Evaluation of the Tarrant County DIRECT Program

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**Introduction**

According to the National Association of Drug Court Professionals, drug courts are an effective way to "actively intervene and break the cycle of substance abuse, addiction, crime, delinquency, and child maltreatment. In this blending of justice, treatment, and social service systems, the drug court participant undergoes an intensive regimen of substance abuse treatment, case management, drug testing, supervision and monitoring, and immediate sanctions and incentives while reporting to regularly scheduled status hearings before a judge with expertise in the drug court model."

This report evaluates the DIRECT Program, Tarrant County’s drug court program.

We used both qualitative and quantitative methods in our evaluation. First, we conducted a focus group of program staff to ask for their understanding of how the program operates, what type of clients the program works best for, what barriers exist to client success and other matters that they had information about. Second, we used information downloaded from the DIRECT program’s database in two rounds of data analysis. For the first round, detailing variables one or two at a time, we looked at all program clients for the years 2002-2006 in some analyses or 2003-2006 in other analyses. We also broke out these demographic variables year-by-year to see if changes were occurring in the program. The second round of analysis used a random sample of 100 clients and advanced statistical methods to conduct multivariate tests of the data and to determine if findings were statistically significant.

In the end, we found clear agreement in the conclusions that we drew from each type of analysis. We find strong evidence that the program is effective, with two-thirds of the initial client population graduating, and about 90% of graduates not being rearrested in the time since their graduation. Statistical procedures tell us that this level of success does not differ according to the client's race or gender.

The strongest predictor of graduation success is client education level. For those who graduated, the best predictor of recidivism was employment status, with the unemployed and part-time employed much more likely to be rearrested than those employed full-time. In short, the program was most effective for well-educated, employed, individuals.

Cost analysis for the program from 2002-2006 shows very reasonable costs per client ($2,238 in 2006) and costs per graduate ($3,304 in 2006). Comparing these costs to what incarceration would be indicates a very cost-beneficial program.

This report has four sections: Section 1 presents the information gathered at the staff focus group; Section 2 details information from the univariate and bivariate analyses including some cost information; Section 3 provides results from a quantitative analysis of 100 randomly selected cases; and Section 4 responds explicitly to the evaluation questions enumerated in the agreement to conduct the evaluation. Section 4 also contains several recommendations which we believe will improve an already successful program.
Section 1: A Qualitative Look at the Program from the View of Program Staff

On February 2, one of the evaluators led program staff members (including a representative from the District Attorney's office) in a 2-hour long focus group meeting to help him understand the program, its strengths and areas of possible improvement. Questions were circulated to staff members before the meeting so they had an opportunity to think about the topics. To show the seriousness with which the staff took the meeting, all staff members participated and were very responsive to the process. One staff member had a multiple page, written answer to the questions. Some of the questions that were on the pre-circulated list were not asked at the meeting due to time limitations.

The first part of the session allowed the evaluator to get a better handle on the mechanics and theory of the program as implemented in Tarrant County. Staff indicated that there are ten key concepts for drug courts across the country but that each jurisdiction with a Drug Court (which is mandated by HB 1287) implements it at least somewhat differently. This allows the Drug Courts to be tailored to the needs and resources of each locale, but makes it difficult to compare one program to the next with any degree of validity.

The rest of this section will list the questions and answers that emerged from the meeting, without attributing specific answers to any one staff member.

1. How long have you been working on the project?
   - 9 months; 4 years; 6 years. One case manager has mainly a social work background, one has mainly a criminal justice background, and one has a mix of both social work and criminal justice background.

2. What are some of the changes you've seen during your time working on the program?
   - Most important change is the judge who is in charge. Judge Nekhok has been the presiding judge for about two years. She has a lot of herself invested in the program, wants to know the details about the clients, and takes more than just a criminal justice approach to the program.
   - Other changes include different interpretations of the Drug Court model (different judges have had different ideas); different levels of staffing, different methods of drug testing, etc. Having the pupillometer as a screening instrument has been a very beneficial change compared to having to conduct urine analyses.

3. In what ways do you see support from those higher in the hierarchy?
   - The judge is very supportive. The program manager has been less involved and has not had any case management responsibilities.

4. What could those higher in the hierarchy do to support your work even more?
   - The program manager has been uninvolved and has not had any case management responsibilities. It would be helpful to have a manager who takes on cases and is available to assist the case managers do their job.
5. How do you define success in this program?

