they were convicted of any new offense after their recidivism clock start date. The elapsed time to recidivate was also measured between the start of the participant’s recidivism clock and the date the participant was arrested for the new offense that ended in conviction.

RESEARCH QUESTION 1: WHICH SUBJECTS WERE CONVICTED OF ADDITIONAL CRIMES AFTER THEIR PARTICIPATION IN THE CCTC?

Summary of Findings

People who successfully graduated from the CCTC had a recidivism rate of 46.5% compared to 53.2% for participants who were terminated or withdrew from the CCTC—this difference, however, is not significant.

Detailed Findings

Table 1 provides data regarding the percentage of CCTC participants who recidivated during the study period as per the study definition of recidivism. The table shows little difference in recidivism rates between the subjects who completed the CCTC and those subjects who failed to complete the CCTC and withdrew or were terminated. For the subjects who successfully completed the CCTC, 33 of the 71 subjects (46.5%) were reconvicted of some type of crime as compared to 42 of the 79 subjects (53.2%) who failed to complete the program.

Table 1
Subjects Reconvicted for Any Offense

	Graduated/Completed Program		Terminated/Withdrew from Program	
	Count	Percent	Count	Percent
Recidivist	33	46.5%	42	53.2%
Non-recidivist	38	53.5%	37	46.8%
Total	71	100.0%	79	100.0%

A concern surfaced regarding 24 subjects in the study sample who had spent less than three months in the Treatment Court program. Analysis of the data without these subjects showed essentially identical recidivism rates. Table 1B displays these results.

Table 1B
Subjects (with > 3 months in CCTC) Reconvicted for Any Offense

	Graduated/Completed Program		Terminated/Withdrew from Program	
	Count	Percent	Count	Percent
Recidivist	31	45.6%	30	51.7%
Non-recidivist	37	54.4%	28	48.3%
Total	68	100.0%	58	100.0%

Since the results without these subjects did not change significantly, the 24 subjects who spent less than three months in the Treatment Court program were left in the study sample for the remaining analyses in this report.

RESEARCH QUESTION 2: WHEN WERE SUBJECTS ARRESTED AND CONVICTED?

Summary of Findings

The success rate, or the percentage of participants who remained conviction-free for the first year after leaving the program, was 76.1% for participants who graduated from the CCTC. The terminated/withdrew study segment had similarly high success rate of 77.2%.

The analysis of recidivism rates versus eligibility to recidivate for the CCTC graduates revealed that the percentage of recidivists decreased substantially from 23.9% during the year immediately after completing the CCTC to 11.7% during the period from Year 1 to Year 2. The recidivism rate decreased again from Year 2 to Year 3 to 7.7% -- and rose slightly to 10.9% after Year 3. The results show that most recidivism will occur in the period up to 1 year after leaving the CCTC, and as graduates continue through the next 2 years, the probability that they will recidivate decreases.

Detailed Findings

In addition to recidivism measures, program effectiveness can be also measured in terms of how long a participant remains conviction free in the community. Even if a participant is convicted of another offense after program completion, the longer the subject remains conviction free is important in evaluating the crime prevention potential for a project.

Table 2 summarizes the analysis of elapsed recidivism time for subjects who were convicted of any new crime during the study period. For the subjects who **successfully completed** the CCTC, 23.9% (17 of 71) of their arrests for any new criminal conviction occurred in less than one year. Similarly, for the subjects who **withdrew** or were **terminated** from the CCTC, 22.8% (18 of 79) of their arrests occurred in less than one year.

Table 2
Time to Recidivism

Participant Group	When First Recidivated	Total	Percentage
Graduated/Completed Program	< 1 year	17	23.9%
	During year 1	7	9.9%
	During year 2	4	5.6%
	After year 2	5	7.0%
	Total Subjects	71	46.5%
Terminated/Withdrew from Program	< 1 year	18	22.8%
	During year 1	8	10.1%
	During year 2	8	10.1%
	After year 2	8	10.1%
	Total Subjects	79	53.2%

If “successful outcome” is defined as no arrest for any new criminal conviction within one year of recidivism eligibility, than the success rate for participants who completed the CCTC would be 76.1% (54 subjects with no arrest for any new criminal conviction within one year divided by 71 participants who successfully completed the CCTC). A similar success rate was observed for participants who withdrew or were terminated from the CCTC with 61 out of 79 (77.2%) with no new convictions within one year.

To provide a more detailed analysis of when recidivism occurs, Table 3 presents recidivism data in yearly increments – focusing on the number of graduates who were eligible to recidivate during a time period and the number of participants who were reconvicted during that time period. Looking at the first column of data – the time period up to one year after CCTC completion– all 71 graduates appear in this increment because at the time of the study every participant had been away from the CCTC for at least a year. During that time period, 17 of the participants (23.9%) were reconvicted. Looking at the second column of data – the first full year after CCTC completion/termination – 60 of the participants had reached that point of elapsed time since leaving the CCTC. During “Year 1” the recidivism rate dropped substantially with only seven participants reconvicted (11.7%). The recidivism rate dropped again in “Year 2” with four of 52 (7.7%) subjects being reconvicted, and increased slightly in “Year 3” with five of 46 subjects (10.9%) committing new crimes. The results show that most recidivism will occur in the period up to 1 year after leaving the CCTC, and as subjects continue through the next 2 years, the probability that they will recidivate decreases.

Table 3
Time to Recidivate by Years of Eligibility to Re-offend
Graduates of CCTC

	Post-CCTC Elapsed Time			
	< 1 Year	Year 1	Year 2	Year 3
Number of Participants Who Recidivated During the Time Period	17	7	4	5
Total # of Participants Who Were Eligible to Recidivate During the Time Period*	71	60	52	46
% Recidivated	23.9%	11.7%	7.7%	10.9%

*The data in this row represents all participants who had completed the CCTC for certain time periods. Participants may appear in more than one column based on the longevity of their post-CCTC elapsed time. For example each of the 46 participants who appear in the “Year 3” column also appear in the “< 1 Year”, “Year 1”, and “Year 2” columns because, having completed three years of post-CCTC elapsed time, they necessarily have also completed less than one year, one year, and two years of elapsed time.

RESEARCH QUESTION 3: WHAT CRIMES DID THEY COMMIT?

Overview

When considering the effect that the CCTC had on participants it is important to differentiate between the number of participants who recidivated and the number of crimes for which participants were convicted during the study period. For example, if a participant's case were disposed in 2009 and s/he was convicted of two crimes in 2010 and then three crimes in 2011, the participant would be counted as a recidivist only once. However, in order to understand the full offense pattern of participants, and to assess the full impact of the CCTC on the criminal behavior of participants, it is important to also note that the defendant was convicted of those five additional crimes during the study period. While the first section of this evaluation focused on whether or not a *participant* was reconvicted during the study period, this section of the analysis focuses on the *number of crimes* for which participants were reconvicted.

