

The Bottom Line

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Research Update on DWI Courts

In 2013, the National Transportation Safety Board (NTSB) endorsed DWI Courts as a proven strategy for rehabilitating repeat driving while impaired (DWI)¹ offenders (NTSB, 2013). In its *Safety Report on Eliminating Impaired Driving*, the NTSB voted unanimously to issue bold recommendations to help the United States reach zero impaired driving fatalities and eliminate alcohol-impaired driving. The NTSB concluded that DWI Courts take a comprehensive approach to changing offender behavior, with their emphasis on ensuring offender accountability, making them a useful approach to rehabilitating drivers for whom traditional countermeasures are not effective.

The NTSB reached this conclusion in response to recent studies and meta-analyses demonstrating that DWI Courts reduce DWI recidivism and general criminal recidivism while returning substantial cost savings to taxpayers. Early evidence suggests DWI Courts can also reduce the incidence of car crashes on our nation's highways.

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In 2012, 1.28 million drivers were arrested for driving under the influence of alcohol or other drugs (Federal Bureau of Investigation, 2013).

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Another 10,322 people died in 2012 due to alcohol-impaired driving, accounting for over 30% of all fatal traffic accidents (National Highway Traffic Safety Administration [NHTSA], 2014). Drivers with blood alcohol concentrations (BAC) over 0.08 g/dL accounted for two-thirds of alcohol-impaired traffic fatalities and were seven times more likely to have a prior conviction for DWI (NHTSA, 2012). Although the majority of persons arrested for DWI do not repeat the offense, approximately 25% will become recidivist DWI offenders (Warren-Kigenyi & Coleman, 2014). Completing substance abuse treatment reduces DWI reoffending significantly, but unfortunately compliance with substance abuse treatment is unacceptably poor for repeat DWI offenders (Cornish & Marlowe, 2003; Timken, 2002).

DWI Courts were created to provide close supervision of repeat DWI offenders and improve their compliance with substance abuse treatment. Modeled after Drug Courts, DWI Courts require

¹ The term driving while impaired (DWI) encompasses equivalent offense terminology, including driving while intoxicated and driving under the influence (DUI) of alcohol or other drugs.

participants to attend frequent status hearings in court, complete an intensive regimen of substance abuse treatment, and undergo random or continuous biological testing for alcohol and other drugs. Most DWI Courts are post-adjudication programs. Along with a variety of other requirements, DWI Courts may require participants to serve some portion of a jail sentence with the remainder of detention being suspended pending completion of treatment. Failure to successfully graduate from the DWI Court can result in a return to custody or a return to traditional adjudication. As of June 30, 2014, 242 DWI Courts and 448 hybrid DWI/Drug Courts were operating in the U.S.

Effects on Recidivism

Earlier reviews concluded that insufficient research was available at that time to determine whether DWI Courts were successful (Marlowe et al., 2009). These concerns have been addressed fully in a recent meta-analysis conducted by the Campbell Collaboration (Mitchell et al., 2012). The Campbell Collaboration is an internationally renowned researcher network that performs meta-analyses and systematic reviews of criminal justice interventions (Campbell Collaboration, n.d.). In performing these scholarly reviews, the Campbell Collaboration uses strict screening criteria, expert peer review, and advanced statistical analyses to yield the most conservative and reliable estimate of the effects of a given program or intervention.

The Campbell Collaboration identified twenty-eight evaluations of DWI Courts that met acceptable criteria for scientific rigor. Of these twenty-eight evaluations, four were randomized controlled trials (RCTs), which meet the highest standards of scientific precision. The large majority of studies (85%) supported the efficacy of DWI Courts and three out of the four (75%) RCT studies supported the efficacy of DWI Courts. When these studies were taken as a whole, the Campbell Collaboration concluded

that DWI Courts reduced both DWI recidivism and general criminal recidivism by an average of more than 12 percent. The best DWI Courts reduced recidivism by as much as 50 to 60 percent as compared to other sentencing options.

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Decreases in recidivism provide substantial economic and public safety benefits for a community which can be quantified. In a study of three counties in Georgia, it was estimated that between 47 and 112 DWI arrests were avoided over 4 years as a result of DWI Courts (Fell et al., 2011). The average cost of an arrest is approximately \$7,000 (Zarkin et al., 2012), which translated into \$329,000 to \$784,000 in savings for the three counties. These figures take into account only the direct, immediate costs of a criminal arrest and associated court hearings, and do not include additional cost savings from avoided jail sentences.

The findings from the Campbell Collaboration are likely to underestimate the current effects of DWI Courts. The meta-analysis included all studies conducted since the founding of DWI Courts over 20 years ago. Older studies examined immature DWI Courts that were just getting started and did not have the benefit of professional experience or research evidence to improve their services. Looking at evaluations conducted within the past five years provides a more contemporary picture of how DWI Courts are performing today.

