Data Driven Decisions

RUTLAND COUNTY TREATMENT COURT

OUTCOME EVALUATION

FINAL REPORT

Submitted to:

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Submitted By

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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 Rutland County Treatment Court (hereafter, the "RTC") was one of the drug courts established by Act 128, and began operating in January 2004. It was established as a pilot program for combating drug crimes, not just possession, but drug-related crimes such as retail theft, burglaries, grand larceny – both misdemeanors and felonies. Offenders identified as drug-addicted are referred to the court by law enforcement, probation officers, and attorneys and put into a treatment program that will reduce drug dependency and improve the quality of life for themselves and their families. In most cases, after their successful completion of drug court, the original charges are dismissed or charges are 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 RTC, the objective of this outcome evaluation was to determine the extent to which the RTC 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 165 subjects who were referred to and accepted into the RTC from January 6, 2004 to February 7, 2012, was conducted using the Vermont criminal history record of participants as provided by the Vermont Criminal Information Center at the Department of Public Safety. The Vermont criminal history record 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 April 24, 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 RTC appears to be a promising approach for reducing recidivism among participants who completed the program. People who graduated from the RTC had a recidivism rate of 35.4% which is significantly less than the recidivism rate of 54.0% for participants who were terminated or withdrew from the RTC.

2. The research showed that significantly more graduates of the RTC (84.6%) remained conviction-free for the first year after leaving the program, compared to the subjects who were unsuccessful in completing the RTC (69%).

3. The RTC appears to be a promising approach for reducing the number and severity of post-RTC reconvictions for participants who complete the RTC. The reconviction rate for the successful RTC participants was almost half the rate for the participants that were unsuccessful (109 compared to 226 reconvictions per 100, respectively). RTC graduates also had significantly fewer felony reconvictions than did the subjects that did not complete the RTC.

4. The RTC recidivists tended to commit post-project crime in Rutland County. For the total study group, 84% of new convictions were prosecuted in Rutland County.

5. The reduced recidivism rates observed for the graduates of the RTC compared with the subjects who were unsuccessful in completing the program were most likely due to the benefits of the RTC rather than due to differences in demographic, criminal history, or base charge characteristics of the study segments.

6. An investigation into the demographic and criminal history characteristics of the RTC participants showed correlations between base docket sentencing severity and type, and tendency to recidivate. However, 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 Rutland County Treatment Court (RTC) was designed to answer five questions associated with the post-project behavior of subjects who participated in the program from January 6, 2004 to February 7, 2012.

1. Which subjects were convicted of additional crimes after their participation in the RTC?

2. For those subjects who were convicted of additional crimes after their participation in the RTC, when were they convicted?

3. For those subjects who were convicted of additional crimes after their participation in the RTC, what crimes did they commit?

4. For those subjects who were convicted of additional crimes after their participation in the RTC, in which counties were the subjects convicted?

5. Which demographic and criminal history characteristics are important in predicting whether or not participants in the RTC recidivate?

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

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.

RUTLAND COUNTY TREATMENT COURT

January 2004 – February 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 Rutland County Treatment Court (RTC) was one of the drug courts established by Act 128 and began operating in January 2004. It was established as a pilot program for combating drug crimes, not just possession, but drug-related crimes such as retail theft, burglaries, grant larceny – both misdemeanors and felonies. Offenders identified as drug-addicted are referred to the court by law enforcement, probation officers, and attorneys and put into a treatment program that will reduce drug dependency and improve the quality of life for themselves and their families. After their successful completion of drug court, the original charges are dismissed or charges are reduced. During the study period, 39.4% of RTC participants (65 of 165) graduated from the program. 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 RTC the objective of this outcome evaluation was to determine the extent to which the program reduced recidivism among 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

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

considered to have recidivated if they were reconvicted for crimes committed after successful completion or termination from the RTC.

An analysis of the criminal history records of the 165 subjects who were referred to and accepted into the RTC from January 6, 2004 to February 7, 2012, was conducted using the Vermont criminal history record of participants as provided by the Vermont Criminal Information Center (VCIC) at the Department of Public Safety. The Vermont criminal history record 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 April 24, 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 RTC, 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 RTC study indicates that only 10 subjects can be classified as a recidivist within this definition. All of these subjects belong to the terminated/withdrew study group. This analysis results in a post-program recidivism rate of 10% for this study segment, and no recidivists among the participants who successfully completed the RTC.

Despite the extremely low recidivism rate for the RTC 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 RTC participant who was convicted of any crime prosecuted in a Vermont Superior Court – Criminal Division, including violations of probation

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

and motor vehicle offenses, after program completion/termination would be considered a recidivist.

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 graduated from the RTC, or were unsuccessful at completing the RTC and were terminated or they withdrew.

For those participants that had **graduated** from the RTC, their recidivism clock started on their "Graduation Date", which was included in the participant description data provided by the Court Administrator's Office (CAO). For subjects who were unsuccessful at completing the RTC and were either **terminated or they withdrew,** the recidivism clock was started on the "Discharge Date", which was also provided in the participant description data from the CAO. If a "Discharge Date" was not available, the recidivism clock was started on the "Sentencing Date" of the base docket case (the case that resulted in the subject's referral to the RTC), 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 from the VCIC criminal history records.

Based on each subject's recidivism start date and criminal records from the VCIC, a subject was considered a recidivist if s/he committed and was convicted of any new offense after the recidivism start date. The elapsed time to recidivate was 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 RTC?

Summary of Findings

Significantly fewer subjects who graduated from the RTC were reconvicted of some type of crime -- 23 of the 65 (35.4%) -- as compared to 54 of 100 subjects (54.0%) who failed to complete the RTC and were terminated or withdrew.

Detailed Findings

Table 1 provides data regarding the percentage of RTC participants who recidivated after leaving the program. The data show that significantly fewer subjects who graduated from the RTC were reconvicted of some type of crime -- 23 of the 65 (35.4%) -- as compared to 54 of 100 subjects (54.0%) who failed to complete the RTC and were terminated or withdrew.