Summary of Findings

Significant differences were observed between study segments with respect to reconviction rate and number of assault reconvictions. The reconviction rate for those participants who successfully graduated from the CCTC was substantially lower than the rate found for those subjects who were terminated or withdrew from the program. The graduates of the CCTC had 173 reconvictions per 100 participants versus 280 reconvictions per 100 participants for the terminated/withdrew group.

The analysis also showed that the graduates of the CCTC were reconvicted of significantly fewer assault charges compared to the reconviction records of the terminated/withdrew group. The graduates only had two assault convictions versus 25 assault convictions for the subjects who did not complete the CCTC.

Detailed Findings

Participant Offense Levels and Patterns

Table 4 shows the number of reconvictions between the recidivists who graduated and those that were terminated/withdrew. Overall, the combined recidivists from the CCTC were convicted of 344 crimes during the follow-up period. Participants who completed the CCTC were convicted of a total of 123 crimes during the study period – 16.3% (20) of those crimes were felonies. Participants who withdrew or were terminated from the CCTC were convicted of 221 crimes during the study period; 19.0% (42) of those crimes were felonies. This difference in felony reconvictions was not significant.

Examination of the reconviction rate per 100 subjects provides a more revealing comparison. The reconviction rate for those participants who completed the CCTC was 173 reconvictions per 100 participants (123 reconvictions divided by the 71 subjects who completed the CCTC, multiplied by 100) versus 280 reconvictions per 100 participants for the terminated/withdrew group (221 reconvictions divided by the 79 subjects, multiplied by 100).

Table 4
Offense Levels For All Crimes For Which Subjects Were Reconvicted

	Graduated/Completed Program		Terminated/Withdrew from Program		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
Felony	20	16.3%	42	19.0%	62	18.0%
Misdemeanor	103	83.7%	179	81.0%	282	82.0%
Total	123	100.0%	221	100.0%	344	100.0%

Table 5 shows the types of crime for which the subjects were reconvicted. The recidivists who completed the CCTC averaged 3.7 convictions with a median of 2 and maximum of 14 convictions. About 69% their reconvictions included (listed in order of frequency): theft, motor vehicle violations, drug crimes, and fraud. There were only 2 violent crime convictions for recidivists who completed the CCTC (1 simple assault, 1 domestic assault). Twenty out of 24 (or 83%) of their motor vehicle violations were driving with license suspended.

The subjects who were terminated/withdrew from the CCTC averaged 5.3 convictions with a median of 4 convictions and a maximum of 33. These subjects showed similar offense patterns as subjects who completed the CCTC, with approximately 65% of their reconvictions including (listed in order of frequency): theft, motor vehicle violations, assault, probation violations, and drug crimes. The terminated/withdrew group had significantly more reconvictions for assault than did the subjects who successfully completed the program (11.3% vs. 0.8% of total reconvictions, respectively). The terminated/withdrew segment had a total of 25 violent crime convictions, of which 11 were simple assaults. Other assault crimes included: domestic assault (9), assaulting a law enforcement officer (3), aggravated assault (1), and assault and robbery (1). Three-quarters of the motor vehicle violations committed by these subjects were for driving with license suspended.

Table 5
All Crimes For Which Subjects Were Reconvicted

	Graduated / Completed Program		Terminated / Withdrew From Program		Total	
	# of Conv	%	# of Conv	%	# of Conv	%
Total Theft Convictions	38	30.9%	55	24.9%	93	27.0%
Total DMV Convictions	24	19.5%	33	14.9%	57	16.6%
Total Assault Convictions	2	0.8%	25	11.3%	27	7.8%
Drug Convictions	12	9.8%	13	5.9%	25	7.3%
Violation of Probation	5	4.1%	17	7.7%	22	6.4%
Vs Justice *	7	5.7%	13	5.9%	20	5.8%
Total Fraud Convictions	11	8.9%	7	3.2%	18	5.2%
Escape	4	3.3%	13	5.9%	17	4.9%
Failure to Appear	5	4.1%	12	5.4%	17	4.9%
Disorderly Conduct	6	4.9%	8	3.6%	14	4.1%
Commerce	0	0.0%	8	3.6%	8	2.3%
Temporary Restraining Order Violation	0	0.0%	8	3.6%	8	2.3%
Total DUI Convictions	6	4.9%	1	0.5%	7	2.0%
Unlawful Trespass	3	2.4%	3	1.4%	6	1.7%
Assault Law Enforcement	0	0.0%	3	1.4%	3	0.9%
Unlawful Mischief	0	0.0%	3	1.4%	3	0.9%
Conspiracy	0	0.0%	1	0.5%	1	0.3%
Disturbing the Peace	0	0.0%	1	0.5%	1	0.3%
Total	123	100.0%	221	100.0%	344	100.0%
Number of Recidivists	33		42		75	
Average # of Convictions	3.7		5.3		4.6	
Median # of Convictions	2		4		4	
Maximum # of Convictions	14		33		33	

Note: Values in the same row that are shaded in gray are significantly different at $p < 0.05$ in the two-sided test of equality for column means.

* Contempt, false alarms, resisting arrest, etc.

RESEARCH QUESTION 4: IN WHICH COUNTIES WERE THE SUBJECTS CONVICTED?

Summary of Findings

The graduates of the CCTC tended to be reconvicted primarily in Chittenden County (76%), followed by Rutland county (17%). The terminated/withdrew group, although showing a similar pattern with most of their crimes occurring in Chittenden County (74%), also had new convictions prosecuted in eight other counties.

Detailed Findings

Table 6 provides the distribution of reconvictions for CCTC participants who successfully completed the program by the county in which the case was prosecuted. Chittenden County was most often the location for reconvictions and accounted for 76% of the total (94 out of 123). Rutland was the next most frequent county for new crimes being committed accounting for 17% of reconvictions (21 out of 123). Other counties where subjects recidivated included: Addison, Franklin, Orange, and Windsor.

Table 6
County of Prosecution for Reconvictions:
Participants Who Graduated

	Chittenden		Rutland		Other Counties	
	# of Conv	%	# of Conv	%	# of Conv	%
Total Theft Convictions	31	33.0%	7	33.3%	0	0.0%
Total DMV Convictions	19	20.2%	2	9.5%	3	37.5%
Drug Offense	9	9.6%	2	9.5%	1	12.5%
Vs Justice *	7	7.4%	0	0.0%	0	0.0%
Total DUI Convictions	6	6.4%	0	0.0%	0	0.0%
Total Fraud Convictions	5	5.3%	4	19.0%	2	25.0%
Disorderly Conduct	5	5.3%	0	0.0%	1	12.5%
Failure to Appear	1	1.1%	4	19.0%	0	0.0%
Violation of Probation	3	3.2%	2	9.5%	0	0.0%
Escape	4	4.3%	0	0.0%	0	0.0%
Unlawful Trespass	3	3.2%	0	0.0%	0	0.0%
Simple Assault	1	1.1%	0	0.0%	0	0.0%
Domestic Assault	0	0.0%	0	0.0%	1	12.5%
Total	94	100.0%	21	100.0%	8	100.0%

* Addison, Franklin, Orange, Windsor

** Contempt, False Alarms, Resist Arrest, etc.

Table 7 shows the distribution of counties where the participants who were terminated or withdrew from the CCTC were prosecuted for their reconvictions. The results show that, as observed for the graduates of the CCTC, a majority (73.7% or 163 of 221) of the new convictions occurred in Chittenden County. Caledonia and Windham Counties accounted for 9.5% and 5.4% of reconvictions, respectively. Addison, Franklin, Grand Isle, Orange, Washington, and Windsor Counties accounted for the remaining 11% of the total reconvictions for this study segment.

