

*Data Driven Decisions*

**RAPID REFERRAL PROGRAM  
SPECTRUM YOUTH & FAMILY SERVICES:  
CONTROL GROUP EVALUATION  
FINAL REPORT**

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October, 2012



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## **EXECUTIVE SUMMARY**

### **RAPID REFERRAL PROGRAM**

The Rapid Referral Program (hereafter, “the Program”) is a partnership between Spectrum Youth & Family Services of Burlington, Vermont and the Chittenden County Criminal Court. The purpose of this partnership is to improve the efficacy of pre-trial conditions being used by the courts in cases involving crimes related to substance use behaviors. The main objective of the Program is to provide judges with a mechanism at arraignment to rapidly refer defendants to Spectrum Youth Services for a substance abuse assessment and to receive information about treatment recommendations rather than delaying services until the case is disposed by the court.

### **METHODOLOGY**

The objective of this evaluation of the Rapid Referral Program was to investigate the feasibility of generating a valid test control group that could be used in confirming the significance of the results from the outcome evaluation conducted on the Program in June, 2012. The result of this outcome evaluation revealed a low level of recidivism (18.7%) for subjects who had participated in the Program. However since a control group was not available for comparison, it was not possible to determine from the research whether the low recidivism rate was due to the Program or due to other factors. This evaluation was initiated to address this issue.

A second objective of this evaluation was to conduct a discriminant analysis, using profile data from Program participants developed in the outcome evaluation, to determine whether or not there are demographic and/or criminal history characteristics that are important in predicting whether or not subjects recidivate.

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, and could be used for profiling the Program participants that were part of the June, 2012 outcome evaluation. These “characterization variables” were also used to develop a filtering program for use on a larger data file. Such a dataset of criminal history records was obtained from the Vermont Criminal Information Center for approximately 14,000 subjects that were arraigned in Chittenden County Criminal Court between January 1, 2006 and January 1, 2012.

Statistical Package for the Social Sciences (SPSS) -- a widely utilized data analysis software application -- was used to configure the data and create the characterization variables. The file

was then systematically filtered based on the parameters developed from the participant study group from the previous study. This resulted in a control group with a total of 394 subjects and a demographic and criminal history profile that matched closely with the original outcome evaluation study group.

## 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 Program participants (18.7%) with the recidivism rate observed for the control group (84.3%) revealed a significant reduction in recidivism, confirming the original conclusion that the Rapid Referral Program appears to be a promising approach for reducing recidivism among Program participants.
3. Comparisons between the Program participants and the control group with respect to demographics and criminal histories showed insignificant or minor differences. The conclusion is that the low recidivism rate observed for the Program participants compared to the control group was likely to be a result of the benefits the participants received from the Program and not a result of the differences observed between the subjects.
4. As part of the discriminant analysis, a test of equality of the group means of the independent variables was conducted. The analysis revealed that six independent variables – *Base Charge Offense Severity Rank, Number of Prior Misdemeanor Convictions, Gender, Age at Recidivism Start Date, Mean Prior Convictions Offense Level, and Mean Prior Convictions Sentence Type* – showed significant differences between the recidivist and non-recidivist groups among the Program participants.
5. The final discriminant analysis generated a recidivism model that included five variables: *Base Charge Offense Rank, Number of Prior Misdemeanor Convictions, Gender, Age at Recidivism Start Date, and Base Charge Sentence Type*. The model, however, was not statistically significant and only correctly assigned 66% of the subjects into recidivist/non-recidivist groups. Based on this analysis, the conclusion can be made that the differences in demographic characteristics and criminal histories among the Program participants were not important factors in determining the tendency to recidivate.



## INTRODUCTION

This evaluation of the Rapid Referral Program (hereafter, “the Program”) is a follow-up to an outcome evaluation conducted on the Program in June of 2012<sup>1</sup>. The result of this outcome evaluation revealed a low level of recidivism (18.7%) for subjects who had participated in the Program. However since a test control group was not available for comparison, it was not possible to determine from the research whether the low recidivism rate was due to the Program or due to other factors. 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.

A second objective of this evaluation was to conduct a discriminant analysis, using the participant profile data developed in the outcome evaluation, to determine whether or not there are demographic and/or criminal history characteristics that are important in predicting whether or not subjects recidivate.

This evaluation was supported through funds provided by Spectrum Youth & Family Services of Burlington, Vermont. However, the findings and conclusions expressed in this report are those of the authors and do not necessarily reflect the views of Spectrum Youth & Family Services.

## OVERVIEW OF THE RAPID REFERRAL PROGRAM<sup>2</sup>

The Rapid Referral Program is a partnership between Spectrum Youth & Family Services and the Chittenden County Criminal Court. The purpose of this partnership is to improve the efficacy of pre-trial conditions being used by the courts in cases involving crimes related to substance use behaviors.

Upon case review at arraignment, if the judge determines that an individual’s charge is related to an issue with substance use, the judge has the discretion to set a condition of release for the individual to participate in an alcohol or drug treatment program in order to “assure the defendant’s appearance” at future court proceedings and to “reasonably assure protection of the public”.<sup>3</sup> Arraignment judges, in order to determine whether treatment is appropriate, take

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<sup>1</sup> The Executive Summary, Findings, and Conclusions sections from the Spectrum Outcome Evaluation (June, 2012) are available in the Appendix. An online version of the Report can be found on the VCJR website: <http://www.vcjr.org/reports/reportscrimjust/reports/spectrumreport.html>

<sup>2</sup> The *Overview* description of the Rapid Referral Program is based on documentation developed by Vermont Criminal Court Judge Ben Joseph and Annie Ramniceanu, Associate Executive Director of Clinical Programs, Spectrum Youth & Family Services.

