## Analysis of Division of Vocational Rehabilitation Data For King, Pierce, Spokane, Thurston, Skagit and Kitsap Counties December 11, 2000

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**Summary.** Analyses of Division of Vocational Rehabilitation (DVR) data for individuals referred to Drug Courts show that overall the utilization rates for DVR services are quite low, but that for two counties participation in a Drug Court Program significantly and substantially increases participation in DVR rehabilitation programs. Drug Court participation approximately doubles the rates at which individuals apply for DVR services, and the rates at which they will be rehabilitated. These results vary by county.

**Drug Court Outcome Groups.** Subjects are classified as follows: Persons who passed an initial legal screen and were referred to the court, but on closer examination were found to be ineligible on either legal or clinical grounds are classified as *Ineligibles*. Persons who met all criteria, and were offered entry to the court, but who personally declined to participate are classified as *Opt Outs*. Individuals who ever graduated from a drug court program are classified as *Graduates*. Any other individuals who have ever been admitted to a drug court program and either failed or dropped out are classified as *Did Not Finish* (DNF). Remaining cases that are in the drug court are classified as *Active*.

**The DVR Program.** The Division of Vocational Rehabilitation's mission is to enable individuals with disabilities to obtain and keep employment. There are four benchmarks in the program:(1) the original application, (2) the determination of eligibility, (3) the development of a rehabilitation plan, and (4) the successful completion of the planned rehabilitation. Successful completion is defined by 90 successive days of competitive employment. Some individuals continue to receive some support services after the initial 90 days, but are still considered (for our purposes) to have been rehabilitated.

Using information supplied by our study, DVR staff identified drug court participants who had applied for DVR service since January 1, 1993. They then provided a record of each application and the history of the program based on that application. Some individuals had more than one application on record, and therefore had more than one event history record returned; this was taken into account in the analysis. Because the start date for this data set is later than for most of our sources, some of the early court referrals do not have a full two years of pre drug court data.

**Method.** The DVR event history records were analyzed for each individual. Tables were constructed for the unduplicated numbers of individuals who applied, who were found eligible, who had agreed to a rehabilitation plan, and who had been rehabilitated, in each time period. The two time periods are the two years before referral to drug court and the two years after referral. Only the three older drug courts (King, Pierce, and Spokane Counties) have subjects with enough data for this analysis. In Skagit, Thurston, and Kitsap Counties very few subjects have follow-up data of this duration, so a thorough analysis is not possible. We provide a table of data for these counties using what post referral data are available.

**Results.** County-by-county and stage-by-stage results are presented in Table One. This table includes all the raw data used in the following figures and statistical analysis.

Figure One shows the combined data for the three older drug courts. There are no significant differences between groups before referral to the drug court (chi square = 2.72, df = 3, p = .44), with around two to two and a half percent applying. Even though the observed application rates differ by half a percent or so, this pattern is within the range of chance events. But after referral to Drug Court, there are significant differences among the groups (chi square = 26.33, df = 3, p = .000). The Graduates and those who enrolled in Drug Court but did not finish both apply for DVR services at a higher rate, around four to six percent, than those who did not enroll in drug court (the Ineligible and the Opt Outs), who

continue to apply at around two to two and half percent. The difference in rate between the Graduates and the DNFs verges on statistical significance (chi square = 3.81, df = 1, p = .051, where .050 is generally considered "statistically significant").

The results for King County show the same overall pattern (Figure Two). Again, the small apparent differences before drug court referral are easily explained as random variation. There are no statistically significant pre-referral group differences (chi square = 1.44, df = 3, p = .70). However, there are significant group differences after referral (chi square = 30.86, df = 3, p = .000). The two groups that enrolled in the drug court program, the DNFs and the Graduates, show substantially higher application rates than do the Ineligibles and the Opt Outs. The application rate for the Graduates is also significantly higher that that of the DNFs (continuity corrected chi square = 4.2, df = 1, p = .04).

Pierce County (Figure Three) shows a different pattern. Drug Court makes no difference in the rate at which participants apply for DVR services. There are no significant differences before drug court (chi square = 0.49, df = 3, p = .92), nor are there any after referral to drug court (chi square = 0.07, df = 3, p = .99).

