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A Natural Experiment in Reform: Analyzing Drug Policy Change In New York City

Final Report to the National Institute of Justice
Grant No: 2010-IJ-CX-0030

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Part I. Introduction

Between 1970 and 2007, the number of people incarcerated in the United States grew tenfold, to over two million held in the nation's prisons, the highest rate of incarceration in the world (Beatty, Petteruti, & Ziedenberg, 2007; Walmsley, 2009; Warren, 2008). While many factors contributed to this growth, research suggests that it was largely the product of rising commitments for drug offenses combined with increased use of mandatory minimum sentences and lengthy periods of incarceration for people with prior convictions (Drucker, 2002; Drucker, 2011; Harrison, 2001; Stemen, Rengifo, & Wilson, 2005).

This extensive use of incarceration imposes an enormous burden on already strained state and federal budgets, and government officials are increasingly looking for ways to reduce incarceration and corrections costs without jeopardizing public safety. In response to this pressure, there is a growing impetus to develop non-custodial sentencing options for people convicted of drug offenses, a largely non-violent group that constitutes a sizeable minority (20 percent) of the incarcerated population in the United States (King & Mauer, 2002; Jacobson, 2005; Sabol, West, & Cooper, 2009). Between 2009 and 2013, more than 30 states passed nearly 50 bills reforming their criminal justice system to define and enforce drug offenses (Subramanian & Moreno, 2014). Specifically, there has been a push to repeal mandatory minimum prison sentences for many drug offenses and to increase use of substance abuse treatment as an alternative to incarceration (ATI) for low-level drug offenders (King, 2007; Wool & Stemen, 2004; Stemen & Rengifo, 2012). Subramanian and Moreno (2014) report that, between 2009 and 2013, 11 states repealed or reduced mandatory minimum sentences for drug offenses and 14 states passed legislation that expanded the use of drug courts and drug treatment

programs. New York State was one of the first large metropolitan jurisdictions to reform its drug laws. In April 2009, the state repealed a series of sentencing statutes which had mandated lengthy determinate sentences for convictions on a range of felony drug charges—commonly referred to as the Rockefeller Drug Laws. The 2009 drug law reforms (DLR) replaced existing mandatory minimum sentences with new statutes that allowed for shorter prison and jail sentences, as well as expanded options for diverting people convicted of felony drug charges and certain property charges to court-mandated treatment programs.

This research capitalized on the naturally occurring quasi-experiment created by these reforms. Specifically, the study used a combination of qualitative and quantitative methods to examine the implementation of DLR in New York City (NYC) and its outcomes, including the cost implications of the new laws and their impact on the offending trajectories of people arrested on a range of felony drug and specified property charges. The findings from this study are intended to both inform local stakeholders about the implementation of DLR in NYC, and to provide policymakers nationally with detailed empirical information to guide decision-making as other jurisdictions consider revising their sentencing policies for drug offenses.

This introductory part of the report begins with a review of research on drug policy (Chapter 1), followed by an overview of drug laws in New York State and a description of the various treatment diversion mechanisms that were available to defendants in jurisdictions across NYC (Chapter 2), and an overview of the study and the report (Chapter 3).

Chapter 1. Review of Literature

Trends in incarceration

Historically the United States prison population has been fairly stable at around 125 prisoners per 100,000 U.S. residents (Drucker, 2011). However, in the mid-1970s the number of people held in U.S. prisons began to increase, in absolute number and as a proportion of the population. By 2006, the rate of incarceration in the U.S. was approximately 750 per 100,000 (Sabol, Minton, & Harrison, 2007). Much of this increase has been driven by the number of people serving prison sentences for drug offenses. In 2009, there were approximately 350,000 adults held in state and federal prisons following conviction for drug offenses, equivalent to 24 percent of the overall prison population (Guerino, Harrison, & Sabol, 2011). At an estimated annual cost of $31,286 per person held in prison (Henrichson & Delaney, 2012), the cost of incarcerating drug offenders was approximately $10.9 billion.

The negative consequences of incarceration

Research has consistently found that incarceration is associated with a host of adverse outcomes including, but not limited to, increased substance abuse (Aos, Phipps, & Barnoski, 2005; Aos, Phipps,Barnoski, & Lieb, 2001; Belenko, 1998; Caulkins, Rydell, Schwabe, & Chiesa, 1997; Hepburn, 2005; Zarkin, Dunlap, Belenko, & Dynia, 2005), future homelessness (Roman & Travis, 2004), diminished employability (Pager, 2003; Pager, Bonikowski, & Western 2009), reductions in lifetime earnings (Pettit & Lyons, 2003; Western, 2002), the dissolution of marriages (Laub, Nagin, & Sampson, 1998; Western, Lopoo, & McLanahan, 2004), detachment from social networks (Christian, Mellow, & Thomas, 2006; Wolff & Draine, 2004), and decreased community-wide trust in police and the law (Drucker, 2011; Clear, Rose, & Ryder, 2001).

Racial disparities in drug arrest and sentencing

Communities of color have borne a disproportionate share of the harms associated with the United States' reliance on incarceration as a response to drug offenses; for example, despite similar rates of drug use for black and white communities, 27 percent of the increase in the African American prison population between 1990 and 2000 was attributable to drug offenses, as compared to 14 percent of the increase in the white prison population over the same time period (Beck & Harrison, 2001). Using data drawn from the 1997 National Longitudinal Survey of Youth, Mitchell and Caudy (2013) found that at age 17, 22, and 27 African Americans' odds of drug arrest are approximately 13, 83, and 235 percent greater than whites. Racial disparities in drug arrests cannot be explained by differences in drug use, or residing in neighborhoods with heavy police emphasis on drug offending (Beckett et al., 2006). The racial and ethnic disparity in incarceration for drug offenses is particularly striking in NYC. Golub et al. (2007) found that African American and Hispanic misdemeanor marijuana arrestees in NYC were more likely to be detained prior to arraignment, had higher rates of conviction, and were more likely to receive jail sentences than their white counterparts. The ratio of African American men to white men between 21 and 44 years old who were incarcerated for drug offenses in 2001 was greater than forty to one (Drucker, 2002; Drucker, 2011).

A shift in policy: the rise of drug courts and treatment-based alternatives to incarceration

Jurisdictions are increasingly seeking ways to reduce the costs and harms associated with incarceration without compromising public safety. ATIs for drug offenders are thought of as one way to reduce imprisonment without compromising public safety and over the last 20 years there has been an explosion in the availability of treatment-based alternatives via drug courts. Drug courts divert non-violent, substance-using offenders from prison and jail into treatment,

providing direct court supervision, coordinating treatment services, and expediting case processing. As of June 30, 2013, there were more than 2,800 drug courts operating in the US, with 155 of these in New York State (NIJ, 2014)

Public safety outcomes relating to different incarceration policies and sentencing options

Research concerning the impact of different sentencing policies and criminal justice on reoffending can be classified into two broad categories. First, there are studies that investigate the relationship between sanction type and recidivism outcomes, often comparing incarceration to other sanctions such as probation or drug courts. Second, there are a growing number of studies that aim to identify the populations that benefit most from drug courts, comparing recidivism outcomes between subgroups of drug court participants. In studies comparing recidivism outcomes for people convicted of drug offenses who serve probation sentences or attend mandated drug treatment programs, research has consistently found that these non-custodial options yield lower rates of recidivism than incarceration (Aos et al., 2005; Belenko, 1998; Carey, Finigan, Crumpton, & Waller, 2006; Caulkins et al., 1997; Finigan, Carey, & Cox, 2007; Gerstein et al., 1997; Hepburn, 2005; Rhodes, Kling, & Shively, 2006; Sung, 2003; Spohn & Holleran, 2002; Zarkin et al., 2005; Gottfredson, Najaka, Kearley, & Rocha, 2006; Sevigny, Fuleihan, & Ferdik, 2013a; Mitchell, Wilson, Eggers, & MacKenzie, 2012; Rossman et al., 2011). In 2005, the Government Accountability Office (GAO) issued its third report on the effects of adult criminal drug courts, with results from 23 program evaluations providing evidence that drug courts significantly reduced reoffending. In addition, two recent independent meta-analyses have concluded that participation in adult drug courts significantly reduced rearrest and reconviction rates by an average of 24 percent (Sevigny et al., 2013a; Mitchell et al., 2012). Rossman et al. (2011) conducted a multi-site evaluation of adult drug courts and found

that drug court participants were significantly less likely to report committing a crime than a comparison group, when controlling for the influence of demographics, criminal justice variables and jurisdictional differences. Further, Gottfredson et al. (2006) found that drug courts had a long-term effect, reducing recidivism over a three-year follow up period.

However, the majority of these studies have been unable to examine recidivism rates for treatment populations and comparison groups during the same time period, limiting the extent to which the existing research controls for environmental factors and trends, which may impact reentry and recidivism outcomes. In addition, the selection process for ATIs may target defendants with less extensive criminal justice histories who are unlikely to recidivate, while people with longer criminal justice histories and a higher likelihood of recidivism may be more likely to be sentenced to prison. Thus, simple comparisons of these two groups could be subject to unknown confounders, and may yield misleading findings about the impact of ATIs. A study of youth convicted of serious felonies and young adult offenders sentenced to either a period of incarceration or probation that used propensity score matching techniques to control for selection effects found similar recidivism patterns for both groups (Loughran et al., 2009).

A second group of recidivism studies compare reoffending outcomes for subgroups of drug court participants. However, compared to the quantity of research examining the overall impact of drug courts on recidivism, empirical tests of the appropriate target population for treatment based ATIs are limited. Research conducted by Taxman and Thanner (2006) examined the effectiveness of intensive drug treatment for probationers using a randomized experimental design. Their findings supported the principles of Risk Need Responsivity, suggesting that individuals with the greatest risk of reoffending benefit the most from high intensity treatment (Andrews & Bonta, 2010; Ward, Melser, & Yates, 2007). This study found that intensive drug

treatment did not have an effect on recidivism outcomes for people who had a low baseline risk of reoffending, but delayed the time to first rearrest for high risk participants. While most drug courts exclude defendants with prior violent convictions, the limited research in this area has found that a history of violent offending has no significant bearing on recidivism reduction for drug court participants (Saum & Hiller, 2008; Mitchell et al., 2012).

Cost-benefit of incarceration policies and sentencing options

As a cost-reduction measure, a number of states have revised sentencing policies to eliminate mandatory minimums for non-violent drug offenders and/or expand options for diverting this population to court mandated treatment (Affholter & Wicksall, 2002; Greene & Mauer, 2010; King, 2009; Subramanian & Moreno, 2014). Cost-benefit analysis (CBA) is a method to weigh the economic pros and cons of policy options from multiple perspectives. Drug courts CBAs typically examine the perspectives of taxpayers and victims. The taxpayers' perspective investigates the policy effect on justice system resources. The victims' perspective measures the policy effect on reducing the costs of victimization.

The research literature in this area demonstrates that drug courts are generally more expensive than traditional case processing in the short term (McCollister, French, & Fang, 2010; Downey & Roman, 2011). Drug court costs are higher than business-as-usual case processing due to drug testing, judicial status hearings, case management, and substance abuse treatment (Rossman et al., 2011). Downey and Roman (2011) estimated that drug court diversion costs an average of $10,000 more per individual when compared to the costs associated with traditional custodial and non-custodial sanctions (Downey & Roman, 2011). Prior studies have found that, while drug courts reduced the overall rate of incarceration, cost savings to the corrections system were offset by the long sentences imposed for those who failed to comply with the conditions of

treatment (Sevigny, Pollack, & Reuter,2013b; Gottfredson et al., 2006). In addition, prior research has found the fiscal benefits of drug courts were largely driven by a reduction in serious offenses committed by a small subset of all participants. While drug courts prevent participants from committing a large amount of drug-related offenses, these crimes are less costly (Rossman et al., 2011). Finally, research found that treatment can be expensive, especially the use of residential treatment. The Alcohol and Drug Service Study (ADSS) reviewed a nationally representative sample of substance abuse treatment facilities and found that outpatient care had a mean cost of $1,433 per admission in 2002, as compared to $3,840 for residential treatment services (Substance Abuse and Mental Health Services Administration (SAMHSA), 2003).

Because the cost of drug court is high in the short run, drug courts are more often found cost-effective when they are studied over a longer time horizon. A comprehensive meta-analysis of community drug treatment programs demonstrated that long-term benefits are often substantial, approximating $12,000 per participant when measured over a 13-year follow-up period (Drake, Barnoski, & Aos, 2009). Support for this finding is reinforced by a number of evaluations of community drug treatment. Community drug treatment for substance abusers convicted of drug offenses, as opposed to incarceration, has been shown to yield long-term cost-benefits (Aos et al., 2005; Aos, Miller, & Drake, 2006; Aos et al., 2001; Finigan et al., 2007; Zarkin et al., 2005).

Measuring the implementation of policy reform

The implementation of any policy reform may not occur as planned and, even when implemented as intended, does not necessarily produce the anticipated results. It has been well-documented that legislation that aims to change sentencing practices and related outcomes often has unintended consequences. For instance, mandatory minimum or determinate sentence

structures have been implemented at both the federal- and state-level to curb disparities in sentencing outcomes. However, studies have demonstrated that compliance with these types of sentencing reforms is limited, in part due to the displacement of discretion from judges to prosecutors (Nagel & Schulhofer, 1992; Ulmer, Kurlychek, & Cramer, 2007). There has been very little research to date on the impact of policy reforms that restore judicial discretion to divert cases to treatment. One of the criticisms of this type of policy reform is the potential to create or exacerbate bias, based on the disparate application of discretion. The limited research that exists on this topic, conducted by Ulmer et al. (2007) in the federal court system, found that restoring discretion to federal judges did not increase sentencing disparity.

There are multiple factors that may limit the impact of policy reforms designed to increase the use of drug treatment as an alternative to incarceration. First, many of these policies grant criminal justice actors, such as judges and prosecutors, a substantial amount of discretion about who ultimately enters treatment (Stemen & Rengifo, 2012). However, judicial discretion is typically only exercised if cases satisfy predefined eligibility criteria. For example, research has found that rules excluding offenders with a prior violent history from drug court diversion can limit their effectiveness (Sevigny et al., 2013b; Saum & Hiller, 2008). Second, as mentioned above, the impact of treatment diversion on jail or prison populations may be limited by the legal consequences of noncompliance with treatment mandates, which often include lengthy custodial sentences (Gottfredson et al., 2006; Rossman et al., 2011; Rempel et al., 2003). Third, drug court capacity and resources may constrain how many eligible offenders are able to access treatment (Zweig, Rempel, Lindquist, & Roman, 2011; Huddleston, Marlowe, & Casebolt, 2011). Finally, ambiguity in the eligibility requirements for ATIs, or other extraneous factors, can result in people who are not clinically appropriate for services being diverted. For example, Stemen &

Rengifo (2012) found that drug law reforms in Kansas had a 'net-widening effect' whereby people arrested on low-level drug charges were diverted to treatment when less intensive sanctions were more appropriate—while many of those that were appropriate for treatment options were sentenced to prison.

Limitations of prior research

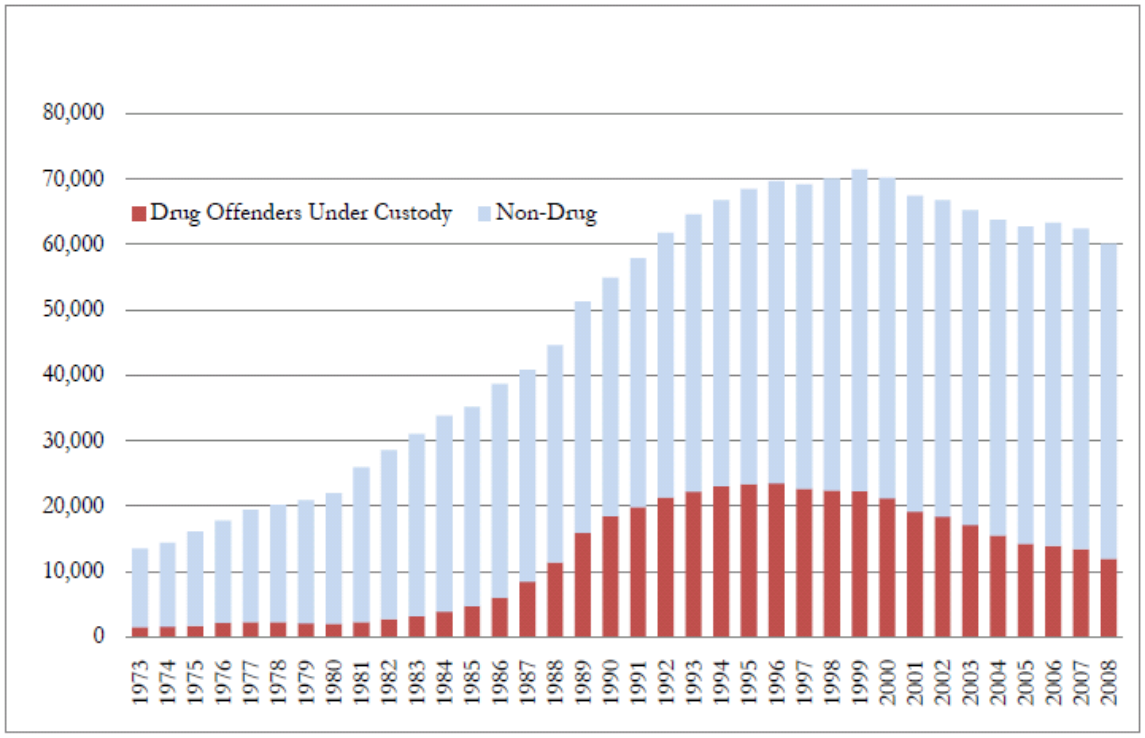
While research on the implementation, public safety outcomes, and costs of different sentencing options is now entering its third decade, it is not yet conclusive. As states craft new sentencing rules for drug offenses, there is a need for research describing the effects of these new policies. The current body of research is limited in a number of ways: 1) few studies have examined the impact of recent reforms that repeal mandatory minimums and restore judges' discretion to divert cases; 2) there is a need for further research on the public safety and cost outcomes of specific legislative changes in drug sentencing policy that controls for variations in the practical implementation of reforms; 3) much of the past research evaluating costs and public safety outcomes of incarceration and sentencing alternatives has been limited in its ability to rigorously match treatment and comparison cohorts; and 4) of the few studies which have examined changes in the use of incarceration, we are not aware of any that have been able to collect data for matched pre- and post-change groups during a similar period of community reentry.

Chapter 2. Overview of NYS Drug Law Reform

A brief history of New York State Drug Law Reform

In 1973, New York State passed the "Rockefeller Drug Laws," making it one of the first states in the country to mandate lengthy prison sentences for a wide range of drug offenses. Under these laws, any defendant convicted of selling two ounces or possessing four ounces of heroin, morphine, "raw or prepared opium," cocaine, or cannabis received a mandatory minimum sentence of 15 years in prison. The primary intent of the Rockefeller Drug Laws was to deter drug abuse and drug crimes. However, an evaluation of the laws showed that they had little impact on drug activity, but led to a drastic increase in incarceration (Maggio, 2006). Analysis conducted by New York State Division of Criminal Justice Services (DCJS) shows that, between the 1970s and 2000, the prison population in NYS increased by approximately six-fold, and the number of people held for drug charges rose from 1,488 in 1973 to 22,266 in 1999 (DCJS, 2010) (see Figure 2-1). Furthermore, the proportion of the NYS prison population convicted on drug charges rose from 10 percent in 1983 to 35 percent in 1994 (DCJS, 2010). In New York, as across the nation, drug felonies were a major driver of the remarkable increase in the prison population (Drucker, 2002).

Figure 2-1. Drug Offenders and Total Offenders Under Custody in New York State Prisons 1973-2008



SOURCE: http://criminaljustice.state.ny.us/pio/annualreport/baseline_trends_report.pdf

Since the Rockefeller Drug Laws came into effect in the early 1970s, a series of reforms have been introduced that have modified the terms of the original statutes. In 1979, marijuana was removed from the schedule of substances that attracted the harshest, 15 years to life, mandatory sentences. Two pieces of legislation enacted in 2004 and 2005 eradicated mandatory life sentences for drug offenders, reduced mandatory minimums for A-I and A-II drug felonies, and increased the quantities of illegal substances necessary to reach the threshold for the most severe drug-related felonies (Mancuso, 2010).[1] However, these acts were criticized for a lack of attention to both rehabilitation and reentry (Mancuso, 2010). Additionally, neither of these acts

[1] Mandatory life sentences were abolished for A-I & A-II felonies, the A-III felony category was eliminated, and drug possession requirements were doubled for both A-I (4 to 8 ounces) and A-II (2 to 4 ounces) felony classifications.

contained provisions related to Class B felonies, the majority of drug felony arrests, where prison sentence was still a mandate and treatment was not an option.

In 1995, the first drug court in New York State opened in Rochester, and in 1996, the Brooklyn Treatment Court became the first drug court in New York City. In 2000, Chief Judge Judith Kaye announced her plan to establish drug courts in every county of New York City. By 2004, every county in NYC had a drug court accepting both misdemeanor drug cases and first-time felony drug cases. During the same time period, a Drug Treatment Alternative-to-Prison (DTAP) program was created by the Kings County District Attorney's Office that has been adopted by other District Attorneys in all five boroughs of NYC. DTAP programs in the city have expanded eligibility for treatment diversion to include non-violent felony drug offenders with prior, or "predicate," felony convictions. Both drug courts and DTAP offer treatment under a "deferred sentencing" model, which requires participants to submit a guilty plea as a prerequisite to program enrollment, with the understanding that they will still be subject to sentencing if they fail to graduate from the program. Upon successful completion of treatment, defendants withdraw their guilty plea and their case is either dismissed or disposed on misdemeanor charges. Prior to DLR, access to treatment as an ATI was largely controlled by prosecutors; they directly administered the city's DTAP programs and maintained the ability to deny access to drug court.

The 2009 Drug Law Reform (DLR)

In response to decades of criticism for the punitive and racially disproportionate impact of existing drug laws and a coordinated lobbying effort by dozens of community groups and advocacy organizations, NYS enacted legislation in April 2009 that introduced significant changes to the sentencing structure for felony drug and specific property offenses. Mandatory

prison sentences were eliminated for defendants convicted for first-time B felony drug offenses as well as both first-time and second-time felony C through E, and minimum prison sentences for both predicate B drug felonies and predicate C felonies were reduced, with the option of diversion to ATIs (see Table 2-1 for details of the DLR).

Table 2-1. Summary of DLR Changes Drug Conviction Charge Level

	B Felony	B Felony predicate*	C Felony predicate*	D Felony predicate*	E Felony predicate*
Pre-DLR sentence options	1-9 yrs prison; OR SHOCK±;	3½ - 12 yrs prison	2 - 8 yrs prison; OR SHOCK±	1½ - 4 yrs prison; OR SHOCK±; OR Willard°	1½ - 2 yrs prison; OR SHOCK±; OR Willard°
Post-DLR sentence options (changes in bold)	1-9 yrs prison; **OR jail term ≤ 1 yr; OR probation; OR judicial diversion; OR Willard°;** OR SHOCK±	**2** - 12 yrs prison; OR judicial diversion; OR SHOCK±	**1½** - 8 yrs; **OR jail term ≤ 1 yr; OR probation; OR judicial diversion; OR Willard°;** OR SHOCK±	1½ - 4 yrs prison; **OR jail term ≤ 1 yr; OR probation; OR judicial diversion;** OR SHOCK±; OR Willard°	1½ - 2 yrs prison; **OR jail term ≤ 1 yr; OR probation; OR judicial diversion;** OR SHOCK±; OR Willard°

*With a prior *non-violent* offense; ± SHOCK is a 6-month boot camp program; post-DLRs, SHOCK can be court ordered; °Willard is a 90-day intensive residential treatment program; participants are under parole supervision

In October 2009, Article 216 of Criminal Procedural Law (CPL) went into effect, expanding judicial discretion and making it possible for *judges* to offer court-mandated treatment ATIs to certain addicted non-violent offenders, without the approval of prosecutors. Specifically, under Article 216 (Appendix A):

- Judges have the discretion to offer treatment diversion to defendants indicted on specified property offenses[2] and all felony-level drug offenses except for felony A charges, if defendants have no prior convictions on violent felony offenses (VFO) within the past ten years;

[2] Based on Article 216, the following felony-level property offenses are eligible for judicial diversion: Burglary 3 (PL § 140.20); Criminal Mischief 3 (PL § 145.05); Criminal Mischief 2 (PL § 145.10);Grand Larceny 4 (PL § 155.30) (only as defined in subdivisions [1], [2], [3], [4],[5], [6], [8], [9] and [10]); Grand Larceny 3 (PL § 155.35); Unauthorized Use of Vehicle 2 (PL § 165.06); Criminal Possession of Stolen Property 4 (PL § 165.45) (only as defined in subdivisions [1], [2], [3], [5] and [6]); Criminal Possession of Stolen Property 3 (PL § 165.50) (except where the property stolen is a firearm, rifle, or shotgun); Forgery 2 (PL § 170.10); Criminal Possession of Forged Instrument 2 (PL § 170.25); and Unlawful using slug 1 (PL § 170.60).

- Judges do not need the consent of the DA's Office to divert defendants to treatment;
- Judges can waive the standard requirement that defendants enter a guilty plea prior to entering treatment if a guilty plea could lead to severe collateral consequences (e.g., if a guilty plea might initiate deportation proceedings, or loss of a job);
- Defendants must meet clinical criteria for drug abuse or dependence to be considered suitable for drug treatment services; and
- Judges may authorize the sealing of a defendant's current felony case and up to three prior misdemeanor cases if the defendant successfully completes the judicial diversion program.