Table 1
Subjects Reconvicted for Any Offense – Post-RTC Reconvictions

	Graduated		Terminated or Withdrew	
	Count	%	Count	%
Recidivist	23	35.4%	54	54.0%
Non-Recidivist	42	64.6%	46	46.0%
Total	**65**	**100.0%**	**100**	**100.0%**

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

RESEARCH QUESTION 2: For those subjects who were convicted of additional crimes after their participation in the RTC, when were they convicted?

Summary of Findings

For all study subjects, most recidivism occurred in the period up to one year after leaving the RTC, and as subjects continued through the next two years after the program, the probability of reconviction for additional crimes decreased.

The graduates of the RTC were significantly more successful in remaining conviction free during their first year after leaving the RTC than were the subjects who were unsuccessful in completing the program. Almost 85% (55 of 65) of the RTC graduates had no arrests for any new criminal conviction within one year of recidivism eligibility, compared to only 69% (69 of 100) of participants who were terminated or withdrew from the RTC.

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 crime free is important in evaluating the crime prevention potential for a project.

Table 2 on the following page, summarizes the analysis of elapsed recidivism time for subjects convicted of any new crime post-program. For the recidivists who graduated from the RTC, only 15.4% (10 of 65) were arrested for any new criminal conviction in less than one year, and 7.7% (5 of 65) were arrested for a new crime between one and two years after graduation. For the recidivists who were terminated or withdrew from the RTC, significantly more subjects were arrested for a new criminal conviction in less than one year (31.0% or 31 of 100), and 10.0% (10 of 100) were arrested between one and two years after leaving the RTC.

If "successful outcome" for the RTC is defined as no arrest for any new criminal conviction within one year of recidivism eligibility, then the success rate for participants who subsequently completed the RTC would be 84.6% (55 subjects with no arrest for any new criminal conviction out of 65 participants who graduated). The success rate drops to 69% (69 divided by 100) for participants who were terminated or withdrew from the RTC.

Table 2
Time to Recidivism – All Post-RTC Reconvictions

Participant Group	When First Recidivated	Total	Percentage of Total Sample
Graduated from RTC	< 1 year	10	15.4%
	Between 1 and 2 years	5	7.7%
	Between 2 and 3 years	2	3.1%
	After 3 years	6	9.2%
	Total Subjects	**65**	**35.4%**
Terminated / Withdrew	< 1 year	31	31.0%
	Between 1 and 2 years	10	10.0%
	Between 2 and 3 years	5	5.0%
	After 3 years	8	8.0%
	Total Subjects	**100**	**54.0%**

Note: Shaded values in the table are significantly different at p< 0.05 in the two-sided test of equality for row proportions. Tests assume equal variances.

To provide a more detailed analysis of when recidivism occurs, Table 3 on the next page presents recidivism data in yearly increments for all 165 of the RTC participants– focusing on the number of participants 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 RTC completion/termination – all 165 subjects appear in this increment because at the time of the study every participant had been away from the RTC for at least a year. During that time period, 24.8% (41 of 165) of the participants were reconvicted of a new crime. Looking at the 2nd column of data – between one and two years after leaving the RTC – the recidivism percentage drops by more than half to 11.4% (15 of 132), and shows almost an equivalent drop between two and three years after the RTC to 6.1% (7 of 114). After three years the recidivism percentage increased to 14.7% (14 of 95). Whether or not this illustrates the importance of continued follow-up with treatment court participants after they leave the RTC, it should be mentioned that of the 95 subjects eligible to recidivate after three years, 53 of those had been eligible to recidivate for five or more years, and 10 of the 14 recidivists did so during years four through seven of eligibility. The increase in recidivism rates during these later years of eligibility to recidivate may be a reflection of the diminishing influence of the treatment court effects on subjects after extended time away from the RTC. It is still valid to conclude that most recidivism will occur in the period up to one year after leaving the RTC, and as subjects continue through the next two years, the probability that they will recidivate decreases.

Table 3
Time to Recidivate Post-RTC by Years of Eligibility to Re-offend – All Participants

	Post-RTC Elapsed Time			
	Less than 1 year	**Year 1**	**Year 2**	**Year 3+**
Time Period in Which Participant Recidivated	41	15	7	14
Total # of Participants who were eligible to recidivate during the time period*	165	132	114	95
% Recidivated	**24.8%**	**11.4%**	**6.1%**	**14.7%**

*The data in this row represent all participants who had completed the RTC or were terminated or withdrew from the RTC for certain time periods. Participants may appear in more than one column based on the longevity of their post-RTC elapsed time. For example each of the 114 participants who appear in the "Year 2" column also appear in the "< 1 Year" and "Year 1" columns because, having completed two years of post-project elapsed time, they necessarily have also completed less than one year and one year of elapsed time.

RESEARCH QUESTION #3: For those subjects who were convicted of additional crimes after their participation in the RTC, what crimes did they commit?

Overview

When considering the effect that the RTC 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 was 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 RTC 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

RTC graduates that recidivated had significantly fewer felony reconvictions than did the subjects not completing the RTC (8.0% vs. 29.2%, respectively). Overall, graduates of the RTC also had a significantly lower reconviction rate than non-graduates (109 per 100 versus 226 per 100).

With respect to types of post-RTC crimes, no significant differences were observed between the two study segments. In total, approximately 73% of the post-RTC crimes included (listed in order of frequency): theft, DMV violations, drug offenses, failure to appear, fraud, and unlawful trespass.

Detailed Findings

Participant Offense Levels and Patterns

Table 4 shows that the combined post-RTC recidivists were convicted of a total of 301 crimes during the follow-up period. The participants who graduated from the RTC, were convicted of only 75 post-RTC crimes – six felonies (8.0%) and 69 misdemeanors (92.0%) – for a reconviction rate of 109 per 100 participants. RTC participants who were terminated or withdrew were reconvicted of a total of 226 crimes for a reconviction rate of 226 per 100 participants, almost double the rate of the RTC graduates. Also, compared to the RTC graduates, they had significantly more felonies (66 or 29.2%).