Spokane County (Figure Four) presents another variation on the general pattern. First, the application rate is higher than for King or Pierce Counties. Again, there are no significant differences between groups before referral (chi square = 2.11, df = 3, p = .55), and there are significant differences after referral (chi square = 19.24, df = 3, p = .000). In Spokane, however, there is no significant post referral difference between the Graduates and the DNFs, both of whom apply for DVR service at about a ten percent rate (Continuity corrected chi square = 0.00, df = 3, p = 1.0).

Intent to Treat Analysis. An "intent to treat" analysis compares all those who entered drug court, and were therefore supposed to receive the full intervention (in this case the combined Graduates and DNFs), with those who did not enter (the combination of Ineligibles and Opt Outs). We find (Figure 5) that in the two years before referral to drug court there is no difference in the rate at which individuals from these two groups apply for DVR services (Chi square = .093, df = 1, p = .761). On the other hand, in the two years after referral to drug court, the rate of DVR applications essentially doubles, from about 2.5% to about 5.0%, for those who enroll in a Drug Court program. This difference is statistically very significant (Chi square = 20.4, df = 1, p = .000).

**Rehabilitation.** It might be suggested that applications are less important than successful rehabilitations. Looking at rehabilitation, among those who apply to DVR there are no group differences in the rate at which applicants are ultimately rehabilitated, either before or after drug court referral. Among those who enrolled in a Drug Court program, 16% *of those applying* for DVR services are rehabilitated. For those not enrolled in drug court, the rate is 15%. So for those who apply to DVR, the *rate* of successful rehabilitation is the same for drug court enrollees as it is for those referred to drug court but who don't enter. However, because the rate of those who apply to DVR is higher for drug court entrants (in two counties, at least), the total *number* of persons being rehabilitated is higher for drug court enrollees.

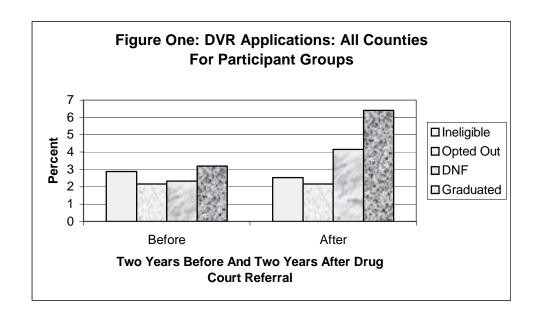
**Supplementary Analysis.** Table Two presents data for the three newer courts. The structure of the table is similar to the structure of Table One, except that (A) we have not calculated percents, and (B) the "After" period includes all individuals, irrespective of the length of time since referral to Drug Court. (Recall that in Table One, and individual needed two years of follow up data to be included.) Table Two shows that there is so little data from the newer courts, and DVR applications are unusual enough in any case, that these data will not support a statistical analysis. The same processes may be going on in these courts, but it will take more time and more cases to be able to show that.

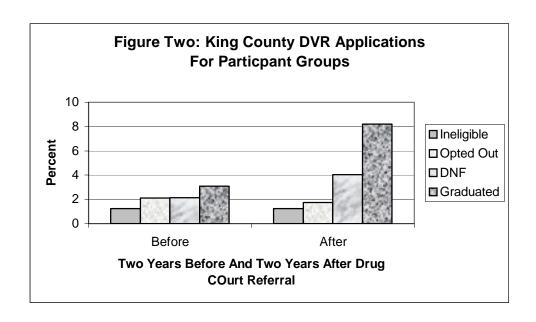
**Table One** 

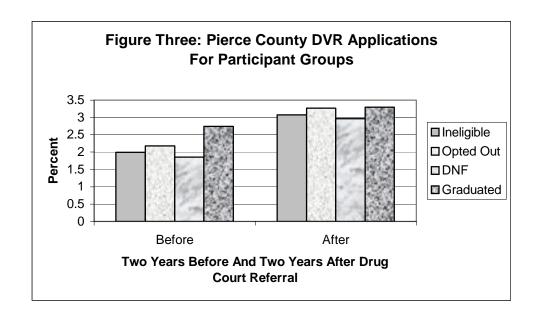
## Division of Vocational Rehabilitation Experiences of Individuals Considered for Drug Court

