

Data Driven Decisions

RUTLAND COUNTY TREATMENT COURT

CONTROL GROUP EVALUATION

FINAL REPORT

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EXECUTIVE SUMMARY

SUMMARY OF CONCLUSIONS

1. The research confirmed that it is feasible to develop a valid control group for use in comparing recidivism results from outcome evaluations.
2. Comparing the recidivism rate for the RCTC participants who graduated from the program (34.5%) with the recidivism rate observed for the RCTC participants who were terminated from the program (54.0%), and the control group (58.8%), revealed a significant reduction in recidivism for the graduates, confirming the original conclusion that the RCTC appears to be a promising approach for reducing recidivism among graduating program participants.
3. The positive impact of the RCTC was further revealed in the comparison of reconviction rates (number of reconvictions per 100 subjects) among the subjects who completed the RCTC, the subjects that were terminated or withdrew from the program, and the control group. The reconviction rate for those participants who completed the program was approximately half the rate observed for the terminated/withdrew group (115 vs. 226 reconvictions per 100 subjects) and 2 ½ times less than the rate determined for the control group (115 vs. 296 reconvictions per 100 subjects).
4. Comparisons between the RCTC participants and the control group, with respect to demographics and criminal histories, showed only a few minor differences. The conclusion is that the significantly lower recidivism rate observed for the RCTC graduates compared to both the terminated/withdrew group and the control group was likely a result of the benefits the participants received from the RCTC program and not a result of the differences observed between the participants and control subjects.

INTRODUCTION

This evaluation of the RCTC is a follow-up to an outcome evaluation conducted in February of 2013¹. The result of that outcome evaluation revealed a recidivism rate of 35.4% for subjects who graduated from the RCTC, which is significantly less than the recidivism rate of 54.0% for participants who were terminated or withdrew from the program. However, since a control group was not available for comparison, it was not possible to determine from the research whether these results represented a significant reduction in recidivism rates compared to what would be expected from similar types of offenders who were not influenced by benefits from the RCTC program. This evaluation was initiated with the objective to investigate the feasibility of generating a valid test control group that could be used in confirming the significance of the outcome evaluation results.

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.

¹ The Executive Summary from the Rutland County Treatment Court outcome evaluation (February, 2013) is available in Appendix C.

SUMMARY OF FINDINGS

Which Subjects Recidivated?

This section compares the rate of recidivism from the previous outcome evaluation with the recidivism rate calculated for the new control group. Table 1 displays the results of this comparison. As reported previously, the percentage of program participants who were reconvicted after graduating from the RCTC was found to be 35.4%, significantly lower than the recidivism rate for the RCTC participants who were terminated from the program (54.0%). In comparison, the control group showed a significantly higher recidivism rate than was observed for the graduates of the RCTC (58.8% vs. 35.4%, respectively), but was at parity with the recidivism rate for the terminated subjects.

Table 1
Comparison of Recidivism Rates
RCTC Study Segments vs. Control Group

| | RCTC Study Participants | | | | | | Control Group | |
|-----------------------|-------------------------|--------|------------------------|--------|-------|--------|---------------|--------|
| | Graduated | | Terminated or Withdrew | | Total | | Count | % |
| | Count | % | Count | % | Count | % | | |
| Recidivist | 23 | 35.4% | 54 | 54.0% | 77 | 46.7% | 265 | 58.8% |
| Non-recidivist | 42 | 64.6% | 46 | 46.0% | 88 | 53.3% | 186 | 41.2% |
| Total | 65 | 100.0% | 100 | 100.0% | 165 | 100.0% | 451 | 100.0% |

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

When Did Subjects Recidivate?

The calculation summarized in the previous section represents the recidivism rate at the time this study was conducted. In addition to this recidivism measure, program effectiveness can also be 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 program. This section takes a closer look at recidivism rates with respect to how long a subject was away from the RCTC and eligible to recidivate.

Tables 2A, 2B, and 2C present recidivism data for the 65 participants who graduated from the RCTC (Table 2A), the 100 participants who were terminated or withdrew from the program (Table 2B), and the 451 subjects in the control group (Table 2C) – focusing on the number of subjects who were eligible to recidivate during a time period and the number who were reconvicted during that same time period. Looking at the first columns in each table under “< 1 Year”, the data show that all 65 graduates of the RCTC, the 100 subjects who were terminated or withdrew from the program, and all 451 of the control group subjects were eligible to recidivate during the time immediately following their recidivism clock start date. The data show that 10 of the graduates were reconvicted of crimes during that time period for a recidivism rate of 15.4% (Table 2A). In comparison, the recidivism rates are almost twice that for the terminated subjects and the control group. Table 2B shows that 32 terminated subjects were reconvicted in less than one year after they left the RCTC, for a recidivism rate of 32.0%. For the control group 132 subjects, or 29.3% (Table 2C), were reconvicted during this time period.