<sup>3</sup> Title 13 Vermont Statutes Annotated Sections 7554(a)(1)(C) and 7554(a)(2)(C).

the “reasonably necessary” step of imposing a condition of receiving a substance abuse assessment and obtaining treatment recommendations from a qualified professional. Determinations regarding the provision of this assessment condition are based on a set of identified criteria that are matched against the details of an individual’s case. For example, in DUI cases a referral for an assessment is made when blood alcohol content (BAC) is above 0.15 or, if below 0.15, an individual’s driving was grossly negligent (i.e., driving on the wrong side of the road).

Spectrum Youth & Family Services has provided the Criminal Court with pre-determined “open intake” appointment times that are held specifically for Criminal Court personnel to utilize for scheduling Criminal Court defendants. These intake slots are provided on multiple days per week so as to facilitate the court having access to a slot the instant they have deemed an individual appropriate to order the assessment as a condition of release. With these provisions, judges are able to ensure that individuals will be seen for an assessment within a week or less of the initial arraignment.

Individuals who are assigned the assessment as a condition of release are provided an appointment time (usually within 0-3 days of the arraignment) and directions (including a map) to the assessment location at Spectrum Youth & Family Services. The court clerk faxes a copy of the court order for the assessment and a blank recommendation report to Spectrum. Upon receiving the court paperwork, Spectrum schedules the defendant into the specially held appointment slot. Rapid referral slots are scheduled to be longer than usual appointments for the purpose of allowing a counselor to complete intake and assessment materials all in one sitting.

When meeting with a client the Spectrum counselor proctors an Addiction Severity Index and has the client complete a urine screen. Following the assessment, the counselor completes the blank recommendation report form and faxes it back to the court clerk’s office. Communications between the assessment provider and the individual receiving services are protected by the court order requiring the assessment to take place. Information gathered as part of the assessment may not be used against the individual as part of the current court proceeding. Recommendations sent back to court are of a limited nature and purposefully do not include clinical information. Information detailed in the recommendation report includes if a client attended, if they completed an assessment, if they are recommended to continue with counseling, which programs may be available to provide counseling services, and a date when a client may attend their next counseling session. During a subsequent assessment feedback session the client has the option to continue following through with any counseling recommendations or wait for the judge to decide about enforcing recommendations as a condition of the court.

The judge makes a decision based on the recommendation whether to assign counseling as a condition of the ongoing court proceedings or not. If a client did not attend their mandated initial assessment, the judge will issue a summons for the client to appear in court and make a

decision about which steps will be taken next by the Judiciary with regard to the client's ability to comply with conditions of release.

## **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, and could be used for profiling the Program participants that were in the June, 2012 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 identifying variables that were used in the final profiling were:

- Gender
- Race
- Age at Recidivism Start Date
- Age at First Conviction or Arrest
- Base Charge Offense Level
- Base Charge Offense Type
- Base Charge Sentence Type
- Total Number of Convictions
- Total Number of Misdemeanor Convictions
- Total Number of Felony Convictions
- Percent of Felony Convictions
- Mean Maximum Sentence Length of All Convictions
- Mean Charge Severity Rank of All Convictions
- Mean Sentence Type of All Convictions

These variables were used to create group characterizations of the participants from the June, 2012 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 program.

To create the test control group, a dataset of criminal history records was obtained from the Vermont Criminal Information Center, for approximately 14,000 subjects that were arraigned in Chittenden County Criminal Court between January 1, 2006 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 September 17, 2012. The criminal records on which the study was based did not contain Federal prosecutions, out-of-state prosecutions, or traffic tickets. Statistical Package for the Social Sciences (SPSS) -- a widely utilized data analysis software

application -- was used to configure the data and create the characterization variables. The file was then systematically filtered based on the parameters developed from the participant study group from the previous study. A final fine tuning of the control group was accomplished through the use of a factor analysis of a combined dataset of the participant group and the control group. The factor analysis grouped the characterization variables into four groups and calculated group scores for each subject. The aggregated group score ranges and means for the participant group were used to fine tune the final filtering of the control group.

The resulting control group had a total of 394 subjects and showed a profile that matched closely with the Program group.

## RECIDIVISM

This section compares the rate of recidivism from the previous outcome evaluation with the recidivism rate calculated for the new control group. The recidivism clock for the control group was started on the arraignment date of the earliest conviction that occurred within the study period – 7/1/2004 to 1/1/2012. If the arraignment date was not available from the Vermont Criminal Information Center records, then the recidivism clock was started on the arrest date of the earliest conviction. If the arrest date was also missing from the criminal history records, the recidivism clock was set to the disposition 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.

Table 1 displays the results of this comparison. As reported previously, the percentage of Program participants who were reconvicted after completing the Program was found to be only 18.7%, or 32 of the 171 participants. In comparison, the control group showed a significantly higher recidivism rate of 84.3%, or 332 of the 394 subjects.

**Table 1**  
**Subjects Reconvicted for Any Offense**

	Spectrum Participants		Control		Total	
	Count	%	Count	%	Count	%
<b>Recidivist</b>	32	18.7%	332	84.3%	364	64.4%
<b>Non-recidivist</b>	139	81.3%	62	15.7%	201	35.6%
<b>Total</b>	171	100.0%	394	100.0%	565	100.0%

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

## WHEN WERE SUBJECTS CONVICTED?

In addition to recidivism measures, 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 conviction free is important in evaluating the crime prevention potential for a program.

Table 2 summarizes the analysis of elapsed recidivism time for subjects who were convicted of any new crime during the study period. For the recidivists who participated in the Program, only 15.2% (26 of 171) of reconversions for any new crime occurred in less than one year after Program completion, and 3.5% (6 of 171) occurred during “Year 1” after Program completion. The control group showed significantly more subjects recidivating within one year of their base charge (51.5%, or 203 of 394).

If “successful outcome” for the Program is defined as no arrest for any new criminal conviction within one year of recidivism eligibility, than the success rate for Program participants would be 84.8% (145 subjects with no arrest for any new criminal conviction within one year divided by 171). In comparison, the success rate for the control group is only 48.5% (191 subjects with no arrest for any new criminal conviction within one year divided by 394).