Table 7
County of Prosecution for Reconvictions:
Participants Who Were Terminated / Withdrew From Program

	Caledonia		Chittenden		Windham		Other Counties*	
	# of Conv	%	# of Conv	%	# of Conv	%	# of Conv	%
Total Theft Convictions	0	0.0%	49	30.1%	4	33.3%	2	8.0%
Total DMV Convictions	1	4.8%	26	16.0%	0	0.0%	5	20.0%
Total Assault Convictions	3	14.3%	16	9.8%	0	0.0%	6	24.0%
Total Fraud Convictions	0	0.0%	15	9.2%	0	0.0%	0	0.0%
Escape	0	0.0%	13	8.0%	0	0.0%	0	0.0%
Drug Offense	0	0.0%	11	6.7%	0	0.0%	2	8.0%
Vs Justice **	1	4.8%	10	6.1%	1	8.3%	1	4.0%
Violation of Probation	5	23.8%	7	4.3%	2	16.7%	3	12.0%
Disorderly Conduct	0	0.0%	6	3.7%	1	8.3%	1	4.0%
Failure to Appear	3	14.3%	4	2.5%	4	33.3%	1	4.0%
Temporary Restraining Order Violation	8	38.1%	0	0.0%	0	0.0%	0	0.0%
Unlawful Mischief	0	0.0%	1	0.6%	0	0.0%	2	8.0%
Unlawful Trespass	0	0.0%	2	1.2%	0	0.0%	1	4.0%
Conspiracy	0	0.0%	0	0.0%	0	0.0%	1	4.0%
Disturbing the Peace	0	0.0%	1	0.6%	0	0.0%	0	0.0%
DUI-2nd Offense	0	0.0%	1	0.6%	0	0.0%	0	0.0%
GNO	0	0.0%	1	0.6%	0	0.0%	0	0.0%
Total	21	100.0%	163	100.0%	12	100.0%	25	100.0%

* Other counties included: Addison, Franklin, Grand Isle, Orange, Washington, and Windsor

** Contempt, False Alarms, Resist Arrest, etc.

PARTICIPANT PROFILE COMPARISONS

Overview

Comparisons of demographic and criminal history profiles of the two study segments was conducted in order to determine if the observed improvement in post-program success for the CCTC graduates could be attributed to benefits of the CCTC or was due to differences in characteristics between the study segments. Data from the participant records provided by the CAO and VCIC were used for this analysis. The following profiles and variables were examined:

- Demographic Profile: Gender, age when they started the CCTC, race, and state of birth.
- Criminal History Profile: Age at first conviction or contact and prior criminal record.
- Case Profile (cases that led to the referral to CCTC): Base docket offense level, type, case disposition, and sentence type.

Demographic Profile Comparisons – Summary of Findings

There were no significant differences found between the study segments or recidivism status when gender, race, and place of birth profiles were compared.

However, when comparing subjects' age when entering the CCTC, significantly more recidivists were between the ages of 18 and 20 and accounted for 22.7% of the recidivist segment. In comparison, only 8% of the non-recidivists fell in this age category. In addition, significantly more non-recidivists were between 40 and 49 when starting the CCTC. This age group accounted for 17.3% of the non-recidivists while the same age group accounted for only 5.3% of the recidivist group. This result indicates that age at program entry may potentially be an important factor in determining tendency to recidivate.

Demographic Profile Comparisons - Detailed Findings

Gender by Study Segments

Table 9 presents the gender composition of the study group. The total study group for the CCTC consisted of approximately 46.7% females and 53.3% males. No statistically significant differences in gender profile were observed across the two study segments.

Table 9
Gender by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	Count	%	Count	%	Count	%
Female	37	52.1%	33	41.8%	70	46.7%
Male	34	47.9%	46	58.2%	80	53.3%
Total	71	100.0%	79	100.0%	150	100.0%

Gender by Recidivists/Non-recidivists

Table 10 presents the gender composition tabulated by recidivism status. No significant differences were observed between the gender distributions of recidivists and non-recidivists.

Table 10
Gender by Recidivists / Non-recidivists

	Recidivist		Non-recidivist		Total	
	Count	%	Count	%	Count	%
Female	38	50.7%	32	42.7%	70	46.7%
Male	37	49.3%	43	57.3%	80	53.3%
Total	75	100.0%	75	100.0%	150	100.0%

Age When Started CCTC by Study Segments

Table 11 summarizes the age distribution of the study segments at the time they started the CCTC. No statistically significant differences were found in the age distributions across the two study segments. Of all subjects, 68% were under 30 years of age. The terminated/withdrew group had a higher percentage of participants under 30 than the graduates—75.9% versus 59.2%, but this difference was not significant

Table 11
Age When Started CCTC by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	Count	%	Count	%	Count	%
18 to 20	8	11.3%	15	19.0%	23	15.3%
21 to 24	20	28.2%	28	35.4%	48	32.0%
25 to 29	14	19.7%	17	21.5%	31	20.7%
30 to 34	11	15.5%	8	10.1%	19	12.7%
35 to 39	6	8.5%	3	3.8%	9	6.0%
40 to 49	10	14.1%	7	8.9%	17	11.3%
50 +	2	2.8%	1	1.3%	3	2.0%
Total	71	100.0%	79	100.0%	150	100.0%

Age When Started CCTC by Recidivists/Non-recidivists

Table 12 shows participant ages by their recidivism status. The data shows that the subjects' age at program entry may be related to their post-program success. Significantly more recidivists were between the ages of 18 and 20 and accounted for 22.7% of the recidivist segment, compared to only 8% representation of this age group for non-recidivists. In addition, significantly more non-recidivists were between the ages of 40 and 49 when starting the CCTC. This age group accounted for 17.3% of the non-recidivists while the same age group accounted for only 5.3% of the recidivist group.