Table 4
Offense Levels For All Post-RTC Crimes For Which Subjects Were Reconvicted

	Graduated		Terminated or Withdrew		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
Felony	6	8.0%	66	29.2%	72	23.9%
Misdemeanor	69	92.0%	160	70.8%	229	76.1%
Total	**75**	**100.0%**	**226**	**100.0%**	**301**	**100.0%**

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

Table 5 shows the types of post-program crimes for which the subjects were reconvicted. RTC graduates were reconvicted of a total of 75 crimes, averaging 3.3 crimes with a median of 1.5 convictions and a maximum of 23. Approximately 71% of their reconvictions included (listed in order of frequency): theft, DMV crimes, unlawful trespass, and violations of probation. They were not reconvicted for any violent crimes. Participants who were terminated or withdrew from the RTC were reconvicted of a total of 226 crimes, averaging 4.2 crimes with a median of three and a maximum of eight crimes. Sixty-eight percent of their reconvictions were for (listed in order of frequency): theft, DMV crimes, drug offenses, failure to appear, and escape. They were reconvicted for six violent crimes: three simple assaults, and one each of aggravated assault, assault and robbery, and domestic assault.

Table 5
All Post-RTC Crimes For Which Subjects Were Reconvicted

	Graduated		Terminated or Withdrew		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
Theft	21	28.0%	62	27.4%	83	27.6%
DMV	17	22.7%	34	15.0%	51	16.9%
Drug Offense	3	4.0%	21	9.3%	24	8.0%
Failure to Appear	3	4.0%	20	8.8%	23	7.6%
Fraud	4	5.3%	16	7.1%	20	6.6%
Unlawful Trespass	8	10.7%	10	4.4%	18	6.0%
Escape	0	0.0%	17	7.5%	17	5.6%
Violation of Probation	7	9.3%	10	4.4%	17	5.6%
Disorderly Conduct	3	4.0%	9	4.0%	12	4.0%
Vs Justice[3]	3	4.0%	9	4.0%	12	4.0%
DUI	3	4.0%	5	2.2%	8	2.7%
Assault	0	0.0%	5	2.2%	5	1.7%
Unlawful Mischief	2	2.7%	3	1.3%	5	1.7%
Accessory	1	1.3%	1	0.4%	2	0.7%
Disturbing the Peace	0	0.0%	1	0.4%	1	0.3%
TRO Violation	0	0.0%	2	0.9%	2	0.7%
Domestic Assault	0	0.0%	1	0.4%	1	0.3%
Total Convictions	**75**	**100.0%**	**226**	**100.0%**	**301**	
Number of Recidivists	23		54		77	
Ave. # of Convictions	3.3		4.2		3.9	
Median # of Convictions	1.5		3.0		3.0	
Max # of Convictions	23		8		23	

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[3] Contempt, False Alarms, Resist Arrest, etc.

RESEARCH QUESTION 4: For those subjects who were convicted of additional crimes after their participation in the RTC, in which counties were the subjects convicted?

Summary of Findings

The RTC recidivists tended to commit post-project crime in Rutland County. For graduates of RTC, 58 of their 75 new convictions (approximately 77%) occurred in Rutland County. For people who did not graduate from the RTC, 86% of their reconvictions were in Rutland County.

Detailed Findings

Table 6A provides the distribution of reconvictions for RTC participants who successfully completed the program by the county in which the case was prosecuted which, more than likely, was the county where the crime was committed. For these participants, 58 of their 75 new convictions (approximately 77%) occurred in Rutland County. The other reconvictions occurred in Chittenden, Bennington, Addison, and Windsor counties.

Table 6A
County of Prosecution for Post-RTC Reconvictions:
Participants Who *Graduated* from RTC

	Addison		Bennington		Chittenden		Rutland		Windsor	
	# of Conv	%	# of Conv	%	# of Conv	%	# of Conv	%	# of Conv	%
Theft	0	0.0%	1	33.3%	3	25.0%	17	29.3%	0	0.0%
DMV-DLS	1	100.0%	0	0.0%	3	25.0%	12	20.7%	1	100.0%
Unlawful Trespass	0	0.0%	0	0.0%	0	0.0%	8	13.8%	0	0.0%
Violation of Probation	0	0.0%	0	0.0%	3	25.0%	4	6.9%	0	0.0%
DUI	0	0.0%	2	66.7%	0	0.0%	4	6.9%	0	0.0%
Forgery/Counterfeiting	0	0.0%	0	0.0%	0	0.0%	4	6.9%	0	0.0%
Disorderly Conduct	0	0.0%	0	0.0%	0	0.0%	3	5.2%	0	0.0%
Drug Offense	0	0.0%	1	33.3%	0	0.0%	2	3.4%	0	0.0%
Failure to Appear	0	0.0%	0	0.0%	2	16.7%	1	1.7%	0	0.0%
Vs Justice[4]	0	0.0%	0	0.0%	1	8.3%	2	3.4%	0	0.0%
Unlawful Mischief	0	0.0%	0	0.0%	0	0.0%	2	3.4%	0	0.0%
Accessory	0	0.0%	0	0.0%	0	0.0%	1	1.7%	0	0.0%
Total Reconvictions	**1**	**100.0%**	**3**	**100.0%**	**12**	**100.0%**	**58**	**100.0%**	**1**	**100.0%**

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[4] Contempt, False Alarms, Resist Arrest, etc.

Table 6B shows the distribution of counties where the participants who were terminated or withdrew from the RTC were prosecuted for their reconvictions. The results show that almost 86% or 194 of the 226 new convictions occurred in Rutland County. Twenty of the remaining reconvictions were prosecuted in Addison, Chittenden, and Bennington Counties. The other 12 reconvictions were spread across Caledonia, Washington, Windham, and Windsor counties.

