A Cost-Benefit Analysis of the
St. Louis City Adult Felony Drug Court

Executive Summary

provided to the
St. Louis City Adult Felony Drug Court
City of St. Louis
22nd Judicial Circuit

by the
Institute of Applied Research
St. Louis, Missouri
2004
Highlights of Findings

The St. Louis Adult Felony Drug Court in the City of St. Louis is a pre-plea drug court that began in April 1997 and accepts individuals charged with drug crimes shortly after arrest. The program is voluntary. Participants must submit to regular breath testing for alcohol and urinalysis for drugs, make regular court appearances, find and maintain employment, and participate in prescribed drug and alcohol treatment. If they successfully complete the program, which averages nearly a year and a half in length, their original charges are dismissed.

- The study was a cost-benefit analysis that compared the first 219 drug court graduates, who had completed drug court before 2001, with a carefully matched control group of 219 individuals charged with a drug crime who had pleaded guilty, had entered probation during the same period, were not offered drug court, and had successfully completed probation.

- The control group contained no individuals who were sentenced to prison. For this reason, the estimates of this study are conservative since drug court graduates with class A and class B felonies and those who are prior and persistent offenders would most likely have been sentenced to prison terms had they not been accepted into Drug Court.

- The study collected consistent data on costs and benefits from a wide variety of data sources at the state and local level. These included: wages, welfare, Medicaid, drug and alcohol treatment, mental health treatment, criminal arrests, criminal convictions, time in jail, prison sentences, court hearings and other court activities, administration and supervision in drug court and probation programs, and births of drug-exposed infants.

- The overall costs of drug court exceeded those of probation. Adding together costs of administration, supervision, drug and alcohol treatment, court hearings, urinalysis, and pretrial detention, it cost an average of $7,793 for a drug court graduate to successfully complete drug court compared to an average of $6,344 for an individual to successfully complete probation. The excess costs of drug court averaged $1,449 per person.

- Various benefits (cost savings) were found for drug court graduates compared to probationers during and after drug court and probation.

  ✓ Costs of jail time were less overall for drug court graduates

  ✓ Costs of pretrial detention were dramatically less for drug court graduates.

  ✓ Wages of drug court graduates were higher during and after drug court.
Drug court graduates also averaged significantly more months working than probationers. This led to:

- Higher taxes and FICA paid by graduates of drug court.
- Lower TANF and food stamps utilized by drug court graduates.

Health care costs and mental health services were significantly lower for drug court graduates after drug court.

Drug court graduates who were incarcerated were incarcerated for shorter periods after graduation with reduced incarceration costs.

Costs to the criminal justice system and costs to victims of crime were lower for drug court graduates compared to probation completers.

The number of infants who were born drug-exposed and the consequent costs were greater for probation completers than for drug court graduates.

Comparing the excess costs of drug court with the benefits after drug court:

- A net savings of $2,615 per graduate was found during the first 24 months after drug court compared to probation completers.
- A total of $2.80 in outcome savings was realized for Missouri citizens for every $1.00 in additional costs of drug court during the first 24 months after drug court or probation.

Overall Costs and Benefits. By projecting all follow-up costs and benefits for an additional 24-month period, calculations of costs and benefits were possible over a four-year period.

- Net savings over four years after drug court or probation amounted to $7,707 per drug court participant. This represents the expenses that would have been incurred by the taxpayer had these drug court clients attended regular probation.
- For every dollar in additional costs for drug court for the 219 drug court graduates, taxpayers realized a savings of $6.32 over the four-year period.

Gross Savings over Four years: The total cost of drug court for the 219 graduates was $1,706,775 or $7,793 per graduate. The benefits during the four-year period after drug court amounted $2,005,274 for all 219 graduates or $9,156 per graduate:

- After four years the benefits exceeded the total drug court cost associated with graduating 219 individuals by $298,399 or $1,362 per drug court graduate.
Executive Summary

The St. Louis Adult Felony Drug Court in the City of St. Louis is a pre-plea drug court that accepts individuals charged with drug crimes shortly after arrest. The program is voluntary. Participants must submit to regular breath testing for alcohol and urinalysis for drugs, make regular court appearances, find and maintain employment, and participate in prescribed drug and alcohol treatment. If they successfully complete the program, which averages nearly a year and a half in length, their original charges are dismissed.

The St. Louis Adult Felony Drug Court began operating on April 7, 1997 in the City of St. Louis (22nd Judicial Circuit). The graduates selected for this study were the first 219 to successfully complete the program. A number of reforms, including a special program for youthful defendants, have been introduced since that time that are designed to enhance drug court outcomes. This group of graduates predates most of those reforms.

Research indicating the benefits of drug courts has accumulated during the previous decade. However, there have been few controlled studies designed to demonstrate whether the value of those benefits to the community offset the costs of operating the programs. The primary goal of the present study was a cost-benefit analysis of the St. Louis Adult Felony Drug Court that compared the first 219 drug court graduates, who had completed drug court before 2001, with a carefully matched group of other individuals charged with drug crimes who were not offered drug court but completed probation.