The second column in the tables show the recidivism rates of the subjects who were at least one full year from leaving the RCTC, or in the case of the control group, from their recidivism start date. Combining the first and second columns of data show that for the post-RCTC elapsed time period including one full year, the graduates of the program recidivated at a significantly lower rate of 23.1% (15 of 65 participants) compared to the participants who were terminated or withdrew (41.1% or 41 of 100 subjects), and the control group (44.8% or 202 of 451 subjects). Subsequent columns extend the post-RCTC elapsed time out to six to seven years and show that very little recidivism occurred after the second full year of eligibility, with 74% to 85% of all subjects who recidivated doing so before and during that time period.

Table 2A
Time to Recidivate Post-RCTC by Years of Eligibility to Re-offend – RCTC Graduates

| Post-RCTC Elapsed Time | < 1 Year | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|--|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Number of Participants Who Recidivated During the Time Period | 10 | 5 | 2 | 4 | 1 | 1 | 0 |
| Total # of Participants who were eligible to recidivate during the time period* | 65 | 52 | 44 | 35 | 25 | 13 | 8 |
| % Recidivated | 15.4% | 9.6% | 4.5% | 11.4% | 4.0% | 7.7% | 0.0% |

*The data in this row represent all participants who had completed the RCTC for certain time periods. Participants may appear in more than one column based on the longevity of their post-RCTC elapsed time. For example each of the 44 participants who appear in the “Year 2” column also appear in the “< 1 Year” and “During Year 1” columns because, having completed two years of post-RCTC elapsed time, they necessarily have also completed less than one year and one year of elapsed time.

Table 2B
Time to Recidivate Post-RCTC by Years of Eligibility to Re-offend – RCTC Terminated/Withdrew

| Post-RCTC Elapsed Time | < 1 Year | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|---|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Number of Participants Who Recidivated During the Time Period | 32 | 9 | 5 | 3 | 4 | 0 | 1 | 0 |
| Total # of Participants who were eligible to recidivate during the time period | 100 | 80 | 70 | 60 | 50 | 40 | 30 | 19 |
| % Recidivated | 32.0% | 11.3% | 7.1% | 5.0% | 8.0% | 0.0% | 3.3% | 0.0% |

Table 2C
Time to Recidivate Post-RCTC by Years of Eligibility to Re-offend – Control

| Post-RCTC Elapsed Time | < 1 Year | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|---|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Number of Participants Who Recidivated During the Time Period | 132 | 70 | 30 | 17 | 6 | 8 | 2 | 0 |
| Total # of Participants who were eligible to recidivate during the time period | 451 | 451 | 417 | 368 | 323 | 280 | 239 | 100 |
| % Recidivated | 29.3% | 15.5% | 7.2% | 4.6% | 1.9% | 2.9% | 0.8% | 0.0% |

Crimes For Which Participants Were Convicted

When considering the effect that the RCTC had on participants it is important to differentiate between the number of *participants* who recidivated and the number, type and severity of *crimes* for which participants were convicted 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.

Table 3 compares the number of reconvictions between the RCTC recidivists, and the control group recidivists. The data show that the combined post-RCTC recidivists were convicted of a total of 301 crimes during the follow-up period. The graduates of the RCTC were convicted of only 75 post-program crimes – 69 misdemeanors (92.0%) and six felonies (8.0%). The RCTC participants who were terminated or withdrew were reconvicted of a total of 226 crimes – 160 misdemeanors (70.8%) and, compared to the graduates, significantly more felonies (66 or 29.2%). The control sample committed a total of 1337 crimes – 1092 misdemeanors (81.7%) and 245 felonies (18.3%). There was no significant difference in the proportion of total felonies to misdemeanors between the combined RCTC recidivists and the control group.

Examination of the reconviction rate per 100 subjects provides a more revealing comparison. The reconviction rate for those participants who completed the program was nearly half the rate observed for the terminated/withdrew group (115 vs. 226 reconvictions per 100 subjects) and 2 ½ times less than the rate determined for the control sample (115 vs. 296 reconvictions per 100 subjects).

