

**Kalamazoo County  
Adult Drug Treatment Court  
Outcome and Cost Evaluation  
*FINAL REPORT***



*Submitted to:*

**Michigan Supreme Court  
State Court Administrative Office**

*Submitted by:*

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September 2006



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*Final Report*

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*Research designed to promote effective decision-making by policymakers  
at the national, state and community levels*



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## EXECUTIVE SUMMARY

### Background

In the past fifteen years, one of the most dramatic developments in the movement to reduce substance abuse among the U.S. criminal justice population has been the spread of drug courts across the country. In a typical drug court program, participants are closely supervised by a judge who is supported by a team of agency representatives that operate outside of their traditional adversarial roles including addiction treatment providers, prosecuting attorneys, public defenders, law enforcement officers, and parole and probation officers who work together to provide needed services to drug court participants. “The emergence of these new courts reflects the growing recognition on the part of judges, prosecutors, and defense counsel that the traditional criminal justice methods of incarceration, probation, or supervised parole have not stemmed the tide of drug use among criminals and drug-related crimes in America.” (Hora, Schma, & Rosenthal, 1999, p. 9).

In the drug treatment court movement, Michigan has been a pioneering force. The Michigan Community Corrections Act was enacted in 1988 to investigate and develop alternatives to incarceration. Four years later, in June 1992, the first women’s drug treatment court in the nation was established in Kalamazoo, Michigan. In 1997, a program for male offenders was added to the Drug Treatment Court Program through an expansion grant from the U.S. Department of Justice<sup>1</sup>. In 2005, NPC Research was hired to perform outcome and cost evaluations of two Michigan adult drug courts; the Kalamazoo Adult Drug Treatment Court and the Barry County Adult Drug Court. This document describes the evaluation and results for the Kalamazoo County Adult Drug Treatment Court (KADTC).

There are three key policy questions that are of interest to program practitioners, researchers and policymakers that this evaluation was designed to answer.

1. Do drug treatment court programs reduce substance abuse?
2. Do drug treatment court programs reduce recidivism?
3. Do drug treatment court programs produce cost savings (in terms of avoided costs)?

### Research Design and Methods

Information was acquired for this evaluation from several sources, including observations of court sessions and team meetings during site visits, key informant interviews, agency budgets and other financial documents. Data was also gathered from KADTC and other agency files and databases.

NPC identified a sample of participants who entered Drug Court from January 2002 through December 2003. A comparison group was identified from those individuals who were referred to the KADTC but not enrolled for a variety of reasons, including a failure to contact the individual after referral or refusal to participate. The two groups were matched on age, gender, ethnicity, and criminal history including prior arrests and time in jail. Both groups were examined through existing administrative databases for a period up to 24 months from the date of Drug Court entry. The methods used to gather this information from each source are described in detail in the main report.

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<sup>1</sup> From the Kalamazoo Adult Drug Treatment Court Policy and Procedures Manual, 2005.

## Results

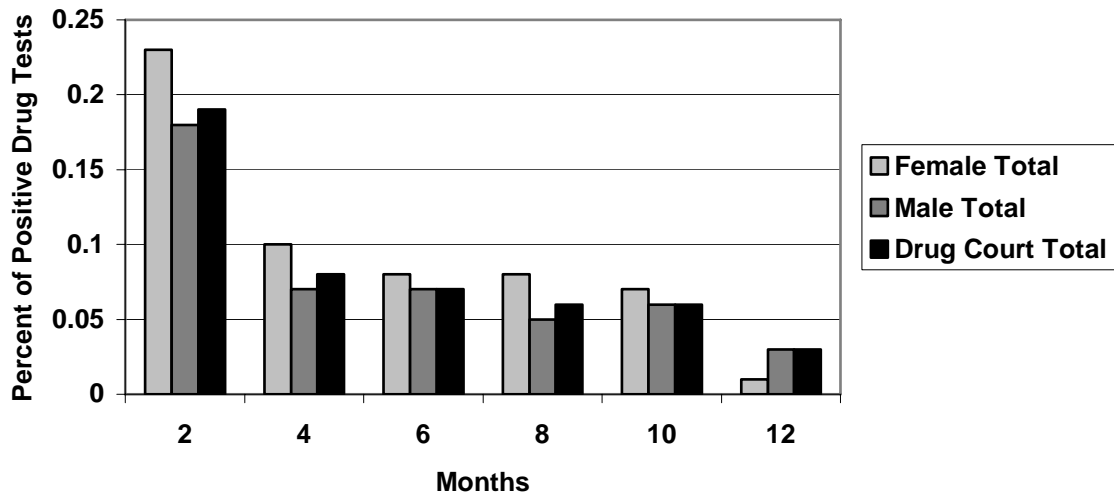
In order to best highlight the results of this evaluation, we can apply the three key policy questions listed above to the specific drug treatment court program in Kalamazoo County.

### 1. Did the Kalamazoo County Drug Treatment Court reduce drug abuse?

**Yes.** KADTC participants reduced their drug use over time.

The KADTC Program kept detailed records of drug testing that occurred while participants were involved with the Program. The evaluation team utilized these records as an indicator of whether drug use decreased over time. Figure 1 demonstrates the percent of positive drug tests over time. This includes graduates, terminated participants, and active participants. This figure shows a steady reduction in positive drug tests over the first year following entry to KADTC.

**Figure 1. Percent of Positive Tests over 12 Months for Female, Male, and All KADTC Participants**

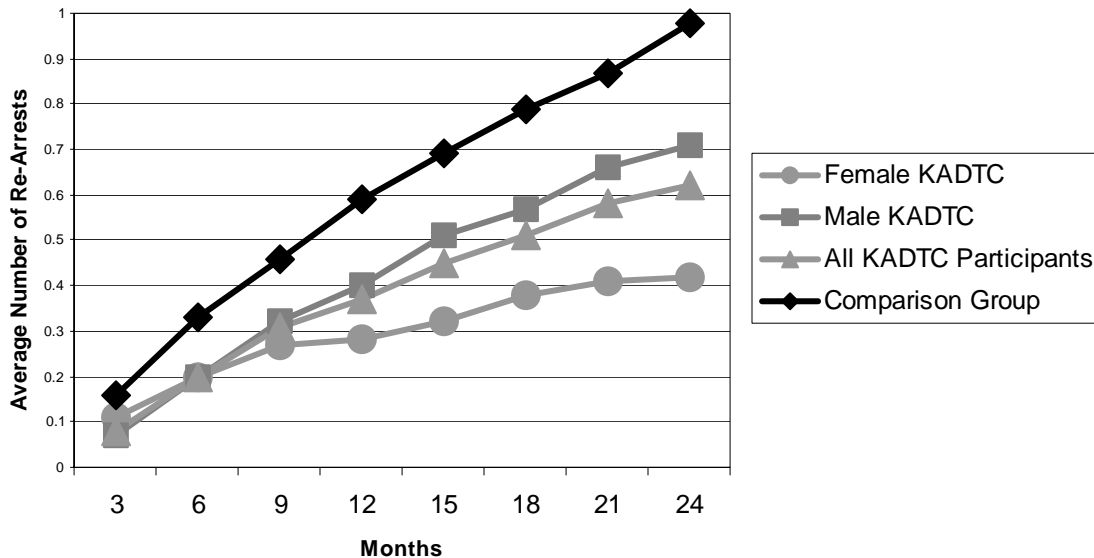


### 2. Did the Kalamazoo County Drug Treatment Court reduce recidivism?

**Yes.** KADTC program participants were significantly less likely to be re-arrested than offenders who were eligible for the program but did not participate.

Figure 2 shows the average number of re-arrests over time for 24 months after entering the KADTC Program for female participants, male participants, all participants, and comparison group members. The Figure indicates that the comparison group was re-arrested significantly ( $p < .05$ ) more often (nearly twice as often) at the end of 24 months post-Drug Court entry than the drug court participants as a whole. Also of interest is the female participants, although re-arrested more often than the male participants during the first few months of the Program, were significantly less likely ( $p < .05$ ) to be re-arrested than male participants in the 2 years following entry into the Program.

**Figure 2. Average Number of Re-Arrests per Person Over 24 Months**



### 3. Are there cost savings (avoided costs) that can be attributed to the KCDTC program?

**Yes.** Due to positive outcomes for drug court participants (including fewer re-arrests, less probation time and fewer new court cases), there were substantial avoided costs for drug court participants.

Summing the amount saved for both the men's and women's Program creates a combined total of **\$593,154**, over half a million dollars saved over just a 2-year period. This savings is for just those individuals who entered the Program during the 2-year sample time period (2002-2003) used for this evaluation. In addition, this number includes all Program participants in the sample, regardless of whether they graduated from the Program. This demonstrates that the Program is cost-beneficial overall, not just for a sub-sample of those who graduate.

These cost savings are those that have accrued in just the two years since program entry. Many of these savings are due to positive outcomes while the participant is still in the program, so savings are already being generated from the time of entry into the program. If Drug Court participants continue to have positive outcomes in subsequent years (as has been shown in other drug courts, e.g., Carey et al., 2005; Finigan, Carey, and Cox 2006) then these cost savings can be expected to continue to accrue over time, repaying the program investment costs and providing further avoided costs to public agencies.

In sum, the Kalamazoo County Drug Treatment Court was successful in decreasing participant drug abuse, reducing participant recidivism and producing cost savings for the taxpayer.



# INTRODUCTION

## Background

In the past fifteen years, one of the most dramatic developments in the movement to reduce substance abuse among the U.S. criminal justice population has been the spread of drug courts across the country. The first drug court was implemented in Florida in 1989. There are now well over 1,000 drug courts operating in all 50 states, the District of Columbia, Puerto Rico and Guam. The purpose of drug courts is to guide offenders identified as drug-addicted into treatment that will reduce drug dependence and improve the quality of life for offenders and their families. “The emergence of these new courts reflects the growing recognition on the part of judges, prosecutors, and defense counsel that the traditional criminal justice methods of incarceration, probation, or supervised parole have not stemmed the tide of drug use among criminals and drug-related crimes in America” (Hora, Schma, & Rosenthal, 1999, p. 9).

In the typical drug court program, participants are closely supervised by a judge who is supported by a team of agency representatives that operate outside of their traditional adversarial roles including addiction treatment providers, prosecuting attorneys, public defenders, law enforcement officers, and parole and probation officers who work together to provide needed services to drug court participants.

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 and Finigan, 2004; Carey et al., 2005). Some drug courts have even been shown to cost less to operate than processing offenders through business-as-usual operations (Carey and Finigan, 2004; Carey et al., 2005).

In the drug treatment court movement, Michigan has been a pioneering force. The Michigan Community Corrections Act was enacted in 1988 to investigate and develop alternatives to incarceration. Four years later, in June 1992, the first women’s drug treatment court in the nation was established in Kalamazoo, Michigan. In the late 1980’s females were the fastest growing population in the criminal justice system and in many of the instances bringing these women to the attention of the system were related to non-violent drug crimes (see Hora et al., 1999). The Kalamazoo Adult Drug Treatment Court Program (KADTC) initially began as a “demonstration project” funded by a Byrne Memorial Formula Grant through the Office of Drug Control Policy with matching funds from the State Office of Community Corrections. The female program has benefited from strong community support. In 2005, community representatives began a nonprofit agency called the Drug Treatment Court Foundation that secured the program’s future by providing a source of funding. In 1997, a program for male offenders was added to the Drug Treatment Court Program through an expansion grant from the U.S. Department of Justice<sup>2</sup>.

This report contains the process description, outcome evaluation, and cost-benefit evaluation for the KADTC, performed by NPC Research. The Ten Key Components of Drug Courts (developed by the NADCP in 1997) were used to guide the process description and research questions. The first section of this report is a description of the methods used to perform this evaluation including the protocols used to obtain information on the Drug Court process, such as site visits, key stakeholder interviews, document reviews, use of state and local administrative databases, and an examination of the Drug Court database. The second section of this report contains a process description of the KADTC and the results of the outcome and cost evaluations.

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<sup>2</sup> From the Kalamazoo Adult Drug Treatment Court Policy and Procedures Manual, 2005.



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# METHODOLOGY

## Process Description Methodology

### RESEARCH STRATEGY

NPC Research begins a program evaluation by gaining an understanding of the environmental context. This includes the organizational structure of the drug court itself, the organization of the agencies that interact through drug court, and the organization of the county. For the Kalamazoo County Adult Drug Treatment Court, this information was collected through site visits, phone calls and interviews with people at the agencies involved, and documents shared during site visits.

The process description of the Kalamazoo County Adult Drug Treatment Court evaluation was a relatively small part of the overall evaluation, as a detailed process evaluation is beyond the scope of this project. Using the 10 Key Drug Court Components as a framework, the current process description was designed to help the evaluation team gain a complete understanding of how the KADTC functions internally and within the broader systems of treatment and criminal justice. This information is integral to NPC's ability to interpret the outcome and cost results for the Drug Treatment Court Program.

### SITE VISITS

The evaluation team traveled twice to the Drug Treatment Court in Kalamazoo, MI to observe and sometimes participate in team meetings and court sessions and to meet with key personnel at each of the agencies involved. Contact with the Drug Treatment Court was also maintained through regular email and phone calls. Those considered key personnel are those knowledgeable about drug court processes or participants, and those knowledgeable about the database(s) at these agencies. At the KADTC this includes the Drug Court Judges, the Drug Court Coordinator, the Case Managers, personnel from the Department of Corrections, Kalamazoo Public Safety, the Prosecuting Attorney, the Circuit Court, Sheriff, the contracted Defense Attorney, and the treatment providers. Site visits also provide an opportunity to observe Drug Court sessions. These observations gave the evaluation team first-hand knowledge of the structure, procedures, and routines of the KADTC.

### KEY INFORMANT INTERVIEWS

Key informant interviews were a critical component of NPC's understanding of the KADTC process. NPC Research interviewed the Drug Court Coordinator, Drug Court Judges, Case Managers, Prosecuting Attorney, and probation and law enforcement representatives. In 2001 NPC Research, under a grant from the Administrative Office of the Courts of the State of California, designed a drug court typology interview guide to provide a consistent method for collecting structure and process information from drug courts. This guide was modified slightly to specifically address the KADTC Program. The information gathered through this guide helped the evaluation team focus on important and unique characteristics of the Kalamazoo Adult Drug Treatment Court.

The topics for this typology interview guide were chosen from three main sources: the evaluation team's extensive experience with drug courts, the American University Drug Court Survey, and a paper by Longshore, et al. (2001), describing a conceptual framework for drug courts. The typology interview covers a large number of areas including specific drug court characteristics, structure,

processes, and organization, with each topic contributing to an understanding of the overall drug court typology. The topics in the typology interview guide include eligibility guidelines, drug court program process (e.g., phases, treatment providers, urinalyses, fee structure, rewards/sanctions), graduation, aftercare, termination, non-drug court process, the drug court team and roles, and drug court demographics and other statistics.<sup>3</sup>

The questions in the typology guide were asked during the site visits and through multiple phone calls with the same individuals. This served three purposes: 1) It allowed us to spread the interview questions out over time, minimizing the length of the interview at any one point in time; 2) It provided us an opportunity to connect with key players throughout the duration of the project, maximizing our opportunities to obtain information; and 3) It allowed us to keep track of any changes that occurred in Drug Court process from the beginning of the project to the end.

## **DOCUMENT REVIEW**

The evaluation team solicited documentation from the Drug Court Program that furthered their understanding of the Program's policies and procedures. These documents included written program descriptions, the KADTC policy and procedures manual, KADTC annual statistical reports, and other written materials.

## **ADMINISTRATIVE DATA ANALYSIS**

Since 2000, the KADTC has extensively used the Community Corrections Automated Management System (CCAMIS) to capture data on participants' basic demographic information, court activities, and drug testing. CCAMIS provided the evaluation team with information on the characteristics of participants served by the Drug Court, the monitoring and sanctioning processes, drug testing, and the frequency of Drug Court hearings. Data regarding Program entry, exit, phase changes, additional demographic information, Drug Court case information, referral, and Behavior Severity Assessment Program (BSAP) assessment results were gathered from Microsoft Word documents kept by the Drug Court Coordinator.

# **Outcome/Impact Evaluation Methodology**

## **RESEARCH STRATEGY**

NPC Research identified a sample of participants who entered Drug Court from January 2002 through December 2003. This 2-year time period was chosen because (a) most data sources utilized in this evaluation had been transferred to electronic formats by this time period, allowing for ease of data collection and (b) this allowed for outcome data for at least 24 months post-Program entry for the evaluation. A comparison group was identified from those individuals who were referred to the KADTC but not enrolled for a variety of reasons, including a failure to contact the individual after referral or refusal to participate. Both groups were examined through existing administrative databases for a period up to 24 months<sup>4</sup> from the date of Drug Court entry (or, in the case of the com-

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<sup>3</sup> A copy of this guide can be found at the NPC Research website – [www.npcresearch.com](http://www.npcresearch.com)

<sup>4</sup> A set of data covering the complete 24-month period from the initial hearing was available for most participants but was not possible for all participants due to the timing of the outcome evaluation data collection, which was completed in December 2005.



parison group, an equivalent date calculated to be comparable to the Drug Court participant entry date). The evaluation team utilized data sources on criminal activity and treatment utilization, described below, to determine whether there was a difference in re-arrests as well as other outcomes of interest between the Drug Court and comparison groups. Outcomes of interest were also examined between different types of individuals within the Drug Court group, for example, outcomes for Program completers (graduates) and non-completers and outcomes for men and women.

## OUTCOME STUDY QUESTIONS

The outcome evaluation was designed to address the following study questions:

1. Does participation in drug court reduce the number of re-arrests compared to traditional court processing? (What is the re-arrest rate for males, females, graduates and non-completers?)
2. Does participation in drug court reduce levels of substance use? (What is the reduction in substance use for males, females, and the entire drug court group?)
3. How successful is the program in bringing program participants to completion and graduation within the expected time frame?
4. What participant characteristics predict program success?
5. What combination and types of services predict successful outcomes?

## OUTCOME DATA COLLECTION AND SOURCES

The majority of the data necessary for the outcome evaluation were gathered from the administrative databases described below and in Table 1. NPC staff members have experience extracting data from similar databases and adapted procedures developed in previous projects for data collection, management, and analyses. Once all data were gathered on the study participants, the data were compiled and cleaned and then moved into SPSS 14.0 for statistical analysis. The evaluation team is trained in a variety of univariate and multivariate statistical analyses using SPSS. The analyses used to answer specific questions are provided with the results described below. These quantitative data were used to answer the study questions outlined above. Data were also evaluated from a more qualitative standpoint to investigate possible emerging trends.

### *Community Corrections Automated Management Information System (CCAMIS)*

This DOS-based data system was developed by Northpointe in 1990 and has been used by the KADTC since May 2000. The database allows the KADTC to record information on participant demographics, drug court hearings, drug testing, case notes, and outcomes. CCAMIS was the primary source of drug court utilization data for the evaluation. Additional demographic data, drug court case data, BSAP assessment results, and referral information were collected from Microsoft Word documents kept by the Drug Treatment Court Coordinator.

### *Treatment Billing Records*

Treatment data for the Drug Court participants was obtained from billing invoices submitted to the KADTC office by the various providers. These records included dates and general types of services provided (individual session, intensive outpatient session, or group session) to Drug Treatment Court participants.

### *Offender Management Network Information System (OMNI)*

In 1998, the Michigan Department of Corrections (MDOC) implemented a case management and tracking system called the Offender Management Network Information System (OMNI). The OMNI system allows the MDOC to monitor prisoner and sentencing information as well as probation and parole activity. The system was fully functional in Kalamazoo County in 2002. Data on probation and parole activities, including drug testing for the comparison and Drug Court groups, were collected from OMNI. Dates and length of prison terms were also collected from the MDOC data management systems.

### *Michigan Computerized Criminal History System (CCH)*

The Michigan Computerized Criminal History System (CCH) is a statewide computerized information system administered by the Michigan State Police (MSP) and designed to assist Michigan's criminal justice agencies. The CCH stores Michigan criminal justice information, such as arrest, charge, and judicial records, from multiple sources in a single database. The evaluation team worked with the MSP to gather data on arrests that did and did not lead to prosecution, charges related to that arrest, and the court information stemming from the arrest. These data were used to determine the recidivism history of the Drug Court and comparison groups for matching the two groups and for participant and comparison group outcomes.