Table 12
Age When Started CCTC

	Recidivist		Non-recidivist		Total	
	Count	%	Count	%	Count	%
18 to 20	17	22.7%	6	8.0%	23	15.3%
21 to 24	26	34.7%	22	29.3%	48	32.0%
25 to 29	15	20.0%	16	21.3%	31	20.7%
30 to 34	11	14.7%	8	10.7%	19	12.7%
35 to 39	2	2.7%	7	9.3%	9	6.0%
40 to 49	4	5.3%	13	17.3%	17	11.3%
50 +	0	0.0%	3	4.0%	3	2.0%
Total	75	100.0%	75	100.0%	150	100.0%

Note: Values in the same row that are shaded in gray are significantly different at $p < 0.05$ in the two-sided test of equality for column means

Race by Study Segments and Recidivists/Non-recidivists

Tables 13 and 14 present the racial characteristics of the CCTC participants tabulated by study segment (Table 13) and recidivism status (Table 14). Over 96% of all subjects were white. African Americans comprised 2.7% of all the study participants. No significant differences were found with regard to race between the study segments or recidivism status.

Table 13
Race by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	Count	%	Count	%	Count	%
African American	2	2.8%	2	2.5%	4	2.7%
Asian	1	1.4%	0	0.0%	1	0.7%
Caucasian	68	95.8%	77	97.5%	145	96.7%
Total	71	100.0%	79	100.0%	150	100.0%

Table 14
Race by Recidivists / Non-recidivists

	Recidivist		Non-recidivist		Total	
	Count	%	Count	%	Count	%
African American	2	2.7%	2	2.7%	4	2.7%
Asian	1	1.3%	0	0.0%	1	0.7%
Caucasian	72	96.0%	73	97.3%	145	96.7%
Total	75	100.0%	75	100.0%	150	100.0%

State or Country of Birth by Study Segments and Recidivists/Non-recidivists

Tables 15 and 16 present information regarding the states where participants were born, tabulated by study segment (Table 15) and recidivism status (Table 16). Seventy-five percent of all the participants were born in Vermont. There were no significant differences found between the study segments or recidivism status in regards to the place of birth. After Vermont the next most common places of birth were Massachusetts, New York and New Jersey. Fourteen other states and one country were also represented.

Table 15
State or Country of Birth by Study Segments

	Graduated/Completed Program		Terminated/Withdrew		Total	
	Count	%	Count	%	Count	%
VT	51	71.8%	62	78.5%	113	75.3%
MA	2	2.8%	6	7.6%	8	5.3%
NY	2	2.8%	3	3.8%	5	3.3%
NJ	2	2.8%	1	1.3%	3	2.0%
AL	2	2.8%	0	0.0%	2	1.3%
CT	2	2.8%	0	0.0%	2	1.3%
MD	1	1.4%	1	1.3%	2	1.3%
PA	2	2.8%	0	0.0%	2	1.3%
RI	0	0.0%	2	2.5%	2	1.3%
CA	0	0.0%	1	1.3%	1	0.7%
GA	1	1.4%	0	0.0%	1	0.7%
IA	1	1.4%	0	0.0%	1	0.7%
NC	0	0.0%	1	1.3%	1	0.7%
NH	1	1.4%	0	0.0%	1	0.7%
SC	1	1.4%	0	0.0%	1	0.7%
TX	0	0.0%	1	1.3%	1	0.7%
WY	1	1.4%	0	0.0%	1	0.7%
Sudan	0	0.0%	1	1.3%	1	0.7%
Unknown	2	2.8%	0	0.0%	2	1.3%
Total	71	100.0%	79	100.0%	150	100.0%

Table 16
State or Country of Birth by Recidivists / Non-recidivists

	Recidivist		Non-recidivist		Total	
	Count	%	Count	%	Count	%
VT	60	80.0%	53	70.7%	113	75.3%
MA	3	4.0%	5	6.7%	8	5.3%
NY	2	2.7%	3	4.0%	5	3.3%
NJ	2	2.7%	1	1.3%	3	2.0%
AL	1	1.3%	1	1.3%	2	1.3%
CT	1	1.3%	1	1.3%	2	1.3%
MD	0	0.0%	2	2.7%	2	1.3%
PA	2	2.7%	0	0.0%	2	1.3%
RI	0	0.0%	2	2.7%	2	1.3%
CA	0	0.0%	1	1.3%	1	0.7%
GA	0	0.0%	1	1.3%	1	0.7%
IA	0	0.0%	1	1.3%	1	0.7%
NC	1	1.3%	0	0.0%	1	0.7%
NH	0	0.0%	1	1.3%	1	0.7%
SC	1	1.3%	0	0.0%	1	0.7%
TX	0	0.0%	1	1.3%	1	0.7%
WY	0	0.0%	1	1.3%	1	0.7%
Sudan	0	0.0%	1	1.3%	1	0.7%
Unknown	2	2.7%	0	0.0%	2	1.3%
Total	75	100.0%	75	100.0%	150	100.0%

Criminal History Profile Comparisons - Summary of Findings

The data shows that the majority of both study groups had their first conviction/contact between the ages of 16 and 20. There were, however, significantly more people within that age range in the terminated/withdrew group. In addition, there were significantly more graduates who had their first conviction between 30 and 34.

A significant difference between study segments was also observed in the average number of prior convictions, with the graduates of the CCTC averaging fewer prior convictions (6.4 versus 11.3 for the terminated/withdrew segment). The graduates also had significantly fewer prior convictions involving probation violations and crimes of unlawful mischief, but significantly more drug offenses than the terminated/withdrew study segment.

There were no significant differences observed in criminal history profiles between recidivist groups.

Criminal History Profile Comparisons - Detailed Findings

Age at First Conviction or Contact by Study Segments

Table 17 summarizes a comparison by the ages of the participants at their first criminal conviction or, if they had no conviction in their criminal history, their first contact with the criminal justice system. The data shows that the majority of both study segments had their first conviction/contact between the ages of 16 and 20, but there were significantly more people within that age range in the terminated/withdrew group (62% versus 42.3% for the graduates). In addition, there were significantly more graduates who had their first conviction between 30 and 34 (11.3% for graduates and 2.5% for terminated/withdrew participants).

Table 17
Age At First Conviction or Contact by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	Count	%	Count	%	Count	%
16 to 20	30	42.3%	49	62.0%	79	52.7%
21 to 24	21	29.6%	18	22.8%	39	26.0%
25 to 29	7	9.9%	9	11.4%	16	10.7%
30 to 34	8	11.3%	2	2.5%	10	6.7%
35 to 39	1	1.4%	0	0.0%	1	0.7%
40 to 49	3	4.2%	1	1.3%	4	2.7%
50 +	1	1.4%	0	0.0%	1	0.7%
Total	71	100.0%	79	100.0%	150	100.0%

Note: Values in the same row that are shaded are significantly different at $p < 0.05$ in the two-sided test of equality for column proportions. Tests assume equal variances.

Age at First Conviction or Contact by Recidivists / Non-recidivists

Table 18 shows the distribution of ages at first conviction or contact analyzed by recidivism status. The results show there were no significant differences in age profiles observed between recidivist groups.