The 2009 DLR dramatically changed the landscape of sentencing options for felony drug cases across NYS, providing the legislative framework for a less punitive and more public-health oriented approach to drug policy. However, the impact of DLR depends on the extent to which the intent of the legislation translates into practical implementation. Therefore, it is necessary to carefully examine how the reforms are being adopted by legal professionals and how the DLR impacts rates of reoffending and cost.

Chapter 3. Overview of court-mandated treatment diversion programs in New York City

As discussed in the preceding chapter, court-ordered drug treatment programs are not new to NYC; drug courts and prosecutor-run DTAP programs existed in all five counties prior to DLR. By changing mandatory minimum sentences and creating a new mechanism for diverting individuals to treatment ("judicial diversion"), it is possible that DLR also altered the use of pre-existing treatment diversion options. In order to better understand how felony cases were processed and diverted in the periods preceding and following the passage of DLR, the research team interviewed DAs in each jurisdiction in NYC, mapping out the various routes for diverting defendants to treatment. This chapter includes an overview of drug court, DTAP, other ATI programs, and the new judicial diversion options in NYC. We also provide a detailed description of how these various options are structured in each of the NYC prosecutorial jurisdictions. This includes separate descriptions for the DA's Offices associated with each of the five counties (Bronx, Kings, New York, Queens, and Richmond) and the Office of Special Narcotics Prosecutors (SNP), which has citywide jurisdiction to investigate and prosecute a subset of felony narcotics cases.

Table 3-1. Eligible Offenses for Different Types of Diversion

Diversion Type	Eligible Offenses
Felony Drug Court	First-time non-violent drug offenses
Judicial Diversion Court	First-time and predicate felony B through E drug offenses and specified property offenses ("Article 216 eligible offenses")
STEP	First-time non-violent property offenses
DTAP	Predicate non-violent offenses (including drug offenses and other offenses)
Other ATIs	Eligibility varies by program. Often, ATI programs divert cases that are not eligible for drug court, DTAP, judicial diversion, and STEP.

Treatment Diversion Programs in NYC

Drug Court

In NYC, all five counties have designated drug courts that connect defendants with treatment as an ATI for both felony and misdemeanor cases. In most cases, felony drug courts focus on defendants facing first-time, non-violent felony charges, typically for drug-related offenses. In some jurisdictions, such as Queens County, defendants charged on first-time, non-violent property offenses are also eligible for treatment diversion via drug court; in other jurisdictions, property cases are eligible for treatment diversion through a designated court part, distinct from drug court (for example STEP in Kings County).

Figure 3-1 describes the flow of a felony case through the NYC court system, including the various treatment diversion options. Although there is some variation in the way that drug courts are used in each jurisdiction, the typical process for drug court diversion begins with a "paper eligibility" screening at arraignment, during which court clerks determine if the case meets the statutory criteria required for entrance into drug court. Assistant District Attorneys (ADAs) then review all cases that court clerks deem eligible during the initial screen and

approve or reject the case for referral to treatment diversion. For those cases that are approved, a clinical assessment is conducted to determine if treatment is suitable for the defendant in a given case (e.g. does the individual have a diagnosable substance use disorder?). If the ADA provides approval for diversion *and* the individual is deemed clinically suitable for treatment, the judge will make a treatment offer to the defendant. If the defendant accepts the treatment diversion offer, he or she will be required to enter a guilty plea and sign a treatment contract before being referred to treatment. Enrollment in a drug court program typically involves mandated treatment for a period 12 or 18 months —which may include a combination of residential treatment and outpatient treatment—and ongoing court oversight. Throughout the course of an individual's participation in the program, the dedicated drug court judge monitors the participant's status via frequent court appearances and regular reports from treatment providers about client progress. Following a deferred sentencing model, if a participant complies with the obligations laid out in the treatment contract, the participant's charges can be dismissed. On the other hand, a participant may "fail" the program if he or she is repeatedly noncompliant with treatment conditions or commits a new crime. In this instance, the participant may have to serve a jail or probation sentence, in accordance with the stipulations of the treatment contract.

Drug Treatment Alternative to Prison programs (DTAP)

DTAP programs are widely-used in NYC. As the flow chart in Figure 3-1 demonstrates, each NYC jurisdiction has a designated DTAP program. Unlike drug courts, DTAP programs are geared towards defendants with prior ("predicate") convictions on non-violent felony charges. The DA both initiates referrals to DTAP and monitors compliance with requirements.

ADAs screen felony cases for DTAP eligibility either "pre-indictment," at the NYC Criminal Court arraignment or after the charge has been filed, or "post-indictment," at the

Supreme Court arraignment following grand jury indictment. ADAs then select eligible defendants to refer for a clinical assessment. Sometimes ADAs also conduct a more detailed review, including interviews with the defendant's family and friends to ensure that treatment is appropriate for the individual. If the defendant is deemed suitable for the DTAP program, the judge approves, and the defendant enters a guilty plea, the ADA will make a treatment offer. Once enrolled, the DA provides oversight for DTAP cases, receiving progress reports from service providers and consulting with the court regarding appropriate sanctions and rewards on an ongoing basis.

Participation in DTAP typically involves a period of residential treatment and may include graduation requirements related to employment, education, and housing. While these requirements differ by jurisdiction, they may include finding or maintaining employment, pursuing a GED, or securing appropriate housing. Upon graduation, charges are either dismissed or, in some situations, felony charges are downgraded to misdemeanors; if participants "fail" to complete treatment, they may be required to serve prison sentences as per the stipulations of the DTAP contract.

ATI programs

DAs may offer defendants diversion opportunities via ATI programs. Eligibility criteria for ATI programs are generally more flexible than those for drug courts and DTAP programs, and many defendants who have a substance abuse disorder but are ineligible for drug courts or DTAP programs may be diverted to treatment via ATIs. For example, defendants charged on violent felony offenses in Queens County—who are ineligible for drug court and DTAP—may be diverted to treatment via a Treatment Alternatives for Safer Communities (TASC) conditional plea, an ATI program run by the Queens County DA's Office.

Defense attorneys can request diversion to ATI programs on behalf of the defendant and an ADA will review the case and refer those cases that they deem eligible for clinical assessment. ATI programs are operated by a wide range of NYC non-profit organizations, largely under the umbrella of TASC, a non-profit criminal justice case management organization. TASC provides clinical assessments, seeks appropriate treatment options, and oversees ATI, drug court and DTAP cases across the city[3], serving as a liaison between the DA's offices and the service provider. Upon completion of ATI programs, felony cases may be dismissed or downgraded to misdemeanors and sentenced. If defendants fail to complete ATI programs, they may be required to serve prison, jail or probation sentences, in accordance with the treatment contract.

Judicial Diversion

Post-DLR, a new path for treatment diversion was created, by which defendants can request treatment diversion from the judge after grand jury indictment or the filing of the Superior Court Information (SCI).[4] Specifically, DLR required that each jurisdiction establish a judicial diversion court part[5] to handle cases meeting criteria listed in Article 216. Staff employed by the judicial diversion courts conduct eligibility screenings and clinical assessments for potential participants. Based on the results of screening and evaluation, the presiding judge in the judicial diversion court part determines if treatment is an appropriate option for the defendant. If either the defendant or the ADA contests the results of the treatment evaluation, an

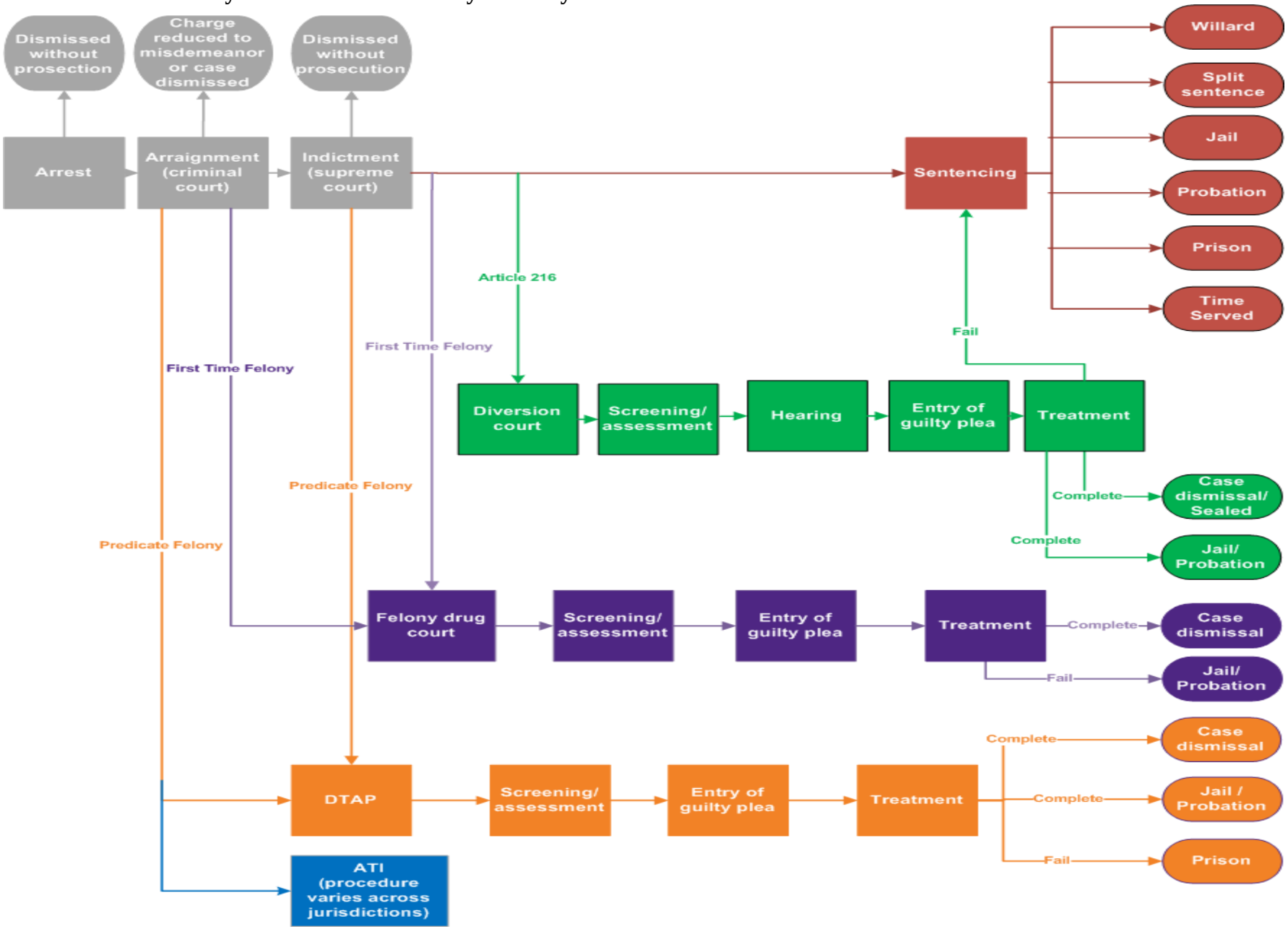
[3] TASC supervises treatment cases for all jurisdictions in NYC except for cases handled by the New York County and SNP.

[4] Based on NY State Criminal Procedure Law Article 200.15, defendants charged for a felony crime may waive their right to a grand jury indictment; in these cases, a district attorney may file a Superior Court Information (SCI), a written accusation to charge a person with commission of crime. SCI has the same legal force as a grand jury indictment.

[5] A court "part" is a specialized court of limited jurisdiction hearing a specific category of cases, such as cases on for initial arraignment, cases on for trial, felony narcotics cases, prostitution cases, or gun possession cases (all these exist in NYC courts). In practical terms, a court "part" is a specific courtroom with a specific assigned judge, staff, and case calendar.

Article 216 hearing may be scheduled to resolve the disagreement. Unlike pre-existing diversion models (drug court, DTAP, etc.), the judge may over-rule the DA's objection and offer diversion. Similar to traditional drug courts, the judicial diversion court operates on a deferred sentence model and usually requires a defendant to submit a guilty plea in order to enroll in treatment. (In accordance with DLR, in some cases a defendant may not be required to enter a guilty plea, if the judge believes that it would lead to severe collateral consequences.) Upon completion of the treatment required by the court, the guilty plea is withdrawn and felony charges are either dismissed or downgraded and sentenced as misdemeanors. As with other diversion models, described above, treatment failure results in the deferred sentence outlined in the contract, such as a prison or jail term.

Figure 3-1. The Flow of Felony Cases in New York City Court System



Diversion programs in each NYC jurisdiction

While there are core similarities in many of the options available for mandated treatment throughout NYC, there is some variation in how cases are processed and diverted in each jurisdiction. Table 3-2 provides an overview of the types of diversion offered in each, jurisdiction, prior to DLR and following the reforms. A detailed description is included in Appendix C.

Table 3-2. Treatment Diversion Programs by NYC Jurisdiction

Diversion Type	Bronx	Kings	New York	Queens	Richmond	SNP
Felony Drug Court	✓ ✓	✓ ✓	✓	✓ ✓	✓ ✓	✓ ✓
Judicial Diversion*	✓	✓	✓	✓	✓	✓
STEP		✓ ✓				
DTAP	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓
ATI	✓ ✓	✓ ✓		✓ ✓	✓ ✓	

✓ pre-DLR diversion mechanism; ✓ post-DLR diversion mechanism.
*Based on the administrative data we collected for this study, post-DLR, a judicial diversion court part was established for each New York City County; however, New York County was the only jurisdiction that made regular use of this mechanism (including cases referred by New York County DAs or SNP).
**In addition to various diversion types listed in this table, felony cases may receive drug treatment via diversion to mental health courts or other felony-level treatment courts (for example, veteran courts, DWI courts in Queens). Felony cases that are downgraded to misdemeanor may receive treatment from misdemeanor drug courts.

- Pre-DLR, DTAP programs were the only treatment diversion option for felony cases in New York County. Felony drug courts in New York County (Manhattan Treatment Court 'MTC') only receive cases from the Office of the Special Narcotic Prosecutor (SNP). Post-DLR, felony cases in New York County can be diverted via judicial diversion court (Manhattan Diversion Court 'MDC').
- TASC manages all treatment diversion in NYC except for cases in New York County and those handled by SNP.
- Post-DLR, the drug court in Bronx County has been expanded to handle both first-time felony cases and second-time felony cases.

- Pre-DLR, there were four different paths of treatment diversion in Kings County (drug court, STEP, DTAP, TASC), covering both first-time and second-time drug felony and property cases. Judicial diversion was added as another diversion mechanism post-DLR.
- Except for drug courts and DTAP programs, DAs can divert felony cases to treatment via other ATI programs. For example, felony cases that are ineligible for drug courts or DTAP programs can be diverted via a TASC conditional plea in Queens County, or using a mechanism referred to as a "two-step plea" in Richmond County.

Substance Use Treatment Programs in NYC

In NYC, there are three main types of substance abuse treatment modalities for criminal justice referrals: inpatient treatment, residential treatment and outpatient treatment.

- Inpatient treatment programs fall into two general categories; detoxification programs and inpatient rehabilitation. Inpatient detoxification programs typically provide short-term, medically supervised detoxification and counseling. Inpatient rehabilitation programs offer longer term counseling and treatment in a medical setting.
- Residential drug treatment programs in New York State typically adopt the Therapeutic Community model. Therapeutic Communities are abstinence based programs that aim to change the lifestyles of drug users through a long-term communal experience which emphasizes the importance of community and the influence of peers. The main distinguishing characteristics of residential treatment programs are the use of peer-counselors and reduced reliance on medical staff. Residential programs are typically offered in non-medical settings.

- Outpatient treatment programs offered to court mandated clients in New York City emphasize counseling, with limited use of medication. Clients continue living in their communities and attend clinics on a regular basis. Treatment is usually provided in a group setting in a community based treatment center. As with residential treatment, most outpatient programs are abstinence based and compliance is assessed using regular drug tests.

Chapter 4. Overview of the study

Research Questions

This study employs a mixed-methods design to document the implementation of DLR in NYC and the impact of reforms on recidivism and taxpayer and victim costs. The research addresses the following three sets of research questions:

1. Implementation: How were the changes to the law reflected in sentencing practices? What factors do judges, prosecutors, and defense attorneys consider when deciding drug cases, and how have these factors shifted over the course of DLR? To what extent did changes to the law increase access to drug treatment and reduce overall custody rates?

2. Reoffending: What were the impacts of diversion created by DLR on reoffending?

3. Costs and benefits: (1) What were the economic implications of DLR for taxpayers and crime victims in NYC? (2) What are the costs and benefits of diverting an individual, from a traditional sentence, to drug treatment?

Data Collection Strategy and Method

To answer these questions, the study used three primary data collection strategies: 1) analysis of administrative records provided by multiple state and city agencies, including information regarding defendants' criminal history, current charges, sentences, treatment diversion, and demographics; 2) qualitative interviews with key informants, including judges, prosecutors, and defense attorneys; and 3) a review of case files.

Data Analysis

The research team conducted three sets of analyses to answer the research questions listed above: implementation analysis, reoffending analysis, and cost-benefit analysis. Further

details of the methods employed for each section of the analysis are included in the relevant report chapters.

Implementation analysis of the reform

The study draws on a combination of quantitative analysis, qualitative interviews, and case file reviews to provide a comprehensive picture of how the 2009 DLR has been implemented in NYC. As part of the quantitative analysis, the research team examined all cases arrested on A through E felony drug charges and specified property charges during two equivalent periods: one period prior to DLR (January – September, 2008) and one period following DLR (January-September, 2010).[6] Propensity Score Matching (PSM) techniques were used to select comparable study samples from these two groups, controlling for two, potentially confounding factors: 1) the downward trend in felony drug arrests over the period covered by the study (2008-2010); and 2) baseline differences between people arrested on drug felony and specified property charges over this period. Specifically, PSM was used to select the same number of cases from the pre-DLR and post-DLR periods matched on key baseline characteristics (demographics, borough of arrest and case disposition, index charge[7] and criminal history). This approach provides a more accurate comparison by minimizing the potential for selection bias (Rosenbaum and Rubin, 1983).

Taking advantage of the quasi-experimental design opportunity presented by DLR, the study compared sentencing and treatment diversion outcomes for the pre and post- DLR samples. Given variations in case processing and the use of treatment diversion across different jurisdictions in NYC, this research examined the implementation of DLR at both the city-level and disaggregated by jurisdiction.

[6] See chapter 5 for a detailed description of sample selection for the implementation study.
[7] Index charge relates to the felony drug or property arrest that qualified the case for inclusion in the study cohort.

To complement and elaborate on the quantitative analysis, the research team at John Jay conducted in-depth interviews with 15 prosecutors, 17 attorneys, and 3 judges from three NYC boroughs (Bronx County, Kings County, and New York County) to explore their perception of the impacts of DLR on felony drug cases including arrest, indictment, sentencing, and treatment diversion practices. The John Jay team also reviewed case files for predicate B Felony cases in Bronx County and New York County during two time periods: cases closed within the first six months of 2008 (pre-DLR) and cases closed within the last six months of 2010 (post-DLR). The case file review was used to examine changes in patterns of handling predicate B Felony cases pre- and post-DLR.

Reoffending analysis of the Reform

In order to examine the impact of DLR on rates of recidivism, researchers used administrative data from DCJS to track rearrests for two groups: a pre-DLR sample of people indicted on Article 216 eligible offenses who were sentenced to jail, prison, or probation prior to the reforms ("the pre-DLR sentenced group"), and a post-DLR sample of people indicted on Article 216 eligible offenses and diverted to treatment after the reforms ("post-DLR diverted group"). PSM was applied to the groups to select individuals with matched characteristics from each sample, ensuring that the two groups were comparable and minimizing the impact of confounding factors. To compare the rearrest rate between the two groups, researcher tracked the pre-DLR sentenced group and the post-DLR diversion group for a similar amount of time, a minimum of 12 months and a maximum of 35 months starting from the date of disposition. Researchers controlled for the incapacitation effect of jail, prison and residential treatment

(which could skew the analysis) by using 'community time' as the denominator for assessing both time to first arrest and rates of reoffending.[8]

Cost-Benefit Analysis

Vera's Cost-Benefit Analysis Unit conducted a cost-benefit analysis (CBA) based on findings from the implementation analysis and the recidivism analysis. The first part of the CBA used data from the implementation analysis to examine citywide costs and benefits associated with the implementation of DLR, comparing the costs to taxpayers for handling a matched sample of felony drug arrests in NYC pre- and post-DLR.

Building on the findings from the recidivism study, the second part of the CBA examined whether drug treatment diversion was a cost-effective alternative to jail, prison, and probation sentences. This component assessed whether justice resources and victim costs offset the cost of increased use of drug treatment services for people diverted to treatment as an ATI.

Report Structure Overview

The remainder of the report addresses the study's three sets of primary research questions. Part II describes the implementation of DLR. Part III details the impact of DLR on recidivism. And Part IV provides findings from the CBA. Each of these parts includes a discussion of methods, findings and conclusions. Part V integrates findings from the various components of the analysis and discusses policy implications for NYC and the rest of the country.

[8] Community time discounts time spent in custodial or residential treatment settings to estimate the relative risk of rearrest for each day spent in the community.

Part II. Implementation of DLR

Chapter 5. Overview of Implementation Analysis of DLR

This Part explores the extent to which DLR has translated into a shift in charging, sentencing and diversion practices in NYC. While DLR increased judicial discretion in sentencing and created new opportunities for treatment alternatives to incarceration, it is not a given that these changes in opportunity will necessarily lead to concomitant changes in the behavior of legal professionals, or that they will translate into the type of changes intended by lawmakers. Furthermore, the six court jurisdictions in NYC (the 5 NYC counties and SNP) operate independently of one another and, to understand the implementation of DLR, it is important to consider how the reforms have been implemented in each of these jurisdictions.

The first chapter describes how DLR has been reflected in charging and sentencing practices and to what extent the reforms have increased access to court mandated treatment, citywide and by jurisdiction. Specifically, this analysis addresses the following research questions:

1) What were the overall trends in arrest for felony drug charges during a period spanning the reform? What proportion of cases were indicted, convicted and sentenced over the same period? How do these long-term trends relate to DLR?
2) How and to what extent have charging practices changed following the implementation of DLR?
3) How, if at all, have the practices of police, prosecutors, defenders, and judges changed in response to DLR?

4) How has DLR affected the use of various sentencing options (including prison, jail, probation, and treatment alternatives to incarceration) for felony drug cases and specified property crimes?

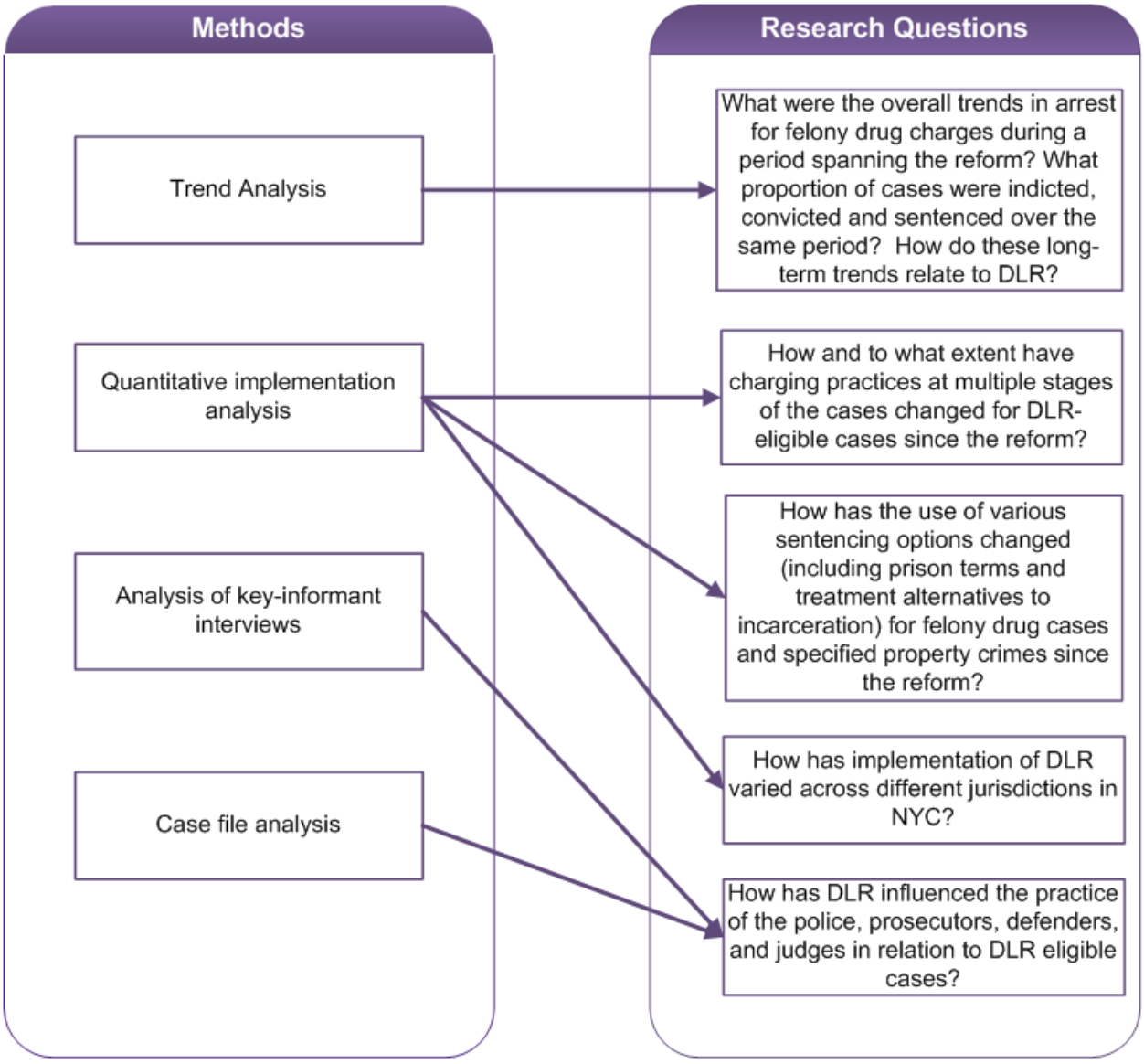
5) How has implementation of DLR varied across different jurisdictions in NYC?