- Success is not just the lack of re-arrest, although that is the easiest to measure. This has many problems as an outcome, such as tracking client to non-Tarrant County locales (can use the national database); lack of arrest doesn't really mean lack of drug use, and mainly, the program provides for many good things to happen to clients even if they are arrested again at a later time.

- The phases are good milestones—if someone completes the program, for example, he or she has received a GED/HS diploma, held a job (perhaps for the first time), been clean on all drug tests for at least 11 months, and so on. These are successes in these clients' life, even if a re-arrest occurs later.

- Clients who are re-arrested for any offense—don't need to differentiate between drug and non-drug offenses because the so called non-drug offenses are often related to drug use in some way.

6. What do you think are the biggest predictors of client success?

- Education, money, high professional type job. If a client has a lot to lose, he or she will take it more seriously.

- Some of the other factors related to success are money, race of client (not in and of itself, but because blacks and Hispanics tend to have fewer resources). Should look at gender and type of offense as well to see if there are any relationships to success.

- Age is a factor—the older you are, the more you have to lose.

7. What are the most significant barriers that you believe get in the way of client success in the program?

- Money, time, being able to get time off from a job to get to the random testing, the meetings with staff, and so on.

- Many clients really do not want to do AA/NA. They risk getting kicked out of the program by forging their AA card signature, yet they forge the signature anyway. Maybe a dozen have been caught in the last few months, folks who were otherwise doing well in the program but didn't want to do the AA 12-step program.

- For higher SES type clients, the greatest barrier may be getting off work without wanting to say why. For lower SES clients, this is also a problem, of course.

- Another important barrier is the severity of the drug problem the client faces.

8. What do you think the most likely results are that we will find?

- That the program works.

9. Why is that?

- Excellent staff.

- Elements that help make the program a success are the public-ness of the ceremonies: people can celebrate what they have accomplished in the courtroom and it provides hope to those clients new to the program or who might be having trouble staying clean.

- The dynamics of being arrested, having to undergo drug testing, and the structure of the program may be as important to program success as the other things that are done by program staff.
10. Given your experience and feedback from clients, what factors contribute to clients making the decision to participate or not in the program? Why do some clients choose to participate and others with the same opportunity do not?

- Clients with more to lose tend to participate; also clients with higher levels of income, education, training, etc. When CPS says that you do the program or lose your kids, it gets your attention and you tend to do the program.
- Some people would just rather go to jail and get it over. It seems too hard, too long, too much trouble to be in the DIRECT Program. And it is hard, long and troublesome, but it can be well worth it for those clients who want a clean record. This type of client tends to have more of a professional job and would lose that means of livelihood with a drug-related or felony conviction on his or her record.

11. If you could make changes to the program what would you do?

- Eliminate the one-size fits all model of the program, particularly the requirement to attend NA/AA, get a sponsor and work the steps. It just isn’t right for everyone.
- The program should be more in-depth, with the use of a severity screening instrument to help make the program more tailored to each individual client
- The clients don’t need to report so often.
- Drug screenings should be truly random. Right now, clients have a pretty good idea when they will be told to come in and they can work the system.
- It would be helpful to alter the phases so that they are more nearly all the same length. To have to re-start the longer phases is just too discouraging to many clients who relapse.
- It would be helpful to have a report on the client’s home life. What we see in the office may not be anything like what is going on in the home.
- A multi-disciplinary approach with more clinical emphasis would be a big improvement.
- A supervisor who is involved in the clinical aspects of the program

Conclusions from this Section

Staff members feel very strongly that the program makes an important change in the lives of clients. They particularly cite the importance of Judge Nekhom in supporting the program in a way that goes beyond the minimum. Without this type of support from her, staff members would be much less likely to believe that the program was capable of achieving its goals. A strong critique of the program’s administration was the need for a more involved and clinically capable supervisor. Staff members have definite opinions about possible changes in the way the program could be run in order to improve it. These should be considered, as resources allow.

The ideas regarding factors influencing success were examined in the quantitative portion of the evaluation, to the extent that such data were available to use.
Section 2: Univariate and Bivariate Data Analyses

This section of the report answers some fairly basic questions that serve as a foundation for more complex questions that rely on more advanced analysis techniques. Some of the tentative conclusions indicated in this section will be checked in the next section when multivariate analysis is conducted. In this section we are not able to answer all the questions that we thought would be helpful to answer due to a lack of data that could address those questions. Still, the information contained in this report should prove useful in understanding how well the DIRECT Program is working and how effective it is in changing lives.