Table 18
Age At First Conviction or Contact by Recidivists / Non-recidivists

	Recidivist		Non-recidivist		Total	
	Count	%	Count	%	Count	%
16 to 20	43	57.3%	36	48.0%	79	52.7%
21 to 24	20	26.7%	19	25.3%	39	26.0%
25 to 29	7	9.3%	9	12.0%	16	10.7%
30 to 34	4	5.3%	6	8.0%	10	6.7%
35 to 39	0	0.0%	1	1.3%	1	0.7%
40 to 49	1	1.3%	3	4.0%	4	2.7%
50 +	0	0.0%	1	1.3%	1	0.7%
Total	75	100.0%	75	100.0%	150	100.0%

Prior Convictions Offense Levels by Study Segments and Recidivists/Non-recidivists

Tables 19 and 20 present the data regarding the offense levels of the subjects’ prior convictions, tabulated by study segment (Table 19) and recidivism status (Table 20). Misdemeanors comprised the majority of prior convictions across the total study group—accounting for over 80% of prior convictions. There were no significant differences found within study segments or by recidivism status.

Table 19
Prior Convictions Offense Levels by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
Felony	85	18.4%	129	14.5%	214	15.8%
Misdemeanor	376	81.6%	763	85.5%	1139	84.2%
Total	461	100.0%	892	100.0%	1353	100.0%

Table 20
Prior Convictions Offense Levels by Recidivists / Non-recidivists

	Recidivist		Non-recidivist		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
Felony	105	15.4%	109	16.3%	214	15.8%
Misdemeanor	578	84.6%	561	83.7%	1139	84.2%
Total	683	100.0%	670	100.0%	1353	100.0%

Prior Convictions Offense Types by Study Segments

Table 21 presents the data on the types of offenses committed prior to involvement with the CCTC. The successful graduates averaged 6.4 prior convictions, significantly fewer than the subjects who were terminated or withdrew from the program who averaged 11.3 prior convictions. The graduates also had significantly fewer prior convictions involving probation violations and crimes of unlawful mischief, but significantly more drug convictions than the terminated/withdrew study segment.

Over half of the prior convictions for all study subjects consisted of (in order of frequency): theft, violation of probation, and DMV crimes.

Table 21
Prior Convictions Offense Type by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	# of Convictions	Percent	# of Convictions	Percent	# of Convictions	Percent
Total Theft Convictions **	137	30.2%	218	24.5%	355	26.4%
Violation of Probation	46	10.2%	162	18.2%	208	15.5%
Total DMV Convictions	38	8.4%	110	12.4%	148	11.0%
Total Fraud Convictions	52	11.5%	77	8.7%	129	9.6%
Total Assault Convictions *	19	4.2%	71	8.0%	90	6.7%
Drug Offense	40	8.8%	44	4.9%	84	6.3%
Disorderly Conduct	24	5.3%	38	4.3%	62	4.6%
Failure to Appear	25	5.5%	36	4.0%	61	4.5%
Total DUI Convictions	21	4.6%	23	2.6%	44	3.3%
Unlawful Mischief	6	1.3%	28	3.1%	34	2.5%
Unlawful Trespass	13	2.9%	19	2.1%	32	2.4%
Vs Justice ***	6	1.3%	16	1.8%	22	1.6%
Alcohol Violation	5	1.1%	11	1.2%	16	1.2%
Temporary Restraining Order Violation	9	2.0%	6	0.7%	15	1.1%
Escape	1	0.2%	6	0.7%	7	0.5%
Fish & Game Violation	4	0.9%	3	0.3%	7	0.5%
Disturbing the Peace	2	0.4%	4	0.4%	6	0.4%
Acts Prohibited/Prostitution	0	0.0%	6	0.7%	6	0.4%
Municipal Ordinance	1	0.2%	2	0.2%	3	0.2%
Accessory	0	0.0%	2	0.2%	2	0.1%
Arson	0	0.0%	2	0.2%	2	0.1%
Conspiracy	1	0.2%	1	0.1%	2	0.1%
Stalking	0	0.0%	2	0.2%	2	0.1%
Extortion	1	0.2%	0	0.0%	1	0.1%
Habitual Offender	1	0.2%	0	0.0%	1	0.1%
License/Title Offense	1	0.2%	0	0.0%	1	0.1%
L&L with a Child	0	0.0%	1	0.1%	1	0.1%
Sexual Assault on a Minor	0	0.0%	1	0.1%	1	0.1%
Weapons/Weapons at school	0	0.0%	1	0.1%	1	0.1%
Total Convictions	453	100.0%	890	100.0%	1343	100.0%
Number of Recidivists	71		79		150	
Average # of Convictions	6.4		11.3		9.0	
Median # of Convictions	4		10		8	
Maximum # of Convictions	29		35		35	

Note: Values in the same row that are shaded in gray are significantly different at $p < 0.05$ in the two-sided test of equality for column means and column proportions.

* The terminated/withdrew segment had significantly more simple assault convictions

** The graduated/completed segment had significantly more shoplifting convictions

*** Contempt, False Alarms, Resist Arrest, etc.

Table 22 presents the data on the types of prior offenses committed, tabulated by recidivism status. There were no significant differences found in the prior conviction offense type between recidivists and non-recidivists.

Table 22
Prior Convictions Offense Type by Recidivists / Non-recidivists

	Recidivist		Non-recidivist		Total	
	# of Convictions	Percent	# of Convictions	Percent	# of Convictions	Percent
Total Theft Convictions	166	24.5%	189	28.4%	355	26.4%
Violation of Probation	122	18.0%	86	12.9%	208	15.5%
Total DMV Convictions	71	10.5%	77	11.6%	148	11.0%
Total Fraud Convictions	66	9.7%	63	9.5%	129	9.6%
Total Assault Convictions	49	7.2%	41	6.2%	90	6.7%
Drug Offense	40	5.9%	44	6.6%	84	6.3%
Disorderly Conduct	34	5.0%	28	4.2%	62	4.6%
Failure to Appear	25	3.7%	36	5.4%	61	4.5%
Total DUI Convictions	18	2.7%	26	3.9%	44	3.3%
Unlawful Mischief	21	3.1%	13	2.0%	34	2.5%
Unlawful Trespass	16	2.4%	16	2.4%	32	2.4%
Vs Justice *	16	2.4%	6	0.9%	22	1.6%
Alcohol Violation	6	0.9%	10	1.5%	16	1.2%
Temporary Restraining Order Violation	3	0.4%	12	1.8%	15	1.1%
Escape	4	0.6%	3	0.5%	7	0.5%
Fish & Game Violation	4	0.6%	3	0.5%	7	0.5%
Disturbing the Peace	5	0.7%	1	0.2%	6	0.4%
Acts Prohibited/Prostitution	2	0.3%	4	0.6%	6	0.4%
Municipal Ordinance	2	0.3%	1	0.2%	3	0.2%
Accessory	2	0.3%	0	0.0%	2	0.1%
Arson	0	0.0%	2	0.3%	2	0.1%
Conspiracy	2	0.3%	0	0.0%	2	0.1%
Stalking	1	0.1%	1	0.2%	2	0.1%
Extortion	0	0.0%	1	0.2%	1	0.1%
Habitual Offender	0	0.0%	1	0.2%	1	0.1%
License/Title Offense	1	0.1%	0	0.0%	1	0.1%
L&L with a Child	0	0.0%	1	0.2%	1	0.1%
Sexual Assault on a Minor	0	0.0%	1	0.2%	1	0.1%
Weapons/Weapons at school	1	0.1%	0	0.0%	1	0.1%
Total	677	100.0%	666	100.0%	1343	100.0%
Number of Recidivists	75		75		150	
Average # of Convictions	9.0		8.9		9.0	
Median # of Convictions	8		7		8	
Maximum # of Convictions	35		35		35	

* Contempt, False Alarms, Resist Arrest, etc.