### *Michigan State Treatment Episode Data Set (TEDS)*

In any study of a drug court, it is important to gather information about individuals' substance abuse treatment histories during and following drug court. In Michigan, agencies that provide treatment that is paid for through some source of public funds<sup>5</sup> are required to submit reports of their treatment activities to the Michigan Department of Community Health (MDCH). This includes information on costs, services, consumer demographics, and administrative activities. MDCH provided NPC evaluation staff with dates of treatment episodes, general types of treatment provided (e.g., outpatient), and other substance abuse treatment related data.

### *Kalamazoo County Jail*

NPC's evaluation team collected information on booking, charges, jail entry, and jail exit dates from the Kalamazoo County Jail paper records.

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<sup>5</sup> Although any treatment received by Drug Court participants and comparison group members both pre and post Drug Court would have been of interest, collection of data from private treatment agencies was not within the scope of this evaluation. In addition, NPC's cost approach examines costs-to-the-taxpayer, so publicly funded treatment was the most relevant to this evaluation.

**Table 1. Kalamazoo County Adult Drug Treatment Court Evaluation Data Sources**

Data Type	Source	Comments
Demographic characteristics	CCAMIS, OMNI	
Urinalyses and other drug tests	CCAMIS, OMNI	The OMNI data include drug tests for only those individuals who had some contact with the State Department of Corrections Office, usually through Probation.
Criminal justice history	CCH	The CCH data do not contain charge information when individuals are prosecuted under city ordinances. This could lead to some underreporting of arrests that occurred by local authorities. However, any underreporting would be true for both the Drug Court and comparison groups so the relative difference between the two groups should still be the same.
Jail time served	County Jail	
Date of program admission and discharge	CCAMIS	
Probation and parole dates	OMNI	
Prison time served	OMNI	
Treatment dates for Drug Court participants	Billing Records	

Data Type	Source	Comments
Statewide treatment data for Drug Court and comparison groups	TEDS	TEDS data may not fully capture all treatment instances due to reporting variation among the provider agencies. Further, the data were matched using Social Security numbers, resulting in some matching problems when SSN was missing or fraudulently reported by the patient. Therefore, it is likely that the treatment information contained in this report is under-estimated. However, this under-estimate is similar in both the Drug Court and comparison group, so the relative difference between the two groups should be the same

**SAMPLE SELECTION**

It was necessary to select a cohort of individuals who had participated in Drug Court and a cohort of individuals who had not for the comparison group.

*The Drug Court Participant Group*

As mentioned above, the sample of participants chosen for this evaluation entered Drug Court from January 2002 through December 2003. This time period was chosen because (a) most data sources utilized in this evaluation had been transferred to electronic formats by this time period, allowing for ease of data collection and (b) this allowed for at least 24 months of outcome data post-Program entry for the evaluation. Participants were included in the participant sample if they received any treatment and court services from the Program, even if they eventually withdrew or opted out of the Program (withdrawals account for a very small portion of the sample).

*The Comparison Group*

Ideally, a comparison cohort is made up of offenders who are similar to those who have participated in drug court (e.g., similar demographics and criminal history), but have not participated in the Drug Treatment Court Program. The evaluation team worked with the KADTC Coordinator to identify persons who were referred to the KADTC but who were not enrolled, focusing on individuals whose reasons for not enrolling were not related to ineligibility. For example, persons in the possible comparison group were frequently coded as “failure to contact.” The Coordinator provided a list of the possible comparison group members and the case number that led to their KADTC referral. Care was taken to ensure that these persons did not appear in future as KADTC participants. Information was gathered from the Michigan State Police data and OMNI data by matching the case number to the individual, thus providing a full range of demographic and criminal history information. The comparison group was matched to the participant group based on demographics, criminal history and treatment history. Further information on the matching process and its results are provided in the Outcome Evaluation Results section of this report.

## Cost Evaluation Methodology

### COST EVALUATION DESIGN

#### *Transaction and Institutional Cost Analysis*

The cost approach utilized by NPC Research 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* 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.

#### *Cost to the Taxpayer*

In order to maximize the study's benefit to policy makers, a "cost-to-taxpayer" approach was used for this evaluation. This focus helps define which cost data should be collected (costs and avoided costs involving public funds) and which cost data should be omitted from the analyses (e.g., costs to the individual participating in the program).

The central core of the cost-to-taxpayer approach in calculating benefits (or avoided costs) for drug court specifically is the fact that untreated substance abuse will cost various tax-dollar funded systems money that could be avoided or diminished if substance abuse were treated. In this approach, any cost that is the result of untreated substance abuse and that directly impacts a citizen (either through tax-related expenditures or the results of being a victim of a crime perpetrated by a substance abuser) is used in calculating the benefits of substance abuse treatment.

#### *Opportunity Resources*

Finally, NPC's cost approach looks at publicly funded costs as "opportunity resources." The concept of opportunity *cost* from the economic literature suggests that system resources are available to be used in other contexts if they are not spent on a particular transaction. The term opportunity *resource* describes these resources that are now available for different use. For example, if substance abuse treatment reduces the number of times that a participant 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.

### COST EVALUATION METHODS

The cost evaluation involves calculating the costs of the program, the costs of "business-as-usual" or traditional court processing for cases that were drug court eligible, and the costs of outcomes for drug court participants and the comparison group members. In order to determine if there are any benefits (or avoided costs) due to drug court program participation, it is necessary to determine what the participants' outcome costs would have been had they not participated in drug court. One of the

best ways to do this is to compare the costs of outcomes for drug court participants to the outcome costs for similar individuals arrested on the same charges who did not participate in drug court. The costs to the Kalamazoo County criminal justice system (cost-to-taxpayer) incurred by participants in Drug Court were compared with the costs incurred by those in Kalamazoo who were eligible for but did not enter Drug Court.

**TICA Methodology**

The TICA methodology is based upon six distinct steps. Table 2 lists each of these steps and the tasks involved.

**Table 2. The Six Steps of TICA**

	<b>Description</b>	<b>Tasks</b>
<b>Step 1:</b>	Determine flow/process (i.e., how participants move through the system)	Site visits/direct observations of program practice Interviews with key informants (agency and program staff) using a program typology and cost guide (See guide on <a href="http://www.npcresearch.com">www.npcresearch.com</a> )
<b>Step 2:</b>	Identify the transactions that occur within this flow (i.e., where participants interact with the system)	Analysis of process information gained in Step 1
<b>Step 3:</b>	Identify the agencies involved in each transaction (e.g., court, treatment, police)	Analysis of process information gained in Step 1 Direct observation of program transactions
<b>Step 4:</b>	Determine the resources used by each agency for each transaction (e.g., amount of judge time per transaction, amount of attorney time per transaction, # of transactions)	Interviews with key program informants using program typology and cost guide Direct observation of program transactions Administrative data collection of # of transactions (e.g., # of court appearances, # of treatment sessions, # of drug tests).
<b>Step 5:</b>	Determine the cost of the resources used by each agency for each transaction	Interviews with budget and finance officers Document review of agency budgets and other financial paperwork
<b>Step 6:</b>	Calculate cost results (e.g., cost per transaction, total cost of the program per participant)	Indirect 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 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. (These calculations are described in more detail below)

Step 1 (learning the drug court flow), was performed during the site visits, through analysis of KADTC documents, and through interviews with key informants. Steps 2 (identifying transaction) and 3 (identifying the agencies involved) were performed through observation during the site visits and by analyzing the information gathered in Step 1. Step 4 (determining the resources used) was performed through extensive interviewing of key informants, direct observation during the site visits, and by collecting administrative data from the agencies involved in Drug Court. Step 5 (determining the cost of the resources) was performed through interviews with Drug Court and non-drug court staff and with agency finance officers. Step 6 (calculating cost results) involved calculating the cost of each transaction and multiplying this cost by the number of transactions. All the transactional costs for each individual were added to determine the overall cost per individual. This was generally reported as an average cost per individual including “investment” costs for the Drug Court Program, and outcome/impact costs due to re-arrests, jail time and other recidivism costs. In addition, due to the nature of the TICA approach, it was also possible to calculate the costs of Drug Court processing and outcomes for each agency.

The direct observation of the Program process and the specific Program transactions occurred during two site visits to Kalamazoo County. The key informant interviews were performed using a Typology Interview Guide first developed by NPC Research in 2000 (see the Drug Court Typology Guide on the NPC Web site – [www.npcresearch.com](http://www.npcresearch.com)). This guide is updated regularly and is also modified as appropriate to fit each drug court site and type of evaluation. The interviews were also performed during the site visits and through interviews via phone and email.

Cost data were collected through interviews with Drug Court staff and budgetary officers as well as from budgets either found online or provided from agency staff. The costs to the criminal justice system outside of Drug Court Program consist of those due to new arrests, subsequent court cases, probation, prison, parole, bookings, jail time served, and non-Drug Court treatment (outpatient, intensive outpatient, detox, and residential). Program costs include all Program transactions including Drug Court sessions, case management, drug tests, the Kalamazoo Probation Enhancement Program (KPEP), group and individual treatment, intensive outpatient treatment, and jail as a sanction.





## RESULTS

The results presented in this report include a detailed process description of the Kalamazoo County Adult Drug Treatment Court's current operations. Points of interest, issues, or successes experienced by the Drug Court are highlighted within the text as either "comments" or "observations." "Comments" contain information gathered directly from interviews with Drug Court staff or from participants, while "Observations" contain information from evaluator observations of Drug Court processes. This is followed by a presentation of the outcome and cost results and a discussion of the policy implications of these results.

### **Kalamazoo County, Michigan, Background**

Kalamazoo County, located in southwestern Michigan, has a population of 240,536 (2004 population estimate), of whom roughly 76% are over the age of 18. Of the 93,479 households documented in the 2000 Census, 11% are female-headed and 30% had children under the age of 18. The County's racial makeup is primarily White (85%). Kalamazoo is home to several Universities, including Western Michigan University. The County seat, the City of Kalamazoo, presents a similar demographic picture, but is slightly more diverse (70% White). The City of Kalamazoo has recently gained national attention following the announcement of the "Kalamazoo Promise." Due to donations from several anonymous citizens, starting with the class of 2006 all children graduating from Kalamazoo Public Schools will receive 100% tuition to any public Michigan University for 4 years.

Kalamazoo has a longstanding history of innovative public programs. Judge William Schma established the first female-specific drug treatment court in the country in Kalamazoo in 1992. In 1997, a drug treatment court for men was added in an attempt to counter the growing number of offenses stemming from substance abuse problems in the County. The Kalamazoo Adult Drug Treatment Court Program continues to offer gender-specific services to its participants, recognizing that men and women may face different issues with respect to the origin and treatment of their substance abuse problems. Over 500 individuals have successfully completed the Program since its inception.

The KADTC enjoys a strong measure of community support, as evidenced by the establishment of the nonprofit Drug Treatment Court Foundation, dedicated to securing funding for the future of the women's Program. Despite the successes of the Adult Drug Treatment Court and other alternative programs, Kalamazoo faces some disturbing criminal justice trends. According to the 2004 Annual Report of the Kalamazoo County Courts, the County has witnessed a 30% increase in felony cases from 2000 to 2004. Cases stemming from methamphetamine production or use have increased from 17 in 2000 to 242 in 2004. Further, jail overcrowding is a chronic problem in Kalamazoo. Drug abuse continues to be a problem for this community, contributing to criminality and high incarceration rates. The Kalamazoo Adult Drug Treatment Court is committed to reversing these trends by addressing the substance abuse issues that often underlie criminal behavior.

### **Kalamazoo County Adult Drug Treatment Court Process Description**

The following information was gathered from interviews, Drug Treatment Court documents (such as the policy manual) and observations of the Kalamazoo Adult Drug Treatment Court. The majority of the information was gathered from the interviews and, as much as possible, the evaluators have attempted to represent the information in the same words in which it was given.

### *Overview*

The Kalamazoo Adult Drug Treatment Court first opened its doors to female participants in June 1992. The KADTC was the first court specifically designed for female non-violent drug offenders in the country. The implementation of the men's Drug Court followed shortly thereafter in 1997. Although the KADTC was originally administered through the Kalamazoo County Office of Community Corrections, in December 1999 the Ninth Circuit Court assumed the administration of the Program. The KADTC Program is unusual among drug treatment courts in that it has been in existence long enough to develop strong standardized practices, thus it is more administratively driven than judge driven. Similar practices have been observed in other, more established courts, such as the STOP Court in Portland, Oregon, which was implemented in 1991. Further, the Program continues to provide gender specific services. These attributes and other unique elements of the Program are discussed further in the remainder of the process description.

### *Implementation*

The idea for the women's Drug Treatment Court was proposed by Judge William Schma in response to the growing number of non-violent female offenders arrested on drug and alcohol related charges in Kalamazoo County. The traditional court processes appeared particularly unsuited to non-violent female offenders, who often had dependent children to care for and who had endured domestic or sexual abuse. Rather than sentence women to be incarcerated for substance abuse issues, the KADTC Program focused on helping women become responsible, drug-free citizens. The success of the women's Program sparked a men's Program in 1997. The decision was made to continue offering gender-specific services through the KADTC.

### *Capacity and Enrollment*

The KADTC enrolls around 30 women and between 40-45 men annually. Between new and existing participants, the KADTC serves over 260 individuals each year.

According to the December 2005 Statistical Report released by the Office of Drug Treatment Court Programs, 587 women have been enrolled in the Program since its inception. Of these women, 215 (36.6%) have successfully completed the Program, 290 (49.4%) have been unsuccessfully discharged, and the remaining women are either active, on bench warrant status, or had opted-out of the Program. A little over half (55.7%) of the women enrolled over the history of the Program were Caucasian, nearly 41% were African American, and the remaining women were Hispanic, Asian, Native American, or members of another ethnic group.

The Men's Drug Treatment Court has enrolled 654 participants from its inception in 1997. Approximately 33% (217) of the men have graduated from the Program, 310 (47.4%) were unsuccessfully discharged, and the remainder were active, on bench warrant status, or opted-out. Through the history of the Program, most participants were Caucasian (66.2%) or African American (29.3%). In 2005, the average age of female and male participants was 31.7 and 30.6 years, respectively. According to the statistical report, over 80% of the women and nearly 88% of the men enrolled in the Program abused more than one substance.

### *Drug Court Goals*

The stated mission of the KADTC Program is "to successfully habilitate substance abusing individuals while maintaining public safety" (KADTC policy and procedure manual, p. 1). The KADTC is committed to providing non-violent drug offenders with the tools that they need to be

successful and contributing members of society. These tools are provided through a combination of treatment, reinforcement, and monitoring. It is the vision of the KADTC that the Program will help contribute to the quality of life in the community and break cycles of criminality. The KADTC staff fosters this vision by being leaders in the provision of innovative alternative programs, continuously working to improve their services, and using teamwork to achieve the goals of the Program and the participants.

### *Eligibility Criteria*

The Drug Treatment Court Program is available to Kalamazoo residents or individuals who work in Kalamazoo and reside in a contiguous county. The Program targets substance-abusing adults charged with non-violent criminal offenses as well as Circuit Court probationers and parolees whose involvement with Drug Court is a condition of probation/parole. The majority of offenses leading to Drug Court are related to drug and alcohol use and include fraud, larceny, burglary, and property destruction. In order to be eligible for the KADTC an individual must not have previously participated in a diversion program; have no history of violent, assaultive, or drug delivery felonies and no more than five prior felony convictions; have no more than one domestic violence or assault and battery conviction; and not have used a weapon during the current offense. Before entering the Program, the potential participant must admit addiction and be physically and mentally capable of meeting the Program requirements.

As of May 22, 2000, all participants entering the Program must enter a guilty plea at the Circuit Court level (see Appendix A for processing flow chart). There are two primary avenues for participants to enter the KADTC. (1.) Participants with a new felony charge may be referred to Drug Court by the Prosecutor or Defense Attorney. These participants are referred to as diversion participants. At the Prosecutor's office, a case comes under review through a warrant request. If the case meets eligibility requirements for Drug Court, the Assistant Prosecutor checks a "diversion eligible" box and the Charging Specialist marks the warrant request and felony complaint with an "office of the Drug Court Program" stamp. At this point, the participant is referred. A Defense Attorney may also refer a participant during a preliminary examination. If an offender chooses to enter Drug Court, they plead guilty to the charge and sentencing is delayed depending on their outcome in the Drug Court Program. (2.) Participants may also be sentenced to the KADTC as a condition of probation or be referred from the Department of Corrections if they commit a technical violation of probation/parole. When a person is sentenced to Drug Court, they must meet state eligibility requirements in order to be admitted.

### *Incentives for Offenders to Enter (and Complete) the KADTC Program*

Diversion participants can have their conviction expunged from their record should they successfully complete the KADTC. Participants entering the Program through probation have the opportunity to gain an early release from probation. A strong incentive for all Drug Treatment Court participants is avoiding incarceration and the opportunity to focus on gaining control of their substance use issues and their lives while living in the community.

### *Drug Treatment Court Program Phases*

The KADTC Program consists of 3 phases. During the 3 months of Phase I, participants are required to submit to 3 random drug tests per week. Participants also have biweekly meetings with their Case Manager and attend Drug Treatment Court sessions biweekly. Treatment requirements include attending individual and group treatment sessions as recommended by the treatment pro-

vider. Another important component of the KADTC is participation in a 12-step program. Participants are required to obtain a sponsor during Phase I, attend a 12-step orientation class, and participate in a minimum of 3 meetings per week. During Phase I participants also work closely with their KADTC Case Manager to establish a restitution plan (if applicable) and a KADTC fee repayment schedule. Finally, participants attend a family orientation, preferably with a family member or significant other. Before advancing to Phase II, participants must be drug-free for 90 days and have obtained a 12-step sponsor. Further, participants must have completed intensive treatment and have a record of successful attendance at Court.

Phases II and III last approximately 12 months combined. Phase II requirements include submission to random drug testing for a minimum of 6 months, monthly meetings with the KADTC Case Manager, and attendance at a minimum of 3 12-step meetings per month. Participants must attend school full-time or maintain steady employment; otherwise, participants must attend biweekly Court sessions and provide verification of efforts to secure employment or school enrollment. Payment toward the KADTC fees and restitution begins in Phase II. If the treatment provider deems it necessary, participants must attend treatment sessions. Finally, if applicable, participants must obtain their GED or high school diploma. Advancement to Phase III is possible after 6 months of negative drug tests, progress toward repayment of restitution and fees, and verification of employment and participation in 12-step meetings.

Phase III requirements are similar to those in Phase II. Random drug testing continues to occur weekly in Phase III. In both Phase II and Phase III all random drug tests must have a negative result or participants are returned to Phase I. Meeting requirements with Case Managers and 12-step requirements are the same as those in Phase II. Prior to graduation, participants must present proof of full-time employment or school enrollment for three months in Phase III. Participants also continue payment of fees and restitution.

#### *Treatment Overview*

The Drug Treatment Court staff conducts an initial intake at the KADTC office using an electronically graded measure called the Behavior Severity Assessment Program (BSAP). As part of the intake process, Case Managers gather information on demographics, health and medication history, education, health insurance, family make-up, history of domestic violence, sexual assault and prostitution history, treatment history, drug use history, and criminal history. Based on the results of this initial screening, participants are referred to one of many treatment locations available in Kalamazoo County. The location of treatment is partially determined by the insurance and financial situation of the participant. Those participants with private insurance may see a licensed therapist for treatment. The Department of Corrections often assists with the cost and provision of treatment for participants on probation. Although the KADTC has contracts with approximately 10 providers, participants primarily seek treatment through two main outpatient providers and one inpatient provider. Community Healing Centers and the University Substance Abuse Clinic at Western Michigan University provide most outpatient services. These agencies are similar in the type of treatment they provide, thus the choice between these facilities often comes down to accessibility for the participants.

Drug Court participants receive a range of treatment services. Outpatient treatment options include intensive outpatient therapy (IOP), individual and group therapy sessions, and relapse prevention groups. Participation in a 12-step program is also included as part of the KADTC treatment requirement. If needed, both short and long-term residential treatment is available as well as detoxi-

fication services. Treatment providers also assist participants in seeking employment, job training, and continuing their education.