Selecting the Control Group. The study employed an experimental design. The control group was composed of individuals selected from probation records that had pleaded guilty to drug crimes, had entered probation during the same period and had successfully completed probation. A probation completer was identified that was the best match to each drug court graduate on criminal charge (primarily drug offenses), prior criminal convictions, age, race, gender and residential zip code, and had entered probation at approximately the same time the graduate had entered drug court. Like drug court participants, none had criminal charges indicating violence. All probation completers were assessed to have drug or alcohol problems, although none had been offered to participate in drug court.

The control group contained no individuals who were sentenced to prison. For this reason, the estimates of this study are conservative since drug court graduates with class A and class B felonies and those who are prior and persistent offenders would most likely have been sentenced to prison terms had they not been accepted into Drug Court.

The Approach to Costs and Benefits: The Taxpayers Perspective. The primary perspective or viewpoint assumed in this study is that of the ordinary citizen, the Missouri “taxpayer.” Under this perspective any relative increase in government expenditures, such as for welfare or publicly supported treatment, or decrease in taxes
paid by drug court defendants would be considered a cost while a corresponding decrease in expenditures or an increase in taxes paid by defendants would be considered a benefit. Similarly, relative reduction in costs to taxpayers directly (such as a reduction in victim costs of crime) would be considered a benefit.

**Improved Methods.** The present study improved on previous drug court studies in several ways:

1. Limiting the control group to “probation completers” was a conservative measure designed to *avoid comparing success in drug court with failure in other criminal justice settings*. In this way the highest possible standard was set for the cost-benefit study.

2. Although control group members would have been eligible for drug court, none had applied for drug court and, consequently, none had been rejected from drug court.

3. Data on costs and benefits were collected for the two-year period *preceding* drug court or probation, the period of participation, and the two-year period *after* completion. This approach permitted the performance of individuals in the study to be adjusted based on their past history. By collecting data during drug court and probation, costs and benefits could be assessed from the day participants entered. Data from the two years after drug court or probation permitted an assessment of longer-term cost and benefit outcomes.

4. The study collected consistent data on costs and benefits from a wide variety of objective data sources at the state and local level. These included: wages, welfare, Medicaid, drug and alcohol treatment, mental health treatment, criminal arrests, criminal convictions, time in jail, prison sentences, court hearings and other court activities, administration and supervision in drug court and probation programs, and births of drug-exposed infants.

**Administrative, Supervision and Treatment Costs of Drug Court versus Probation.** While offenders were in the drug court and probation programs, the costs of drug court overall were somewhat higher than the costs of maintaining offenders in probation.

- *Administrative costs* averaged $429 per drug court graduate compared to an estimated $195 per probation completer.

- *Supervision* was primarily the responsibility of regular probation officers for members of the control group, while probation officers specially assigned to the drug court (called diversion managers) supervised drug court graduates. Supervision averaged $81 per completer and $62 per graduate primarily because probation completers spent about three months more in probation than graduates spent in drug court.
The average cost of urinalysis for graduates was $651 compared to $40 for probation completers.

All drug court graduates participated in alcohol and drug treatment, the costs of which averaged $147 per graduate. Only a minority of probation completers was assigned to such treatment averaging $41 per completer. The costs of court hearings were calculated to be $504 per drug court graduate compared to $237 per probation completer.

Other Costs and Benefits. Certain benefits, including increased taxes paid and reduced costs of public programs of drug court graduates, began to accrue during the program. These continued to increase during the follow-up period after graduation. By the end of the entire follow-up period of four years (two years of collected data and two years of projected data), the relative benefits of drug court substantially outweighed those of probation.

Costs of jail time were greater for drug court participants while they were in drug court because jail-time was a sanction individually applied by the drug court judge. During the period of drug court and probation participation, costs of jail time averaged $795 per drug court graduate and $359 per probation completer. The situation was reversed during the two years after completion: $264 per graduate and $497 per completer. Pretrial detention (prior to the original drug charge) was essentially zero for drug court graduates since they were placed on personal recognizance (rather than remaining in jail or paying bail) and were immediately diverted to drug court. Some probation completers, however had jail time prior to bond or recognizance release. These costs were $0 for drug court graduates but averaged $2,737 per probation completer.

Average monthly wages of drug court graduates were higher during drug court ($639) than probationers during probation ($614). This trend continued after drug court and probation: a 24-month average of $18,251 for drug court graduates compared to $16,822 for probation completers. These differences were in part attributable to longer periods of employment for graduates.

Federal, state and local taxes and FICA were about equivalent during the drug court probation period: the monthly average for drug court graduates was $106 and for probation completers was $107. However after completion of drug court or probation the 24-month average was greater for graduates ($5,234) than for completers ($4,782).