**Table 2**  
**Time to Recidivism**

Participant Group	When First Recidivated	Total	Percentage
Spectrum Participants	< 1 year	26	15.2%
	During year 1	6	3.5%
	During year 2	0	0.0%
	After year 2	0	0.0%
	<b>Total Subjects</b>	<b>171</b>	<b>18.7%</b>
Control	< 1 year	203	51.5%
	During year 1	69	17.5%
	During year 2	33	8.4%
	After year 2	27	6.9%
	<b>Total Subjects</b>	<b>394</b>	<b>84.3%</b>

## CRIMES FOR WHICH PARTICIPANTS WERE CONVICTED

When considering the effect that the Program 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. 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.

**Participant Offense Patterns**

Table 3 compares the number of reconvictions between the Program recidivists, and the control group recidivists. The Program recidivists were convicted of 108 crimes during the follow-up period – 4 felonies and 104 misdemeanors. The control group recidivists were convicted of a total of 852 crimes during the study period – 22 felonies and 830 misdemeanors. There was no significant difference in the proportion of felonies to misdemeanors between the Spectrum participants and the control group.

**Table 3  
Offense Levels For All Crimes For Which Subjects Were Reconvicted**

	Spectrum Participants		Control		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
<b>Felony</b>	4	3.7%	22	2.6%	26	2.7%
<b>Misdemeanor</b>	104	96.3%	830	97.4%	934	97.3%
<b>Total</b>	108	100.0%	852	100.0%	960	100.0%

Examination of the reconviction *rate* per 100 subjects revealed that the Program recidivists had a higher reconviction rate per 100 compared to the control group recidivists. The reconviction rate for the Program recidivists was 337 reconvictions per 100 subjects (108 reconvictions divided by the 32 Program recidivists, multiplied by 100) versus 256 reconvictions per 100 subjects for the control group (852 reconvictions divided by the 332 control group recidivists, multiplied by 100). This difference in reconviction rate was not, however, found to be statistically significant.

Table 4 shows the types of crime for which the subjects were reconvicted. The recidivists who completed the Program averaged 3.4 convictions with a median of 2 and maximum of 17 convictions. The five most prevalent offenses, which comprised 53% of their total reconvictions, were (listed in order of frequency): violations of probation; DUI offenses; theft; unlawful mischief; and driving with license suspended. There were only 5 violent crime convictions for Program recidivists, all of which were simple assault. Forty-seven percent of their motor vehicle violations were driving with license suspended. Given the Program’s emphasis on substance abuse it is important to note that only 13% of the reconvictions (14 out of 108) were for alcohol related charges and 6% of the reconvictions (6 out of 108) were for drug related crimes.

The control group averaged 2.9 reconvictions with a median of 2 convictions and a maximum of 15. These subjects showed similar offense patterns as subjects who completed the Program, with approximately 61% of their reconvictions including (listed in order of frequency): theft; driving with license suspended; DUI offenses; disorderly conduct; and assault.

Comparing reconvictions across the two study segments revealed that though there were no significant differences between the two groups in terms of the average, median, and maximum number of reconvictions, the Program participants had significantly more reconvictions for violations of probation, leaving the scene of an accident, DUI 1<sup>st</sup> offenses, and acts prohibited/prostitution.

**Table 4**  
**All Crimes For Which Subjects Were Reconvicted**

	Spectrum Participant		Control		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
Other DMV Convictions	11	10.2%	140	16.4%	151	15.7%
Total Theft Convictions	10	9.3%	131	15.4%	141	14.7%
Total Assault Convictions	5	4.6%	83	9.7%	88	9.2%
Disorderly Conduct	5	4.6%	74	8.7%	79	8.2%
Drug Offense	6	5.6%	62	7.3%	68	7.1%
Violation of Probation	18	16.7%	43	5.0%	61	6.4%
Other DUI Convictions	3	2.8%	53	6.2%	56	5.8%
Unlawful Mischief	10	9.3%	45	5.3%	55	5.7%
Failure to Appear	8	7.4%	45	5.3%	53	5.5%
Unlawful Trespass	5	4.6%	41	4.8%	46	4.8%
Alcohol Violation	2	1.9%	38	4.5%	40	4.2%
Vs. Justice: Contempt, False Alarms, Resist Arrest, etc.	5	4.6%	25	2.9%	30	3.1%
DUI-1st Offense	9	8.3%	16	1.9%	25	2.6%
Total Fraud Convictions	0	0.0%	22	2.6%	22	2.3%
Leaving the Scene of an Accident	4	3.7%	8	0.9%	12	1.3%
Acts Prohibited/Prostitution	4	3.7%	8	0.9%	12	1.3%
Commerce	0	0.0%	6	0.7%	6	0.6%
Fish & Game Violation	0	0.0%	5	0.6%	5	0.5%
Escape	0	0.0%	4	0.5%	4	0.4%
Other Convictions	3	2.8%	3	0.4%	6	0.6%
<b>Total</b>	108	100.0%	852	100.0%	960	100.0%
<b>Number of Recidivists</b>	32		332		364	
<b>Average # of Convictions</b>	3.4		2.6		2.6	
<b>Median # of Convictions</b>	2		2		2	
<b>Maximum # of Convictions</b>	17		14		17	

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.

## IN WHICH COUNTIES WERE SUBJECTS RECONVICTED?

Table 5 provides the distribution of reconvictions for the Program participants by the county in which the case was prosecuted which, more than likely, is also the county where the crime was committed. Ninety-five percent of the convictions were prosecuted in three counties. Approximately 80% (86 of 108) of the reconvictions occurred in Chittenden County. About 16% (17 out of 108) of the reconvictions occurred in (listed in order of frequency) Addison and Franklin Counties.