### *Other Drug Court Services*

The KADTC has established strong ties with many community partners. As a result, the Drug Treatment Court provides referrals to the Department of Human Services, housing resources, maternal support services, YWCA sexual and domestic assault programs, Michigan Works (employment service), and child care resources. The Kalamazoo Probation Enhancement Program (KPEP) is another resource for Drug Treatment Court participants. KPEP, a non-profit agency run by the Department of Corrections, operates as an intermediate step between incarceration and independence. At KPEP, participants are closely monitored and given basic life skills training, some mental health services, group therapy sessions, and public health services. KPEP also has a GED program and onsite tutors available to help participants reach their education goals.

The Drug Treatment Court staff encourages participants to take advantage of these resources. Occasionally, the KADTC provides incentives for utilizing services. For example, when treatment providers offer parenting classes, participants may receive a \$10 gift card per session attended or a prize worth up to \$200 if participants attend all 12 classes plus the orientation session.

### *Team Meetings*

Every other Tuesday, the KADTC Team members meet in a planning session to discuss participants' progress and actions they plan to recommend to the Judge. The Drug Court Coordinator, Case Managers, the Drug Treatment Court Program Assistant, and Probation Agent usually attend these meetings. Occasionally, treatment providers or other relevant parties may attend as well. During these meetings, the Team discusses each participant scheduled on the Court docket for that week. The Team focuses on reports for each participant in the order the participants will appear in Court, beginning with upcoming graduates and ending with new participants. Because the KADTC is a large program, one purpose of this meeting is to distill the Team's decisions so that the Team can be as efficient as possible when communicating recommendations to the Judge(s) prior to Court.

Prior to each Court session, the Judge (for men's and women's sessions, respectively), Drug Treatment Court Coordinator, Case Managers, and Probation Agent meet to convey the Team's recommendations to the Judge(s). Other individuals may attend this meeting if invited; for example, an intern from Western Michigan University who runs a support group for women in Drug Court has attended the session prior to the female Court session. These sessions usually last about 1 hour.

At a different level, a Drug Treatment Court Policy Council meeting is held on a monthly basis. The members of the Council include men's and women's Drug Treatment Court Judges, the juvenile Drug Court Judge, Judge Schma (founder of Drug Treatment Courts in Kalamazoo), the Adult Drug Treatment Court Coordinator, Court Administrator, Assistant Prosecutor, County Administrator, County Sheriff, and other community members. The purpose of this Council is to discuss funding, eligibility criteria, changes in federal or state law, and anything else that affects the Drug Court Programs from a policy perspective.

The Drug Treatment Court staff work closely together on a daily basis. In the office environment, the Case Managers and Coordinator discuss participant issues regularly. Further, the Case Manag-

ers are generally in daily telephone contact with the various treatment providers. The Case Managers also interact with other involved agencies regularly, such as probation and law enforcement.

**Observation:** The communication lines both within the Drug Treatment Court office and between agencies are quite open. There appears to be regular and candid dialogue regarding participant progress and how each agency can contribute to participant success. Agencies work together to present a cohesive and united front when interacting with participants.

#### *Provider and Team Communication with Court*

The Judge is receptive to recommendations from the KADTC Team and decisions are made in a collaborative spirit. Providers communicate with the Court primarily through their reports to the Case Managers. In turn, the Case Managers and other KADTC Team members generally interact with the Court only on days when Drug Treatment Court sessions are held.

#### *Drug Court Sessions*

The Court schedule recently changed from weekly sessions, alternating between men's and women's Court, to biweekly Drug Treatment Court sessions. Court sessions for men and women are held on the same day, with men's Court beginning at 8:30 a.m. and lasting about 2 hours and women's Court beginning at 11:00 a.m. with a duration of roughly 1 hour.

Attendees at the men's Court session include participants, their family or support network, the Judge, the Coordinator, the Case Managers, the KADTC Program Assistant, Probation Agent, and sometimes a representative from the 12-step programs. The Prosecuting Attorney attends Court when a graduation occurs and Bailiffs are present when participants are incarcerated. The men's Court is presided over by a male District Court Judge. Participants are required to sign in prior to Court. Court begins with any scheduled graduations for that day. Following graduation, the order in which participants are called progresses from those doing best to those receiving sanctions. Due to the large number of participants in the Program, the Judge often calls groups of participants forward together who are in accolades (in compliance with program directives), but always spends several minutes addressing each person individually. Court sessions are primarily a conversation between the Judge and participant. If the participant has engaged in non-compliant behavior, the Judge allows the individual opportunity to take responsibility for their action. Frequently, if the individual holds himself accountable, the sanction is less severe. Case Managers and the Probation Agent occasionally offer information or advice during Court. When participants have completed their turn before the Judge, they are given their paperwork, which includes any sanctions assigned that day, and may leave unless the Judge orders them to stay. If a participant receives a jail sanction, the Bailiff takes them into custody immediately.

The women's Court is procedurally and operationally similar to the men's Court. The women's Court is presided over by a female Family Court Judge. In addition to the attendees mentioned previously, a Judicial Aide also attends the women's Court session. The Aide provides personal hygiene items and other sundries for the participants (each participant is allowed one item). The number of participants seen by the Judge in a women's Court session is roughly one-third the number seen in the men's Court. The order of appearance is the same as the men's session, beginning with graduates and ending with new participants. Female participants may leave Court following their time before the Judge. The primary differences between the men's and women's sessions are time before the Judge (due to participation constraints, males tend to have less time before the Judge) and tone (due to different judges).

### *The Drug Court Team*

**Judge.** There are two Judges for the KADTC, one each for the men’s and women’s Programs. Judges volunteer for Drug Treatment Court and they determine the length of their service. Often, Judges who serve as substitutes eventually become primary Drug Treatment Court Judges. In Kalamazoo, the Drug Court Policy Council determines eligibility criteria, thus removing the Judges from making admittance decisions. Thus, the first encounter Judges have with participants is after participants are already admitted into the Program. The Kalamazoo Court is less Judge-driven than many drug courts, and is run more administratively, following a standardized set of policies and procedures.

**Comment:** The KADTC staff reports that the process of admitting individuals to the Program without relying on the Judge to make eligibility decisions places all participants on equal footing with the Judge. Because the Judge is not acutely aware of the prior criminal history of an individual, this allows the Judge to deal with each participant as an individual focused on recovery.

Judge Kropf, the men’s Drug Treatment Court Judge, is a District Court Judge. Judge Kropf was formerly a Drug Treatment Court Judge for the women’s Court, but has recently returned to Drug Treatment Court to take over the men’s Court. Due to his experience with both Courts, Judge Kropf has unique and valuable insight about the KADTC Program. For example, it is easier to get to know the female participants because the smaller numbers allows for more individualized time during Court; further, the women tend to be more open than the men. As the men’s Drug Court Judge, Judge Kropf’s role ranges from father figure to confessor to drill sergeant. The Judge’s candid manner in the courtroom encourages the men to openly discuss their grievances as long as they maintain a tone of respect. Although the Judge maintains a friendly demeanor, he is clearly the authority in the room and enforces the policies of the Court. Judge Kropf emphasizes to current and new participants the importance of putting recovery first. In his words, participants must “fish or cut bait.” The participants know that if they are not willing to get serious about recovery, the Judge will not hesitate to return them to a less forgiving, more traditional system.

The women’s Drug Treatment Court Judge, Judge Conlon, is also a Family Court Judge. This dual role means that at times, Judge Conlon sees the same women in Drug Treatment Court and Family Court. Judge Conlon’s Drug Treatment Court demeanor is one of compassionate sensitivity. She is aware that women substance users may have issues, such as a history of domestic abuse, which contribute to problems with recovery. Judge Conlon supports the women in their unique ways of working through recovery, whether through religion, exercise, or other tools. Judge Conlon maintains a professional and serious tone with participants, emphasizing that Drug Treatment Court is an opportunity and a second chance. It is up to the participants to embrace this opportunity.

**Drug Treatment Court Coordinator.** The Drug Court Coordinator is the point of contact for the Drug Court Team, which means that she is in constant contact with Team members outside of Court, and provides the various agencies with information about the Drug Court and its participants. This position is integral to the smooth working of the KADTC. The Coordinator supervises a staff of three full-time Case Managers and one Program Assistant. She is also responsible for coordinating staff development activities. The Coordinator spends substantial time gathering statistics and writing reports to granting agencies. The KADTC produces a thorough annual statistical report largely through the efforts of the Coordinator. The Coordinator utilizes research to determine areas of need for Program development and works on planning solutions to address commu-

nity and Program needs. Similarly, the Coordinator serves on the Drug Court Policy Council in an advisory status.

On a daily basis, the Coordinator reviews invoices and budgetary aspects of the Program. She also acts as a back up for the Case Managers, occasionally counseling participants and supervising drug tests. Participants may request to see the Coordinator if they have a complaint regarding their Case Manager. The Coordinator organizes and guides each planning session and attends Court each Friday. She offers expert guidance regarding participant progress and possible rewards or sanctions to recommend to the Court. The Coordinator also reviews all BSAP assessments for new participants and all treatment referrals and reports.

***Drug Treatment Court Case Managers.*** The Case Managers are the participants' main liaisons to the rest of the Drug Court Team. Case Managers make referrals and monitor all services that are needed by participants in accordance with their treatment plan. There is a female Case Manager for the female participants and two male Case Managers for the male participants. Case Managers are responsible for screening new participants for eligibility and assisting new participants with initial treatment referrals and orientation to the Program. The Case Managers meet with Phase I participants bi-weekly, and Phase II and III participants monthly. During these meetings, the Case Managers record participant progress, verify treatment attendance, and offer assistance in maintaining sobriety.

On a regular basis, the Case Managers spend substantial time documenting their interactions with participants, drug testing information, treatment information, Court and meeting attendance, contact with law enforcement, and other important data in the CCAMIS program. The Case Managers also supervise urine tests, assist participants with employment and housing referrals, help participants find medical and legal services, and act as a resource and confidant for issues of all kinds. Case Managers prepare status reports for the bi-weekly KADTC planning meetings and attend Court sessions. When necessary, they prepare discharge paperwork and other reports.

***Drug Treatment Court Program Assistant.*** The Program Assistant aids the Coordinator and Case Managers with the daily activities of the Drug Treatment Court. She supervises drug tests when the Case Managers are unavailable, tracks and enters Program data into a central database (CCAMIS), assists the Coordinator with record keeping and billing, and records the court action during Court sessions.

***Treatment Counselors.*** The Court contracts with as many as 10 treatment providers in the County, however, the majority of the KADTC participants receive substance abuse treatment at two outpatient and one inpatient facility. The treatment providers submit written progress reports (biweekly status reports) to the Case Managers and daily reports regarding attendance at treatment. The providers also contact the Case Managers daily regarding any special circumstances or treatment requirements involving KADTC participants. The treatment providers have little, if any, contact with the Court.

***Probation.*** Probation Agents from the Michigan Department of Corrections (MDOC) supervise Drug Treatment Court participants, refer offenders from probation/parole who meet eligibility requirements, and prepare bench warrants. The Agents are involved with the planning sessions and attend each Court session. One primary role is to keep the KADTC staff informed of probationer/parolee activities outside of Drug Treatment Court. The Agents also perform home visits when probationers/parolees move, ensuring that their residence meets the conditions of probation and Drug Treatment Court. Home visits are also performed when participants are suspected of



drug or alcohol use. Agents involved with the KADTC spend about 35-40% of their time on Drug Treatment Court activities.

***Defense Attorney.*** The role of the Defense Attorney is to provide legal advice, ensure that the rights of the participants are protected, and refer participants to Drug Court. The contracted Defense Attorney may attend planning meetings, but is usually only involved in getting potential Drug Treatment Court participants screened for eligibility and during termination sentencing hearings. A member of the defense attorney community participates in the Drug Court Policy Council, providing counsel on participant issues, eligibility criteria, and legal issues pertaining to the Drug Treatment Court.

***Prosecuting Attorney.*** The Office of the Prosecuting Attorney's (OPA) main role in Drug Treatment Court is to identify and refer potential Drug Court participants and to ensure that public safety is protected. The Prosecutor's role with Drug Treatment Court in Kalamazoo does not differ substantially from the "business as usual" model; Drug Treatment Court is always an option that is considered along with other alternatives. A representative from the Prosecutor's office sits on the Drug Court Policy Council, providing counsel on eligibility criteria and laws affecting Drug Court. The OPA also reviews warrants and attends Drug Treatment Court sessions when there is a graduation. The Prosecutor does not usually attend Drug Treatment Court planning sessions.

***Law Enforcement.*** Local law enforcement is not currently heavily involved with the KADTC. Bailiffs attend Court sessions when escorting a participant to or from the County Jail. Officers are also available to come to the Drug Court office to execute a warrant.

#### ***Drug Court Team Training***

Members of the Kalamazoo Adult Drug Treatment Court Team have attended Drug Court training conferences and workshops. KADTC staff members receive extensive training when hired. On-going training sessions are available about 4 times yearly and topics include ethics and ethical issues, substance abuse treatment, co-occurring disorders, DSM-4 criteria and diagnosis, and other topics of interest. The Coordinator and Case Managers frequently attend the yearly conference of the Michigan Association of Drug Court Professionals. Other Team members, including the Prosecutor and Probation Agent, also attend this yearly meeting.

#### ***Drug Court Fees***

Participants in the KADTC are assessed a fee of \$200 unless a relapse or other Program non-compliance, which results in participation longer than 90 days before the transition to Phase 2, occurred during the first 90 days of the Program. In the event a relapse or non-compliance that results in Phase 1 participation of greater than 90 days, the fee is raised to \$300. Participants also pay for drug testing. A urine test is \$5 per test except in cases of missed, positive, or tampered tests, in which case the cost is \$30 per test. If KADTC participants graduate, they pay \$30 for each day they spent in jail (if the individual spends over 7 days in jail, the Kalamazoo County Sheriff's Department waives the jail fee). These fees must be paid prior to graduation.

After enrollment, restitution is assessed if applicable. In order to graduate, restitution does not need to be paid in full, however, participants must have established a history of timely and reasonable payments.

### *Drug Testing*

The frequency of drug testing varies by phase. Participants in Phase I submit to random tests at least 3 times per week. In Phases II and III, the rate of testing drops to once per week. Participants are tested using both urine tests (drops/UAs) and breath tests (PBT). Upon enrolling in the KADTC, participants are assigned a color code. Participants know when they need to come in for a test by calling a hotline, called the “drop line,” and listening for their color.

**Comment:** The KADTC recently changed its drug testing requirements for pregnant participants from 2 times per week to 3 times per week in the later Phases. A report funded by a grant through the Kalamazoo Foundation reviewed the process and goals for pregnant women and found that two of three pregnant women used twice while pregnant. In response to this report, the KADTC modified its processes so that pregnant participants, even those in Phase 2 and 3, are tested along with Phase 1 participants. The intent of the more frequent testing is to place additional pressure on participants not to use, or at the very least, discover use sooner to prevent damage to the fetus as well as the participant’s recovery.

During the standard workweek, the Case Managers at the KADTC office monitor the tests. All drug testing is gender specific, in keeping with the philosophy of having separate men’s and women’s Courts. Drug tests are directly observed by Case Managers of the same gender as participants. On holidays and weekends, KPEP staff perform drug testing at the KPEP facility. Procedures are in place to ensure that positive tests are confirmed. When instant tests come up positive, the sample is sent to a lab for confirmation. If a lab test is positive, the test is performed a second time to confirm the result.

### *Rewards*

The KADTC utilizes both formal and informal rewards. If a participant has been in full compliance with all Program directives for two weeks, they are in “accolades”. This is a formal distinction made by the KADTC staff and participants in accolades are recognized in Court with applause and praise from the Judge(s). Less formally, verbal reinforcement is a common reward utilized by the Team. The Judge(s) and other Team members congratulate, encourage, and praise the participants. Occasionally, the Program has more tangible rewards available. Female participants may receive personal hygiene items, such as body lotion. When participants change phases, they are given a 12-step or AA book and a certificate of achievement. Judge Conlon (women’s Judge) gives participants a small crystal angel when they are doing particularly well. The KADTC is currently seeking donations of items, such as movie tickets, as rewards for continued success in the Program. Participants are also rewarded by less stringent Program requirements. For example, if participants have been in accolades for one month, they may be required to take fewer breath tests.

### *Sanctions*

The KADTC has a standardized sanction system in place (see the Sanction chart in Appendix B). Based on the level of infraction, the Team recommends a sanction to the Judge(s). The participant must see the Judge before a recommended sanction can be enforced, meaning that a two-week gap could occur between the infraction and the imposition of a sanction. Behaviors leading to sanctions include not attending AA/NA meetings, being late or missing appointments, missed or dirty UAs, defiant or reticent attitudes, and lying. Sanctions range from intensified treatment, community service, phase regression, electronic monitoring, spending time at KPEP, incarceration, increased drug testing, and termination.

Many violations incur a standard and unchangeable sanction. For example, unreported use, dishonesty regarding use, or continued participant use, results in 3 days of incarceration. If an individual is given jail as a sanction, the participant is taken immediately into custody. There is no flexibility in when or how much jail is served. However, when the behavior is more complicated or could result in discharge from the Program, the Team may disagree on the severity of the sanction. In these cases, the Judge intervenes and makes the final sanction determination.

### *Unsuccessful Termination*

If participants fail in all treatment options, engage in repeated non-compliance with KADTC regulations, or are consistently unable to meet the Program requirements, they may be discharged unsuccessfully. When a participant is unsuccessfully terminated, the “next step” for the individual depends on their status during the initial referral process. Participants referred through an OPA (Office of the Prosecuting Attorney) diversion program are sent to sentencing and often receive probation. Participants referred through probation are in violation of the conditions of their probation if unsuccessfully discharged. These participants often receive a harsher sentence, such as incarceration, after failing to complete the Program.

### *Graduation*

Participants who have 6 months of negative drug tests in Phase III, have maintained full-time employment or school enrollment (if not disabled), and are in compliance with all payments and restitution, may be eligible for graduation. Graduation ceremonies are held at the beginning of each Court session. Family and friends of the graduate are welcome to attend the graduation. The participant receives praise from the Judge and is encouraged to share words of advice and/or encouragement with other participants. All graduates receive a Program medallion key chain during the ceremony. If the graduate was referred as a diversion participant, the Prosecutor presents a framed copy of the nolle (a declaration that the case will proceed no further) certificate, verifying that the conviction has been dismissed from the graduate’s record. At this point, the graduate’s involvement with the criminal justice system for the Drug Court case usually ends. However, if the graduate was sentenced to the KADTC as a condition of probation/parole, the graduate often remains on probation/parole after completing the KADTC.

### *Data Collected by the Drug Court for Tracking and Evaluation Purposes*

The KADTC makes excellent use of the case management system called CCAMIS to keep data on participants for tracking and evaluation purposes. The CCAMIS system was developed in May 2000. The Coordinator, Case Managers, and Program Assistant are trained in the use of the system and enter data bi-weekly (at a minimum). CCAMIS tracks dates of KADTC sessions, dates of entry into each phase, drug testing information, Court action (such as sanctions or rewards), payment history, referrals, and length of Program participation. The CCAMIS system is also used extensively as a repository for case notes.

The KADTC also keeps other electronic data sources. Microsoft Word tables are used to track basic participant information collected at intake including drugs of choice, age of first drug use, treatment history prior to Drug Court, sentencing information relating to the Drug Court case, Circuit Court case number leading to Drug Court, employment and education status at enrollment (and recently at exit), court of origin, status at exit, demographics, and prior criminal history. The Program also keeps an electronic record of all BSAP information, including a composite score and scores on the medical, employment, alcohol, drug, legal, family, social, and psychological dimen-

sions of the assessment tool. The BSAP is administered within the first few weeks of the Program and then again prior to discharge from the Program.

Some records are not transferred to an electronic source in the KADTC office. These include distinct dates and types of treatment services received and any records prior to 2000.

