

Oregon Drug Court Cost Study: Statewide Costs and Promising Practices

Final Report



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EXECUTIVE SUMMARY

The statewide cost study of Oregon’s adult drug courts was accomplished in a collaboration between NPC Research, the Criminal Justice Commission and the Department of Corrections. The purposes of this statewide evaluation were to answer two critical drug court policy questions:

- a. Are adult drug courts cost-beneficial?
- b. What are best practices for Oregon’s drug courts?

To determine whether Oregon’s drug court programs were cost beneficial, it was necessary to gather information on program costs and recidivism-related costs. To calculate recidivism-related costs a recidivism study was performed with a comparison group, to determine the relative benefits of drug court compared to traditional court processes. Finally, to determine what practices were best practices for Oregon’s drug courts, a process analysis was performed on the drug courts included in this study.

Recidivism in this study was defined as any new arrest (not conviction) that occurs after the date of drug court entry. The recidivism study used a quasi-experimental design with a cohort of all drug court participants who entered the programs during a specified time period and a matched comparison sample of individuals who were arrested for similar, drug court-eligible charges who did not participate in a drug court program. A comparison group was identified from all offenders with drug court-eligible charges from the same time period who did not participate in drug court programs. The drug court participants and comparison individuals were matched by county on age, gender, ethnicity, prior drug charges, prior property charges and prior person or violence charges. The full comparison group selection process is described in the methods section.

Both groups were examined through existing administrative databases for a period at least 3 years from the date of drug court entry. For comparison group members, an equivalent “entry date” was calculated by creating an average of the number of days from arrest to drug court entry for participants and adding that mean number of days to the arrest date for comparison group members. The evaluation team utilized the state data sources to determine whether there was a difference in re-arrests, number of days in jail, on probation, on parole and in prison between the drug court and comparison group.

The cost approach utilized by NPC Research in the DC-CSET is called Transactional and Institutional Cost Analysis (TICA). The TICA approach views an individual’s interaction with publicly funded agencies as a set of *transactions* (also called *events* in this document) in which the individual utilizes resources contributed from multiple agencies. Transactions are those points within a system where resources are consumed and/or change hands. In the case of drug courts, when a drug court participant appears in court or has a drug test, resources such as judge time, defense attorney time, court facilities, and urine cups are used. Court appearances and drug tests are transactions. In addition, the TICA approach recognizes that these transactions take place within multiple organizations and institutions that work together to create the program of interest. These organizations and institutions contribute to the cost of each transaction that occurs for program participants. TICA is an intuitively appropriate approach to conducting costs assessment in an environment such as a drug court, which involves complex interactions among multiple taxpayer-funded organizations.

For the process analysis, a Web-based survey of each of the adult drug courts that participated in the study assessed a variety of characteristics of drug courts that have been assessed in prior evaluations by NPC. The advantage of a Web-based survey is that it allowed NPC to efficiently collect data on a number of important drug court program elements in **all** of the drug court sites, rather than using a sampling strategy. Thus, all Oregon adult drug courts that were in existence at the time of the survey are represented in the data, and the statistical power for analysis is maximized. The online tool was developed based on in-depth qualitative data collected in prior research in more than 75 adult drug courts (e.g., Perkins, Carey, & Cox, 2008; Carey, Waller, Sanders, & Burrus, 2010). The information on practices used by each drug court program was examined in relation to program outcomes including graduation rate, recidivism and costs, to determine which practices were significantly related to more positive outcomes.

Adult Drug Court Cost-Benefits in Oregon

I. ARE DRUG COURTS COST BENEFICIAL?

Program Investment Costs

The average cost of a drug court program per participant was \$18,696. The largest portion of adult drug court costs are due to drug treatment (an average of \$9,668, or 52% of total costs). Drug court sessions (\$3,771, or 20% of total costs) and case management (an average of \$3,417, or 17% of total costs) are also significant program costs. When program costs are evaluated by agency, the largest portion of costs accrues to agencies involved in treatment (\$13,314, or 71% of total costs).

When learning about drug court program costs, it is important to remember that the state would be funding the traditional criminal justice system to process these offenders if there were no drug court. For informational purposes only, NPC created an estimated **“business-as-usual”** cost per case for offenders who did not enter drug court. This cost includes a court case, average jail time per court case, average prison time per court case, average parole time per court and average probation time per court case. It does *not* include treatment costs, as treatment data on non-drug court participants were not available for this study. The estimated business-as-usual statewide cost per offender was **\$9,389**, which is about half (\$9,307 less) than the average drug court program cost per participant. Because the business-as-usual cost is estimated and does not include what are likely substantial treatment costs, it should not be considered a comprehensive estimate of costs or be directly compared to the drug court program cost. However, with the understanding that this business-as-usual cost is a considerable underestimate, it does illustrate that there is a cost to processing these offenders regardless of whether they participate in drug court and that drug court may not be as expensive to implement as it appears, given the costs that would be spent by the system anyway.

Recidivism

The recidivism results showed a significant reduction in recidivism for drug court participants compared to similar offenders who do not participate in drug court, an average of 44% reduction in number of re-arrests and an average of 23% reduction in recidivism rate. Although there were drug court programs that had a negative effect size, indicating that their participants did not perform better than offenders who went through traditional court processing, there were only two programs out of the 20 that had these results.

Recidivism Costs

The results from cost evaluations of 20 Oregon drug courts show an average 3-year outcome cost savings of **\$6,812** per drug court participant when compared to the comparison group. When victimizations are included, the outcome cost savings over 3 years increase from \$6,812 per participant to **\$16,933** per participant. The recidivism cost savings described in the cost results are those that have accrued in just the 3 years since drug court entry. Many of these savings are due to positive outcomes while the participant is still in the program. Therefore, it is reasonable to state that savings to the state and local criminal justice systems are generated from the time of participant entry into drug court.

If drug court participants continue to have positive outcomes in subsequent years (as has been shown in other drug courts NPC has evaluated, e.g., Carey et al., 2005; Finigan, Carey, & Cox, 2007) then these cost savings can be expected to continue to accrue over time, repaying the program investment costs and providing further savings in opportunity resources to public agencies. For example, if the 3-year cost findings are extrapolated out just 2 more years (to 5 years), the savings come to **\$28,222** per participant. When these findings are multiplied by the number of drug court participants that were included in this study (those offenders that entered drug court programs in the state between 2001 and 2006), the total cost savings comes to **\$159,595,410**. These findings indicate that drug court is both beneficial to participants and beneficial to Oregon taxpayers.

Of particular interest to state and local policymakers is the cost-benefit ratio of these Oregon drug court programs; that is, the return on investment. The cost of drug court was \$18,696, about double the cost of “business as usual” which was conservatively estimated at \$9,389. The 3 year benefit of drug court was \$16,933 including taxpayer and victimization costs. Therefore, there is a net benefit to the public safety system of at least **\$1.82 for each \$1 invested** in drug court.

Overall, the cost findings in this report indicate that drug treatment court is both beneficial to participants and beneficial to Oregon taxpayers. Taking into account the investment of \$18,696 per person, after 5 years, the **net taxpayer savings** for *just the cohorts included in the study* at these 20 drug court sites comes to \$56,550,000, nearly **\$57 million**.

Best Practices – Promising Practices Related to Positive Outcomes in Oregon

2. WHAT ARE BEST PRACTICES IN OREGON’S ADULT DRUG COURTS?

Data were collected on over 300 practices engaged in by the 24 Oregon drug courts that participated in this study. Analyses were run to determine which practices were related to higher graduation rates, lower recidivism and lower recidivism-related costs (cost savings). Results showed 38 promising practices. Following are the highlights of those drug court practices related to positive outcomes.

Key Component #1: Highlights

1. Drug courts that included law enforcement on the drug court team had 33% less recidivism.
2. Drug courts that had both law enforcement and treatment attendance at these meetings had half the recidivism and 25% higher cost savings compared to courts that did not have both team members attend.
3. Programs that had at least six team members attend staffing had less than half the recidivism.
4. Drug courts where the judge, coordinator, both attorneys, probation, treatment and law enforcement attended court sessions had less than half the recidivism and 25% higher cost savings. Drug courts where law enforcement attended court sessions had graduation rates 15% higher and less than half the recidivism.
5. Drug courts where the treatment provider communicated with the team through email had 4 times lower recidivism and 33% higher cost savings.

Key Component #2: Highlights

6. Oregon drug courts are following best practices in including a prosecutor and defense attorney as members of the drug court team. In studies in other states, recidivism rates were 3 times lower for drug courts that included a prosecutor and courts that included a defense attorney as a member of the drug court team.
7. Including participants with prior or current violence charges did not relate to program outcomes. This indicates that these programs are equally effective for participants with prior violence as those without prior violence.
8. Accepting non-drug charges such as drug trafficking, property offenses and forgery were significantly related to lower recidivism. This finding and the one above supports an argument for expanding drug court eligibility to serve more high-risk offenders who could benefit from this type of intensive program

Key Component #3: Highlights

9. Drug courts that used a standardized assessment to determine eligibility for the program had 40% lower recidivism.
10. Drug courts that allowed participants with drug trafficking charges into the program had nearly 40% higher savings in taxpayer dollars. Programs that exclude these offenders should consider the benefits of expanding their eligibility criteria.
11. Courts that expected the time from arrest to program referral to be no more than 30 days had recidivism rates 37% lower and taxpayer savings 43% higher than those that expected a longer time period.

Key Component #4: Highlights

12. Drug courts that provided wrap-around services such as health and dental care had recidivism rates that were up to 40% lower than courts that did not offer these services. Drug courts that provided culturally specific services had graduation rates that were more than 12 percentage points higher.
13. Programs where treatment providers performed home visits had graduation rates 15 percentage points higher graduation rates, and those that had the coordinator perform home visits had almost half the recidivism and 33% higher cost savings.

14. Programs with four phases had 36% lower recidivism and 25% greater taxpayer savings.
15. Programs that had alumni groups that met regularly after graduation and that assisted current participants had 25% lower recidivism and 35% greater cost savings.
16. Drug courts that had treatment agencies or providers directly contracted with the program had nearly half the recidivism and 40% greater taxpayer savings.

Key Component #5: Highlights

17. Drug courts that tested 3 or more times per week in the first phase had 25% lower recidivism than drug courts that tested less often.
18. Programs that get their drug test results back within 48 hours of taking the sample had less than half the recidivism and double the taxpayer savings compared to programs that wait longer for results.
19. Drug courts that used a breathalyzer had double the graduation rates, and programs that used an oral swab or a tether had half the recidivism.

Key Component #6: Highlights

20. Drug courts that had written rules or guidelines regarding the team's response to participant behavior and gave the team a copy of these guidelines had recidivism reductions of more than 25% and double the cost savings.
21. Drug courts that imposed sanctions immediately after the non-compliant behavior before the next scheduled court hearing had less than half the recidivism and nearly double the taxpayer savings.
22. Programs that reduce or dismiss the jail sentence for the drug court case as an incentive for graduation had 4 and a half times less recidivism and 3 times greater cost savings.
23. Programs that required participants to have a job or be in school in order to graduate had half the recidivism and 30% greater taxpayer savings.
24. Drug courts that require participants to pay program fees to graduate had 40% lower recidivism.
25. Programs that required participants to complete community service in order to graduate had 25% lower recidivism and 25% higher cost savings than programs that did not require community service.
26. Programs that report terminating participants because of new arrests for possession or for any new arrest had double the recidivism and half the cost savings.

Key Component #7: Highlights

27. Drug courts that required participants to attend drug court sessions once every 2 weeks had less than half the recidivism rates twice the cost savings.
28. Drug courts that required participants to attend court sessions no more than once per month in the last phase of the program had a third of the recidivism rate and more than twice the cost savings.
29. Drug courts where the judge spends at least 5 minutes with each participant during court sessions had double the taxpayer savings compared to programs where the judge spends less time with participants.

Key Component #8: Highlights

- 30. Drug courts that used evaluation feedback to make modifications to their drug court program had one-third the recidivism and double the cost savings compared to programs that did not make these adjustments or did not use an evaluator at all.
- 31. Drug courts that used their own program statistics to make improvements to their program practices had half the recidivism and more than twice the cost savings compared to courts that did not perform this monitoring.
- 32. Drug courts that monitored their data to determine if their program was moving toward its goals had 33% lower recidivism and over 3 times the cost savings.

Key Component #9: Highlights

- 33. Programs where the judge received training from prior drug court judges had 3 times greater cost savings than drug courts that did not train staff prior to implementation.
- 34. Drug courts in which new team members received formal drug court specific training or orientation had one quarter the recidivism and 30% greater cost savings.
- 35. Drug courts where the probation staff members were formally trained on the drug court model had 25% greater cost savings.
- 36. Drug courts that trained staff on strength-based philosophy had 25% lower recidivism and double the taxpayer savings.

Key Component #10: Highlights

- 37. Drug courts that included law enforcement on the drug court team (as a team member that attends team meetings and court sessions) had graduation rates 15% higher, half the recidivism, and 25% higher cost savings than drug courts that did not include law enforcement on the team.
- 38. Drug courts with formal partnerships with community agencies that work regularly with drug court participants had graduation rates 8 percentage points higher and 25% greater cost savings compared to courts that did not have these partnerships.

Recommendations for Future Studies

This study provides some detailed cost and benefit data on Oregon's adult drug courts. It also provides a description of the practices are currently being used in Oregon adult drug courts and which of these practices are associated with higher graduation rates, lower recidivism and cost savings/benefits. To gain further understanding of the effectiveness of Oregon drug courts, the authors of this study suggest including the following components in future research:

Addiction severity, prior treatment history and risk level: Addiction severity and risk level data were not available consistently for this study. It is very likely that drug court participants with more severe addictions and higher risks to reoffend are less likely to successfully complete the drug court program and have other positive outcomes, regardless of the availability of quality program practices such as evidence-based and wrap-around services. In fact, it would be extremely useful to know just how much addiction severity influences the relationship between drug court practices and outcomes. Future studies should prioritize the collection and use of this information.

More detailed and in-depth study of Key Component #10: The importance of community partners in supporting drug court programs and participants is key. Support from the community can provide important wrap-around services to participants and help make drug court programs sustainable in their own communities. More detailed information on appropriate community partners and how to gain further community support can contribute to the long-term success of the drug court model.

Conclusion

The focus of this study was on determining whether the adult drug courts in Oregon were cost-beneficial and to examine drug court best practices. There were 38 drug court practices that were related to positive outcomes for drug court participants. Drug court programs should review this list to determine how they can enhance their programs and improve participant outcomes.

Overall, the cost findings in this report indicate that Oregon's adult drug courts are both beneficial to participants and beneficial to Oregon taxpayers. Taking into account the investment of \$18,696 per person, after 5 years, for *just those participants included in this study*, the **net savings** to Oregon comes to \$56,550,000, nearly **\$57 million**.

Given the significant taxpayer savings demonstrated in this report, rather than creating new options for incarcerating an ever-growing number of Oregon's residents, the best use of state funds for offenders with drug possession and other drug-related charges is to put the funds in drug court programs that will reduce the need for jail and prison cells. The drug court programs in Oregon have now been extensively studied and have shown consistent decreases in offender recidivism and substantial cost savings due to these programs turning offenders into contributing citizens.

I. INTRODUCTION

In late 2009, the Oregon Criminal Justice Commission, in collaboration with NPC Research, obtained a grant from the U.S. Department of Justice, Bureau of Justice Assistance (BJA) (Grant Number 2008-DC-BX-0014), to perform a statewide cost-benefit evaluation of Oregon's adult drug courts. This evaluation would gather program and recidivism data from Oregon's adult drug court programs; calculate the costs associated with the program and with participant recidivism to determine how much was invested in these programs; and determine how much (if any) was saved due to positive participant outcomes, and whether there was a return on taxpayer investment in the program. In addition, in order to better understand how successful programs were able to be successful, data on program practices were gathered and examined in relation to measures of program success (e.g., higher graduation rates, lower recidivism and higher savings). These results led to valuable information on best practices in Oregon's drug courts that other drug courts can emulate to improve outcomes for their participants.

Since the first drug court began operation in Miami in 1989, several hundred thousand men, women, and juveniles have participated in drug court programs that have involved federal, state, and local taxpayer investments of billions of dollars. As of January 2010, there were over 2,459 adult, juvenile, family and other specialized drug treatment courts active in all 50 states, the District of Columbia, Northern Mariana Islands, Puerto Rico, and Guam with another 214 being planned (National Association of Drug Court Professionals, 2010).

The economic consequences to society of drug and alcohol abuse have long been detailed. From a health perspective, untreated substance abusers produce tangible costs to health systems from both the health complications of substance use, as well as increased accidents that result from the use of alcohol and drugs. Untreated substance abuse is very costly to the individual and to taxpayers who must fund the consequences of the negative social behaviors that result from addiction. Further, there is a well-researched link between substance abuse and criminal behavior that results in a profound fiscal impact on the criminal justice system. As in many other states throughout the country, the costs of the rising tide of drug arrests have been financially burdensome for Oregon's trial courts.

One of the efforts to address this problem has been through drug court programs. Through the drug court model, courts have been using the coercive authority of the criminal justice system to offer treatment to substance dependant and abusing offenders in lieu of incarceration. There is evidence that treating substance abuse leads to a lessening of criminal behavior as well as reduced use of the health care system (Finigan, 1996). The research literature overwhelmingly indicates that retention in and completion of treatment programs have a tremendous effect in reducing drug use and criminal behavior (Belenko, 1998; Taxman, 1999). Drug courts are a proven and effective way to increase substance abuse treatment retention rates.

However, drug court programs can require a large monetary investment. In the typical drug court program, participants are closely supervised by a judge who is supported by a team of agency representatives including addiction treatment providers, district attorneys, public defenders, law enforcement officers, and parole and probation officers who operate outside of their traditional adversarial roles and work together to provide needed services to drug court participants. This unique collaboration is perceived as expensive to implement, and data are consistently needed at the local level to demonstrate that such treatment reduces costs in the long run.

Drug courts have been shown to be effective in reducing recidivism (GAO, 2005) and in reducing taxpayer costs due to positive outcomes for drug court participants (Carey & Finigan, 2004; Carey, Finigan, Crumpton, & Waller, 2006). Belenko (1998; 2001) found in reviews of drug court research that drug courts successfully engaged and retained offenders in treatment, and reduced both clients' drug use and criminal recidivism. However, he also notes that while evidence appears to be converging that drug courts can work, considerably less is known about *how* drug courts work, especially for particular types of clients.

Given the rapid expansion of drug courts across the country, there has been interest in standardizing the drug court model. The National Association of Drug Court Professionals led this effort in their groundbreaking publication, *Defining Drug Courts: The Key Components* (National Association of Drug Court Professionals, 1997). In this work, they prescribe 10 operational characteristics that all drug courts should use as guides for performance. These include practices such as drug testing, judicial interaction with participants, and the integration of alcohol and other drug treatment services with judicial case processing.

However, drug court programs vary tremendously in how they operationalize these 10 Key Components. Drug courts also vary on other issues that may influence program effectiveness, such as what type of clients enter the drug court, the level of experience and expertise of drug court team members, and frequency of judicial turnover, among other issues. While research is relatively clear that adult drug courts can have positive effects for improving treatment outcomes and reducing recidivism, outcomes vary considerably across participants and programs. For example, in Oregon, graduation rates range from less than 20% in some courts to over 80% in others. It is important not only to examine the costs and benefits of Oregon's drug courts, but also to explore practices that occurred within these programs (inside the "black box") to determine which practices lead to better participant and program outcomes, including higher graduation rates, lower criminal justice recidivism, and lower recidivism costs (which translates to higher savings).

Although recidivism data exist for many drug courts in Oregon, very few comprehensive studies have been conducted on individual courts or on a statewide basis to determine the costs and benefits of drug court programs. Policymakers and program administrators need this information if they are to make informed decisions concerning the allocation of funds and the best ways for these innovative programs to meet Oregon's needs.

History of Drug Courts in Oregon

One of the first drug courts in the country was founded in Multnomah County, OR, in 1991. The program, known as the Sanction Treatment Opportunity Progress (STOP) program, became a national model for drug courts. Several evaluations of the STOP program have demonstrated significant impact on recidivism and drug use, while showing substantial cost-savings to other parts of the system.

In 1996, when there were only five drug courts in the state, the drug court judges and other team members established the Oregon Association of Drug Court Professionals (OADCP). The two primary purposes of the Association are: (1) promote and advocate for the establishment and sustainability of drug treatment courts in Oregon; and (2) provide technical assistance and support to its members.

In 2000, the Oregon Judicial Department, working with the OADCP, secured a Department of Justice Statewide Enhancement Grant to create a data collection system. Using this grant to leverage state resources, in April 2003, the Judicial Department launched the Oregon Drug Court Manage-

ment System, since renamed as the Oregon Treatment Court Management System (OTCMS). The OTCMS serves the drug courts as both a case management and data depository tool.

In 2004, Oregon Supreme Court Chief Justice Wallace P. Carson, Jr., established the Chief Justice's Treatment Court Advisory Committee (TCAC). TCAC is composed of judges, court staff, members of the Oregon State Bar, and Department of Human Services (DHS) representatives. In 2005, the TCAC worked with Oregon Criminal Justice Commission (CJC) to develop statewide Drug Court Performance Measures.