The research team used a combination of quantitative and qualitative approaches to explore the research questions outlined above. These approaches included:

1. *Trend analysis:* quantitative analysis of administrative data on cases generated by arrests on felony drug charges between October 2006 and March 2011 to describe overall changes in rates of arrest, indictment, sentencing, and drug court diversions during this period.
2. *Quantitative DLR implementation analysis:* quantitative analysis of administrative records describing sentencing outcomes, treatment diversions, and charging decisions at multiple discretionary points between arrest and adjudication for matched cases pre-DLR and post-DLR; and quantitative analysis of data on cases indicted on specified property charges, comparing rates of treatment diversion for matched cases pre-DLR and post-DLR.
3. *Analysis of key-informant interviews:* qualitative analysis of data collected during interviews with prosecutors, defense attorneys and judges to explore perceptions of DLR.
4. *Case file analysis:* quantitative analysis of data collected as part of a review of case files generated by arrests on predicate B felony drug charges[9] pre- and post-DLR to investigate any changes in charging practices associated with the reform.

[9] Predicate B felony drug arrests refer to arrestees facing B felony drug charges with prior felony convictions but no prior convictions on violent felony charges.

Figure 5-1. Implementation of DLR: Research questions by analytical strategies



One of the challenges to understanding the impact of DLR is the potentially confounding influence of factors that are not connected to the reforms on sentencing outcomes or rates of drug court diversion. In other words, observed differences in sentencing or diversion may be the result of: a) the impact of policies introduced by the DLR; or b) historical trends that are not connected to DLR, such as the number of people arrested on felony drug charges, the nature of those cases, and other individual level or case characteristics that may influence decisions about sentencing

or suitability for drug court diversion. To understand the impact of DLR, the research accounts for extraneous factors in two ways. First, the trend analysis documents shifts in felony drug arrests, indictment, sentencing, and treatment diversion, describing historical trends that predate and span the reforms. This analysis provides context for both the quantitative and qualitative examination of DLR implementation. Second, the PSM design employed as part of the quantitative implementation analysis controls for differences in the number and type of cases between these two periods. The bulk of the quantitative analysis presented in this chapter compares two samples of cases from the pre- and post-DLR periods of equal size that have been matched on key defendant and case characteristics. These two complementary analytic strategies are used to provide a quantitative description of the implementation of DLR.

The qualitative analysis of stakeholder interviews provides a description of the situational, political, and logistical factors that may influence DLR but are not captured as part of the quantitative analysis. The case file reviews supplement both the quantitative and qualitative components of the implementation analysis, describing defendant and case characteristics for a purposively selected sample of cases from two NYC counties.

The four research methods are designed to be mutually reinforcing with findings from one analysis aiding in the interpretation of results from another. In Chapter 6 through Chapter 8 each of these four methods are described in detail, including data sources, sampling strategy, analysis, and findings.

Chapter 6. Trend Analysis

The 2009 DLR cannot be isolated from historical trends in rates of drug felony arrest, indictment and sentencing, and the use of treatment diversion in each of the six NYC jurisdictions. It is also important to note that the 2009 DLR was the most recent in a series of reforms since the initial "Rockefeller" drug laws were established in 1973. To put DLR into context, the implementation analysis starts with an examination of trends in felony drug arrests, indictments, prison commitments, and drug court diversions over a four-and-a-half-year period, using historical case data for arrests on felony drug charges between October 2006 and March 2011 in NYC.

Methodology

Data

The research team collected case-level administrative records from DCJS describing charges[10], case disposition, sentencing, and information on criminal history. The New York State Office of Court Administration (OCA) provided information on drug court screening and admission, treatment participation, and treatment outcomes from the New York State Uniform Treatment Application (UTA), the statewide data system that records information on treatment courts.[11]

Data from DCJS and OCA were matched at the case-level using a combination of person-level and case-level identifiers.[12] All records that matched on these two items were considered to

[10] If an arrest included multiple charges, only the top charge was recorded in the DCJS dataset.
[11] Information on DTAP and ATI is not available for the trend-analysis cohort.
[12] DCJS and OCA use the same person-level identifiers, the New York State ID (NYSID), to track unique individuals. These agencies also use the same case-level ID, the criminal justice tracking number (CJTN) and arrest date to track distinct cases (as many individuals have more than one case).

be a case-level "match". In certain circumstances the courts may elect to "seal" a case, removing it from the public record. For example, cases may be sealed when a defendant is acquitted or when the conditions of an alternative sentence are satisfied. Accessing information on sealed cases is important for this study as the DLR statute grants the courts the option of sealing cases after completing court-mandated drug treatment.[13] Sealed cases are no longer a matter of public record but can be accessed in anonymized form. To collect data on sealed cases, Vera used the anonymization protocol described in Appendix F to request case level data without any personally-identifiable information.

Sample

The sample for the trend analysis included all cases generated by arrests on category A through E felony drug charges between October 1, 2006 and March 31, 2011, a period leading up to and following the DLR (the "four-and-a-half-year cohort").

Analysis strategy

Descriptive analysis was used to describe changes in the number of arrests, indictments, sentences, and treatment diversions for the four-and-a-half-year cohort using drug felony cases as the unit of analysis, rather than individuals. The "trend analysis" was conducted at both the citywide level, providing a picture of drug arrests and case outcomes in NYC overall, and at the jurisdiction level, documenting case trends in each of the five NYC counties.[14]

[13] The legislation authorizes courts to conditionally seal records of drug, marijuana and Willard-eligible non-drug crimes (see CPL §410.91) upon a defendant's successful completion of a judicial diversion program. Sealing authority will also extend to up to three of the client's prior misdemeanor drug convictions.

[14] New York City counties are coterminous with the five boroughs. Elsewhere in this report cases disposed in New York County are disaggregated to differentiate between cases handled by the New York County DAs office and the Office of the Special Narcotics Prosecutor (SNP). For the trend analysis, it was not possible to separate cases handled by SNP from cases handled by the NYC DA's office.

Findings

Trends in felony drug arrests, indictments, and prison sentences

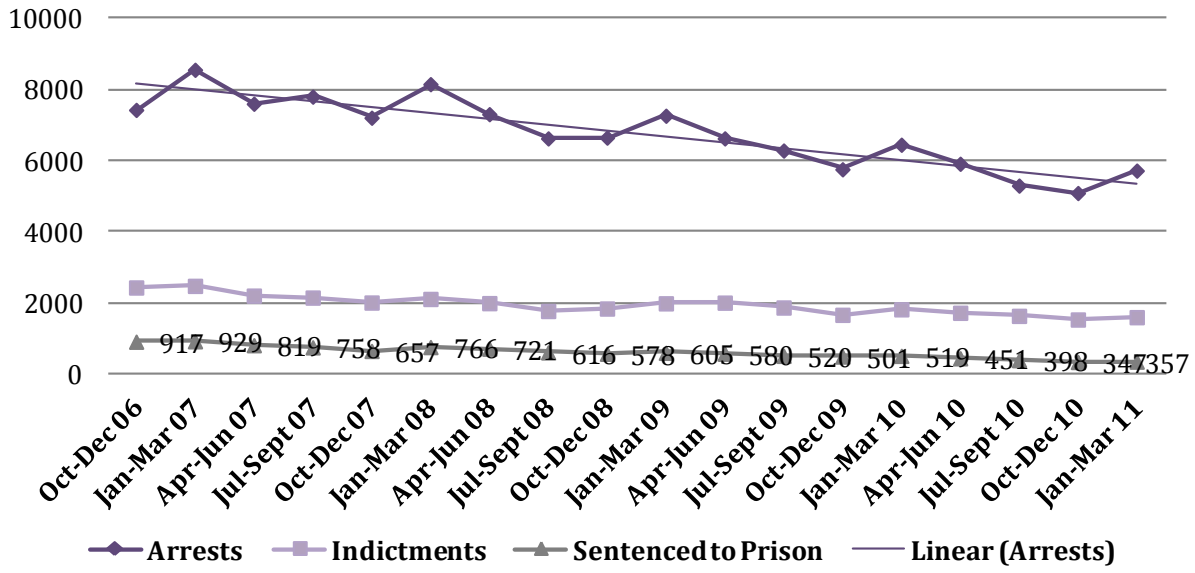
City Level Analysis

Between October 1, 2006 and March 31, 2011, there was a consistent downward trend in the number of felony drug arrests, indictments, and prison sentences. Figure 6-1 describes changes in these three indicators, divided into three-month intervals ("*quarters*"). The number of felony drug arrests decreased from 7,429 arrests in the last quarter of 2006 to 5,723 in the first quarter of 2011. It is of note that there was substantial seasonal variation in felony drug arrests in NYC, with the number of arrests for felony drug charges peaking in the first quarter of each year. This variation may be the result of variance in policing practices. Controlling for seasonal variation, there was a 33 percent reduction in felony drug arrests between the first quarter of 2007 (8,556) and the first quarter of 2011 (5,723).

Over the same period, the total number of felony drug cases indicted per quarter declined by 27 percent, from 2,486 cases in the first quarter of 2007 to 1,606 cases in the first quarter of 2011, including both grand jury indictments and SCIs.[15] Most of the decrease in absolute numbers of indictments is explained by declining numbers of felony drug arrests. Accounting for changes in arrests, the indictment rate for felony drug cases declined from 33 to 28 percent over this period. There was also a substantial decrease in the proportion of felony drug cases that resulted in a prison sentence, from 12 percent during the last quarter of 2006 to 6 percent during the first quarter of 2011. The decline in prison as a response to drug felony offenses may be partially explained by DLR (a point that is explored in detail later in this chapter). However, it is also clear that the downward trend in the use of prison predates the reforms.

[15] The administrative dataset used for this analysis did not include information on whether the case was indicted or SCId. Researchers coded a case as indicted or SCId if the record included an indictment charge, or the case resulted in either a prison sentence or diversion to a felony level drug court.

Figure 6-1. Felony Drug Trends by Quarter: Arrests, Indictments, and Prison Sentence



County level analysis

The five county court systems in NYC are often described as "cities unto themselves" referring to the degree to which caseloads, policies, and court practices differ by jurisdiction. To understand and account for the considerable heterogeneity within NYC, the following analysis describes felony drug arrests, indictments, and prison sentences for each of the five counties. During the period covered by the trend analysis, more than 80 percent of felony drug arrests occurred in three counties (Bronx County, Kings County, and New York County).

Although all five counties experienced the same downward trend in felony drug arrests, the magnitude of that decline varied by county (see Figure 6-2).[16] A larger decline was seen in Kings County (36 percent reduction), with the number of felony drug arrests decreasing from 2,277 in the first quarter of 2007 to 1,461 in the first quarter of 2011, and New York County (35

[16] As the primary aim of the study is to describe court practices, the analysis is based on the county where cases were disposed rather than arrest counties. New York County courts disposed a number of cases involving defendants arrested elsewhere in the city (approximately 7 percent of all felony drug cases disposed). Two percent of cases initiated by an arrest in Kings County were disposed in other counties. Four percent of cases initiated by an arrest in Bronx County were disposed in other counties.

percent reduction), where the number of felony drug arrests declined from 2,257 to 1,475 over the same period.

Figure 6-2. Felony Drug Trends by Quarter: Arrests by County

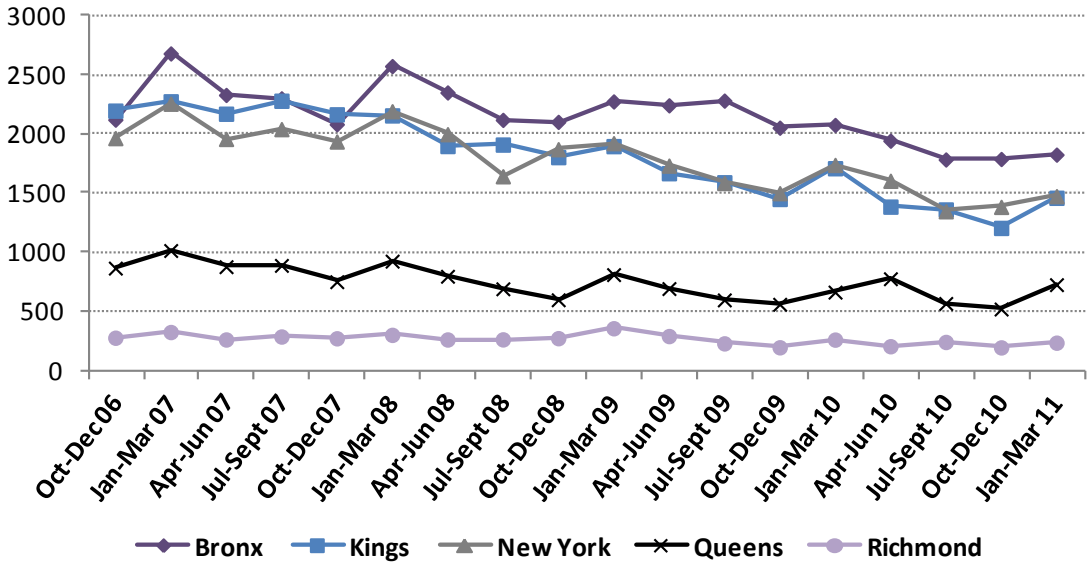


Figure 6-3a and Figure 6-3b describe shifts in the number of indictments and indictment rates across the five counties of NYC between 2006 and 2011, respectively. Although the number of indictments declined citywide, the extent of this decline varied across counties. In Bronx County, indictment rates decreased from 35 percent to 23 percent over the four-and-a-half-year study period. In Richmond County, an average of about 20 percent of felony drug arrests resulted in indictment, slightly below the city average of 29 percent. Although the indictment rate was generally lower in Richmond County than elsewhere in the city, there was considerable variation by quarter, with three notable spikes, in the fourth quarter of 2007, the second quarter of 2009, and the third quarter of 2010. The indictment rates remained stable for Kings County, New York County and Queens County between 2006 and 2011. However, New York County had a consistently higher indictment rate than the rest of NYC (see Figure 6-3b).

On average, the indictment rate was 42 percent in New York County, compared to an average of 29 percent for NYC as a whole over the four-and-a-half-year period.[17]

Figure 6-3a. Felony Drug Trends by Quarter: Indictments by Disposition County

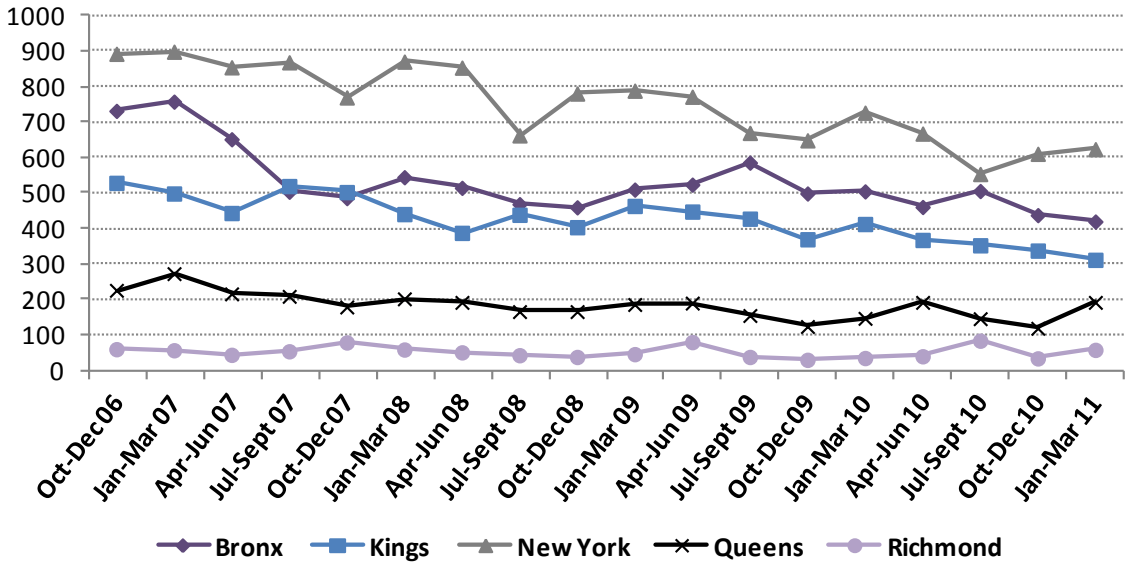
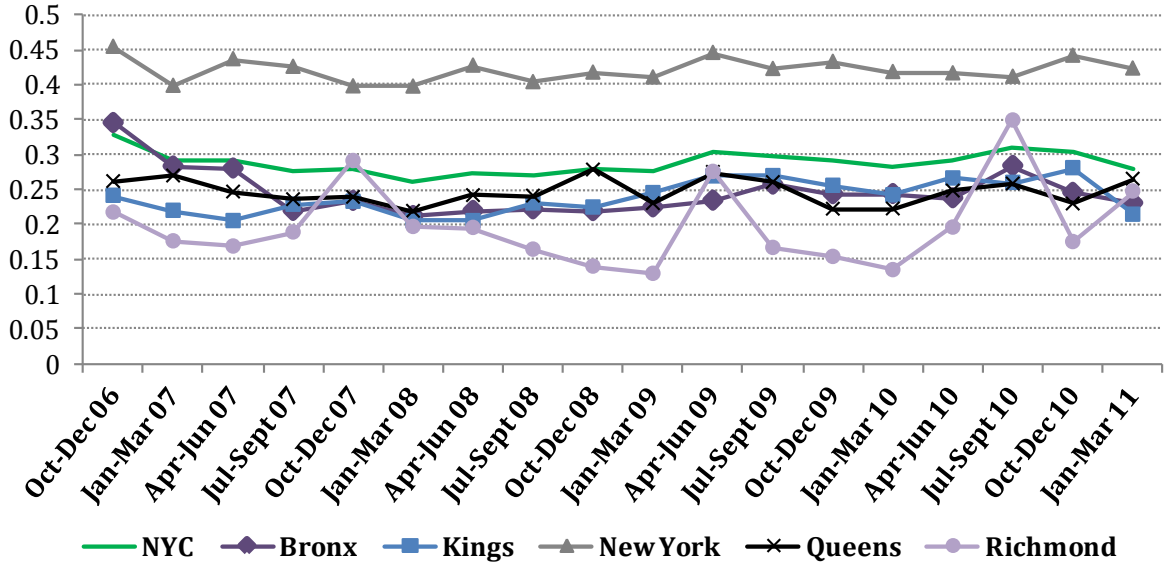


Figure 6-3b. Felony Drug Trends by Quarter: Indictment rates by Disposition County



[17] Cases handled by SNP are disposed in NY County. These cases tend to involve more serious offenses and have a higher indictment rate and a higher conviction rate than those handled by DAs in the rest of city. This may partially explain the higher indictment rate seen in NY County.

Figure 6-4a and Figure 6-4b describe trends in the use of prison over time for each county. The proportion of cases resulting in prison sentences decreased dramatically in three NYC counties between 2006 and 2011; an 84 percent of reduction in Bronx County, a 69 percent of reduction in Kings County, and a 55 percent of reduction in New York County. As with indictment rate, the proportion of cases resulting in prison sentences in New York County is greater than the average of NYC as a whole (18 percent compared to 9 percent). The use of prison sentences in Queens County remained stable over the study period at around 8 to 10 percent of all felony drug cases. The rate of prison sentence in Richmond County varied widely with a spike in the third quarter of 2010 (13 percent); however, on average, only 5 percent of felony drug arrests in Richmond County resulted in a prison sentence. Again, while this trend may partially be explained by DLR, there were temporal shifts in the use of prison that predate the introduction of the reforms in 2009.

Figure 6-4a. Felony Drug Trends by Quarter: Number of Prison Sentence by Disposition County

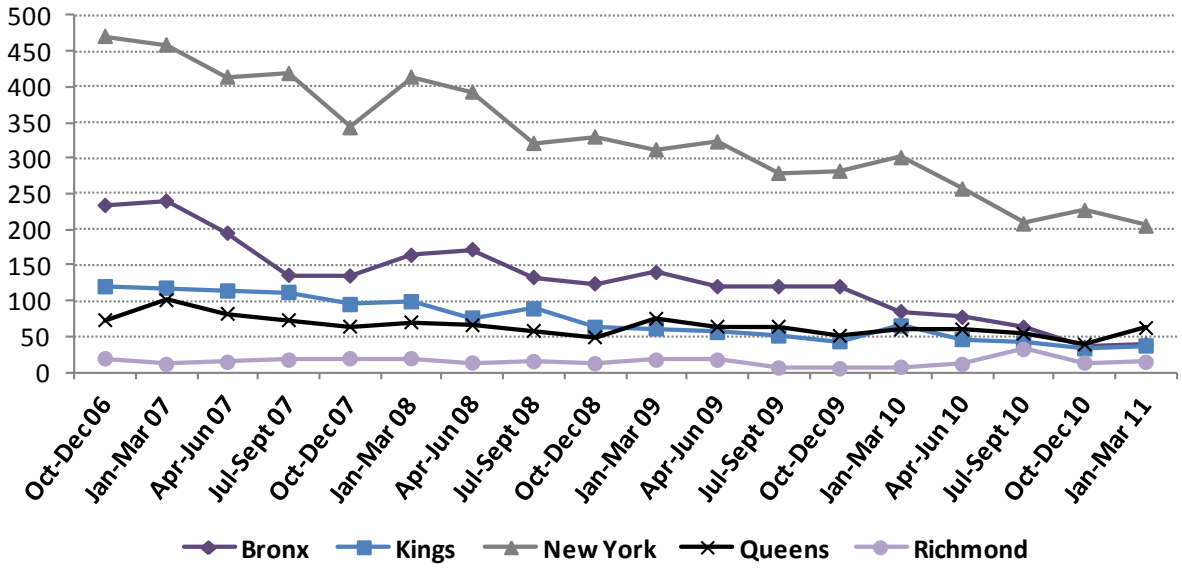
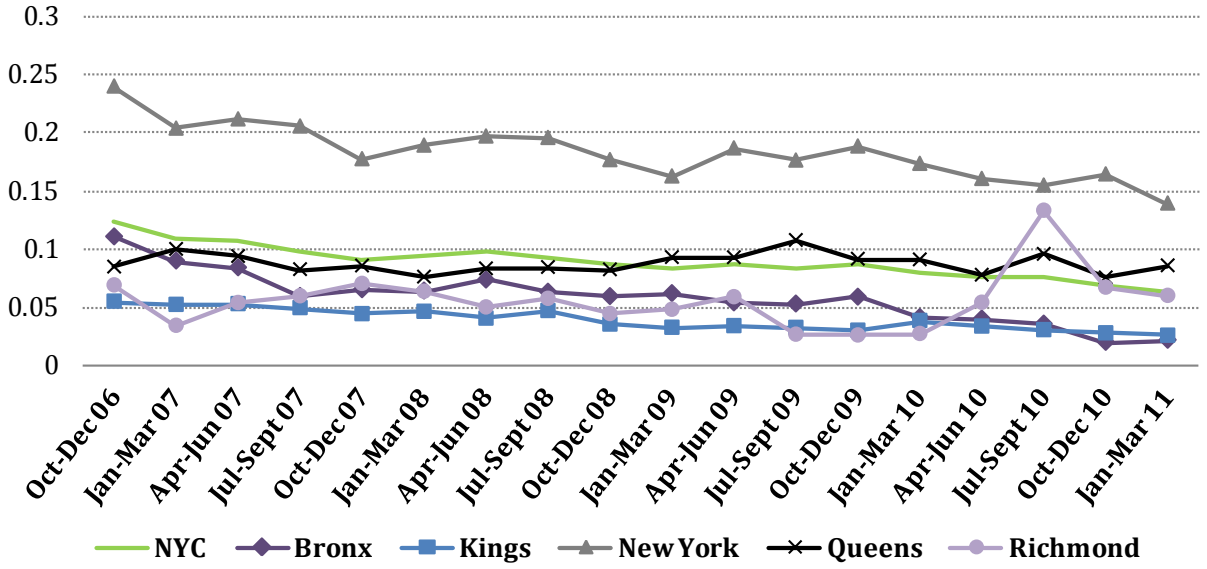


Figure 6-4b. Felony Drug Trends by Quarter: Prison Sentence Rate by Disposition County



Trend in demographics of felony drug defendants

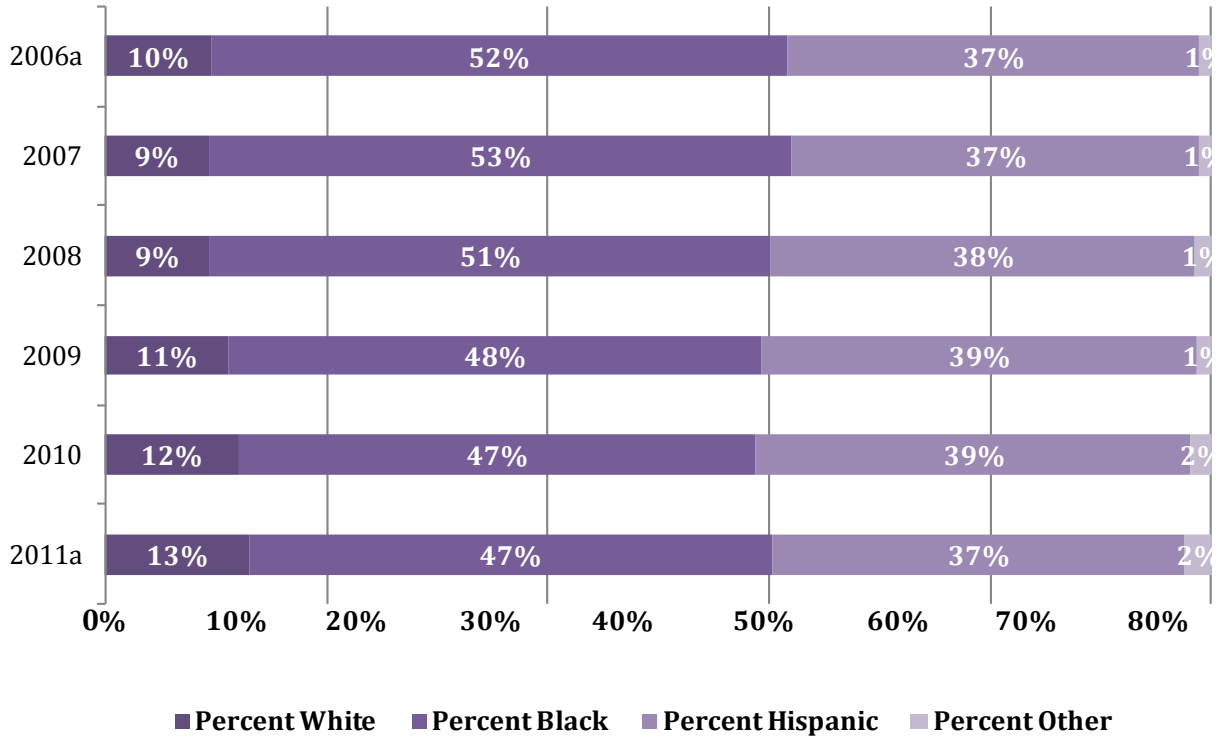
Between 2006 and 2011, the majority of drug felony cases involved males (83 percent of all arrests). The proportion of felony drug arrests involving women fluctuated between 14 percent and 18 percent with a moderate increase in the number of female arrestees over the period covered by the analysis (see Appendix E). The average age of arrestees was 34 years, remaining stable over the period covered by the trend analysis.