Table 6B
County of Prosecution for Post-RTC Reconvictions:
Participants Who Were _Terminated or Withdrew_ from RTC

	Addison		Bennington		Chittenden		Rutland		Other*	
	# of Conv	%	# of Conv	%	# of Conv	%	# of Conv	%	# of Conv	%
Theft	6	66.7%	1	33.3%	3	37.5%	51	26.3%	1	8.3%
DMV	2	22.2%	1	33.3%	0	0.0%	28	14.4%	3	25.0%
Drug Offense	0	0.0%	0	0.0%	1	12.5%	20	10.3%	0	0.0%
Failure to Appear	0	0.0%	0	0.0%	0	0.0%	20	10.3%	0	0.0%
Escape	0	0.0%	0	0.0%	1	12.5%	12	6.2%	4	33.3%
Fraud	0	0.0%	0	0.0%	0	0.0%	16	8.2%	0	0.0%
Violation of Probation	0	0.0%	0	0.0%	0	0.0%	10	5.2%	0	0.0%
Unlawful Trespass	1	11.1%	0	0.0%	0	0.0%	9	4.6%	0	0.0%
Disorderly Conduct	0	0.0%	0	0.0%	0	0.0%	8	4.1%	1	8.3%
Vs Justice[5]	0	0.0%	0	0.0%	2	25.0%	6	3.1%	1	8.3%
Assault	0	0.0%	0	0.0%	0	0.0%	4	2.1%	1	8.3%
DUI	0	0.0%	0	0.0%	1	12.5%	4	2.1%	0	0.0%
Unlawful Mischief	0	0.0%	0	0.0%	0	0.0%	3	1.5%	0	0.0%
TRO Violation	0	0.0%	0	0.0%	0	0.0%	2	1.0%	0	0.0%
Accessory	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	8.3%
Disturbing the Peace	0	0.0%	0	0.0%	0	0.0%	1	0.5%	0	0.0%
Domestic Assault	0	0.0%	1	33.3%	0	0.0%	0	0.0%	0	0.0%
Total Reconvictions	**9**	**100.0%**	**3**	**100.0%**	**8**	**100.0%**	**194**	**100.0%**	**12**	**100.0%**

* Other includes Caledonia, Washington, Windham, and Windsor counties.

[5] Contempt, False Alarms, Resist Arrest, etc.

PARTICIPANT PROFILE COMPARISONS

Overview

In order to determine whether the observed reduction in recidivism rate for the RTC graduates was due to differences in characteristics of the study segments, or due to the benefits of the program, comparisons of the demographic, criminal history, and base docket profile characteristics of the study segments were conducted. 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 at referral to RTC, race, state of birth, employment, education, and marital status.

- Criminal History Profile:

    Age at first conviction or contact, and prior criminal record.

- Base Docket Profile:

    Offense level and type, and case disposition/sentencing.

Demographic Profile Comparisons

Summary of Findings

No significant differences were observed between the study segments with respect to gender, age at referral to the RTC, race, or education.

Comparing the participants who graduated from the RTC with those that were terminated or withdrew revealed that significantly more graduates were married (20.0% vs. 3.0%), employed (43.1% vs. 11.0%), and were born in Vermont (81.5% vs. 68.0%).

Based on the results of further analysis, however, it can be concluded that these significant differences that were observed between study segments were not important factors in determining the tendency of RTC participants to recidivate (see Regression Analysis on page 26).

Detailed Findings

Table 7 presents the gender composition of the study group. The total study group for the RTC consisted of approximately 42% females and 58% males. No statistically significant differences in gender profile were observed across the two study segments.

Table 7
Gender – Total Study Sample

	Graduated		Terminated or Withdrew		Total	
	Count	%	Count	%	Count	%
Female	30	46.2%	39	39.0%	69	41.8%
Male	35	53.8%	61	61.0%	96	58.2%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

Table 8 summarizes the age distribution of the study segments at the time of their referral to the RTC. No statistically significant differences were found in the age distributions across the two study segments. Approximately 60% of the total study sample was between the ages of 21 and 29.

Table 8
Age at Referral to RTC – Total Study Sample

	Graduated		Terminated or Withdrew		Total	
	Count	%	Count	%	Count	%
18 to 20	4	6.2%	13	13.0%	18	10.3%
21 to 24	22	33.8%	36	36.0%	58	35.2%
25 to 29	15	23.1%	26	26.0%	41	24.8%
30 to 34	11	16.9%	11	11.0%	22	13.3%
35 to 39	4	6.2%	8	8.0%	12	7.3%
40 to 49	7	10.8%	6	6.0%	13	7.9%
50 +	2	3.1%	0	0.0%	2	1.2%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

Table 9 presents the racial characteristics of the study groups. Not surprisingly, over 96% of all subjects were white. African Americans comprised 2.4% of the study participants, and only two participants were Asian. No other racial groups were represented. There were no significant differences between the study segments in regards to race.

Table 9
Race of Study Sample

	Graduated		Terminated or Withdrew		Total	
	Count	%	Count	%	Count	%
African American	0	0.0%	4	4.0%	4	2.4%
Asian	1	1.5%	1	1.0%	2	1.2%
Caucasian	64	98.5%	95	95.0%	159	96.4%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

Table 10 presents information regarding the states where participants were born. Approximately 73% of the participants were born in Vermont. Significantly more subjects who successfully completed the RTC were born in Vermont versus those that were terminated or withdrew from the program (81.5% vs. 68.0% respectively). After Vermont, 16 other states and one country were represented with New York, Massachusetts, and Connecticut, the next most common birth states.