**Table 5**  
**County of Prosecution for New Convictions – Program Participants**

	Addison		Chittenden		Franklin		Other Counties*	
	# of Conv	%	# of Conv	%	# of Conv	%	# of Conv	%
Violation of Probation	0	0.0%	16	18.6%	2	25.0%	0	0.0%
Unlawful Mischief	0	0.0%	10	11.6%	0	0.0%	0	0.0%
Total DMV Convictions	4	44.4%	10	11.6%	0	0.0%	1	20.0%
Total Theft Convictions	0	0.0%	9	10.5%	1	12.5%	0	0.0%
Total DUI Convictions	3	33.3%	8	9.3%	0	0.0%	1	20.0%
Simple Assault	0	0.0%	5	5.8%	0	0.0%	0	0.0%
Failure to Appear	2	22.2%	5	5.8%	1	12.5%	0	0.0%
Unlawful Trespass	0	0.0%	5	5.8%	0	0.0%	0	0.0%
Acts Prohibited/Prostitution	0	0.0%	4	4.7%	0	0.0%	0	0.0%
Vs Justice: Contempt, False Alarms, Resist Arrest, etc	0	0.0%	4	4.7%	1	12.5%	0	0.0%
Disorderly Conduct	0	0.0%	3	3.5%	1	12.5%	1	20.0%
Alcohol Violation	0	0.0%	2	2.3%	0	0.0%	0	0.0%
Drug Offense	0	0.0%	2	2.3%	2	25.0%	2	40.0%
Temporary Restraining Order Violation	0	0.0%	2	2.3%	0	0.0%	0	0.0%
Contributing to the Delinquency of a Minor	0	0.0%	1	1.2%	0	0.0%	0	0.0%
<b>Total</b>	<b>9</b>	<b>100.0%</b>	<b>86</b>	<b>100.0%</b>	<b>8</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>

\* Other counties: Grand Isle, Lamoille, and Washington



Table 6 provides the distribution of reconvictions for the control group by county. Approximately 94% (804 out of 852) of the reconvictions occurred in Chittenden County. The remaining 6% (48 out of 852) of the reconvictions were spread out over 11 other counties with the most number occurring in (listed in order of frequency) Franklin, Washington, and Rutland Counties.

**Table 6**  
**County of Prosecution for New Convictions – Control Group**

	Chittenden		Franklin		Rutland		Washington		Other Counties*	
	# of Conv	%	# of Conv	%	# of Conv	%	# of Conv	%	# of Conv	%
<b>Total DMV Convictions</b>	135	16.8%	1	6.3%	2	33.3%	4	57.1%	6	31.6%
<b>Total Theft Convictions</b>	122	15.2%	4	25.0%	1	16.7%	1	14.3%	3	15.8%
<b>Total Assault Convictions</b>	81	10.1%	2	12.5%	0	0.0%	0	0.0%	0	0.0%
<b>Disorderly Conduct</b>	68	8.5%	4	25.0%	1	16.7%	0	0.0%	1	5.3%
<b>Drug Offense</b>	59	7.3%	1	6.3%	0	0.0%	1	14.3%	1	5.3%
<b>Unlawful Mischief</b>	44	5.5%	1	6.3%	0	0.0%	0	0.0%	0	0.0%
<b>Violation of Probation</b>	42	5.2%	0	0.0%	0	0.0%	0	0.0%	1	5.3%
<b>Failure to Appear</b>	41	5.1%	1	6.3%	0	0.0%	1	14.3%	2	10.5%
<b>Unlawful Trespass</b>	41	5.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>Alcohol Violation</b>	36	4.5%	0	0.0%	1	16.7%	0	0.0%	1	5.3%
<b>Vs. Justice: Contempt, False Alarms, Resist Arrest, etc.</b>	25	3.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>Total Fraud Convictions</b>	22	2.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>Acts Prohibited / Prostitution</b>	8	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>Commerce</b>	6	0.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>Other Convictions</b>	11	1.4%	0	0.0%	1	16.7%	0	0.0%	0	0.0%
<b>Total</b>	<b>804</b>	<b>100.0%</b>	<b>16</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>

\* Other counties: Addison, Bennington, Caledonia, Grand Isle, Lamoille, Orange, Orleans, Windsor

## PARTICIPANT PROFILE COMPARISONS

No data was available regarding the characteristics of Program participants other than that which could be gleaned from participants’ criminal records. The following profiles demonstrate how closely the Program participants and control group were matched. Although there are significant differences reported in some of the variables used to develop the control group, additional analysis showed these differences were not found to affect the high recidivism rate reported for the control group.

The overall conclusion is that the low recidivism rate observed for the Program participants was more likely due to the benefits the participants received from the Program rather than from differences in demographic or criminal history characteristics between the two groups.

**Demographic Profile**

**Gender**

Table 7 presents the gender composition of the study group. The total Program study group consisted of approximately 30% females and 70% males. There were no significant differences between the Program participants and control group with respect to gender.

**Table 7  
Gender by Program Participants/Control**

	Spectrum Participants		Control		Total	
	Count	%	Count	%	Count	%
<b>Female</b>	52	30.4%	114	28.9%	166	29.4%
<b>Male</b>	119	69.6%	280	71.1%	399	70.6%
<b>Total</b>	171	100.0%	394	100.0%	565	100.0%

**Race**

Table 8 presents the racial characteristics of the Program participants and the control group. Not surprisingly, over 90% of all subjects were white. The Program study group included only five African Americans (3%) and three Asians (2%). There were slightly more African Americans in the control group, but the difference is not significant.