The table on page 3 summarizes high-quality evaluations conducted since 2009. Nine of the ten studies (90%) reported trends clearly favoring DWI Courts and the improvements

RESEARCH UPDATE ON DWI COURTS

Citation	Location & Research Design	Sample Sizes (N's)	Measured: New Conviction or Arrest (NC or NA)	DWI Recidivism	General Recidivism	Additional Findings
Carey et al. 2012	San Joaquin, CA: retrospective matched comparison	Part: 1,170 Comp: 1,262	NC at 18 mos. postentry	Part: 9% Comp: 12%	NR	Comparison group twice as likely to have an accident associated with alcohol or drugs*
Cavanaugh & Franklin 2012	Texas: contemporary matched comparison	Part: 84 Comp: 84	NA at 12 mos. post completion	Part: 6.0% Comp: 4.8%	Part: 13.1% Comp: 4.8%	NR
Cissner 2009	Erie & Niagara, NY: contemporary matched comparison	Part: 31 Comp: 115	NA at 12 mos. postentry	Part: 3.9% Comp: 0.7%	Part: 5% Comp: 8.4%	NR
Fell et al. 2011	Clark, Hall, & Chatham, GA: contemporary & retrospective matched comparison	Part: 622 Cont: 450 Retro: 270	NC at 48 mos. postentry	Grad:† 9% Part: 15% Cont:† 24% Hist: 36%	NR	Estimated that between 47 and 112 repeat DWI arrests prevented
Gilbertson 2009	Ninth Judicial Distict, MN: contemporary matched comparison	Part: 138 Comp: 119	Average NA at unreported time	NR	Part: 0.01 Comp: 0.13	DUI Court participants had fewer arrests for gross misdemeanors*
Hiller et al. 2009	Waukesha, WI: waitlisted matched comparison	Part: 72 Comp: 64	NA at 24 mos. postentry	Part: 6.9% Comp: 7.8%	Part: 29.2% Comp: 45.3%	NR
Jones 2011	Maricopa, AZ: experimental, random assignment	Part: 387 Ctrl: 397	NC at 24 mos. postentry	Grad:* 3.6% Part: 4.9% Comp: 6.7%	NR	Direct cost \$2,055 per part. \$2,115 standard probation
Mackin et al. 2009a	Anne Arundel, MD: contemporary matched comparison	Grad: 7 Part: 11 Comp: 59	NA at 24 mos. postentry	Grad: 29% Part: 46% Comp: 59%	Grad: 0% Part:* 0% Comp: 37%	Savings of \$1,627 per part. \$5,872 per grad.
Mackin et al. 2009b	Howard, MD: contemporary matched comparison	Grad: 31 Part: 38 Comp: 52	NA at 24 mos. postentry	Grad:* 7% Part:* 13% Comp:* 5%	Grad:* 7%; Part:* 11% Comp:* 30%	Savings of \$1,382 per part. \$4,999 per grad.
Ronan et al. 2009	Bannock, Kootenai, Bonneville, & Bingham, ID: contemporary matched comparison	Grad: 164 Part: 216 Comp: 200	NC at 54 mos. postentry	NR	Grad:* 18% Part:* 23% Comp: 37%	NR

Comp, comparison; Cont., contemporary; Ctrl, control; Grad, graduates; Hist, historical; NR, not reported; Part., participants; Retro, retrospective *p < 0.05. †p < 0.01.

were statistically significant in seven of the ten (70%) studies. In a few studies the results were not statistically significant because of small sample sizes or brief follow-up windows. For mathematical reasons, detecting statistical significance with small numbers of participants is difficult even if the improvements are clinically meaningful and beneficial. Brief follow-up periods can also make it hard to detect statistical significance because recidivism rates tend to be low in the short term. Participants take some time to reengage in DWI behavior and to be caught by the authorities. Therefore, short follow-up periods are unlikely to reflect the ultimate outcomes.

As can be seen from the table, most studies measured recidivism in terms of rearrest or reconviction rates, followed by average numbers of rearrests or reconvictions. Additionally, some studies examined only DWI or alcohol-related arrests or convictions, whereas other studies examined any new arrest or conviction.

Duration of Effects

An important question is whether the effects of DWI Courts last beyond the period of enrollment in the program. Fortunately, high-quality studies with long follow-up windows have reported statistically significant benefits of DWI Courts lasting at least four years (Fell et al., 2011; Lapham et al., 2006; Ronan et al., 2009).

Recidivism was 63% lower for DWI Court graduates than for DWI offenders who completed probation from adjacent counties, and 79% lower than for DWI offenders who completed probation in the same counties before the DWI Courts were founded.

One study of several DWI Courts in Georgia found that recidivism, defined as a new DWI or alcohol-related conviction, was 38% lower for DWI Court participants after four years than for probationers from adjacent counties (Fell et al., 2011). In that same study, recidivism for DWI Court participants was 65% lower than for probationers from the same counties in the years immediately preceding the creation of the DWI Courts. The results were even more favorable for graduates. Recidivism was 63% lower for DWI Court graduates than for DWI offenders who completed probation from adjacent counties, and 79% lower than for DWI offenders who completed probation in the same counties before the DWI Courts were founded.