It should be noted that the information that was downloaded from the database is not entirely consistent when different questions are asked of it. Different places in the output produce different totals. For example, when adding the numbers for graduations (330 clients), Terminations (172 clients) and Elected out (18 clients) we come to a total of 520 clients. But when we add the number of Whites (370 clients), Hispanics (105 clients), Blacks (54 clients) and other (4 clients), the sum is 533. So we have shown the number in the category I am analyzing as well as for the subcategory (such as race or gender).

Question Set 1: How many clients were admitted into the Program and what were their characteristics? Did this vary over the years examined?

The first set of evaluation question asks how many clients were admitted into the program, and what their demographic characteristics were. Examining the time period from 2002 to 2006, a total of 533 clients were admitted into the program. This included 370 Whites (69%), 105 Hispanics (20%), 54 Blacks (10%) and 4 “other” (1%) (see Figure 1). Another way to break out the clients was by gender: there were 374 men (70%) and 159 women (30%).

![Figure 1: DIRECT Program Clients, by Race, FYs 2002-2006 (n = 533)](image)
While we do not have the exact age of each individual to display, we can show the age groupings that are provided in the database (see Figure 2). Youth aged 17 and 18 were 12% of the clients (n = 66) admitted into the program. Young adults aged 19-21 were 26% of the clients (n = 140). Adults in the rest of their 20s up to age 30 made up one-fourth of the clients (25%, n = 134). Clients aged 31 to 40 were 22% of the clients (n = 119) and those over 40 made up the final 14% of the clients (n = 74). We can also impute a mean age by taking the midpoint of each range (for example, taking 45 as the middle of the 40-plus category), multiplying by the number of clients in that category and dividing by the number of clients. When we do this, we get a figure of 28.1 years of age. Naturally, this imputed mean should be treated with some degree of skepticism, but it is useful as a reference point.

![Figure 2: DIRECT Program Clients, by Age, FYs 2002-2006 (n = 533)](image)

Imputed Mean Age: 28.1 years

We have information related to whether the client was an English speaker or non-English speaker. Overall, 497 (93%) of clients were English speakers and 36 (7%) were not.

The final way we have of categorizing the clients was the type of crime they were charged with that led them into the program. The vast majority of clients were being charged with a felony: 501 (94%) out of 533 clients. Only 32 (6%) were charged with a misdemeanor.
The racial composition of clients does vary somewhat from one year to the next (see Figure 3). Over two-thirds of the clients in the fiscal years 2003-2006 are White, and this increased slightly over time. Hispanic clients are about one-fifth of the total for each of the four years we looked at. Black client percentages ranged from 13% down to 4%, showing the most volatility.

As can be seen in Figure 4, gender fluctuates somewhat by year as well. In 2003, 70% of clients were male. The percentage of men increased in 2004, came back down in 2005, and dropped to a low of 63% in 2006. Correspondingly, women's participation dropped from the first year (30%) to the second (26%), then increased in the final two years, ending at 37% in 2006.

Looking at the imputed mean age across the Fiscal Years 2003-2006, we see a small increase over time, starting at 26.8 years of age in 2003 and ending at 29.0 years of age in 2006 (see Figure 5).

Figure 6 shows that the percent of clients who speak English ranges from slightly less than 90% of clients to nearly 100%, depending on the year. Similarly, the percentage of clients who are being charged with a felony (as opposed to a misdemeanor) is pretty steady at around 91%, for the years 2004-2006. In 2003, all the clients had committed a felony (see Figure 7).
Figure 4: DIRECT Program Clients, by Gender, FYs 2003-2006

![Graph showing the percentage of male and female clients from 2003 to 2006.]

Figure 5: DIRECT Program Clients, Imputed Mean Age by Year, FYs 2003-2006

![Graph showing the imputed mean age of clients by year from 2003 to 2006.]