### *Drug Court Funding*

The gender specific sides of the Program are funded through different sources. The women's Court began as a demonstration project funded by a Byrne Memorial Fund grant in 1992 with matching funds through the State Office of Community Corrections. Due to the length of its history, the women's Court reached the limits of federal implementation and enhancement grants. Beginning in 1997, the women's Court was funded through the Kalamazoo County Circuit Court/General Fund. A major success for the Program occurred in 2005, when committed community members and agencies formed the non-profit Drug Treatment Court Foundation, securing the financial future of the women's Program.

The men's Court was developed in 1997 through the support of U.S. Dept of Justice, Office of Justice Programs and Drug Court Programs Office. In 1999, the Program received a State Court Administrative Office Grant. Continued funding for the men's Program was secured in October 2001 through a federal Byrne Memorial Fund grant, a P.A. Alcohol Tax, and funding from the Kalamazoo County Circuit Court/General Fund.

## **Outcome Evaluation Results**

### **PARTICIPANT AND COMPARISON GROUP MATCHING**

Because KADTC has a separate men's and women's Court, matching included not only matching the complete KADTC sample with the entire comparison group but also included matching the women's Drug Treatment Court and women comparison group members and men's Drug Treatment Court and male comparison group members. The participant groups and comparison groups were matched on characteristics that were meaningful for this evaluation. The groups were compared on gender (for whole group), ethnicity, average age at Drug Court entry (or the proxy entry assigned to the comparison group),<sup>6</sup> criminality 2 years prior to Drug Court entry, and days spent in jail 2 years prior to Drug Court entry. There were 241 individuals in the final participant sample (74 females and 167 males) and 258 comparison group members (95 females and 163 males). Table 3 describes the participant and comparison group demographics as well as other characteristics and Table 4 provides the information by gender groups.

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<sup>6</sup> A proxy Drug Court start date was calculated for the comparison group by adding the median number of days between the Drug Court arrests and Drug Court entry for the Drug Treatment Court group to the arrests date for the comparison group. The median (and mode) for time between Drug Court entry and Drug Court arrests was 142 days. This includes the time between arrest and Court entry for Drug Treatment Court participants who came to the Court from probation and diversion programs.

**Table 3. Participant and Comparison Group Characteristics**

	<b>Drug Treatment Court N = 241</b>	<b>Comparison N = 258</b>
Gender	69% male 31% female	63% male 37% female
Ethnicity	68% White	65% White
Average age at DC entry	32 years	32 years
Average number of arrests 2 years prior to DC entry date	1.57	1.75
Average number of drug-related arrests 2 years prior to DC entry date	0.79	0.75
Average number of jail days associated with arrests 2 years prior to DC entry date	26.31	19.30

Note: T-tests and chi-square tests showed no significant difference between the two groups on these variables ( $p > .05$ )

Table 3 indicates that the KADTC group and the final comparison group were closely matched on all target variables. The comparison group had slightly more females than the KADTC group and had a slightly higher prior arrest history. However, the KADTC group had more days in jail prior to their KADTC arrest, although not significantly. Overall, the groups were not significantly different on any of the variables available for matching.

**Table 4. Participant and Comparison Group Characteristics by Gender**

	<b>Female KADTC N = 74</b>	<b>Female Comparison N = 95</b>	<b>Male KADTC N = 167</b>	<b>Male Com- parison N = 163</b>
Ethnicity	69% White	71% White	67% White	62% White
Average age at DC entry	33 years	36 years	32 years	30 years
Average number of arrests 2 years prior to DC entry date	1.27	1.58	1.71	1.85
Average number of drug-related arrests 2 years prior to DC entry date	0.55	0.65	0.90	0.80
Average number of jail days associated with arrests 2 years prior to DC entry date	9.49	17.74	33.67	20.21*

\*Note: T-tests showed no significant difference between the female groups or male groups on these variables ( $p > .05$ ), with the exception of male jail days (significant at  $p < .05$ ).

Table 4 shows that in general, females in this sample were slightly older than males and tended to have fewer arrests than males. The women in the KADTC sample had the lowest number of prior arrests as well as prior drug-related arrests. The male KADTC group had a higher number of days spent in jail than any other group and was the only variable that could not be matched with the male comparison group.<sup>7</sup> Other than jail days for males, both gender groups had no significant differences on the variables available for matching with their respective comparison group.

KADTC participants reported a variety of drugs of choice, fairly evenly distributed across the sample. Marijuana was the most frequently reported drug of choice for the KADTC group as a whole (33%). Female participants were nearly equally likely to report crack (24%) and marijuana (27%) as their primary drugs of choice. Male participants reported both alcohol (31%) and marijuana (36%) as their main drugs of choice. Despite the nationwide trend of increasing methamphetamine use, only about 6% of KADTC participants reported it as their primary drug of choice.

## Outcome Research Question Results

The following results are provided in the order of the research questions described previously. These results describe the recidivism experienced by the Drug Treatment Court participants and the comparison group in terms of average number of re-arrests as well as re-arrest rate, the drug use over time in both groups measured by drug test results and drug related re-arrests, the success of the KADTC in bring participants to Program completion in the intended length of time, and any participant characteristics or Program services that predict successful outcomes. These analyses include comparisons among the all participants and gender groups.

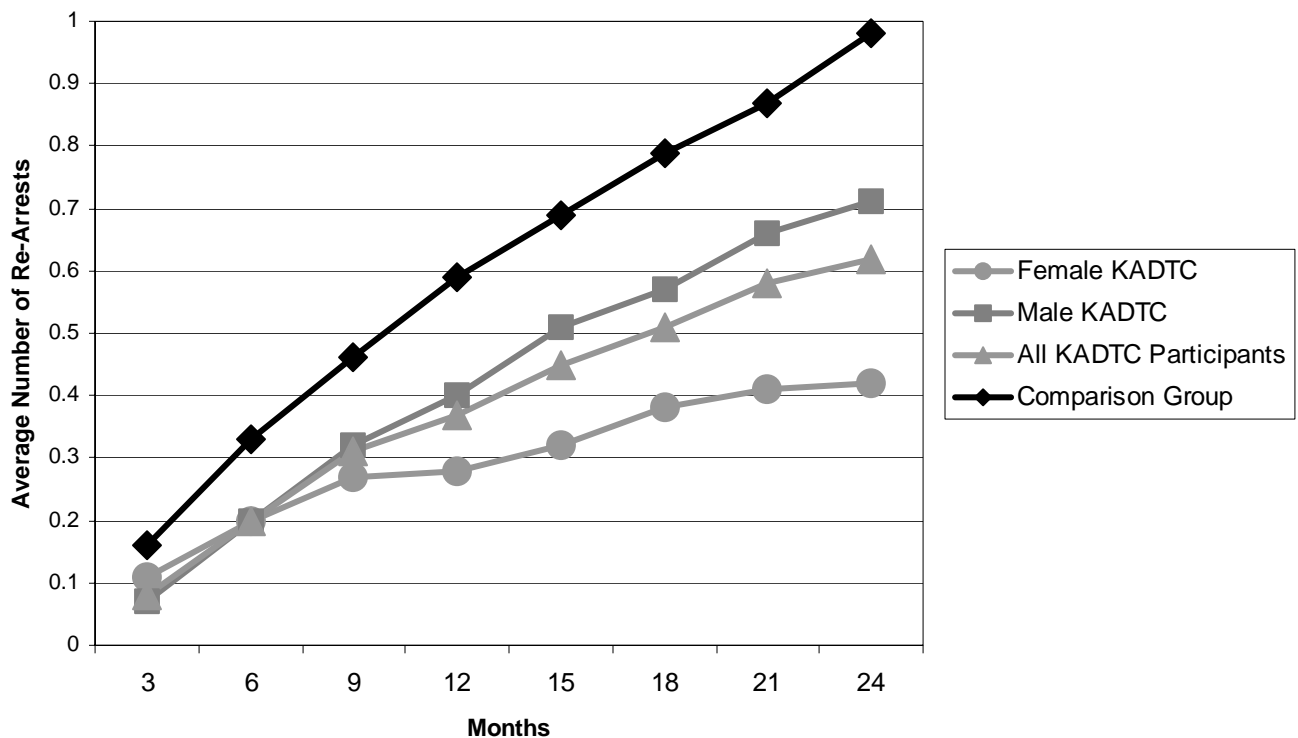
<sup>7</sup> It is possible that the KADTC males had fewer chances for prior arrests if they were incarcerated for more days. This may indicate a slightly higher criminality in the male participant group than the comparison group. Therefore, the positive outcomes described below are all the more striking.

## RESEARCH QUESTION #1: RECIDIVISM

### *Does participation in drug court reduce the number of re-arrests compared to traditional court processing?*

Figure 1 shows the average number of re-arrests over time for 24 months after entering the Drug Treatment Court Program for female KADTC participants, male KADTC participants, all KADTC participants, and comparison group members. The Figure indicates that the comparison group was re-arrested significantly ( $p < .05$ ) more often at the end of 24 months post-Drug Court entry than the KADTC group as a whole. When investigating patterns within the KADTC, the female participants, although re-arrested more often than the male participants during the first few months of the Program, were significantly less likely to be re-arrested than male participants in the 2 years following entry into the Program.

Figure 1. Average Number of Re-Arrests per Person Over 24 Months



### *Re-Arrest Rate*

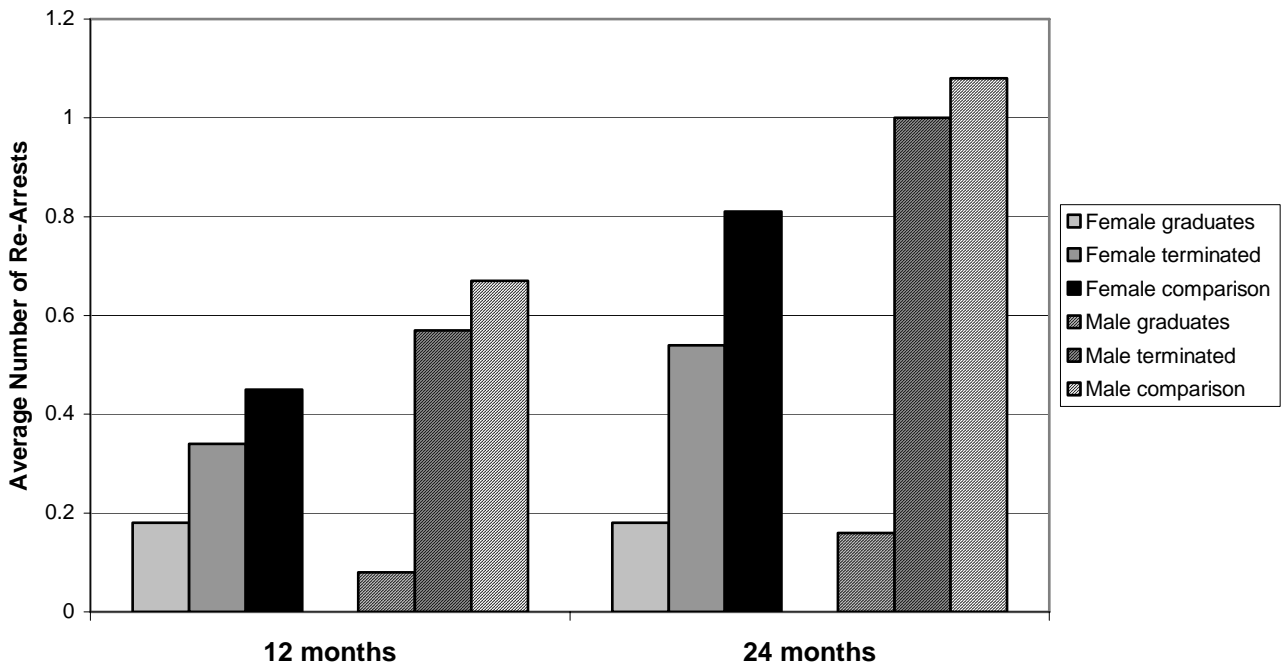
A calculation of the re-arrest rate showed that only 14% of KADTC graduates were re-arrested during the 24 months post-Drug Court entry and 38% of all KADTC participants (regardless of discharge status) were re-arrested after Drug Court entry as compared to 52% of comparison group members. The re-arrest rate of 14% for KADTC graduates is similar to, even slightly lower than, the average re-arrest rate of 17% for drug treatment court graduates nationwide (Roman, Townsend, and Bhati, 2003).

**Re-Arrests by Gender**

A closer look at the gender breakdown of re-arrests can be found in Figure 2. This figure includes re-arrests at 12 and 24 months post-Drug Court entry. Figure 2 indicates that both female and male graduates were re-arrested much less often than terminated participants or comparison group members. Terminated and comparison group members of both sexes were similar in their re-arrest histories, with the closest similarity between male terminated and comparison group members.

Although females were re-arrested less often than males in general, the patterns of recidivism are similar across gender groups, indicating that KADTC is successful with both women and men. Taken together Figure 1 and Figure 2 suggest that participation in the KADTC Program leads to a noticeable decrease in recidivism. It appears that even if individuals are not successful in KADTC, some exposure to the Program can lower the rate of re-offending.

**Figure 2. Average Number of Re-Arrests per Person at 12 and 24 Months by Gender**



To present a more detailed and descriptive picture of the criminality of the groups, arrests were coded as drug-related (e.g., possession), property-related (e.g., larceny), or person-related (e.g., assault). In addition, the arrests were coded as a felony or misdemeanor according to the most serious charge associated with each.<sup>8</sup> Table 5 presents the average number of re-arrests per participant for each charge category.

In the 2 years following Drug Court entry, the Drug Treatment Court group had significantly fewer drug related, misdemeanor, property, and person related arrests than the comparison group. In ad-

<sup>8</sup> When an individual received more than one charge per arrest, a single arrest could be coded as both a person and drug crime. Therefore, the numbers in Table 5 do not reflect the total average arrests in Figure 1.



dition, although the difference was not statistically significant, KADTC participants also had fewer felony arrests at 24 months post-Drug Court entry than the comparison group. Drug Treatment Court graduates overall had fewer re-arrests in every category.

There has been some question about whether drug court programs, which redirect offenders from incarceration into treatment, endanger public safety. These results offer evidence that drug court programs actually protect public safety more effectively than traditional court processing.

**Table 5. Average Number of Re-Arrests per Person by Classification Over 24 Months**

	<b>Drug Court Total</b>	<b>Graduates</b>	<b>Comparison Group</b>
<b>Drug Related Arrests</b>			
1 year average	.14	.06	.24
2 year average	.24	.09	.36
<b>Property Related Arrests</b>			
1 year average	.13	.03	.25
2 year average	.25	.06	.42
<b>Person Related Arrests</b>			
1 year average	.05	.06	.08
2 year average	.09	.02	.17
<b>Misdemeanor Arrests</b>			
1 year average	.17	.08	.26
2 year average	.26	.12	.45
<b>Felony Arrests</b>			
1 year average	.17	.02	.27
2 year average	.32	.03	.44

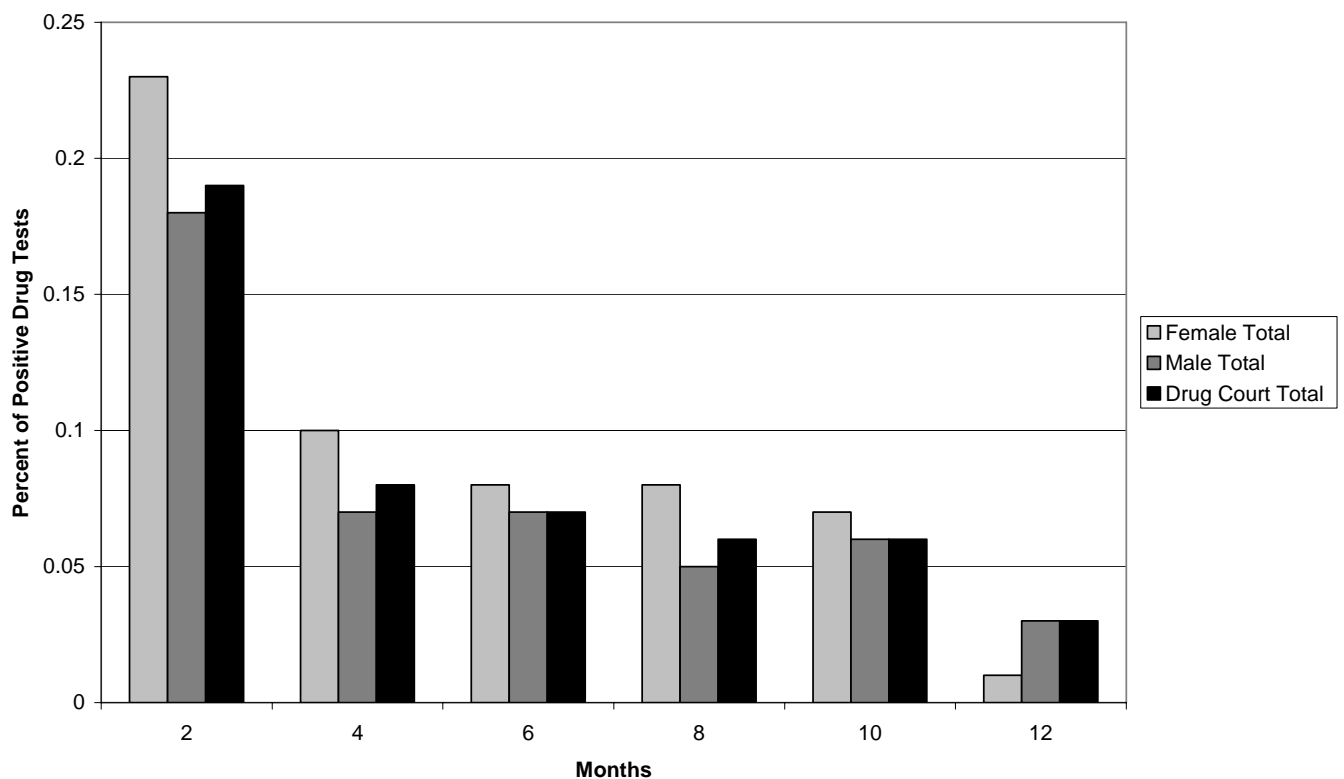
## RESEARCH QUESTION #2: REDUCING SUBSTANCE ABUSE

### *Does participation in drug court reduce levels of substance use?*

#### *Reduction in Positive Drug Tests*

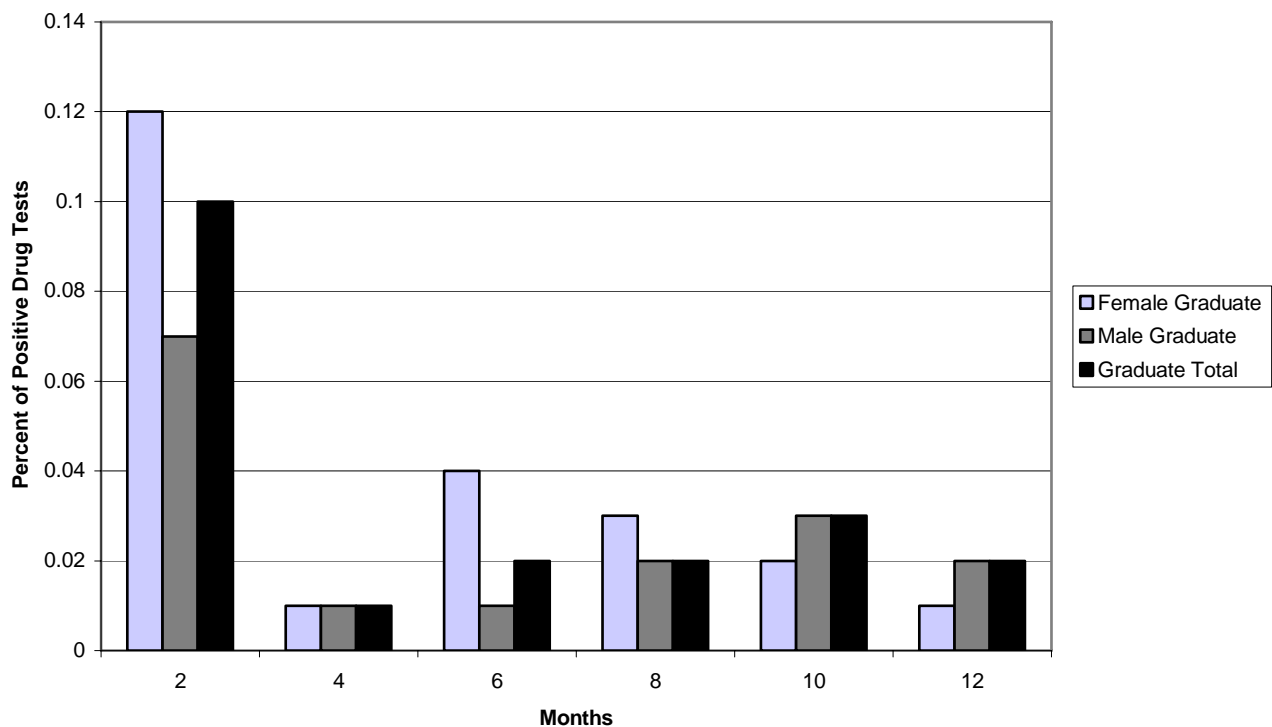
The KADTC Program kept detailed records in the CCAMIS system of drug testing that occurred while participants were involved with the Program. The evaluation team utilized these records as an indicator of whether drug use decreased over time for female and male participants. Figure 3 depicts the percent of positive drug tests to total drug tests over the 12-month period after Drug Court entry for female, male, and all Drug Court participants. The percent of positive UAs was calculated in 2-month (non-cumulative) blocks and includes graduates, terminated participants, and active participants. If an individual was terminated prior to 1 year of participation, their data was included up to the month of discharge. Figure 3 indicates a steady reduction in positive drug tests over the first year following entry to KADTC, from a high 23% at 2 months down to less than 3% positive at 12 months. It is not unusual for participants to have a higher number of positive tests in the first few months following Program entry as the participants work on gaining control of their addiction and adjust to the KADTC expectations. The percent of positive tests declined for both male and female groups. Considering that the number of drug tests required in Phase II and III is reduced from those in Phase I, it is significant that the percent of positive tests continued to decline, as a single positive test would have a stronger weight when fewer tests are given.