The 2005 Oregon Legislature authorized a \$2.5 million grant program, administered by the CJC, to implement and enhance drug courts. An additional 11 drug court grants were issued by the Criminal Justice Services Division (CJSD) using the Byrne Memorial Grant Fund. These grants were issued July 2006 and funded 20 state drug courts. In 2009, Oregon received just over \$10 million in American Recovery and Reinvestment Act funds through 2013 for existing drug courts as well as newly implementing drug courts focused on treating an expanded population of offenders, specifically substance-dependent or substance-abusing property offenders. In addition, the CJC received \$6 million in general drug court grants (which used to be all state funds, but are now a mix of funds) for 2009 through 2011 and \$2 million in Justice Assistance Grants (JAG) grants from 2009 to 2011 for stabilizing drug courts that were losing funding in 2009.

Currently, as of 2010, there are 57 drug courts in Oregon, with many counties running two or more programs (i.e., adult criminal, juvenile, family/dependency, DUII, or mental health). There are 26 Adult Drug Courts, 14 Juvenile Drug Courts, 11 Family Dependency Treatment Courts, 2 DWI Courts, 2 Adult Hybrid Drug Court (DWI), and 2 Federal Reentry Drug Courts. Counties that do not have drug courts are all in rural areas with small populations.

Oregon drug courts also have the distinction of being among the most thoroughly evaluated programs in the country. One of the major reasons for this is that NPC Research, which specializes in drug court research and evaluation is based in Portland, Oregon. NPC is a national leader in evaluating drug courts for effectiveness and cost-effectiveness (the distinction between effectiveness and cost-effectiveness is noted because an expensive intervention may be effective, but not cost-effective). NPC has conducted numerous evaluations of Oregon drug courts, some more than once. Process, outcome, and/or cost-benefit evaluations have been conducted in Multnomah, Clackamas, Douglas, Benton, Marion, Malheur, and Washington counties.

The Criminal Justice Commission's purpose is to improve the efficiency and effectiveness of state and local criminal justice systems by providing a centralized and impartial forum for statewide policy development and planning. The commission is charged with developing a long-range public safety plan for Oregon, which includes making recommendations on the capacity and use of state prisons and local jails, implementation of community corrections programs, and methods to reduce future criminal conduct. The results of this evaluation will assist the CJC in making research-driven recommendations and decisions for implementing and funding drug courts in Oregon.

The purposes of this statewide evaluation were to answer two critical drug court policy questions:

1. Are Oregon's adult drug courts cost-beneficial?
2. What are best practices for Oregon's drug courts? (That is, which practices are related to better program outcomes – higher graduation rates, lower recidivism and higher taxpayer savings.)

In order to answer these questions it is necessary to perform both a recidivism and cost study, and to gather key information on drug court practices and processes.

II. EVALUATION DESIGN

To determine whether Oregon’s drug court programs are cost beneficial, it is necessary to gather information on program costs and outcome costs (recidivism-related costs). To calculate recidivism-related costs, a recidivism study must be performed with a comparison group to determine the relative benefits of drug court compared to traditional court processes. Finally, to determine what practices are best, it is necessary to perform a process study to gather information on what practices are being performed by each program. This section and the following section describe the study design and methods implemented to achieve the answers to the two key policy questions.

Recidivism Study Design

Recidivism in this study is defined as any new arrest¹ (not conviction) that occurs after the date of drug court entry. There are several reasons for this definition: 1) Convictions can occur several months or even years after the time of an arrest. Using convictions rather than arrests could result in a false appearance that no criminal activity was occurring in the first year after drug court entry; 2) Some convictions that occur after drug court entry could be the result of criminal activity that occurred before drug court entry, and 3) For the purposes of cost evaluation, it is the arrest and subsequent consequences of the arrest (e.g., time in jail, time on probation) that result in a taxpayer cost.

The recidivism study used a quasi-experimental design with a cohort of all drug court participants who entered the programs during a specified time period, and a matched comparison sample of individuals who were arrested for similar, drug court-eligible charges who did not participate in a drug court program. The Criminal Justice Commission (CJC) identified and provided to NPC Research a sample of all participants who entered the Oregon adult drug court programs that were operating at the time of the sample between January 2001 and December 2006. This timeframe allowed for the availability of at least 3 years and up to 8 years of recidivism data post-program entry for all study participants. A comparison group was identified from all offenders with drug court-eligible charges from the same time period who did not participate in drug court programs. The drug court participants and comparison individuals were matched by county on age, gender, ethnicity, prior drug charges, prior property charges, and prior person or violence charges. The full comparison group selection process is described in the methods section of this report.

Both groups were examined through existing administrative databases for a period at least 3 years from the date of drug court entry. For comparison group members, an equivalent “entry date” was calculated by creating an average of the number of days from arrest to drug court entry for participants and adding that mean number of days to the arrest date for comparison group members. The evaluation team utilized the data sources described below, to determine whether there was a difference in re-arrests, number of days in jail, on probation, on parole, and in prison between the drug court and comparison group.

¹ Data on arrests were gathered from the judicial system database (OJIN), as close examination of the available statewide criminal justice databases revealed that this database was the most consistent and complete. The OJIN database includes only arrests that resulted in cases filed so “new arrests” for this study are equivalent to “new cases filed.”

Cost Study Design (Cost Approach)

COST-BENEFIT

“Cost-Benefit Analysis” has been defined in a variety of ways and used in a variety of contexts. As Sen (2001) states:

...the term “cost-benefit analysis” has considerable plasticity and various specific procedures have been called by that name... cost-benefit analysis is a very general discipline, with some basic demands... that establish an approach but not a specific method... (pp. 96-97, 114)

The definition of cost-benefit as it is performed by NPC Research in this study is similar to that used by Gold, Siegel, Russell, and Weinstein (1996).

...cost-benefit analysis (CBA) [is] an analytic tool for estimating the net social benefit of a program or intervention as the incremental benefit of the program less the incremental cost, with all benefits and costs measured in dollars. (p. 395)

That is, we assign costs to the drug court process and to the business-as-usual process to determine the incremental (or net) investment cost in the drug court program. We assign costs to the outcomes experienced by drug court participants and business-as-usual participants to determine the incremental (net) benefit, or savings, due to outcomes. Comparing the net amount invested to the amount saved results in the cost-benefit ratio.

TRANSACTIONAL AND INSTITUTIONAL COST ANALYSIS

The cost approach utilized by NPC Research in the DC-CSET is called Transactional and Institutional Cost Analysis (TICA). The TICA approach views an individual’s interaction with publicly funded agencies as a set of *transactions* (also called *events* in this document) in which the individual utilizes resources contributed from multiple agencies. Transactions are those points within a system where resources are consumed and/or change hands. In the case of drug courts, when a drug court participant appears in court or has a drug test, resources such as judge time, defense attorney time, court facilities, and urine cups are used. Court appearances and drug tests are transactions. In addition, the TICA approach recognizes that these transactions take place within multiple organizations and institutions that work together to create the program of interest. These organizations and institutions contribute to the cost of each transaction that occurs for program participants. TICA is an intuitively appropriate approach to conducting costs assessment in an environment such as a drug court, which involves complex interactions among multiple taxpayer-funded organizations.

OPPORTUNITY RESOURCES

NPC’s cost approach looks at publicly funded costs as “opportunity resources.” The concept of *opportunity cost* from economics relates to the cost of doing an activity instead of doing something else. The term *opportunity resource* as it is applied in TICA describes resources that are now available for a given use because they have not been consumed for an alternative activity. For example, if substance abuse treatment reduces the number of times that a client is subsequently incarcerated, the local Sheriff may see no change in his or her budget, but an opportunity resource will be available to the Sheriff in the form of a jail bed that can now be filled by another person.

Best Practices Study Design

A Web-based survey of each of the adult drug courts that participated in the study assessed a variety of characteristics of drug courts that have been assessed in prior evaluations by NPC. The advantage of a Web-based survey is that it allowed NPC to efficiently collect data on a number of important drug court program elements in **all** of the drug court sites, rather than using a sampling strategy. Thus, all Oregon adult drug courts that were in existence at the time of the survey are represented in the data, and the statistical power for analysis is maximized. The online tool was developed based on in-depth qualitative data collected in prior research in more than 75 adult drug courts (e.g., Perkins, Carey, & Cox, 2008; Carey, Waller, Sanders, & Burrus, 2010). The information on practices used by each drug court program were examined in relation to program outcomes—including graduation rate, recidivism and costs—to determine which practices were significantly related to more positive outcomes.

The survey assessed the following areas:

- a) **Program Background:** These questions include when and how the program was implemented, primary drugs of choice for the clients in that program, and the make-up of the drug court team.
- b) **Eligibility (Inclusion and Exclusion) Criteria:** These data elements include specific inclusions and exclusions for entry into drug court such as what kinds of offenses are accepted, which charges are targeted for admission, family involvement, age restrictions, and whether clients are excluded for having mental health problems, a violent criminal history or gang involvement.
- c) **Drug Court Team Activities:** This area assesses how often the drug court team meets, its composition, communication between team members and the roles of each member.
- d) **Treatment:** This area measures the number of treatment providers involved with the court, their relationship with the court the type of treatment services offered such as residential, outpatient and detoxification as well as ancillary services like parenting and anger management classes, acupuncture and educational training.
- e) **Drug Testing:** This measures the types of drug tests, how they are performed and the frequency with which they are performed.
- f) **Other practices related to the 10 Key Components:** Each of the 10 Key Components was further assessed with questions in addition to those described above.

Key Component #1: Drug Courts integrate alcohol and other drug treatment services with justice system case processing. Items assessing this area examine the extent to which the treatment system and the other drug court personnel work together, how often they communicate with each other and how information on drug tests, treatment completions and violations of expectations is shared between treatment staff and court staff.

Key Component #2: Using a non-adversarial approach, prosecution and defense counsel promote public safety while protecting participants' due process rights. Items assessing this component evaluate the extent to which both the defense and prosecuting attorneys communicate with each other and the nature of that communication, sit on the staff of the drug court team and communicate outside the courtroom as the participant moves through the court system.

Key Component #3: Eligible participants are identified early and promptly placed in the drug court program. These items assess how eligible participants are identified, who makes referrals

to the drug courts, the composition of the target population, how many steps are involved between identification and enrollment, capacity of program and the time from arrest to referral, and referral to enrollment in the program.

Key Component #4: Drug courts provide access to a continuum of alcohol, drug and other treatment and rehabilitation service. Items assess the core services (drug and alcohol treatment) and ancillary services offered as a part of treatment (GED programs, parenting classes, anger management), the breadth of evidence-based practices for treating methamphetamine-using clients (e.g., Matrix Model) and the progression of requirements in the program phases.

Key Component #5: Abstinence is monitored by frequent alcohol and other drug testing. These items assess how often testing occurs, whether it is random or scheduled and what the sanctions are for positive tests.

Key Component #6: A coordinated strategy governs drug court responses to participants' compliance. This area assesses the degree to which compliant and non-compliant behavior is formally defined, whether this is written, how quickly the staff responds to non-compliant behavior, the variety of sanctions and rewards used and whether staff and judges have had training on how to best modify participant behavior using sanctions and rewards.

Key Component #7: Ongoing judicial interaction with each participant is essential. Items assess the frequency of sessions with participants, the consistency and nature of judge interaction with the client (in particular the responses to non-compliant behavior and rewards for positive behavior), and how much the judge is aware of how sanctions will affect family, job and other areas of the participant's life.

Key Component #8: Monitoring and evaluation measure the achievement of program goals and gauge effectiveness. Items assess the degree to which the program collects data essential for evaluation and for tracking client progress, the degree to which the drug court responds to feedback and integration of regular self-monitoring.

Key Component #9: Continuing interdisciplinary education promotes effective drug court planning, implementation, and operations. Whether the drug court staff is trained prior to, or soon after, joining the drug court team, whether team members are involved in regular trainings on drug court practices, and the extent to which new information is gathered and shared on their target population and drug addiction in general.

Key Component #10: Forging partnerships among drug courts, public agencies, and community-based organizations generates local support and enhances drug court program effectiveness. This area assesses the extent to which stakeholders from community treatment programs and other community resources are a part of the management and resources available to the drug court.

III. METHODOLOGY

Methods

SITE SELECTION

The Oregon drug courts that participated in this study include all adult programs that existed between 2000 and 2006 that had sufficient numbers for valid statistical analysis ($N=20$). The time frame of 2000 to 2006 was chosen to allow for the collection of recidivism data for at least 3 years after participants entered the program. The Oregon drug court programs that were included in this study are in Benton, Clackamas, Clatsop, Crook, Douglas, Jackson, Jefferson, Josephine, Klamath, Lane, Linn, Malheur, Marion, Multnomah, Polk, Umatilla, Union, Wasco, Washington, and Yamhill counties. In addition, four of these programs (Clackamas, Marion, Malheur, and Multnomah) had had previous evaluations including recidivism and cost. Further, these programs had data on drug court practices from the time of those studies. Because these practices, as well as recidivism and cost results, differed from the results of the current study, these programs were added to the best practices analysis (with cost results updated to 2010 dollars) resulting in an N of 24.

SAMPLE SELECTION

The *drug court participant sample* ($N= 5,655$) for the recidivism and cost studies was chosen for each program using a cohort approach. All participants who entered the programs between January 2000 and December 2006 were included in the sample, and recidivism-related outcomes were tracked through May 2010. These data were gathered by the CJC from the statewide drug court database, the Oregon Treatment Court Management System (OTCMS), described below.

The *comparison sample* ($N= 7,380$) was chosen in two steps. First, the CJC and DOC provided NPC with dataset of all offenders statewide who had drug court-eligible charges (specifically drug and property charges) between January 2000 and December 2006. These offenders were then identified by NPC in the Oregon Judicial Information Network (OJIN) database described below, and any with legal exclusions and any who had participated in a drug court program were removed. Second, the drug court sample was matched in aggregate within each county to the potential comparison group on demographics and criminal history including county of residence and drug court-eligible charge, age, gender, race/ethnicity, prior drug charges, prior property charges and prior person/violence charges.² This resulted in a final statewide comparison sample of 7,380 individuals.

DATA COLLECTION AND SOURCES

Administrative Data

NPC staff members adapted procedures developed in previous drug court evaluation projects for data collection, management, and analysis of the statewide data. Once all data were gathered on the study participants, the data were compiled, cleaned and moved into SPSS 15.0 for statistical analysis. The evaluation team employed univariate and multivariate statistical analyses using SPSS (described in more detail in the data analysis section). The data necessary for the outcome evaluation were gathered from the administrative databases described below and in Table 1.

² Data on drug of choice were not available for the comparison group so participants were not matched on this characteristic.

Table 1. Oregon Drug Court Cost Study Evaluation Data Sources

Database	Source	Example of Variables
<i>The Oregon Treatment Court Management System (OTCMS)</i>	Each individual program OTCMS databases	For drug court participants only: Demographics, time spent in drug court, court sessions, drug test results, discharge status
<i>Department of Corrections (DOC)</i>	Oregon Department of Corrections (DOC)	Start and end dates for parole, probation; Start and end dates for prison time
<i>Oregon Judicial Information Network (OJIN)</i>	Oregon Judicial Department	Incident dates (arrests), dates of case filings, charges
<i>Local Sheriff Jail Data</i>	Marion County, Multnomah County, Josephine County, Jackson County, Washington County, Malheur County	Jail entry and exit dates

The Oregon Treatment Court Management System

In 2000, the Oregon Judicial Department (OJD), working with the Oregon Association of Drug Court Professionals (OADCP), secured a Department of Justice Statewide Enhancement Grant to create a data collection system. These funds were used to develop the Oregon Treatment Court Management System (OTCMS), a Management Information System (MIS) that serves as a participant case management tool and program data depository. The OTCMS is currently used by 45 of Oregon's 47 adult, juvenile, and Family Treatment Drug Courts. OTCMS is the primary data source for Oregon drug court process and outcome evaluations as well as the data source for reporting performance measures to the state.

Department of Corrections (DOC)

The DOC database contains information on demographics and service data including the start and end dates and level of supervision for probation, parole, and post-prison supervision. These data were used to examine participant and comparison group criminal justice recidivism and to determine criminal justice recidivism-related costs.

Oregon Judicial Information Network (OJIN)

OJIN is a case tracking system that stores Oregon State Court case information from multiple sources and counties in a single database. It lists all events related to a case, including all hearings scheduled. It is valuable for demographics, key case dates, and case findings as well as criminal justice recidivism information that includes misdemeanor arrests. These data were used for criminal justice recidivism analyses and related costs.

Local Sheriff Data

Most Sheriff offices keep records of jail entry and exit dates. Some data are kept in electronic databases while others are on paper or on microfiche. These data were collected from several different sample counties and the resulting number of days in jail for the participants in those coun-

ties was used to calculate jail costs at the local level. The days in jail per arrest was then calculated across counties and this number was used in estimating jail costs in counties where we did not obtain local jail data.

Cost Data

The basic steps used in the TICA methodology and tasks performed for each step are described in Table 2.

Table 2. The Six Basic Steps of TICA

	Description	Tasks
Step 1:	Determine flow/process (i.e., how clients move through the system)	<ul style="list-style-type: none"> • Site visit. • Interviews with key stakeholders (agency and program staff).
Step 2:	Identify the transactions that occur within this flow (i.e., where clients interact with the system)	<ul style="list-style-type: none"> • Analysis of process information gained in Step 1.
Step 3:	Identify the agencies involved in each transaction (e.g., court, treatment, police)	<ul style="list-style-type: none"> • Analysis of process information gained in Step 1.
Step 4:	Determine the resources used by each agency for each transaction (e.g., amount of judge time per transaction, amount of attorney time per transaction, number of transactions)	<ul style="list-style-type: none"> • Interviews with program key informants using cost guide. • Administrative data collection of number of transactions (e.g., number of court appearances, number of treatment sessions, number of drug tests).
Step 5:	Determine the cost of the resources used by each agency for each transaction	<ul style="list-style-type: none"> • Interviews with budget and finance officers. • Document review of agency budgets and other financial paperwork.
Step 6:	Calculate cost results (e.g., cost per transaction, total cost of the program per participant)	<ul style="list-style-type: none"> • Support and overhead costs (as a percentage of direct costs) are added to the direct costs of each transaction to determine the cost per transaction. • The transaction cost is multiplied by the average number of transactions for program participants to determine the total average cost per transaction type. • These total average costs per transaction type are added to determine the program and outcome costs.

Process (Drug Court Practice) Data

The process data were collected through an online survey described in the Study Design section of this report. A link to the online survey was emailed to the coordinator of each program, who was asked to fill out one survey in collaboration with the entire drug court team. Hard copies of the survey were provided so that all team members could review the survey together and the team could determine their combined answers.

Once the surveys were completed, they were reviewed for completeness and consistency. Any missing or inconsistent answers were noted and phone calls were made to each of the programs to verify answers and clarify any inconsistencies, as well as to verify our understanding of the answers. In approximately half the programs, site visits were made and any contradicting information gained from observing the programs was resolved through interviews with court staff.

Analyses

RECIDIVISM ANALYSES

Univariate analyses of co-variance were performed to compare the mean number of all re-arrests, as well as the mean number of days on probation, on parole, in jail and in prison for drug court participants and the comparison group for each program in the 3 years after the drug court start date (or an equivalent date for the comparison group). The means reported were adjusted (i.e., controlled for) based on gender, age, ethnicity, number of prior drug arrests and number of prior property arrests in the 2 years before drug court start. The adjusted means were used in the cost calculations and are presented in the cost results. The non-adjusted means for graduates are included in the costs for reference but should not be compared directly with the comparison group.³

In addition, crosstabs were run to examine differences in recidivism rate (the number of individuals re-arrested at least once in the 3-year outcome period) between drug court and the comparison group. Chi-square analyses were used to identify any significant differences in re-arrest rates between drug court and comparison group participants.

COST CALCULATIONS

Costs were calculated based on budgets and other financial information from fiscal year 2010. Although recidivism occurred over a three-year period, a zero discount rate was used as any change in cost figures due to inflation would be negligible.

The costs calculated for this study include the following four cost results:

- a) Cost per transaction
- b) Costs associated with the drug court program (in 7 drug court sites)
- c) Costs associated with outcomes (costs for transactions other than and subsequent to those associated with the drug court program) (In all 20 drug court sites)
- d) Cost savings related to lower recidivism

³ Because the comparison group consists of all individuals who were eligible for drug court, some of the individuals (if they had participated in drug court) would have graduated while other would have failed. Therefore, comparing the drug court graduates to the comparison group is the equivalent of comparing apples to a combination of apples and oranges.

a. Cost Per Transaction. The costs incurred by each agency in terms of direct costs (staff time and materials) and indirect costs (support costs and overhead calculated as percentages of the direct costs) involved in transactional cost areas were combined to create costs for each agency for every transaction. The costs for each agency were then added together to get total cost per transaction. For instance, in the case of the cost of drug court sessions, the per-hour costs for courts, law enforcement agencies, district attorney offices, public defender offices, treatment agencies, and probation agencies were combined to generate total per-hour cost for **drug court sessions**. Using the average number of minutes used per participant for a single drug court hearing (from the timing performed during site visits), this cost *per hour* was then translated into the cost for a single **drug court hearing** per participant. (Note: Drug court sessions should be differentiated from drug court hearings. A drug court session is the entire session, involving multiple drug court participants. A drug court hearing is the court appearance of a single drug court participant.) This cost per hearing was then multiplied by the number of hearings for each participant to get the overall cost of drug court hearings per participant.