Figure 6-5 shows the racial and ethnic distribution of all arrestees associated with cases initiated by felony drug arrests between 2006 and 2011. The overwhelming majority of those arrested for drug felony offenses over this four-and-a-half-year period were either black (50 percent) or Hispanic (38 percent).[18] National estimates of drug use by race indicate similar rates of blacks (8.9 percent), whites (8.7 percent), and Hispanics (8.8 percents) reporting any illicit

[18] DCJS defines race and ethnicity using the terms black, white, Hispanic, and 'other' (including Asians, Native Americans, and 'others'). We followed DCJS' definition in the analysis.

drug use in the past month.[19] The racial disparity in arrests is particularly striking when arrest rates are compared to the demographic profile of NYC residents (33.3 percent white, 22.8 percent black, and 28.6 percent Hispanic).[20] Despite similar estimated rates of drug use, blacks and Hispanics in New York City are many times more likely to be arrested for drug felony offenses when compared to whites. Over the four-and-a-half-year period covered by the study cohort there was a 10 percent reduction in the proportion of arrestees who were black (from 52 to 47 percent) and a 20 percent increase in the proportion of arrestees who were white (from 10 to 12 percent).

Figure 6-5. Felony Drug Trends by Year: Arrests by Race

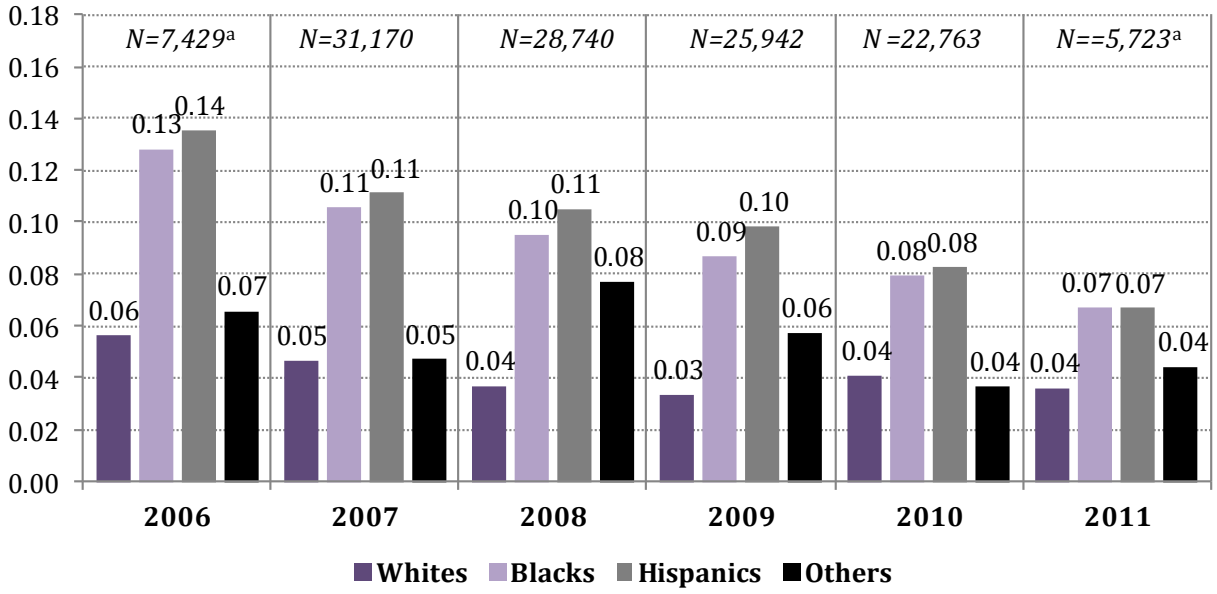


[a]2006 data only include cases arrested on felony drug charges within the last quarter of 2006; and 2011 data include cases arrested on felony drug charges within the first quarter of 2011.

[19] These statistics are from the *2012 National Survey on Drug Use and Health conducted by the Substance Abuse and Mental Health Services (SAMHSA)*.
http://www.samhsa.gov/data/NSDUH/2012SummNatFindDetTables/NationalFindings/NSDUHresults2012.pdf
[20] http://www.nyc.gov/html/dcp/pdf/census/census2010/t_pl_p2a_nyc.pdf

Figure 6-6 describes the proportion of arrests resulting in prison sentence disaggregated by race and ethnicity. Between 2006 and 2011, the use of prison decreased for all racial and ethnic groups. However, black arrestees and Hispanic arrestees were far more likely to receive a prison sentence as a result of drug felony arrest than white arrestees, with an average of 9 percent of black arrestees and 10 percent of Hispanic arrestees receiving prison sentences, compared to 4 percent of white arrestees. In 2011, blacks and Hispanics were nearly twice as likely to receive a prison sentence following a felony drug arrest when compared to whites.[21]

Figure 6-6. Felony Drug Trends by Year: Prison Sentence Rate by Race



[a] 2006 data only include cases arrested on felony drug charges within the last quarter of 2006; 2011 data include cases arrested on felony drug charges within the first quarter of 2011.

The county-level analysis of arrestee demographics revealed similar trends to those found citywide (Table 6-1). Black and Hispanic arrestees were twice as likely to receive prison sentence in all five NYC counties when compared to whites. Hispanics arrested on drug felony charges in Queens were almost three times as likely to receive a prison sentence compared to

[21] This analysis does not take account of any differences in charge, age, or criminal history.

whites (11 percent and 4 percent, respectively). In New York County, blacks arrested on drug felony charges were more than twice as likely as whites to be sentenced to prison sentences over this period (20 percent and 8 percent, respectively). In Bronx County, there were significant year on year fluctuations over the period covered by the cohort, but on average blacks and Hispanics facing drug felony charges were at least twice as likely to receive a prison sentence when compared to whites.

Table 6-1. Felony Drug Arrests Imprisonment Rate, by Race and Year

		2006[a]	2007	2008	2009	2010	2011[a]	All Years
Bronx	Black	0.11	0.08	0.06	0.06	0.04	0.02	0.06
	Hispanic	0.11	0.08	0.07	0.06	0.04	0.02	0.06
	White	0.11	0.05	0.02	0.02	0.02	0.03	0.03
Kings	Black	0.06	0.05	0.04	0.03	0.03	0.03	0.04
	Hispanic	0.06	0.06	0.05	0.04	0.04	0.03	0.05
	White	0.02	0.02	0.02	0.01	0.02	0.01	0.02
New York	Black	0.25	0.21	0.20	0.19	0.18	0.15	0.20
	Hispanic	0.25	0.20	0.20	0.19	0.17	0.16	0.19
	White	0.14	0.11	0.07	0.06	0.07	0.06	0.08
Queens	Black	0.10	0.11	0.09	0.10	0.09	0.12	0.10
	Hispanic	0.10	0.10	0.10	0.13	0.12	0.09	0.11
	White	0.02	0.03	0.04	0.05	0.04	0.02	0.04
Richmond	Black	0.09	0.07	0.08	0.07	0.10	0.05	0.08
	Hispanic	0.07	0.05	0.07	0.05	0.08	0.30[b]	0.06
	White	0.03	0.03	0.03	0.03	0.05	0.05	0.04

[a] 2006 data only include cases arrested on felony drug charges within the last quarter of 2006; 2011 data include cases arrested on felony drug charges within the first quarter of 2011.
[b] Among the 10 Hispanics arrested on felony drug charges in the first quarter of 2011, 3 (30 percent) received prison sentence.

Trends in sentencing and treatment diversion for DLR eligible cases

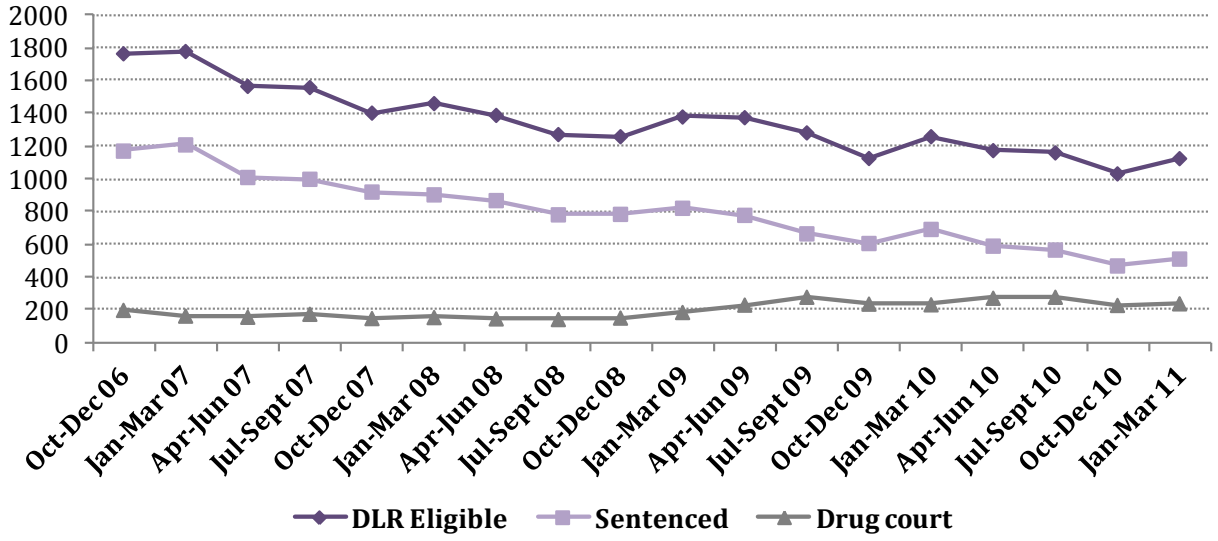
Additional analysis focused on cases that met the eligibility criteria for drug court diversion set out by CPL Article 216. The Article states that people indicted on B through E felony drug charges who have no prior VFO convictions within the past ten years can be

screened for drug abuse or dependence and have their case diverted to drug court by the judge. Because a number of cases diverted to felony drug courts had missing values on indictment charges, researchers included indicted cases with B through E Felony arrest charges (excluding A Felony arrests) and no prior VFO convictions as DLR eligible.[22] [23] This analysis describes the change in the number of DLR eligible cases over time as well as trends in sentencing and drug court admissions for those cases.

Figure 6-7 illustrates citywide trends in sentencing and treatment diversion for DLR eligible cases between October 2006 and March 2011. Compared to overall reductions in the number of felony drug arrests (33 percent), there was a greater decline in the number of DLR eligible cases (37 percent), decreasing from 1,779 in the first quarter of 2007 to 1,125 in the first quarter of 2011. The proportion of DLR eligible cases receiving corrections sentences[24] decreased from 66 percent in October 2006 to 46 percent in March 2011, and the proportion of DLR eligible cases that were diverted to treatment via drug court increased from 11 percent to 21 percent over the same time period. Drug court enrollment began to increase in the second quarter of 2009, peaked in the third quarter of 2009, and remained at about the same level during 2010 and the first quarter of 2011.[25]

[22] With the data at hand, it is not possible to determine whether a prior violent offense occurred within the previous ten years; therefore, all cases with any prior VFO (youth or adult) have been excluded from the analysis of DLR eligible cases.
[23] Compared to the definition of DLR eligible cases in the statute, our definition did not include cases that were arrested on A Felony charges and indicted on B through E charges. However, A Felony charges accounted for less than 5 percent of felony drug arrests in NYC.
[24] Correctional sentences in this report include both custodial sentences (jail, prison, and "time served") and community correctional sentences (probation, split sentences)
[25] The first part of DLR took effective in April 2009 reducing mandatory minimums for B through E Felony drug charges. The second part of DLR took effective in October 2009 introducing judicial diversion to treatment for B through E Felony drug charges, please see Chapter 2 for detailed description on the 2009 DLR.

Figure 6-7. Felony Drug Trends by Quarter for DLR Eligible Cases: Arrests, Sentence, and Drug Court Diversion



To explore trends in use of various sentencing options, the analysis of case outcomes was disaggregated by cases receiving prison, jail, and probation sentences.[26] As Figure 6-8 illustrates, in October 2006, more than twice as many DLR eligible cases received a prison sentence (30 percent) compared to cases sentenced to jail (13 percent) or probation (16 percent), and a relatively small percentage of cases (11 percent) were diverted via drug courts. By mid-2010 (post-DLR) a greater proportion of DLR eligible cases were diverted to drug court than any of the other sentencing options. In the third quarter of 2010, about 24 percent of DLR eligible cases were diverted to drug court, while 18 percent of DLR eligible cases were ultimately sentenced to prison and 14 percent were sentenced to jail. The rate of drug court diversion reduced somewhat

[26] Other sentencing options, including time served, split sentence, fine, conditional discharge and unconditional discharge, and other sentences, together accounted for 21 percent of DLR eligible cases included in trend analysis. About 7 percent of DLR eligible cases ended in a dismissal.

in the last quarter of 2010 (22 percent) and the first quarter of 2011 (21 percent), but it remained higher than the rates of prison sentence and jail sentence.

Figure 6-8. Felony Drug Trends by Quarter for DLR Eligible Cases: Rate of Prison Sentence, Jail Sentence, Probation Sentence, and Drug Court Diversion

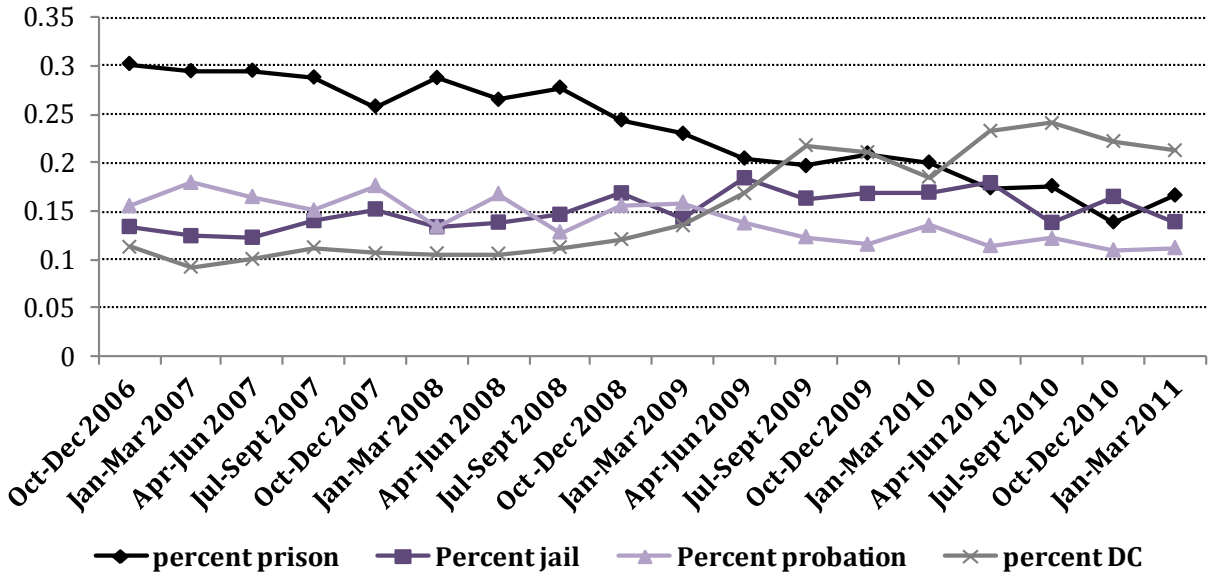
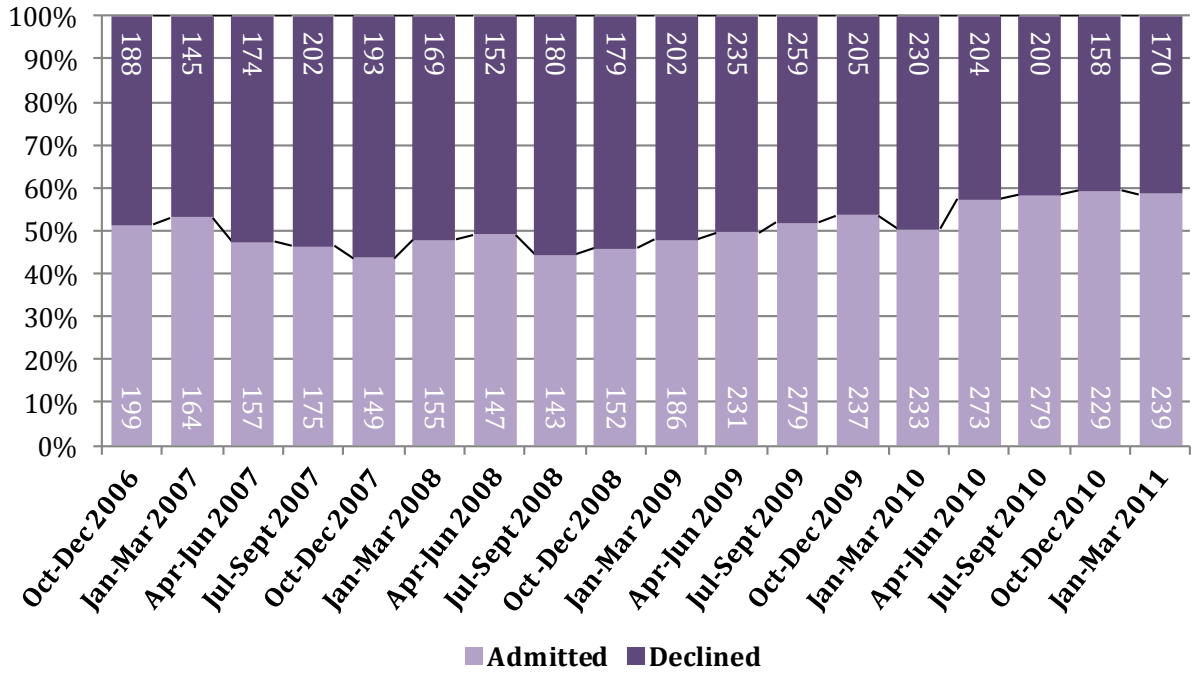


Figure 6-9 describes trends in drug court screening and admission for DLR eligible cases during the four-and-a-half-year period covered by the trend analysis. There was a moderate uptick in the number of drug court screenings during the third quarter of 2009, after the first phase of DLR was introduced (42 percent: 538 out of 1,282 DLR eligible cases) as compared to the last quarter of 2006 (22 percent: 387 out of 1,765 DLR eligible cases). And rates of case acceptance peaked during the last quarter of 2010 (59 percent) and remained high during the first quarter of 2011 (58 percent).

Figure 6-9. Felony Drug Trends by Quarter for DLR Eligible Cases: Rate of Drug Court Screening and Admission



Summary of Findings from Trend Analysis

Between October 2006 and March 2011, there was a consistent downward trend in felony drug arrests, indictments, and prison sentences, citywide and in each of the five counties. The number of felony drug arrests decreased by about 33 percent, the indictment rate declined from 33 percent to 28 percent, and the proportion of felony drug cases that resulted in prison sentences fell from 12 percent to six percent.

Blacks and Hispanics accounted for nearly 90 percent of all felony drug arrests in NYC over this period. In March 2011, black arrestees and Hispanic arrestees were nearly twice as likely to receive prison sentence when compared to white arrestees, although the racial disparity reduced somewhat between 2006 and 2011.

The use of drug court as an alternative to incarceration increased gradually over time, particularly for DLR eligible cases, with an increase from 11 percent of DLR eligible cases

receiving drug court diversion in October 2006 to 21 percent drug court diversion in 2011. By mid-2010 (post-DLR) a greater proportion of DLR eligible cases were diverted to drug court than any of the other sentencing options.

Chapter 7. Quantitative Implementation Analysis

This chapter describes methods and findings from the quantitative implementation analysis, which compared a variety of outcomes for cases with felony drug arrests and specified property indictments before and after the DLR went into effect. To recap, DLR introduced two significant changes to the way that felony drugs and specified property cases are handled in New York State. First, the range of sentencing options was increased and mandatory minimum sentences were removed for B through E felony cases with no prior VFOs. Second, DLR created more options for diverting cases to treatment based ATIs, both by expanding the number of cases that are eligible for diversion based on the offense class and by creating a new diversion option known as judicial diversion (see Chapter 2 for a detailed description of DLR). This chapter is divided into five sections that describe the impact of these two components of DLR.

The first section introduces the methods used for the quantitative implementation analysis, including data sources, sampling, and analytic strategies. The second section describes case outcomes (charges, sentencing, and treatment diversion) for all arrests that met the study sampling criteria. The next section describes the application of PSM to reduce selection bias and ensure comparability between pre- and post-DLR cases. The fourth section describes charging patterns, case outcomes and rates of treatment diversion for felony drug cases. This section also describes treatment diversion for cases that were indicted on specified property charges (which are also eligible for diversion under the terms of the DLR statute). The chapter concludes with a discussion of drug court participants pre- and post-DLR, including numbers screened for drug court participation, treatment modalities, and treatment graduation rates.

Methodology

Data

The research team collected case-level administrative records from multiple state and city agencies, including information on: 1) criminal history, charges, disposition, sentencing, and arrest information from DCJS; 2) data on drug court screening and admission, treatment participation, and treatment outcomes from the OCA-maintained UTA; 3) information on admission to Drug Treatment Alternative to Prison programs (DTAP) from each of the five county DAs' offices and the Office of the Special Narcotics Prosecutor (SNP); and 4) jail data, including information on length of stay in jail from the NYC Department of Correction (DOC). To collect data for sealed records, Vera used the anonymization protocol described in appendix F.

Vera also requested data on Alternative to Incarceration programs (ATI) from the New York State Office of Probation and Correctional Alternatives (OPCA); these data were not used for analysis, however, as there were concerns that they were not comprehensive.[27]

Data from DCJS, OCA, and each of the five county District Attorneys' offices were matched at the case level by DCJS using a combination of person-level IDs, case-level IDs, and arrest dates. All records that matched on these three items were considered to be a case-level "match." All agencies providing data used the New York State ID (NYSID) number as a universal person-level identifier. However, DOC does not record arrest dates or the case-level ID used by the other agencies, so DOC data were matched by comparing the arrest date and DOC admission date. All cases with a DOC admission date after the index arrest date and before a subsequent arrest were considered to be associated with the index arrest (a case-level "match").

[27] Based on our conversations with ATI providers, OPCA only maintains records for the ATI programs that they fund.

Sample

The sample for the quantitative implementation analysis includes all cases that met three criteria, based on the charge, arrest data, and disposition date. First, only cases that related to charges that may have been impacted by DLR were included: felony drug cases and specified property cases. *Felony drug cases* were defined as all cases generated by *arrests on A through E felony drug offenses*. Although DLR only applies to B through E felony drug cases, the inclusion of A felony offenses made it possible to explore the impact of DLR on "charging patterns," or the way that charges change between critical case events: arrest, arraignment, indictment, and disposition; a defendant charged with an A Felony drug offense at arrest may be diverted under the terms of DLR if their charge is reduced to a B Felony or lower at arraignment or indictment. Since DLR is relevant only to the small subset of property offenses specified as eligible for judicial diversion in DLR eligible cases, the research team assumed that the DLR would have a limited impact on charging patterns for property crimes, limiting the utility of requesting data on all property charge arrests. Thus, for this analysis, *specified property cases* were defined as all cases associated with *indictments* (rather than arrests) on the property charges eligible according to the Article 216 legislation. It is important to note that the analyses of drug felony arrests and specified property indictments are not directly comparable, because of these differences in case definitions

Second, to be included in the sample, cases were selected based on arrest dates (for drug felony cases) and indictment dates (for specified property cases). The pre-DLR sample includes all cases with arrest dates between January 1, 2008 and September 30, 2008, that were disposed by April 6, 2009 (DLR went into effect on April 7, 2009). The post-DLR sample includes all cases meeting the charge criteria with arrest dates between January 1, 2010 and September 30,

2010, disposed before April 6, 2011. The research team limited the pre- and post-samples to those cases generated during the first nine months of 2008 and 2010 in order to allow for a "buffer" between the periods of study and the implementation of the DLR to avoid any spurious effects associated with changes in behavior immediately before and after the reform (e.g. intentionally slowing down the processing of a case that began pre-DLR so that it could be adjudicated post-DLR). Similarly, the research team excluded any cases from the pre-DLR sample that were not disposed by April 6, 2009–the day before the DLR went into effect–to avoid falsely assigning cases adjudicated post-DLR into the pre-DLR sample. To some extent, this right-censoring of the data may have resulted in the exclusion of more complicated or more serious cases which take a longer time to be disposed.[28] To reduce this selection bias, the post-DLR sample was restricted to those cases disposed during an equivalent time period (by April 6, 2011). See Appendix M for further details of the case selection and follow-up periods used in the various components of the analysis.