**Figure 3. Percent of Positive Tests Over 12 Months for Female, Male, and All KADTC Participants**



The percent of positive tests were also examined for female graduates, male graduates, and all graduates (see Figure 4). Figure 4 clearly demonstrates that the incidence of positive tests declined for graduates over their time in the Program (which is not surprising as clean drug tests are a requirement for graduation). After the first 2-month period, the graduates never exceeded 5% positive tests. It is interesting to note that graduates began their tenure in KADTC with a lower percentage of positive tests than the group as a whole (refer to Figure 3), which may indicate that either graduates were more ready to comply with Program requirements or that perhaps they had a less severe addiction than those participants who were eventually terminated unsuccessfully.

**Figure 4. Percent of Positive Tests Over 12 Months for Graduates**

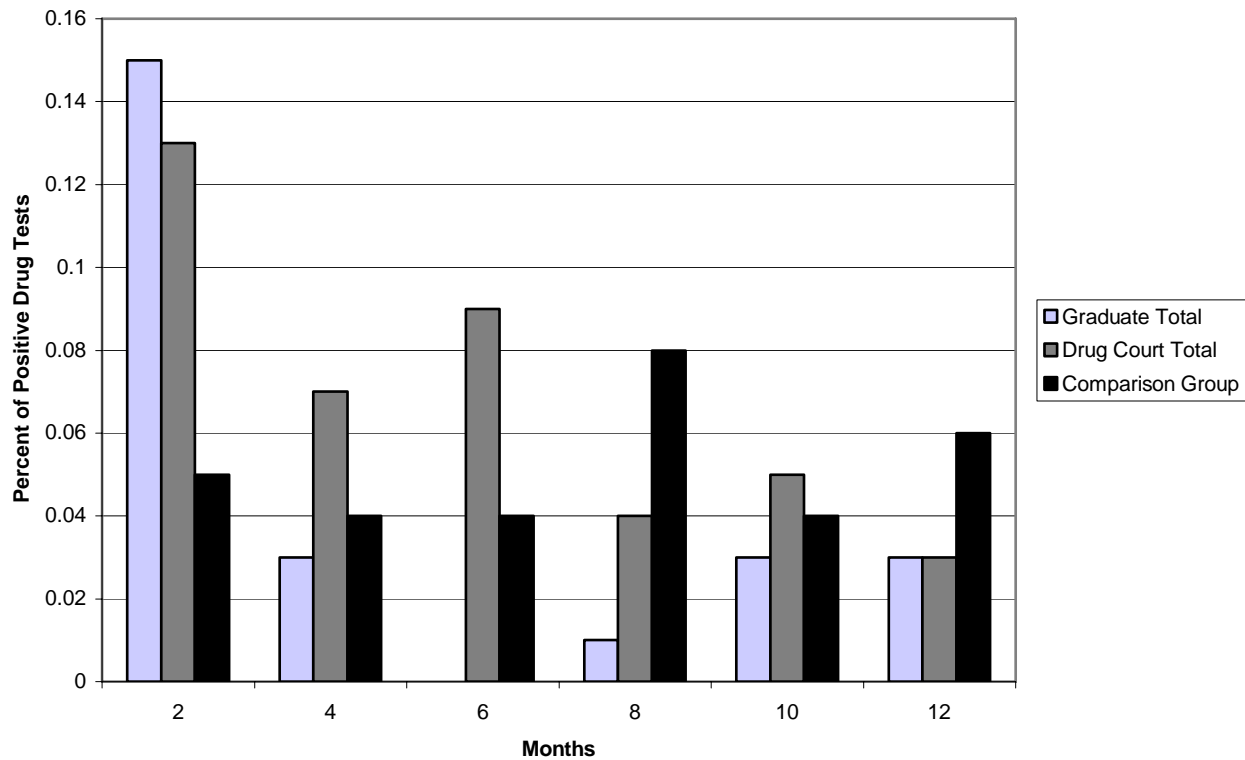


A second set of analyses was conducted on both Drug Court participants and the comparison group using the OMNI data obtained from the Department of Corrections (DOC). The DOC data offers a unique opportunity to compare the drug testing history of Drug Treatment Court participants with the comparison group. It is unusual to have any consistent drug testing information on the comparison group in drug court evaluations. The DOC data includes only those individuals who had some contact with the DOC in the 12 months following entry into Drug Court (or the proxy assigned to the comparison group). This means that not all members of either the KADTC sample or the comparison group were included in these analyses. These analyses should be interpreted with care, particularly because the number of tests given are dependent on the degree of interaction an individual had with the DOC, which can vary widely (as opposed to the structured requirements of the KADTC).

Figure 5 indicates that the KADTC group as a whole, as well as the graduates, declined in the percent of positive drug tests over the 12-month period following entry to the Program. The compari-

son group members, although initially showing a smaller ratio of positive tests to all tests than the KADTC members, showed a fairly consistent trend of positive tests (4-6% over time). This provides some indication that traditional services are less effective in reducing substance abuse for those individuals with substance use issues than the targeted and highly structured services offered by the KADTC.

**Figure 5. Percent of Positive Tests for KADTC and Comparison Group Participants**

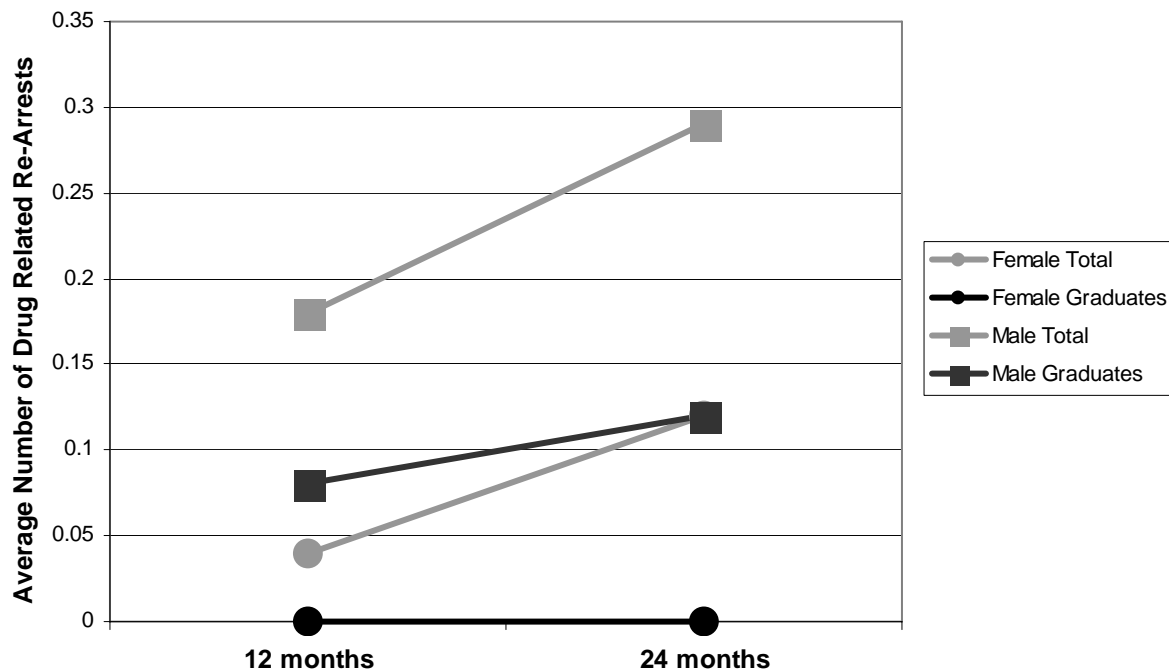


***Reduction in Drug Related Re-Arrests***

Whether the KADTC is effective at reducing substance use can also be measured by looking at the number of re-arrests for drug related crimes. The 2-year averages for the KADTC graduates, all participants and the comparison group are shown in Table 5 (see above). As previously noted, Drug Treatment Court participants, particularly the graduates, were re-arrested significantly fewer times for drug-related crimes than the comparison group.

To further understand patterns within the men’s and women’s Programs within the KADTC, Figure 6 depicts the drug-related re-arrests by gender. Although the male participants are re-arrested less often than male comparison group members, the male participants were re-arrested significantly more often on drug related charges than the female participants 2 years after entry into the KADTC. The female graduates had no drug-related re-arrests any time during the 24 months post-Drug Court entry. Overall, these findings indicate that the KADTC Program was effective at reducing recidivism related to drugs for both men and women and that this Program was particularly effective for women as female participants were least likely to re-enter the criminal justice system due to drug-related offenses.

**Figure 6. Average Number of Drug Related Re-Arrests at 12 and 24 Months Post KADTC Entry for Men and Women**



#### *Substance Use Reduction Conclusion*

Taken together, these results provide compelling evidence that the KADTC Program is effective in reducing substance use among its participants. The Program appears to be particularly effective with reducing use among females. Further, the reduction in substance use has ramifications for the community in that KADTC participants are less likely to engage in drug-related criminality following their time in the Program.

#### **RESEARCH QUESTION #3: PROGRAM COMPLETION**

##### *How successful is the program in bringing program participants to completion and graduation within the expected time frame?*

Whether a program is bringing its participants to completion in the intended time frame is measured by program graduation (completion) rate and retention rate, and by the amount of time participants spend in the program. Program *graduation rate* is the percentage of participants who graduated from the program out of a cohort of participants who have all left the program by either graduating or terminating unsuccessfully. Program *retention rate* is the percentage of individuals who have either graduated or are still active out of the total number who have entered the program. The KADTC Program graduation rate for this sample of all those entering the Program between January 2002 and December 2003 ( $n = 227$ ) is 27%. The graduation rate for women involved in KADTC during this time period was 23% while 29% of the men graduated. The retention rate for this sample of participants was 33%, 32% for the women and 34% for the men. This is actually quite low compared to the national average of approximately 70% (Huddleston, 2006, keynote speech at the Pacific Law Enforcement Summit). It is unclear why the KADTC retention rate is

this low. It may be that the Program requirements are less flexible (or more tightly adhered to) than in other programs. It also may be that the services provided are most effective for a particular type of participant and less effective for the larger group. (This is discussed further in the section on participant characteristics and outcomes, below). However, regardless of the retention rate, the recidivism results described above show that the KADTC Program produces positive outcomes for its participants.

To measure whether the Program is adhering to its expected time frame, the average amount of time in the Program was calculated for participants who had enrolled in the KADTC during 2002 and 2003 and had been discharged by December 9, 2005. The average length of time of participation in the Kalamazoo Drug Treatment Court Program was just under 1 year (361 days). Graduates spent an average of 583 days (median = 523) in the Program or just over 19 months. The average length of time in the Program was similar for female and male graduates (mean = 596 and 578 days, respectively). Participants who were unsuccessfully discharged spent on average 269 days in the Program or around 9 months. The expected time frame for completion of the KADTC is about 15 months (3 months in Phase I and 12 months combined in Phase II and III). These results indicate that it takes graduates slightly longer than expected to complete the Program, however, this is not unusual, as the average length of time to graduation tends to be around 18 months nationwide (Cooper, 2004). Note that these results indicate that the KADTC tends to focus its resources (in terms of time spent) on those participants who do end up graduating, rather than expending excessive resources on participants who do not comply with its policies.

#### **RESEARCH QUESTION #4: PREDICTORS OF PROGRAM SUCCESS**

##### ***What participant characteristics predict program success and decreased recidivism?***

Graduates and unsuccessfully discharged participants were compared on the basis of demographic characteristics and drug of choice to determine whether any significant patterns predicting Program graduation or recidivism could be found. The following analyses include participants who entered the Program in 2002 and 2003 and who were discharged from the Program as of December 9, 2005. Of the 241 persons who entered the Program during that time period, 161 (66.8%) were terminated from the Program, and 66 (27.4%) had graduated from the Program. The remaining 14 participants were still active in December and thus were not included in these analyses.

The KADTC Program tracks several types of demographic and treatment history variables for its participants. The Program administers the Behavior Severity Assessment Program (BSAP) which provides composite scores on seven indexes (see [www.tresearch.org/resources/instruments.htm](http://www.tresearch.org/resources/instruments.htm) for more information). These indexes provide a snapshot of the participant's needs at the time of Program enrollment in the areas of employment, alcohol, drugs, legal, medical, family, and psychiatric. Scores range between 0 to 1, with higher scores indicating a greater severity of need. This index allows the KADTC staff to target services for its incoming participants. These demographic, treatment history, and assessment variables were used to determine whether Program success and/or decreased recidivism could be predicted from the participant characteristics.

##### ***Program Success***

An ANOVA analysis of the mean differences showed that participants who graduated tended to be significantly older than those who were unsuccessfully discharged and that graduates also had an older age of first use (21 years vs. 17 years) than the terminated participants. This trend was echoed in the male and female groups and was particularly noticeable in the females, where graduates

did not begin using until they were an average of 29 years, compared to the terminated participants whose average age of first use was just under 20 years. This age difference support the commonly known fact that individuals who begin drug use at an earlier age (and therefore have a longer addiction history) may have a more difficult time discontinuing drug use, due to the habits that form at an early age, greater organic damage, or fewer resources available at a young age. These are just some of the possible reasons why younger participants tend to be slightly less successful in Court. The KADTC may want to further investigate how age and drug use history factors into individuals' Program engagement and adjust services as needed.

Marijuana was the primary drug of choice for unsuccessful participants (34%), whereas graduates were more likely to report problems with alcohol (32%). Female participants who terminated before completing the Program were also more likely to use marijuana (34%), although many terminated participants also reported using crack and methamphetamine as the primary drug of choice. Over 52% of female graduates reported that crack was their primary drug of choice. Finally, the males shared a similar pattern, with marijuana again nominated as the primary drug of choice for terminated participants (34%), and alcohol and marijuana nominated as the primary drug for male graduates. The consistent pattern of marijuana and termination may be worthy additional investigation. Considering that marijuana use may be more difficult to conceal than other drugs due to its longevity in the body, it may be easier for KADTC staff to detect continued use, which may eventually lead to termination. It is also plausible that there are needs being unmet for marijuana users. It is recommended that the KADTC examine their treatment services to determine whether they can be adjusted to better target marijuana use.

Overall, graduated and terminated participants were similar in their criminality 2 years prior to starting Drug Court, however some significant differences were found. The average number of prior arrests for graduated participants was significantly lower than the number for terminated participants (graduate mean = 1.15, terminated mean = 1.75). This is to be expected as the best predictor of future criminal behavior is past criminal behavior. However, when prior arrests were examined by gender, this difference was still significant for men, but not for women. In the case of female participants, prior criminal history was not a significant indicator of graduation status. It is possible that those who receive referrals to Drug Court through probation have a more severe criminal history (as they are already on probation for a previous crime), approaching the Program with a different set of incentives and motivations than those with less prior contact with the criminal justice system.

In sum, graduates tended to have a greater age at first use than terminated participants, marijuana was the most common primary drug of choice for terminated participants, and terminated male participants tend to arrive at the Program with a slightly more severe criminal history. The Program may benefit by enhancing their services to see if they can better address the needs of the long-time user and the particular needs of marijuana users. In addition, the KADTC Program may want to consider making a push to capture more referrals through the Prosecuting Attorney and the Defense Attorney soon after the Drug Court eligible arrest (as compared to those referred through Probation after several probation violations).

Aside from these three findings, overall the participants who graduate and those who are unsuccessful are very similar in their characteristics. This, along with the successful outcomes described above, indicates that the KADTC serves offenders with varying demographics and treatment histories very well.

### *Recidivism and Participant Characteristics*

Very few of the participant characteristics described above were statistically related to re-arrests after Drug Court entry. Correlations between the participant characteristics and re-arrests 24 months after Drug Court entry showed that just ethnicity ( $r = -.23$ ) and employment status at Drug Court entry ( $r = -.14$ ) had a significant relationship with re-arrests. This indicates that non-white and unemployed participants were more likely to be re-arrested following KADTC entry. Further, examination of the gender groups revealed that non-white males were significantly more likely to be re-arrested while unemployed females were more likely to be re-arrested. There were no clear patterns between drug-of-choice and overall recidivism.

There is not enough information to explain the relationship between ethnicity and recidivism, though this correlation warrants further investigation in the future. It is possible that the KADTC could look into the cultural appropriateness of their services.

The link between being unemployed and recidivism is not surprising. If someone is unemployed they are more likely to turn to crime to obtain money for living expenses. They are also more likely to become bored and perhaps relapse, leading to further criminal activity.

### **RESEARCH QUESTION #5: PROGRAM SERVICES AS PREDICTORS OF SUCCESSFUL OUTCOMES**

#### ***What combination and types of services predict successful outcomes including program completion and decreased recidivism?***

As with many other drug court programs, the KADTC strives to tailor the types of services received to fit the specific needs of the participants, (participants are not randomly assigned to different Drug Court services). However, the evaluation team was able to examine sanction days and frequency and type of treatment at the various service locations in relation to graduation status at exit and recidivism to investigate whether any patterns could be found.

The number of days spent in jail for sanctions was significantly higher for terminated participants than for graduates for the group as a whole, females, and males. This is not surprising, as non-compliance often leads to jail time and eventually termination. On average, terminated participants spent approximately 14 days in jail for sanctions (females = 19; males = 12) as compared to 6 days for graduates (females = 6; males = 5). This is common in many programs and indicates that the use of high amounts of jail time as a sanction may not be the most effective promoter of behavior change, since those participants with the highest amount of jail time are those who end up unsuccessfully terminated. Like many drug court programs, the KADTC may want to examine how to use jail as a sanction most effectively to lead to more successful Program graduates.

An examination of treatment services received revealed that female graduates had significantly more individual (one-on-one) treatment sessions (mean = 17.75) than terminated participants (mean = 7.69). This is likely a function of the longer tenure and commitment to the Program for graduates. However, this finding could also be an indication that female participants who receive more one-to-one attention from treatment providers reap greater benefits than those who seek less individual treatment. There were no other differences for the type of treatment received between graduated and terminated participants.

Recidivism was significantly influenced by the amount of treatment received, whether as individual sessions or IOP sessions. Those who had more one-on-one or intensive treatment were less likely to recidivate. Although these relationships were not strong (correlations ranged from  $-.14$  to  $-.17$ ) and



may be an artifact of graduation status, this is a trend worth tracking over time. (There were no other significant relationships between services received and recidivism). Individuals who receive more one-on-one attention may feel more invested in their treatment and therefore may be more likely to embrace recovery and stay on a positive, drug-free and crime-free path.