2003 (n=101) 2004 (n=91) 2005 (n=126) 2006 (n=155)
Figure 6: DIRECT Program Clients, Language by Year, FYs 2003-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
<th>2003 (n=101)</th>
<th>2004 (n=91)</th>
<th>2005 (n=126)</th>
<th>2006 (n=155)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>97%</td>
<td>87%</td>
<td>90%</td>
<td>96%</td>
<td></td>
</tr>
<tr>
<td>Non-English</td>
<td>3%</td>
<td>13%</td>
<td>10%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 7: DIRECT Program Clients, Crime Type by Year, FYs 2003-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
<th>2003 (n=101)</th>
<th>2004 (n=91)</th>
<th>2005 (n=126)</th>
<th>2006 (n=155)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felony</td>
<td>100%</td>
<td>91%</td>
<td>90%</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td>Misdemeanor</td>
<td>0%</td>
<td>9%</td>
<td>10%</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>
Question Set 2: How many clients graduated from the program and what were their characteristics? Did this vary over the years examined?

Graduation from the DIRECT Program represents the first stage of program success. Of the 520 clients admitted into the program, a total of 330 (63%) graduated. One third (33%, n = 172) were terminated, being considered unsuccessful. The final 3% (n = 18) chose to drop out of the program voluntarily. Thus, nearly two thirds of the clients who began the program graduated successfully (see Figure 8).

![Figure 8: DIRECT Program Clients by Disposition, FYs 2002-2006 (n = 520)](image)

As shown in Figure 9, this high graduation rate changes very little from year to year. Excluding FY 2002 because there were only a few clients, the completion rates for clients was either 68% or 69% for FYs 2003, 2004, 2005 and 2006. There was somewhat more variation between the percent of clients who were terminated (which ranged from 27% to 29%) and the percent of clients who opted out, which ranged from 2% to 5%).
Figure 9: DIRECT Program Client Disposition, By Year, FY 2003-2006 (n = 473)

- Graduates: 69% 68% 69% 68%
- Terminations: 29% 27% 27% 28%
- Elected Out: 2% 4% 4% 5%

Figure 10: DIRECT Program Clients, Disposition by Race, FY 2002-2006 (n = 533)

- Graduated: 68% 69% 67%
- Terminated: 32% 31% 33%

White (n = 370) Hispanic (n = 105) Black (n = 54)
When we look for differences in the graduation rates by demographic characteristic, the one variable that looks important is race (see Figure 10). While the graduation rates for Whites and Hispanics is similar (both near 70%), the rate for Blacks is much lower, at less than half (33%) (Note: the “other” category is omitted because it only has 4 clients in it). It appears that Blacks do not fare well in the program, although one cannot say it is due to race by itself. It may be that other variables that have not been measured, such as income or education level, are positively associated with being Black, and it is those variables that are actually causing the lower rate of graduation.

There are no important differences in the graduation rate between men and women (63% and 67%, respectively) or between people in different age groups, although clients over the age of 40 may graduate at higher rates (72%) compared to the other age groups (graduation rates ranging from 58% to 66%) (see Figures 11 and 12).

![Figure 11: DIRECT Program Clients, Disposition by Gender, FY 2002-2006 (n = 533)](image)

We also examined if there was any apparent difference between graduation rates and types of crime the client was being charged with (see Figure 13). The percent of clients charged with a felony who graduated was essentially the same across the years looked at; about two thirds of those who entered the program graduated each year. The misdemeanor graduation rate, on the other hand, varied considerably (note that there were no misdemeanor cases in 2003). The volatility in the misdemeanor rate is probably due to the small numbers of clients in the program who are involved in these lesser crimes. In 2003, there were zero misdemeanor cases; in 2004, there were 8 (7 graduated); in 2005, there were 12 cases (5 graduated) and in 2006, there were also 12 cases (8 graduated).
Figure 12: DIRECT Program Clients, Disposition by Age, FY 2002-2006 (n = 533)

- 17-18 yrs. (n = 66) 58% Graduated, 42% Terminated
- 19-21 yrs. (n = 140) 65% Graduated, 35% Terminated
- 22-30 yrs. (n = 134) 66% Graduated, 34% Terminated
- 31-40 yrs. (n = 119) 61% Graduated, 39% Terminated
- 40+ yrs. (n = 74) 72% Graduated, 28% Terminated

Age Group

Figure 13: DIRECT Program Clients: Graduation Percent by Crime Type by Year, FY 2003-2006

- Felony
  - 2003: 69% Graduated
  - 2004: 88% Graduated
  - 2005: 72% Graduated
  - 2006: 67% Graduated

- Misdemeanor
  - 2003: 66% Graduated
  - 2004: 42% Graduated
  - 2005: 68% Graduated
  - 2006: 67% Graduated
Question Set 3: How many clients were successful (were not re-arrested) and what were their characteristics? Did this vary over the years examined?