Non-drug court **court** transactions were calculated somewhat differently. The identification of the cost of every court hearing outside of drug court for every subsequent court case is beyond the scope of this study (indeed, it would be a major study in itself). For this reason, the transaction of interest was determined to be the court *case* rather than a court hearing. The cost of an average court case was determined based on local budgets and interviews with local agency staff—and then was combined with information collected in several studies of time used in court process in California and other states (National Center for State Courts, 2002; Carey & Finigan, 2003).

Costs for the comparison group were necessarily based on the transactions that occurred for the sample of comparison offenders from the nine counties that participated in Phases I and II of this study. However, the cost of those transactions was calculated using local cost information (e.g., agency staff salaries and overhead rates) so that the cost results were actually local numbers.

The costs for each of the transactions were also calculated per agency, by assigning the amount of specific agency resources spent for a specific transaction. That is, since all costs for each transaction were first gathered at the agency level, the amount spent on each transaction per agency was already determined. In some cases, such as drug court hearings, several agencies accounted for a portion of the transaction cost. In other cases, such as probation time, the agency cost per transaction was accounted all to one agency (probation).

Costs were calculated based on budgets and other financial information from the most recent fiscal year available to the program. All costs were adjusted, as necessary, to 2009 dollars. A zero discount rate was used, as any change in cost figures due to the discount rate would be negligible.

b. Costs Associated with the Program (Investment Costs). As listed above, in the description of the data entered by the program, the transactions associated with the program include drug court appearances, treatment sessions, case management, and jail used as a sanction. Program staff activities that relate to these transactions are included in calculating the transaction costs. For example, time spent preparing for court appearances including pre-court team meetings are included in the cost of a court appearance.

c. Costs Associated with Outcomes. To determine outcome costs, the costs of the outcome transactions per individual were summed to establish the total outcome costs per individual. Outcomes (listed in Step 2, above) included any transactions that occurred after the drug court-eligible case, except for those associated with the eligible case. For example, this included any re-arrests and court cases due to those re-arrests, even if they occurred while an individual was still in drug court. For the treatment, probation, and jail data that could not be associated with a

particular case, transactions (e.g., jail time served, treatment episodes) counted as outcomes if they occurred after the drug court start date minus those transactions that were assigned to the drug court-eligible case.

The cost per individual in both the drug court participant group and the comparison group were averaged to get the mean outcome cost per individual for each group. This number can then be multiplied by the average number of participants who enter drug court each year to get the yearly outcome costs for both groups.

In Phase III, the outcome costs were calculated without victimization costs as it was not feasible for the drug court staff to collect data on victimizations committed by each participant. As with the investment costs, the outcome costs were calculated per agency by assigning the appropriate agency cost to each transaction and adding them. This was calculated as the average agency outcome cost per offender.

d. Cost Savings. Once the average costs per participant for the drug court-eligible case and the outcomes were calculated, any cost savings could be determined by taking the difference between the two groups. The difference was computed in three ways:

The difference in eligible case costs (net investment): The costs associated with the drug court-eligible case for the comparison groups were subtracted from the costs for the drug court participant groups to determine the difference. A negative number would indicate costs savings (benefits) for the system due to drug court while a positive number would indicate that the drug court cost more to run than the non-drug court process. This difference in eligible case costs describes the cost to the system of the drug court versus traditional court processing.

The difference in outcome costs (net outcome costs/savings): The outcome costs for the comparison groups were subtracted from the outcome costs for the drug court participant groups to determine the difference in outcome costs. As above, a negative number would indicate savings due to drug court while a positive number indicates loss due to drug court.

The difference in total costs (total net benefit): The drug court-eligible case costs and outcome costs for each group were added to obtain the total cost to the system for those who participated in drug court and those who did not. The total costs of the comparison groups were subtracted from the total costs of the drug court groups to determine the overall cost difference between the two. Once again, a negative number would indicate overall cost savings due to drug court while a positive number would indicate loss due to drug court. This difference in total costs is truly the bottom line for the cost to the system of drug court participants versus the cost of non-drug court participants.

Each of these calculations was also performed in the same way on a per agency basis. This was calculated as the average cost per agency per offender.

ANALYSIS OF DRUG COURT PRACTICES

Frequencies were performed on the data across the Oregon drug court programs on each of more than 300 adult drug court practices to determine the amount of variation that existed across programs in implementing any particular practice. The practices were categorized by component for each of the 10 Key Components (based on earlier work by Carey, Finigan, & Pukstas, 2008) and the variations in practice are reported in the results section of this report.

It is important to note that many drug court practices did not vary substantially between programs. For example, all programs included a prosecutor and defense attorney as members of the drug court team. If all courts perform the same practice, it is not possible to determine whether

courts that perform that practice have better outcomes than courts that do not. Therefore, for all those practices that did not vary across these drug courts, we cannot answer the question of whether or not those practices are important for better outcomes. *If a practice is not included in the results as a practice related to positive outcomes, this does not mean that the practice is not important, only that it is not measurable with these data.*

ANALYSIS OF PRACTICES IN RELATION TO PROGRAM OUTCOMES

The quantitative analysis assessed court-level characteristics; drug court practices were associated with court level outcomes, specifically the program graduation rate, the percent difference in number of re-arrests between the drug court and comparison group (i.e., the recidivism effect size), and the percent difference between the drug court and comparison group on recidivism-related costs (i.e., the effect size for the combined costs of re-arrests, new court cases, probation, jail and prison) after program start. The percent difference, or effect size, was used as a method for normalizing the results across sites. Costs, in particular, can vary across jurisdictions based on many factors that are not related to the drug court program, including cost of living in the area and the availability of different resources.

The primary research question was: At the court level, which adult drug court practices predict positive outcomes, especially cost-beneficial outcomes? To answer the question we examined 335 different adult drug court practices in relation to drug court graduation rates, recidivism rates, program costs and outcome (or recidivism) costs. Using bivariate correlations, we also examined several participant population characteristics such as gender, drug of choice, race/ethnicity, and length of time in the program to determine whether these characteristics are related to each other and to the outcome.

We decided to establish a rule that there would be sufficient variation among sites if at least 15% of the sites differed from other sites in the practice. This was a rule that assured that there was variation in at least three or four sites. Any fewer than that was deemed too idiosyncratic. Those program practices that showed sufficient variation were examined in relation to the outcomes described above.

The graduation rate was calculated on cohorts of drug court participants at each site who had enrolled in the program over a 6-year period and who had all exited the program (either successfully or unsuccessfully) at the time of data collection. The graduation rate is the number of participants who successfully completed the program divided by the total number enrolled.

Recidivism was defined as the percent difference in number of re-arrests between the drug court and comparison group in the 3-year period after the program entry date (also called an “effect size”). A higher percentage indicates a larger reduction in recidivism for drug court participants compared to the comparison group.

Outcome, or recidivism costs were costs incurred due to criminal justice recidivism for both the drug court participants and comparison group members after drug court entry (or an equivalent date calculated for the comparison group). Recidivism costs include re-arrests, new court cases, probation and parole time served, and incarceration (jail and prison). Outcome costs—for the purposes of these analyses in order to normalize the values across drug court sites—were calculated as the percent improvement in outcome costs for the drug court group in relation to the

comparison group.⁴ This is also called an “effect size” for differences in cost. A higher percentage indicates lower recidivism costs (or higher cost savings) for drug court participants.

For the outcome analyses, the use of a mixed model approach was considered with a nested design using court/site as a grouping variable with data at the client level. However, it was determined that this analysis of best practices was really more appropriate at the court level, as we were attempting to determine what court level practices affect court level outcomes (e.g., the program graduation rate, not whether or not a particular individual graduated). Therefore, with an N of just 24, these data could best lend themselves to t-tests,⁵ the results of which can provide some understanding of the trends in best practices as well as confirmation of the results of an existing national study on drug court best practices (see Carey, Finigan, & Mackin, in process). With the small sample size, differences in variance (skewness) in the samples were taken into account in determining the significance.

For these analyses, the vast majority of the data on program practices from the process evaluations were coded as yes/no questions. For example, “the treatment provider regularly attends drug court sessions.” Those practices with sufficient variation across sites were measured against the program outcome data. In a few cases there was a range of data (such as the number of days between arrest and program entry) that were not appropriate for the yes/no format. In these cases the actual numbers were used. In determining whether there was enough variation in sites on specific items to warrant further examination, we accepted the item as having variation among sites if 15% or more (up to 85%) of sites had a different approach than the others.

T-tests were run on the answer (yes/no) for each question on graduation rate, the percent difference in investment and the percent improvement in outcome costs. In cases where process data were a continuous variable, t-tests were run using cut points. The mean differences in the graduation rate, recidivism and costs were reported if the difference for “yes versus no” was at least 2 times greater for one condition over the other or if the differences were statistically significant at least at a “trend” level ($p < 0.15$).

Limitations of the Analyses

One of the main limitations of the study is the lack of information on the comparison group such as drug use history, treatment history, and drugs of choice. However, in other studies performed in Oregon (e.g., Carey et al., 2010) the comparison group was chosen in a similar manner, and treatment and drug use history were comparable, so there is reason to believe that the drug court and comparison cohorts in this study are also similar.

A limitation of the best practices analysis is that many practices did not vary much between drug courts in Oregon. If all courts perform the same practice, it is not possible to determine whether courts that perform that practice have better outcomes than courts that do not. Therefore, for all those practices that did not vary across these 24 Oregon drug courts, we cannot answer the question of whether or not those practices are important for positive outcomes.

Another limitation is the relatively small number of programs that participated in the study. Although in the context of the available research, 24 programs is a very large number to have this

⁴ Actual costs (or costs saved) across sites can vary due to factors such as cost-of-living in the particular area; therefore, we felt a more appropriate direct comparison would be the percent difference in costs between the drug court and the comparison group.

⁵ As non-parametric tests with this data showed no appreciable differences in results, t-tests were judged to be the most convenient in producing easily understood outcomes (e.g., means).

level of detailed information, in the context of statistical analyses an N of 24 is very small and limits the type of valid analyses that can be run.

Further, in the best practices analysis each drug court practice was analyzed univariately on the outcomes. It is possible that the results shown for a drug court practice are highly correlated or confounded with another drug court practice or population characteristics of the drug courts. With 24 drug courts it is difficult to build a single statistical model that accounts for all drug court practices and population characteristics.

Finally, a possible limitation of these analyses is that there may be some drug courts that have populations with higher rates of mental illness, more severe addictions, low educational levels, and few economic opportunities. Drug courts with high proportions of participants in this situation are more likely to have less positive outcomes—despite the fact that such drug courts might be implementing all the best practices. This type of participant data in these drug courts was not consistently available so we were unable to determine how this might have impacted outcomes.

IV. RESULTS

Cross-site Results for 20 Oregon Drug Courts

As described in Section I, the purposes of this statewide evaluation were to answer two critical drug court policy questions:

1. Are Oregon's adult drug courts cost beneficial?
2. What are best practices for Oregon's drug courts?

The results are presented for each of these policy questions below. Before presenting the policy question results, it is important to describe the characteristics of the drug court programs and their participants in order to provide a context for these results.

DRUG COURT POPULATION CHARACTERISTICS

Table 2 provides a description of the range in program and participant characteristics across the 24 sites. As listed earlier, the drug courts that took part in this study included Benton, Clackamas, Clatsop, Crook, Douglas, Jackson, Jefferson, Josephine, Klamath, Lane, Linn, Malheur, Marion, Multnomah, Polk, Umatilla, Union, Wasco, Washington, Yamhill. (See Appendix A for a map of participating counties.)

Because we promised confidentiality to those courts that participated in this study, we cannot present the results or program characteristics individually for each site. Instead, the results are presented in aggregate across the state with the range, mean,⁶ median,⁷ and mode⁸ for each characteristic. Table 3 shows that the programs were all well established, with the youngest program at 4 years old and one of the oldest courts in the nation at 20 years. Graduation rates ranged from 15% to 73%, with an average of 46%. Recidivism rates over 3 years from drug court entry ranged from 13% to 64%. There was not a wide range of ethnicities represented in these programs; 16 of the 20 programs were over 80% White. Participant gender ranged from 46% male in some courts to 97% male in others. Drugs of choice had a wide variety, with some courts being made up of entirely of methamphetamine users (100% meth) while others had mostly cocaine users (51% cocaine). Most courts also had many marijuana and alcohol users. The cohorts selected for this study ranged in size from 31 participants to more than 1,800.

⁶ Mean = The average across courts

⁷ Median = The number that is in the middle of the range

⁸ Mode = The most common number

Table 3. Characteristics of Program and Participant Population in 20 Oregon Drug Courts

	Range	Mean	Median
Age of Program (Years)	4- 20	10.3	9
Number of participants in Drug Court Sample/Cohort	31 - 1819	244	123
Graduation Rate	15%-73%	46%	45%
Recidivism Rate (3 years from entry)	13%-64%	37%	38%
Percentage Male	46% - 97%	67%	66
Percentage Caucasian	46% - 99%	84%	86%
Percentage Latino	0% - 35%	9%	7%
Percentage African American	0% - 21%	5%	3%
Percent Drug of Choice: Methamphetamine	32% - 100%	75%	78%
Percent Drug of Choice: Cocaine	0% - 51%	12%	10%
Percent Drug of Choice: Heroin	0% - 14%	6%	5%
Percent Drug of Choice: Marijuana	19% - 78%	54%	59%
Percent Drug of Choice: Alcohol	14% - 66%	39%	42%

Policy Question #1: Are Adult Drug Courts Cost Beneficial?

Although there are differences in scale across sites, the general trend in all 20 sites was the same. Drug courts save money due to favorable outcomes for drug court participants.

This section presents the recidivism and cost results for the 20 drug court sites that were included in this study. The first section describes program and recidivism costs by transaction (e.g., cost per drug court appearance, cost per treatment session) including the average cost and the range across drug court sites. The second section of the cost results provides the program and recidivism costs for each of the relevant agencies (e.g., superior court, probation, treatment).

One of the advantages of the approach to costs developed in this study is its ability to examine factors in the drug court setting that influence costs and cost savings with the potential to determine promising practices. The cost results for the drug courts will be followed by a section on promising or “best” practices that includes a description of the practices in 24⁹ drug courts that were related to positive outcomes including higher graduation rates, lower recidivism rates, and higher cost savings.

PROGRAM INVESTMENT (UNIT COSTS)

Individual drug courts are intensive interventions that involve coordination of multiple agencies and professional practitioners applying a variety of areas of expertise, intensive case management and supervision, and frequent judicial reviews. Drug courts are typically made possible

⁹ This number includes four programs that are in the practice dataset twice with data from two different time periods.

through the application and coordination of resources drawn from multiple agencies located in more than one jurisdictional organization. Although the amount of staff time and other resources (buildings, materials and supplies and operating equipment) made available by a number of public organizations represents substantial public costs, research in drug courts demonstrates that due to decreased future system impacts (less frequent re-offending, for example), this investment frequently results in substantial future savings.

The results from a cost evaluation of Oregon's adult drug courts are compiled in the tables below. The ranges and averages are reported on *program investment costs* across seven (7) sites and on *outcome/recidivism costs* in 19 sites. (Recidivism costs from 5 additional Oregon sites that participated in previous NPC evaluations were included in the best practices analysis). The program investment cost sites included Benton, Josephine, Malheur, Marion, Multnomah, Union, and Washington counties. The recidivism cost sites included the previously mentioned 7 sites as well as Clackamas, Clatsop, Crook, Douglas, Jackson, Jefferson, Klamath, Lane, Linn, Polk, Wasco, and Yamhill counties.

The Transactional and Institutional Cost Analysis (TICA) approach (described in the methods section earlier in this report) was used to calculate the costs of each of the transactions that occurred while participants were engaged in the program (e.g., drug court sessions, drug tests) as well as the recidivism-related transactions that occurred outside of the program (e.g., arrests, jail days, probation days). Program transactions calculated in these analyses included drug court sessions, case management, individual drug treatment, group drug treatment, residential drug treatment, assessments, transitional housing, detoxification, drug tests, alcohol tests, and jail sanctions. The costs for this study were calculated to include taxpayer costs only. All cost results provided in this report are based on fiscal year 2010 dollars.

Program Transactions

A Drug Court session, for the majority of drug courts, is one of the most staff- and resource-intensive program transactions. These sessions typically include representatives from some or all of the following:

- Circuit Court (Judge, Court Clerk, Bailiff, Case Manager, and Drug Court Coordinator);
- District Attorney (Deputy District Attorney);
- Public Defender (Deputy Public Defender or contracted private defense attorney);
- Community Corrections (Probation Officers);
- Law Enforcement (Sheriff's Deputy, Police Officer); and
- County Health Department and/or private treatment agencies (Case Managers, Counselors).

The cost of a ***Drug Court Appearance*** (the time during a session when a single program participant interacts with the judge) is calculated based on the average amount of court time (in minutes) each participant interacts with the judge during the drug court session. This includes the direct costs of each drug court team member present, the time team members spend preparing for the session, the agency support costs, and jurisdictional overhead costs. The cost for a single drug court appearance ranged from \$55.88 to \$194.31, with an average cost of **\$125.47** per participant.

Case Management is based on the amount of staff time dedicated to case management activities during a regular work week and is then translated into a total cost for case management per partic-

ipant per day (taking staff salaries and benefits, and support and overhead costs into account).¹⁰ The main agencies typically involved in case management are the County Health Department, Community Corrections, Circuit Court, treatment agencies, and sometimes local law enforcement. The daily cost of case management ranged from \$3.58 to \$13.69, with an average cost of **\$8.04**.

Drug Treatment is provided by county treatment agencies and multiple private treatment providers. Participants often pay co-pays to treatment providers on a sliding scale, depending on income, so the rates shown below are only the cost to taxpayers. Individual treatment per participant ranged from \$54.29 per session to \$153.00 per session, with an average of **\$107.62** per session. Group treatment per participant ranged from \$4.62 to \$66.57, with an average of **\$44.05** per person per session. Residential treatment ranged from \$25.00 to \$125.00 and averaged **\$87.05** per day. Assessments ranged from \$120.00 to \$274.14 and averaged \$198.43. All rates were provided to NPC by drug court coordinators and representatives of the county treatment agencies or private treatment agencies.

Drug Testing is typically performed by Circuit Court and County Health Department case managers, Community Corrections, and by private treatment providers. Again, participants often pay co-pays on a sliding scale, depending on income, so the rates shown below are only the cost to taxpayers. The cost per UA test ranged from \$0.00 (participants paid the full cost of UA testing) to \$23.00 and averaged **\$11.71** per test. The cost per ETG alcohol test ranged from \$20.20 to \$25.00 and averaged **\$22.60** per test. Drug and alcohol testing costs were obtained from the drug court coordinators and representatives of all drug testing agencies.

Jail Sanctions are provided by the Sheriff's Office or other county detention agency. Jail costs were acquired from representatives of the local Sheriff's Office or from budgetary information found online. The cost of jail ranged from \$53.95 to \$150.00, with an average cost of **\$90.46**.

PROGRAM COSTS

Table 4 provides the range of costs per participant and the average cost per participant for each drug court transaction, based on program cost results from the seven Oregon adult drug court sites included in NPC program cost calculations. The table contains the total cost for each transaction. For example, the cost for drug court sessions is the unit cost per court session multiplied by the average number of sessions attended per participant.

¹⁰ Case management includes meeting with participants, evaluations, phone calls, referring out for other help, answering questions, reviewing referrals, consulting, making community service connections, assessments, documentation, file maintenance, and residential referrals.

Table 4. Program Costs per Participant

	Drug Court program costs per participant	
Transaction	Range	Average
Drug Court Sessions	\$838 - \$7,578	\$3,771
Case Management	\$1,546 - \$6,106	\$3,417
Treatment	\$2,436 - \$21,155	\$9,668
Drug/Alcohol Testing	\$0 - \$3,062	\$1,289
Jail Sanctions	\$48 - \$1,303	\$551
Total	\$3,411 - \$31,380	\$18,696

As Table 4 shows, there is a large variation in costs across programs. This is due to myriad factors including the cost of living in the region and the specific practices performed by the program. For example, programs that follow best practices and perform at least two drug tests per week will be more expensive than programs that test only once per month. Further, programs that require participants to pay drug testing costs will have lower costs (to the taxpayer) than programs that pay for drug testing out of grant monies or other public funds.

Program Costs per Agency

Another useful way to examine program costs is by agency. Table 5 shows the range of costs per participant and the average cost per participant *by agency*, based on program cost results from the seven Oregon adult drug court sites included in NPC program cost calculations.