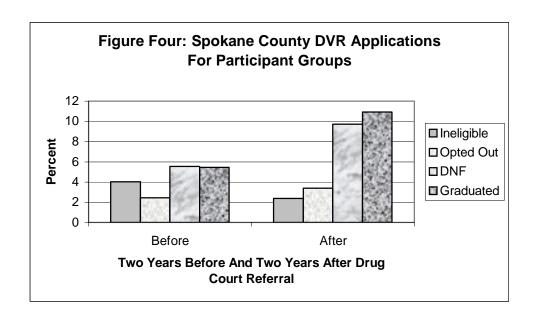
|                | Two                    | urt Referral | Two Years After Drug Court Referral |               |            |           |           |               |
|----------------|------------------------|--------------|-------------------------------------|---------------|------------|-----------|-----------|---------------|
|                | Applied                | Eligible     | Plan                                | Rehabilitated | Applied    | Eligible  | Plan      | Rehabilitated |
| King County H  | Base N % (N)           | % (N)        | % (N)                               | % (N)         | % (N)      | % (N)     | % (N)     | % (N)         |
| DC Yes         | <b>695</b> 2.3% (16)   | 1.6% (11)    | .4% (3)                             | 0.4% (3)      | 5.0% (35)  | 3.6% (25) | 1.7% (12) | 0.6% (4)      |
| Grad           | 195 3.1% (6)           | 3.1% (6)     | 1.0% (2)                            | 1.0% (2)      | 8.2% (16)  | 7.2% (14) | 3.6% (7)  | 1.5% (3)      |
| DNF            | 470 2.1% (10)          | 1.1% (5)     | 0.2% (1)                            | 0.2% (1)      | 4.0% (19)  | 2.3% (11) | 1.1% (5)  | 0.2% (1)      |
| DC No          | <b>1533</b> 2.0% (31)  | 1.7% (26)    | 1% (10)                             | 0.1% (2)      | 1.7% (26)  | 1.1% (17) | 0.4% (6)  | 0.3% (4)      |
| Ineligible     | 161 1.2% (2)           | 0.6% (1)     | 0.0% (0)                            | 0.0% (0)      | 1.2% (2)   | 0.6% (1)  | 0.6% (1)  | 0.6% (1)      |
| Opted Out      | 1372 2.1% (29)         | 1.8% (25)    | 0.7% (10)                           | 0.1% (2)      | 1.7% (24)  | 1.2% (16) | 0.4% (5)  | 0.2% (3)      |
| Pierce County  |                        |              |                                     |               |            |           |           |               |
| DC Yes         | <b>452</b> 2.2% (10)   | 1.1% (5)     | 0% (2)                              | 0.0% (0)      | 3.3% (15)  | 2.0% (9)  | 1.1% (5)  | 0.7% (3)      |
| Grad           | 182 2.7% (5)           | 1.1% (2)     | 0.5% (1)                            | 0.0% (0)      | 3.3% (6)   | 2.7% (5)  | 1.1% (2)  | 0.5% (1)      |
| DNF            | 270 1.9% (5)           | 1.1% (3)     | 0.4% (1)                            | 0.0% (0)      | 3.0% (8)   | 1.5% (4)  | 1.1% (3)  | 0.7% (2)      |
| DC No          | <b>827</b> 2.1% (17)   | 1.5% (12)    | 1% (7)                              | 0.4% (3)      | 3.1% (26)  | 1.8% (15) | 1.3% (11) | 0.6% (5)      |
| Ineligible     | 552 2.0% (11)          | 1.3% (7)     | 0.7% (4)                            | 0.4% (2)      | 3.1% (17)  | 1.8% (10) | 1.3% (7)  | 0.5% (3)      |
| Opted Out      | 275 2.2% (6)           | 1.8% (5)     | 1.1% (3)                            | 0.4% (1)      | 3.3% (9)   | 1.8% (5)  | 1.5% (4)  | 0.7% (2)      |
| Spokane County | •                      |              |                                     |               |            |           |           |               |
| DC Yes         | <b>127</b> 5.5% (7)    | 4.7% (6)     | 3.9% (5)                            | 3.1% (4)      | 10.2% (13) | 8.7% (11) | 7.1% (9)  | 2.4% (3)      |
| Grad           | 55 5.5% (3)            | 5.5% (3)     | 3.6% (2)                            | 3.6% (2)      | 10.9% (6)  | 10.9% (6) | 10.9% (6) | 3.6% (2)      |
| DNF            | 72 5.6% (4)            | 4.2% (3)     | 4.2% (3)                            | 2.8% (2)      | 9.7% (7)   | 6.9% (5)  | 4.2% (3)  | 1.4% (1)      |
| DC No          | <b>878</b> 3.6% (32)   | 2.8% (25)    | 2% (18)                             | 0.9% (8)      | 2.6% (23)  | 2.2% (19) | 1.1% (10) | 0.2% (2)      |
| Ineligible     | 672 4.0% (27)          | 3.1% (21)    | 2.1% (14)                           | 1.0% (7)      | 2.4% (16)  | 1.9% (13) | 0.9% (6)  | 0.1% (1)      |
| Opted Out      | 206 2.4% (5)           | 1.9% (4)     | 1.9% (4)                            | 0.5% (1)      | 3.4% (7)   | 2.9% (6)  | 1.9% (4)  | 0.5% (1)      |
| Total          | <b>4512</b> 2.5% (113) | 1.9% (85)    | 1.0% (45)                           | 0.4% (20)     | 3.1% (138) | 2.1% (96) | 1.2% (53) | 0.5% (21)     |