The ultimate goal of the DIRECT Program is to have former clients who graduated from the program not be rearrested within a five year period. Because we are looking at data from 2003-2006, we are not able to say for certain that former clients from the more recent years who have not been rearrested up to now will continue to stay arrest-free for the entire five-year period, but we can examine what the success rate is up to now.

Overall, of the 330 clients who graduated from the program, 289 have not been rearrested. This is 88% of all graduates and 63% of all clients who ever entered the program (see Figure 14).

Figure 15 shows the percent of success (when comparing the number of clients who were not rearrested to all graduates) by year of entry into the DIRECT program (the upper line) and also the rate of success when using all clients as the basis of comparison (the lower line).
In other words, the top line of this chart answers the question for each year, “What percent of program graduates are not rearrested?” For clients from 2003 (who have had the full 5 years pass by), the success rate measured this way is 74%. Later years show varying levels of success, so the success rate is not entirely dependent on the number of years that have gone by since the client’s graduation. For clients who graduated in 2004, for example, the current success rate is 95%. Rates for 2005 and 2006 are 86% and 97%. Even given the probability of some drop off in these rates as their full 5-year period continues to pass by, these rates for 2004-2006 must be considered very high.

The lower line shows the success rate comparing the number of clients who were not arrested to all clients who ever entered the program. Naturally, these percentages are lower than the upper line where we compare the successful graduates only to all graduates because there are more clients who entered the program than who graduated from the program. Still, this lower line is important because it shows how many clients emerge without being rearrested if they have ever entered the program. The program, even if delivered only partly due to client termination or opting out, is still at least partially delivered and may have some sort of effect later on. Additional research will need to be conducted to determine the impact of different levels of intervention (completion of Phase 1, Phase 2, or Phase 3 as well as graduation) on rearrests.
Cost Analysis

Judge Nekhom requested that cost data be included in this report. The information was provided by Ms. Cheryl Bennett-Wright. During the years from 2002 to 2006, a total of nearly two million dollars was spent ($1,969,363). In 2002, the total spent was $363,515, in 2003, program costs were $320,895; in 2004, the program costs were $441,236; in 2005, a total of $496,796 was spent and in 2006, the program spent $346,921. This trend indicates rising expenditures from 2002 until 2005, with a decrease in 2006.

We also examined two very important ratios with the cost data, linking both costs and number of clients and number of graduates. These figures are of more importance than the total program spending, because they show how much it costs to service one client, or, even more vitally, one graduate of the program. Figure 16 shows these figures from 2002-2006.

The cost data from the first year (2002) look very high, particularly cost per graduate. This is appropriate because the program had to bear all of the start-up costs but had relatively few clients in the program as it takes time to recruit and convince clients to participate in the first months of a new program. Even more startling is the cost per graduate in 2002. Because it is a one-year program, very few clients could begin and graduate from the program in this time period. We present this information for comparison and completeness, but believe it should largely be ignored. The next four years tell a very interesting story. Cost per client and per graduate...
declined sharply in 2003, only to rise in 2004. In 2004, costs rose and number of clients fell, compared to 2003. But in 2005 and 2006, we see an increasing number of clients and graduates bring down cost per client and cost per graduate. While we have not estimated how much it costs to incarcerate one of these clients for a typical amount of time for a felony, it seems safe to say that it would be more than the cost of a successful graduate. While there are costs that accrue to treat the unsuccessful clients, we would hypothesize that the program is cost-effective, saving considerable amounts of money for taxpayers because most of the clients do graduate.

Conclusions from this Section

While the data analysis conducted in this section is very basic, it leads to some interesting conclusions and hypotheses for additional, multivariate analysis.