Table 5. Program Costs per Participant by Agency

	Drug Court program costs per participant	
Agency	Range	Average
Circuit Court	\$197 – \$3,193	\$1,249
District Attorney	\$252 – \$1,094	\$617
Public Defender	\$188 – \$1,561	\$706
Community Corrections	\$29 – \$4,104	\$1,150
Law Enforcement	\$48 – \$3,942	\$1,660
Treatment	\$2,586 – \$27,900	\$13,314
Total	\$3,411 – \$31,380	\$18,696

As Table 5 demonstrates, the agency that contributes by far the largest amount toward the drug court programs is treatment. Since one of the main goals of drug courts is to get participants into treatment and to stay in treatment, these results show that Oregon drug courts are succeeding at this goal. Table 5 shows that the bulk of the remaining program costs are spread roughly equally across the court, community corrections and law enforcement, while the District Attorney and Public Defender contribute a relatively small amount per participant to program participation.

Program Costs Summary

In sum, the average cost of a drug court program per participant was \$18,696. The largest portion of adult drug court costs is due to drug treatment (an average of \$9,668, or 52% of total costs). Drug court sessions (\$3,771 or 20% of total costs) and case management (an average of \$3,417 or 17%) are also significant program costs. When program costs are evaluated by agency, the largest portion of costs accrues to agencies involved in treatment (\$13,314 or 71% of total costs).

When learning about drug court program costs, it is important to remember that the state would be funding the traditional criminal justice system to process these offenders if there were no drug court. For informational purposes only, NPC created an estimated “**business-as-usual**” cost per case for offenders who did not enter drug court. This cost includes a court case (an average cost statewide of \$2,407.86 per case), average jail time per court case (27 days at a statewide average of \$89.91 per day), average prison time per court case (28 days at an average of \$84.46 per prison day), average parole time per court case (17 days at \$12.34 per day), and average probation time per court case (244 days at a statewide cost of \$8.11 per day). It does not include treatment costs, as treatment data on non-drug court participants were not available for this study. The estimated business-as-usual statewide cost per offender is **\$9,389**, which is about half (\$9,307 less) than the average drug court program cost per participant. Because the business-as-usual cost is estimated and does not include what are likely substantial treatment costs, it should not be considered a comprehensive estimate of costs or be directly compared to the drug court program cost.

However, with the understanding that this business-as-usual cost is a substantial underestimate, it does illustrate that there is a cost to processing these offenders regardless of whether they participate in drug court and that drug court may not be as expensive to implement as it appears, given the costs that would be spent by the system if there were no drug court program.

OUTCOME/RECIDIVISM COSTS

Recidivism

Figure 1 illustrates the recidivism rates (percent of individuals re-arrested) for Oregon's adult drug courts over the full 3-year period.

Figure 1. Recidivism (Re-Arrest) Rates for Oregon Adult Drug Courts Were Significantly Less Than the Comparison Group

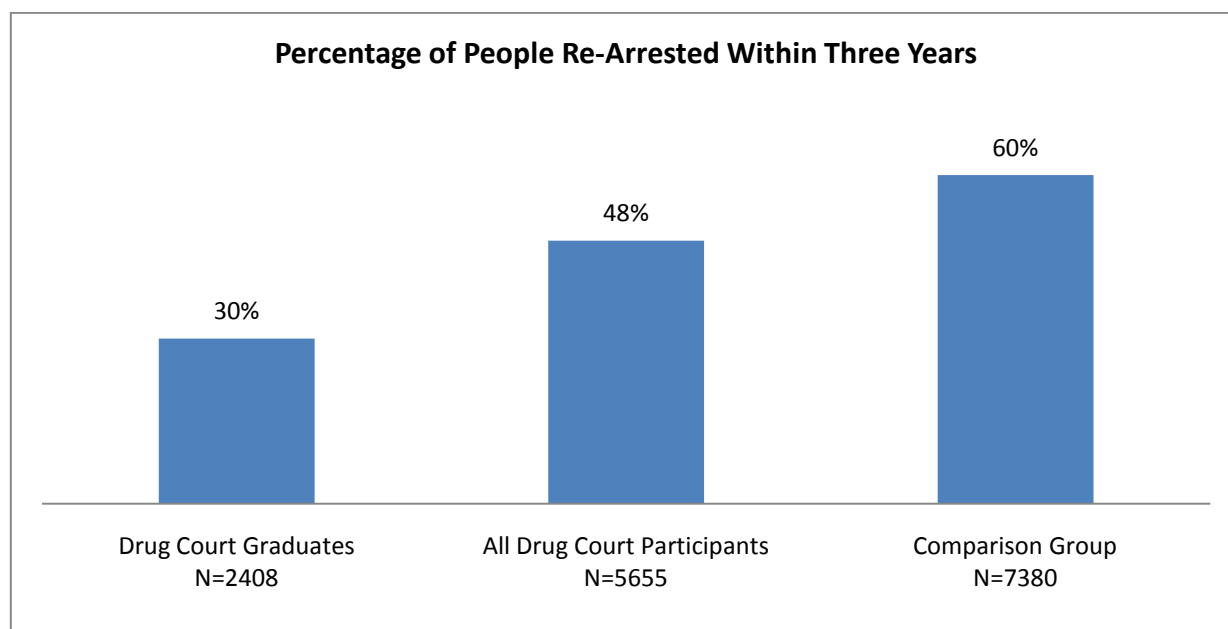


Table 6 provides the ranges and means for the re-arrest rates and effect sizes across the Oregon drug court programs that were included in this study.

**Table 6. Oregon Drug Court 3-Year Recidivism Results:
Ranges, Averages and Effect Sizes**

Recidivism measure	Range across programs	Statewide average
Drug Court recidivism rate (percent of individuals re-arrested)	27% – 54%	48%
Comparison recidivism rate	36% – 69%	60%
Effect size ¹¹ for recidivism rate	-.07 – .53	.23*
Drug Court average number of re-arrests	0.41 – 1.62	1.14
Comparison average number of re-arrests	0.70 – 3.14	2.02
Effect Size ¹² for number of re-arrests	-.06 – .67	.44*

*This effect size is statistically significant at $p < .001$.

The recidivism results in Figure 1 and Table 6 show a significant reduction in recidivism for drug court participants compared to similar offenders who do not participate in drug court, an average of 44% reduction in number of re-arrests and an average of 23% reduction in recidivism rate. An effect size is the percent difference between the drug court group and the comparison group. A negative effect size means that the drug court group has worse outcomes than the comparison group. As illustrated in Table 6 by the low end of the range of effect sizes, there are drug court programs whose participants did not perform better than offenders who went through traditional court processing. However, there were only two programs out of the 20 that had that result. Further, those effect sizes were extremely small (they were not statistically significant), which means that these programs did not perform worse than traditional court processing, they just performed no better. In addition, the best practices results later in this report demonstrate that the programs that did poorly were also not performing best practices. If these programs were to implement new practices that aligned with best practices, their outcomes would likely improve. Finally, the recidivism results were from a cohort that entered the program in 2006 or before. It is possible that these programs have already received training and improved their practices and that outcomes for current participants might be better.

¹¹ Percent Difference between Drug Court and Comparison Group

¹² Percent Difference between Drug Court and Comparison Group

Recidivism Over Time

It is useful to examine how recidivism results, particularly effect sizes change over time. Table 7 provides the effect sizes for recidivism rate and number of re-arrests for each year of the 3-year period.

Table 7. Recidivism Effect Sizes Over 3 Years

Time period	Recidivism rate effect size	Re-Arrest effect size
Year 1	0.26	0.42
Year 2	0.24	0.43
Year 3	0.20	0.44

Table 7 shows how the effect sizes shift over time. The effect size for recidivism rate, the percentage of individuals who were re-arrested at least once during each time period, actually decreases over time, indicating that the difference between the drug court and comparison group begins to “fade” over time. The implication may be that the effect of drug court may “wear off” over time, or that the comparison group will get better without the assistance of drug court over time (e.g., individuals tend to “age out” of criminal behavior).

Conversely, Table 7 also shows that the effect size for number of re-arrests does not decrease over time and, in fact, increases slightly. This finding is consistent with findings from other studies that show no decrease in effect size for numbers of re-arrests for longer time periods, even up to 14 years after drug court entry (Carey et al., 2005; Finigan, Carey, & Cox, 2008). This indicates that although the number of people being re-arrested may change differentially between groups over time, the relative amount of criminal activity being engaged in by each group does not.

The cost analysis is based on actual numbers of re-arrests, and not on the number of individuals being re-arrested; therefore, the effect size for recidivism costs that is most relevant is that for number of re-arrests. For this reason, any projected costs beyond the 3 years of administrative data that is the base of costs for this study are not discounted based on reduced effect sizes over time.

OUTCOME OR RECIDIVISM COSTS (UNIT COSTS)

The Transactional and Institutional Cost Analysis (TICA) approach was used to calculate the costs of each of the criminal justice system outcome transactions that occurred for drug court and comparison group participants. Transactions are those points within a system where resources are consumed and/or change hands. Outcome transactions for which costs were calculated in this analysis included re-arrests, subsequent court cases, probation time, parole time, jail time, local control time, prison time, and victimizations. Only costs to the taxpayer were calculated in this study. All cost results represented in this report are based on fiscal year 2010 dollars or updated to fiscal year 2010 dollars using the Consumer Price Index. The methods of calculation were carefully considered to ensure that all direct costs, support costs, and overhead costs were included as specified in the TICA methodology followed by NPC.

The outcome cost analyses were based on a cohort of adult drug court participants from each site and a matched comparison group of offenders from the corresponding county who were eligible

for adult drug court programs through their criminal history but who did not attend these programs. These individuals were tracked through administrative data for at least 3 years post program entry (and a similar time period for the comparison group). This study compares recidivism costs for the two groups over the 3 years. In addition, the evaluation examines the recidivism costs for participants at each of the sites by agency.

The 3-year follow-up period was selected to allow a large enough group of both drug court and comparison individuals to be representative of the program, as well as to allow more robust cost numbers through use of as long a follow-up period as possible (with as many individuals as possible having at least some time during the follow-up period that represented time after program involvement).

The outcome costs discussed below do not represent the entire cost to the state system or to society. Rather, the outcome costs include the criminal justice-related transactions for which NPC's research team was able to obtain outcome data and cost information. However, we believe that the costs represented capture the majority of criminal justice system costs. Outcome transaction costs were calculated using information from the Oregon Department of Corrections as well as the Circuit Court, District Attorney, Public Defender, Sheriff's Office, Community Corrections, and multiple local police departments located in the following nine sites—Benton, Clackamas, Jackson, Josephine, Malheur, Marion, Multnomah, Union, and Washington counties. The unit cost of each outcome transaction was then averaged across the nine counties and applied to recidivism data for drug courts statewide (the remaining 10 sites, which include Clatsop, Crook, Douglas, Jefferson, Klamath, Lane, Linn, Polk, Wasco, and Yamhill counties). Recidivism data for Lincoln County and Umatilla County were only available for 2 years from the time of program entry, so these two sites were not included in the 3-year outcome analysis.

Outcome Transactions

The cost of an **Arrest** is generally gathered from representatives of the law enforcement agency (or agencies) involved. The cost per arrest incorporates the time of the law enforcement positions involved in making an arrest, law enforcement salaries and benefits, support costs and overhead costs. In Oregon, the cost of a single arrest ranged from \$147.59 to \$231.71, with an average cost of **\$206.28**.

Court Cases include all court cases, including those cases that are dismissed as well as those cases that result in arraignment and are adjudicated. Court case costs are shared among the Circuit Court, the District Attorney, and the Public Defender. Using budget and caseload information obtained from the Oregon Office of Public Defense Services and information found online or from agency representatives, the cost of a Circuit Court case ranged from \$778.92 to \$3,255.32, with an average cost of **\$2,407.86**.

Probation is provided by each county's Community Corrections agency, which is sometimes a division of the Sheriff's Office. The statewide cost of probation was acquired from representatives of Community Corrections, using statewide budget and caseload information. The cost per person per day of probation is **\$8.11**.

Parole is also provided by each county's Community Corrections agency (sometimes a division of the Sheriff's Office). The statewide cost of parole was acquired from representatives of Community Corrections, using statewide budget and caseload information. The cost per person per day of parole is **\$12.34**.

Jail is provided by the Sheriff's Office or other county detention agency. Jail costs were acquired from representatives of those local agencies or from budgetary information found online. The cost of jail ranged from \$53.95 to \$150.00, with an average cost of **\$89.91**.

Local Control is when an offender with a prison sentence of 1 year or less serves his or her time in county jail instead of state prison. Local control costs used in this analysis were the same as the jail costs provided above, but costs were assigned to the Oregon Department of Corrections as it reimburses the county jail for the offender's time in local control. The cost of local control ranged from \$53.95 to \$150.00, with an average cost of **\$89.91**.

Prison is provided by the Oregon Department of Corrections. The statewide cost per person per day of prison is **\$84.46**, which was found on the Department's Web site.

Victimizations were calculated from the National Institute of Justice's *Victim Costs and Consequences: A New Look* (1996).¹³ The costs were updated to fiscal year 2010 dollars. **Property crimes** are **\$12,349** per event and **person crimes** are **\$40,004** per event. Victimization data was calculated only for the statewide average costs.

Outcome Cost Results

Table 8 provides the range of costs per participant and the average cost per participant (and per comparison group member) for each outcome transaction, based on outcome cost results from the Oregon adult drug court sites NPC evaluated.

¹³ The costs for victimizations were based on the National Institute of Justice's *Victim Costs and Consequences: A New Look* (1996). This study documents estimates of costs and consequences of personal crimes and documents losses per criminal victimization, including attempts, in a number of categories, including fatal crimes, child abuse, rape and sexual assault, other assaults, robbery, drunk driving, arson, larceny, burglary, and motor vehicle theft. The reported costs include lost productivity, medical care, mental health care, police and fire services, victim services, property loss and damage, and quality of life. In our study, arrest charges were categorized as violent or property crimes, and therefore costs from the victimization study were averaged for rape and sexual assault, other assaults, and robbery and attempted robbery to create an estimated cost for violent crimes, arson, larceny and attempted larceny, burglary and attempted burglary, and motor vehicle theft for an estimated property crime cost. All costs were updated to fiscal year 2010 dollars using the consumer price index (CPI).

Table 8. Recidivism (Outcome) Costs per Participant Over 3 years

Transaction	Drug Court outcome costs per participant		Comparison Group outcome costs per offender		Difference/Savings* per offender	
	Range	Average	Range	Average	Range	Average
Arrests	\$66 - \$359	\$235	\$127 - \$695	\$417	(-\$10) - \$337	\$182
Court cases	\$1,084 - \$2,832	\$2,745	\$1,686 - \$5,412	\$4,864	(-\$120) - \$3,309	\$2,119
Probation	\$499 - \$4,758	\$3,352	\$1,248 - \$5,092	\$3,689	(-\$2,413) - \$2,223	\$337
Parole	\$0 - \$1,565	\$343	\$22 - \$661	\$443	(-\$1,114) - \$520	\$100
Jail	\$745 - \$3,488	\$2,739	\$1,009 - \$5,775	\$4,852	(-\$120) - \$3,520	\$2,113
Local Control	\$0 - \$1,793	\$599	\$262 - \$1,915	\$967	(-\$738) - \$1,915	\$368
Prison	\$0 - \$6,893	\$3,148	\$954 - \$7,778	\$4,741	(-\$3,268) - \$4,177	\$1,593
Subtotal	\$3,421 - \$14,796	\$13,161	\$6,403 - \$23,893	\$19,973	\$85 - \$10,155	\$6,812
Victimizations	NA	\$16,962	NA	\$27,083	NA	\$10,121
Total	NA	\$30,123	NA	\$47,056	NA	\$16,933

*A negative difference means the drug court cost more than traditional court

Table 8 shows that the largest difference, or savings, in recidivism costs are due to fewer new court cases and less time in jail and prison for drug court participants in the 3 years after drug court entry. When victimization costs are included, the difference in costs jumps substantially with drug court participants costing a total of **\$16,933 less** than non-drug court offenders due to fewer victim crimes for participants.

Outcome Costs per Agency

Another useful way to examine recidivism costs is by agency. The transactions shown above are provided by one or more agencies. If one specific agency provides a service or transaction (for example, Corrections provides prison days), all costs for that transaction accrue to that specific agency. If several agencies all participate in providing a service or transaction (for example, the Circuit Court, District Attorney, and Public Defender are all involved in court cases), costs are split proportionately amongst the agencies involved. Table 9 shows the range of costs and the

average cost per participant (and per comparison group member) by agency, based on outcome cost results from the 20 Oregon adult drug court sites.

Table 9. Recidivism (Outcome) Costs per Participant by Agency Over 3 years

Agency	Drug Court outcome costs per participant		Comparison Group outcome costs per individual		Difference/Savings* per individual	
	Range	Average	Range	Average	Range	Average
Circuit Court	\$607 - \$1,551	\$1,537	\$944 - \$3,253	\$2,724	(-\$67) - \$1,989	\$1,187
District Attorney	\$196 - \$1,137	\$686	\$421 - \$1,699	\$1,216	(-\$30) - \$873	\$530
Public Defender	\$206 - \$526	\$522	\$320 - \$961	\$924	(-\$23) - \$586	\$402
Community Corrections	\$762 - \$4,764	\$3,695	\$1,597 - \$5,587	\$4,132	(-\$2,397) - \$2,665	\$437
Law Enforcement	\$812 - \$3,683	\$2,974	\$1,136 - \$6,223	\$5,269	(-\$130) - \$3,793	\$2,295
Corrections	\$0 - \$7,353	\$3,747	\$1,551 - \$9,693	\$5,708	(-\$2,231) - \$4,941	\$1,961
Subtotal	\$3,421 - \$14,796	\$13,161	\$6,403 - \$23,893	\$19,973	\$85 - \$10,155	\$6,812
Victimizations	NA	\$16,962	NA	\$27,083	NA	\$10,121
Total	NA	\$30,123	NA	\$47,056	NA	\$16,933

*A negative difference means the drug court cost more than traditional court

As demonstrated in Table 9, every criminal justice agency shows less cost for drug court participants due to lower recidivism. Law Enforcement (police/sheriff) and Correction (prison) show the largest amount of benefit due to drug court participation.

RECIDIVISM COSTS SUMMARY

Not including victimizations, the largest adult drug court participant recidivism cost is due to probation (an average of \$3,352, or 25% of the total recidivism cost) and prison (an average of \$3,148, or 24% of total recidivism cost). The largest outcome costs for the comparison group were due to new court cases (an average of \$4,864, or 24% of total costs) and jail (an average of \$4,852, or 24% of total costs). The largest outcome cost savings for the drug court group (when compared to the comparison group) was for court cases (an average of \$2,119, or 31% of total outcome cost savings) and jail (an average of \$2,113, or 31% of total outcome cost savings).

Drug court participants have less arrest, court case, probation, parole, jail, local control, prison, and victimization outcome costs than comparison group members. Table 9 shows that every agency is shown to benefit as a result of drug court.

The results from cost evaluations of 20 Oregon drug courts show an average 3-year outcome cost savings of **\$6,812** per drug court participant when compared to the comparison group. When victimizations are included, the outcome cost savings over 3 years increase from \$6,812 per participant to **\$16,933** per participant. The recidivism cost savings illustrated in Table 8 and Table 9 are those that have accrued in just the 3 years since drug court entry. Many of these savings are due to positive outcomes while the participant is still in the program. Therefore, it is reasonable to state that savings to the state and local criminal justice systems are generated from the time of participant entry into drug court.

If drug court participants continue to have positive outcomes in subsequent years (as has been shown in other drug courts NPC has evaluated, e.g., Carey et al., 2005; Finigan, Carey, & Cox, 2007) then these cost savings can be expected to continue to accrue over time, repaying the program investment costs and providing further savings in opportunity resources to public agencies. For example, if the 3-year cost findings are extrapolated out just 2 more years (to 5 years), the savings come to **\$28,222** per participant. When these findings are multiplied by the number of drug court participants that were included in this study (those offenders that entered drug court programs in the state between 2001 and 2006), the total cost savings comes to **\$159,595,410**. These findings indicate that drug court is both beneficial to participants and beneficial to Oregon taxpayers.

OVERALL COST SUMMARY – ARE DRUG COURTS IN OREGON COST BENEFICIAL?

The answer to this question is clearly YES. This is illustrated further in the cost-benefit ratio, below.

Cost-Benefit Ratio

Of particular interest to state and local policymakers is the cost-benefit ratio of these Oregon drug court programs; that is, the return on investment. In Oregon, the average investment cost in the adult drug court programs in this study was **\$18,696** per person. This investment, combined with the benefits due to positive outcomes results in a cost-benefit ratio of **1:1.5** after 5 years.

If the investment cost of business-as-usual is included this results in a “net investment” (the cost of drug court over and above the amount the system would spend on the same case anyway). The cost of drug court was about \$18,696, about double the cost of “business as usual” which was conservatively estimated at \$9,389. The 3 year benefit of drug court was \$16,933 including taxpayer and victimization costs. Therefore, there is a net benefit to the public safety system of \$1.82 for each \$1 invested in drug court.

If other system costs were included, such as health care, welfare and employment system costs, this cost-benefit ratio might increase dramatically. For example, Finigan’s (1998) study of the STOP drug court in Multnomah County found a cost-benefit ratio of 1:10. That is, for every dollar spent on the program, \$10 was saved in public costs.