Table 3
Offense Levels for All Crimes for Which Subjects Were Reconvicted

| | RCTC Study Participants | | | | | | Control | |
|--------------------|-------------------------|---------------|------------------------|---------------|------------------|---------------|------------------|---------------|
| | Graduated | | Terminated or Withdrew | | Total | | # of Convictions | % |
| | # of Convictions | % | # of Convictions | % | # of Convictions | % | | |
| Felony | 6 | 8.0% | 66 | 29.2% | 72 | 23.9% | 245 | 18.3% |
| Misdemeanor | 69 | 92.0% | 160 | 70.8% | 229 | 76.1% | 1092 | 81.7% |
| Total | 75 | 100.0% | 226 | 100.0% | 301 | 100.0% | 1337 | 100.0% |

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

Table 4 shows a comparison of the types of post-program crimes for which the RCTC recidivists and the control recidivists were reconvicted. The RCTC recidivists were reconvicted of a total of 301 crimes, averaging 3.9 crimes with a median of three convictions and a maximum of 23. The control group recidivists were reconvicted of a total 1337 crimes, averaging five reconvictions with a median of four convictions and a maximum of 26. The comparison of reconvictions between the RCTC recidivists and the control group recidivists revealed similar patterns. For both groups the top three most frequent crimes, accounting for approximately 50% of the total reconvictions, consisted of (listed in order of frequency): theft crimes, DMV violations, and drug crimes. The primary difference observed in comparing the types of reconvictions between the two samples was the control group recidivists committed more assault crimes (5.8%) and more domestic assault crimes (2.1%) than did the RCTC recidivists (1.7% and 0.3%, respectively).

Table 4
All Crimes for Which Subjects Were Reconvicted

| | Graduated | | Terminated or Withdrew | | Total | | Control | |
|---------------------------------|-----------|---------------|------------------------|---------------|------------|---------------|-------------|---------------|
| | # of Conv | % | # of Conv | % | # of Conv | % | # of Conv | % |
| Theft | 21 | 28.0% | 62 | 27.4% | 83 | 27.6% | 270 | 20.2% |
| DMV | 17 | 22.7% | 34 | 15.0% | 51 | 16.9% | 266 | 19.9% |
| Drug Offense² | 3 | 4.0% | 21 | 9.3% | 24 | 8.0% | 99 | 7.4% |
| Failure to Appear | 3 | 4.0% | 20 | 8.8% | 23 | 7.6% | 70 | 5.2% |
| Fraud | 4 | 5.3% | 16 | 7.1% | 20 | 6.6% | 61 | 4.6% |
| Unlawful Trespass | 8 | 10.7% | 10 | 4.4% | 18 | 6.0% | 58 | 4.3% |
| Escape | 0 | 0.0% | 17 | 7.5% | 17 | 5.6% | 49 | 3.7% |
| Violation of Probation | 7 | 9.3% | 10 | 4.4% | 17 | 5.6% | 76 | 5.7% |
| Disorderly Conduct | 3 | 4.0% | 9 | 4.0% | 12 | 4.0% | 59 | 4.4% |
| Vs Justice³ | 3 | 4.0% | 9 | 4.0% | 12 | 4.0% | 54 | 4.0% |
| DUI | 3 | 4.0% | 5 | 2.2% | 8 | 2.7% | 45 | 3.4% |
| Assault | 0 | 0.0% | 5 | 2.2% | 5 | 1.7% | 78 | 5.8% |
| Unlawful Mischief | 2 | 2.7% | 3 | 1.3% | 5 | 1.7% | 38 | 2.8% |
| Accessory | 1 | 1.3% | 1 | 0.4% | 2 | 0.7% | 10 | 0.7% |
| Disturbing the Peace | 0 | 0.0% | 1 | 0.4% | 1 | 0.3% | 5 | 0.4% |
| TRO Violation | 0 | 0.0% | 2 | 0.9% | 2 | 0.7% | 22 | 1.6% |
| Domestic Assault | 0 | 0.0% | 1 | 0.4% | 1 | 0.3% | 28 | 2.1% |
| Alcohol Violation | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 17 | 1.3% |
| Total Other | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 7 | 0.5% |
| Fish & Game | 0 | 0.0% | 0 | 0.4% | 0 | 0.0% | 7 | 0.5% |
| Total Convictions | 75 | 100.0% | 226 | 100.0% | 301 | 100.0% | 1337 | 100.0% |
| # of Recidivists | 23 | | 54 | | 77 | | 265 | |
| Mean Convictions | 3.3 | | 4.2 | | 3.9 | | 5.0 | |
| Median Convictions | 1.5 | | 3.0 | | 3.0 | | 4.0 | |
| Max Convictions | 23 | | 8 | | 23 | | 26 | |

² The large majority of Drug Offenses are possession and sale.

³ Contempt, False Alarms, Resist Arrest, etc.

SUBJECT PROFILE COMPARISONS

The following profile comparisons demonstrate how closely the RCTC participants and the control group were matched. Although there were a few significant differences reported in some of the variables used to develop the control group, additional analysis showed these differences were not found to significantly affect the recidivism rate reported for the control group.

The overall conclusion is that the significantly lower recidivism rate observed for the RCTC graduates, compared to the subjects who were terminated or withdrew from the program and the control group, was more likely due to the benefits the participants received from the RCTC rather than from differences in demographic or criminal history characteristics between the groups.