- White clients make up over two-thirds of all clients, with Hispanics being about one-fifth, and Blacks being about 10%. The preponderance of White clients has been rising slowly over time.
- The average client is probably in his or her late 20s, an average that has probably risen slightly over the time period examined.
- There are more than twice as many males in the program as females. Although this has narrowed somewhat in the later years of what we looked at, it is still a very large difference (63% males and 37% females in 2006).
- Almost all clients (more than 90%) speak English.
- Almost all the clients in the program (more than 90%) have been charged with a felony, as compared to being charged with a misdemeanor. This holds true for all years in the analysis.
- Over two-thirds of all program clients graduate from the program successfully. This percentage holds steady across all years for which we have data. The percentages of terminations and electing out are also nearly identical for all years separately.
- Graduation rates by race show a large difference between Whites and Hispanics, with a success rate over two-thirds of all entering the program, and Blacks, with a success rate of only one-third.
- Graduation rates do not differ for men and women—gender does not seem to affect this first level of success.
- Older clients (40 years and up) may be more likely to graduate from the program than other age groups.
- About two-thirds of clients who enter the program with a felony charge graduate from the program. This rate is similar across all years examined. The graduation rate for those clients charged with a misdemeanor has considerable volatility, probably due to the small number of clients in this category.
- Almost all clients who graduated from the program (88%) have not been rearrested during the time period of the study. Put another way, only 12% of graduates are not successful in avoiding re-arrest.
- Over half of all clients who enter the program have not been re-arrested during the time period of the study up to now. The rate varies somewhat by year.
- Program costs seem very reasonable in comparison to costs of incarceration.
Section 3: Quantitative Analysis on 100 Randomly Selected Cases

In order to further identify factors that influence retention and recidivism a random sample of client case records were selected from the Scotia Case Management System (aka, PC Drug Court) the database where the DIRECT program files are stored. Cases closed between 2002 and 2006 were included in the selection process. Based on the total number of case files that were closed during those years, 100 client case records were selected. During 2002 to 2006, 37\% of the cases were closed due to termination prior to graduation and 63\% were closed because the client graduated from the program. Thus, 37\% of the 100 cases randomly selected for this part of the evaluation were non-graduates and 63\% were graduates of the program. The number of cases selected and the systematic methods used to select the 100 sample cases allowed for a good representation of the entire client cases closed between 2002 and 2006 within ± 5\%. In addition to the client information stored in the PC Drug Court database, the Tarrant County arrest records of the 100 clients included in this part of the evaluation were retrieved from the Criminal Justice Information Display System (aka, Tarrant County Main Frame).

Retention

Similarities between Graduates and Non-Graduates
In order to identify factors that may affect retention in the program, available data about the non-graduates and graduates were compared. About 65\% of Whites graduated from the program, compared to 56\% of Blacks, and 67\% of Hispanic participants. Although the percentage of Blacks that graduated was less than the other two groups, statistical testing indicates that there was not a statistically significant difference in graduation rates among the three ethnic groups. A similar result was found in terms of gender. About 65\% of men graduated from the program and about 60\% of women who participated in the program graduated. Again, statistical tests indicate no difference in graduation rates between the two groups.

The majority of non-graduates and graduates were single, and statistical comparisons indicate no differences between graduates and non-graduates by marital status. The mean age for the non-graduates was 29.78 years and the mean age for the graduates was about the same, 29.03 years. Statistical comparisons show no age differences between those who graduated from the program and those who did not.

Differences between Graduates and Non-Graduates
Several demographic characteristics were identified that were statically significant for graduates versus non-graduates. The first of these was level of education. The higher the level of education, the more likely the client was to graduate from the program. Around 91\% of those who had some type of college experience (community college, vocational, bachelor degree, etc.) graduated from the program. This compares to 59\% of high school or GED earning participants, and only 33\% of those who have less than a high school diploma graduated from the program.

Similarly, those who were employed were more likely to graduate from the program compared to those who were unemployed or employed part-time. However there was little difference in graduation rates between those who were unemployed and those who worked part-time. About
52% of those unemployed graduated from the program compared to 50% of those who worked part-time. However, close to 75% of those who worked full-time graduated from the program.

Positive urinalysis drug test during participation in the program occurred in both the graduate and non-graduate groups. However, more non-graduates had positive drug tests during program participation compared to graduates, and the mean number of positive tests was higher for the non-graduates. Results from statistical analysis show that these differences were statistically significant.

Factors that Predict Program Retention—Graduation from the Program

A more advanced statistical procedure, logistic regression, was used to detect which of the factors predict retention in the program. Logically, only those factors described above in which statistically significant differences between graduates and undergraduates were found were used to make this determination. The results identified several factors that were found to be associated with retention in the program. Level of education was a predictor of retention. Those with higher levels of education (at least some college) were six times more likely to stay in the program and graduate compared to those who had no post high school education. Similarly, those participants who did not have any positive drug tests were more likely to graduate from the program. Statistically, type of employment was not a predictor of retention.