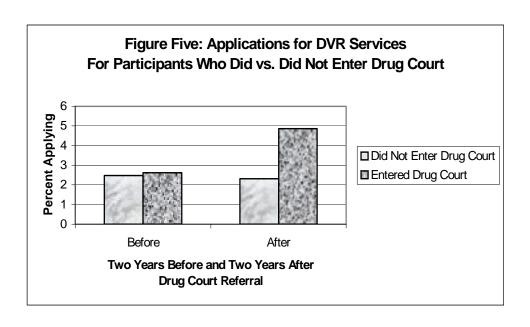
Notes: DC Yes = Enrolled in Drug Court Program, DC No = Opted Out or Ineligible for Drug Court Program. Applied = Applied for DVR program. Eligible = Found eligible for DVR program. Plan = Rehabilitation plan agreed to. Rehabilitated = 90+ days of competitive post program employment.











**Table Two** 

## Division of Vocational Rehabilitation Experiences of Individuals Considered for Drug Court, Kitsap, Skagit, & Thurston Counties

|                 | Two Year Period<br>Before Drug Court Referral |            |               |           |                      | All Available Data Since<br>Drug Court Referral |               |           |                      |
|-----------------|---|------------|---------------|-----------|----------------------|---|---------------|-----------|----------------------|
| Kitsap County   | Base<br>N                                     | Apply<br>N | Eligible<br>N | Plan<br>N | Rehabil-<br>itated N | Apply<br>N                                      | Eligible<br>N | Plan<br>N | Rehabil-<br>itated N |
| DC Yes          | 36  | 1          | 1             | 0         | 0                    | 0   | 0             | 0         | 0                    |
| DC No           | 2   | 1          | 1             | 0         | 0                    | 0   | 0             | 0         | 0                    |
| Skagit County   |   |            |               |           |                      |   |               |           |                      |
| DC Yes          | 71  | 6          | 5             | 4         | 3                    | 4   | 4             | 2         | 0                    |
| DC No           | 1   | 0          | 0             | 0         | 0                    | 0   | 0             |           | 0                    |
| Thurston County |   |            |               |           |                      |   |               |           |                      |
| DC Yes          | 161   | 4          | 3             | 2         | 2                    | 7   | 4             | 2         | 0                    |
| DC No           | 261   | 9          | 5             | 2         | 1                    | 4   | 2             | 0         | 0                    |