Demographic Profile Comparison

Gender

Table 5 presents the gender composition of the study group compared to the control cohort. The total RCTC study group consisted of approximately 42% females and 58% males, compared to the control group which was composed of approximately 40% females and 60% males. This difference was not found to be significant.

Table 5
Gender by RCTC Participants/Control

| | RCTC Participants | | | | | | Control Group | |
|---------------|-------------------|--------|------------------------|--------|-------------------|--------|---------------|--------|
| | Graduated | | Terminated or Withdrew | | Total Study Group | | Count | % |
| | Count | % | Count | % | Count | % | | |
| Female | 30 | 46.2% | 39 | 39.0% | 69 | 41.8% | 179 | 39.7% |
| Male | 35 | 53.8% | 61 | 61.0% | 96 | 58.2% | 272 | 60.3% |
| Total | 65 | 100.0% | 100 | 100.0% | 165 | 100.0% | 451 | 100.0% |

Race

Table 6 presents the racial characteristics of the RCTC participants and the control group. Not surprisingly, approximately 95% of all subjects were Caucasian. The RCTC study cohort included only four African Americans (2.4%) and two Asians (1.2%). There were slightly more African Americans (4.9%) in the control group, but the difference is not significant.

**Table 6
Race by RCTC Participants/Control**

| | RCTC Participants | | | | | | Control Group | |
|-------------------------|-------------------|---------------|------------------------|---------------|------------|---------------|---------------|---------------|
| | Graduated | | Terminated or Withdrew | | Total | | Count | % |
| | Count | % | Count | % | Count | % | | |
| Caucasian | 64 | 98.5% | 95 | 95.0% | 159 | 96.4% | 426 | 94.5% |
| African American | 0 | 0.0% | 4 | 4.0% | 4 | 2.4% | 22 | 4.9% |
| Asian | 1 | 1.5% | 1 | 1.0% | 2 | 1.2% | 0 | 0.0% |
| Hispanic | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 0.2% |
| Native American | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 0.2% |
| Unknown | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 0.2% |
| Total | 65 | 100.0% | 100 | 100.0% | 165 | 100.0% | 451 | 100.0% |

Current Age

Tables 7A and 7B show a comparison of the ages of the RCTC and control group subjects. The data in Table 7A show that the total RCTC participants' age profile matches very closely to that of the control subjects. Table 7B on the next page shows the same analysis segmented by gender. Again, the data show a very close match with the control sample. No significant differences were observed.

**Table 7A
Current Age - By RCTC Participants/Control**

| | RCTC Participants | | | | | | Control Group | |
|-----------------|-------------------|---------------|------------------------|---------------|------------|---------------|---------------|---------------|
| | Graduated | | Terminated or Withdrew | | Total | | Count | % |
| | Count | % | Count | % | Count | % | | |
| 50 to 59 | 5 | 7.7% | 3 | 3.0% | 8 | 4.8% | 22 | 4.9% |
| 40 to 49 | 6 | 9.2% | 11 | 11.0% | 17 | 10.3% | 45 | 10.0% |
| 35 to 39 | 10 | 15.4% | 11 | 11.0% | 21 | 12.7% | 65 | 14.4% |
| 30 to 34 | 23 | 35.4% | 26 | 26.0% | 49 | 29.7% | 146 | 32.4% |
| 25 to 29 | 19 | 29.2% | 33 | 33.0% | 52 | 31.5% | 133 | 29.5% |
| 21 to 24 | 2 | 3.1% | 15 | 15.0% | 17 | 10.3% | 37 | 8.2% |
| 19 to 20 | 0 | 0.0% | 1 | 1.0% | 1 | 0.6% | 3 | 0.7% |
| Total | 65 | 100.0% | 100 | 100.0% | 165 | 100.0% | 451 | 100.0% |

Table 7B
Current Age - RCTC Participants/Control by Gender

| | Female | | | | Male | | | |
|--------------|-------------------|---------------|---------------|---------------|-------------------|---------------|---------------|---------------|
| | RCTC Participants | | Control Group | | RCTC Participants | | Control Group | |
| | Count | % | Count | % | Count | % | Count | % |
| 50 to 59 | 4 | 5.8% | 11 | 6.1% | 4 | 4.2% | 11 | 4.0% |
| 40 to 49 | 8 | 11.6% | 18 | 10.1% | 9 | 9.4% | 27 | 9.9% |
| 35 to 39 | 6 | 8.7% | 18 | 10.1% | 15 | 15.6% | 47 | 17.3% |
| 30 to 34 | 26 | 37.7% | 68 | 38.0% | 23 | 24.0% | 78 | 28.7% |
| 25 to 29 | 20 | 29.0% | 51 | 28.5% | 32 | 33.3% | 82 | 30.1% |
| 21 to 24 | 4 | 5.8% | 10 | 5.6% | 13 | 13.5% | 27 | 9.9% |
| 19 to 20 | 1 | 1.4% | 3 | 1.7% | 0 | 0.0% | 0 | 0.0% |
| Total | 69 | 100.0% | 179 | 100.0% | 96 | 100.0% | 272 | 100.0% |