To further reduce selection bias and control for baseline differences between the pre- and post-DLR cases, the research team used PSM to select similar cases from the pre- and post-DLR groups to be used in the comparative analyses. For the implementation analysis of felony drug arrests, the research team matched pre-DLR and post-DLR cases based on their arrest charges, county of arrest, demographics, and criminal history, ensuring comparability among cases by measuring these variables at the point of arrest. For the implementation analysis of specified property charges, researchers matched pre-DLR and post-DLR cases based on their arrest charges, indictment charges, arrest county, demographics, and criminal history, ensuring the

[28] We have compared 2008 cases disposed before April 7, 2009 and after April 7, 2009 and 2010 cases disposed before April 7, 2011 and after April 7, 2011. Cases that took a longer time to be disposed tended to have more serious charges than cases included in the study cohort. This finding applied to both the pre-reform sample and the post-reform sample.

similarity of cases at the moment of indictment (see Appendix G for detailed description of PSM). As the result of the PSM, a total of 14,410 matched pairs of felony drug arrests and a total of 921 matched pairs of specified property cases were included in the matched implementation samples.

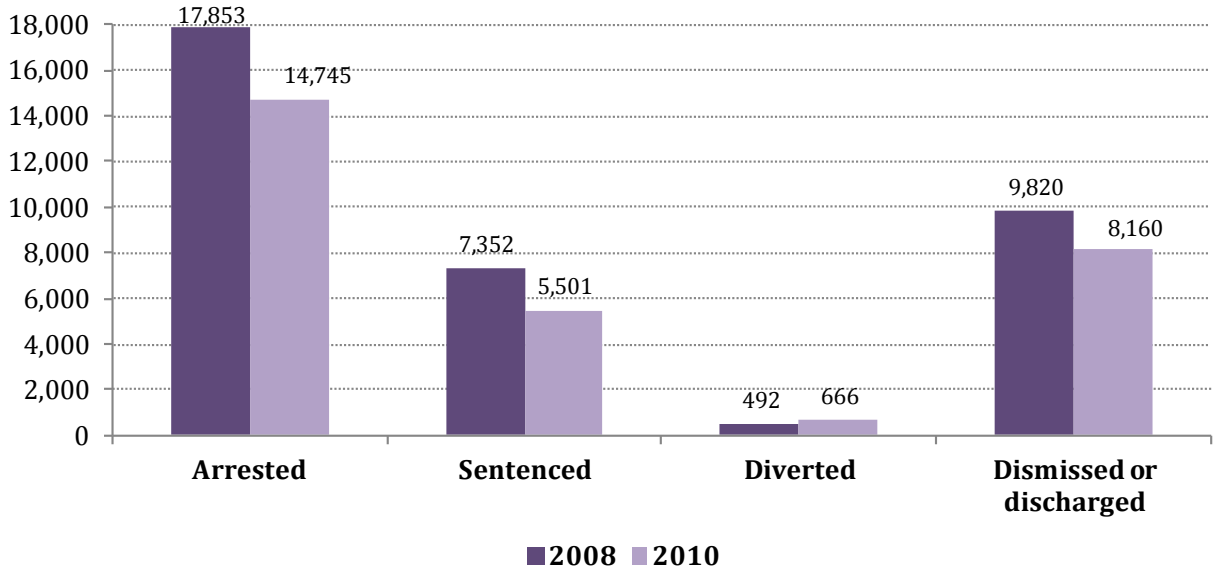
Analysis Strategy

The research team compared sentencing outcomes, use of treatment diversion, and charge progression for matched pre-DLR and post-DLR cases using independent sample T-tests to explore any significant differences that may be related to DLR. This analysis was conducted at both the citywide and NYC jurisdiction level (five NYC counties and cases handled by SNP). Given the considerable influence that the courts have on case outcomes, the jurisdiction was defined by the DA's Office that handled the case at the time of disposal. In most instances, the court jurisdiction where the case was heard was the same as the county of arrest. However, some cases originating from arrests citywide are referred to and processed by SNP, which specifically focuses on serious narcotic drug cases. These cases were analyzed separately from cases handled by the five county DA's Offices. The research team used multivariate regression analysis to independently determine: 1) the impact of race on case outcomes; 2) factors that predict the type of treatment mandated by the courts; and 3) the likelihood of completing treatment.

Analysis of the 2008 and 2010 unmatched samples of felony drug arrests

The implementation analysis compared outcomes for cases with felony drug arrest charges for the pre-DLR and post-DLR samples (as defined in the methods section of this chapter).

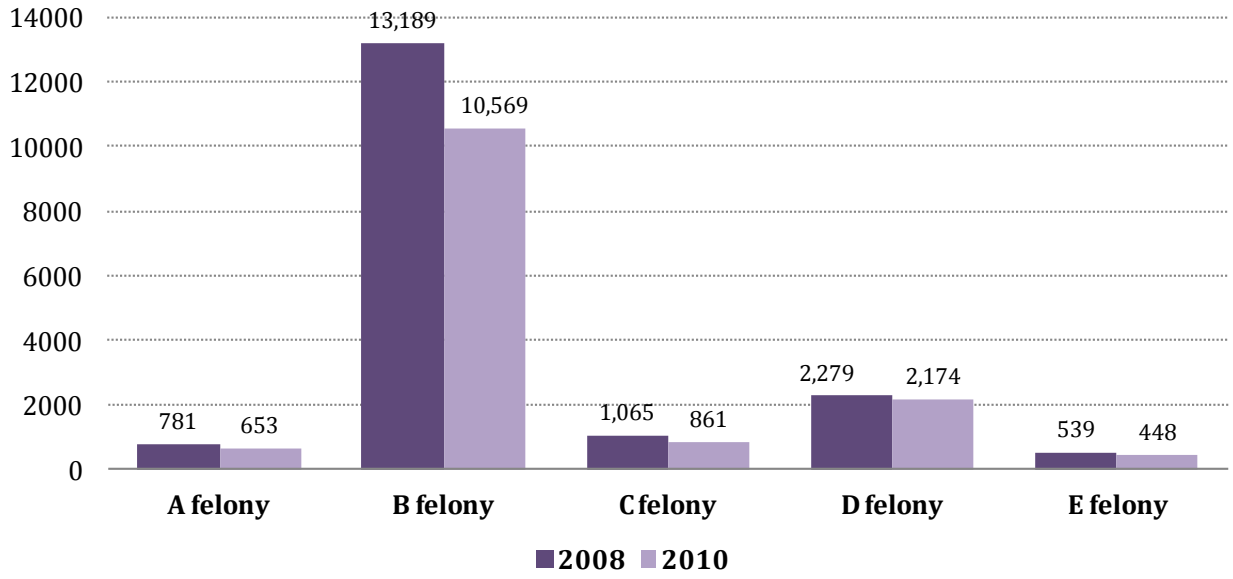
Figure 7-1. Comparison of the 2008 and 2010 Unmatched Felony Drug Arrests Samples: Case Outcomes[a]



[a] In the pre-DLR sample, a total of 189 cases had missing disposition information; in the post-DLR sample, a total of 418 cases had missing disposition information.

Analysis of the full (unmatched) felony drug arrest sample found that the number of cases diverted to treatment increased by approximately 35 percent between 2008 and 2010 (from 492 to 666). The number of cases sentenced to jail/probation/prison decreased by roughly 25 percent over the same period (from 7,352 to5,501). However, the decline in cases receiving a non-diversion sentence or dismissal/discharge is partly explained by the 17 percent decrease in felony drug arrests over this period (from 17,853 in 2008 to 14,745 in 2010). As Figure 7-2 shows, the profile of arrest charges decreased over this period, with a 20 percent reduction in the number of cases arrested on Felony B drug charges. The overall reduction in the severity of charges between these two periods will have a probable impact on case outcomes, independent of DLR. Therefore it is important to control for changes in both the number of felony drug arrests and profile of arrest charges (along with other factors) when considering the impact of DLR.

Figure 7-2. Comparison of the 2008 and 2010 Unmatched Felony Drug Arrests Samples: Arrest Charges



PSM was used to ensure comparability between the 2008 and 2010 samples by: a) selecting an equal number of cases from each period for inclusion in the analysis; and b) controlling for baseline differences between cases.

Table 7-1. Comparison of Cases Characteristics for Felony Drug Arrests between Unmatched Samples and Matched Samples

Covariate		Unmatched Samples		Matched Samples	
		2008 N=17,853	2010 N=14,745	2008 N=14,410	2010 N=14,410
Demographic Characteristics	Age	34.74	35.21***	35.14	35.11
	Sex (Percent Male)	82.2%	83.5%**	83.0%	83.3%
	White	9.2%	11.9%***	11.0%	11.2%
	Black	50.7%	47.2%***	47.7%	47.8%
	Hispanic	38.6%	39.2%	39.6%	39.4%
	Asian	1.0%	1.0%	1.0%	1.0%
	Other Race	0.5%	0.7%*	0.6%	0.6%
County of Arrest	Bronx	32.8%	33.4%	33.7%	33.5%
	Kings	27.8%	26.7%*	26.8%	26.8%
	New York	24.9%	25.2%	25.0%	25.1%
	Queens	10.8%	10.8%	10.7%	10.8%
	Richmond	3.7%	3.9%	3.9%	3.8%
Prior Arrests	Felony	4.62	4.85***	4.80	4.81
	Misdemeanor	6.10	6.72***	6.50	6.60
	Violent Felony	1.26	1.30	1.29	1.29
	Drug	5.46	5.83***	5.75	5.77
Prior Convictions	Felony – Adult	1.02	1.07**	1.06	1.06
	Felony – Youth	.13	.12*	.12	.12
	Misdemeanor – Adult	4.26	4.67***	4.52	4.60
	Misdemeanor – Youth	.09	.10*	.10	.10
	Violent Felony - Adult	.20	.21^{+}	.21	.21
	Violent Felony - Youth	.05	.05	.05	.05
	Drug	2.69	2.86***	2.83	2.83
Instant Offense – Top Arrest Charge	Sale: Opium, Cocaine, or Derivatives	5.1%	6.6%***	6.1%	6.2%
	Sale: Marijuana	1.2%	1.1%	1.2%	1.1%
	Sale: Synthetic Narcotics	0.3%	0.2%	0.2%	0.2%
	Sale: Other	42.1%	41.4%	41.8%	41.8%
	Poss: Opium, Cocaine, or Derivatives	1.5%	1.2%*	1.3%	1.2%
	Poss: Marijuana	3.7%	4.4%**	4.3%	4.1%
	Poss: Synthetic Narcotics	.7%	.6%	.6%	.6%
	Poss: Other	45.4%	44.4%	44.4%	44.5%
Instant Offense – Top Arrest Class	A-I Felony, Non-Reducible	2.1%	2.3%	2.3%	2.3%
	A-II Felony	2.3%	2.1%	2.2%	2.1%
	B Felony	73.9%	71.7%***	72.0%	72.1%
	C Felony	6.0%	5.8%	6.1%	5.9%
	D Felony	12.8%	14.7%***	14.1%	14.3%
	E Felony	3.0%	3.0%	3.3%	3.3%

*p<.05; **p<.01; ***p<.001

Cases were matched on 51 covariates that are associated with case outcomes, including arrestee demographics, index offense and arrest class, county of arrest, and arrest and conviction

history. Table 7-1, describes a selection of the covariates included in the PSM and case characteristics for the matched and unmatched felony drug arrest samples. As this table demonstrates, there was substantial heterogeneity between the 2008 and 2010 samples with significant differences in 26 out of the 51 covariates, including race, the county of arrest/disposition, prior criminal record, and characteristics of the instant offense. Specifically, when compared to the 2008 sample, the 2010 sample was older, included a higher proportion of males and whites, and had more prior arrests and convictions (which may be confounded with age). There were a greater proportion of cases with the sale of opium, cocaine or derivatives, or possession of marijuana charges in the 2010 sample, whereas more of the 2008 sample had possession of opium or cocaine and derivatives as their top arrest charge. After the implementation of PSM, no statistically significant differences were found between the two groups. Therefore, the matching protocol successfully controlled for observed baseline differences between the pre- and post-DLR samples of felony drug arrests, allowing for a direct comparison of case outcomes between the two groups. A detailed description of PSM is included in Appendix G. Following the matching procedure, there were 14,410 matched cases in both the 2008 and 2010 felony drug arrest samples ("the matched implementation samples of felony drug charges").[29]

Analysis of Sentencing Outcomes

Researchers used the matched implementation samples of felony drug charges to examine the impacts of DLR on sentencing outcomes for felony drug arrests. The first section describes changes in charging patterns over the period of the reforms (the relationship between arrest,

[29] Researchers applied the same procedure of PSM to select matched samples of cases indicted for specified property charges. As a result of the matching, there are 912 matched cases in the specified property indictment samples ("the matched implementation samples of specified property charges").The detailed description is included in Appendix G.

indictment and convictions charges). The following section examines the impact of DLR on the use of different types of correction sentences (jail, prison, and probation) citywide and at the jurisdiction level (for each of the five NYC counties and cases handled by SNP). Findings for all matched cases arrested on felony drug charges are presented first, followed by a separate analysis of cases arrested on B Felony charges. Independent sample t- tests were used to determine whether any significant differences existed between the pre-DLR and post-DLR sample.

Charge pattern

While DLR was intended to alter sentencing practices, it is possible that changes to the sentencing statutes might also influence decisions that occur earlier in a case, such as the District Attorneys' (DA) charging practices (indictment charges, plea offers, and ultimately disposition charges). For example, in the absence of mandatory prison terms for B Felonies, a DA that has reason to treat a defendant leniently may still indict the case on a B Felony charge, anticipating that they will ultimately be diverted or receive a non-custodial sentence. In order to explore these shifts, charging patterns were compared for various points in a case. In other words, this analysis describes the way that charges change from one case event to the next (e.g. at arrest, indictment, and disposition) pre- and post-DLR.

Given that arrest charge was one of the criteria for matching cases from the 2008 and 2010 samples, the distribution of arrest charges was similar for the pre- and post-DLR samples, and the majority of cases (72 percent for both the 2008 and 2010 samples) were arrested on B Felony charges. This included arrests for criminal possession or sale of a controlled substance use in the third degree.[30] There was an overall increase in the number of drug felony cases indicted and the severity of the charge class (i.e. arrest charges were less likely to be "down-

[30] For example, possession of narcotic drugs with intent to sell is a B Felony offense.

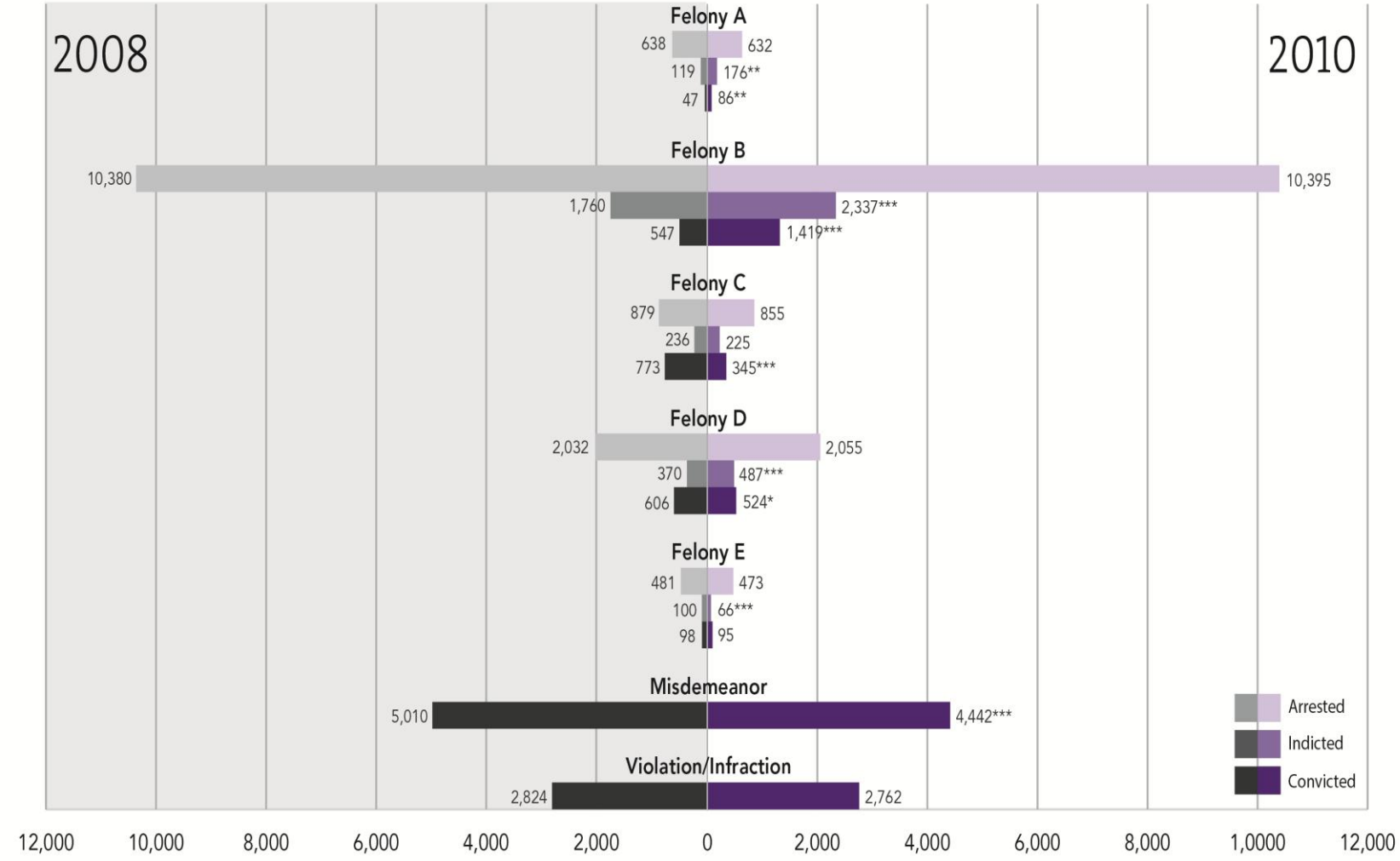
graded" between arrest and disposition in the post-DLR period). The overall proportion of felony drug cases that were indicted increased from 19 percent pre-DLR (2,751 out of 14,410) to 24 percent post-DLR (3,497 out of 14,410) (see Figure 7-3).[31] There was also an increase in the number of cases indicted on B Felony charges post-DLR (a 33 percent increase, from 1,760 pre-DLR to 2,337 post-DLR). The number of cases that were disposed as B Felonies more than doubled, from 547 cases pre-DLR to 1,419 post-DLR. Concurrently, the number of felony drug cases convicted on C Felony charges declined by 55 percent, decreasing from 773 pre-DLR to 345 post-DLR. Additionally, the number of felony drug arrests convicted on D Felony and misdemeanor charges declined by 13 percent and 11 percent, respectively.

However, the majority of felony drug cases in both samples did not result in a conviction, either because the DA declined to bring charges, or because the judge dismissed the case, issued an ACD verdict (Adjournment in Contemplation of Dismissal), or found the defendant not guilty. Fourteen percent of the drug felony arrests in the matched pre-DLR sample resulted in a felony conviction, 30 percent were not prosecuted or dismissed, and 54 percent were convicted as misdemeanors or violations.[32] For the post-DLR sample, the proportion of felony convictions increased to 17 percent of drug felony arrests, 29 percent were not prosecuted or dismissed, and 50 percent were convicted on misdemeanors or violations.

[31] A case cannot be disposed in Criminal Court on felony charges. The majority of cases that are continued on felony charges are indicted in Supreme Court following arraignment. In certain circumstances, a Superior Court Information (SCI) may be used in lieu of a Supreme Court indictment. SCIs are sometimes used to accept a plea to felony charges as a condition of pre-indictment diversion to drug treatment. In the quantitative implementation analysis, the indictment includes both Supreme Court indictment and SCI.

[32] Violations are lesser charges with a maximum jail sentence of 15 days.

Figure 7-3. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Charge Pattern



*p<.05; **p<.01; ***p<.001

Researchers examined the impact of DLR on charge progression for each of the six NYC jurisdictions (five NYC counties and SNP). Following the general citywide trend, there was an increase in the proportion of cases disposed on B Felony charges in each jurisdiction. This includes cases that entered a plea to B Felony charge as a condition of treatment diversion. The increase in B Felony dispositions was particularly pronounced for cases handled by SNP, with the percent of B Felony dispositions increasing from 14 percent pre-DLR to 53 percent post-DLR.[33]

Sentencing outcomes

DLR provides opportunities to reduce the use of prison sentences and increase the use of treatment. However, the new laws are discretionary and courts can still choose to sentence eligible cases to prison, jail, or probation. In order to better understand the impact of DLR on case outcomes, the research team analyzed sentences and use of treatment diversion (including both drug courts and DTAP programs) for felony drug cases in the 2008 and 2010 matched implementation samples.

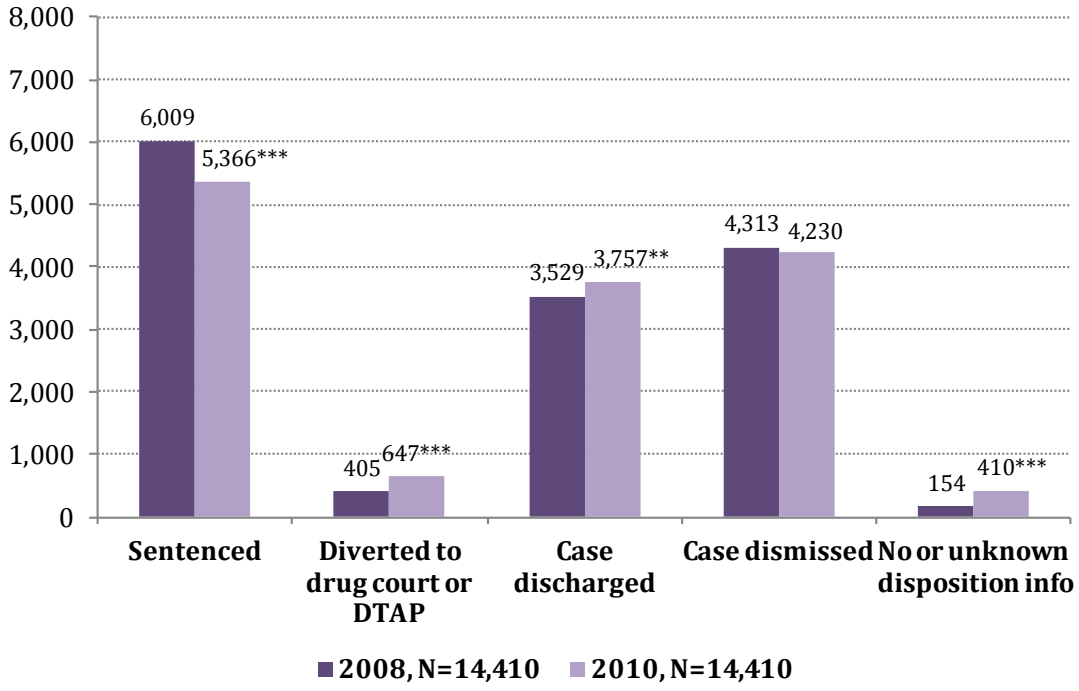
Citywide analysis

Figure 7-4 describes outcomes for felony drug cases included in the 2008 and 2010 matched implementation samples. The proportion of these cases that were sentenced to prison, jail, probation or time-served ("correctional sentences") decreased by 11 percent from 42 percent (n=6,009) of 2008 cases to 37 percent (n=5,366) of 2010 cases. The proportion of cases that were dismissed or discharged increased slightly from 54 percent (n=7,842) to 55 percent (n=7,987). [34] While a small minority of felony drug cases were diverted to drug court or DTAP during both

[33] Pre-DLR, SNP disposed of 80 cases as B Felonies, resulting in 58 prison sentences and 16 treatment diversions. Post-DLR, 310 cases were disposed as B Felonies of which 105 resulted in a prison sentence and 68 were diverted.
[34] Discharged cases include cases receiving conditional discharge, unconditional discharge, fine, and convicted with no sentence.

periods, the proportion of treatment diversions increased by 60 percent; from 3 percent (n=405) of the 2008 matched felony drug arrest sample to 5 percent (n=647) of the 2010 felony drug arrest sample. Changes in the use of correctional sentencing, discharges, and treatment diversion were all statistically significant based on independent sample t-tests.