**Table 8  
Race by Program Participants/Control**

	Spectrum Participants		Control		Total	
	# of Subjects	%	# of Subjects	%	# of Subjects	%
<b>African American</b>	5	2.9%	21	5.4%	26	4.6%
<b>Asian</b>	3	1.8%	5	1.3%	8	1.4%
<b>Caucasian</b>	161	94.2%	359	91.6%	520	92.4%
<b>Unknown</b>	2	1.2%	7	1.8%	9	1.6%
<b>Total</b>	171	100.0%	392	100.0%	563	100.0%

**Age at Recidivism Start Date**

Table 9 shows a comparison of subject ages at the “Recidivism Start Date” between the Participant group and the control group. For both groups approximately 95% of the subjects are under 25 years of age. However, the data in Table 9 does show that the control group had significantly more subjects in the 17 to 18 year-old category and less in the 21 to 24 year-old category than did the Program group. An examination of recidivism rates for each age category revealed little change in the large difference in recidivism rates observed between the two study segments. The conclusion is that this observed difference in age distribution between the Program participants and the control group is not a factor in determining the recidivism rate.

**Table 9  
Age at Recidivism Start Date  
By Program Participants/Control**

	Spectrum Participants		Control		Total	
	# of Subjects	%	# of Subjects	%	# of Subjects	%
<b>15 to 16</b>	0	0.0%	14	3.6%	14	2.5%
<b>17 to 18</b>	16	9.4%	94	23.9%	110	19.5%
<b>19 to 20</b>	58	33.9%	137	34.8%	195	34.5%
<b>21 to 24</b>	87	50.9%	131	33.2%	218	38.6%
<b>25+</b>	10	5.8%	18	4.6%	28	5.0%
<b>Total</b>	<b>171</b>	<b>100.0%</b>	<b>394</b>	<b>100.0%</b>	<b>565</b>	<b>100.0%</b>

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.

**Criminal History Profile**

**Age at First Conviction or Arrest**

Table 10 summarizes data regarding the age of participants at their first criminal conviction or arrest if they did not show any convictions in their criminal history. Approximately 23% of the Program participants and 31% of the control group had been convicted of a criminal offense or had at least been arrested by age 18. Approximately 60% of both groups had been convicted of a criminal offense or arrested by age 20. Comparing across the two study segments revealed that no significant differences were observed between the Program participants and the control group.

**Table 10**  
**Age at First Arrest or Conviction**

	Spectrum Participants		Control		Total	
	# of Subjects	%	# of Subjects	%	# of Subjects	%
<b>17 to 18</b>	40	23.4%	121	30.7%	161	28.5%
<b>19 to 20</b>	64	37.4%	128	32.5%	192	34.0%
<b>21 to 24</b>	61	35.7%	131	33.2%	192	34.0%
<b>25+</b>	6	3.5%	14	3.6%	20	3.5%
<b>Total</b>	<b>171</b>	<b>100.0%</b>	<b>394</b>	<b>100.0%</b>	<b>565</b>	<b>100.0%</b>

**Base Charge Offense Level**

Table 11 shows the comparison between the Program participants and the control group for the offense levels (felony vs. misdemeanor) of base charges -- those charges that resulted in the referral of study participants to the Program, or the charges used as the start of the recidivism clock for the control group. Overall, both study groups showed that over 95% of their base charge convictions were misdemeanors, with only 2% to 4% being felony convictions. There were no statistically significant differences in base charge offense level between the Program participant group and the control group.

**Table 11**  
**Base Charge Offense Level**

	Spectrum Participants		Control		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
<b>Felony</b>	6	3.8%	8	2.0%	14	2.5%
<b>Misdemeanor</b>	153	96.2%	386	98.0%	539	97.5%
<b>Total</b>	<b>159*</b>	<b>100.0%</b>	<b>394</b>	<b>100.0%</b>	<b>553</b>	<b>100.0%</b>

\* Does not include 12 subjects whose base dockets were not found the criminal records from the VCIC.

**Base Charge Offense Type**

Table 12 shows a comparison of base charge offense types between the Program participants and the control group. For both groups DUI charges constituted nearly half of the base charges. In general the offense profiles matched very closely between the two study segments. However there were a few significant differences observed. The Program participants had significantly more careless and negligent driving charges as well as significantly more alcohol offenses. Though the Program participants had significantly more DUI 2<sup>nd</sup> base charges, the total DUI base charges matched very closely with the control group. The control group had significantly more disorderly conduct and simple assault charges.

**Table 12**  
**Types of Offenses for the Base Charges**

	Spectrum Participants		Control		Total	
	# of Convictions	%	# of Convictions	%	# of Convictions	%
DUI 1 <sup>st</sup> or 3 <sup>rd</sup> & Subsequent	71	44.7%	196	49.7%	267	48.3%
Total Theft Convictions	4	2.5%	31	7.9%	35	6.3%
Disorderly Conduct	3	1.9%	31	7.9%	34	6.1%
Drug Offense	12	7.5%	22	5.6%	34	6.1%
Simple Assault	4	2.5%	27	6.9%	31	5.6%
Careless & Negligent Driving	13	8.2%	16	4.1%	29	5.2%
Alcohol Violation	12	7.5%	9	2.3%	21	3.8%
Other DMV Convictions	1	.6%	15	3.8%	16	2.9%
DUI-2nd Offense	13	8.2%	3	0.8%	16	2.9%
Unlawful Trespass	4	2.5%	10	2.5%	14	2.5%
Total Fraud Convictions	2	1.3%	10	2.5%	12	2.2%
Unlawful Mischief	2	1.3%	8	2.0%	10	1.8%
Other Assault Convictions	6	3.8%	1	0.3%	7	1.3%
Vs. Justice: Contempt, False Alarms, Resist Arrest, etc.	2	1.3%	4	1.0%	6	1.1%
Failure to Appear	5	3.1%	0	0.0%	5	0.9%
Acts Prohibited / Prostitution	2	1.3%	2	0.5%	4	0.7%
Commerce	0	0.0%	3	0.8%	3	0.5%
Disturbing the Peace	0	0.0%	3	0.8%	3	0.5%
Violation of Probation	2	1.3%	1	0.3%	3	0.5%
Fish & Game Violation	0	0.0%	2	0.5%	2	0.4%
Municipal Ordinance	1	0.6%	0	0.0%	1	0.2%
<b>Total</b>	<b>159*</b>	<b>100.0%</b>	<b>394</b>	<b>100.0%</b>	<b>553</b>	<b>100.0%</b>

\* Does not include 12 subjects whose base dockets were not found the criminal records from the VCIC.