Age at First Conviction or Arrest

Tables 8A and 8B summarize data regarding the age of participants at their first criminal conviction, or first arrest if they did not show any convictions in their criminal history. Approximately 57% of the RCTC and control group subjects had been convicted of a criminal offense, or had at least been arrested, by age 20. No significant differences were observed between the RCTC participants and the control group in age at first conviction or arrest.

Table 8A
Age at First Arrest or Conviction by RCTC Participants/Control

| | RCTC Participants | | | | | | Control Group | |
|--------------|-------------------|---------------|------------------------|---------------|------------|---------------|---------------|---------------|
| | Graduated | | Terminated or Withdrew | | Total | | Count | % |
| | Count | % | Count | % | Count | % | | |
| 50 + | 1 | 1.5% | 0 | .0% | 1 | .6% | 0 | .0% |
| 40 to 49 | 3 | 4.6% | 2 | 2.0% | 5 | 3.0% | 9 | 2.0% |
| 35 to 39 | 1 | 1.5% | 3 | 3.0% | 4 | 2.4% | 7 | 1.6% |
| 30 to 34 | 2 | 3.1% | 6 | 6.0% | 8 | 4.8% | 16 | 3.5% |
| 25 to 29 | 10 | 15.4% | 9 | 9.0% | 19 | 11.5% | 44 | 9.8% |
| 21 to 24 | 10 | 15.4% | 23 | 23.0% | 33 | 20.0% | 117 | 25.9% |
| 16 to 20 | 38 | 58.5% | 57 | 57.0% | 95 | 57.6% | 258 | 57.2% |
| Total | 65 | 100.0% | 100 | 100.0% | 165 | 100.0% | 451 | 100.0% |

Table 8B shows a gender comparison between the RCTC and the control study cohorts with respect to age at first arrest or conviction. The only significant difference observed was that the male control group had more subjects in the 21 to 24 age category than did the RCTC group.

Table 8B
Age at First Arrest or Conviction - RCTC Participants/Control by Gender

| | Female | | | | Male | | | |
|-----------------|-------------------|---------------|---------------|---------------|-------------------|---------------|---------------|---------------|
| | RCTC Participants | | Control Group | | RCTC Participants | | Control Group | |
| | Count | % | Count | % | Count | % | Count | % |
| 50 + | 1 | 1.4% | 0 | .0% | 0 | 0.0% | 0 | 0.0% |
| 40 to 49 | 2 | 2.9% | 6 | 3.4% | 3 | 3.1% | 3 | 1.1% |
| 35 to 39 | 2 | 2.9% | 5 | 2.8% | 2 | 2.1% | 2 | 0.7% |
| 30 to 34 | 6 | 8.7% | 13 | 7.3% | 2 | 2.1% | 3 | 1.1% |
| 25 to 29 | 12 | 17.4% | 28 | 15.6% | 7 | 7.3% | 16 | 5.9% |
| 21 to 24 | 17 | 24.6% | 43 | 24.0% | 16 | 16.7% | 74 | 27.2% |
| 16 to 20 | 29 | 42.0% | 84 | 46.9% | 66 | 68.8% | 174 | 64.0% |
| Total | 69 | 100.0% | 179 | 100.0% | 96 | 100.0% | 272 | 100.0% |

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

Criminal History Profile Comparisons

Base Charge Offense Level

Table 9 shows the comparison between the RCTC participants and the control group for the offense levels (felony vs. misdemeanor) of the base docket charges -- those charges that resulted in the referral of study participants to the RCTC, or the charges used as the start of the recidivism clock for the control group. All study groups showed that approximately 60% of their base charge convictions were misdemeanors. There were no statistically significant differences in base charge offense level between the RCTC and the control group.