Figure 7-4. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Case Outcomes



*p<.05 **p<.01 ***p<.001

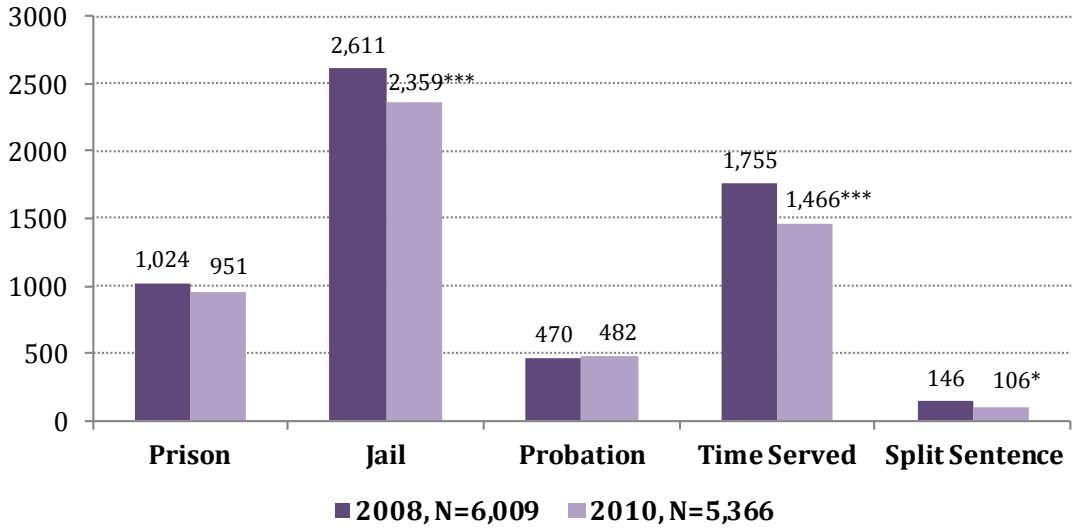
Results of the sentencing outcome analysis were also disaggregated by sentence type, including prison, jail, probation, split sentences, and "time served".[35] As Figure 7-5 shows, the number of cases sentenced to prison decreased by about 7 percent (from 1,024 to 951 cases), and jail sentences decreased by about 10 percent (from 2,611 to 2,359 cases). The number of cases that received split sentences decreased by 27 percent (from 146 to 106), and the number of cases

[35] A split sentence is a combination jail and probation sentence. Time served refers to a sentence where the defendant is credited immediately after the guilty verdict with the time spent in remand awaiting trial. A time served sentence typically results in immediate release from jail.

that resulted in time served decreased by 16 percent (from 1,755 to 1,466). Felony drug cases receiving probation sentences remained stable over this time period.

Additional analyses examined case outcomes for a variety of arrest charges. We found that changes in case outcomes for felony drug arrests were largely driven by shifts in dispositional outcomes for cases arrested on B Felony charges, which account for the bulk of all felony drug arrests (72 percent). There was a 13 percent reduction in prison sentences (769 pre-DLR and 672 post-DLR) for these cases and a 61 percent increase in treatment diversions (345 pre-DLR and 554 post-DLR).

Figure 7-5. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Sentence Type [a]

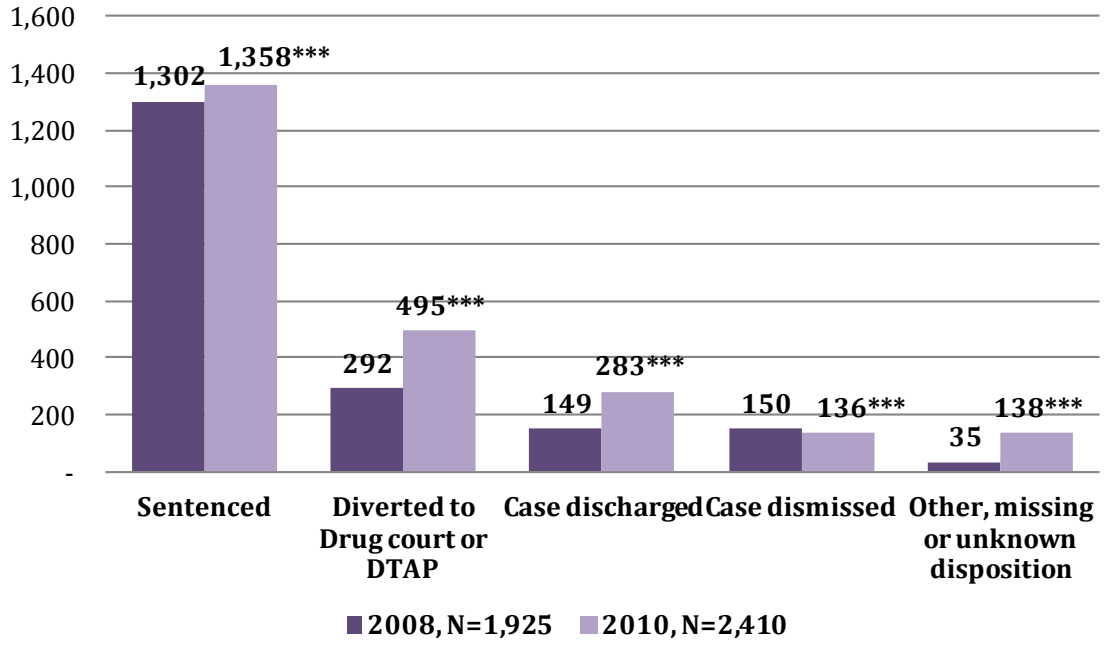


[a] Cases sentenced to Willard (a 90-day intensive residential treatment program administered by NYS parole) were not included in this analysis. Three cases included in the 2008 sample and two cases in the 2010 sample received WILLARD sentence.
*p<.05 **p<.01 ***p<.001

Researchers further examined sentence outcomes for DLR eligible cases, including cases arrested and indicted on B through E Felony charges, indicted, with no prior violent felony

convictions (Figure 7-6).[36] Post-DLR, 2,410 of the cases in the matched drug felony sample were indicted, compared with 1,925 pre-DLR. The use of diversion increased from 15 percent (292 out of 1,925) to 21 percent (495 out of 2,410) of DLR eligible cases. The proportion of cases resulting in any correctional sentence decreased from 68 percent (1,302 out of 1,925) to 56 percent (1,358 out of 2,410), and the use of prison sentences decreased from 29 percent (566 out of 1,925) to 19 percent (456 out of 2,410).

Figure 7-6. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Case Outcomes for DLR Eligible Cases.



*p<.05 **p<.01 ***p<.001

Table 7-2 describes average sentence lengths for the pre- and post-DLR samples. The length of custodial sentences increased over this period: the average prison sentence increased by approximately 10 percent (from 30 months to 33 months), and the average jail sentence

[36] According to Article 216, cases that are indicted on B through E felony charges with no prior violent felony convictions within the past 10 years are eligible for diversion. Indictment here refers to both grand jury indictment and the use of SCI as an alternative to indictment.

increased by approximately 24 percent (from 96 days to 119 days). The length of probation sentences remained constant over the period covered by the analysis (52 months).

Table 7-2. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Average Prison Sentence, Jail Sentence, and Probation Sentence

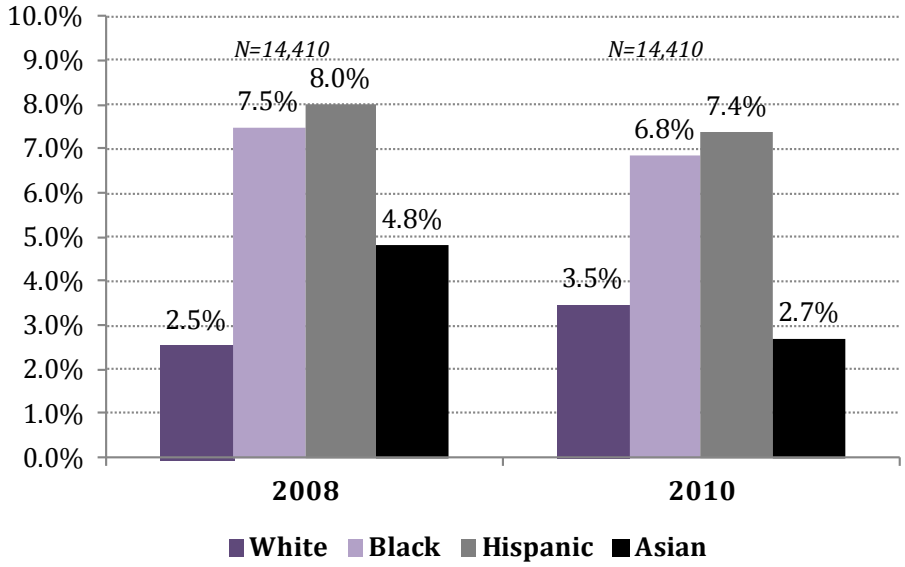
	2008	2010
Prison sentence in months	29.6	32.5**
Jail sentence in days	95.7	118.5***
Probation sentence in months	52.4	51.5

*p<.05 **p<.01 ***p<.001

Figure 7-7 provides a breakdown of prison sentence by the race of the defendant, demonstrating a marked racial disparity in sentencing patterns. In 2008, Hispanics included in the study sample were 3.2 times more likely to receive a prison sentence when compared to whites. Blacks were three times more likely than whites to be sentenced to a prison term. In 2010, disparity in sentencing outcomes decreased somewhat, with an increase in prison terms for whites and a modest decrease for blacks and Hispanics. However, both blacks and Hispanics were approximately twice as likely to receive a prison sentence in 2010 when compared to whites. This disparity is not explained by other factors, such as prior criminal record, the type or severity of arrest charge, and gender, or the court jurisdiction where the cases was heard.[37]

[37] A logistic regression analysis of sentencing outcomes found that being black or Hispanic increased the odds ratio of receiving a prison sentence by 89 percent and 76 percent respectively when compared to whites, controlling for severity of arrest charges, demographics, prior criminal record, and disposition counties.

Figure 7-7. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Prison Sentence by Race of Defendant

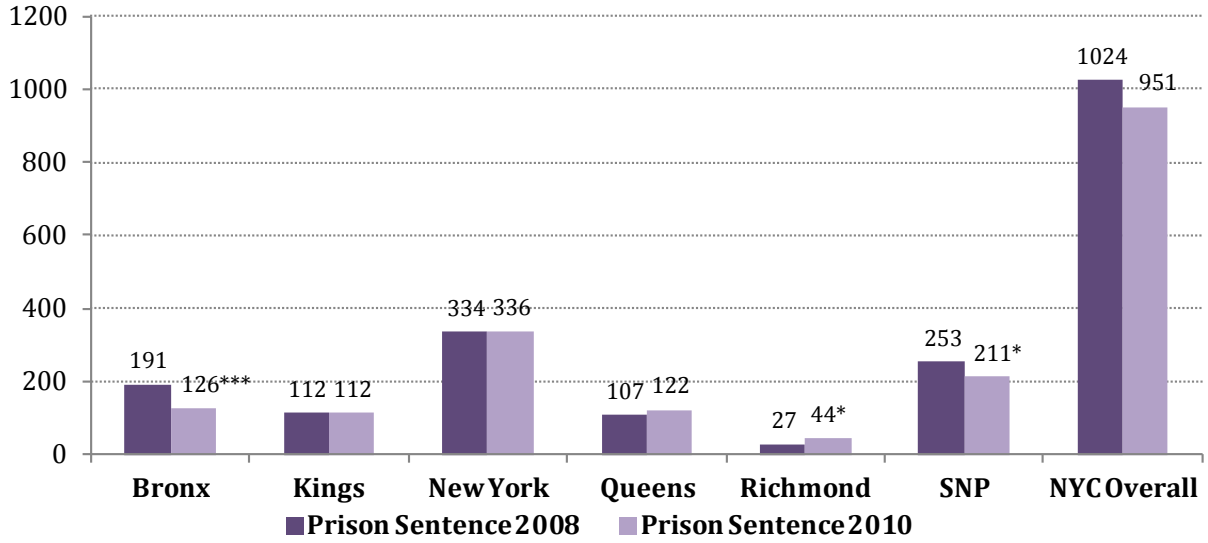


Jurisdiction-level analysis

Pre- and post-DLR sentencing outcomes were also analyzed at the jurisdictional level to detect any variation in sentencing. While there was a seven percent reduction in the use of prison sentences citywide, the magnitude of change varied by jurisdiction. As Figure 7-8 shows, the greatest reduction in the use of prison occurred in Bronx County (34 percent), decreasing from 191 cases pre--DLR to 126 cases post-DLR. The change in the use of prison sentences for cases handled by SNP declined by about 17 percent, from 253 pre-DLR to 211 post-DLR. There was no significant change in the use of prison in New York, Kings or Queens Counties and a significant increase in Richmond County (from 27 to 44 cases). However, the proportion of each jurisdiction's cases that were sentenced to prison varied widely. Post-DLR, New York County and SNP had a higher proportion of cases that received prison sentences (10 percent and 36

percent respectively), while only 3 percent of cases in Kings County received a prison sentence.[38]

Figure 7-8. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Prison Sentence by Disposition Jurisdictions

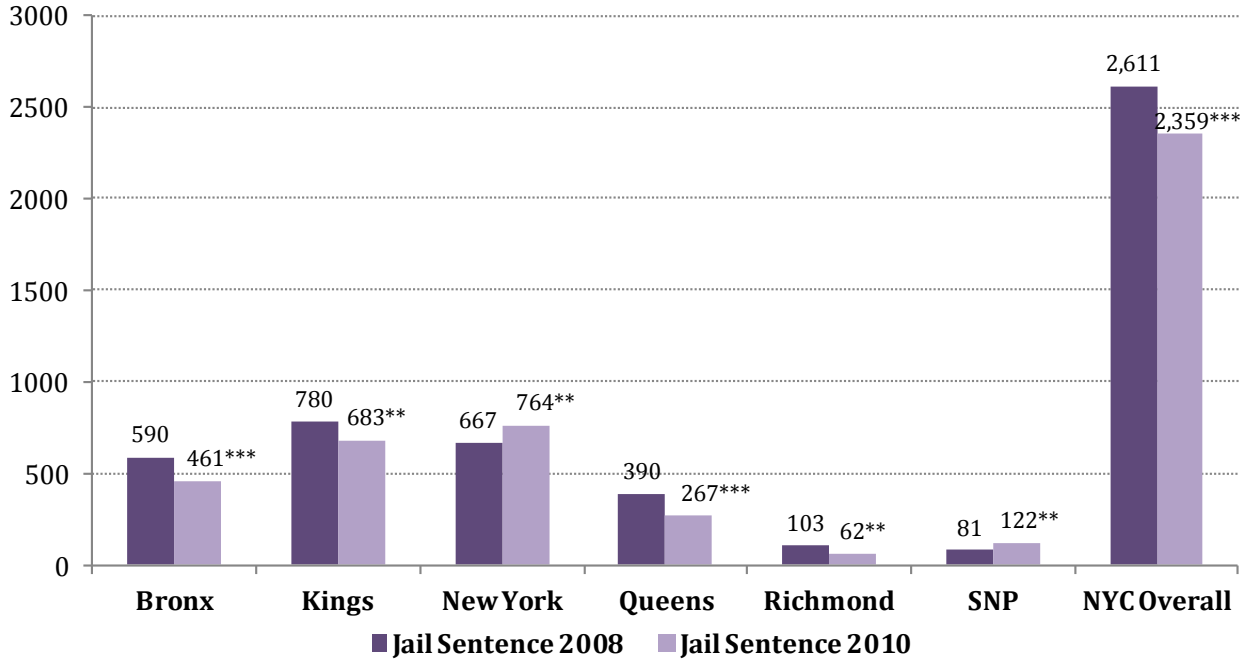


*p<.05 **p<.01 ***p<.001

Figure 7-9 describes the use of jail in each jurisdiction. As this figure illustrates, the number of felony drug cases handled by the New York County DA's Office and SNP that were sentenced to jail increased by 15 and 61 percent, respectively. In contrast, there were significant reductions in the number of cases receiving jail sentences in Bronx, Kings, Queens, and Richmond counties.

[38] SNP handles many of the most serious felony drug cases in NYC, which may partly account for disparities in sentencing outcomes.

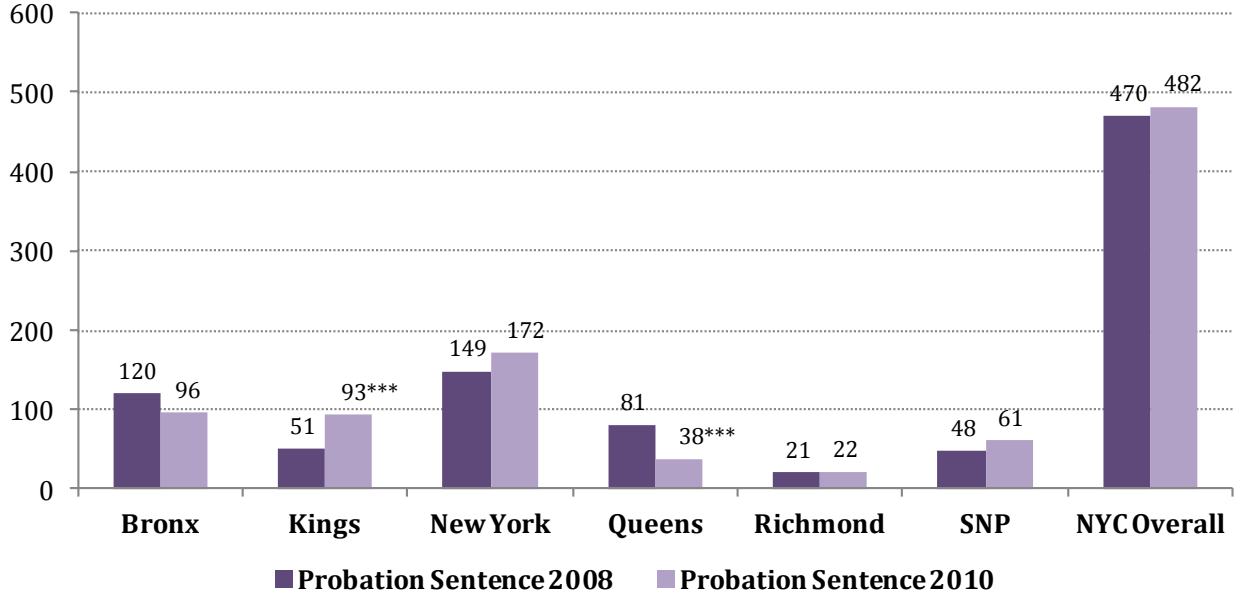
Figure 7-9. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Jail Sentence by Disposition Jurisdictions



*p<.05 **p<.01 ***p<.001

Citywide, there was a slight increase in the number of felony drug sample cases that received probation sentences, with significant variation at the jurisdiction level (see Figure 7-10). Following the reform, Kings County felony drug cases were more likely to receive probation sentences than they were pre-DLR. In Bronx and Queens Counties, on the other hand, the use of probation for felony drug cases declined.

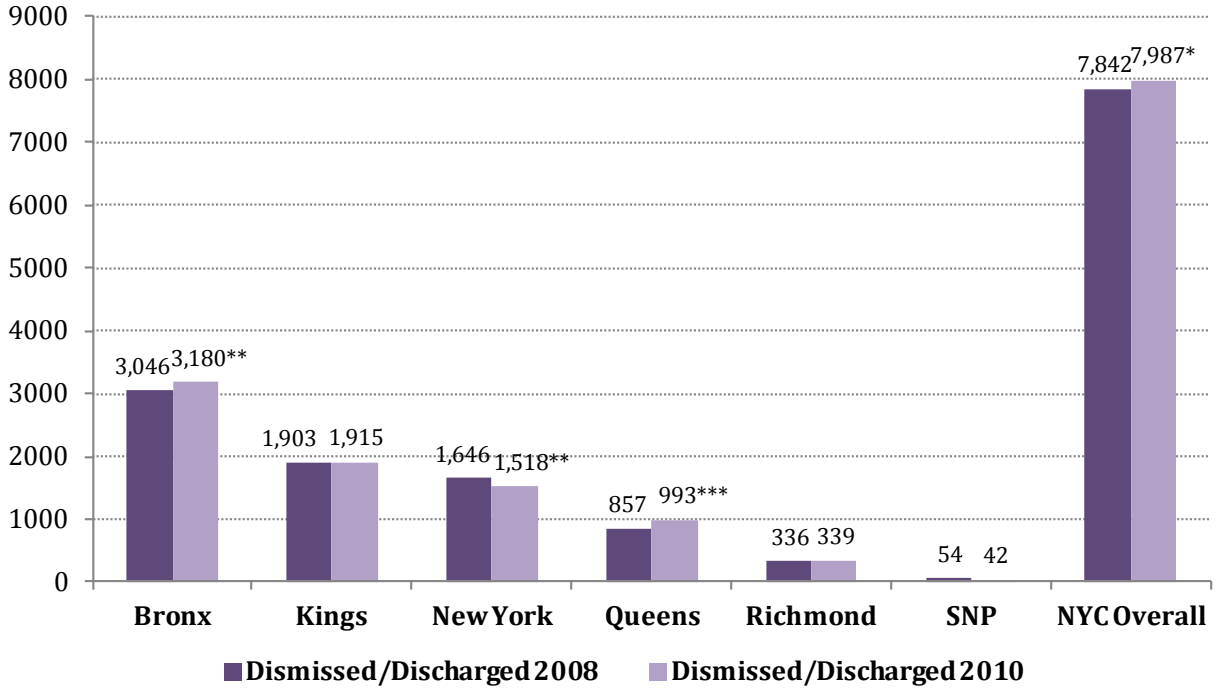
Figure 7-10. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Probation Sentence by Disposition Jurisdictions



*p<.05 **p<.01 ***p<.001

Post-DLR, felony drug cases were more likely to be dismissed or discharged without sentences in Bronx and Queens than before the reform, while the number of cases in New York County that were dismissed or discharged decreased. There was no significant change in the number of felony drug arrests cases dismissed or discharged without sentences under the jurisdiction of Kings County, Richmond County, or SNP.

Figure 7-11. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Dismissed or Discharged by Disposition Jurisdictions



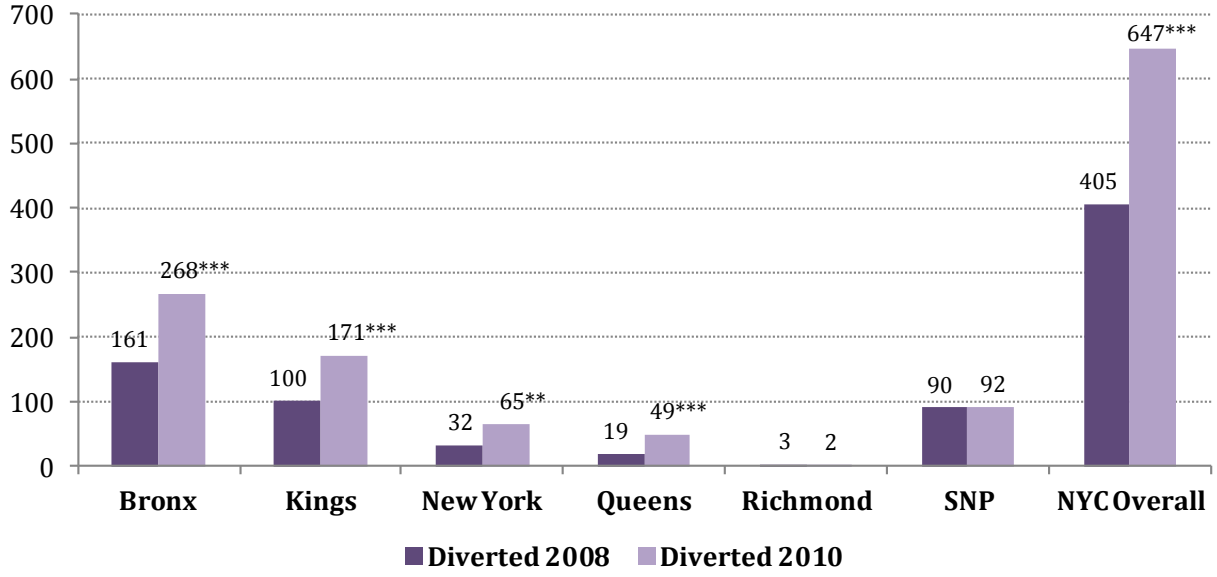
*p<.05 **p<.01 ***p<.001

Figure 7-12 compares the use of treatment diversion pre- and post-DLR. The number of felony drug arrests that were diverted to treatment increased about 60 percent citywide, and there was a similar increase in Bronx and Kings counties. There was an even larger increase in the use of treatment diversion for New York County and Queens County cases, where the number of cases diverted to treatment more than doubled.[39] However, post-DLR, Bronx County and Kings County diverted a greater proportion of felony drug cases to treatment than the other NYC jurisdictions, by a significant margin. For example, among DLR-eligible felony drug cases,

[39] Because of technical difficulties, NY County was not able to provide case-level DTAP data for the 2010 cohort. However, based on analysis of aggregate records provided by the New York County DA's Office data the number of 2010 DTAP diversions in New York County is likely to be low (an estimated 13 diversions) (see footnote 45 for further details).

Bronx County diverted 29 percent of cases to treatment, compared to 10 percent of eligible cases in New York County.