## Cost Evaluation Results

As described in the methodology section, the Transactional and Institutional Cost Analysis (TICA) approach was used to calculate the costs of each of the transactions that occurred while participants were engaged in the Program. Transactions are those points within a system where resources are consumed and/or change hands. In the case of drug courts, when a participant appears in court or has a drug test, resources such as judge time, defense attorney time, court facilities, and urine cups are used. Program transactions calculated in this analysis included Drug Court appearances, case management, treatment sessions (individual, group, and intensive outpatient), drug tests, KPEP, and jail as a sanction days. The costs for this evaluation were calculated including taxpayer costs only. All cost results provided in this report are based on fiscal year 2006 dollars.

### INVESTMENT COSTS

#### *Program Transactions*

A ***Drug Court Session***, for the majority of drug courts, is one of the most staff and resource intensive program transactions. In Kalamazoo County, Drug Court sessions include representatives from the Circuit Court and District Court (Judges, Drug Court Coordinator, Case Managers, Program Assistant), the Prosecuting Attorney, the contracted Defense Attorney, the Department of Corrections (Probation Agents), and the University Substance Abuse Clinic (Director). The cost of a ***Drug Court Appearance*** (the time during a session when a single participant is interacting with the judge) is calculated based on the average amount of court time (in minutes) each participant uses during the Court session, which includes the time of all the staff in attendance. This includes the direct costs of each Drug Court Team member present during sessions, the time Team members spent preparing for or contributing to the session, the agency support costs, and overhead costs. The average cost for a single Drug Court appearance per participant is **\$95.61** for men's Drug Court and **\$118.42** for women's Drug Court. This cost per appearance is on the lower end of the per appearance costs of other adult drug courts studied by NPC Research. For example, courts in California and Oregon had appearance costs ranging from \$97 to \$156 (Carey and Finigan, 2004; Carey, et al., 2005).

***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 participant per day.<sup>9</sup> The main agencies involved in case management for Drug Court include the Circuit Court, the Department of Corrections, the University Substance Abuse Clinic, and Community Healing Centers. The per day cost of case management per participant is **\$3.56** for women and **\$3.13** for men. This is within the range found for case management costs in other drug courts. For example, case management costs from cost analyses in 9 drug courts in California (Carey, et al., 2005) varied from just over \$1.00 per day to over \$11.00 per day.

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<sup>9</sup> Case management includes home visits, meeting with participants, evaluations, phone calls, paperwork, answering questions, consulting with therapists, documentation, file maintenance, schedule maintenance, residential referrals, and providing resources and referrals for educational and employment opportunities.

**Treatment** is provided by multiple agencies, although two main providers are used most often. Community Healing Centers provides individual, group, and intensive outpatient treatment sessions, while the University Substance Abuse Clinic provides individual and group treatment sessions. Since this cost analysis is focused on public funds, the cost of treatment in this instance is only the amount paid for by the public funds. **Individual Treatment** sessions are **\$54.00**. **Group Treatment** per participant is **\$30.00** per session at Community Healing Centers and **\$22.00** per session at the University Substance Abuse Clinic. Community Healing Centers offers **Intensive Outpatient Treatment** for **\$89.00** per participant per session. All costs are billed rates that include all salary, support, and overhead costs associated with the session. Other agencies also provide group treatment sessions, but the scope of the evaluation prevented NPC from obtaining the cost of group treatment at the other treatment agencies. For other group treatment sessions, an average of the group treatment sessions at Community Healing Centers and the University Substance Abuse Clinic was used. This rate is **\$26.00** per participant per session.

**Drug Tests** are performed by the Circuit Court. Participants are required to pay a portion of the drug test cost. The cost of drug tests after participant payment is subtracted are **\$1.12** per women's UA test and **\$0.89** per men's UA test. These costs were determined by using the total amount that the Court spent on testing for each group, divided by the total number of tests administered. The Department of Corrections also performs drug testing at **\$6.94** per lab UA test. This is a billed rate that includes the cost of materials, salary, support, and overhead costs associated with the test.

**KPEP** is a non-profit agency run by the Department of Corrections that is a residential alternative to jail. KPEP performs treatment sessions and offers job skills training, anger management, and a GED program. The cost of KPEP for Drug Court participants is **\$29.00** per person per day. This is a billed rate that includes the cost of services, salary, support, and overhead costs associated with KPEP.

**Jail Days as a Sanction** costs were provided by the Kalamazoo County Sheriff's Department. Jail bed days are **\$70.55** per person per day. This rate was calculated by the Kalamazoo County Jail Administrator and includes all staff time, food, medical, and support/overhead costs.

#### **Program Costs**

Table 6 presents the average number of men's Program transactions (Drug Court appearances, treatment sessions, etc.) per participant and the total cost for each type of transaction (the number of transactions times the cost per transaction). The sum of these transactions is the total per participant cost of the men's Program. These numbers include the average of all male participants in the sample, regardless of completion status, except for those who were currently active. It is important to include participants who terminated as well as those who graduated because all participants use Program resources, whether they graduate or not.

**Table 6. Average Men's Program Costs per Participant**

<b>Transaction</b>	<b>Transaction Unit Cost</b>	<b>Avg. # of Program Related Transactions</b>	<b>Avg. Cost per Participant<sup>10</sup></b>
Drug Court Appearances	\$95.61	16.22	<b>\$1,551</b>
Case Management	\$3.13	381.47 Days <sup>11</sup>	<b>\$1,194</b>
Individual Treatment Sessions	\$54.00	8.38	<b>\$453</b>
CHC Group Treatment Sessions	\$30.00	1.22	<b>\$37</b>
USAC Group Treatment Sessions	\$22.00	0.60	<b>\$13</b>
Other Group Treatment Sessions	\$26.00	4.20	<b>\$109</b>
Intensive Outpatient Treatment Sessions	\$89.00	16.13	<b>\$1,436</b>
Court UA Tests (UAs)	\$0.89	92.81	<b>\$83</b>
DOC Lab UA Test	\$6.94	5.77	<b>\$40</b>
KPEP	\$29.00	5.01	<b>\$145</b>
Jail as a Sanction Days	\$70.55	10.01	<b>\$706</b>
<b>Total Drug Court</b>			<b>\$5,767</b>

Table 7 presents the average number of women's Program transactions (Drug Court appearances, treatment sessions, etc.) per participant and the total cost for each type of transaction (number of transactions times the cost per transaction). The sum of these transactions is the total per participant cost of the women's Program. These numbers include the average of all women's Drug Court participants except those who were currently active, regardless of completion status. It is important to include participants who terminated as well as those who graduated because all participants use Program resources, whether they graduate or not.

<sup>10</sup> Average costs per participant for this column have been rounded to the nearest whole dollar amount.

<sup>11</sup> Case management is calculated by number of days in Drug Court, so the average number of transactions in this case is the average number of days spent in the Drug Court Program.

**Table 7. Average Women’s Program Costs per Participant**

<b>Transaction</b>	<b>Transaction Unit Cost</b>	<b>Avg. # of Program Related Transactions</b>	<b>Avg. Cost per Participant<sup>12</sup></b>
Drug Court Appearances	\$118.42	21.63	<b>\$2,561</b>
Case Management	\$3.56	434.27 Days <sup>13</sup>	<b>\$1,546</b>
<b>Individual Treatment Sessions</b>	\$54.00	9.52	<b>\$514</b>
<b>CHC Group Treatment Sessions</b>	\$30.00	1.36	<b>\$41</b>
<b>USAC Group Treatment Sessions</b>	\$22.00	1.00	<b>\$22</b>
<b>Other Group Treatment Sessions</b>	\$26.00	0.32	<b>\$8</b>
<b>Intensive Outpatient Treatment Sessions</b>	\$89.00	16.68	<b>\$1,485</b>
<b>Court UA Tests (UAs)</b>	\$1.12	98.78	<b>\$111</b>
<b>DOC Lab UA Test</b>	\$6.94	3.45	<b>\$24</b>
<b>KPEP</b>	\$29.00	0.90	<b>\$26</b>
<b>Jail as a Sanction Days</b>	\$70.55	15.76	<b>\$1,112</b>
<b>Total Drug Court</b>			<b>\$7,450</b>

Tables 6 and 7 present the costs to the taxpayer of each transaction in the KADTC Program.<sup>14</sup> For both the men’s and women’s Program, the KADTC spends the most on Drug Court sessions, IOP treatment, case management and jail as a sanction. This is similar to other drug courts studied by NPC (Carey and Finigan, 2004; Carey, et al., 2005). However, one area where the KADTC may be able to reduce costs is in the use of jail as a sanction. Practitioners have found that short-term incarceration (24 to 48 hours) that occurs without notice, directly from the drug court session, is one the most effective uses of incarceration to promote behavior change (West Huddleston and Helen Harberts, NDCI, personal communication August 18, 2006). This is actually very similar to the KADTC model, as individuals are taken directly to jail from court when sanctioned and are sanctioned depending on the sanctioning guidelines. However, the jail days are assigned according to the sanction chart and range from 3-7 days. There is some evidence that after 48 hours the incarceration loses it’s “shock” value and the individual becomes used to and more comfortable in the jail environment, which removes some of the power of the sanction. Another benefit of short-term incarceration is that this is less of a hardship than longer-term incarceration (of several days or weeks) for participant employers and families, allowing the participants to continue with gainful

<sup>12</sup> Average costs per participant for this column have been rounded to the nearest whole dollar amount.

<sup>13</sup> Case management is calculated by number of days in Drug Court, so the average number of transactions in this case is the average number of days spent in the Drug Court Program.

<sup>14</sup> The women’s Drug Court has been fully funded by an endowment grant of privately donated funds since 2005. The endowment is \$150,000 per year, which covers all costs and positions involved in women’s Drug Court.

employment and positive family relationships. In addition, to keep the shock value of incarceration, it is necessary to use this sanction sparingly and use other types of sanctions more often such as additional treatment sessions, writing papers about how they can improve their behavior and sitting through court sessions in addition to their normally required sessions. Another way to increase the effectiveness of incarceration and other sanctions is to have them occur as soon after the non-compliant behavior as possible, preferably within 24 hours. This can be accomplished by allowing Program staff members (such as probation) administer sanctions when the Judge is not available.

The total Program cost per participant is presented in the bottom row of Tables 6 and 7. On average, in other drug court programs studied by NPC, the program cost per participant ranged from \$4,000 to just over \$12,000 depending on the intensity of the program and the extent to which the programs used public funds for their services (Carey and Finigan, 2004; Carey, et al., 2005). The average costs per participant of the Drug Court Program (\$5,767 for the men and \$7,450 for the women) are in the middle of this range. It was found in NPC's studies of other drug courts that the cost of "business-as-usual," that is, the cost to the criminal justice system of processing the case if there had been no drug court program, was nearly as high as the cost of the program. In fact, in some jurisdictions, the cost of the program was *less* than "business-as-usual."

#### *Program Costs per Agency*

Another useful way to examine Program costs is to break them down by agency. Table 8 provides this breakdown (per participant) by agency. Because the Circuit Court has the most staff dedicated to the Drug Court Program, it has the largest proportion of the cost. This is due to the large amount of case management performed by this agency, as well as the proportionately larger number of Circuit Court employees involved in the Program. Drug court programs generally include a high level of supervision and in KADTC this supervision is performed primarily by the Circuit Court Case Managers. The women's Drug Court has higher Circuit Court costs than the men's Drug Court and this cost makes up the majority of the total cost difference between the two. This is partially due to the smaller number of female participants. The men's Drug Court has the advantage of some economy of scale. In addition, the female participants tend to spend slightly more time in front of the Judge at each Drug Court appearance. Interestingly, as will be demonstrated later in this report, although the women's Drug Court is more expensive than the men's, the female participants also save a substantial amount more in outcome costs than the male participants.

The next largest expense belongs to Community Healing Centers. This is because of the treatment services provided by this agency, and more specifically, the intensive outpatient treatment sessions. The University Substance Abuse Clinic and Other Treatment Agencies have significantly lower proportions of treatment costs. This is due to the less frequent use of group treatment sessions in the Drug Treatment Court Program (intensive outpatient treatment is used more often) and the lower cost of group and individual treatment sessions (in comparison to intensive outpatient treatment sessions). The treatment costs indicate that the Drug Court participants are participating in treatment as intended by the KADTC Program.

The Sheriff has the next largest proportion of the cost of Drug Court, and it is entirely due to the use of jail days used as a sanction. As discussed earlier in this report, the KADTC Program may want to examine their use of jail as a sanction in order to reduce Program costs.

The other agencies involved in the Drug Court Program incur their costs mainly through staff attendance at Drug Court Team meetings and court sessions. These activities are clearly less time intensive than daily supervision and treatment.

**Table 8. Average Men’s and Women’s Program Cost per Participant by Agency<sup>15</sup>**

<b>Agency</b>	<b>Average Agency Cost per Men’s Participant</b>	<b>Average Agency Cost per Women’s Participant</b>
Circuit Court	\$1,909	\$3,139
District Court	\$223	\$0
Prosecuting Attorney	\$114	\$246
Defense Attorney	\$320	\$313
Dept. of Corrections	\$197	\$252
Sheriff	\$706	\$1,112
University Substance Abuse Clinic	\$300	\$385
Community Healing Centers	\$1,889	\$1,995
Other Treatment Agencies	\$109	\$8
<b>Total</b>	<b>\$5,767</b>	<b>\$7,450</b>

*Traditional Court Processing Transactions*

In addition to the KADTC Program transactions, the TICA approach was used to calculate the costs of the traditional court (non-Drug Court) processing transactions. The traditional court transactions calculated in this analysis included arrests/bookings, court cases, treatment (residential, residential detox, outpatient, and intensive outpatient), jail days, and probation days. The costs for this study were calculated including taxpayer costs only. All cost results provided are based on fiscal year 2006 dollars.

**Arrests/Bookings** for the Drug Court Program are conducted by multiple agencies. This evaluation used an average of arrest and booking cost information from Kalamazoo Public Safety, the State Police, and the Sheriff, as the arresting agency could not be determined from the arrest data. The cost of a single arrest and booking on average is **\$200.79** (\$169.97 for Kalamazoo Public Safety, \$196.19 for the State Police, and \$236.20 for the Sheriff). Each rate was calculated by determining the positions, activities, and time involved in a typical arrest, and then assigning salary, benefits, and support/overhead costs to those activities to result in a cost for one arrest.

**A Court Case** in traditional court processing costs an average of **\$413.52**. This was calculated by dividing the total yearly budget expenditures of the Circuit Court, District Court, Prosecuting Attorney, and contracted Defense Attorney by the total number of cases for that year (the budget year

<sup>15</sup> Average agency costs per participant have been rounded to the nearest whole dollar amount.

used was 2004. The resulting court case cost was then updated using the Consumer Price Index). This is an average for all types of court cases and includes a high number of low-level cases; therefore this cost may underestimate the cost of the court cases experienced by the offenders in the study population. However, it was beyond the scope of this study to perform the detailed data collection necessary to determine the costs of every type of court case. Further, NPC has found through previous studies (e.g., Carey and Finigan, 2004; Carey et al., 2005) that simply dividing the court budget by the number of cases heard by the court is a reasonably accurate way to determine the cost of an average court case by comparing this average cost to the costs calculated through detailed time studies of traditional court case processing.

**Drug and Alcohol Treatment** outside of the Drug Court Program was pulled from the Michigan State Treatment Episode Data Set (TEDS). The treatment in this dataset includes outpatient treatment sessions, intensive outpatient treatment sessions, and residential treatment. Treatment costs were calculated based on unit costs provided with the TEDS dataset. **Residential Treatment** is **\$137.30** per person per day and **Residential Detox** is **\$201.99** per person per day. **Outpatient Treatment** episodes are **\$701.75** per person per admission and **Intensive Outpatient Treatment** episodes are **\$771.05** per person per admission.

**Jail Day** costs were provided by the Kalamazoo County Sheriff's Department. Jail bed days are **\$70.55** per person per day. This rate was calculated by the Kalamazoo County Jail Administrator and includes all staff time, food, medical, and support/overhead costs.

**Probation** costs were provided by the Department of Corrections. Probation supervision costs are **\$5.48** per person per day. This was based on the yearly cost of probation calculated by the Department of Corrections in a manner consistent with NPC's TICA methodology including direct costs, as well as support and jurisdictional overhead costs.

#### *Investment Costs in the Drug Court Eligible Case for Drug Court Participants*

In addition to the costs of the Drug Court Program, there were costs associated with the case that led to Drug Court that were not directly associated with Program participation. Since they are a cost to the taxpayer and are a part of the system that leads to Drug Court participation, NPC includes these costs in "investment" costs. Tables 9 and 10 present the average number of investment transactions per men's Drug Court participant and women's Drug Court participant, along with the total cost for each type of transaction (number of transactions times the cost per transaction). The sum of these transactions is the total per participant investment cost for a Drug Court eligible case, outside of the costs of the Drug Court Program. These numbers include the average of all Drug Court participants in our sample (N = 160 for the men, and N= 67 for the women) except for the small number of those who were currently active and therefore had not finished receiving services.

**Table 9. Average Investment Costs per Men’s Program Participant**

Transaction	Transaction Unit Cost	Avg. # of Program Related Transactions	Avg. Cost per Participant <sup>16</sup>
Arrest/Booking <sup>17</sup>	\$200.79	1.00	\$201
Jail Days (Sheriff)	\$70.55	14.87	\$1,049
Probation Days (DOC)	\$5.48	343.75	\$1,884
<b>Total Drug Court</b>			<b>\$3,134</b>

**Table 10. Average Investment Costs per Women’s Program Participant**

Transaction	Transaction Unit Cost	Avg. # of Program Related Transactions	Avg. Cost per Participant <sup>18</sup>
Arrest/Booking <sup>19</sup>	\$200.79	1.00	\$201
Jail Days (Sheriff)	\$70.55	6.52	\$460
Probation Days (DOC)	\$5.48	359.60	\$1,971
<b>Total Drug Court</b>			<b>\$2,632</b>

An examination of Tables 9 and 10 show that the male participants jail cost for the Drug Court case (but outside of the Drug Court Program) is over twice that of the female jail costs. It is not clear why this should be so. This may be due to the slightly higher termination rate for male participants (which most likely results in more jail time). It is also possible that this is due to male participants having more severe criminal history in the 2 years prior to Program entry than the female participants, which would lead to harsher sentences when terminated from the Program.

***Investment Costs in the Comparison Group for the Drug Court Eligible Case - Traditional (Non-Drug Court) Case Processing***

Tables 11 and 12 present the average number of traditional court processing transactions per male comparison offender and per female comparison offender, along with the total cost for each type of transaction (number of transactions times the cost per transaction). The sum of these transactions is the total per offender cost of traditional court processing. These numbers include the average of all comparison group participants (N = 163 for males and N= 95 for females).

<sup>16</sup> Average costs per participant for this column have been rounded to the nearest whole dollar amount.

<sup>17</sup> This includes the arrest costs for Kalamazoo Public Safety, the Kalamazoo County Sheriff, and the Michigan State Police. The arrest data obtained by NPC did not show what agency made each arrest, so an average of the cost of an arrest at each agency was used.

<sup>18</sup> Average costs per participant for this column have been rounded to the nearest whole dollar amount.

<sup>19</sup> This includes the arrest costs for Kalamazoo Public Safety, the Kalamazoo County Sheriff, and the Michigan State Police. The arrest data obtained by NPC did not show what agency made each arrest, so an average of the cost of an arrest at each agency was used.