Table 10
State or Country of Birth

	Graduated		Terminated or Withdrew		Total	
	Count	%	Count	%	Count	%
VT	53	81.5%	68	68.0%	121	73.3%
NY	4	6.2%	6	6.0%	10	6.1%
MA	1	1.5%	5	5.0%	6	3.6%
CT	3	4.6%	1	1.0%	4	2.4%
FL	1	1.5%	2	2.0%	3	1.8%
NJ	0	0.0%	3	3.0%	3	1.8%
CA	1	1.5%	1	1.0%	2	1.2%
MD	0	0.0%	2	2.0%	2	1.2%
PA	1	1.5%	1	1.0%	2	1.2%
RI	0	0.0%	2	2.0%	2	1.2%
VA	0	0.0%	2	2.0%	2	1.2%
AL	0	0.0%	1	1.0%	1	0.6%
AZ	0	0.0%	1	1.0%	1	0.6%
MO	0	0.0%	1	1.0%	1	0.6%
NC	1	1.5%	0	0.0%	1	0.6%
OH	0	0.0%	1	1.0%	1	0.6%
TX	0	0.0%	1	1.0%	1	0.6%
Japan	0	0.0%	1	1.0%	1	0.6%
Unknown	0	0.0%	1	1.0%	1	0.6%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**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.

Table 11 presents information regarding employment status of the study subjects at the start of the RTC. Overall, approximately 76% of the study subjects were unemployed. Significantly more of the participants who were terminated or withdrew from the RTC were unemployed (88%) compared to those that graduated.

Table 11
Employment at Start of RTC

	Graduated		Terminated or Withdrew		Total	
	Count	%	Count	%	Count	%
Employed	28	43.1%	11	11.0%	39	23.6%
Unemployed	37	56.9%	88	88.0%	125	75.8%
Unknown	0	0.0%	1	1.0%	1	0.6%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

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

Table 12 displays information regarding the highest level of education of the study subjects at the start of the RTC. Overall, approximately 44% of the study subjects did not complete high school or receive a GED. No significant differences were found across the education levels and study groups.

Table 12
Highest Level of Education at Start of RTC

	Graduated		Terminated or Withdrew		Total	
	Count	%	Count	%	Count	%
< 9th grade	3	4.6%	1	1.0%	4	2.4%
9th grade	5	7.7%	10	10.0%	15	9.1%
10th grade	16	24.6%	12	12.0%	28	17.0%
11th grade	6	9.2%	20	20.0%	26	15.8%
GED	6	9.2%	14	14.0%	20	12.1%
HS diploma	14	21.5%	25	25.0%	39	23.6%
Some college	8	12.3%	15	15.0%	23	13.9%
Assoc. degree	4	6.2%	1	1.0%	5	3.0%
BA degree	1	1.5%	1	1.0%	2	1.2%
Unknown	2	3.1%	1	1.0%	3	1.8%
Total	**66**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

Table 13 shows the study subjects' marital status at the start of the RTC. The data reveal that significantly more participants who had graduated from the program were married versus those who were terminated or withdrew from the RTC (20.0% vs. 3.0%, respectively). Overall, a majority of the subjects in the study were single (70.9%).

Table 13
Marital Status at Start of RTC

	Graduated		Terminated or Withdrew		Total	
	Count	%	Count	%	Count	%
Single	41	63.1%	76	76.0%	117	70.9%
Living as married	3	4.6%	9	9.0%	12	7.3%
Married	13	20.0%	3	3.0%	16	9.7%
Separated	2	3.1%	3	3.0%	5	3.0%
Divorced	4	6.2%	7	7.0%	11	6.7%
Widow / widower	1	1.5%	0	0.0%	1	0.6%
Unknown	1	1.5%	2	2.0%	3	1.8%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**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.

Criminal History Profile

Summary of Findings

No significant differences were observed between the study segments with respect to age at first conviction or contact, or offense levels and average number of prior convictions before entering the RTC.

Concerning prior convictions, the participants who graduated the RTC had significantly fewer fraud and probation violations, and significantly more alcohol convictions, than did those subjects who were unsuccessful at completing the RTC.

With respect to base docket charges, significantly more subjects who were terminated or withdrew from the program received sentences to incarceration (49%) compared to those who were successful in graduating from the program (no sentences to incarceration).

Overall, the lack of differences between study segments with respect to criminal history leads to the conclusion that differences in recidivism rates between study segments were most likely due to benefits of the program and not due to differences between study cohorts. Concerning the differences that were observed in base docket charges, further regression analysis showed that these were not important factors in predicting the tendency to recidivate.

In total, the study subjects were convicted of 1180 crimes prior to entering the RTC. Of those convictions, over 86% were misdemeanors. The majority of the crimes committed were theft, violation of probation, and DMV offenses.

Detailed Findings

Table 14 summarizes data regarding the age of participants at their first criminal conviction, or contact with the criminal justice system if they did not show a previous conviction. No significant differences were found across the study segments for each age category. Over 50% of the total study sample was between the ages of 16 and 20 when first convicted, or when they first contacted the system.

Table 14
Age at First Conviction

	Graduated		Terminated or Withdrew		Total	
	Count	%	Count	%	Count	%
16 to 20	35	53.8%	54	54.0%	89	53.9%
21 to 24	7	10.8%	21	21.0%	28	17.0%
25 to 29	8	12.3%	8	8.0%	16	9.7%
30 to 34	2	3.1%	6	6.0%	8	4.8%
35 to 39	1	1.5%	3	3.0%	4	2.4%
40 to 49	3	4.6%	2	2.0%	5	3.0%
50 +	1	1.5%	0	0.0%	1	0.6%
No prior convictions	8	12.3%	6	6.0%	14	8.5%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

Table 15 shows a summary of the offense levels of the participants' prior convictions. Overall, over 86% of prior convictions were misdemeanors. No significant difference in prior offense levels was found between the study segments.