Figure 7-12. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Treatment Diversion by Disposition Jurisdictions

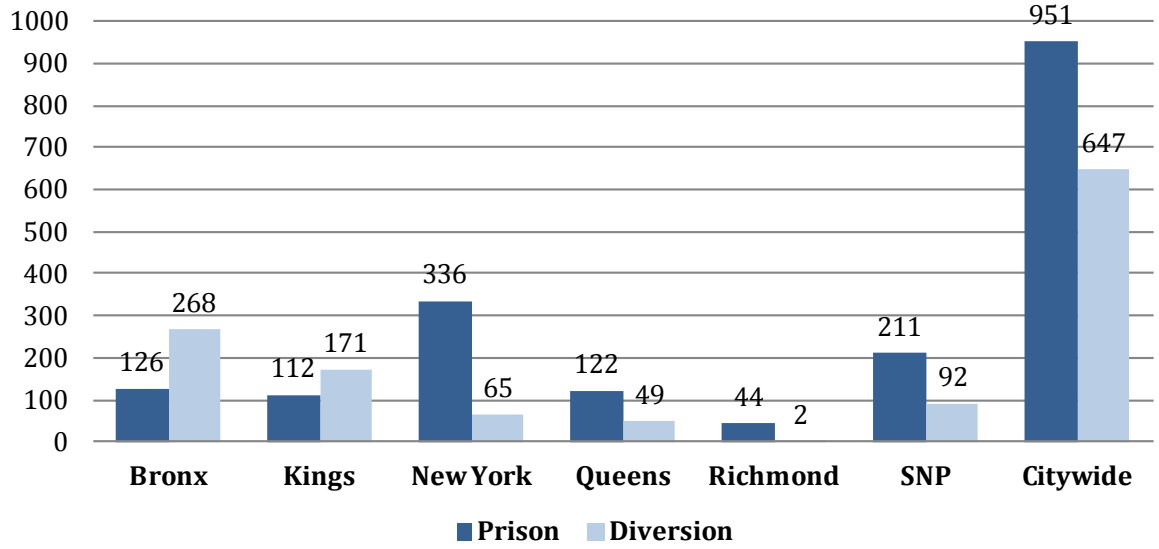


*p<.05 **p<.01 ***p<.001

There is wide jurisdiction level variation in the balance between prison and treatment diversion. As Figure 7-13 demonstrates, post-DLR, courts in Bronx County and Kings County diverted more drug felony cases to treatment than they sent to prison, by a significant margin: 2.1 to one and 1.5 to one, respectively. In New York County and SNP the reverse was true, with ratios of one to 5.2 and one to 2.3 respectively. The jurisdictional disparity was reduced somewhat when only DLR eligible cases were included in the analysis. However, Bronx County and Kings County were still more likely to use diversion than New York County. Post-DLR, the

use of diversion vs. prison was 2.6 to one in Bronx County, 2.2 to one in Kings County, as compared to one to 3.1 in New York County and one to one for cases handled by SNP. [40]

Figure 7-13. 2010 Matched Felony Drug Arrest Samples: Prison Sentencing and Treatment Diversion by Jurisdiction



Sentence outcomes for B Felony arrests

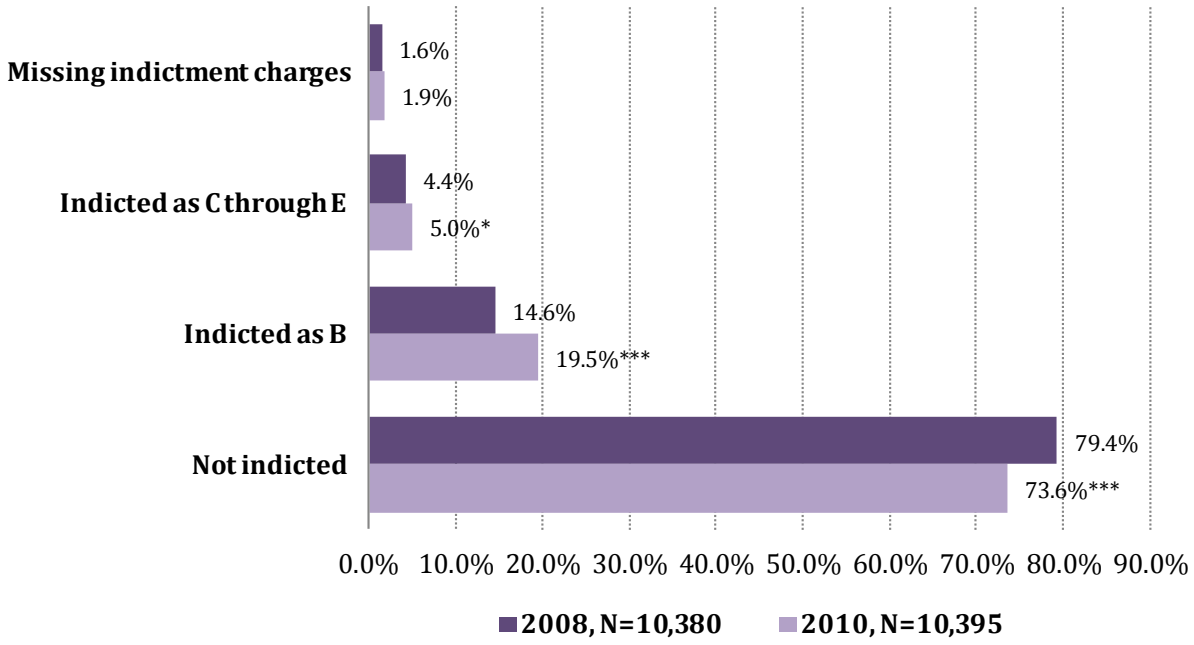
The following section provides a detailed analysis of cases originating from an arrest on B Felony charges. These cases accounted for more than 70 percent of felony drug cases included in the 2008 and 2010 samples and, unlike C through E Felonies, the reform has eliminated mandatory prison sentences for cases disposed in this charge class. As the analysis of charge patterns has shown, the number of drug cases that were indicted and disposed as B Felonies increased post-DLR. This section explores this trend in more detail and examines case outcomes for both first and second (predicate) B Felony charges.

Charging patterns

[40] Post-DLR, SNP diverted 23 percent of DLR eligible cases to treatment and sentenced 21percent of DLR eligible cases to prison. This may be partially explained by the relatively large proportion of SNP cases that were disposed on A Felony charges (5% vs. 1% citywide). These cases are not eligible for diversion under the terms of Article 216.

Figure 7-14 summarizes indictment charges pre- and post DLR for B Felony arrests. The proportion of cases arrested on B Felony charges that were indicted increased from 21 percent to 26 percent over the study period. Cases originating from an arrest on B Felony charges were more likely to be indicted as B Felonies post-DLR, increasing from 15 percent to 20 percent.

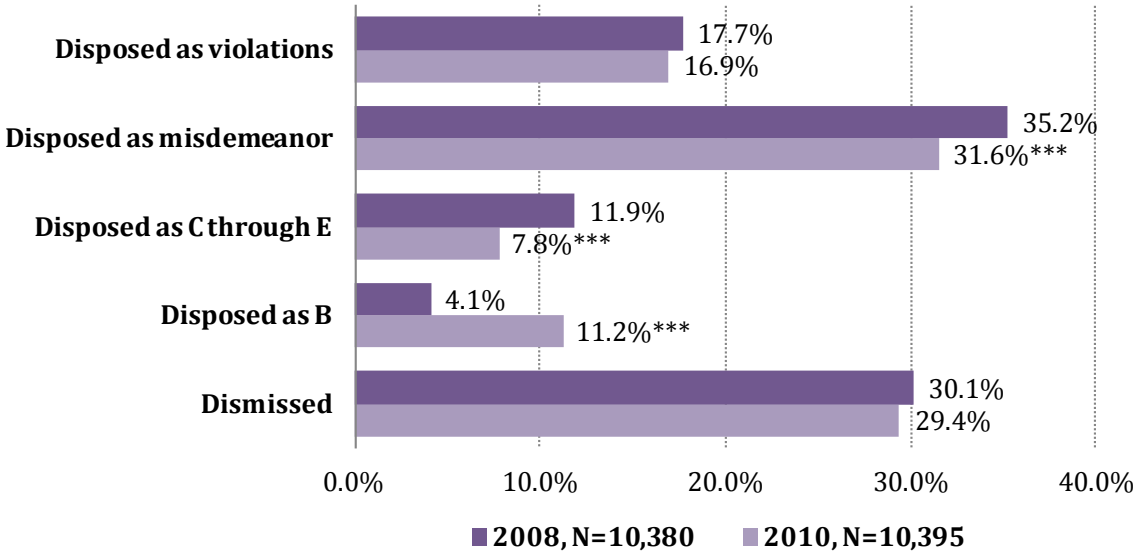
Figure 7-14. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Indictment Charges for B Felony Drug Arrests



*p<.05 **p<.01 ***p<.001

Figure 7-15 describes disposition charges for the same set of cases arrested on B Felony charges. Among 10,380 B Felony drug arrests included in the pre-DLR sample, 4 percent of cases were disposed as B Felonies. In contrast, more than 11 percent of arrests on B Felony charges post-DLR were disposed as B Felonies. Accordingly, B Felony arrests were less likely to be downgraded and disposed as C through E Felonies post-DLR (12 percent pre-DLR and 8 percent post-DLR).

Figure 7-15. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Disposition Charges for B Felony Drug Arrests



Disposition charges were missing for 1% of pre-DLR cases and 3% of post-DLR cases.
*p<.05 **p<.01 ***p<.001

Sentencing outcomes for B-Felony arrests

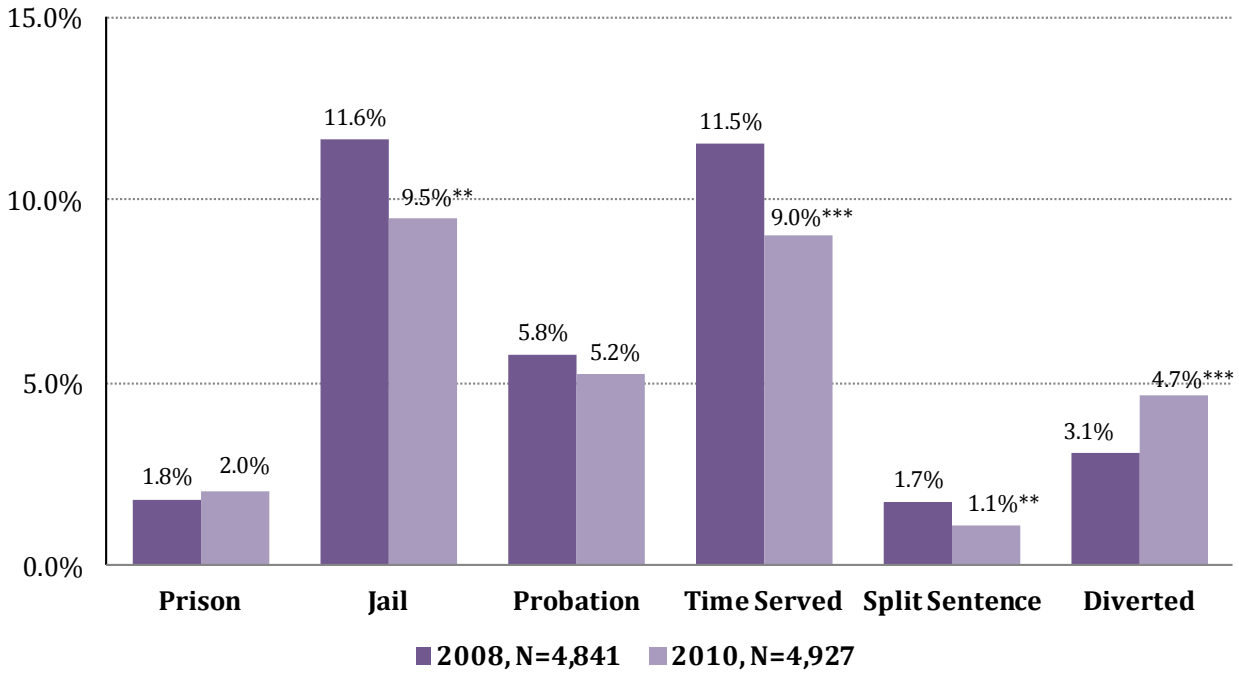
Since the reform altered the sentencing options for both first and second B felony convictions, the following analyses describe sentencing outcomes for both sets of cases before and after the reforms. For the purposes of these analyses, first B Felony refers to cases arrested on a B Felony drug charge with no prior felony convictions, and predicate B Felony refers to B Felony arrests with a prior non-violent felony conviction.[41]

In about two-thirds of first B Felony drug cases, charges were either dismissed, the case was discharged without a sentence or the case was still pending pre-DLR (63 percent) and post-DLR (66 percent). Figure 7-16 describes sentencing outcomes for first B drug felonies excluding these cases. The proportion of first B Felonies receiving prison and probation sentences

[41] Predicate B Felony arrests refer to cases arrested on B Felony drug charges with no prior violent felony convictions, including adult and juvenile convictions.

remained stable (at about 2 percent). The proportion of first B Felony cases diverted to treatment increased from 3.1 percent pre-DLR to 4.7 percent post-DLR, while the use of jail sentences, time served, and split sentences all decreased. While a number of these changes are significant, they do not represent the sea change in charging practices for B Felonies that may be expected, given the provisions of the Article 216 statute.

Figure 7-16. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Sentencing Type for First B Felony Drug Arrests[42]

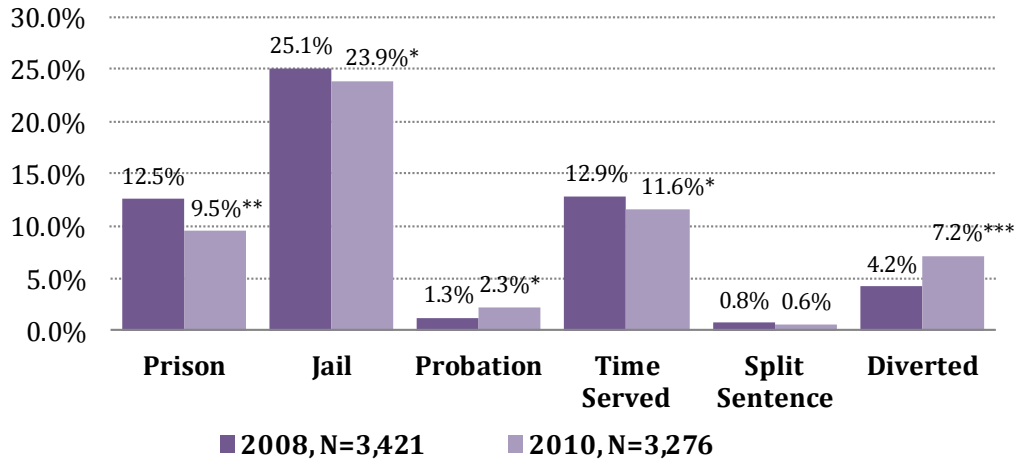


*p<.05 **p<.01 ***p<.001

Compared to first B Felony cases, a smaller proportion of predicate B Felonies were dismissed, discharged without sentences or not yet disposed in both periods (43 percent, pre-DLR and 42 percent, post-DLR). The proportion of cases originating from predicate B Felony arrests that were sentenced to prison declined by 24 percent and treatment diversion increased by 64 percent.

[42] The percentages in the chart do not sum to 100 percent as the majority of First B Felony drug arrests did not result in a sentence.

Figure 7-17. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Sentencing Type for Predicate B Felony Drug Arrests[43]



*p<.05 **p<.01 ***p<.001

Mirroring the trend for all B through E drug felony cases, described above, the average length of prison and jail sentences increased for both first and predicate B drug felonies (see Table 7-3).

Table 7-3. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Sentencing Length for B Felony Drug Arrests

Average sentence	First B		Second B	
	2008	2010	2008	2010
Prison sentence in months	21.3	24.4	27.5	26.6
Jail sentence in days	108.5	121.4	100.0	122.9**

*p<.05 **p<.01 ***p<.001

Analysis of Treatment Diversion

The second component of the quantitative analysis of DLR implementation focuses on treatment diversion. As Article 216 expanded treatment diversion options for both felony drug

[43] The percentages in the chart do not sum to 100 percent because 42 percent of predicate B Felony drug arrests did not result in a sentence

arrests and cases indicted on specified property charges, this section uses the matched implementation samples to describe diversion for both sets of cases. Because extensive treatment diversion mechanisms existed in NYC prior to the implementation of the reform (see Chapter 3), it is important to understand how DLR impacted the use of new diversion mechanisms created under the terms of the Article 216 statute (commonly known as judicial diversion) as well as shifts in the use of pre-existing diversion mechanisms (DTAP, felony drug courts, and misdemeanor drug courts). [44] Therefore, the analysis of treatment diversion was not limited to judicial diversion but includes the range of diversion mechanisms provided by NYC courts. This section begins with an analysis of treatment diversion for felony drug arrests, followed by analysis of specified property charges. In addition, this section describes the characteristics of those participating in drug court pre-DLR and post-DLR, comparing participants' demographics, criminal history, drug court screening, treatment modality, and treatment graduation rates.

Comparison of treatment diversion for felony drug arrests

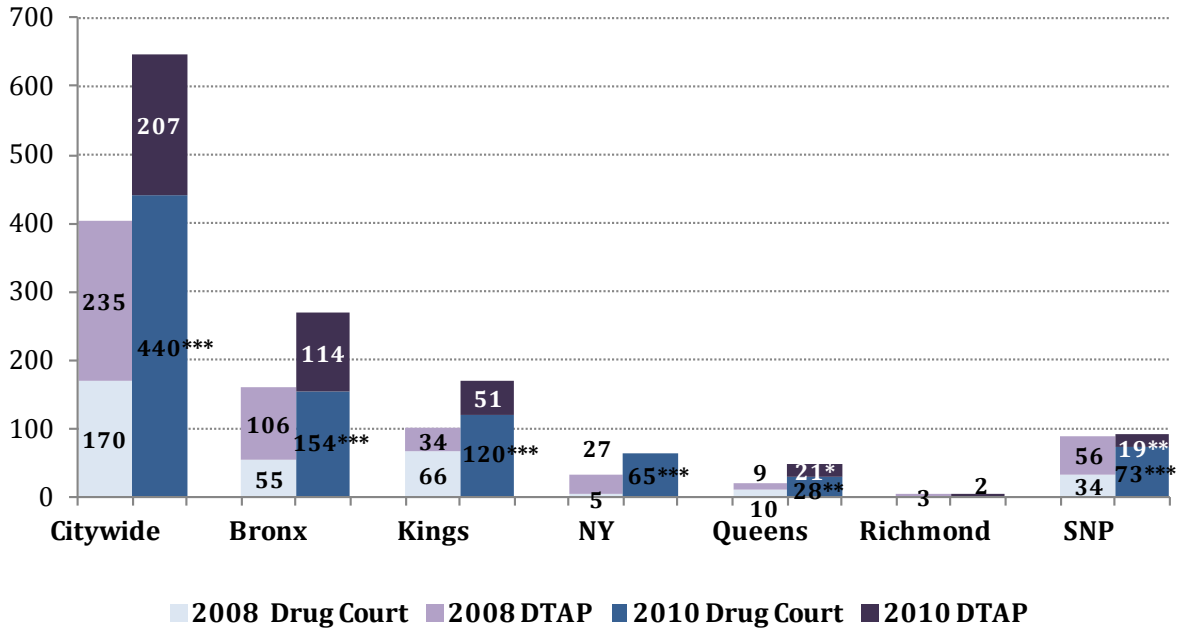
This section describes the types of treatment diversion used before and after the reform, including DTAP, felony drug courts, misdemeanor drug courts, and judicial diversion (Article 216) courts.

Drug court diversion vs. DTAP

As mentioned above, analysis of the matched pre- and post-DLR samples of felony drug arrests found that the number of treatment diversions increased by about 61 percent citywide, from 405 cases pre-DLR to 647 cases post-DLR. As Figure 7-18 shows, the increase in diversion was largely attributable to the increased use of drug court programs post-DLR. The number of drug court diversions more than doubled post-reform, while the number of DTAP cases fell slightly over this period.

[44] Felony drug charges can be downgraded to a misdemeanor and receive treatment via misdemeanor drug courts.

Figure 7-18. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: DTAP and Drug Court Diversions by Disposition Jurisdictions



*p<.05 **p<.01 ***p<.001

The use of treatment diversion increased citywide, ranging from a 2 percent increase for SNP cases to a 163 percent increase for Queens County cases. In the Bronx, the use of drug courts more than doubled post-DLR[45] while the use of DTAP remained stable; a similar trend is seen for cases in Kings County. For cases handled by SNP, the rate of treatment diversion remained relatively stable (from 90 cases pre-DLR to 92 post-DLR), but there were changes in the type of diversion used. The proportion of SNP cases diverted via drug court increased from 38 percent (34 out of 88) to 79 percent (73 out of 92), while the use of DTAP decreased from 62 percent of all treatment diversions to 21 percent. In New York County, the drug court program expanded dramatically from 5 cases pre-DLR to 65 cases post-DLR. Based on conversations with prosecutors working in New York County, prior to DLR, the courts in NY County only diverted misdemeanor cases to Manhattan Misdemeanor Drug Court (MMDC) and there were no

[45] Based on conversations with legal professionals with experience handling felony drug cases, this increase may partially reflect improvements in the accuracy methods used to record information on diverted cases.

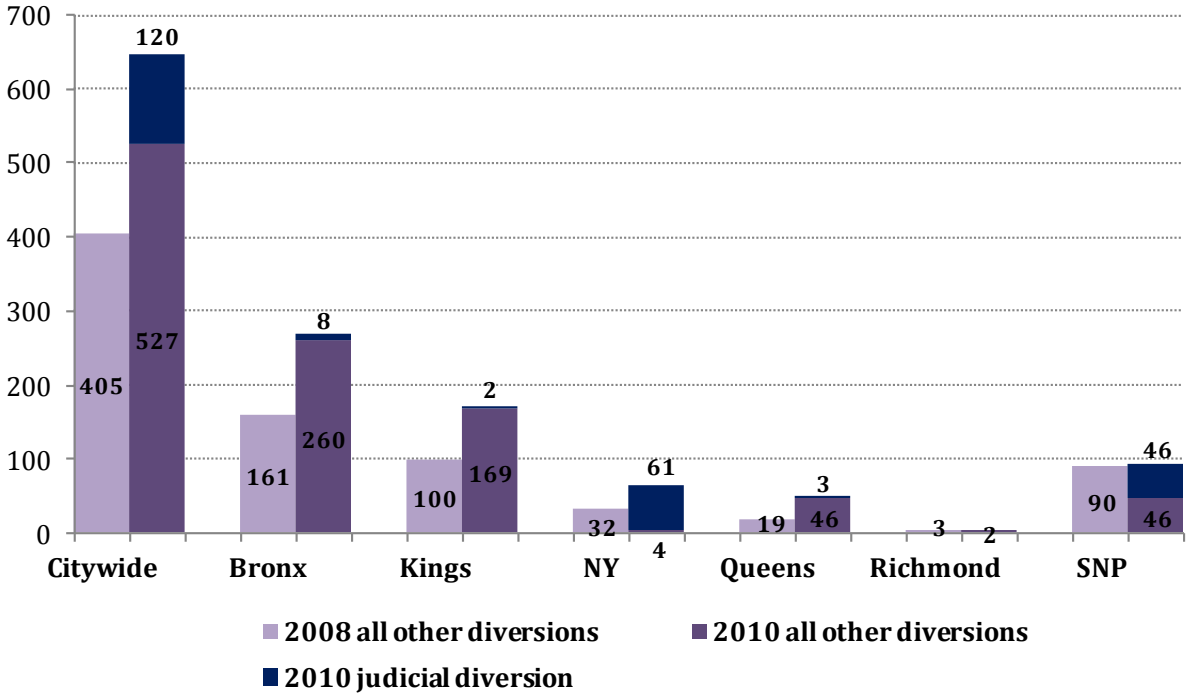
felony drug court diversion options. Felony drug cases are now diverted via the Manhattan Diversion Court (MDC), a judicial diversion court part created under the terms of DLR. Since we did not receive case-level data on DTAP in 2010 from New York County, there are currently no DTAP cases from the post-DLR New York County sample. However, based on analysis of aggregate records provided by the New York County DA's Office data the number of 2010 DTAP diversions in New York County is likely to be low (an estimated 13 diversions).[46] There was also a substantial increase in the use of both drug court and DTAP in Queens County; however, despite this increase, diversion was used much less frequently in Queens when compared to counties elsewhere in the city. In Richmond, there were only three DTAP diversions in 2008 and two DTAP diversions in 2010, based on the matched implementation samples.

Use of judicial diversion

DLR expanded judicial discretion to divert defendants in non-violent felony cases to treatment, creating a new "route" to treatment that had not existed before 2009. Prior to the reforms, the decision to divert a case was largely under the control of prosecutors, either explicitly, via the DA-administered TASC and DTAP programs, or implicitly, via DA-led screening decisions regarding eligibility to participate in drug court programs. DLR provided judges with the option of diverting cases *over the objection of prosecutors* for the first time. This shift in the balance of discretion presents a significant change in the system for diverting felony drug defendants to treatment. To examine the implementation of this specific component of the reform, it is necessary to explore the use of this new "judicial" diversion option. For the purposes of this analysis, judicial diversion is operationalized as cases handled by court "parts" designated for judicial diversion.

[46] Based on aggregate statistics provided by NY County DA's Office, the number of DTAP cases declined by about 50 percent in 2010 compared to 2008. Study data show that 26 felony drug arrests were diverted to DTAP in 2008, suggesting a "best-estimate" of 13 DTAP diversions in NY County for 2010.

Figure 7-19. Comparison of the 2008 and 2010 Matched Felony Drug Arrest Samples: Judicial Diversion by Disposition Jurisdictions



As Figure 7-19 shows, based on analysis of the 2010 matched sample, a total of 120 cases were diverted to treatment via the new judicial diversion court parts, accounting for 19 percent of overall treatment diversions in NYC. Judicial diversion was used extensively for cases under the jurisdiction of SNP and the New York County DA's office, accounting for 94 percent and 50 percent of cases that were diverted to treatment, respectively. In the rest of the city, however, judicial diversion court parts were rarely used. The majority of cases that were diverted to treatment in Bronx, Kings, and Queens counties were handled by the pre-existing drug court and DTAP mechanisms. There were only two judicial diversion cases out of a total of 171 treatment diversions in Kings County, three judicial diversions out of a total of 49 diversions in Queens County, and eight judicial diversions out of a total of 264 treatment diversions in Bronx

County.[47] These findings were corroborated by legal professionals interviewed in Bronx and Kings as part of this study (see Chapter 8 for a description of these findings).