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.

**Base Charge Sentence Type**

Table 13 displays information regarding the most serious type of sentence received by participants for their base charge convictions. Nearly 57% of the Program participants and 70% of the control group were sentenced to either probation or a fine. For Program participants, 20% (25 out of the 123 charges for which a sentence was imposed) received a sentence to incarceration. A similar percentage of the control group were incarcerated -- 22%, or 76 out of the 346 sentences imposed. These differences between the groups regarding sentence type, were not significant. The control group did, however, receive significantly more deferred sentences than did the Program participants (11.9% vs. 5.8%, respectively).

**Table 13**  
**Base Charge Sentence Type**

	Spectrum Participants		Control		Total	
	Count	%	Count	%	Count	%
<b>Probation</b>	60	35.1%	155	39.3%	215	38.1%
<b>Fine</b>	38	22.2%	115	29.2%	153	27.1%
<b>Split Sentence</b>	14	8.2%	46	11.7%	60	10.6%
<b>Sentence Deferred</b>	10	5.8%	47	11.9%	57	10.1%
<b>Incarceration</b>	11	6.4%	30	7.6%	41	7.3%
<b>Not Disposed By Court</b>	19	11.1%	0	.0%	19	3.4%
<b>No Base Docket</b>	12	7.0%	0	.0%	12	2.1%
<b>Missing/Unknown</b>	4	2.3%	1	.3%	5	.9%
<b>Diversion Completed</b>	3	1.8%	0	.0%	3	.5%
<b>Total</b>	<b>171</b>	<b>100.0%</b>	<b>394</b>	<b>100.0%</b>	<b>565</b>	<b>100.0%</b>

**Other Criminal History Characterization Variables**

Table 14 shows a comparison of descriptive statistics between the Program participants and the control group for the remaining key criminal history characterization variables used to develop the control group. Statistical tests showed some significant differences between study segments, with the control group showing higher mean numbers of misdemeanors and total convictions, and more severe sentence types (i.e., lower mean score). However, additional analysis with sub-segments of the control group with lower numbers on misdemeanor and total convictions and sentence severity did not significantly change recidivism rates. The revised control group samples still showed recidivism rates over 80%. Based on these additional tests the conclusion can be made that the observed significant differences in criminal histories between the Program and control groups did not affect the reported recidivism rates.

**Table 14**  
**Other Criminal History Characterization Variables**  
**By Participant Group / Control Group**

	Spectrum Participants				Control			
	Mean	Median	Max	Min	Mean	Median	Max	Min
<b>Total Number of Felony Convictions</b>	0.1	0	2	0	0.1	0	5	0
<b>Total Number of Misdemeanor Convictions</b>	2.7	1	18	0	4.4	3	16	1
<b>Percent Felony Convictions</b>	2.7	0	100	0	2.4	0	83	0
<b>Total Number of Convictions</b>	2.7	1	19	0	4.5	3	16	2
<b>Mean Sentence Type of All Convictions</b>	4.5	4	7	2	3.9	4	7	2
<b>Mean Charge Severity Rank of All Convictions</b>	36.7	38	65	0	34.6	35	65	14
<b>Mean Max Sentence Length of All Convictions</b>	18.9	0	365	0	18.0	3	365	0

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

## **REGRESSION ANALYSIS: Are there demographic and criminal history characteristics that are important in predicting whether participants recidivate or not?**

### **Summary of Findings**

A discriminant analysis was conducted to investigate if correlations exist between certain demographic and criminal history characteristics of the Spectrum Program participants and their tendency to recidivate. If certain participant characteristics which are predictive of post-Program recidivism could be identified, such knowledge might assist Spectrum staff to identify for inclusion in the Program those defendants who are more likely to benefit from their services while directing defendants who are less likely to benefit from the Program to other services which might better serve their needs.

The analysis revealed that five variables -- *Base Charge Offense Rank, Number of Prior Misdemeanor Convictions, Gender, Age at Recidivism Start Date, and Base Charge Sentence Type* -- showed some correlation to recidivism. The resulting regression model, however, did not show strong statistical significance and only correctly assigned 66% of the subjects into recidivist/non-recidivist groups. Based on this analysis, the conclusion can be made that the differences in demographic and criminal history profiles of the study sample were not important factors in determining the tendency of Program participants to recidivate.

### **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 Program 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 Recidivism Start Date – Mean age in years
- Age at First Conviction or Arrest – Mean age in years
- Total Number of Prior Convictions
- Mean Prior Convictions Offense Levels: 1 = felony, 2 = misdemeanor.
- Mean Prior Convictions Sentence Type: incarceration, split sentence, etc. lower value equals a more severe sentence.
- Mean Prior Convictions Severity Rank: Higher value equals a more severe offense – range 15 to 75
- Mean Prior Maximum Length Incarcerated Sentence (days)
- Base Charge Offense Level: 1 = felony, 2 = misdemeanor.



- Base Charge Offense Rank: Higher value equals a more severe offense – range 15 to 75
- Base Charge Sentence Type
- Maximum Base Charge Incarcerated Sentence Length (days)

**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 15 below shows this analysis and indicates that six independent variables – *Base Charge Offense Rank, Number of Prior Misdemeanor Convictions, Gender, Age at Recidivism Start Date, Mean Prior Convictions Offense Level, and Mean Prior Convictions Sentence Type* – showed significant differences (>95% confidence level) between the recidivist and non-recidivist groups.