As discussed in the recidivism analysis results earlier in this report, the cost analysis is based on actual numbers of re-arrests, and not on the number of individuals being re-arrested, therefore the effect size for recidivism costs that is most relevant is that for number of re-arrests. These effect sizes did not decrease over time in this study. Similar results were found in other studies as well, up to 14 years after drug court participation (e.g., Finigan, Carey, & Cox, 2008). For this reason, any projected costs beyond the 3 years of administrative data that are the basis of costs for this study are not discounted based on reduced effect sizes over time.

Overall, the cost findings in this report indicate that drug treatment court is both beneficial to participants and beneficial to Oregon taxpayers. Taking into account the investment of \$18,696 per person, after 5 years, the **net taxpayer savings** for *just the cohorts included in the study* at these 20 drug court sites comes to \$56,550,000, nearly **\$57 million**.

Policy Question #2: What are Oregon Drug Court Best Practices?

As expressed earlier, one of the advantages of the approach to costs developed in this study is its ability to examine factors in the drug court setting that influence participant and program outcomes with the potential to determine promising or best practices. This section of the report describes the findings for practices in the 24¹⁴ drug courts that were related to positive outcomes including higher graduation rates, lower recidivism rates and higher cost savings.

The differences in these practices between sites are significant, and the potential vast for how these practices could influence participant success and system costs. This analysis is designed to assist the policymaker in assessing potential best practices as well as developing cost-beneficial practices.

The results below are structured within the 10 Key Components of drug court. Each of the Key Components is defined, and then those practices that were significantly related to graduation rate, recidivism rate, and cost savings are presented. “Cost savings” is defined as lower costs to the taxpayer due to lower recidivism-related outcomes for drug court participants compared to similar offenders who did not participate in drug court. Recidivism-related outcomes include re-arrests, time on probation, new court cases, and time served in jail and prison.

Table 10 shows the range in outcomes experienced by the 25 adult drug courts in this study including graduation rates, recidivism rates, program costs and recidivism costs. Recidivism rates and costs can vary widely between sites based on factors that have little to do with the program itself, such as the availability of the police to make arrests (e.g., fewer police may result in fewer arrests) and the cost of living in the area. For this reason, the recidivism and cost outcomes were normalized across programs by creating a “percent difference” between the drug court group and its comparison group for each outcome (with the exception of graduation rate). The percent difference in recidivism rate consists of the difference between the drug court participants and comparison group in the number of re-arrests divided by the number of re-arrests for the comparison group. The percent increase in program costs was calculated by subtracting the cost of the program from the cost of traditional court case processing divided by the traditional case costs. And the decrease in recidivism costs (i.e., increase in savings) was calculated by subtracting the drug court recidivism costs from the comparison group recidivism costs and dividing by the comparison group recidivism costs. The ranges and means for these percent differences are presented in Table 10.

¹⁴ As described earlier in this report, there were four drug courts that had available data on graduation rates, recidivism and costs from other, previous studies.

Table 10. Outcome Measures Range and Mean Across 24 Adult Drug Courts

	Range	Average
Graduation rate	15%-73%	46%
Percent decrease in recidivism (effect size for number of re-arrests)	-6% - 67%	44%
Percent decrease in recidivism costs (or increase in cost savings)	-7% to 58%	29%

As shown in Table 10, these outcomes ranged widely across programs. Graduation rate went from a low of 15% to a high of 73%. The percent decrease (or improvement) in recidivism (the difference between the drug court and comparison group) went from a low of -6% (the comparison group did slightly better than the drug court group) to a high of 67% (the drug court group did substantially better than the comparison group). However, the average decrease in recidivism across all courts was positive at 21%. Finally, the cost savings generated from reduced recidivism and recidivism-related resources (e.g., jail, probation, prison) ranged from -7% (the drug court outcomes cost more than the non-drug court comparison group) to 58% (the drug court program outcomes cost substantially less than non-drug court outcomes). The average recidivism costs for these courts showed substantial savings with the drug court group costing 29% less than the comparison group, demonstrating an overall substantial savings to the Oregon taxpayer due to participation in drug court.

PROGRAM PARTICIPANT POPULATION CHARACTERISTICS IN RELATION TO OUTCOMES

When the outcomes in Table 10 are analyzed in relation to the characteristics of the participants population as described in Table 3 (at the beginning of the Results section) there are several interesting findings:

- Courts that have higher graduation rates are also more likely to have lower recidivism rates ($p < .05$) and higher cost savings ($p < .01$).

This implies that programs are graduating the appropriate individuals who have, indeed, changed their behavior.

- Programs with a higher percentage of Latinos have lower graduation rates (not significant) and significantly higher recidivism ($p < .05$).

These kinds of findings (particularly the graduation rates and recidivism) are similar to findings in other criminal justice and drug court research (e.g., Dannerbeck et al., 2006) and demonstrate a consistent issue that drug courts need to address. Together this information implies that programs have not yet figured out how to address the needs of non-White participants.

- Drug courts with a higher methamphetamine-using population have lower recidivism and higher recidivism cost savings ($p < .1$). Other drugs of choice (e.g., cocaine, heroin and

alcohol) have relatively less positive outcomes, though programs with alcohol users did have significantly better recidivism costs.

This supports the idea that individuals with methamphetamine addiction respond particularly well to the contingency management techniques (Petry & Stitzer, 2002; Prendergast, Podus, Finney, Greenwell, & Roll, 2006) used in the drug court model.

The above findings provide important information to drug court programs in understanding how their participant population shapes their outcomes and how they may need to adjust their practices to help enhance the success of their participants and their programs.

KEY COMPONENT #1: DRUG COURTS INTEGRATE ALCOHOL AND OTHER DRUG TREATMENT SERVICES WITH JUSTICE SYSTEM CASE PROCESSING.***Key Component #1: Description***

The focus of this key component is on the integration of treatment services with traditional court case processing. Practices that illustrate an adherence to treatment integration include the role of treatment provider in the drug court system and collaboration of all the agencies involved in the program.

- What is the role of the treatment provider on the drug court team? Is a treatment representative included as part of the team? Do treatment representatives regularly attend drug court meetings where participant progress is discussed? Does a treatment provider attend drug court sessions?
- Is there a single treatment provider or multiple providers? While this is partly a reflection on the size, geographic location and economics of the service area, the number of providers also determines the lines of communication that must be established. Generally, it is easier to develop a closer connection with one agency as compared to several.
- Is there a central intake being used to manage assessments and referrals?
- What are the methods and consistency by which treatment providers are communicating with the court system? Is there regular reporting or only in response to a particular incident? Is communication formally written or verbal?
- What other agencies attend team meetings and drug court sessions? Also, what agencies are involved in referring participants to drug court? The act of referring participants may be an indicator of agency involvement in the program.

Key Component #1: What Are the Drug Courts in Oregon Doing?

Of the 24 adult drug courts that participated in this study all courts:

- Received participant referrals from the Prosecutor
- Reported that a Prosecutor, Defense Attorney, Probation representative, and Treatment representative were members of the drug court team
- Received verbal reports from the treatment provider on participant progress during team meetings
- Reported that treatment regularly shared information in a timely manner
- Reported that the judge and treatment representative attends all Drug Court sessions

The vast majority (at least 85% of those asked) of the 24 drug courts:

- Received participant referrals from the Defense Attorney and Probation
- Reported that a coordinator was part of the drug court team
- Reported that the Prosecutor, Defense Attorney, Probation, and Coordinator always attend team meetings
- Reported that Probation and the Coordinator attend Drug Court sessions regularly

- Included the Defense Attorney, Prosecutor and law enforcement at drug court sessions
- Communicated with the treatment providers verbally during court sessions
- Communicated with the treatment providers through verbal and written progress reports
- Reported that a treatment representative attended policy meetings

The 24 courts varied in some practices under Key Component #1, with 15% or more of the courts performing some practices differently than other courts. These include those practices presented in Table 11.

Key Component #1: How do These Practices Impact Outcomes?

The main focus of these analyses was to determine what drug court practices were related to higher graduation rates, lower recidivism and higher cost savings. It is important to note that many practices that fell under Key Component #1 did not vary much between drug courts in Oregon. If all courts perform the same practice, it is not possible to determine whether courts that perform that practice have better outcomes than courts that do not, therefore, for all those practices that did not vary across these 24 Oregon drug courts, we cannot answer the question of whether those practices are important for better outcomes in Oregon. However, there are national studies of drug courts that do answer some of these questions and where relevant, these results are discussed in this report.

Analyses of those practices that did vary across the Oregon drug court sites yielded multiple practices that were significantly related to program outcomes. Table 11 provides the results for practices that varied sufficiently across programs to be included in a valid analysis of outcomes.

Table 11. Key Component #1: Practices and Outcome Results

KC #1 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower costs/higher savings
Team members			
A representative from Law Enforcement is a member of the drug court team	N	Y*	N
Attendance at team meetings where participant progress is discussed			
All team members attend team meetings where participant progress is discussed (pre-court meetings/staffings)	N	Y*	Y
Law Enforcement and Treatment both regularly attend staffing (pre-court team meetings)	N	Y*	N
Law Enforcement regularly attends drug court team meetings (pre-court staffings)	N	Y***	Y
Case Manager regularly attends drug court team meetings (pre-court staffings)	Y**	Y*	Y
Drug Court session attendance			
Case Manager attends drug court sessions	Y**	N	Y
Law Enforcement attends drug court sessions	Y***	Y	Y
Bailiff attends drug court sessions	N	Y*	N
Policy meetings			
Team meets on a quarterly basis to discuss policy issues	Y	N	N
Communication			
Treatment Provider communicates with team via email	N	Y***	Y

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels.

* = trend (p<.15)

** p < .1

*** p < .05

Table 11 reveals that including a law enforcement representative (i.e., police or sheriff) as a member of the drug court team is significantly related to reduced criminal recidivism and associated outcome costs. Table 11 also shows that having all team members attend team meetings and drug court sessions is related to significantly better outcomes including higher graduation rates, lower recidivism and greater cost savings. Courts that included law enforcement as an active member of the team had significantly better graduation rates, lower recidivism rates, and greater cost savings. These results support similar findings from other studies (Carey, Finigan, & Pukstas, 2008; Carey et al., 2006; Carey & Perkins, 2008; Carey, Finigan, & Mackin, in process) including positive outcomes for drug courts that have all team members attend team meetings and drug court sessions.

This illustrates the importance of the collaborative nature of the drug court model. Having all team members at staffing meetings allows immediate communication of information from the perspective of multiple agencies, resulting in decisions in the best interest of the participant based on more complete and holistic information. Further, having a treatment provider at drug court sessions assists communication with the judge and the rest of the drug court team; the provider is immediately available to answer questions brought up between the participant and the team. Although much of this communication can occur at team meetings, this does not allow for a dialogue between judge, participant and treatment provider that can happen in the court room.

In addition, Table 11 shows that programs that had team meetings to discuss policy issues on a quarterly basis (at least 4 times per year) had significantly higher graduation rates. It is important for teams to take time to review their policies regularly to ensure that all team members are on the same page and that their policies and practices are consistent with best practices.

Finally, programs where treatment providers communicate with the team through email in addition to written and verbal reports had substantially lower recidivism and higher cost savings. The ability to communicate with the whole team with one message and the ability to send the message immediately rather than waiting until a face-to-face meeting is possible allows the team to respond to participant behavior more swiftly and also to make better decisions based on more complete information.

Notice that in some cases, the difference in costs is significant while the difference in recidivism is not, or vice versa. Although to some extent, the costs are based on the number of re-arrests, the costs are also a measure of the time spent in prison, jail and on probation. This time served varies based on the severity of the crime committed. Therefore, the costs are actually a measure of the difference in severity of the crimes for each group. For example, if there is no significant difference in recidivism (# of re-arrests) but there is a significant difference in outcome costs, this implies that the drug court participants may have been re-arrested the same number of times as the comparison group, but they were re-arrested for less serious offenses

Key Component #1: Summary of Practices Related to Graduation Rate, Lower Recidivism and Higher Cost Savings

Key Component #1: Highlights of Practices Related to Improved Outcomes

- 1. Drug courts that included law enforcement on the drug court team had 33% less recidivism.** Law enforcement has the unique ability to see clients out on the street that is generally not available in the same way to other members of the team, and this information can help inform team decisions on their response to participant behavior. In addition, law enforcement can act as security, allowing more home visits which are an important component of the supervision of drug court clients. Law enforcement agency support of the program can also increase referrals into the program as they are able to identify potential participants at the time of the arrest.
- 2. The attendance of all team members at staffing meetings was highly related to positive program outcomes. In particular, drug court that had both law enforcement and treatment attendance at these meetings had half the recidivism and 25% higher cost savings compared to courts that did not have both team members attend.** This illustrates the importance of the combined perspective of criminal justice and treatment in making good team decisions that result in positive client behavior change.
- 3. Programs that had at least 6 team members attend staffing had less than half the recidivism.** The more team members that attended staffing, the better the participant outcomes. This demonstrates that high team involvement and collaboration leads to better outcomes.
- 4. The attendance of team members at court sessions is also highly related to positive program outcomes. Drug courts where the judge, coordinator, both attorneys, probation, treatment and law enforcement attended court sessions had less than half the recidivism and 25% higher cost savings. Drug courts where law enforcement attended court sessions had graduation rates 15% higher and less than half the recidivism.** Court sessions are where final decision are made on incentives and sanctions. The ability of the judge to have immediate feedback and information from the team is invaluable in making and imparting good decisions that impact participant behavior. In addition, court sessions are where participants can observe team solidarity and see the team (a large group of important individuals) working together on the participant's behalf. This can have a profound effect on participant behavior and belief in the system.
- 5. Drug courts where the treatment provider communicated with the team through email had 4 times lower recidivism and 33% higher cost savings.** The use of email provides at least two advantages over verbal or written reports. Communication can happen easily between meetings, allowing swifter follow-up on participant non-compliant behavior and the entire team can receive the information at once allowing better informed decisions.

KEY COMPONENT #2: USING A NON-ADVERSARIAL APPROACH, PROSECUTION AND DEFENSE COUNSEL PROMOTE PUBLIC SAFETY WHILE PROTECTING PARTICIPANTS' DUE PROCESS RIGHTS.

Key Component #2: Description

This key component is concerned with the balance of three important areas. The first is the nature of the relationship between the prosecution and defense counsel in drug court. Unlike traditional case processing, drug court case processing favors a non-adversarial approach. The second focus area is that drug court programs remain responsible for promoting public safety. The third focus area is the protection of the participants' due process rights.

Drug court practices related to this key component include the roles of both the prosecution and defense attorneys. Do both members regularly attend drug court sessions, team meetings, steering or advisory meetings? Is there a specific attorney from each office dedicated to the drug court or do the positions rotate?

Regarding public safety, what types of cases are referred to drug court? Does the drug court permit non-drug cases? Do they allow misdemeanor or felony charges or both?

Lastly, this component is concerned with due process rights. What are the incentives to an offender to join a drug court program? Is the participant being offered alternatives? Does the participant have to enter a plea before or after entry to drug court? Must the participant be amenable to treatment?

Key Component #2: What Are the Drug Courts in Oregon Doing?

Of the 24 adult drug courts that participated in this study all courts:

- Reported that a Prosecutor and Defense Attorney were members of the drug court team

The vast majority (at least 85% of those asked) of the 24 drug courts:

- Reported that the Prosecutor and Defense Attorney always attend team meetings and drug court sessions

These 24 courts varied in how they implemented other practices under Key Component #2 with more than 15% of the courts performing some practices differently than other courts. These include those practices presented in Table 12.

Key Component #2: How do These Practices Impact Graduation Rates and Other Outcomes?

Analyses of those Key Component #2 practices that did vary across sites yielded multiple practices that were significantly related to program outcomes. Table 12 provides the results for practices that varied sufficiently across programs to be included in a valid analysis of outcomes.¹⁵

¹⁵ It is important to keep in mind that for all those practices that did not vary across these 24 Oregon drug courts, we cannot answer the questions of whether or not those practices are important for outcomes. If a practice is not included on the list of those related to outcomes, this does not mean that the practice is not important, only that it is not measurable with these data.

Table 12. Key Component #2: Practices and Outcome Results

KC #2 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/ higher savings
The program is post-plea only	N	N	N
The program is pre-plea only	N	N	N
The program excludes offenders with current or prior violent convictions	N	N	N
The program allows other charges in addition to drug charges	N	Y**	N
The program allows both felonies and misdemeanors	Y**	Y	Y**

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels.

* = trend ($p < .15$)

** $p < .1$

*** $p < .05$

Because all Oregon drug courts reported that a prosecutor and defense attorney were members of the drug court team and attended team meetings and court sessions, it was not possible with this data to demonstrate whether the inclusion of attorneys was important for program outcomes. However, data from more than 100 drug courts nationally showed that the inclusion of both attorneys was significantly related to higher graduation rates, lower recidivism, and higher cost savings (Carey, Finigan, & Mackin, in process). Therefore, Oregon drug courts as a whole are following national best practices in terms of attorney involvement.

In addition, sometimes results that show no difference are as meaningful as the differences. In the case of practices that fall under Key Component #2, the fact that including participants with prior or current violence charges was not significantly related to outcomes is an interesting and important finding. This finding is consistent with findings nationally, and in California and with a larger sample of programs (Carey, Finigan and Pukstas, 2008; Carey and Waller, 2010; Carey, Finigan and Mackin, in progress). This indicates that individuals with prior violence are as likely to graduate and appear to recidivate at the same rate as those without prior violence. Further, accepting non-drug charges such as drug trafficking, property offenses and forgery was related to lower recidivism and accepting felonies as well as misdemeanors was related to higher graduation rates and larger cost savings. This is probably due to the greater impact intense drug court supervision and other services have on high-risk individuals. Since lower risk offenders are less likely to recidivate anyway, the difference between low-risk drug court participants and low-risk offenders who did not participate in drug court is not as substantial as the difference between high-risk drug court participants who do not recidivate as often as high-risk offenders who do not have the intensive supervision of drug court. This is an argument for expanding drug court eligibility to serve more high-risk offenders who could benefit from this type of intensive program.

Key Component #2: Summary of Practices Related to Graduation Rate, Lower Recidivism and Higher Cost Savings

Key Component #2: Highlights of Practices Related to Improved Outcomes

1. **Oregon drug courts are following best practices in including a prosecutor and defense attorney as members of the drug court team. In studies in other states, recidivism rates were 3 times lower for drug courts that included a prosecutor and courts that included a defense attorney as a member of the drug court team.** The prosecutor and defense attorneys, particularly when working as a non-adversarial members of the team, can provide a unique legal perspective and can also serve as a liaison with the DA's and Public Defender's offices, increasing support for the program in general. Participation of the drug court attorneys, both prosecution and defense, in team meetings and at drug court sessions had a positive effect on graduation rate and on outcome costs.
2. **Including participants with prior or current violence charges *did not* relate to program outcomes.** This indicates that these programs are equally effective for participants with prior violence as those without prior violence.
3. **Accepting non-drug charges such as drug trafficking, property offenses and forgery were significantly related to lower recidivism.** This finding and the one above supports an argument for expanding drug court eligibility to serve more high risk offenders who could benefit from this type of intensive program.

KEY COMPONENT #3: ELIGIBLE PARTICIPANTS ARE IDENTIFIED EARLY AND PROMPTLY PLACED IN THE DRUG COURT PROGRAM.***Key Component #3: Description***

The focus of this key component is on the development and effectiveness of the eligibility criteria and referral process. Different drug courts allow different types of criminal histories. Has the drug court defined their eligibility criteria clearly? Are these criteria written and provided to the individuals who do the referring? It is also of interest how the drug court determines if a client meets these criteria. While drug courts are always targeting clients with a substance use problem, the drug court may or may not use a substance abuse screening instrument to determine eligibility. The same may apply to mental health screens. A screening process that includes more than just an examination of legal eligibility may take more time but may also result in more accurate identification of individuals who are appropriate for the services provided by the drug court.

Related to the eligibility process is how long it takes a drug court participant to move through the system. The goal is to implement an expedient process. How much time passes between arrest and drug court entry? Who is involved in the referral process? Is there a central intake for treatment for expedient placement in the program? Also, what is the program's capacity? Capacity may reflect the needs of the community and the resources available to the drug court. In some service areas, there are more eligible participants than there are available drug court slots.

Key Component #3: What Are the Drug Courts in Oregon Doing?

Of the 24 adult drug courts that participated in this study all:

- Reported that they performed a full drug and alcohol assessment to determine level of care

The vast majority (over 85%) of these 24 drug courts:

- Reported felony charges and property charges as eligible for the program
- Allowed participants with dual-diagnoses into the program
- Have written eligibility requirements
- Reported that participants must be amenable to treatment
- Reported average number of days from arrest to program entry greater than 40 days
- Received participant referrals from the Defense Attorney, Prosecutor, and Probation

The 24 courts varied in some practices under Key Component #3 with more than 15% of the courts performing some practices differently than other courts. These included the practices listed in Table 13.

Key Component #3: How do These Practices Impact Graduation Rates and Other Outcomes?

Analyses of those practices that varied across sites¹⁶ showed several practices within Key Component #3 that were significantly related to outcomes. In addition, several practices are *not* related to outcomes that are somewhat surprising.