Another study reported significant improvements for DWI Courts lasting four and a half years (Ronan et al., 2009). At fifty-four months after entry, 23% of the DWI Court participants were rearrested for a new offense compared with 37% of matched probationers. Recidivism was a mere 18% for the DWI Court graduates.

Motor Vehicle Crashes

Most studies of DWI Courts have focused on rearrest or reconviction rates as the outcome measure. Ultimately, however, a primary goal of DWI Court is to reduce car crashes and fatalities. One high-quality study was identified that examined motor vehicle crashes as an outcome measure, and the results significantly favored DWI Court. An evaluation in San Joaquin, California, found that DWI Court participants, regardless of whether they graduated, were half as likely as matched probationers to be involved in an alcohol- or drug-related car crash over a period of eighteen months (Carey et al., 2012). The DWI Court participants were also more likely to comply with court, probation and Department of Motor Vehicle (DMV) requirements and to regain their driver's licenses.

RESEARCH UPDATE ON DWI COURTS

It is often far more difficult for researchers to obtain analyzable data on motor vehicle crashes from state administrative databases than to obtain rearrest records. In addition, longer follow-up periods are often required to measure impacts on motor vehicle crashes because crashes tend to occur at lower frequencies than arrests. The additional effort required to analyze crashes is more than justified, however, by the fact that car crashes often have far greater human and economic costs than arrests. Researchers are strongly encouraged to include car crashes as an

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outcome measure in their evaluations and funders are encouraged to provide additional resources and longer evaluation timelines to permit these critical analyses to be performed.

Cost-Effectiveness

Evaluations of DWI Courts generally analyze cost impacts in one of two ways. *Cost evaluations* compare the up-front investment costs of administering a DWI Court against the costs of probation or jail sentences. They do not take into account the costs of making an arrest or holding court hearings; as a result, they often underestimate the cost advantage of a DWI Court. *Cost-effectiveness* or *cost-benefit evaluations* consider not only investment costs but also outcome costs, such as financial savings resulting from lesser jail sentences. Studies reveal the up-front costs of DWI Courts are comparable to or less than those of standard probation, and real dollar savings are reaped as a result of lower recidivism and fewer participants returning to the criminal justice system. The results of these studies are summarized in the last column of Table 1.

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Many people assume DWI Courts cost more to administer than traditional probation; however, in many cases that is not true. A study in Coconino, Arizona, found that DWI Court cost an average of \$534 per participant per month, compared with \$758 for traditional probation (Solop et al., 2003). Another evaluation in Bernalillo, New Mexico, found the cost of DWI Court was \$654 per participant compared with \$2,125 for standard probation, leading to overall savings of \$247,010 for the jurisdiction over two and a half years (Guerin & Pitts, 2002). Although the DWI Courts provided more intensive and expensive services than probation, they nevertheless cost less to administer because they shortened the required time period for supervising the participants and reduced the use of incarceration.

DWI Courts produced average net cost savings of \$1,505 per participant and \$5,436 per graduate.

As was noted earlier, cost-benefit analyses take into account the dollar savings realized from reduced recidivism and other beneficial outcomes. Two independent evaluations of DWI Courts in Maryland found that DWI Courts produced average net cost savings of \$1,505 per participant and \$5,436 per graduate (Mackin, et al., 2009a, 2009b). In both of these evaluations, the cost savings were attributable primarily to significant reductions in recidivism, and thus to less money being spent to incarcerate repeat DWI offenders.

Conclusion

That DWI Courts reduce recidivism is no longer a matter of debate or conjecture. The most conservative estimate is that DWI Courts reduce DWI recidivism and general criminal recidivism approximately 12 percent better than other sentencing options, and the best DWI Courts are as much as 60 percent better. Contrary to assumptions, DWI Courts often do not cost more to administer than traditional probation because they shorten the time period required to supervise offenders and reduce overreliance on incarceration. Taking into account the cost benefits achieved from better outcomes, DWI Courts have saved local communities nearly \$1,500 per participant within two years and more than \$5,000 per graduate.

DWI Courts also produce benefits, both tangible and intangible, which extend beyond crime reduction and cost savings. Transitioning a repeat DWI offender into sustained recovery means more than just reduced recidivism. Recovery also leads to healthier families, better work productivity, fewer people on public assistance, fewer medical costs, and numerous other benefits to communities, families, and individuals. Research clearly supports the NTSB's conclusion that DWI Courts are critical for achieving the goals of eliminating traffic fatalities, reducing substance-impaired driving, and enhancing public health and safety.

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- *Denotes studies included in the Campbell Collaboration meta-analysis.



The NCDC, a professional services division of the National Association of Drug Court Professionals (NADCP), is the only dedicated advocacy, policy, training and technical support organization for DWI Courts in the nation. For more information about DWI Courts go to www.dwicourts.org.

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