**Table 11. Average Traditional Court Processing Investment Costs per Person for Males**

<b>Transaction</b>	<b>Transaction Unit Cost</b>	<b>Avg. # of Transactions</b>	<b>Avg. Cost per Participant<sup>20</sup></b>
Arrest/Booking <sup>21</sup>	\$200.79	1.00	<b>\$201</b>
Court Case	\$413.52	1.00	<b>\$414</b>
Outpatient Treatment Episodes	\$701.75	0.40	<b>\$281</b>
Residential Detox Days	\$201.99	1.20	<b>\$242</b>
Residential Treatment Days	\$137.30	0.00	<b>\$0</b>
Intensive Outpatient Treatment Episodes	\$771.05	0.00	<b>\$0</b>
Jail Days (Sheriff)	\$70.55	6.31	<b>\$445</b>
Probation Days (DOC)	\$5.48	324.34	<b>\$1,777</b>
<b>Total</b>			<b>\$3,360</b>

**Table 12. Average Traditional Court Processing Investment Costs per Person for Females**

<b>Transaction</b>	<b>Transaction Unit Cost</b>	<b>Avg. # of Transactions</b>	<b>Avg. Cost per Participant<sup>22</sup></b>
Arrest/Booking <sup>23</sup>	\$200.79	1.00	<b>\$201</b>
Court Case	\$413.52	1.00	<b>\$414</b>
Outpatient Treatment Episodes	\$701.75	0.20	<b>\$140</b>
Residential Detox Days	\$201.99	0.50	<b>\$101</b>
Residential Treatment Days	\$137.30	3.05	<b>\$419</b>
Intensive Outpatient Treatment Episodes	\$771.05	0.05	<b>\$39</b>
Jail Days (Sheriff)	\$70.55	21.97	<b>\$1,550</b>
Probation Days (DOC)	\$5.48	386.02	<b>\$2,115</b>
<b>Total</b>			<b>\$4,979</b>

<sup>20</sup> Average costs per participant for this column have been rounded to the nearest whole dollar amount.

<sup>21</sup> This includes the arrest costs for Kalamazoo Public Safety, the Kalamazoo County Sheriff, and the Michigan State Police. An average of the cost of an arrest at each agency was used.

<sup>22</sup> Average costs per participant for this column have been rounded to the nearest whole dollar amount.

<sup>23</sup> This includes the arrest costs for Kalamazoo Public Safety, the Kalamazoo County Sheriff, and the Michigan State Police. An average of the cost of an arrest at each agency was used.

The cost to the taxpayer of traditional court processing per person is \$3,360 for males and \$4,979 for females. Probation is by far the most expensive transaction, and jail days and treatment are the next most expensive.<sup>24</sup> Interestingly, the women have more jail time and more probation time for a similar, Drug Court eligible case than the men. It is unclear why women would have harsher sentences than men.

The cost for traditional case processing for those who participate in the KADTC Program is less than for those who do not participate in Drug Court. The Drug Court eligible case cost for men's Drug Court participants (\$3,134) is lower by \$226 than the case costs for male offenders who did not participate in the Drug Court Program (\$3,360). The Drug Court eligible case cost for women's Drug Court participants (\$2,632) is lower by \$2,347 than the case costs for female offenders who did not participate in the Drug Court Program (\$4,979), so there is some benefit to the taxpayer in investment costs of choosing the Drug Court process over traditional court processing. This is consistent with the intention of drug court programs to serve as diversion programs that use fewer of traditional court resources.

However, overall the investment costs in the men's Drug Court Program (including both Program costs and other costs related to the Drug Court eligible case) are \$5,541 greater than traditional court process alone. The overall investment costs in the women's Drug Court Program (including both Program costs and other costs related to the Drug Court eligible case) are \$5,103 greater than traditional court process alone. The savings in outcome costs presented in the next section show how the positive outcomes for Drug Court participants can repay this investment and then continue to produce cost benefits (savings) to the criminal justice system and the taxpayer.

## OUTCOME COSTS

This section describes some of the payoffs in monetary terms due to the positive outcomes experienced by Drug Court participants. The specific outcome transactions examined include re-arrests, subsequent court cases, subsequent treatment (residential, residential detox, outpatient, and intensive outpatient), probation, prison, parole, and jail time for men's and women's Drug Court Program participants and male and female comparison group offenders. These outcome transactions occurred over a 2-year period from the time of Drug Court Program entry. Lower recidivism and lower costs for Drug Court participants compared to those offenders who did not participate indicate that the Program can provide a return on its investment.

The outcome numbers reflect data through March 2006. There were 499 individuals included in these analyses (167 men's Drug Court participants, 74 women's Drug Court participants, 163 male comparison group members, and 95 female comparison group members). All Drug Court participants included in this analysis had 24 months of follow-up data available.

Outcome costs were calculated using information from Kalamazoo Public Safety, the State Police, the Sheriff, the Department of Corrections, Circuit Court, District Court, Prosecuting Attorney, Defense Attorney, and Community Mental Health. The methods of calculation were examined to ensure that all direct costs, support costs and overhead costs were included as specified in the TICA methodology followed by NPC Research.

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<sup>24</sup> It is likely that the treatment data gained from TEDS underestimates the actual treatment costs by at approximately 43%, based on NPC's comparison of treatment data received by Drug Court participants in another county (from the Barry County Substance Abuse Services) and data obtained from TEDS on the same participants. Given this, the total investment cost for traditional case processing is also probably underestimated.

### *Outcome Transactions*

The outcome transactions included in this analysis are the same as those described above for traditional court processing with the exception of victimization costs.

**Arrests/Bookings** in Kalamazoo are conducted by multiple agencies. This evaluation used an average of arrest and booking cost information from Kalamazoo Public Safety, the State Police, and the Sheriff, as the arresting agency could not be determined from the arrest data. The cost of a single arrest and booking is an average of **\$200.79** (\$169.97 for Kalamazoo Public Safety, \$196.19 for the State Police, and \$236.20 for the Sheriff). Each rate was calculated by determining the positions, activities, and time involved in a typical arrest, and then assigning salary, benefits, and support/overhead costs to those activities to come up with a cost for one arrest.

**Jail Days** occur at the Kalamazoo County Sheriff Department. The cost of a jail bed is **\$70.55** per person per day, and the cost per **County Jail Booking** is **\$23.55**. One county jail booking occurs for each instance of incarceration. These rates were calculated by the Kalamazoo County Jail Administrator and include all staff time, food, medical, and support/overhead costs.

**Probation** is conducted by the Department of Corrections. Probation costs are **\$5.48** per person per day. This was based on the yearly cost of probation calculated by the Department of Corrections in a manner consistent with NPC's TICA methodology.

**Prison Days** and **Parole Days** are the responsibility of the Department of Corrections. The cost of a prison bed is **\$81.93** per person per day, and the cost per parole is **\$5.19** per person per day. These rates were obtained from the Department of Corrections and were calculated in a manner that is consistent with NPC's TICA methodology including direct costs, as well as support and jurisdictional overhead costs.

**Subsequent Court Cases** costs are shared by the Circuit Court, District Court, Prosecuting Attorney, and contracted Defense Attorney. The cost of an average **Court Case** is **\$413.52**. This was calculated by dividing the total yearly budget expenditures of each agency by the total number of cases for that year. This is an average for all types of court cases and includes a high number of low-level cases; therefore this cost probably underestimates the cost of the court cases experienced by the offenders in the study population.

**Residential Treatment** is contracted out to various treatment agencies. The cost to the taxpayer of residential treatment per person is **\$137.30** per day. **Residential Detox** is also contracted out to various treatment agencies and the cost per person is **\$201.99** per day. These rates were calculated using cost and usage data from the Michigan Department of Community Health in a manner consistent with NPC's TICA methodology.

**Outpatient Treatment** sessions are also provided by multiple treatment agencies. The cost of one outpatient treatment episode is **\$701.75**. The cost of one **Intensive Outpatient Treatment** episode is **\$771.05**. These rates were also calculated using cost and usage data from the Michigan Department of Community Health in a manner consistent with NPC's TICA methodology.

**Victimizations** were calculated from the National Institute of Justice's *Victim Costs and Consequences: A New Look (1996)*.<sup>25</sup> The costs were updated to fiscal year 2006 dollars. **Property Crimes** are **\$11,302.00** per event and **Person Crimes** are **\$36,613.00** per event.

<sup>25</sup> 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 sex-

Table 13 presents the average number of these outcome transactions (e.g., the average number of re-arrests, the average number of prison days) incurred per person for men’s Drug Treatment Court Program graduates, all Drug Treatment Court participants and for the male comparison group. As Table 13 indicates, men’s KADTC graduates were generally successful in maintaining a life free of criminal activity. Further, with the exception of prison and parole days, the men’s KADTC participants (both graduates and terminated together) had fewer other criminal justice contacts such as re-arrests and days spent in jail or on probation than the comparison group.

**Table 13. Average Number of Outcome Transactions per Participant 2 Years Post Drug Court Entry (Men)**

Transaction	Men’s Drug Court Graduates	All Men’s Drug Court Participants	Male Comparison Group
Re-arrests	0.16	0.71	1.05
Jail Bookings	0.02	1.17	1.23
Jail Days	0.02	29.78	31.26
Probation Days	51.09	68.15	123.67
Prison Days	6.49	147.04	95.10
Parole Days	0.00	25.32	22.33
Subsequent Court Cases	0.57	1.00	1.10
Residential Treatment Days	0.00	1.71	0.00
Residential Detox Days	0.00	0.27	0.00
Outpatient Treatment Episodes	0.00	0.27	0.10
Intensive Outpatient Treatment Episodes	0.00	0.06	0.30
Victimizations (Property Crimes)	0.04	0.29	0.43
Victimizations (Person Crimes)	0.00	0.08	0.17

Table 14 presents the average number of these outcome transactions (e.g., the average number of re-arrests, the average number of prison days) incurred per person for the women’s Drug Treatment Court Program graduates, all female participants (both graduated and terminated combined), and for the female comparison group. The graduates of the women’s KADTC engaged in very few activities post-drug court entry that resulted in outcome costs to taxpayers. The female comparison group had

ual 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 2005 dollars using the consumer price index (CPI) for the relevant geographical area.

a higher rate of probation days, prison days, and parole days than did their women's KADTC counterparts. The costs associated with these activities are discussed in the following sections.

**Table 14. Average Number of Outcome Transactions per Participant 2 Years Post Drug Court Entry (Women)**

<b>Transactions</b>	<b>Women's Drug Court Graduates</b>	<b>All Women's Drug Court Participants</b>	<b>Female Comparison Group</b>
Re-arrests	0.18	0.42	0.79
Jail Bookings	0.06	1.00	1.07
Jail Days	0.47	16.81	13.17
Probation Days	0.00	44.38	97.26
Prison Days	0.00	21.08	30.47
Parole Days	0.00	0.00	31.99
Subsequent Court Cases	0.53	0.70	0.91
Residential Treatment Days	0.00	1.59	0.00
Residential Detox Days	0.00	0.16	0.00
Outpatient Treatment Episodes	0.13	0.28	0.25
Intensive Outpatient Treatment Episodes	0.00	0.22	0.20
Victimizations (Property Crimes)	0.12	0.16	0.42
Victimizations (Person Crimes)	0.06	0.11	0.17

### *Outcome Costs*

Table 15 provides the costs associated with the outcomes described in Table 13 (above). It presents the total outcome costs for each type of transaction (number of transactions times the cost per transaction) for men's Drug Court Program graduates, all men's Program participants, and for the male comparison group.

**Table 15. Average Outcome Costs per Participant 2 Years Post Drug Court Entry (Men)**

<b>Transaction</b>	<b>Transaction Unit Cost</b>	<b>Men's Drug Court Graduates</b>	<b>All Men's Drug Court Participants</b>	<b>Male Comparison Group</b>
Re-arrests	\$200.79	\$32	\$143	\$211
Jail Bookings	\$23.55	\$0	\$28	\$29
Jail Days	\$70.55	\$1	\$2,101	\$2,205
Probation Days	\$5.48	\$280	\$373	\$678
Prison Days	\$81.93	\$532	\$12,047	\$7,792
Parole Days	\$5.19	\$0	\$131	\$116
Subsequent Court Cases	\$413.52	\$236	\$414	\$455
Residential Treatment Days	\$137.30	\$0	\$235	\$0
Residential Detox Days	\$201.99	\$0	\$55	\$0
Outpatient Treatment Episodes	\$701.75	\$0	\$189	\$70
Intensive Outpatient Treatment Episodes	\$771.05	\$0	\$46	\$231
Victimizations (Property Crimes)	\$11,302.00	\$452	\$3,278	\$4,860
Victimizations (Person Crimes)	\$36,613.00	\$0	\$2,929	\$6,224
<b>Total</b>		<b>\$1,533</b>	<b>\$21,969</b>	<b>\$22,871</b>

Table 16 provides the costs associated with the women's outcomes described in Table 14 (above). It presents the total outcome costs for each type of transaction (number of transactions times the cost per transaction) for women's Drug Court Program graduates, all women's Program participant, and for the female comparison group.

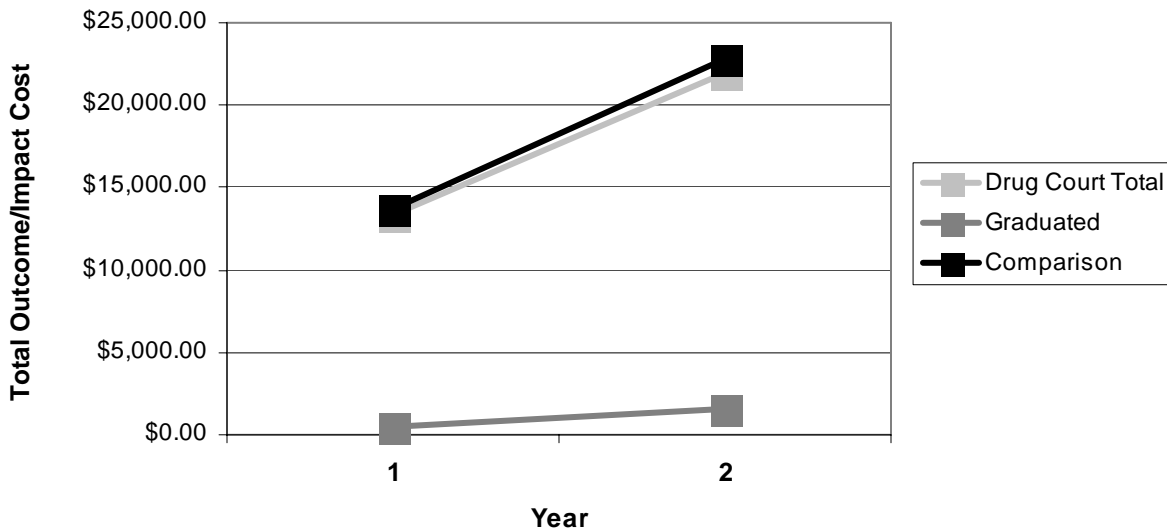
**Table 16. Average Outcome Costs per Participant 2 Years Post Drug Court Entry (Women)**

<b>Transaction</b>	<b>Transaction Unit Cost</b>	<b>Women's Drug Court Graduates</b>	<b>All Women's Drug Court Participants</b>	<b>Female Comparison Group</b>
Re-arrests	\$200.79	\$36	\$84	\$159
Jail Bookings	\$23.55	\$1	\$24	\$25
Jail Days	\$70.55	\$33	\$1,186	\$929
Probation Days	\$5.48	\$0	\$243	\$533
Prison Days	\$81.93	\$0	\$1,727	\$2,496
Parole Days	\$5.19	\$0	\$0	\$166
Subsequent Court Cases	\$413.52	\$219	\$289	\$376
Residential Treatment Days	\$137.30	\$0	\$218	\$0
Residential Detox Days	\$201.99	\$0	\$32	\$0
Outpatient Treatment Episodes	\$701.75	\$91	\$196	\$175
Intensive Outpatient Treatment Episodes	\$771.05	\$0	\$170	\$154
Victimizations (Property Crimes)	\$11,302.00	\$1,356	\$1,808	\$4,747
Victimizations (Person Crimes)	\$36,613.00	\$2,197	\$4,027	\$6,224
<b>Total</b>		<b>\$3,933</b>	<b>\$10,004</b>	<b>\$15,984</b>

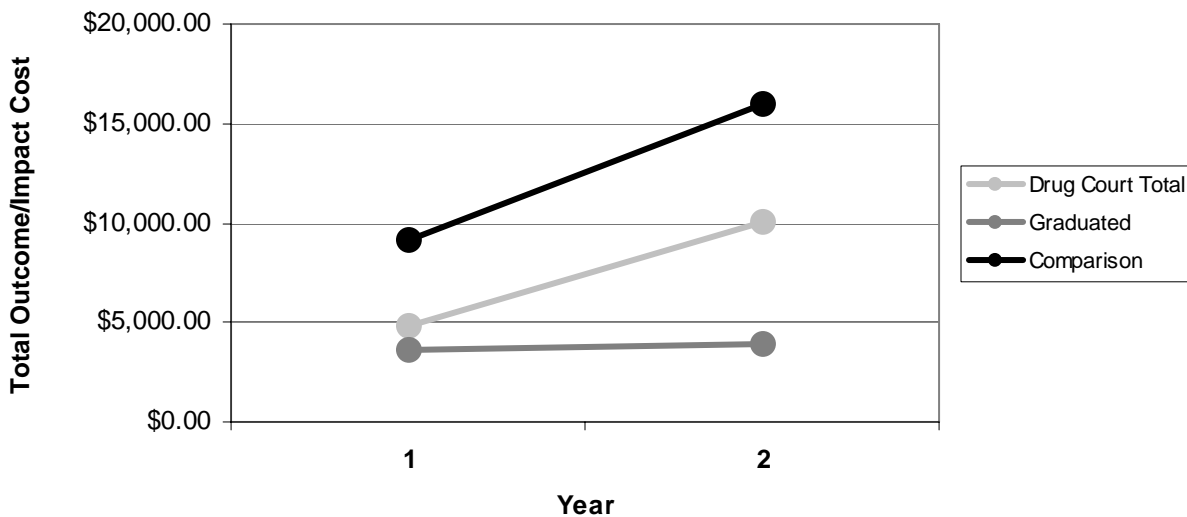
An examination of the outcome costs in Tables 15 and 16 indicates that the majority of the costs are due to prison days and person and property crime victimizations, followed by jail days. The men's Drug Treatment Court in particular has high prison costs. This high rate may be due to the use of prison in the sentencing of participants terminated from Drug Court. If prison costs are excluded, the average cost per men's Drug Court participant is only \$9,922, versus \$15,079 for a male comparison group member. Women's KADTC participants had much lower prison costs. The total outcome costs per participant over 2 years for the KADTC women is just \$10,004 compared to \$15,984. This is discussed further later in this report.

Figures 7 and 8 demonstrate the per participant outcome costs at 12 and 24 months post Drug Court entry for men and women. These figures reveal that there is little difference in total outcome costs averaged per participant between the men’s Drug Treatment Court participants and the male comparison group, although the male graduates are doing very well. In contrast, there is a large difference in total outcome costs between the women’s Drug Court participants and the female comparison group. Again, this high outcome cost for the men is most likely due to the significant use of prison in termination sentences.

**Figure 7. Total Outcome Costs Averaged per Male Participant 2 Years Post Drug Court**



**Figure 8. Total Outcome Costs Averaged per Female Participant 2 Years Post Drug Court**





The outcome cost tables and figures indicate that overall, KADTC is effective in the use of services that deter criminal behavior, leading to a reduced cost to the system compared to individuals who do not receive such services. It is interesting to note that even for participants who terminate from the Program unsuccessfully, they appear to garner some benefit due to the increased monitoring and treatment they receive while in the Program. For those participants who commit fully to KADTC and eventually graduate, the benefits relating to decreased contact with the criminal justice system are overwhelming. The male and female graduates incurred less than 25% of the comparison group outcome costs. Although these figures only focus on 24 months of post-Program entry data, these figures indicate that KADTC is not only helpful for participants while they are enrolled in the Program, but that participation in a diversion program with a powerful monitoring and treatment component can have long term benefits.

### *Outcome Costs by Agency*

Tables 17 And 18 (respectively) present the male and female outcome costs by agency. Law Enforcement outcome transactions include re-arrests, jail days, and jail bookings. Department of Corrections transactions include probation days, prison days, and parole days. The Circuit/District Court, Prosecuting Attorney, and Defense Attorney are all involved only in the subsequent court case transaction. Treatment transactions include residential treatment, residential detox, outpatient treatment episodes, and intensive outpatient treatment episodes. Victimization costs were not included in these tables, as they cannot be assigned to any specific agency.