¹⁶ It is important to note that if all courts perform the same practice, it is not possible to determine whether courts that perform that practice have better outcomes than courts that do not. If a practice is not included on the list of

Table 13. Key Component #3: Practices and Outcome Results

KC #3 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/ higher savings
Assessments			
Drug court uses a standardized assessment to determine eligibility	N	Y**	N
Drug court uses a substance abuse screen/assessment to determine eligibility.	N	Y	Y
Eligibility			
Misdemeanor charges are eligible for the program	Y***	N	N
Drug trafficking charges are eligible for the program	N	N	Y***
DUI charges are eligible for the program	Y***	N	N
Prostitution charges are eligible for the program	N	N	Y
Drug court excludes offenders who do not admit to having a drug problem	Y	Y***	N
Drug court excludes offenders who are on narcotic replacement therapy such as methadone	N	Y***	N
Drug court excludes offenders with serious mental health issues	N	R***	R***
Prompt placement			
All referring agencies have a copy of the eligibility requirements	Y**	N	Y
Program estimates 30 days or less between arrest and referral to the program	Y	Y**	Y**

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels

* = trend ($p < .15$)

** $p < .1$

*** $p < .05$

those related to higher graduation rates, this does not mean that the practice is not important, only that it is not measurable with this data.

Table 13 shows that using a standardized assessment to determine eligibility for the program is related to positive outcomes. In order for drug court programs to have a significant impact on participants, it is crucial that the participants are appropriately placed. Offenders who are not addicts or abusers and/or who are not high-need for rehabilitative services do not need the intensive supervision and services that drug courts offer. Marlowe et al. (2006) through a random assignment study demonstrated that participants that are low-risk and low-need actually got worse when placed in a intensive supervision and treatment services program and high-risk, high-need offenders placed in a low-intensity program also did worse. Programs that accept participants without an assessment to determine appropriateness for the level of services in their program can expect less positive outcomes.

Allowing misdemeanors in the program significantly increased program graduation rate but did not impact recidivism or costs. One explanation for this is that participants with misdemeanor charges may be lower risk and therefore may be more likely to graduate, but have less of an impact on recidivism and cost because they are unlikely to recidivate anyway, even if they did not participate in the program.

Conversely, allowing offenders with drug trafficking charges into the program has no impact on graduation rate or lower recidivism but is significantly related to higher cost savings. Although some team members, particularly prosecutors, are concerned that allowing offenders with drug trafficking charges into the program threatens public safety, others believe that drug trafficking is a good indicator of an offender with a serious drug problem and that all drug offenders that use regularly will also pick up drugs for their friends or neighbors, and that it is not an indication of selling. The results from this study show that allowing drug trafficking actually protects public safety significantly better (as demonstrated by the significantly lower recidivism rate) and results in greater savings of taxpayer funds. Programs that exclude these offenders should consider the benefits of expanding their eligibility criteria.

Programs that allow offenders with DUI charges had significantly higher graduation rates, but had no difference in recidivism or costs. In many cases, DUI offenders are a different, more highly functioning, population than offenders who use other drugs. This may contribute to better graduation rates, while not having a noticeable impact on recidivism or costs (since, aside from chronic DUI offenders, most DUI offenders do not offend again). Other studies have indicated that mixing DUI offenders with other drug offenders results in poorer outcomes for the DUI offenders (Marlowe, 2010) though these results of this study do not support that.

Programs that excluded participants that were on narcotic replacement therapy, such as methadone, had significantly lower recidivism. However, it is likely that this is more an indication of excluding heroin users, since heroin is a notoriously difficult addiction to treat successfully, and not an indication that the use of methadone is contraindicated. In fact, the use of agonist medications, such as methadone, have been confirmed as an evidence-based practice in the successful treatment of drug dependence (e.g., Gold & Brady, 2003).

Surprisingly, excluding participants with serious mental health issues was related to *higher* recidivism. That is, allowing participants with serious mental health issues was related to significantly decreased recidivism. Many drug court programs report that they are not prepared to treat individuals with mental health issues, particularly those the program considers serious enough that the participant is not able to understand or comply with program requirements. However, in spite of this concern, Oregon's drug courts appear to do very well with these participants. It is possible that these programs are well aware of the issues that face individuals with serious mental health

difficulties and are using appropriate (and effective) treatment techniques that are better than what is done in the traditional court system for these types of offenders.

Prompt placement in the program is one of central tenants of Key Component #3. Analyses for these Oregon drug courts showed that drug courts that expect participants to be referred to the program within 30 days of arrest (or violation) have higher graduation rates, lower recidivism and higher cost savings. The positive outcomes associated with faster program entry provide further evidence for the argument that it is important to “strike while the iron is hot.” Participants may be more ready to change when faced with the negative consequences of engaging in drug abuse and other criminal behavior such as being arrested and spending time in jail.

Finally, drug courts that reported that all agencies that referred to the program had a copy of the eligibility requirements had significantly higher graduation rates. When the referring agencies have a good understanding of the eligibility requirements they are better able to refer appropriate participants and better able to refer them swiftly.

Key Component #3: Summary of Practices Related to Graduation Rate, Lower Recidivism and Higher Cost Savings

Key Component #3: Highlights of Practices Related to Improved Outcomes

1. **Drug courts that used a standardized assessment to determine eligibility for the program had 40% lower recidivism.** In order for drug court programs to have a significant impact on participants, it is crucial that the participants are appropriately placed in the needed level of services.
2. **Drug courts that allowed participants with drug trafficking charges into the program had nearly 40% high savings in taxpayer dollars.** Results from this study show that allowing drug trafficking actually protects public safety significantly better (as demonstrated by the significantly lower recidivism rate) and results in greater savings of taxpayer funds. Programs that exclude these offenders should consider the benefits of expanding their eligibility criteria.
3. **Excluding participants with serious mental health issues was related to *higher* recidivism.** That is, allowing participants with serious mental health issues was related to significantly decreased recidivism. In spite of concern about the availability of appropriate treatment, Oregon’s drug courts appear to do very well with these participants. It is possible that these programs are well aware of the issues that face individuals with serious mental health difficulties and are using appropriate (and effective) treatment techniques that are better than what is done in the traditional court system for these types of offenders.
4. **Courts that expected the time from arrest to program referral to be no more than 30 days had recidivism rates 37% lower and taxpayer savings 43% higher than those that expected a longer time period.** The positive outcomes associated with faster program entry provide further evidence for the argument that it is important to “strike while the iron is hot.”

KEY COMPONENT #4: DRUG COURTS PROVIDE ACCESS TO A CONTINUUM OF ALCOHOL, DRUG AND OTHER TREATMENT AND REHABILITATION SERVICE.***Key Component #4: Description***

The focus of this key component is on the drug court's ability to provide participants with a range of treatment services. Success under this component is highly dependent on success under the first component (i.e., ability to integrate treatment services within the program). Compliance with Key Component #4 requires having a range of treatment modalities or types of service available. In addition, the continuum of care for drug courts includes phases, so that as a participant improves, the level of treatment can be decreased to match his or her needs. Finally, appropriate treatment includes the appropriate length of stay.

Drug courts have decisions about how wide a range of services to provide.

- What types of services are offered? Does this include individual, group, and self-help meetings? Does it include evidence-based treatment practices? What is the extent of the services offered as part of drug court? Is relapse prevention a regular part of the curriculum?
- The drug court may also prescribe the intensity or frequency of these services.
- The number of phases and expected length of stay in treatment differs between programs. How many phases are best and how long should participant time in the program be for the best outcomes?

Besides relying on traditional drug treatment services, the program may seek to include wrap-around and habilitation services. Examples of common wrap-around services include vocational training, parenting classes and health services, as well as other life skills services. This can be provided through drug court staff or through relationships with community partners. Some also extend the continuum of care to include aftercare.

Key Component #4: What Are the Drug Courts in Oregon Doing?

Of the 24 adult drug courts that participated in this study, all:

- Reported that probation performed case management
- Provided participants with outpatient group and outpatient individual treatment
- Provided participants with self-help and employment services
- Required AA/NA or other self-help meetings for participants
- Included a phase when participants learn relapse prevention and otherwise are prepared for leaving the program

The vast majority (over 85%) of these 24 drug courts:

- Reported that probation performed home visits
- Reported that treatment performed case management
- Had one treatment agency or a single overseeing agency
- Required group treatment for participants in Phase I at least twice per week
- Provided gender specific, residential, mental health, and psychiatric treatment services

- Offered parenting, anger management, job training/ vocational assistance, health education, family/domestic relations counseling, GED/educational assistance, and housing services to participants
- Expected the program to take at least 1 year to complete

The 24 courts differed in some practices under Key Component #4, with more than 15% of the courts performing some practices differently than other courts or not performing some practices at all. The practices that differed between courts included those listed in Table 14.

Key Component #4: How do These Practices Impact Graduation Rates and Other Outcomes?

Analyses of those practices that varied across sites¹⁷ showed several practices that were significantly related to one or more of the outcomes measured.

Table 14. Key Component #4: Practices and Outcome Results

KC #4 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
Treatment and Services Offered			
Health Care	Y	Y*	Y
Dental Care	Y	Y**	Y
Prescription drugs for substance abuse treatment	Y	Y	N
Culturally specific	Y*	N	N
Childcare	Y**	N	Y
Transportation	N	Y	N
Treatment performs home visits	Y***	N	N
Coordinator performs home visits	N	Y***	Y
Phases			
Program has 4 phases	N	Y**	Y
Alumni			
Drug court has an alumni group that meets regularly after graduation	N	Y	Y
Drug court has an alumni group that provides support for current participants	N	Y	Y

¹⁷ It is important to note that if all courts perform the same practice, it is not possible to determine whether courts that perform that practice have better outcomes than courts that do not. If a practice is not included on the list of those related to higher graduation rates, this does not mean that the practice is not important, only that it is not measurable with this data.

KC #4 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
Treatment Contract			
Alcohol and drug treatment providers are directly contracted with court	Y	Y***	Y**

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels.

* = trend ($p < .15$)

** $p < .1$

*** $p < .05$

Wrap-around services such as health care, dental care, prescription drugs for substance abuse treatment, transportation, and childcare were related to higher graduation rates and lower criminal recidivism. Health and dental care were also related to higher cost savings, indicating not only a decrease in re-arrests but also decreased use of related criminal justice resources such as jail, probation and prison. Many drug court participants come from a population of individuals who have never learned how to obtain/maintain employment or balance a checkbook, and therefore need significant habilitative care. These results suggest that those programs that are able to provide wrap-around, habilitative services contribute significantly to participant success both within the drug court and after the program.

It is important to emphasize that population-specific services and other wrap-around services (e.g., gender specific, mental health, and language/culturally specific treatment sessions, parenting classes, prenatal classes, family counseling, GED/education assistance, employment assistance and housing assistance) are considered evidence-based and have been linked to optimal treatment outcomes. For example, women use drugs for different reasons than men, they often face challenges in mothering and child care different than men, and they often have histories of sexual and physical abuse that make gender-specific treatment an important vehicle to successful outcomes for women.

Home visits performed by treatment and the coordinator were related to higher graduation rates, lower recidivism, and greater taxpayer savings. Home visits by treatment and the coordinator, who are not associated with law enforcement or supervision, allow an important check on participants for supervision purposes while helping participants feel more comfortable with having visits to their home. It may also help participants feel more strongly that the drug court team is working together and truly cares about the participants' welfare which could contribute to participants working harder in the program.

Programs with four phases had better outcomes than programs with fewer phases or more phases. It is unclear why this number is better than others. It is possible that fewer phases do not provide participants with a feeling that they are making progress in a reasonable amount of time, while more phases may appear too long or complicated to complete.

Although the results were not significant, programs that had alumni groups that met regularly after graduation and that assisted current participants had substantially lower recidivism and

greater cost savings. The presence of an active alumni group denotes a program that has significantly impacted participant lives and helped participants see the importance of giving back. This continued support can be invaluable to participants who need help maintaining their sobriety after leaving the structure of the program and also gives hope to participants who are struggling to complete the intensive requirements of the program.

Almost all drug courts in Oregon had a minimum program length of 12 months or more, so it was not possible to measure whether programs that have a shorter minimum length would have better or worse outcomes. However, results from a national study (Carey, Finigan, & Mackin, in process) showed that drug courts whose participants spend an average of 12 or more months in the program had significantly higher graduation rates and lower recidivism. A longer time in the program generally means a longer time in treatment and allows participants more time to stabilize and gain practice in performing healthier and more structured behaviors.

Drug courts that had a treatment contracted directly with the program had significantly better outcomes. This result may be due to a stronger relationship between the providers and the court when there is a direct contract. These treatment providers may be more likely to adjust their services to fit the drug court population specifically, rather than treating them with other types of populations. This also may be somewhat related to the number of treatment agencies that work with the program.

Most of Oregon drug courts had a single treatment agency, or single overseeing treatment agency. A study of 18 drug courts across the nation (Carey, Finigan, & Pukstas, 2008) demonstrated that drug courts that used a single treatment agency, or a single agency that provides oversight to all treatment rather than multiple separate treatment agencies, had higher graduation rates and lower recidivism. Drug courts that used a single treatment agency had 12 times greater cost savings (due to decreased recidivism) than drug courts that used multiple treatment agencies. A single treatment agency (that provides all treatment modalities, or oversees the treatment at other agencies for the drug court) tends to lead to more consistent communication between the court and treatment and a better understanding of and support for the drug court model by the treatment provider. In addition, NPC has observed that in drug courts with a single treatment agency, the judge and the rest of the drug court team tend to learn more from the treatment provider about addiction and treatment. Multiple treatment agencies can be more difficult to coordinate and are also less likely to adjust their services to best fit the special needs of drug court participants who have legal issues as well as substance abuse issues. Further, courts with a single treatment provider may be able to negotiate a contract that allows for lower rates for their drug court participants. However, depending on the size of the drug court jurisdiction, the geographic location of treatment providers and participants, and the availability of treatment services in the program jurisdiction, it may not be possible to have a single treatment agency. In these cases it is important to work toward a high level of communication and commitment between the court and the treatment providers.

A key aspect of the treatment system that needs further study is the coordination between treatment providers and the drug court. Lutze and van Wormer (2007, p. 228) assert that it is the “union between treatment and accountability” that makes drug courts so effective. Neglecting the treatment half of the equation may be responsible for the failure of a good number of drug court participants to graduate. Lutze and van Wormer stress that the main challenges to a strong union are strengthening the collaboration between treatment and criminal justice agencies and providing appropriate treatment (e.g., by race, culture, gender, drug of choice, socioeconomic status) that promotes behavior change among offenders.

Key Component #4: Highlights of Practices Related to Improved Outcomes

1. **Drug courts that provided wrap-around services such as health and dental care had recidivism rates that were up to 40% lower than courts that did not offer these services. Drug courts that provided culturally specific services had graduation rates that were more than 12 percentage points higher.** It is important to emphasize that population-specific services and other wrap-around services are considered evidence-based and have been linked to optimal treatment outcomes.
2. **Programs where treatment providers performed home visits had graduation rates 15 percentage points higher graduation rates and those that had the coordinator perform home visits had almost half the recidivism and 33% higher cost savings.** Having treatment and the coordinator, who are not associated with law enforcement or supervision, allows an important check on participants for supervision purposes while helping the participants feel more comfortable with having visits to their home.
3. **Programs with 4 phases had 36% lower recidivism and 25% great taxpayer savings.** It is possible that fewer phases do not provide participants with a feeling that they are making progress in a reasonable amount of time while more phases may appear too long or complicated to complete.
4. **Programs that had alumni groups that met regularly after graduation and that assisted current participants had 25% lower recidivism and 35% greater cost savings.** This continued support can be invaluable to participants who need help maintaining their sobriety after leaving the structure of the program and also gives hope to participants who are struggling to complete the intensive requirements of the program.
5. **Drug courts that had treatment agencies or providers directly contracted with the program had nearly half the recidivism and 40% greater taxpayer savings.** This result may be due to a stronger relationship between the providers and the court when there is a direct contract. These treatment providers may be more likely to adjust their services to fit the drug court population specifically, rather than treating them with other types of populations.

KEY COMPONENT #5: ABSTINENCE IS MONITORED BY FREQUENT ALCOHOL AND OTHER DRUG TESTING.

Key Component #5: Description

The focus of this key component is on the use of alcohol and other drug testing as a part of the drug court program. This component encourages frequent testing but does not define the term “frequent” so drug courts develop their own guidelines on the number of tests required. Related to this component, the drug court must assign responsibility for these tests and the method for collection.

- Are tests administered on a random basis or for cause (such as the client appearing at a treatment session to be under the influence)?
- How frequently should drug courts be testing?

It is also important to understand the types of tests that drug courts are administering. Some may be more effective for encouraging abstinence than others. In addition, the tests vary in the amount of time required to generate results. Depending on the test administered, there may be a long time lapse from substance use until the drug court is informed of the results (and therefore a delay before the drug court can administer a treatment response or sanction). There is also no clear standard for how long participants must remain clean before they are able to understand the benefits of a clean lifestyle and consistently integrate the positive behavior changes into their lives.

- Are some tests more effective than others?
- How quickly should testing results be available to staff to be effective?
- How long should participants remain clean before graduating from the program?

Key Component #5: What Are the Drug Courts in Oregon Doing?

Of the 24 adult drug courts that participated in this study, all:

- Reported that they performed random drug testing
- Performed drug testing for cause (such as the participant appears under the influence)
- Performed drug tests at least once per week in Phase I
- Used urine drug testing (“urinalyses” or “UAs”)
- Did **not** use sleep monitors

The vast majority (over 85% of those asked) of these 24 drug courts:

- Did **not** use blood tests for drug testing.
- Did **not** use hair tests for drug testing
- Required participants to be clean for 90 days prior to graduation
- Reported having probation and treatment but **not** the court perform drug testing

The 24 courts differed in some practices under Key Component #5 with more than 15% of the courts performing some practices differently than other courts or some courts engaged in practices that others did not. These practices are listed in Table 15.

Key Component #5: How do These Practices Impact Graduation Rates and Other Outcomes?

Analyses of those practices that varied across sites¹⁸ showed several practices within Key Component #5 significantly related to outcomes. Frequent and random drug testing and rapid results are a foundation of contingency management, the most effective treatment model for a whole range of substances, especially methamphetamines and alcohol (Prendergast et al., 2006).

Table 15. Key Component #5: Practices and Outcome Results

KC #5 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
Type of Test			
Breathalyzer	Y***	N	N
Oral Swab	N	Y**	Y
Bracelet/tether	N	Y***	Y
Frequency of tests and speed of results			
In first phase, tests are collected 3 or more times per week	N	Y	Y
Drug test results are back in 48 hours or less	N	Y**	Y**

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels

* = trend (p<.15)

** p < .1

***p < .05

Table 13 shows that using a variety of different types of drug testing may be related to better outcomes. Programs that used a breathalyzer had significantly higher graduation rates, and the use of an oral swab and bracelet or tether was related to significantly lower recidivism and higher taxpayer savings. Drug testing outside of urine tests allows the program more intense supervision along with an increased possibility of catching drug use early. In addition, these other tests are less invasive and therefore possibly less stressful and embarrassing to participants.

The frequency of drug testing is related to positive outcomes. Programs that tested 3 times per week in the first phase had lower recidivism and greater cost savings (which means the programs that invest in frequent drug testing are likely to recoup that investment). Drug court participants report drug testing as one of the most effective techniques used for deterring use (Mackin et al.,

¹⁸ It is important to note that if all courts perform the same practice, it is not possible to determine whether courts that perform that practice have better outcomes than courts that do not. If a practice is not included on the list of those related to higher graduation rates, this does not mean that the practice is not important, only that it is not measurable with these data.

2008; Carey & Waller, 2007; Carey, Weller, & Heiser, 2003). More frequent (and random) drug testing makes it more difficult for participants to find times to use between tests.

Table 15 also shows that drug courts where drug test results are available to the team within 48 hours of taking the sample have significantly lower recidivism and higher taxpayer savings. Swifter test results mean the team can respond more swiftly to participant relapse, which results in more support for participants when they are most in need and a better understanding for participants of the consequences of their behavior.

Key Component #5: Highlights of Practices Related to Improved Outcomes

1. **Drug courts that tested 3 or more times per week in the first phase had 25% lower recidivism than drug courts that tested less often.** Drug court participants report drug testing as one of the most effective techniques used for deterring use. More frequent and random drug testing makes it more difficult for participants to find times to use between tests.
2. **Programs that get their drug test results back within 48 hours of taking the sample had less than half the recidivism and double the taxpayer savings compared to programs that wait longer for results.** Swifter test results mean the team can respond more swiftly to participant relapse, which results in more support for participants when they are most in need and a better understanding for participants of the consequences of their behavior.
3. **Drug courts that used a breathalyzer had double the graduation rates and programs that used an oral swab or a tether had half the recidivism.** Drug testing outside of urine tests allows the program more intense supervision along with an increased possibility of catching drug use early. In addition, these other tests are less invasive and therefore possibly less stressful and embarrassing to participants.