Base Docket Case Profiles - Summary of Findings

No significant differences were observed between study segments or recidivist groups with respect to base docket offense levels or types, however, the recidivists were charged with significantly more shoplifting crimes on their base docket than were the non-recidivists.

The most important difference observed in the comparisons of base docket profiles was that significantly more subjects who were terminated or withdrew from the CCTC, and significantly more recidivists, were sentenced to incarceration on their base docket. The results indicate that base docket sentencing could potentially be an important factor in determining tendency to recidivate.

Base Docket Case Profiles - Detailed Findings

Base Docket Offense Levels by Study Segments and Recidivists/ Non-recidivists

Tables 23 and 24 present the data regarding the most serious offense level for charges from the base docket, tabulated by study segment (Table 23) and recidivism status (Table 24). The case that resulted in their referral to the CCTC is referred to as the “base docket”. Overall, the base docket offense levels consisted of 40.7% felonies and 56.7% misdemeanors. No significant differences were observed in base docket offense levels across the two study segments or by recidivism status.

Table 23

Base Docket Offense Level by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
Felony	30	42.3%	31	39.2%	61	40.7%
Misdemeanor	38	53.5%	47	59.5%	85	56.7%
No Base Docket	3	4.2%	1	1.3%	4	2.7%
Total	71	100.0%	79	100.0%	150	100.0%

Table 24

Base Docket Offense Level by Recidivists / Non-recidivists

	Recidivist		Non-recidivist		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
Felony	27	36.0%	34	45.3%	61	40.7%
Misdemeanor	46	61.3%	39	52.0%	85	56.7%
No Base Docket	2	2.7%	2	2.7%	4	2.7%
Total	75	100.0%	75	100.0%	150	100.0%

Base Docket Offense Types by Study Segments

Table 25 presents data regarding the most serious charges from the base docket. No significant differences in types of charges were observed across the two study segments. In total, 68% of the base docket charges consisted of (in order of frequency) theft, fraud, drug offenses, and shoplifting.

Table 25
Most Serious Base Docket Charges by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	# of Charges	Percent	# of Charges	Percent	# of Charges	Percent
Other Theft Charges	27	38.0%	25	31.6%	52	34.7%
Total Fraud Charges	17	23.9%	15	19.0%	32	21.3%
Drug Offense	11	15.5%	7	8.9%	18	12.0%
Shoplifting	4	5.6%	9	11.4%	13	8.7%
Unlawful Trespass	5	7.0%	2	2.5%	7	4.7%
Disorderly Conduct	1	1.4%	4	5.1%	5	3.3%
Total DMV Charges	1	1.4%	3	3.8%	4	2.7%
DUI-2nd Offense	2	2.8%	2	2.5%	4	2.7%
Assault & Robbery	0	0.0%	3	3.8%	3	2.0%
Simple Assault	0	0.0%	2	2.5%	2	1.3%
Failure to Appear	0	0.0%	2	2.5%	2	1.3%
Vs Justice*	0	0.0%	2	2.5%	2	1.3%
Disturbing the Peace	0	0.0%	1	1.3%	1	0.7%
Unlawful Mischief	0	0.0%	1	1.3%	1	0.7%
No Base Docket	3	4.2%	1	1.3%	4	2.7%
Total Convictions	71	100.0%	79	100.0%	150	100.0%

* Contempt, False Alarms, Resist Arrest, etc.

Base Docket Offense Types by Recidivists/Non-recidivists

Table 26 shows the distribution of base docket charges, tabulated by recidivism status. The data shows that the recidivists were charged with significantly more shoplifting crimes than were the non-recidivists. No other significant differences in types of charges were observed.

Table 26
Most Serious Base Docket Charges by Recidivists / Non-recidivists

	Recidivist		Non-recidivist		Total	
	# of Charges	Percent	# of Charges	Percent	# of Charges	Percent
Other Theft Charges	23	30.7%	29	38.7%	52	34.7%
Total Fraud Charges	16	21.3%	16	21.3%	32	21.3%
Drug Offense	9	12.0%	9	12.0%	18	12.0%
Shoplifting	10	13.3%	3	4.0%	13	8.7%
Unlawful Trespass	4	5.3%	3	4.0%	7	4.7%
Disorderly Conduct	3	4.0%	2	2.7%	5	3.3%
Total DMV Charges	1	1.3%	3	4.0%	4	2.7%
DUI-2nd Offense	3	4.0%	1	1.3%	4	2.7%
Assault & Robbery	1	1.3%	2	2.7%	3	2.0%
Simple Assault	0	0.0%	2	2.7%	2	1.3%
Failure to Appear	1	1.3%	1	1.3%	2	1.3%
Vs Justice *	1	1.3%	1	1.3%	2	1.3%
Disturbing the Peace	1	1.3%	0	0.0%	1	0.7%
Unlawful Mischief	0	0.0%	1	1.3%	1	0.7%
No Base Docket	2	2.7%	2	2.7%	4	2.7%
Total	75	100.0%	75	100.0%	150	100.0%

Note: Values in the same row that are shaded are significantly different at $p < 0.05$ in the two-sided test of equality for column proportions. Tests assume equal variances.

* Contempt, False Alarms, Resist Arrest, etc.

Base Docket Sentence Type by Study Segments

Table 27 displays the base docket dispositions and sentence type data, tabulated by study segment. Significantly more people who were terminated or withdrew from the CCTC were sentenced to incarceration (41.8% versus 8.5%) on their base docket.

Table 27
Base Docket Sentence Type by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	Count	%	Count	%	Count	%
Incarceration	6	8.5%	33	41.8%	39	26.0%
Probation	22	31.0%	15	19.0%	37	24.7%
Not Disp By Court	17	23.9%	14	17.7%	31	20.7%
Drug court	14	19.7%	0	0.0%	14	9.3%
Split Sentence	4	5.6%	7	8.9%	11	7.3%
Missing / Unknown	1	1.4%	5	6.3%	6	4.0%
Sentence Deferred	2	2.8%	3	3.8%	5	3.3%
Mental Hospital / Mental Health Court	2	2.8%	0	0.0%	2	1.3%
Fine	0	0.0%	1	1.3%	1	0.7%
No Base Docket	3	4.2%	1	1.3%	4	2.7%
Total	71	100.0%	79	100.0%	150	100.0%

Note: Values in the same row that are shaded in gray are significantly different at $p < 0.05$ in the two-sided test of equality for column proportions. Tests assume equal variances.