**Table 9
Base Docket Charge Offense Level by RCTC Participants/Control**

| | RCTC Participants | | | | | | Control Group | |
|--------------------|-------------------|---------------|------------------------|---------------|------------|---------------|---------------|---------------|
| | Graduated | | Terminated or Withdrew | | Total | | Count | % |
| | Count | % | Count | % | Count | % | | |
| Felony | 23 | 35.4% | 40 | 40.0% | 63 | 38.2% | 171 | 37.9% |
| Misdemeanor | 38 | 58.5% | 60 | 60.0% | 98 | 59.4% | 280 | 62.1% |
| Unknown | 4 | 6.2% | 0 | 0.0% | 4 | 2.4% | 0 | 0.0% |
| Total | 65 | 100.0% | 100 | 100.0% | 165 | 100.0% | 451 | 100.0% |

Base Charge Offense Class

Table 10 shows a comparison of base charge offense types between the RCTC participants and the control group. For both groups theft charges constituted approximately 40% of the base charges. The offense class profile for the RCTC subjects matched very closely with the control group. No significant differences were observed.

Table 10
Offense Classes for Most Severe Base Docket Charge by RCTC Participants/Control

| | RCTC Participants | | | | | | Control Group | |
|------------------------------|-------------------|---------------|------------------------|---------------|------------|---------------|---------------|---------------|
| | Graduated | | Terminated or Withdrew | | Total | | Count | % |
| | Count | % | Count | % | Count | % | | |
| Theft | 25 | 38.5% | 45 | 45.0% | 70 | 42.4% | 182 | 40.4% |
| Public Order Offenses | 11 | 16.9% | 14 | 14.0% | 25 | 15.2% | 81 | 18.0% |
| Fraud | 8 | 12.3% | 11 | 11.0% | 19 | 11.5% | 39 | 8.6% |
| Drug Offenses | 5 | 7.7% | 12 | 12.0% | 17 | 10.3% | 52 | 11.5% |
| Other DMV Offenses | 4 | 6.2% | 8 | 8.0% | 12 | 7.3% | 33 | 7.3% |
| DUI | 6 | 9.2% | 2 | 2.0% | 8 | 4.8% | 25 | 5.5% |
| Assault | 4 | 6.2% | 3 | 3.0% | 7 | 4.2% | 20 | 4.4% |
| Domestic Assault | 0 | 0.0% | 3 | 3.0% | 3 | 1.8% | 7 | 1.6% |
| TRO | 1 | 1.5% | 2 | 2.0% | 3 | 1.8% | 12 | 2.7% |
| Unknown | 1 | 1.5% | 0 | 0.0% | 1 | 0.6% | 0 | 0.0% |
| Total | 65 | 100.0% | 100 | 100.0% | 165 | 100.0% | 451 | 100.0% |

Comparison of Prior Criminal Activity

Table 11 shows a frequency distribution of total number of prior convictions comparing the RCTC study segments with the control group. The data show that the control group distribution of total prior convictions matches very well with the total RCTC study group. No significant differences were observed.

Table 11
Total Number of Pre-RCTC Convictions by Participant Group / Control Group

| | RCTC Participants | | | | | | Control Group | |
|---------------------------------|-------------------|---------------|------------------------|---------------|------------|---------------|---------------|---------------|
| | Graduated | | Terminated or Withdrew | | Total | | Count | % |
| | Count | % | Count | % | Count | % | | |
| 10+ Prior Convictions | 16 | 24.6% | 33 | 33.0% | 49 | 29.7% | 156 | 34.6% |
| 8 to 9 Prior Convictions | 4 | 6.2% | 9 | 9.0% | 13 | 7.9% | 28 | 6.2% |
| 6 to 7 Prior Convictions | 4 | 6.2% | 7 | 7.0% | 11 | 6.7% | 31 | 6.9% |
| 3 to 5 Prior Convictions | 11 | 16.9% | 20 | 20.0% | 31 | 18.8% | 68 | 15.1% |
| 2 Prior Convictions | 6 | 9.2% | 7 | 7.0% | 13 | 7.9% | 28 | 6.2% |
| 1 Prior Conviction | 6 | 9.2% | 7 | 7.0% | 13 | 7.9% | 33 | 7.3% |
| No Prior Convictions | 18 | 27.7% | 17 | 17.0% | 35 | 21.2% | 107 | 23.7% |
| Total | 65 | 100.0% | 100 | 100.0% | 165 | 100.0% | 451 | 100.0% |

Table 12 shows a summary of descriptive statistics – mean, median, and maximum -- of the criminal history characterization variables used to match the control file with the RCTC study cohort. The data show that for most of the variables the control group is at statistical parity with the total RCTC study group. The only significant differences observed were for average charge severity, and total assault charges. The control group had a significantly higher average severity of prior convictions and average number of assault convictions than the total RCTC study group.