Recidivism

Only data from the graduates were used to look more specifically at recidivism. About 18% of the graduates in this sample were re-arrested sometime after graduation for drug-related crimes such as drug possession, public intoxication, driving while intoxicated, etc. These data were collected through the Tarrant County Main Frame. This percentage for the sample is somewhat higher than for the total population of graduates.

No differences were found in graduates' re-arrest rates by race, marital status, level of education, age, or whether or not they had a positive drug test during participation in the program. The average number of case management sessions provided to graduates who were re-arrested was 96 sessions, and the average provided to those graduates who were not re-arrested was also 96 sessions. Statistical tests indicate that graduates who were re-arrested received the same amount of case management sessions as those who were not.

However, men were more likely to be re-arrested compared to women, and there was a difference in graduates' re-arrest records based on employment status. About 35% of those who were unemployed were re-arrested, compared to 25% of those who worked part-time, and 8% of those who worked full-time. Statistical tests indicate that these differences are statistically significant.

Predictors of recidivism—Drug Related Re-Arrest

Logistic regression was again used to determine whether gender and employment status were predictors of recidivism. Only employment status was found to be a predictor. Those who were employed were 25% less likely to be re-arrested after graduation.
Other Findings
Graduates of the program were less likely to be rearrested compared to non-graduates. Only about 18% of graduates are rearrested compared to 70% of non-graduates. In addition, non-graduates were more likely to have been arrested for other serious crimes while participating in the program, and are more likely to be arrested for additional serious crimes after graduation. About 18% of graduates were arrested for other crimes after graduation compared to almost half of non-graduates.

In terms of non-graduates, about 41% terminated from the program during Phase 1. Interestingly the same percentage of clients (41%) was able to work through to Phase 3. However, this 41% are not able to finish the program to the point of graduation. Regardless, the higher the phase the participants are able to reach, the less likely they are to be rearrested for drug crimes. Around 87% of those who terminated during Phase 1 were rearrested. This dropped to 71% of those who reached Phase 2, and further dropped to 53% of those who reached Phase 3.

Conclusions from This Section
Participants who remained in the program received an average 96 case management sessions, and data from this section indicate that 72.6% of the graduates did not have any positive drug test while in the program and 82.5% of the graduates were not rearrested for drug crimes after graduation. In addition, their re-arrest rates were far lower than those who did not complete the program.

Although many of the clients that terminated before graduation did so during Phase 1, an equal number remained in the program into Phase 3. The longer these clients were in the program, the less likely they were to be rearrested after termination, another measure of success for the program.

Clients were more likely to remain in the program and graduate if they were educated beyond high school. This was the best predictor of program success in terms of graduation. For those who graduated, the best predictor of recidivism was employment status. Those individuals who were employed were far less likely to be rearrested after graduation. Thus the program was most effective for well-educated and employed individuals. In fact, participants with these characteristics were able to complete the program relatively smoothly with few, if any, positive drug tests or re-arrests while in the program, and they were able to steer clear of re-arrest after graduation.
Section 4: Response to Evaluation Questions and Additional Recommendations

1. What is the retention rate of the program?

About 63% of clients who are admitted complete and graduate from the program. This percentage is consistent with national trends identified in federal reports. National retention rates for Drug Court Programs are between 65% and 85%. However, experts caution that the retention rates for national programs are greatly influenced by the characteristics of the clients who participate in the programs. Programs similar to the DIRECT program have retention rates in the same range.

2. What influences this rate?

Although race was initially identified as a potential factor associated with retention rates, further analysis of the DIRECT data revealed that race was not a significant factor. Also, there was a trend in the data indicating that those who were employed were more likely to continue in the program compared to those who are unemployed. In addition, those who continue to use drugs and alcohol while in the program were more likely to either drop out or be terminated from the program. However, the most significant factor associated with retention is education. Those who have some type of formal training beyond high school are six times more likely to graduate from the program. Interestingly, this finding is consistent with the initial perspective proposed by DIRECT staff during the focus group part of the data collection process. Education remained a factor throughout the basic and advanced data analyses processes.