Base Docket Sentence Type by Recidivists/Non-recidivists

Table 28 shows the base docket sentencing data tabulated by recidivism status. The results show that there were significantly more recidivists sentenced to incarceration than the non-recidivists (33.3% versus 18.7%). There were also significantly fewer recidivists that received drug court sentences³ (4.0% versus 14.7% for non-recidivists).

Table 28
Base Docket Sentence Type by Recidivist / Non-recidivist

	Recidivist		Non-recidivist		Total	
	Count	%	Count	%	Count	%
Incarceration	25	33.3%	14	18.7%	39	26.0%
Probation	18	24.0%	19	25.3%	37	24.7%
Not Disp By Court	13	17.3%	18	24.0%	31	20.7%
Drug Court	3	4.0%	11	14.7%	14	9.3%
Split Sentence	7	9.3%	4	5.3%	11	7.3%
Missing / Unknown	1	1.3%	5	6.7%	6	4.0%
Sentence Deferred	4	5.3%	1	1.3%	5	3.3%
Mental Hospital / Mental Health Court	1	1.3%	1	1.3%	2	1.3%
Fine	1	1.3%	0	0.0%	1	0.7%
No Base Docket	2	2.7%	2	2.7%	4	2.7%
Total	75	100.0%	75	100.0%	150	100.0%

Note: Values in the same row that are shaded in gray are significantly different at $p < 0.05$ in the two-sided test of equality for column proportions. Tests assume equal variances.

³ Note: The base docket sentencing data is extracted from the disposition codes found in the test subjects' VCIC records. Only 14 subjects who successfully graduated from the CCTC showed base docket disposition codes of "Drug Court". In these cases the dockets showed that the subjects were referred to drug court and no other sentencing information was indicated. The records also showed that they successfully completed Drug Court and their cases were dismissed. The base docket records of the other successful participants of the CCTC showed that sentences were imposed, to be served if they did not complete Drug Court. Upon successful completion of Drug Court their cases were dismissed or their sentences were reduced.

Maximum Lengths of Sentences to Incarceration by Study Segments

Table 29 shows information regarding the maximum sentence length received by participants who were sentenced to incarceration or received split sentences. The CCTC participants who were terminated/withdrew had an average maximum sentence length of 812 days (2.2 years). The graduates of the CCTC had an average maximum sentence length of 313 days. This difference was not found to be significant.

Table 29
Base Docket Maximum Sentence Length by Study Segments

	Graduated / Completed Program		Terminated / Withdrew		Total	
	Count	%	Count	%	Count	%
< 90 days	3	30.0%	9	22.5%	12	24.0%
90 days to < 1 yr	5	50.0%	10	25.0%	15	30.0%
1 yr to < 3 yrs	1	10.0%	9	22.5%	10	20.0%
3+ yrs	1	10.0%	12	30.0%	13	26.0%
Total Subjects	10	100.0%	40	100.0%	50	100.0%
Ave. Sentence Length (days)	313		812		712	
Min Sentence Length (days)	1		4		1	
Max Sentence Length (days)	1095		3650		3650	

Table 30 shows the maximum base docket sentencing data tabulated by recidivism status. The recidivists had an average maximum sentence length of 837 days (2.3 years). The non-recidivists averaged 490 days (1.3 years). This difference is not significant.

Table 30
Base Docket Maximum Sentence Length by Recidivist / Non-recidivists

	Recidivist		Non-recidivist		Total	
	Count	%	Count	%	Count	%
< 90 days	7	21.9%	5	27.8%	12	24.0%
90 days to < 1 yr	11	34.4%	4	22.2%	15	30.0%
1 yr to < 3 yrs	4	12.5%	6	33.3%	10	20.0%
3+ yrs	10	31.3%	3	16.7%	13	26.0%
Total	32	100.0%	18	100.0%	50	100.0%
Ave. Sentence Length (days)	837		490		712	
Min Sentence Length (days)	4		1		1	
Max Sentence Length (days)	3650		1825		3650	

RESEARCH QUESTION 5: ARE THERE DEMOGRAPHIC AND CRIMINAL HISTORY CHARACTERISTICS THAT ARE IMPORTANT IN PREDICTING WHETHER PARTICIPANTS RECIDIVATE OR NOT?

Regression Analysis - Summary of Findings

To answer this question, a discriminant analysis was conducted to investigate if correlations exist between certain demographic and criminal history characteristics of the CCTC participants and their tendency to recidivate. The analysis revealed that two variables -- *Age at Program Start* and *Base Docket Sentence Type* -- showed some correlation to recidivism. The resulting regression model, however, did not show strong statistical significance and only correctly assigned 65% of the subjects into recidivist/non-recidivist groups. Based on the results of this analysis, the differences in demographic profiles and criminal histories of the study sample were not important factors in determining the tendency of CCTC participants to recidivate.

Regression Analysis - Detailed Findings

Discriminant analysis is a classification methodology that is used to predict group membership -- in this case the group is recidivists -- based on a linear combination of independent variables. The procedure begins with a data set of observations where both group membership and the values of the independent variables are known. For this study, the intended result of this analysis was a model that allows prediction of whether or not a CCTC participant is likely to recidivate, based on their known demographic and criminal history information. The following variables were used in the discriminant analysis.

Independent variables:

Gender: 1 = female, 2 = male

Race: 1 = African American, 2 = Asian, 3 = Caucasian

Age at Referral to Program – age in years

Age at First Conviction or Contact – age in years

Total Number of Prior Convictions

Total Number of Prior Felony Convictions

Total Number of Prior Misdemeanor Convictions

Base Charge Offense Level: 1 = felony, 2 = misdemeanor.

Base Charge Offense Rank: Higher value equals more severe offense – range 15 to 75

Base Charge Sentence Type: incarceration, split sentence, etc. Lower value equals more severe sentence.

Maximum Base Charge Sentence Length

Months in Program

Dependent variable:

Total Post-Program Recidivists: 1 = recidivist, 2 = non-recidivist

For a first step, a test of equality of the group means of the independent variables was conducted. Table 31 displays this analysis and indicates that four independent variables – *Age at Program Start*, *Base Docket Sentence Type*, *Maximum Base Docket Sentence Length*, and *Age at First Conviction/Contact* -- showed significant differences (+95% confidence level) between the recidivist and non-recidivist groups.