KEY COMPONENT #6: A COORDINATED STRATEGY GOVERNS DRUG COURT RESPONSES TO PARTICIPANTS' COMPLIANCE.***Key Component #6: Description***

The focus of this key component is on how the drug court team responds to clients' behavior during program participation, including how the team works together to determine an effective, coordinated, response. Drug courts have established a system of rewards, treatment responses and sanctions that determine the program's response to acts of both non-compliance and compliance with program requirements. This system may be informal and implemented on a case-by-case basis, or this may be a formal system applied evenly to all clients, or a combination of both. Who makes the decisions about the appropriate response to participant behavior? Drug court team members may meet and decide on responses, or the judge may decide on the response in court. Drug court participants may (or may not) be informed of the details on this system of rewards and sanctions so their ability to anticipate a response from their team may vary significantly across programs.

The drug court must also decide what constitutes an effective reward or sanction. Who can administer the rewards? Who can administer sanctions? Related to these decisions is how quickly a client will receive a reward or sanction after a behavior has occurred. Will these rewards and sanctions take place outside of the courtroom? If so, the rewards and sanctions can be administered more frequently than the court session schedule may allow.

Finally, the drug court must decide what amount of compliance results in the "ultimate incentive," graduation from the program. What are the requirements for graduation? How long should participants be "clean" before they can graduate? Should they be required to have a job or be in school? Must participants live in a sober living environment? Do participants need continued support after graduation?

Key Component #6: What Are the Drug Courts in Oregon Doing?

Of the 24 adult drug courts that participated in this study all:

- Dismissed or expunged the charge that led to drug court upon graduation
- Used intangible rewards such as applause in court
- Used written essays and increased drug testing as a response to non-compliant participant behavior

The vast majority (over 85%) of these 24 drug courts:

- Terminated probation early when participants graduated
- Used tangible rewards such as movie tickets and key chains
- Reported that participants know which behaviors lead to sanctions and rewards
- Discussed and decided upon sanctions as a group
- Imposed sanctions at the first court session after the non-compliant behavior
- Used community service, residential treatment, increased court appearances, and increased treatment sessions as possible sanctions
- Required sober housing prior to graduation

- Required a sobriety plan prior to graduation
- Required participants to pay all drug court and treatment fees in order to graduate

The 24 courts differed in some practices under Key Component #6, with more than 15% of the courts performing some practices differently than other courts or some courts engaged in practices that others did not. The practices that differed between courts are listed in Table 16 below.

Key Component #6: How do These Practices Impact Graduation Rates and Other Outcomes?

There were a very large number of practices that fall under Key Component #6. Analyses of those practices that varied sufficiently across sites found four practices that were significantly related to positive outcomes.

Table 16. Key Component #6: Practices and Outcome Results

KC #6 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
Guidelines			
Team members are given a copy of rules/guidelines for sanctions	N	Y	Y**
Participants are given a written list of possible sanctions	N	Y	Y**
Sanctions are imposed immediately after non-compliant behavior	N	Y***	Y
Jail is used as an alternative for detox or residential treatment when detox or residential treatment are unavailable	N	Y***	Y***
Incentives and requirements for graduation			
Jail or prison sentence for drug court case is not served if participants successfully complete the program	N	Y**	Y*
Participants must pay all court-ordered fines and fees in order to graduate	N	Y**	Y
Participants must have a job or be in school in order to graduate	N	Y**	Y
Participants must complete community service prior to graduation	N	Y	Y
Termination			
Any new arrest would prompt termination	N	R	R*

KC #6 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
Any new possession arrest would prompt termination	N	R***	R***
Missing treatment would prompt termination	N	R**	R
Positive drug tests would prompt termination	N	R**	R

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels

* = trend ($p < .15$)

** $p < .1$

*** $p < .05$

Drug courts that had written rules or guidelines regarding participant behavior and the team's response to that behavior had lower recidivism and significantly higher cost savings. In addition, ensuring that the team had a copy of the rules was related to lower recidivism and significantly higher cost savings, and giving the participants a list of the possible sanctions was also related to positive outcomes. Observations and interviews with program staff have revealed that teams that do not have possible rewards and sanctions written down have a tendency to "forget" about the variety of possible sanctions and rewards and just use a few standard responses. Frequently, the standard response is jail. Having written guidelines serves as a reminder to program staff of the range of possible responses, which allows the team to have more responses to choose from. The team can then better fit their responses to the participant so the reward or sanction is more meaningful, and therefore more likely to change participant behavior. Particularly if the participants also have an understanding of the sanctions that are possible or likely to happen.

Programs that imposed sanctions immediately after the non-compliant behaviors (in advance of regular court sessions) had significantly lower recidivism and higher taxpayer savings. This highlights the importance of a swift response to participant behavior. This demonstrates to the participants that the team is aware of what the participant is doing, that non-compliant behavior will not be tolerated and also makes the sanction more salient to the participants as it is closely connected to the inappropriate behavior.

Although using jail as an alternative to residential treatment is not an evidence-based practice, the results in Table 14 show that it can be an effective alternative when residential beds are not available. Programs that used jail when residential care was not available had significantly lower recidivism and significantly higher cost savings.

Programs that reduced or dismissed the jail sentence that participants that would have served for the case that led to drug court was significantly related to reduced recidivism and increased cost savings but, oddly, was not related to increased graduation rate. Avoiding jail time appears to be a powerful incentive for participants to engage in positive behavior change and avoid future recidivism. Perhaps the lack of connection to graduation rate is indication that there are other, more

important factors (such as habilitative and population specific services) that have greater impact on a participant's ability to succeed in the program.

Drug courts that require participants to pay program fees had significantly lower recidivism, and higher cost savings. Although this finding may seem counter-intuitive, it is possible that higher fees lead to better outcomes because people tend to find more value in something they have to pay for.

Programs that required participants to complete community service in order to graduate also had lower recidivism and greater taxpayer savings. Similar to the program fees, participants may find more value in a program that they have invested more time and energy into. And programs that require community service from the perspective of giving back to the community, rather than as a punishment, may also provide participants with a sense of self-worth that improves their success rate.

Similarly, requiring participants to have a job and be in school was also related to lower recidivism and greater cost savings. Participants that are in school or are working and have a steady income may have a greater sense of self-worth that may help them continue to succeed in the future. Also, the funds from employment and skills gained in school should reduce the need for participants to turn to criminal activities for their livelihood.

Because all the drug courts in this study used jail as a sanction to some extent, it was not possible to determine if jail is a best practice for these courts. However, in other research (Carey, Pukstas, Waller, & Finigan, 2008) the judicial use of jail (generally infrequent use and for shorter periods) has been associated with significantly lower recidivism rates. Conversely, it is important to note that other studies have also shown that the use of longer periods in jail (e.g., frequently using 1-week sanctions) was related to *lower* graduation rates and higher recidivism (Carey & Perkins, 2008; Carey, Finigan, & Mackin, in process). It is likely that the use of jail (at least large doses) does not always improve compliance with the program and, in fact, can make it difficult for participants to keep their jobs and ensure their children are cared for. Other types of sanctions or responses may be more meaningful to participants, such as community service that involves giving back to the community in a way that participants can see the clear benefit of their work. The use of large amounts of jail days has also been associated with higher termination rates (e.g., Carey, Marchand, & Waller, 2006).

Finally, these results show that some reasons courts reported for termination actually relate to higher recidivism and fewer savings. Programs that report terminating participants because of new arrests for possession or for any new arrest had significantly higher recidivism and significantly lower cost savings. It is possible these courts were letting go of participants too soon, as these new arrests may have been indication of the need for additional services and supervision, rather than a return to the traditional criminal justice system. Further, programs that terminated participants based on positive drug tests and missing treatment also had less positive outcomes. These findings require further research to determine how many positive drug tests would lead to termination, as well as how many missed treatment sessions. At some point, if participants are not engaged in the program and attending treatment, it is necessary for the program to remove these participants from the program.

Key Component #6: Highlights of Practices Related to Improved Outcomes

1. **Drug courts that had written rules or guidelines regarding the team's response to participant behavior and gave the team a copy of these guidelines had recidivism reductions of more than 25% and double the cost savings.** Having written guidelines serves as a reminder to program staff of the range of possible responses which allows the team to better fit their responses to the participant so the reward or sanction is more meaningful, and therefore more likely to change participant behavior.
2. **Drug courts that imposed sanctions immediately after the non-compliant behavior before the next scheduled court hearing had less than half the recidivism and nearly double the taxpayer savings.** A swift response to participant behavior demonstrates to the participants that the team is aware of what the participant is doing as well as making the sanction more salient to the participants as it is closely connected to the inappropriate behavior.
3. **Programs that reduce or dismiss the jail sentence for the drug court case as an incentive for graduation had 4 and a half times less recidivism and 3 times greater cost savings.** Avoiding jail time appears to be a powerful incentive for participants to engage in positive behavior change and avoid future recidivism.
4. **Programs that required participants to have a job or be in school in order to graduate had half the recidivism and 30% greater taxpayer savings.** Participants that are in school or are working and have steady source of income may have a greater sense of self-worth that may help them continue to succeed in the future. Also, the funds from employment and skills gained in school should reduce the need for participants to turn to criminal activities for their livelihood.
5. **Drug courts that require participants to pay program fees to graduate had 40% lower recidivism.** Although this finding may seem counter-intuitive, it is possible that higher fees lead to better outcomes because people tend to find more value in something they have to pay for.
6. **Programs that required participants to complete community service in order to graduate had 25% lower recidivism and 25% higher cost savings than programs that did not require community service.** Similar to the program fees, participants may find more value in a program that they have invested more time and energy into.
7. **Programs that report terminating participants because of new arrests for possession or for any new arrest had double the recidivism and half the cost savings.** Its possible these new arrests may be an indication of the need for additional services and supervision, rather than a return to the traditional criminal justice system

KEY COMPONENT #7: ONGOING JUDICIAL INTERACTION WITH EACH PARTICIPANT IS ESSENTIAL.

Key Component #7: Description

The focus of this key component is on the judge's role in drug court. The judge has an extremely important function for drug court in monitoring client progress and using the court's authority to promote positive outcomes. While this component encourages ongoing interaction, drug courts must still decide how to structure the judge's role. How often does the client interact with the judge in court? How involved is the judge with the client's case? Outside of the court sessions, the judge may or may not be involved in team discussions and staffing meetings.

Key Component #7: What Are the Drug Courts in Oregon Doing?

Of the 24 adult drug courts that participated in this study and were asked, all:

- Reported having the judge attend staffing meetings
- Reported that the judge speaks directly to participants during their court appearances

Of the 24 adult drug courts that participated in this study the vast majority (over 85%):

- Had judges assigned who volunteered for the drug court bench
- Had judges with indefinite terms
- Reported that the judge provides consistent follow-through on warning to participants

The remainder of the practices with regard to the judge's role and activities varied between courts. Over 15 % of the programs performed different practices than the other programs. These practices are listed in Table 17.

Key Component #7: How do These Practices Impact Graduation Rates and Other Outcomes?

Unfortunately, many of the programs included in this study did not respond to all the questions regarding the judge's role, therefore there were a relatively small number of practices that fall under Key Component #7 included in these results. Of those practices that had sufficient data, all but one were significantly related to positive outcomes.

Table 17. Key Component #7: Practices and Outcome Results

KC #7 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
Participants attend court sessions every 2 weeks in the first phase	N	Y	Y*
Participants attend courts sessions once per month in the last phase	N	Y*	Y***
Judge spends an average of 4 to 5 minutes per participant at court appearance	N	N	Y**

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels

* = trend ($p < .15$)

** $p < .1$

*** $p < .05$

Drug courts that required participants to attend drug court sessions once every 2 weeks tend to have lower recidivism and higher cost savings (at the trend level) than programs that require court sessions less often or more often. These findings are consistent with the findings in the national study in over 100 drug courts (Carey, Finigan & Mackin, in process). Court sessions as frequent as once per week may be more of a burden to participants than they are a benefit. The structure of a drug court program should support participants' ability to make the behavior changes to a healthier and more responsible lifestyle. Too much structure, or too many requirements, can undermine a participant's ability to keep a job, care for his/her children, or succeed in other ways. However, this analysis did not take into account participant risk level which could be a major factor in determining the most effective level of supervision. Marlowe et al. (2006) found that lower risk participants did better with less frequent court sessions while those at higher risk levels did better with more frequent drug court sessions.

Drug courts that required participants to attend court sessions no more than once per month in the last phase of the program had lower recidivism than courts that required participants to attend less often. Participants may appreciate the continued structure and ongoing contact with the judge as they prepare to graduate from the program. The positive interaction with the judge as they continue to do well may give participants the belief that they can continue to do well after leaving the program.

Finally, drug courts where the judge spends at least 4 to 5 minutes with each participant during court sessions had significantly higher cost savings than programs where the judge spends less time with participants. This is slightly more than the results from the national study that showed that an average of 3 minutes per participant was optimum (Carey, Finigan & Mackin, In Process). However, this may be due to the very small number of courts in this study that had this information available. Drug court participants at focus groups have stated that the role of the judge is key in their recovery. Having an authority figure in the judge's position giving them

positive feedback has made the difference for them in feeling like they can make it through the program and through life without drugs. Many participants will say that they are following the program requirements because they want to make the judge proud. Having the judge take the time with each participant to talk about their successes as well as their set-backs can be an important learning experience not only for the participant in front of the judge, but also for the participants looking on. The court room is an excellent place to have participants learn from example what kind of behaviors get rewarded, as well as what behaviors get punished.

The interaction of the drug court judge with participants is central to the drug court model. Attention should be given to the appropriate frequency of court sessions for optimum participant benefit as well as to judge assignment and training. (Training will be discussed further in Key Component #9).

Key Component #7: Highlights of Practices Related to Improved Outcomes

1. **Drug courts that required participants to attend drug court sessions once every 2 weeks had less than half the recidivism rates twice the cost savings.** Court sessions as frequent as once per week may be more of a burden to participants than they are a benefit. The structure of a drug court program should support participants' ability to make the behavior changes to a healthier and more responsible life style.
2. **Drug courts that required participants to attend court sessions no more than once per month in the last phase of the program had a third of the recidivism rate and more than twice the cost savings.** Participants may appreciate the continued structure and ongoing contact with the judge as they prepare to graduate from the program. The positive interaction with the judge as they continue to do well may give them participants the belief that they can continue to do well after leaving the program.
3. **Drug courts where the judge spends at least 5 minutes with each participants during court sessions had double the taxpayer savings compared to programs where the judge spends less time with participants.** Drug court participants at focus groups have stated that the role of the judge is key in their recovery. Many participants will say that they are going to treatment and choosing not to use because they want to make the judge proud. Having the judge take the time with each participant to talk about their successes as well as their set-backs can be an important learning experience not only for the participant in front of the judge, but also for the participants looking on.

KEY COMPONENT #8: MONITORING AND EVALUATION MEASURE THE ACHIEVEMENT OF PROGRAM GOALS AND GAUGE EFFECTIVENESS.***Key Component #8: Description***

This key component encourages drug court programs to monitor their progress toward their goals and evaluate the effectiveness of their practices. The purpose is to establish program accountability to funding agencies and policymakers as well as to themselves and their participants. Further, regular monitoring and evaluation provides programs with the feedback needed to make adjustments in program practices that will increase effectiveness. Monitoring and evaluation are assisted when the drug court maintains thorough and accurate records. Drug courts may record important information electronically, in paper files or both. Ideally, drug courts will partner with an independent evaluator to help assess their progress. Has the drug court program participated in an evaluation? Do they collect their own statistics? Lastly, it is important to determine how receptive programs are to modifying their procedures in response to feedback.

Key Component #8: What Are the Drug Courts in Oregon Doing?

There was much variation across drug courts across the practices within this component. Of the 24 adult drug courts that participated in this study there were no practices that all 24 performed consistently across programs.

Of the 24 adult drug courts that participated in this study the vast majority (over 85%):

- Reported having an electronic database
- Used the program's electronic database to enter and track treatment data

More than 15% of the courts differed on all of the remaining practices examined within Key Component #8.

Key Component #8: How do These Practices Impact Graduation Rates and Other Outcomes?

Analyses of those practices that varied across sites showed most practices within Key Component #8 were significantly related to outcomes. Table 18 lists the practices and outcome results.

Table 18. Key Component #8: Practices and Outcome Results

Kc #8 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
The results of program evaluations have led to modifications in the drug court operations	N	Y	Y**
Review of the statistics or regular reporting of program statistics has led to modifications in the drug court operations	N	Y**	Y***
Participant data are monitored to determine if the program is moving toward its goals	N	Y	Y**
Program has had an outside evaluator measure whether it is being implemented as intended	N	Y	Y

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels

* = trend ($p < .15$)

** $p < .1$

*** $p < .05$

Drug courts that used the results of program evaluation as well as regular review of their program statistics to make modifications in their drug court practices had lower recidivism and significantly higher cost savings.

In addition, drug courts that used their data to monitor whether their program was moving toward its goals and had an evaluator measure whether the program was implemented as intended also had lower recidivism and higher taxpayer savings.

These findings support the findings from studies in California and Missouri and nationally that show that evaluation and data monitoring can greatly assist programs in making improvements to their programs (Carey, Waller, & Weller, 2010; Carey & Perkins, 2008; Carey, Finigan, & Pukstas, 2008; Carey, Finigan, & Mackin, in process). The findings illustrate the importance of gaining feedback to enhance program practices over time. Programs that have not had evaluation, or have chosen not to use the evaluation feedback to enhance program practices, should reconsider the usefulness of including evaluation. Although it can be difficult, being open to changing old practices that may be ineffective may significantly improve participant outcomes. Further, evaluators should focus their efforts on how programs can improve their services rather than focusing on the problems or issues of the program under study. This will assist program staff in remaining open to evaluation and change to foster program improvements.

Key Component #8: Highlights of Practices Related to Improved Outcomes

1. **Drug courts that used evaluation feedback to make modifications to their drug court program had one-third the recidivism and double the cost savings compared to programs that did not make these adjustments or did not use an evaluator at all.** The use of evaluation and internal program statistics to modify program process shows a willingness to learn and adjust to new information to best serve program participants.
2. **Drug courts that used their own program statistics to make improvements to their program practices had half the recidivism and more than twice the cost savings compared to courts that did not perform this monitoring.** This illustrates the importance of gaining feedback to enhance program practices over time and that consistent monitoring and adjustment of practices can substantially improve participant and program outcomes.
3. **Drug courts that monitored their data to determine if their program was moving toward its goals had 33% lower recidivism and over 3 times the cost savings.** Programs that have not had evaluation, or have chosen not to use the evaluation feedback to enhance program practices, should reconsider the usefulness of including evaluation. Although it can be difficult, being open to changing old practices that may be ineffective may significantly improve participant outcomes.

KEY COMPONENT #9: CONTINUING INTERDISCIPLINARY EDUCATION PROMOTES EFFECTIVE DRUG COURT PLANNING, IMPLEMENTATION, AND OPERATIONS.

Key Component #9: Description

This key component encourages ongoing professional development and training of drug court staff. Team members need to be updated on new procedures and maintain a high level of professionalism. Drug courts must decide who receives this training and how often. This can be a challenge during implementation as well as for courts with a long track record. Drug courts are encouraged to continue organizational learning and share lessons learned with new hires.

Key Component #9: What Are the Drug Courts in Oregon Doing?

Of the 24 adult drug courts that participated in this study the vast majority (over 85%) reported that:

- The judge received formal drug court specific training in addition to training by previous drug court judges, through observing other courts and attendance at professional drug court related conferences
- The Defense Attorney, coordinator and treatment provider(s) received formal training
- Drug court staff received training specially about the target population including age, gender, ethnicity or drugs of choice
- Drug court staff have attended drug court-related trainings specific to their role on the drug court team
- Drug court staff have received training on strength-based philosophy and practices
- Drug court staff bring new information on drug court practices including drug addiction and treatment to staff meetings
- The judge, coordinator and treatment provider(s) have had training in the use of rewards and sanctions to modify the behavior of court participants

For a few practices more than 15% of the courts differed on each of the practices examined within Key Component #9. In these cases, some programs engaged in practices that others did not. The practices that differed between courts are listed in Table 19.

Key Component #9: How do These Practices Impact Graduation Rates and Other Outcomes?

There were only small number of practices within Key Component #9 that varied enough across programs for valid statistical analysis. These showed significant relationship to outcomes. Staff training should lead staff to engage in practices beneficial to participants and therefore impact graduation rates and longer term outcomes. Table 19 provides the results of the analysis of practices that fall under Key Component #9.

Table 19. Key Component #9: Practices and Outcome Results

KC #9 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
The judge received training from previous drug court judges	Y*	Y	Y*
Probation was formally trained on drug court model	N	Y	Y
New team members get formal drug court specific training or orientation	N	Y***	Y
Drug court staff members have received training on strength-based philosophy and practices	N	Y	Y***

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels

* = trend ($p < .15$)

** $p < .1$

*** $p < .05$

Drug courts where the judge received training from previous drug court judges had higher graduation rates, lower recidivism and greater taxpayer savings than courts where previous judges did not train the new judge. Oregon's drug court programs reported that they trained most team members on the drug court model, though probation was trained less often. Programs that did train probation staff members had lower recidivism and higher cost savings. Nationally, programs that engaged in staff training on the drug court model had higher graduation rates, lower recidivism rates and higher cost savings than drug courts that did not train staff formally (Carey, Finigan, & Pukstas, 2008). A good understanding of each team member's role and the goals of drug court allows the program to operate much more smoothly.