Table 15
Prior Convictions – Offense Level

	Graduated		Terminated or Withdrew		Total	
	# of Conv	%	# of Conv	%	# of Conv	%
Felony	46	11.6%	111	14.3%	157	13.4%
Misdemeanor	350	88.4%	666	85.7%	1016	86.3%
Total Convictions	**396**	**100.0%**	**777**	**100.0%**	**1173**	**100.0%**

Table 16 presents data on convictions of the study subjects prior to their involvement with the RTC. For the participants who graduated the RTC, the average number of prior convictions was 6.1, with a median of three, and a maximum number of 36. The subjects who were unsuccessful in completing the RTC averaged 7.8 convictions, with a median of five, and a maximum number of 30. This difference in number of prior convictions was not statistically significant. However, the successful graduates of the RTC had significantly fewer fraud and probation violation convictions, and significantly more alcohol convictions, than did those subjects who were unsuccessful at completing the RTC. Two thirds of the prior convictions for all study subjects included (listed in order of frequency): theft, violation of probation, DMV crimes, failure to appear, and alcohol offenses. Approximately 75% of motor vehicle violations (DMV) involved driving with license suspended.

Table 16

Prior Convictions – Offense Type

	Graduated		Terminated or Withdrew		Total Convictions	
	# of Conv	%	# of Conv	%	# of Conv	%
Total Theft Convictions	82	20.7%	191	24.6%	273	23.3%
Violation of Probation	48	12.1%	168	21.6%	216	18.4%
Total DMV Convictions	53	13.4%	84	10.8%	137	11.7%
Failure to Appear	38	9.6%	53	6.8%	91	7.8%
Total Alcohol Convictions	39	9.8%	40	5.1%	79	6.7%
Drug Offense	29	7.3%	39	5.0%	68	5.8%
Total Fraud Convictions	9	2.3%	56	7.2%	65	5.5%
Total Assault Convictions	16	4.0%	26	3.3%	42	3.6%
Total DUI Convictions	18	4.5%	24	3.1%	42	3.6%
Disorderly Conduct	14	3.5%	22	2.8%	36	3.1%
Unlawful Mischief	14	3.5%	18	2.3%	32	2.7%
Unlawful Trespass	10	2.5%	13	1.7%	23	2.0%
Vs Justice[6]	10	2.5%	10	1.3%	20	1.7%
Fish & Game Violation	5	1.3%	9	1.2%	14	1.2%
Escape	3	0.8%	8	1.0%	11	0.9%
TRO Violation	3	0.8%	6	0.8%	9	0.8%
Other Convictions	5	1.3%	10	1.3%	15	1.3%
Total Convictions	396	100.0%	777	100.0%	1173	100.0%
Total Subjects	65		100		165	
Ave. Prior Convictions	6.1		7.8		7.1	
Median # of Convictions	3		5		4	
Max # of Convictions	36		30		36	

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

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[6] Contempt, False Alarms, Resist Arrest, etc.

Base Docket Case Profile

Summary of Findings

In total, 38.2% of the charges from the base dockets were felony offenses. Over three-quarters of the charges consisted of (in order of frequency) theft, drug offenses, fraud, failure to appear, and DMV violations. No significant differences were observed across the two study groups in offense levels or types of base docket charges.

The participants who graduated received no sentences to incarceration on their base dockets. In comparison, significantly more subjects who were terminated or withdrew from the program received sentences to incarceration (49%). In addition, significantly more of the graduates were not disposed by the court (32.3%) versus those who were terminated or withdrew from the RTC (13.0%).

Further analysis revealed that there was some correlation between the *Base Docket Sentence Type* and *Base Docket Charge Rank*, and the tendency to recidivate. However, the analysis did not show strong statistical significance and these profile characteristics were not found to be important factors in predicting recidivism (see Regression Analysis on page 26).

Detailed Findings

Table 17 presents data regarding the most serious offense level for charges from the base docket. The case that resulted in the participants' referral to the RTC is referred to as the "base docket." Overall, 38.2% of the charges from the base dockets were felony offenses. No significant differences were observed in base docket offense levels across the two study segments.

Table 17

Base Docket Offense Level

	Graduated		Terminated or Withdrew		Total	
	# of Conv	%	# of Conv	%	# of Conv	%
Felony	23	35.4%	40	40.0%	63	38.2%
Misdemeanor	38	58.5%	60	60.0%	98	59.4%
Unknown	4	6.1%	0	0.0%	4	2.4%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

Table 18 presents data regarding the most serious offenses from the base dockets. No significant differences in types of charges were observed across the two study segments. In total, 79% of the base docket charges consisted of (in order of frequency) theft, drug offenses, fraud, failure to appear, and DMV violations.

Table 18
Most Serious Base Docket Charges

	Graduated		Terminated or Withdrew		Total	
	# of Chrgs	%	# of Chrgs	%	# of Chrgs	%
Theft	24	36.9%	45	45.0%	69	41.8%
Drug Offense	8	12.3%	13	13.0%	21	12.7%
Fraud	7	10.8%	11	11.0%	18	10.9%
Failure to Appear	3	4.6%	9	9.0%	12	7.3%
DMV	2	3.1%	8	8.0%	10	6.1%
DWI	5	7.7%	2	2.0%	7	4.2%
Assault	3	4.6%	3	3.0%	6	3.6%
Unlawful Trespass	2	3.1%	3	3.0%	5	3.0%
Domestic Assault	0	0.0%	3	3.0%	3	1.8%
TRO Violation	1	1.5%	2	2.0%	3	1.8%
Accessory	2	3.1%	0	0.0%	2	1.2%
Alcohol Violation	1	1.5%	1	1.0%	2	1.2%
Unlawful Mischief	2	3.1%	0	0.0%	2	1.2%
Other Misdemeanor	1	1.5%	0	0.0%	1	0.6%
Unknown	4	6.2%	0	0.0%	4	2.4%
Total Charges	**65**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

Table 19 displays information regarding the type of sentence received by participants on charges from the base docket. Significant differences were observed between study segments in case dispositions and sentences. The graduates from the RTC received no sentences to incarceration, whereas 49% of the subjects who were terminated from the program received sentences to incarceration. Also, significantly more graduates of the RTC were referred to Drug Court[7] (26.0%) compared to no subjects who were terminated from the program being sent to Drug Court, and had cases that were not disposed by the court -- 32.3% vs. 13.0% -- for the terminated group. Significantly more subjects who did not complete the RTC received deferred sentences (11.0%) compared to no graduates of the RTC receiving deferred sentences.