Table 31
Test of Equality of Group Means

	Independent Variable Means		F	Sig.
	Recidivists	Non-Recidivists		
Age at Program Start	25.2	30.5	15.20	.000
Base Docket Sentence Type	4.9	6.5	8.05	.005
Max Base Docket Sentence Length	357.3	117.6	5.74	.018
Age at 1st Conviction/Contact	20.8	23.0	4.75	.031
Gender	1.5	1.6	0.96	.329
Original Charge Offense Level	1.7	1.6	0.83	.363
Original Charge Rank	39.0	38.1	0.13	.714
Race	2.9	2.9	0.06	.807
Total Prior Misdemeanors	7.6	7.5	0.03	.874
Number of Prior Convictions	9.0	8.9	0.01	.907
Total Prior Felonies	1.4	1.4	0.01	.938
Months In Program	12.1	12.0	0.01	.940

Note: Values in the same row that are shaded in gray are significantly different at $p < 0.05$ in the two-sided test of equality for column proportions.

A discriminant analysis was subsequently performed to determine if a *combination* of the independent variables exists that accurately assigns cases to the two recidivist groups. A stepwise variable selection method was used to determine which variables to include or remove from the model. The final result showed that only two independent variables remained in the model – *Age at Program Start* and *Base Docket Sentence Type*.

Table 32 shows the resulting regression models for each group of the dependent variable – Recidivists and Non-recidivists. The coefficients and constants in the table are used to create regression equations. These equations can be used to assign each subject to the Recidivist or Non-recidivist group by multiplying the independent predictor variable values by its coefficient and summing these products for the two predictor variables with the constant to arrive at a classification score. Two classification scores are calculated for each subject – a Recidivist score and a Non-recidivists score. A subject is assigned to that group for which the classification score is the largest.

Table 32
Discriminant Analysis Model

	Recidivist	Non-recidivist
Age at Program Start	0.360	0.435
Base Docket Sentence Type	0.409	0.540
Constant	-6.245	-9.079

Although a regression model was determined from the discriminant analysis, statistical significance testing showed a low correlation with the discriminant function, only explaining about 13% of the variation in the grouping variable, i.e. whether a subject is a recidivist or non-recidivist.

The low correlation of the discriminant function with the dependent variable is further revealed by the classification results shown in Table 33. In this table the rows are the observed categories of the dependent variable and the columns are the predicted categories. When prediction is perfect all cases will lie on the diagonal. The classification results reveal that 64.7% of CCTC participants were classified correctly as “Recidivists” or “Non-recidivists”.

Table 33
Classification Results

		Predicted Group Membership		Actual Group Membership
		Recidivist	Non-recidivist	
Count	Recidivist	52	23	75
	Non-recidivist	30	45	75
%	Recidivist	69.3	30.7	100.0
	Non-recidivist	40.0	60.0	100.0

Numbers/Percentages in bold and shaded are correctly predicted. 64.7% of original grouped cases correctly predicted.

The discriminant analysis did reveal, however, a potentially interesting relationship between the independent variable, *Base Docket Sentence Type*, and the tendency to recidivate. *Base Docket Sentence Type* was shown to have a positive correlation to recidivism, meaning that as the value of Sentence Type gets smaller (meaning a more severe sentence) the tendency to recidivate increases. This suggests that the CCTC participants who received incarcerated sentences on their base docket had higher probability to recidivate compared to participants who received a community-based sentence. It is interesting to note that this result is consistent with findings from three previous outcome evaluations – The Windsor County Sparrow Project⁴, Rutland County Treatment Court⁵, and the Spectrum Youth & Family Services Rapid Referral Program⁶ – where *Base Docket Sentence Type* remained in the regression equations as a potential predictor of recidivism. In these cases, however, the correlations were also too weak to provide useful models. This consistency across three different projects is encouraging, however, and shows the importance of doing more regression modeling with future program outcome evaluations, while looking further into pre-program sentencing parameters. It also shows the importance of obtaining more detailed demographic and psychographic participant profile information that will facilitate the development of more powerful predictive models that could provide important tools for future pre-program screening.

⁴ Online report link: <http://www.vcjr.org/reports/reportscrimjust/reports/sparrowreport.html>

⁵ Draft report of the Rutland County Treatment Court Outcome Evaluation is currently being reviewed.

⁶ Online report link: <http://www.vcjr.org/reports/reportscrimjust/reports/spectrum2report.html>

LIMITATIONS

Throughout this report the study cohort has been divided into two groups -- “Graduated” and “Terminated or Withdrew.” The purpose of dividing the study cohort in this way was to show the difference in the post-program behavior between the two groups. It is important to note, however, that the “Terminated or Withdrew” group is not a true control or comparison group as found in experimental or quasi-experimental research designs. The key difference is that unlike in an experimental design, the “Terminated or Withdrew” group did participate at some level in the CCTC program and possibly were affected by that experience. The recidivism pattern of the “Terminated or Withdrew” group is likely to be different from a true control group whose members would not be exposed to the services provided by the CCTC program.

CONCLUSIONS

1. The research showed that the CCTC had a minimal effect at reducing recidivism rates of participants of the CCTC.

People who successfully graduated from the CCTC had a recidivism rate of 46.5% compared to 53.2% for participants who were terminated or withdrew from the CCTC. This difference was not significantly different.

It is important to note, however, that a true control or comparison group, as found in experimental research designs, was not available for comparison. The recidivism pattern of the study participants is likely to be different from a control group whose members would not be exposed to the services provided by the CCTC program.

2. The research showed a very positive success rate, with over three-quarters of both the CCTC graduates and the subjects that were terminated or withdrew from the program, remaining conviction-free for the first year after leaving the CCTC.

For the successful CCTC graduates, more than 76.1% remained conviction-free during their first year after leaving the program. The participants in the CCTC that were terminated or withdrew from the program showed a similarly positive success rate of 77.2%.

The research also showed that most recidivism will occur in the period up to 1 year after leaving the CCTC, and as subjects continue through the next 2 years or longer, the probability that they will recidivate decreases.

3. The CCTC appears to be a promising approach for reducing the number and severity of reconvictions for participants who completed the CCTC.

The reconviction rate for the successful CCTC participants was almost half the rate compared to the participants that were unsuccessful in completing the program (173 compared to 280 reconvictions per 100, respectively). CCTC graduates were also convicted of significantly fewer violent crimes, committing only two assault crimes versus 25 assault convictions for the subjects who did not complete the CCTC.

4. The CCTC recidivists tended to commit post-CCTC crime in Chittenden County.

For graduates of CCTC, 94 of their 123 new convictions (approximately 76%) occurred in Chittenden County. The other reconvictions for graduates occurred mostly in Rutland County and accounted for 17%. For people who did not graduate from the CCTC, 73.7% of their reconvictions were in Chittenden County, the other counties of prosecution being predominantly Caledonia (9.5%) and Windham (5.4%).

- 5. The research revealed that the participant characteristics *Base Docket Sentence Type* and *Age at Program Start* showed some correlation with recidivism and could potentially be important factors in determining post-program success.**

Base Docket Sentence Type and Age at Program Start showed positive correlation to recidivism. This means that more severe sentences and younger age at program start increases the probability to recidivate. However, regression analysis was not able to create a model with the high enough statistical significance to be a useful screening tool for predicting post-program success.