Table 12
Pre-RCTC Convictions - Comparison of Characterization Variables
By Participant Groups / Control Group

| | | RCTC Graduates | RCTC Terminated / Withdrew | Total RCTC Participants | Control Group |
|--|----------------|----------------|----------------------------|-------------------------|---------------|
| | N = | 65 | 100 | 165 | 451 |
| Average Prior Charge Severity | Mean | 23.4 | 26.2 | 25.1 | 33.6 |
| | Median | 26 | 28 | 27 | 31 |
| | Maximum | 65 | 67 | 67 | 70 |
| Total Prior Convictions | Mean | 6.1 | 7.8 | 7.1 | 8.1 |
| | Median | 3 | 5 | 4 | 5 |
| | Maximum | 36 | 30 | 36 | 40 |
| Total Prior Felonies | Mean | 0.7 | 1.1 | 1.0 | 1.1 |
| | Median | 0 | 0 | 0 | 0 |
| | Maximum | 8 | 7 | 8 | 15 |
| Total Prior Drug Convictions | Mean | 0.4 | 0.4 | 0.4 | 0.3 |
| | Median | 0 | 0 | 0 | 0 |
| | Maximum | 5 | 6 | 6 | 5 |
| Total Prior DUI Convictions | Mean | 0.3 | 0.2 | 0.2 | 0.3 |
| | Median | 0 | 0 | 0 | 0 |
| | Maximum | 3 | 2 | 3 | 4 |
| Total Prior Theft Convictions | Mean | 1.3 | 1.9 | 1.6 | 1.3 |
| | Median | 1 | 1 | 1 | 0 |
| | Maximum | 9 | 13 | 13 | 15 |
| Total Prior VOP | Mean | 0.7 | 1.7 | 1.3 | 1.6 |
| | Median | 0 | 0 | 0 | 0 |
| | Maximum | 11 | 13 | 13 | 19 |
| Total Prior Assault Convictions | Mean | 0.2 | 0.1 | 0.1 | 0.3 |
| | Median | 0 | 0 | 0 | 0 |
| | Maximum | 2 | 2 | 2 | 5 |

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.

Table 13 provides a comparison of frequency distributions of the prior conviction offense classes between the RCTC study segments and control group. The results show a very close match of the control group with the RCTC study cohort with respect to number and types of prior convictions. The only significant difference observed was the total RCTC study group was convicted of more prior theft crimes than the control group.

Table 13
Pre-RCTC Convictions - Comparison of Offense Classes
By Participant Groups / Control Group

| | RCTC Participants | | | | | | Control Group | |
|-----------------------------|-------------------|---------------|------------------------|---------------|-------------|---------------|---------------|---------------|
| | Graduated | | Terminated or Withdrew | | Total | | Count | % |
| | Count | % | Count | % | Count | % | | |
| Public Order Offense | 179 | 45.2% | 345 | 44.4% | 524 | 44.7% | 1779 | 48.7% |
| Theft | 82 | 20.7% | 191 | 24.6% | 273 | 23.3% | 602 | 16.5% |
| DMV Other Offenses | 53 | 13.4% | 85 | 10.9% | 138 | 11.8% | 438 | 12.0% |
| Drug Offense | 26 | 6.6% | 39 | 5.0% | 65 | 5.5% | 152 | 4.2% |
| Fraud | 11 | 2.8% | 50 | 6.4% | 61 | 5.2% | 154 | 4.2% |
| DUI | 18 | 4.5% | 24 | 3.1% | 42 | 3.6% | 150 | 4.1% |
| Assault | 18 | 4.5% | 22 | 2.8% | 40 | 3.4% | 186 | 5.1% |
| Fish & Game | 5 | 1.3% | 9 | 1.2% | 14 | 1.2% | 52 | 1.4% |
| TRO | 3 | 0.8% | 6 | 0.8% | 9 | 0.8% | 50 | 1.4% |
| Domestic Assault | 0 | 0.0% | 4 | 0.5% | 4 | 0.3% | 60 | 1.6% |
| Other Convictions | 1 | 0.3% | 2 | 0.3% | 3 | 0.3% | 27 | 0.7% |
| Total | 396 | 100.0% | 777 | 100.0% | 1173 | 100.0% | 3650 | 100.0% |

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

APPENDIX A

OVERVIEW OF THE RUTLAND COUNTY TREATMENT COURT

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 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 only drug possession, but drug-related crimes, both misdemeanor 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. During the study period, 39.4% of RCTC 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.

This evaluation of the RCTC is a follow-up to an outcome evaluation conducted in February of 2013⁴. The result of that outcome evaluation revealed a recidivism rate of 35.4% for subjects who graduated from the RCTC, which is significantly less than the recidivism rate of 54.0% for participants who were terminated or withdrew from the program. However, since a control group was not available for comparison, it was not possible to determine from the research whether these results represented a significant reduction in recidivism rates compared to what would be expected from similar types of offenders who were not influenced by benefits from the RCTC program. This evaluation was initiated with the objective to investigate the feasibility of generating a valid test control group that could be used in confirming the significance of the outcome evaluation results.

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.