Table 19
Base Docket Case Dispositions & Type of Sentence

	Graduated		Terminated or Withdrew		Total	
	# of Chrgs	%	# of Chrgs	%	# of Chrgs	%
Incarceration	0	0.0%	49	49.0%	49	29.7%
Not Disposed by Court	21	32.3%	13	13.0%	34	20.6%
Probation	12	18.5%	14	14.0%	26	15.8%
Drug Court	17	26.2%	0	0.0%	17	10.3%
Sentence Deferred	0	0.0%	11	11.0%	11	6.7%
Split Sentence	3	4.6%	5	5.0%	8	4.8%
Open	2	3.1%	1	1.0%	3	1.8%
Fine	1	1.5%	1	1.0%	2	1.2%
Missing / Unknown	5	7.7%	6	6.0%	11	6.7%
No Base Docket Record	4	6.2%	0	0.0%	4	2.4%
Total	**65**	**100.0%**	**100**	**100.0%**	**165**	**100.0%**

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

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[7] Note: The base docket sentencing data is extracted from the disposition codes found in the test subjects' VCIC records. Only 17 subjects who successfully graduated from the RTC 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 RTC 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.

Tables 20A & B show information regarding the minimum and maximum sentence lengths received by the RTC participants that were terminated or withdrew from the program and were sentenced to incarceration on their base docket charges. The data shows that these subjects had an average minimum sentence length of 1.1 years with a minimum of 1 day and a maximum of 3 years, and an average maximum sentence length of 3.6 years with a minimum of 1 day and a maximum of 15 years.

Table 20A
Minimum Lengths of Sentences to Incarceration on the Base Docket

	Terminated or Withdrew	
	Count	**%**
< 90 days	7	14.3%
90 days to < 1 yr	17	34.7%
1 yr to < 3 yrs	25	51.0%
3+ yrs	0	.0%
Total	**49**	**100.0%**
Mean*	1.1 yrs	
Minimum *	1	
Maximum *	3.0 yrs	

* Units in days unless otherwise indicated.

Table 20B
Maximum Lengths of Sentences to Incarceration on the Base Docket

	Terminated or Withdrew	
	Count	**%**
< 90 days	5	10.2%
90 days to < 1 yr	15	30.6%
1 yr to < 3 yrs	5	10.2%
3+ yrs	24	49.0%
Total	**49**	**100.0%**
Mean*	3.6 yrs	
Minimum*	1	
Maximum*	15 years	

* Units in days unless otherwise indicated.

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 RTC participants and their tendency to recidivate. The analysis revealed that two variables -- *Base Docket Sentence Type,* and *Base Docket Charge Rank* – showed some correlation to recidivism. The resulting regression model, however, did not show strong statistical significance and only correctly assigned 68% of the subjects into recidivist/non-recidivist groups. Based on these results the conclusion can be made that the differences in demographic profiles and criminal histories of the study sample were not important factors in predicting the tendency of 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 RTC 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 RTC – 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 Docket Offense Level: 1 = felony, 2 = misdemeanor
> Base Docket Offense Rank: higher value equals more severe offense – range 15 to 75
> Base Docket Sentence Type: incarceration, split sentence, etc. lower value equals more severe sentence
> Employment at Start of RTC
> Highest Education Level at Start of RTC
> Marital Status at Start of RTC
> State of Birth (1 = Vermont, 2 = all other)

Dependent variable:
> Recidivists: 1 = recidivist and 2 = non-recidivist

For a first step, a test of equality of the group means of the independent variables was conducted. Table 21 below shows this analysis for post-program recidivists and indicates that three independent variables – *Base Docket Sentence Type, Base Docket Charge Rank, and Total Prior Convictions* -- showed significant differences (+95% confidence level) between the recidivist and non-recidivist groups.

Table 21
Test of Equality of Group Means

	Independent Variable Means		F	Sig.
	Recidivists	Non-recidivists		
Base Docket Offense Rank	37.0	44.9	10.17	.002
Base Docket Sentence Type	4.7	6.2	10.09	.002
Total Prior Convictions	8.4	5.9	4.44	.037
Total Prior Misdemeanors	7.2	5.2	3.56	.061
Total Prior Felonies	1.2	.7	3.52	.063
Marital Status	5.1	4.9	1.14	.288
Age at Treatment Court Referral	26.5	27.5	0.84	.362
Race	3.0	2.9	0.64	.426
Age at First Conviction or Contact	21.9	22.2	0.09	.765
Highest Education Level at Start of RTC	5.3	5.4	0.08	.772
Gender	1.6	1.6	0.06	.802
Employment at RTC Start	1.5	1.5	0.04	.836
State of Birth	1.3	1.3	0.03	.852
Base Docket Offense Level	1.7	1.7	0.03	.865
Time in RTC	236.3	240.8	0.01	.908

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 – *Base Docket Sentence Type, and Base Docket Charge Rank*.

Table 22 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-recidivist score. A subject is assigned to that group for which the classification score is the largest.

Table 22
Discriminant Analysis Model

	Recidivist	Non-recidivist
Base Docket Sentence Type	.513	.676
Base Docket Charge Rank	.150	.181
Constant	-4.680	-6.865

However, based on statistical significance testing, the model showed low correlation, accounting for only about 11% of the variation in the grouping variable, i.e. whether a subject is a recidivist or non-recidivist (R^2 = 0.339).

The low correlation of the discriminant function with the dependent variable is further revealed by the classification results shown in Table 23. 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 67.9% of all project participants were classified correctly into "recidivist" or "non-recidivist."