**Table 15**  
**Test Of Equality Of Group Means**

	Independent Variable Means		F	Sig.
	Recidivists	Non-recidivists		
Base Charge Offense Rank	32.9	44.2	9.00	0.003
Number Prior Misdemeanor Convictions	4.6	2.0	7.92	0.006
Gender	1.9	1.6	6.99	0.009
Age at Recidivism Start Date	21.0	22.0	5.83	0.017
Mean Prior Convictions Offense Level	1.2	0.7	5.72	0.018
Mean Prior Convictions Sentence Type	5.2	5.9	4.89	0.028
Base Charge Sentence Type	5.5	4.8	2.72	0.101
Age at First Conviction or Arrest	19.3	20.2	2.18	0.141
Base Charge Offense Level	2.0	2.0	1.33	0.251
Mean Prior Convictions Charge Rank	16.5	12.6	1.03	0.312
Mean Max Prior Sentence Length (days)	36.7	20.2	0.41	0.521
Race	3.0	3.0	0.31	0.577
Max Base Docket Sentence Length (days)	34.8	24.8	0.12	0.724

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 five independent variables remained in the model – *Base Charge Offense Rank, Number of Prior Misdemeanor Convictions, Gender, Age at Recidivism State Date, and Base Charge Sentence Type*.

Table 16 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 five predictor variables with the constant to arrive at a classification score. Two classification scores are calculated for each subject – a recidivist score and a non-recidivists score. A subject is assigned to that group for which the classification score is the largest.

**Table 16**  
**Discriminant Analysis Model**

	Recidivist	Non-recidivist
<b>Gender</b>	12.70	11.72
<b>Number Prior Misdemeanor Convictions</b>	-0.35	-0.52
<b>Base Charge Offense Rank</b>	0.03	0.05
<b>Base Charge Sentence Type</b>	1.63	1.43
<b>Age at Recidivism Start Date</b>	5.24	5.50
<b>Constant</b>	-71.81	-74.95

However, based on statistical significance testing, the model showed low correlation, accounting for only about 17% of the variation in the grouping variable, i.e., whether a subject is a recidivist or non-recidivist ( $R^2 = 0.167$ ).

The low correlation of the discriminant function with the dependent variable is further revealed by the classification results shown in Table 17. 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 percentage of cases on the diagonal is the percentage of correct classifications. The classification results reveal that only 19 of 32 recidivists, and 94 of 139 non-recidivists, or a total of 66.1% of all Program participants were classified correctly into “recidivists” or “non-recidivists”.

**Table 17**  
**Classification Results**

		Predicted Group Membership		Actual Group Membership
		Recidivist	Non-recidivist	
Count	<b>Recidivist</b>	<b>19</b>	13	32
	<b>Non-recidivist</b>	45	<b>94</b>	139
%	<b>Recidivist</b>	<b>59.4</b>	40.6	100.0%
	<b>Non-recidivist</b>	32.4	<b>67.6</b>	100.0%

Numbers/Percentages in bold and shaded are correctly predicted. 66.1% of original grouped cases correctly predicted.

The final conclusion from the discriminate analysis is that five variables – *Gender, Number of Prior Misdemeanors, Base Charge Offense Rank, Base Charge Sentence Type, and Age at Recidivism Start Date*-- were found to differentiate recidivists from non-recidivists. However, significance testing revealed low correlation coefficients for the regression model. Consequently the model did not show very strong predictive power, and correctly classified only 66% of the study subjects into the correct group.

Although the resulting model from this analysis was not very useful in predicting recidivism, it is important to note that the results showed some consistency with recent analyses done for outcome evaluations on The Windsor County Sparrow Project and the Rutland County Treatment Court. In those analyses, Base Charge Sentence Type and Base Charge Offense Rank were variables that differentiated recidivists and non-recidivists and remained in the regression analysis. This consistency across three different projects is encouraging. It shows the importance of doing more regression modeling with future program outcome evaluations, while looking further into sentencing parameters. The low predictive power of the models generated in these studies indicates the importance of obtaining more detailed demographic and psychographic participant profile information that may facilitate the development of more statistically significant predictive models and provide important tools for future program screening.

## 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 Program participants (18.7%) with the recidivism rate observed for the control group (84.3%) revealed a significant reduction in recidivism, confirming the original conclusion that the Rapid Referral Program appears to be a promising approach for reducing recidivism among Program participants.
3. Comparisons between the Program participants and the control group with respect to demographics and criminal histories showed insignificant or minor differences. The conclusion is that the low recidivism rate observed for the Program participants compared to the control group was likely to be a result of the benefits the participants received from the Program and not a result of the differences observed between the subjects.
4. As part of the discriminant analysis, a test of equality of the group means of the independent variables was conducted. The analysis revealed that six independent variables – *Base Charge Offense Severity Rank, Number of Prior Misdemeanor*

- Convictions, Gender, Age at Recidivism Start Date, Mean Prior Convictions Offense Level, and Mean Prior Convictions Sentence Type* – showed significant differences between the recidivist and non-recidivist groups among the Program participants.
5. The final discriminant analysis generated a recidivism model that included five variables: *Base Charge Offense Rank, Number of Prior Misdemeanor Convictions, Gender, Age at Recidivism Start Date, and Base Charge Sentence Type*. The model, however, was not statistically significant and only correctly assigned 66% of the subjects into recidivist/non-recidivist groups. Based on this analysis, the conclusion can be made that the differences in demographic characteristics and criminal histories among the Program participants were not important factors in determining the tendency to recidivate.

## **APPENDIX**

### **RAPID REFERRAL PROGRAM: SPECTRUM YOUTH & FAMILY SERVICES OUTCOME EVALUATION REPORT, June, 2012**

#### **EXECUTIVE SUMMARY**

##### **RAPID REFERRAL PROGRAM**

The Rapid Referral Program is a partnership between Spectrum Youth & Family Services of Burlington, Vermont and the Chittenden County District Court. The purpose of this partnership is to increase access to mental health and substance abuse assessment services for individuals involved in the criminal justice system whose charge(s) are related to substance use. The main objective of the Program is to provide judges with a mechanism at arraignment to rapidly refer defendants to Spectrum Youth Services for substance abuse screening and treatment rather than delaying services until the case is disposed by the court.