⁴ The Executive Summary from the Rutland County Treatment Court Outcome Evaluation report (February, 2013) is available in the Appendix C.

APPENDIX B

CONTROL GROUP EVALUATION METHODOLOGY

Control Group Generation

The development of the test control group began with identifying demographic and criminal history variables that are available in the criminal history records from the Vermont Criminal Information Center at the Department of Public Safety that could be used for profiling the RCTC participants from the February 2013 outcome evaluation. The intent was to determine the parameters for creating a filtering program that could be used on a much larger data set of criminal histories for extracting a group of subjects with specific profiles. The following characterization variables were used in the development of the control file.

- **Demographic Variables:**
 - Gender
 - Race
 - Current Age
 - Age at First Conviction or Arrest
- **Base Docket Charge Variables** – The “base docket” is the docket that represents the start of the recidivism clock – chosen as the first docket showing a conviction within the time frame of the original outcome evaluation. It is important that the base dockets for the control sample are consistent with the study sample with respect to:
 - Charge Offense Level – felony or misdemeanor
 - Charge Offense Class – represents offense type and relative severity of the crime
- **Prior Criminal History Variables**
 - Number of Total Prior Convictions
 - Number of Prior Felony and Misdemeanor Convictions
 - Number of Prior Drug Convictions
 - Number of Prior DUI Convictions
 - Number of Prior Theft Convictions
 - Number of Prior VOP Convictions
 - Number of Prior Assault Convictions

These variables were used to create profiles of the participants from the RCTC outcome evaluation. Frequency tables and means, medians, and minimum/maximum ranges were collected for each variable to be used in developing the parameters for the filtering process.

To create the test control group, a dataset of criminal history records was obtained from the Vermont Criminal Information Center, for approximately 7,400 subjects that were arraigned in Rutland County Superior Court - Criminal Division between January 1, 2003 and January 1, 2012. The Vermont criminal history records included all charges and convictions prosecuted in a Vermont criminal court that were available as of April 11, 2013. The criminal records on which

the study was based did not contain federal prosecutions, out-of-state prosecutions, or traffic tickets.

A widely utilized data analysis software application -- Statistical Package for the Social Sciences (SPSS) -- was used to configure the data, compile the characterization variables, choose the base dockets, set the recidivism start dates, and run an initial recidivism analysis. This main control file was then systematically filtered and matched to the RCTC study group on the major demographic and criminal history parameters: gender, age, age at first conviction, race, base docket offense levels and charge classes.

In order to facilitate further refining and balancing of the control file with respect to the more specific criminal history variables, a factor analysis was conducted on the combined study and control dataset to investigate if this statistical methodology would reveal simpler underlying relationships among these interrelated variables. This technique was used with some success in the development of a control group for the Spectrum Youth & Family Services Rapid Referral Program⁵. For the Spectrum project the factor analysis was able to group the characterization variables into four groups and calculate group scores for each of the study participants and control subjects. The aggregated group score ranges and means for the participant group were used to fine tune the final filtering of the control group. For the RCTC control group development, the factor analysis was not able to find a simplified structure for the dataset, probably because the RCTC study cohort was not as homogenous as the Spectrum study group. Further filtering and balancing of the RCTC control group was facilitated by dividing the larger control dataset into smaller gender and age sub-segments. Using an iterative process, each control data sub-set was matched to the corresponding RCTC study sub-set, then recombined in the proper proportions using a random selection process.

The resulting final control group consisted of 451 subjects and showed a demographic and criminal activity profile that matched closely with the RCTC study cohort.

Determination of Recidivism

The recidivism clock for the control group was started on the disposition date of the earliest conviction that occurred within the study period – 3/1/2003 to 5/1/2012. If the disposition date was not available from the Vermont Criminal Information Center records, then the recidivism clock was started on the arraignment date of the earliest conviction. If the arraignment date was also missing from the criminal history records, the recidivism clock was set to the arrest date of the earliest conviction within the study period. The elapsed time was then measured between the start of the control subject's recidivism clock and date the subject was arrested for any new offense which ended in conviction.

⁵ This report can be found at:

http://www.crgvt.org/uploads/5/2/2/2/52222091/spectrum2_finalreport_10-20-12b.pdf

APPENDIX C

RUTLAND COUNTY TREATMENT COURT: Outcome Evaluation Report – February 2013

EXECUTIVE SUMMARY

SUMMARY OF CONCLUSIONS

- 1.** The RCTC 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 reconvictions for participants who completed the program. The reconviction rate for the successful RTC participants was almost half the rate for the participants that were unsuccessful (115 compared to 226 reconvictions per 100, respectively). RTC graduates also had significantly fewer felony reconvictions than did the subjects who did not complete the RTC.
- 4.** The RTC recidivists tended to commit post-program 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.