**Table 17. Average Male Outcome Cost per Participant by Agency**

<b>Agency</b>	<b>All Male Drug Court Participants</b>	<b>Male Comparison Group</b>	<b>Cost Difference (Savings)</b>
Circuit/District Court	\$383	\$421	\$38
Prosecuting Attorney	\$22	\$24	\$2
Defense Attorney	\$9	\$10	\$1
Department of Corrections	\$12,551	\$8,586	-\$3,965
Treatment	\$525	\$301	-\$224
Law Enforcement	\$2,272	\$2,445	\$173

Table 17 illustrates that every agency except for the Department of Corrections and Treatment save money due to the outcomes of Drug Court participants. The higher cost for Treatment indicates an increased use of treatment services by Drug Court participants, which can be considered a positive occurrence, as participation in the Drug Court Program has allowed participants to see the benefit of treatment and to feel more comfortable using this resource when needed. The large difference for the Department of Corrections is almost entirely due to the higher number of prison days for Drug Court participants, which is in turn due to terminated participants receiving prison time at their sentencing after Program termination (graduates have very minimal outcome prison time). This implies that KADTC participants receive harsher sentences for the same types of cases

than individuals who do not participate in the Program. The KADTC may want to examine the use of this practice and reconsider whether this is the most effective response to participant termination. Given the relatively high termination rate, the prison time does not appear to be an effective deterrent to keep people in the Program.

**Table 18. Average Female Outcome Cost per Participant by Agency**

Agency	All Female Drug Court Participants	Female Comparison Group	Cost Difference (Savings)
Circuit/District Court	\$268	\$348	\$80
Prosecuting Attorney	\$15	\$20	\$5
Defense Attorney	\$6	\$8	\$2
Department of Corrections	\$1,970	\$3,195	\$1,225
Treatment	\$616	\$329	-\$287
Law Enforcement	\$1,294	\$1,113	-\$181

Table 18 (above) illustrates that every agency except for Law Enforcement and Treatment save money due to the outcomes of Drug Court participants. As discussed for the men, above, the higher cost for Treatment is a consequence of an increased use of treatment services by Drug Court participants after leaving the Program, indicating that participants have gained an understanding of the benefits of participating in treatment when needed. The difference for Law Enforcement is due to the jail days for terminated Drug Court participants.

*Overall Outcome Cost Savings*

Tables 19 and 20 present the difference in costs between the Drug Court group and the comparison group (averaged per participant) for each outcome transaction. For the most part, this cost difference demonstrates a savings (or benefit) due to Drug Court participation. The exceptions are prison and parole time for men and treatment for both men and women. These tables also present the total savings due to positive outcomes due to Drug Court participation both per participant and for the sample as a whole over the 2 years post Drug Court entry.

**Table 19. KADTC Male Outcome Cost Savings 2 Years Post Drug Court Entry<sup>26</sup>**

<b>Transaction</b>	<b>Cost per Male Drug Court Participant</b>	<b>Cost per Male Comparison Group Member</b>	<b>Difference in Cost (Savings)</b>
Re-arrests	\$143	\$211	\$68
Jail Bookings	\$28	\$29	\$1
Jail Days	\$2,101	\$2,205	\$104
Probation Days	\$373	\$678	\$305
Prison Days	\$12,047	\$7,792	-\$4,255
Parole Days	\$131	\$116	-\$15
Subsequent Court Cases	\$414	\$455	\$41
Treatment	\$525	\$301	-\$224
Victimizations	\$6,207	\$11,084	\$4,877
<b>Total Per Participant</b>	<b>\$21,969</b>	<b>\$22,871</b>	<b>\$902</b>
<b>Total all participants for 2 years (n=167)</b>			<b>\$150,634</b>

Table 19 displays the total savings for all male participants with 2 years of outcomes post Drug Court entry. The total per participant savings of \$902 multiplied by the number of participants in that 2-year period amounts to a total savings due to the men's Drug Court Program of **\$150,634**.

<sup>26</sup> Average costs per participant have been rounded to the nearest whole dollar amount.

**Table 20. KADTC Female Outcome Cost Savings 2 Years Post Drug Court Entry**

<b>Transaction</b>	<b>Cost per Female Drug Court Participant</b>	<b>Cost per Female Comparison Group Member</b>	<b>Difference in Cost (Savings)</b>
Re-arrests	\$84	\$159	\$75
Jail Bookings	\$24	\$25	\$1
Jail Days	\$1,186	\$929	-\$257
Probation Days	\$243	\$533	\$290
Prison Days	\$1,727	\$2,496	\$769
Parole Days	\$0	\$166	\$166
Subsequent Court Cases	\$289	\$376	\$87
Treatment	\$616	\$329	-\$287
Victimizations	\$5,835	\$10,971	\$5,136
<b>Total Per Participant</b>	<b>\$10,004</b>	<b>\$15,984</b>	<b>\$5,980</b>
<b>Total all participants for 2 years (n=76)</b>			<b>\$442,520</b>

Note: Average costs per participant have been rounded to the nearest whole dollar amount.

Table 20 displays the total savings for all female participants with 2 years of outcomes post Drug Court entry. The total per participant savings of \$5,980 multiplied by the number of participants in that 2-year period amounts to a total savings due to the women’s Drug Court Program of **\$442,520**.

Summing the amount saved for both the men’s and women’s Program creates a combined total of **\$593,154**, over half a million dollars saved over just a two year period. This savings is for just those individuals who entered the Program during the 2-year sample time period (2002-2003) used for this evaluation. In addition, this number includes all Program participants in the sample, regardless of whether they graduated from the Program. This demonstrates that the Program is cost-beneficial overall, not just for a sub-sample of those who graduate.

## SUMMARY/CONCLUSIONS

The Drug Treatment Court in Kalamazoo County, Michigan has a long-standing tradition of successfully diverting individuals from drug related criminal behavior to a more positive and healthy lifestyle by using a strong combination of monitoring and treatment. The KADTC Program has developed and implemented a standardized set of policies and procedures that allow it to be extremely consistent across participants. The Program is one (and was the first) of a very small set of drug courts across the country that offer gender specific services, recognizing that men and women have unique needs and respond to treatment and court incentives in different ways. The Judges, KADTC staff, and other persons associated with the Court work together closely as a team and are excellent at providing consistency and care to participants.

The overall outcome and cost evaluation results were positive for the KADTC group as a whole and for both men and women. All KADTC participants, regardless of graduation status, showed reduced recidivism (both in overall arrests and in drug related arrests) compared to similar offenders who did not enter the Program. Graduates of the Program showed markedly reduced recidivism as well as a reduction in drug related behavior in the 2 years following entry to the KADTC. This result is likely due to the sustained level of service provided by the Program Staff as well as a strong personal commitment to behavior change.

The Program had a fairly low overall graduation rate (27%) compared to other drug courts this team has evaluated and compared to the average graduation rate of drug courts in the U.S. Although all programs hope to be successful with as many participants as possible, the KADTC Program specifically targets offenders who have a consistent history of problems with substance use and criminal behavior. The KADTC accepts many participants who have already served time on probation and who may be more difficult to serve than individuals with a lesser criminal history. Although the KADTC has developed strong policies to deal with non-compliance and thus minimize resources invested in participants who fail to fully engage in the Program, these same policies may limit flexibility in considering personal circumstances. Some small changes in flexibility (such as allowing participants to serve sanctions on the weekend and thus keep a job) may enhance the ability for some committed individuals to stay in and successfully complete the Program.

The cost evaluation provides further evidence that the Program is not only effective in reducing drug use and criminal behavior, but it is effective in saving taxpayers money compared to traditional court processing. Although the initial Program costs may be higher than traditional court processing, these costs are offset by lower outcome costs (higher avoided costs) for the KADTC participants. Simply put, when individuals stay out of the court system, they do not use the already strained resources of law enforcement agencies, court agencies, or corrections. Further, the enormous social and personal costs associated with person and property crimes are avoided.

The total cost savings described in the cost section encompass those participants who were included in the sample for this evaluation. If the per participant cost savings are extrapolated to all participants who entered the Program since its inception, the total Program cost savings for men is **\$589,908** and for women is **\$3,510,260**. These two numbers add to a combined total of over **\$4 million** taxpayer dollars saved due to KADTC Program participation. This is strong indication that drug courts, and in particular the KCDTC Program, work.



## REFERENCES

- Carey, S.M. and Finigan, M.W. (2004). A Detailed Cost Analysis in a Mature Drug Court Setting: A Cost-Benefit Evaluation of the Multnomah County Drug Court. *Journal of Contemporary Criminal Justice*. 20(3) 292-338.
- Carey, S.M., Finigan, M.W., Waller, M., Lucas, L. and Crumpton, D. (2005). California Drug Courts: A Methodology for Determining Costs and Avoided Costs, Phase II: Testing the Methodology, Final Report. Submitted to the California Administrative Office of the Courts November 2004. Submitted to the Bureau of Justice Assistance in June 2005.
- Carey, S.M., Marchand, G. (2005). "Malheur County Adult Drug Court 'S.A.F.E. Court' Cost Evaluation Final Report." Submitted to the Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice. Available at [www.npcresearch.com](http://www.npcresearch.com).
- Cooper, C. (2004). OJP Drug Court Clearing House and Technical Assistance Project: Summary of Drug Court Activity by State and County. American University.  
<http://spa.american.edu/justice/resources/drgchart2k.pdf>
- Government Accounting Office (2005). "Adult Drug Courts: Evidence Indicates Recidivism Reductions and Mixed Results for Other Outcomes." Available at [www.gao.gov/new.items/d05219.pdf](http://www.gao.gov/new.items/d05219.pdf) February 2005 Report
- Goldkamp, S.J., Robinson, J.B. and White, M.D. (2002). "An Honest Chance: Perspectives on Drug Courts." Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice. <http://www.ncjrs.gov/html/bja/honestchance>.
- Gottfredson, D., Najaka, S., & Kearly, B. (2003). "Effectiveness of Drug Treatment Courts: Evidence from a Randomized Trial." *Criminology and Public Policy*, 2(2).
- Harrell, A., Mitchell, O., Merrill, J. C., & Marlowe, D. B. (2003). "Evaluation of Breaking the Cycle." Washington, DC: The Urban Institute. (Available at [www.urban.org](http://www.urban.org).)
- Hora, P.F., W.G. Schma, and J. Rosenthal. 1999. "Therapeutic Jurisprudence and the Drug Treatment Court Movement: Revolutionizing the Criminal Justice System's Response to Drug Abuse and Crime in America." *Notre Dame Law Review* 74(2):439-527.
- Merton, R. K. (1948). The self-fulfilling prophecy. *Antioch Review*, 8, 193-210.
- National Association of Drug Court Professional Drug Court Standards Committee (1997). "Defining Drug Courts: The Key Components." U.S. Department of Justice, Office of Justice Programs, Drug Court Programs Office.
- Roman, J., Townsend, W., and Bhati, A.S., (2003). Recidivism Rates for Drug Court Graduates: Nationally Bases Estimates Final Report. U.S. Department of Justice, NCJRS (<http://www.ncjrs.org/pdffiles1/201229.pdf>)
- Rosenthal, R., & Jacobson, L. (1968). "Pygmalion in the Classroom." New York: Holt, Rinehart & Winston.

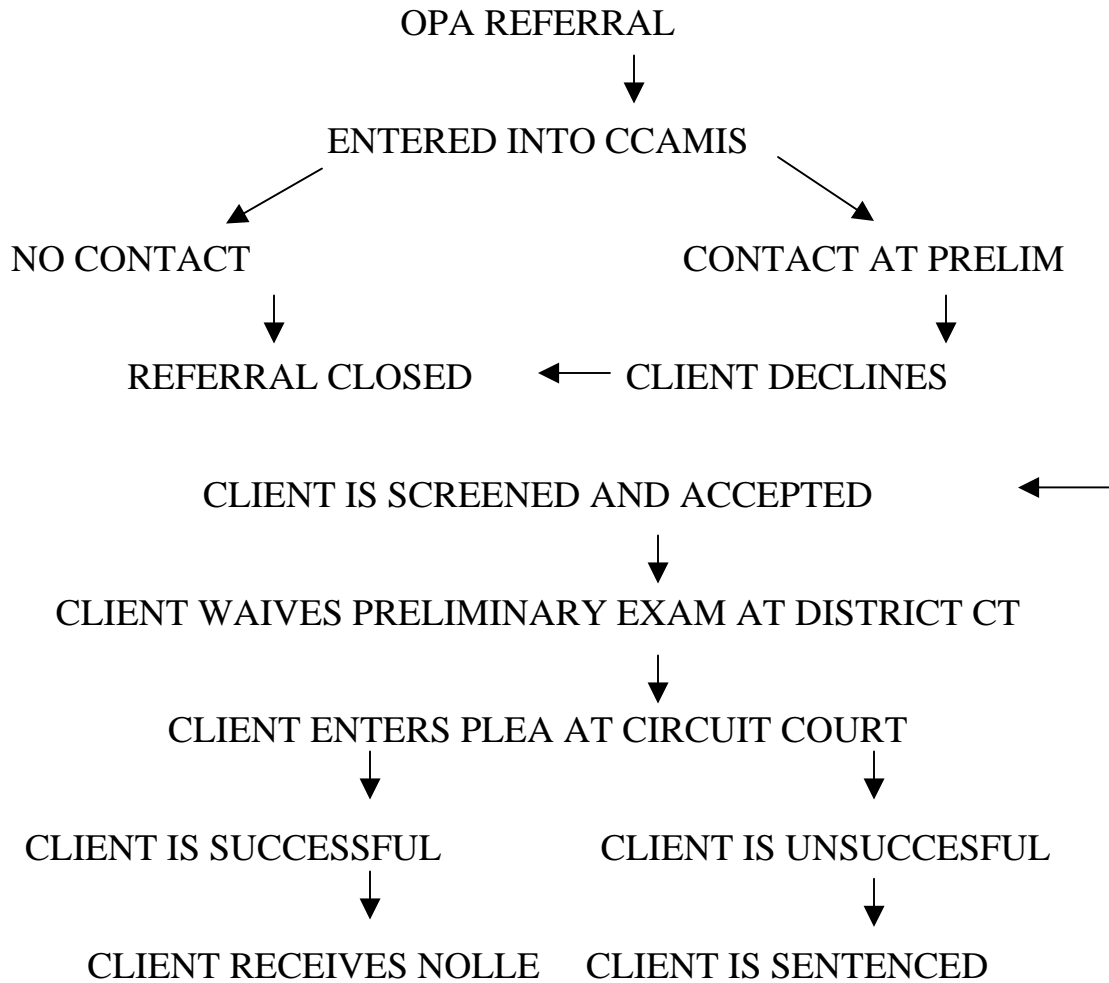




## **APPENDIX A: POST-PLEA FLOW CHART**



### Post-Plea Flow Chart



*Courtesy of Kalamazoo Adult Drug Treatment Court Office*



**APPENDIX B: SANCTION CHARTS – ALL PHASES**



## Sanction Charts – All Phases

### DRUG COURT SANCTIONS

- Phase I -

REQUIREMENT	CONSIDERATIONS	SANCTION
Paying for Urine Screens	New Participant? (Maximum one month in the program for free urine screens)	Missed urine screen (after 30 days free)
Missed appointment (ODTCP, treatment, 12-Step Orientation Session, etc.)	Verification of whereabouts? Did the client cancel and reschedule the appointment?	8 hours of CSW for each missed appointment
Chronic missed appointments Chronic rescheduling	None	Daily Reporting Electronic Monitoring Incarceration
Chronic missed 12-Step meeting	None	8 hours of CSW and daily 12-Step meeting attendance (duration varies)
Absconded from the ODTCP	Did the client turn themselves into authorities? Are there new charges pending?	3-5 days in jail or K-PEP Electronic Monitoring for 3 months Daily Reporting for 3 months
Absconded from the ODTCP more than once	None	Discharged from the ODTCP
Absconded from long-term treatment, inpatient treatment, or K-PEP	None	Discharged from the ODTCP
Unsuccessfully discharged from long-term treatment, inpatient treatment, or K-PEP	None	Discharged from the ODTCP
Violation of the Medication Contract	Is this the first violation?	8 hours of CSW
First tampered urine screen	Is the client new to the program?	8 hours of CSW
History of tampered urine screens	None	Progressive jail or K-PEP time Discharged from the ODTCP (eventually)
Tampering with urine specimen (i.e. using another person's urine)	None	Discharged from the ODTCP
Tampered drug patch	How was the patch tampered with? How did the client report the tamper? Did the client admit tampering with the drug patch?	3 days in jail or K-PEP Begin Phase I over (if applicable) Discharged from the ODTCP (eventually)
Missed urine screen	Did the client contact ODTCP staff immediately? Did the client drop the next morning?	3 days in jail or K-PEP
Delay in reporting a relapse	Is the client new to the program? Reported relapse before the drop but not within 24 hours after the relapse?	8 hours of CSW to 1 day in jail or K-PEP

REQUIREMENT	CONSIDERATIONS	SANCTION
Unreported relapse - positive urine screen	Admits after being confronted by ODTCP staff? Denies completely when confronted by ODTCP staff? Admits after being confronted by Judge? Denies completely when confronted by Judge?	3-5 days in jail or K-PEP
Lying behavior	Continues to deny when confronted with evidence that the client has been lying.	1-7 days in jail or K-PEP
Forged meeting or CSW slip	None	7 days in jail
New misdemeanor while in the program: DV, DWLS, larceny, B&E, OUIL, ordinance violations	Circumstances (read police report)? Was there violence? Injury to victim? Repeated offense (is defendant on probation for the same charge or previous conviction for the same charge)?	CSW, jail, tether, or unsuccessful discharge
2 <sup>nd</sup> misdemeanor while in the program	None	Unsuccessful discharge
New felony while in the program	None	Unsuccessful discharge



**DRUG COURT SANCTIONS**

- Phase II/III -

<b>REQUIREMENT</b>	<b>CONSIDERATIONS</b>	<b>SANCTON</b>
Working while in Phase II/III (allow 1-3 months to find employment)	Single parent?	16 hours CSW biweekly Increase 4 hours CSW biweekly until either employed or CSW is up to 30 hours per week
Missed appointment	Did the client reschedule the appointment? Did the client cancel prior to the appointment time?	No cancellation or reschedule: 8 hours of CSW If in last month of participation, Phase II/III extended one month
2 <sup>nd</sup> Missed appointment	Did the client reschedule the appointment? Did the client cancel prior to the appointment time?	If client cancelled appointment and rescheduled, no change No cancellation or reschedule: 8 hours of CSW to 1 day in jail or K-PEP If in last 2 months of participation, Phase II/III may be extended for one month If client cancelled appointment and rescheduled, warned that future missed appointments will result in a sanction by the court and an extension in Phase II/III No cancellation or reschedule: 1 day in jail or K-PEP If in last 3 months of participation, Phase II/III extended for three months
3 <sup>rd</sup> or more missed appointment (Habitual)	Did the client reschedule the appointment? Did the client cancel prior to the appointment time?	<b>HABITUAL:</b> No cancellation or reschedule: 1 day in jail or K-PEP Returned to Phase I for 1-3 months and 3 months in Phase II/III If client cancelled appointment and rescheduled: 8 hours of CSW and Phase II/III extended for two months
1 <sup>st</sup> Missed Urine Screen	Did the client have a history of missed urine screens in Phase I?	If in last three months of participation, 3 days in jail or K-PEP and extended in Phase II/III for one month
2 or more Missed Urine Screens		3 or more days in jail or K-PEP and returned to Phase I for 1-3 months
Failure to attend 12-Step Meetings		Ordered to make up the missed meetings and 8 hours CSW



<b>REQUIREMENT</b>	<b>CONSIDERATIONS</b>	<b>SANCTON</b>
(missed 1-2 meetings during a reporting period)		
Failure to attend 12-Step Meetings (missed 3 or more meetings during a reporting period)		Ordered daily meetings until next ODTCP appointment, subject to review 8 hours CSW possible
Failure to pay restitution or ODTCP fees	Is the client working? Has the client experienced unusual financial problems? Other issues?	Court appearance and 8 hours of CSW
Lying behavior	Continues to deny when confronted with evidence that the client has been lying.	1-7 days in jail or K-PEP, returned to Phase I
Forged meeting or CSW slip	None	7 days in jail, returned to Phase I

Revised 6/03 – *Courtesy of Kalamazoo Adult Drug Treatment Court Office*