##### **METHODOLOGY**

An outcome evaluation attempts to determine the effects that a program has on its participants. In the case of the Rapid Referral Program (hereafter “the Program”), the objective of this outcome evaluation was to determine the extent to which the Program impacts 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. For this study an analysis of the criminal history records of the 171 subjects who were referred and accepted into the Program from November, 2008 to September, 2011 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 District Court that were available as of December 5, 2011. The criminal records on which the study was based do not contain Federal prosecutions, out-of-state prosecutions, or traffic tickets.

## MAJOR CONCLUSIONS

1. The Rapid Referral Program serves its designated target population.
2. The Rapid Referral Program serves defendants who possess a variety of risk factors generally considered to be related to recidivism.
3. The Rapid Referral Program appears to be a promising approach for positively impacting recidivism among Program participants.
4. The vast majority of Rapid Referral Program participants that recidivate are convicted of new crimes within one year of Program completion. Estimates suggest that the percentage of participants who recidivate is not likely to increase as post-Program elapsed time continues to increase for participants.
5. Generally, post-Program reconvictions for Rapid Referral Program participants involved minor types of crime.
6. The Rapid Referral Program seems to be relatively successful in reducing the number of reconvictions for alcohol and drug crimes among participants after Program completion.
7. The Rapid Referral Program recidivists tended to commit post-Program crime in Chittenden County.

## FINDINGS

### **RESEARCH QUESTION #1**

#### ***Which subjects were convicted of additional crimes after their participation in the Program?***

- 1.1 An analysis of the Vermont criminal records for the 171 subjects who participated in the Rapid Referral Program shows that only 32 of the 171 subjects (18.7%) who completed the Program were reconvicted of some type of crime during the study period.

### **RESEARCH QUESTION #2**

#### ***For those subjects who were convicted of additional crimes after their participation in the Program, when were they convicted?***

- 2.1 For the recidivists who participated in the Program, 81.3% (26 of 32) of reconvictions for any new crime occurred in less than one year after Program

completion, and 18.7% (6 of 32) occurred during the first year after Program completion.

- 2.2 Though recidivism was highest within one year of Program completion, the recidivism percentage declines sharply during “Year 1” after Program completion and continues to drop to zero during “Year 2” and “Year 3” of post-Program elapsed time. This data suggests that though the vast majority of recidivism occurs within the first year, it is unlikely that recidivism will increase substantially as participants increase their post-Program elapsed time to three or more years.

### **RESEARCH QUESTION #3**

***For those subjects who were convicted of additional crimes after their participation in the Program, which crimes did they commit?***

- 3.1 Over half of reconvictions for Program recidivists included (listed in order of frequency) violation of probation, motor vehicle charges, DUI, and unlawful mischief. Approximately 96% of reconvictions were for misdemeanors and 4% of reconvictions were for felonies. Only 5% of the reconvictions were for a violent crime.
- 3.2 Only 13.5% of the reconvictions (14 out of 104) were for alcohol related charges and 5% of the reconvictions (5 out of 104) were for drug related crimes.
- 3.3 Recidivists from the Program were convicted of a total of 104 crimes during the follow-up period. The average number of reconvictions per recidivist was 3.3 crimes. The median number of reconvictions per recidivist was 2.0. The number of reconvictions per offender ranged from 1 to 17.

### **RESEARCH QUESTION #4**

***For those subjects who were convicted of additional crimes after their participation in the Program, in which counties were the subjects convicted?***

- 4.1 Approximately 80% (83 of 104) of the reconvictions occurred in Chittenden County. The remaining 20% (21 out of 104) of the reconvictions occurred in (listed in order of frequency) Addison, Franklin, Grand Isle, Lamoille, and Washington Counties. Approximately 96% of reconvictions (100) were for misdemeanors and 4% of reconvictions (4) were for felonies.

## CONCLUSIONS

**1. The Rapid Referral Program serves its designated target population.**

Slightly more than 90% of the participants were between the ages of 19 and 24. The median age was approximately 21 years of age. Nearly 65% of referrals involved cases where the most serious charge was a substance abuse related charge.

**2. The Rapid Referral Program serves defendants who possess a variety of risk factors generally considered to be related to recidivism.**

Nearly all Program participants in the study were under 24 years of age, 33% of participants are males under the age of 21, 36% of all Program participants had a prior conviction, nearly 30% of participants were under 21 at the time of their first conviction, nearly 30% of participants had a prior conviction for an alcohol related crime or a drug crime, and nearly 65% of participants had been referred to the Program for alcohol or drug crimes.

**3. The Rapid Referral Program appears to be a promising approach for positively impacting recidivism among Program participants.**

Only 32 of the 171 subjects (18.7%) who completed the program were reconvicted of some type of crime during the study period.

**4. The vast majority of Rapid Referral Program participants that recidivated are convicted of new crimes within one year of Program completion.**

Approximately 80% of reconvictions for any new crime occurred in less than one year. The remainder of reconvictions occurred during the first year after Program completion. Estimates suggest that the percentage of participants who recidivate is not likely to increase as post-Program elapsed time continues to increase for participants.

**5. Generally, post-Program reconvictions for Rapid Referral Program participants involved minor types of crime.**

Approximately 96% of reconvictions were for misdemeanors. The most common reconvictions for Program recidivists included violation of probation, motor vehicle charges, DUI, and unlawful mischief.



**6. The Rapid Referral Program seems to be relatively successful in reducing the number of convictions for alcohol and drug crimes among participants after Program completion.**

Only 13.5% of the post-Program convictions for Program participants were for alcohol related charges and 5% of the convictions were for drug related crimes.

**7. The Rapid Referral Program recidivists tended to commit post-Program crime in Chittenden County.**

80% of the convictions for Program participants occurred in Chittenden County. The remaining 20% of the convictions occurred in Addison, Franklin, Grand Isle, Lamoille, and Washington Counties.