Table 23
Classification Results

		Predicted Group Membership		Actual Group
		Recidivist	Non-recidivist	Membership
Count	**Recidivist**	**55**	22	77
	Non-recidivist	31	**57**	88
%	**Recidivist**	**71.4%**	28.6%	100.0%
	Non-recidivist	35.2%	**64.8%**	100.0%

Numbers/Percentages in bold and shaded are correctly predicted. 67.9% of original grouped cases correctly predicted.

The final conclusion from the discriminate analysis is that two variables -- Base Docket Sentence Type, and Base Docket Charge Rank -- were found to differentiate recidivists from non-recidivists. However, the resulting regression model was able to correctly classify only 68% of the study subjects into the correct group and did not provide a useful screening tool for predicting the probability of post-program success.

The discriminant analysis did reveal, however, some potentially interesting relationships between the two independent variables and the tendency to recidivate. *Base Docket Sentence Type* was shown to have a negative correlation to recidivism. This means that as the value of Sentence Type gets smaller (meaning a more severe sentence) the tendency to recidivate increases. This suggests that the RTC participants who received incarcerated sentences on their base docket had a higher probability to recidivate compared to participants who received a community-based sentence. The analysis also showed that *Base Docket Charge Rank* was positively correlated with the dependent variable, meaning that as the charge rank value increases (more severe charge) the tendency to recidivate decreases. This is not consistent with the results observed for Sentence Type. One thing that may be working here to explain this inconsistency is that the correlation between Base Charge Rank and Sentence Type was very weak indicating that a severe charge rank did not necessarily mean a severe sentence. Also, Charge Rank was only about 25% as important as Sentence Type in the regression model.

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 an experimental design, the "Terminated or Withdrew" group did participate at some level in the RTC program and was possibly 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 RTC program. For example, in an outcome evaluation of the RTC conducted in 2009 by NPC Research[8], a recidivism rate of 84% was reported for a control group that was selected to specifically match the RTC graduates in demographics and criminal histories, but without any involvement in the RTC program. Given the positive results observed for the "Graduated" group in this study it is possible that the levels of recidivism for a true control group might be higher than reported here. Further, since we cannot assume that any differences between the two groups reported on in this study are random (as would be the case in an experimental design) there may be differences between the two groups which are unrelated to program participation but are related to recidivism.

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[8] *Vermont Drug Courts: Rutland County Adult Drug Court Cost Evaluation Final Report,* NPC Research, January 2009.

CONCLUSIONS

1. **The RTC appears to be a promising approach for reducing recidivism among participants who completed the program.**

    People who graduated from the RTC had a recidivism rate of 35.4% which is significantly less than the recidivism rate of 54.0% for participants who were terminated or withdrew from the RTC.

2. **The RTC was shown to be very effective in producing graduates that remained conviction-free in the community during their first year after leaving the program.**

    The research showed that for all of the study participants, most recidivism occurred in the period up to one year after leaving the RTC. However, for the RTC graduates, more than 83% -- 55 of 65 participants -- remained conviction-free during their first year after leaving the program. This is significantly better than the subjects who were unsuccessful in completing the RTC. Only 69 of 100 of the subjects (69%) that were either terminated or withdrew from the RTC remained conviction-free during the first year after leaving the program.

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

    The reconviction rate for the successful RTC participants was almost half the rate for the participants that were unsuccessful (109 compared to 226 reconvictions per 100, respectively). RTC graduates also had significantly fewer felony reconvictions than did the subjects that did not complete the RTC.

4. **The RTC recidivists tended to commit post-project crime in Rutland County.**

    For the graduates of the RTC, 58 of their 75 new convictions (approximately 77%) occurred in Rutland County. For subjects who did not graduate from the RTC, 86% of their reconvictions were prosecuted in Rutland County.

5. **The reduced recidivism rates observed for the graduates of the RTC, compared with the subjects who were unsuccessful in completing the program, were most likely due to the benefits of the RTC rather than due to differences in demographic, criminal history, or base charge characteristics of the study segments.**

    Examining subject profiles with respect to demographic characteristics revealed no significant differences between the study segments with respect to gender, age at referral to the RTC, race, or education. Differences were however, observed for marital status, employment, and state of birth. Further analysis revealed that these differences were not important factors in determining the tendency of RTC participants to recidivate.

Similar results were found in comparing criminal history and base docket profiles. The only significant differences observed were in numbers of prior convictions for fraud, probation violations, and alcohol offenses. With respect to base dockets, the only significant difference between study cohorts was the number of sentences to incarceration. Based on further observations these differences were found to be unrelated to the observed differences in rates of recidivism.

These findings support the conclusion that the difference in recidivism rates observed between the two study segments was more likely a result of the benefits of the RTC program than to characteristic differences in the study cohorts.

6.   **An investigation into the demographic and criminal history characteristics of the RTC participants showed correlations between base docketing sentencing severity and type, and tendency to recidivate. However, the correlations were not strong enough to result in a useful model that could be used as a predictor of recidivism.**

Further regression analysis revealed that only the severity of base docket charges and type of base docket sentences correlated with recidivism. The relationship between recidivism and base docket sentence type suggested that RTC participants who received incarcerated sentences on their base docket had a higher probability to recidivate compared to participants who received a community-based sentence. However, the observed correlations were not strong and did not produce a useful model for predicting the probability of post-program success. The resulting model was able to correctly classify only 68% of the study subjects as recidivists or non-recidivists.

Although the model was not statistically strong, it is important to note that it was consistent with a recent analysis done for an outcome evaluation on The Windsor County Sparrow Project[9]. In that analysis, Base Docket Sentence Type was the only variable that differentiated recidivists and non-recidivists, providing a regression model that showed very similar predictive power as observed in this analysis. This consistency across two different projects is encouraging. It shows the importance of doing more regression modeling with future program outcome evaluations, while looking further into 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, providing important tools for future pre-program screening.

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[9]   An online version of this report can be found at:
http://www.vcjr.org/reports/reportscrimjust/reports/sparrowreport.html.