Drug courts that trained new staff prior to, or soon after, they started work had lower recidivism than drug courts and higher cost savings than programs that did not train new staff. These results support previous research that shows a significant connection between formal training for new staff and positive outcomes (Carey, Finigan, & Pukstas, 2008). Allowing time for new staff to learn about their role and tasks before beginning work will allow them to "hit the ground running" rather than attempting to do the job while learning about the job.

Drug courts that trained staff on strength-based philosophy had lower recidivism and significantly greater taxpayer savings. A strength-based approach focuses on individuals' skills and positive actions in addition to risk factors, rather than focusing solely on risk. This is a very motivating approach to treatment that promotes behavior change in positive directions and is extremely compatible with the drug court model.

Each member of a drug court team has its own unique role and tasks in the program. It is important for all members of the team to understand their own role and how to perform it in an opti-

imum way. The results for Key Component #9 highlight the importance of training and experience for drug court staff. Training staff, particularly when all team members are included, results in more positive outcomes. Drug court programs are based on practices that are somewhat unique, particularly within the criminal justice system. These practices include behavior modification techniques and non-adversarial approaches to solving problems. Most criminal justice-related agency staff have never received education in these areas. An understanding of how these practices work is key to drug court staff ability to implement an effective drug court program.

Key Component #9: Highlights of Practices Related to Improved Outcomes

- 1. Programs where the judge received training from prior drug court judges had 3 times greater cost savings than drug courts that did not train staff prior to implementation.** A good understanding of each team member's role and the goals of drug court allows the program to begin operations much more smoothly. The Judge's role in drug court is key to participant success. A thorough understanding of the model and in rewards and sanctions for behavior modification will give the judge the tools to help the most participants to be successful in the program and their lives in the future.
- 2. Drug courts in which new team members received formal drug court specific training or orientation had one quarter the recidivism and 30% greater cost savings.** It is paramount that all members of the team understand how the drug court model works, their own role, and how to perform it in an optimum way. Drug court programs are based on practices that are somewhat unique, particularly within the criminal justice system. Most criminal justice related agency staff have never received education in these areas. An understanding of how these practices work is key to drug court staff ability to implement an effective drug court program
- 3. Drug courts where the probation staff members were formally trained on the drug court model had 25% greater cost savings.** Probation officers that have been trained on the drug court model will have a greater understanding of the special needs of drug court participants beyond just traditional supervision. They will also better understand the importance of communicating with the judge and the team in promoting successful outcomes for participants.
- 4. Drug courts that trained staff on strength-based philosophy had 25% lower recidivism and double the taxpayer savings.** A strength-based approach focuses on individuals skills and positive actions in addition to risk factors, rather than focusing solely on risk. This is a very motivating approach to treatment that promotes behavior change in positive directions and is extremely compatible with the drug court model.

KEY COMPONENT #10: FORGING PARTNERSHIPS AMONG DRUG COURTS, PUBLIC AGENCIES, AND COMMUNITY-BASED ORGANIZATIONS GENERATES LOCAL SUPPORT AND ENHANCES DRUG COURT PROGRAM EFFECTIVENESS.***Key Component #10: Description***

This key component encourages drug courts to develop partnerships with other criminal justice and service agencies. For these collaborations to be true “partnerships,” regular meetings and collaborations with these partners should occur. If successful, the drug court will benefit from the expertise that resides in all of the partner agencies. Participants will enjoy greater access to a variety of services. Drug courts must still decide with whom to partner and how formal to make these partnerships. Who will be considered as part of the main drug court team? Who will provide input primarily through policymaking? What types of services will be available to clients through these partnerships?

Key Component #10: What Are the Drug Courts in Oregon Doing?

Few practices that fall under Key Component #10 were examined as a part of this study. This is an area that requires much further research. In particular, the nature of the relationship between the drug court and the community agencies that provide services to participants should be reviewed for best practices. For example, when agencies offer free or low-cost services to drug court programs, is the team checking on the quality of those services? Does inviting representatives from community agencies to drug court graduations and to sit on the steering committee increase community support for the program and result in greater sustainability for the program?

In this study, all of the drug courts included probation on the drug court team. The vast majority (over 85%) regularly referred participants to services made available in the community. The implementation of a small number of practices varied across drug court sites with greater than 15% of the drug court differing from the other sites. These are listed in Table 20.

Key Component #10: How do These Practices Impact Graduation Rates and Other Outcomes?

The practices that varied across sites were related to outcomes, though not significantly.

Table 20. Key Component #10: Practices and Outcome Results

KC #10 Drug Court Practices KEY: Y=Yes - practice is related to outcome N=No - no sig relation of practice to outcome R= Reversed - Practice is inversely related to outcome	Higher graduation rate	Lower recidivism rate	Lower recidivism costs/higher savings
A representative from Law Enforcement is a member of the drug court team and attends court sessions and staffing meetings	N	Y*	N
The drug court team includes representatives from community agencies that work regularly with drug court participants	Y	N	Y

Note: Y with no asterisks means that the difference in outcomes was notable but due to the small sample sizes, the difference did not reach statistical trend or significance levels

* = trend ($p < .15$)

** $p < .1$

*** $p < .05$

Drug courts that included law enforcement on the drug court team (as a team member that attends team meetings and court sessions) had higher graduation rates, lower recidivism and significantly higher cost savings. Working in the community (on the street), law enforcement can contribute a unique perspective to the drug court team. Law enforcement can improve referrals to the program and can extend the connection of the drug court team into the community for further information gathering and monitoring of participants (e.g., in the form of home visits). This all contributes to positive outcomes.

Drug courts that reported formal partnerships with community agencies that provide services to drug court participants had higher graduation rates and higher cost savings (though not significantly). Community partnerships could be an excellent source of support and sustainability for drug court programs. Future research should examine this area in much more depth.

Key Component #10: Highlights of Practices Related to Improved Outcomes

1. **Drug courts that included law enforcement on the drug court team (as a team member that attends team meetings and court sessions) had graduation rates 15% higher, half the recidivism and 25% higher cost savings than drug courts that did not include law enforcement on the team.** Working in the community (on the street), law enforcement can contribute a unique perspective to the drug court team. Law enforcement has the unique ability to see clients out on the street that is generally not available in the same way to other members of the team, and this information can help inform team decisions on their response to participant behavior. In addition, law enforcement can act as security, allowing more home visits which are an important component of the supervision of drug court clients. Law enforcement agency support of the program can also increase referrals into the program as they are able to identify potential participants at the time of the arrest.
2. **Drug courts with formal partnerships with community agencies that work regularly with drug court participants had graduation rates 8 percentage points higher and 25% greater cost savings compared to courts that did not have these partnerships.*** Community partnerships can be an excellent source of support and sustainability for drug court programs.

*The results for #2 are not statistically significant.

V. SUMMARY

The statewide cost study of Oregon's adult drug courts was accomplished in a collaboration between NPC Research, the Criminal Justice Commission and the Department of Corrections. The purposes of this statewide evaluation were to answer two critical drug court policy questions:

- a. Are adult drug courts cost-beneficial?
- b. What are best practices for Oregon's drug courts?

To determine whether Oregon's drug court programs were cost beneficial, it was necessary to gather information on program costs and recidivism-related costs. To calculate recidivism-related costs a recidivism study was performed with a comparison group, to determine the relative benefits of drug court compared to traditional court processes. Finally, to determine what practices were best practices for Oregon's drug courts, a process analysis was performed on the drug courts included in this study.

Recidivism in this study was defined as any new arrest (case filing) that occurred after the date of drug court entry. The recidivism study used a quasi-experimental design with a cohort of all drug court participants who entered the programs during a specified time period and a matched comparison sample of individuals who were arrested for similar, drug court-eligible charges who did not participate in a drug court program. A comparison group was identified from all offenders with drug court-eligible charges from the same time period who did not participate in drug court programs. The drug court participants and comparison individuals were matched by county on age, gender, ethnicity, prior drug charges, prior property charges and prior person or violence charges. Both groups were examined through existing administrative databases for a period at least 3 years from the date of drug court entry.

The cost approach utilized by NPC Research in the DC-CSET is called Transactional and Institutional Cost Analysis (TICA). The TICA approach views an individual's interaction with publicly funded agencies as a set of *transactions* (also called *events* in this document) in which the individual utilizes resources contributed from multiple agencies. Transactions are those points within a system where resources are consumed and/or change hands. In the case of drug courts, when a drug court participant appears in court or has a drug test, resources such as judge time, defense attorney time, court facilities, and urine cups are used. TICA is an intuitively appropriate approach to conducting costs assessment in an environment such as a drug court, which involves complex interactions among multiple taxpayer-funded organizations.

For the best practice analysis, a Web-based survey of each of the adult drug courts that participated in the study assessed a variety of characteristics of drug courts that have been assessed in prior evaluations by NPC. The information on practices used by each drug court program was examined in relation to program outcomes including graduation rate, recidivism and costs, to determine which practices were significantly related to more positive outcomes.

Adult Drug Court Cost-Benefits in Oregon

1. ARE DRUG COURTS COST BENEFICIAL?

Program Investment Costs

The average cost of a drug court program per participant was \$18,696. The largest portion of adult drug court costs are due to drug treatment (an average of \$9,668, or 52% of total costs). Drug court sessions (\$3,771, or 20% of total costs) and case management (an average of \$3,417, or 17% of total costs) are also significant program costs. When program costs are evaluated by agency, the largest portion of costs accrues to agencies involved in treatment (\$13,314, or 71% of total costs).

When learning about drug court program costs, it is important to remember that the state would be funding the traditional criminal justice system to process these offenders if there were no drug court. For informational purposes only, NPC created an estimated “**business-as-usual**” cost per case for offenders who did not enter drug court. This cost includes a court case, average jail time per court case, average prison time per court case, average parole time per court and average probation time per court case. It does *not* include treatment costs, as treatment data on non-drug court participants were not available for this study. The estimated business-as-usual statewide cost per offender was **\$9,389**, which is about half (\$9,307 less) than the average drug court program cost per participant. Because the business-as-usual cost is estimated and does not include what are likely substantial treatment costs, it should not be considered a comprehensive estimate of costs or be directly compared to the drug court program cost. However, with the understanding that this business-as-usual cost is a considerable underestimate, it does illustrate that there is a cost to processing these offenders regardless of whether they participate in drug court and that drug court may not be as expensive to implement as it appears, given the costs that would be spent by the system anyway.

Recidivism

The recidivism results showed a significant reduction in recidivism for drug court participants compared to similar offenders who do not participate in drug court, an average of 44% reduction in number of re-arrests and an average of 23% reduction in recidivism rate. Although there were drug court programs that had a negative effect size, indicating that their participants did not perform better than offenders who went through traditional court processing, there were only two programs out of the 20 that had these results.

Recidivism Costs

The results from cost evaluations of 20 Oregon drug courts show an average 3-year outcome cost savings of **\$6,812** per drug court participant when compared to the comparison group. When victimizations are included, the outcome cost savings over 3 years increase from \$6,812 per participant to **\$16,933** per participant. The cost savings described in the cost results are those that have accrued in just the 3 years since drug court entry. Many of these savings are due to positive outcomes while the participant is still in the program. Therefore, it is reasonable to state that savings to the state and local criminal justice systems are generated from the time of participant entry into drug court.

If drug court participants continue to have positive outcomes in subsequent years (as has been shown in other drug courts NPC has evaluated, e.g., Carey et al., 2005; Finigan, Carey, & Cox, 2007) then these cost savings can be expected to continue to accrue over time, repaying the pro-

gram investment costs and providing further savings in opportunity resources to public agencies. For example, if the 3-year cost findings are extrapolated out just 2 more years (to 5 years), the savings come to **\$28,222** per participant. When these findings are multiplied by the number of drug court participants that were included in this study (those offenders that entered drug court programs in the state between 2001 and 2006), the total cost savings comes to **\$159,595,410**. These findings indicate that drug court is both beneficial to participants and beneficial to Oregon taxpayers.

The cost of drug court was about \$18,696, about double the cost of “business as usual” which was conservatively estimated at \$9,389. The 3 year benefit of drug court was \$16,933 including taxpayer and victimization costs. Therefore, there is a net benefit to the public safety system of \$1.82 for each \$1 invested in drug court.

Overall, the cost findings in this report indicate that drug treatment court is both beneficial to participants and beneficial to Oregon taxpayers. Taking into account the investment of \$18,696 per person, after 5 years, the **net taxpayer savings** for *just the cohorts included in the study* at these 20 drug court sites comes to \$56,550,000, nearly **\$57 million**.

Best Practices – Promising Practices Related to Positive Outcomes in Oregon

2. WHAT ARE BEST PRACTICES IN OREGON’S ADULT DRUG COURTS?

Data were collected on over 300 practices engaged in by the 24 Oregon drug courts that participated in this study. Analyses were run to determine which practices were related to higher graduation rates, lower recidivism and lower recidivism-related costs (cost savings). Results showed 37 promising practices. Following are some highlights of those drug court practices of particular interest or policy relevance related to positive outcomes.

Key Component #1: Highlights

1. Drug courts that included law enforcement on the drug court team had 33% less recidivism.
2. Drug courts that had both law enforcement and treatment attendance at these meetings had half the recidivism and 25% higher cost savings compared to courts that did not have both team members attend.

Key Component #2: Highlights

3. Including participants with prior or current violence charges did not relate to program outcomes. This indicates that these programs are equally effective for participants with prior violence as those without prior violence.
4. Accepting non-drug charges such as drug trafficking, property offenses and forgery were significantly related to lower recidivism. This finding and the one above supports an argument for expanding drug court eligibility to serve more high-risk offenders who could benefit from this type of intensive program

Key Component #3: Highlights

5. Drug courts that allowed participants with drug trafficking charges into the program had nearly 40% higher savings in taxpayer dollars. Programs that exclude these offenders should consider the benefits of expanding their eligibility criteria.
6. Courts that expected the time from arrest to program referral to be no more than 30 days had recidivism rates 37% lower and taxpayer savings 43% higher than those that expected a longer time period.

Key Component #4: Highlights

7. Drug courts that provided wrap-around services such as health and dental care had recidivism rates that were up to 40% lower than courts that did not offer these services. Drug courts that provided culturally specific services had graduation rates that were more than 12 percentage points higher.
8. Drug courts that had treatment agencies or providers directly contracted with the program had nearly half the recidivism and 40% greater taxpayer savings.

Key Component #5: Highlights

9. Drug courts that tested 3 or more times per week in the first phase had 25% lower recidivism than drug courts that tested less often.

Key Component #6: Highlights

10. Drug courts that imposed sanctions immediately after the non-compliant behavior before the next scheduled court hearing had less than half the recidivism and nearly double the taxpayer savings.
11. Programs that reduce or dismiss the jail sentence for the drug court case as an incentive for graduation had 4 and a half times less recidivism and 3 times greater cost savings.
12. Programs that required participants to complete community service in order to graduate had 25% lower recidivism and 25% higher cost savings than programs that did not require community service.

Key Component #7: Highlights

13. Drug courts that required participants to attend drug court sessions once every 2 weeks had less than half the recidivism rates twice the cost savings.
14. Drug courts where the judge spends at least 5 minutes with each participant during court sessions had double the taxpayer savings compared to programs where the judge spends less time with participants.

Key Component #8: Highlights

15. Drug courts that used evaluation feedback to make modifications to their drug court program had one-third the recidivism and double the cost savings compared to programs that did not make these adjustments or did not use an evaluator at all.
16. Drug courts that monitored their data to determine if their program was moving toward its goals had 33% lower recidivism and over 3 times the cost savings.

Key Component #9: Highlights

17. Programs where the judge received training from prior drug court judges had 3 times greater cost savings than drug courts that did not train staff prior to implementation.
18. Drug courts in which new team members received formal drug court specific training or orientation had one quarter the recidivism and 30% greater cost savings.

Key Component #10: Highlights

19. Drug courts that included law enforcement on the drug court team (as a team member that attends team meetings and court sessions) had graduation rates 15% higher, half the recidivism, and 25% higher cost savings than drug courts that did not include law enforcement on the team.
20. Drug courts with formal partnerships with community agencies that work regularly with drug court participants had graduation rates 8 percentage points higher and 25% greater cost savings compared to courts that did not have these partnerships.

Conclusion

The focus of this study was on determining whether the adult drug courts in Oregon were cost-beneficial and to examine drug court best practices. There were 37 drug court practices that were related to positive outcomes for drug court participants. Drug court programs should review this list to determine ways they might enhance their programs and improve participant outcomes.

Overall, the cost findings in this report indicate that Oregon's adult drug courts are both beneficial to participants and beneficial to Oregon taxpayers. Taking into account the investment of \$18,696 per person, after 5 years, for *just those participants included in this study*, the **net savings** to Oregon comes to \$56,550,000, nearly **\$57 million**.

Given the significant taxpayer savings demonstrated in this report, rather than creating new options for incarcerating an ever-growing number of Oregon's residents, the best use of state funds for offenders with drug possession and other drug-related charges is to put the funds in drug court programs that will reduce the need for jail and prison cells. The drug court programs in Oregon have now been extensively studied and have shown consistent decreases in offender recidivism and substantial cost savings due to these programs turning offenders into contributing citizens.

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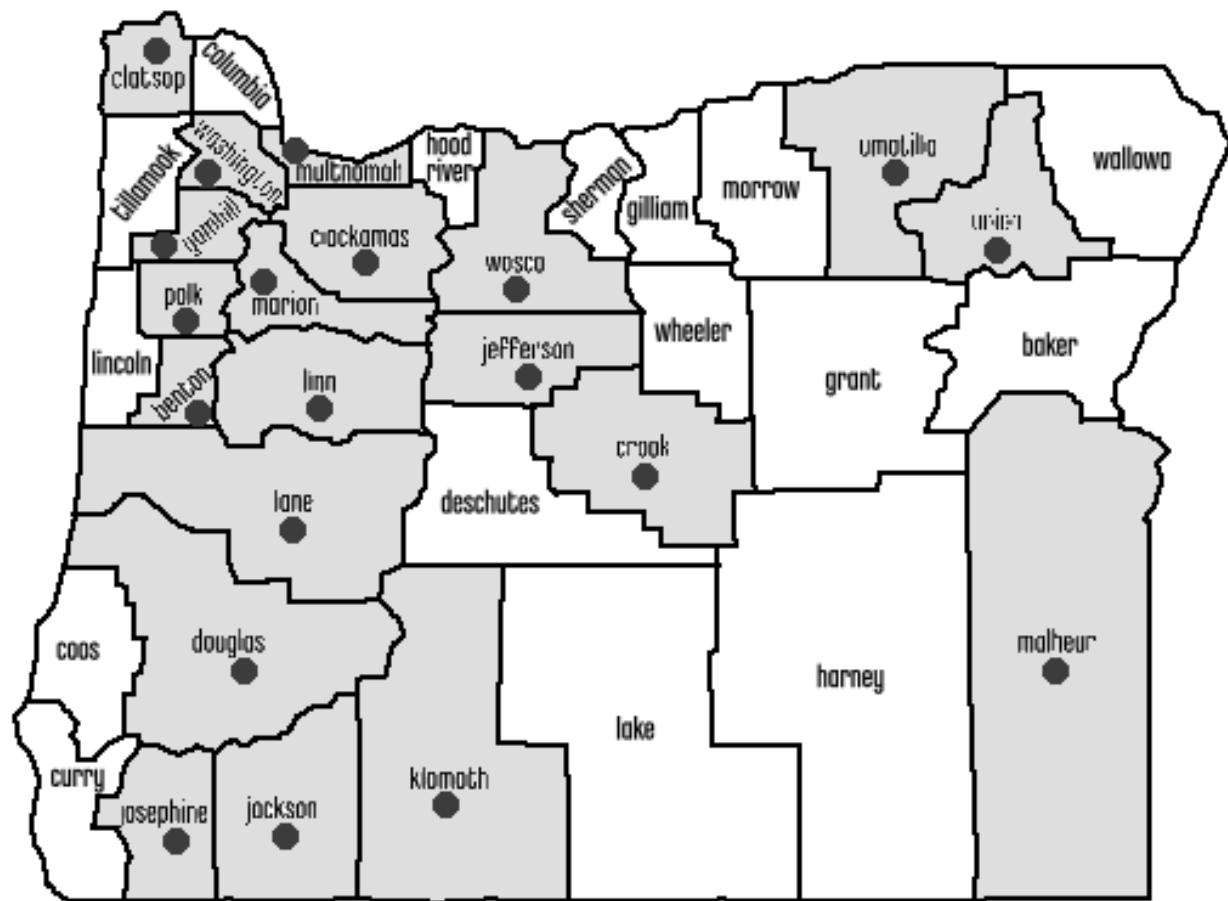
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**APPENDIX A: OREGON ADULT DRUG COURTS
PARTICIPATING IN THIS RESEARCH**

Oregon Counties with Adult Drug Courts Participating in this Research



Benton
Clackamas
Clatsop
Crook
Douglas
Jackson
Jefferson

Josephine
Klamath
Lane
Linn
Malheur
Marion
Multnomah

Polk
Umatilla
Union
Wasco
Washington
Yamhill