Reception of welfare (AFDC/TANF and food stamps) reflected the difference in wages and time working. Monthly combined averages during drug court/probation were $56 per graduate compared to $59 per completer. The 24-month averages after graduation or completion were $1,291 per graduate and $1,468 per completer.
Health care costs and mental health services were significantly different for the two groups. Other research has shown that a substantial benefit of drug and alcohol treatment is reduced health care costs. This was the finding of this study as well, since only a minority of probationers received alcohol and drug treatment services. While monthly Medicaid costs were about the same for graduates and completers ($75 versus $84, respectively), 24-month costs after the program were substantially lower for graduates ($1,062) compared to completers ($1,520). Mental health service costs averaged $3 per month for graduates and $7 per month for completers while they were in drug court or probation. But afterward the 24-month averages were $12 for drug court graduates versus $71 for probation completers.

Other variables tracked included the costs of subsequent arrests and incarcerations. Graduates were incarcerated for shorter periods after graduation with costs averaging $104 per graduate compared to $214 per completer.

Costs to victims and other costs to the criminal justice system of later crimes were estimated based on the type of crime and costing methods used in other studies. Later crimes of probation completers more often involved crimes against persons, such as assault and robbery, while the later crimes of graduates were almost exclusively drug crimes. Consequently, 24-month averages were $104 in tangible costs per graduate versus $212 per completer and $376 in intangible costs per graduates versus $1,572 per completer.

Finally, the costs associated with infants who were born drug-exposed were greater for completers than graduates. Among babies born to probation completers in the control group, six were identified as drug exposed leading to an average 24-month cost of $789 per completer. One drug-exposed infant was found among graduates for an average 24-month cost of $132.

Costs and Benefits during Drug Court and Probation and during the 24 Months afterward. These were calculated directly based on data collected for each study participant over two years.

Program Costs: Costs computed for the two programs consisted of administration, supervision, urinalysis, pretrial detention, jail sanctions (and new arrests), court activities, court fees, drug and alcohol treatment services and mental health services. The costs of drug court for the 219 graduates totaled $1,706,775 while the costs of probation for the 219 probation completers were $1,389,460. The average costs per participant, therefore, were:

- Average per drug court graduate: $7,793
- Average per probation completer: $6,344
- Difference (excess cost of drug court): $1,449
Benefits associated with Outcomes: Adding costs of participation in later programs and subtracting savings from payment of taxes and FICA, the total dollars associated with outcomes were calculated for the first 24 months after drug court or probation. For drug court these were a positive $172,053 while for probation the total was negative $717,908. These resulted when costs of public programs, cost of probation supervision for later offenses, jail for later offenses, TANF, food stamps, Medicaid expenses, psychiatric payments by the state, later drug and alcohol treatment services, prison terms for later offenses, costs to victims of crime, and costs of drug-exposed infants born to graduates and completers) were subtracted from taxes and FICA paid. The averages per participant were:

- Average benefits (cost offsets – costs) per drug court grad: $3,278
- Average benefits (cost offsets – costs) per probation completer: $(786)
- Difference (in favor drug court): $4,064

Net Savings over Two years: The net savings for the first 24 months after drug court or probation may be calculated by subtracting the differences in program costs from the difference in benefits ($889,961 - $317,315). The savings attributable to drug court totaled $572,646 for the entire group of 219 graduates.

- There was an average saving of $2,615 per graduate for the first 24 months after drug court. This represents the expenses that would have been incurred by the taxpayer over the first two years after drug court or probation had the drug court clients attended regular probation.

Ratio of Costs to Benefits over Two years. The cost-benefit ratio is obtained by dividing differences in benefits by differences in program costs ($889,961 / $317,315): This amounted to:

- A total of $2.80 in outcome savings was realized for Missouri citizens for every $1.00 in additional costs of drug court during the first 24 months after drug court or probation.

Overall Costs and Benefits. Follow-up costs and benefits were projected for an additional 24 months primarily through trend analyses. Projections were validated by comparing results to extended data (beyond 24 months) that was available for individuals who had entered drug court or probation during its earliest days. By adding two years of projected values to measured values for the first two years after drug court or probation, four-year costs and benefits were calculated.

Net Savings over Four Years: The net savings attributable to drug court totaled $1,687,859 for the entire group of 219 graduates.

- Net savings of over four years after drug court or probation amounted to $7,707 per drug court participant. This represents the expenses that
would have been incurred by the taxpayer over a four year period had the drug court clients attended regular probation.

- **Ratio of Costs to Benefits over Four years:** It costs about $317,315 more to put these 219 individuals through drug court than sending them through probation. However, the relative savings associated with better outcomes of drug court compared to probation was $2,005,174 over four years. Thus:
  
  ✓ For every dollar in added costs for drug court for the 219 drug court graduates, taxpayers realized a savings of $6.32 over four years.

- **Gross Savings over Four years:** The total cost of drug court for the 219 graduates was $1,706,775 or $7,793 per graduate. The benefits during the four-year period after drug court amounted $2,005,274 for all 219 graduates or $9,156 per graduate:
  
  ✓ After four years the benefits exceeded the total drug court cost associated with graduating 219 individuals by $298,399 or $1,362 per drug court graduate.