3. What can the program do to increase the retention rate?

a. Change the length of the phases of the program to make them equal in length. The fact that many participants are able to remain in the program successfully to Phase 3 and then drop out may be an indication that they simply lose hope and give up. Changing the phases to equal lengths may provide reinforcement to the participants that accomplishing the goals and objectives of each phase is achievable.

b. Increase the emphasis on educational goals and objectives with participants in the program. Although educational achievement is already discussed with clients during the program, most of these efforts are on those clients who do not have a high school diploma. The goal and intervention is focused on helping the client obtain a G.E.D. However, even participation in vocational training and community college increased the likelihood of a participant remaining in the program, and decreased the likelihood of re-arrest. This may be especially beneficial given the overwhelmingly young population that participates in the DIRECT program.

c. Create a character development component to the program. This could be provided through individual case management or via small groups within the DIRECT program, or it could be out-sourced to an appropriate provider. There is an indirect character development component in the 12-steps program, however this may not be enough to have a significant impact.
on the clients. About 68% of clients who do not graduate from the program are rearrested for drug crimes while participating in the program and 70% are rearrested for drug crimes after termination. Most interesting is that about 56% are arrested for other crimes while in the program and 61% are arrested for other types of crimes after termination from the program. This may be the best indicator of anti-social behavior. Given the younger age group that participates in the program, interventions aimed at character development may help to decrease this behavior.

d. Review and monitor out-sourced education and treatment programs regularly and systematically to ensure that these programs meet the needs of clients who participate in the DIRECT program. This may require verification from the programs that specific outcome objectives were achieved with the clients referred through the DIRECT program.

4. What is the recidivism rate?

The recidivism rate is about 12%, based on data from 2002 to 2006 for the whole program. Although the DIRECT staff and administration would prefer a lower rate, this is far less than the national average of 27.5%.

5. What influences this rate?

Although the trend was that men were more likely to be rearrested than women, only employment was associated with recidivism. Those who were unemployed were more likely to experience at least one re-arrest for a drug crime compared to those who were employed. This is again consistent with speculation from the DIRECT staff that the program is most effective for those who are well educated and employed, especially those employed in professional positions.

6. What can the program do to lower the recidivism rate further?

We make three recommendations to improve program outcomes even more:

- **Increase efforts to help clients obtain employment.** This includes helping clients seek additional training as described above, and locating opportunities for fulltime employment. This may require creating and/or enhancing collaboration with community agencies such as the Texas Workforce Commission, and/or establishing more direct contacts with the Human Resource Departments of potential employers.

- **Boost direct work with clients around setting specific long term and short term employment goals and objectives.** Have weekly updates on progress made and identification of barriers to successful employment.

- **Institute truly random UAs for clients.** At present, clients know which days they might be called upon to have a drug screening test and so can plan to “cheat” if they desire, knowing that they will not be caught. It is interesting to note that although clients are able to cheat, 67% of non-graduates of the program and 27.4% of graduates had at least one positive UA during the program. Regardless, one way to have a truly random UA process is to outsource the testing to the County Probation department which conducts
thousands of UAs per month. This one change would make the concept of random testing would help to ensure that if clients are using illegal substances and alcohol, this can be directly addressed with the client during the program.

Additional Recommendations for the Program

While not specifically called for in the contract, the evaluation process suggests these additional recommendations would be helpful in achieving the best possible outcomes for as many clients as possible. Particularly if the decision is made to expand the program, we believe the following ideas should be considered:

- **Increase use of motivational intervention models in work with the clients.** There is empirical evidence to suggest that these models are effective with the types of client issues presented by those participating in the DIRECT program. Although use of the "stage of change" is part of the initial evaluation process used by the out-sourced programs, there is little evidence that the motivational model techniques are continued throughout the span of the program. Utilization of the motivational models seems warranted, given the characteristics of the successful DIRECT client. Speculation by the staff is that those who are successful are more motivated because they have more to lose in the form of employment, status, etc. The motivational models may help identify and adjust barriers to success for clients who do not have these identifiable motivational tangibles, and help them stay committed to the program process.

- **Develop better use of the Scotia Case Management System.** Although a substantial amount of client data is stored in the system, the database is not used to the fullest potential. There are many data elements of the database that could be used more fully and some elements are not used at all. Also, even information that is placed in the database is not done so consistently for each client. For example, although there is a place to record participants' income, this information is not stored consistently in the system. Better use of the database will allow for more accurate information that can be used to further evaluate and monitor success in the program.