Comparison of treatment diversion for specified property indictments

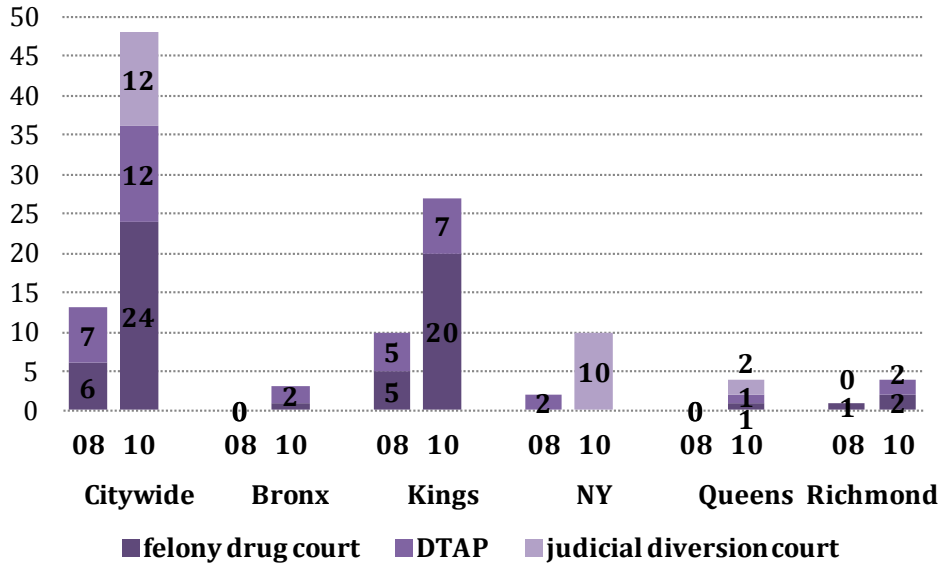
Article 216 allows judges to divert defendants without prior VFOs who are indicted for specified property crimes to treatment, if they are clinically eligible.[48]

The research team analyzed rates of treatment diversion for cases indicted on felony specified property charges, including 921 matched cases in both the 2008 and 2010 implementation samples.[49] As for felony drug arrest cases, analyses of outcomes for specified property charges were conducted at both the citywide and jurisdiction level.

Citywide, even though the number of diversions for specified property cases tripled in the post-DLR period, a very small proportion of all specified property cases in the matched samples were diverted to treatment. This was true both pre-DLR (13 cases and 1.4 percent of the 2008 matched implementation sample of specified property charges) and post-DLR (48 cases and 5.2 percent of the 2010 matched implementation sample of specified property charges). At the jurisdiction level, Kings County was the only jurisdiction that had treatment diversion options for specified property charges prior to DLR.[50] Post-DLR, Kings County continued to divert specified property cases using existing mechanisms (DTAP and felony drug courts). In response to DLR, New York County began diverting specified property cases to treatment via judicial diversion court parts, accounting for all of specified property cases diverted post-reform (N=10).

[47] In 2011, Bronx County renamed an existing drug court part as the Bronx County Judicial Diversion Court. The data collected for this study predates this change in nomenclature.
[48] Based on Article 216, if a defendant has a history of alcohol or substance abuse or dependence and such alcohol or substance abuse or dependence is a contributing factor to the defendant's criminal behavior, they are clinically eligible for diversion programs.
[49] Specified property charges are not included as part of the prior discussion of sentencing outcomes and charging patterns as DLR did not alter sentencing guidelines for these charges.
[50] SNP does not handle property offenses; therefore, jurisdiction-level analysis examines variation of treatment diversion for cases indicted on specified property charges across the five NYC Counties.

Figure 7-20. Comparison of the 2008 and 2010 Matched Specified Property Indictment Samples: Drug Court, DTAP, and Judicial Diversion by County



Drug court participation

The following section describes OCA drug court data for the pre-and post-DLR matched samples, including characteristics of drug court participants, drug court screening, reasons for declining diversion offers, the requirements of court-ordered treatment plans, and treatment completion rates. This analysis is limited to drug court participants (including judicial diversion court parts), as information on treatment modality, status, and outcome for other forms of diversion (e.g. DTAP) was not available to the research team. Drug court participants in this section include both felony drug arrestees and those indicted on specified property charges.

Drug court participant profile

Table 7-4 describes the characteristics of 176 cases diverted to drug court pre-DLR and 476 drug court cases post-DLR. Compared to those diverted pre-DLR, drug court participants post-DLR were significantly older (34 yrs compared to 31 yrs). Post-DLR, women and Hispanics

were less likely to be diverted and blacks were more likely to be diverted, but none of these findings met criteria for statistical significance.

Post-DLR drug court participants tended to have longer criminal histories, including more prior arrests and convictions for both felony and misdemeanor charges. Furthermore, on average, those admitted to drug court post-DLR had substantially more prior arrests and convictions for drug offenses.[51] Based on information collected by staff working in the courts, 48 percent of drug court participants self-reported marijuana as their primary drug choice pre-DLR compared to 40 percent post-DLR. The other most commonly reported primary substances were heroin and crack, cited by 24 and 12 percent of post-DLR drug court participants respectively.

[51] These findings may partially reflect a change in mechanisms for diverting predicate felony cases over the period covered by this study. Pre-DLR, DTAP programs operating in each of the six court jurisdictions were the primary mechanism for diverting predicate felony cases. As a result of DLR, predicate cases are increasingly referred to pre-existing felony drug courts and the newly created judicial diversion court parts. The analysis presented in this section does not include information on prior history for DTAP participants. However, the finding that DTAP referrals remained steady over the study period, presented in an earlier section of this report, may suggest that there was minimal displacement of cases from DTAP to drug court.

Table 7-4. Characteristics of Drug Court Participants

		2008	2010
		N=176	N=476
Demographics	Mean Age	31.10	34.20**
	Female	21.6%	15.3%
	White	13.1%	13.9%
	Black	42.6%	45.6%
	Hispanics	43.8%	38.9%
	Asian	0.6%	0.8%
Criminal history	Prior felony arrests	1.98	4.06***
	Prior misdemeanor arrests	3.72	6.66***
	Prior VFO arrests	0.49	0.82**
	Prior drug arrests	3.20	5.95***
	Prior felony convictions	0.40	0.90**
	Prior misdemeanor convictions	1.64	4.36***
	Prior VFO convictions	0.02	0.08*
	Prior drug convictions	1.20	2.88***
Primary drug choice	Alcohol	3.1%	4.6%
	Cocaine	8.2%	11.1%
	Crack	14.5%	12.1%
	Heroin	17.6%	24.0%
	Marijuana	48.4%	39.7%*
	Others	8.2%	8.5%

*p<.05 **p<.01 ***p<.001

Drug court screening, admission, and declination

Figure 7-21a. The 2008 Implementation Sample: Drug Court Admission, Declination, and Declination Reasons

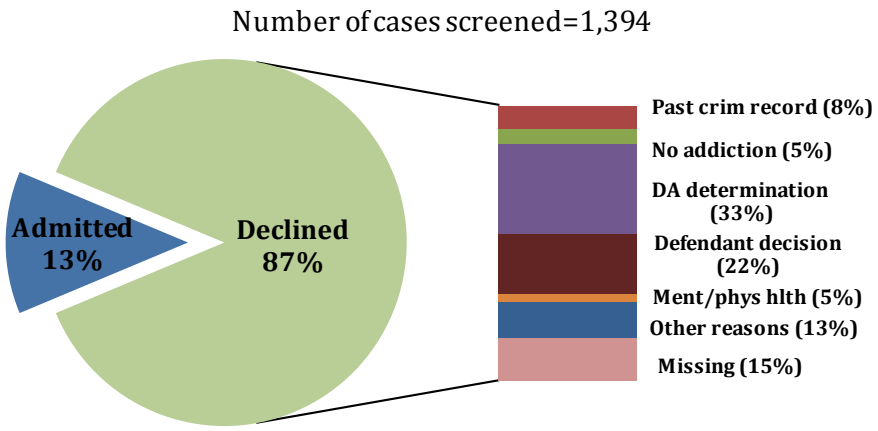
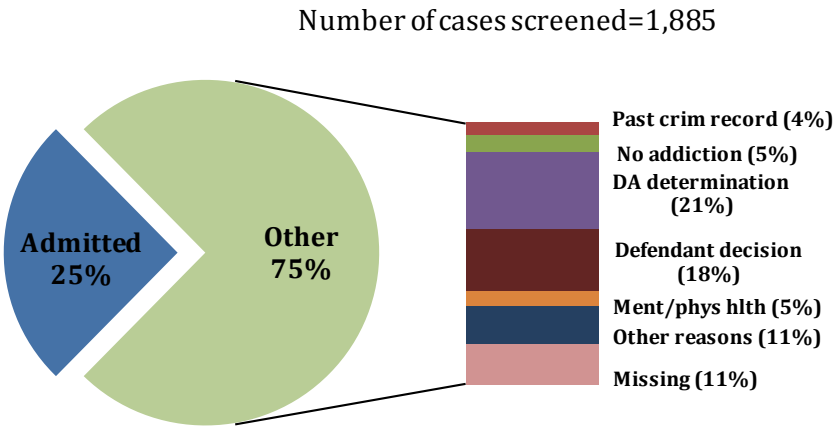


Figure 7-21b. The 2010 Implementation Sample: Drug Court Admission, Declination, and Declination Reasons



The process for identifying cases that are eligible for drug court includes a number of components, or steps. First, representatives from the court or the prosecutor's office check defendants' criminal records and current charges to determine if they meet statutory requirements for treatment diversion (B through E Felony drug charges or specified property charges with no prior violent felony convictions). This is often referred to as "paper eligibility." If someone is eligible for diversion on paper he or she may be referred for clinical assessment to determine whether they meet clinical criteria for "drug abuse" or "drug dependence." For the screening and assessment analysis, the research team defined "drug court screening" using records from New York State court data system (UTA data provided by OCA).[52]

Figure 7-21a and Figure 7-21b compare drug court screening, admission, and declination reasons for the 2008 and 2010 matched implementation samples of all drug felony and specified property cases. The number of cases screened for drug court eligibility increased by 35 percent (from 1,394 pre-DLR to 1,885 post-DLR). Among cases screened by drug courts, the proportion of cases admitted also increased, from 13 percent in 2008 to 25 percent in 2010. Based on data recorded in the UTA, DA determination and defendant refusal were the two major reasons for drug court declination. The slight decrease in the proportion of declinations resulting from a DA determination (from 33 percent to 28 percent) may reflect the ability of judges to make diversion decisions over prosecutors' objections as a result of DLR.

However, as discussed previously, the majority of drug felony arrests did not result in a felony conviction and these cases have been excluded from the analysis to examine rates of screening and diversion where there was an indictment or SCI (referred to here as "DLR

[52] Based on our conversations with OCA, court staff define "drug court screening" inconsistently when inputting information into the court data system. Therefore, findings on screening rates should be interpreted with some caution.

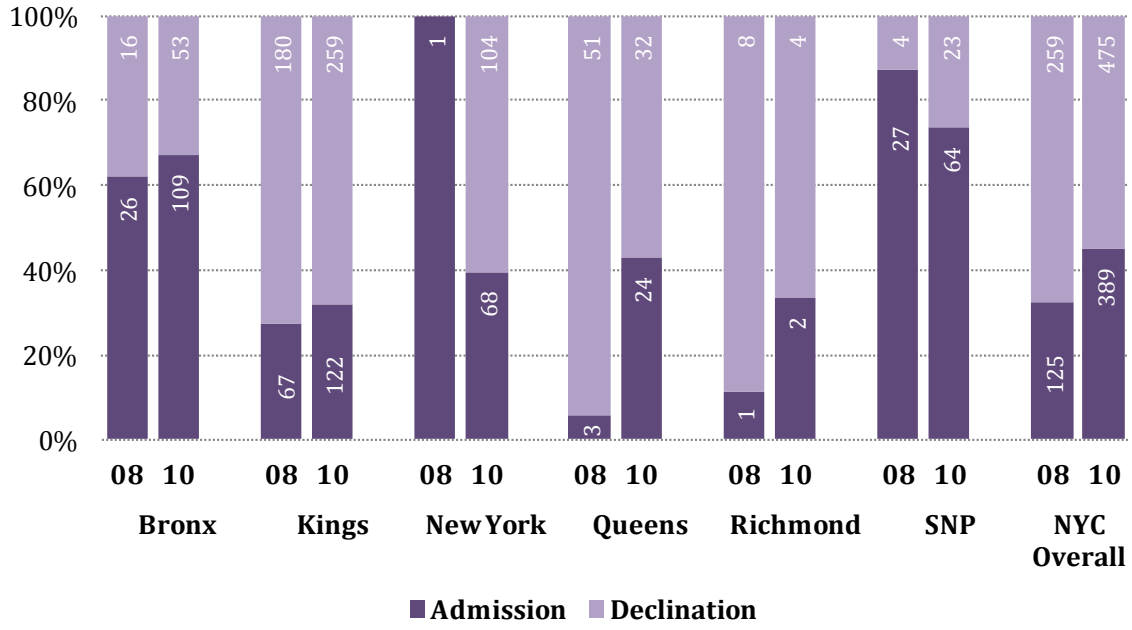
eligible" cases).[53] Pre-DLR, 13 percent of these cases were screened for participation in drug court and 4 percent were admitted. Post-DLR just over a quarter (26 percent) of DLR eligible cases were screened and 12 percent were ultimately admitted to drug court. [54]

There was significant variation in screening practices by jurisdiction, with minimal differences within jurisdictions over the period covered by the study. Figure 7-22 provides a jurisdiction breakdown of the number of DLR cases screened for participation and admitted to drug court. For example, Kings County adopted a more liberal screening policy than that used in other jurisdictions. Post-DLR, 46 percent of DLR eligible cases in Kings County were screened and 15 percent were admitted to drug court. In contrast, 22 percent of eligible cases in Bronx County were screened and 15 percent were admitted to drug court (amongst screened cases, Bronx admitted 67 percent of cases compared to 32 percent in Kings). In New York County, 17 percent of DLR eligible cases were screened and 7 percent were admitted to drug court (New York County admitted 40 percent of screened cases to drug court).

[53] This analysis of treatment admission for DLR eligible cases differs from the findings presented in earlier sections (page 78) in two key ways: 1) both felony drug cases and specified property cases are included in analysis of admissions; and 2) cases diverted via DTAP programs are excluded.

[54] Among the 14,410 felony drug arrests included in the 2010 matched implementation sample, 2,410 cases were DLR eligible (arrested on B-E Felony charges, indicted, with no prior VFO convictions). All 921 cases included in the matched specified property sample were DLR eligible, based on the indictment charge and criminal history.

Figure 7-22. The 2008 and 2010 Implementation Samples: Drug Court Screening and Admission by NYC Jurisdictions for DLR Eligible Cases[55]

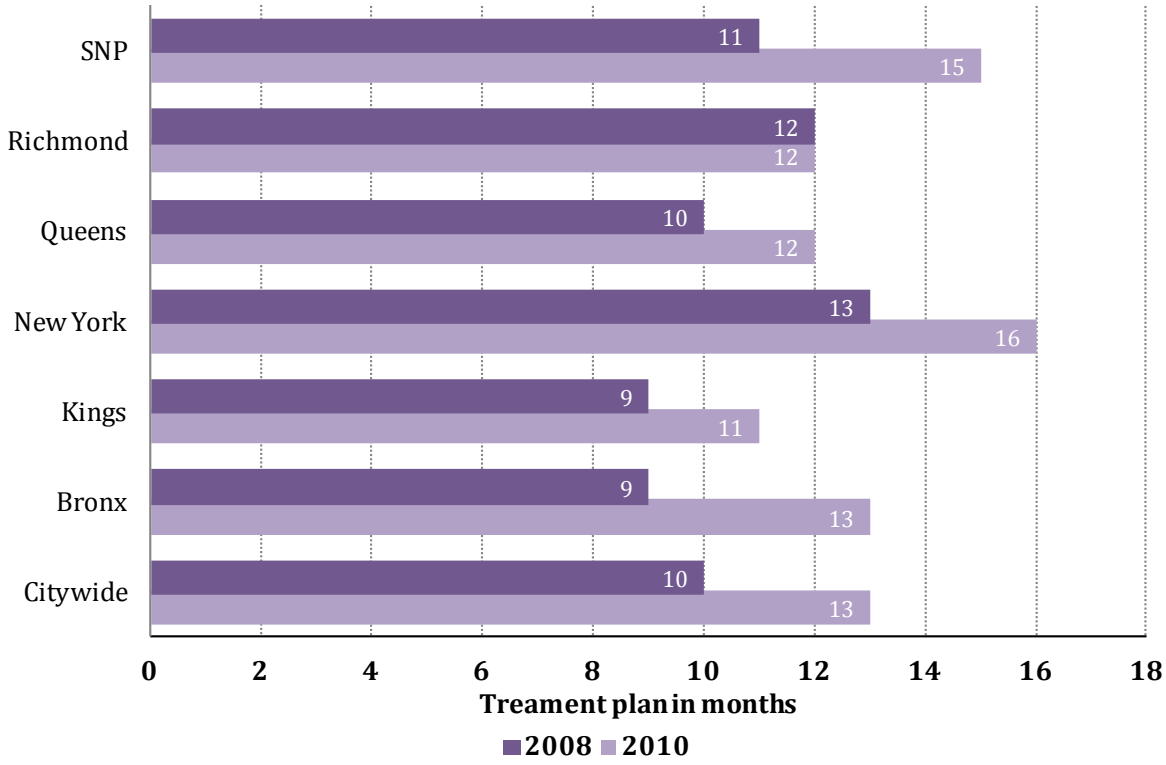


Treatment mandates

The treatment times mandated by the courts as a condition of diversion ("treatment plans") were also compared for the pre- and post-DLR periods. It is important to note that treatment plans are open-ended and may be extended for a range of reasons related to non-compliance with court requirements or the additional required to meet 'holistic' treatment goals (e.g. conditions related to education, employment, and housing). Therefore, there may be variance between the treatment time specified in the initial treatment plan and total time in treatment. As Figure 7-23 shows, treatment plans for post-DLR drug court participants were 30 percent longer than the plans for cases diverted to drug court pre-DLR. The average length of treatment plans increased in all NYC counties post-reform, with a higher than average increase in SNP (from 11 months pre-DLR to 15 months post-DLR); the average length of treatment plans in Bronx County increased from 9 months pre-DLR to 13 months post-DLR.

[55] DLR eligible cases include felony drug cases indicted on B through E Felony charges with no prior VFO convictions as well as cases indicted on property charges specified in Article 216 with no prior VFO convictions.

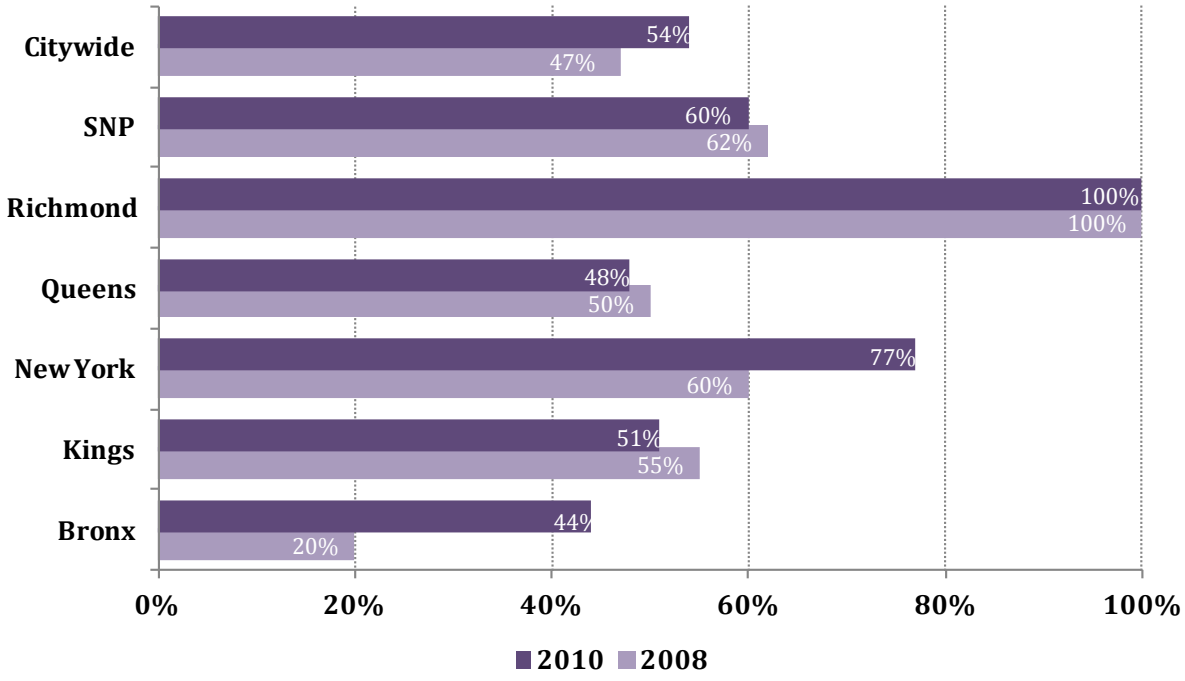
Figure 7-23. Comparison of 2008 and 2010 Drug Court Participants: Length of Drug Court Treatment Plan by NYC Jurisdictions



Post-DLR, there was also a substantial increase in the use of residential treatment services in NYC. As Figure 7-24 indicates, residential treatment was a component of mandates in 47 percent of all drug court cases pre-DLR, increasing to 54 percent post-DLR. The shift towards residential treatment services was most notable in Bronx County (20 percent pre-DLR and 44 percent post-DLR) and New York County (60 percent pre-DLR and 77 percent post-DLR). The proportion of drug court cases receiving residential treatment decreased slightly in Kings County, Queens County, and for cases handled by SNP. A significant portion of participants reporting marijuana as their primary drug choice were diverted to residential treatment (36 percent pre-DLR and 50 percent post-DLR). Accordingly, there was a citywide decrease in the use of outpatient services, declining from 73 percent pre-DLR to 56 percent post-DLR (see

Figure 7-25).[56] Reductions in the use of outpatient treatment services were higher in New York County (80 percent in 2008 and 29 percent in 2010) and SNP (79 percent in 2008 and 49 percent in 2010). Citywide, about 24 percent of drug court participants received both residential and outpatient treatment services. The length of stay in both residential treatment and outpatient treatment programs increased markedly during the post-reform period. Using the matched samples of felony drug arrests, we found that the length of stay in residential treatment averaged across all drug court participants almost doubled from 139 days to 274 days, and the average length of stay in outpatient treatment increased from 199 days to 226 days.[57]

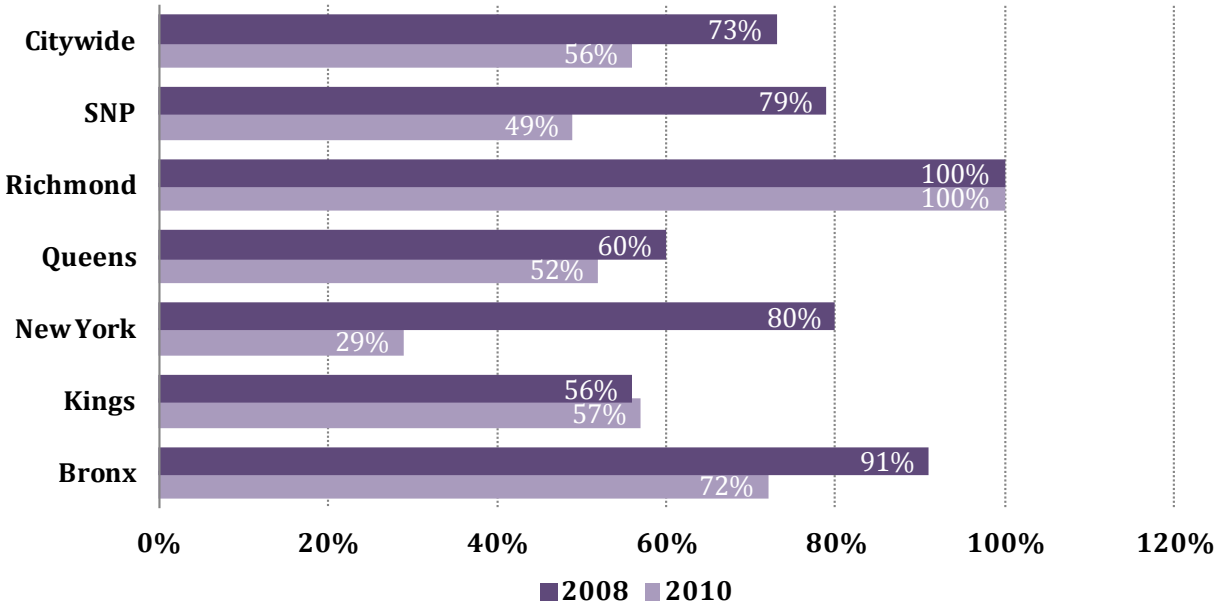
Figure 7-24. Comparison of 2008 and 2010 Drug Court Participants: Rate of Residential Treatment Services by NYC Jurisdictions



[56] Drug court mandates may include a combination of inpatient, residential and outpatient treatment services.

[57] Appendix N provides a detailed description of methods for imputing total length of stay for cases that were still in court mandated treatment at the end of the data collection period ('right censored cases'). The imputed length of stay for the 252 individuals who entered residential treatment post-DLR was 478.9 days, over an average of 1.7 episodes. The increase in length of stay is a combination of greater use of residential treatment and longer average lengths of stay.

Figure 7-25. Comparison of 2008 and 2010 Drug Court Participants: Rate of Outpatient Treatment Services by NYC Jurisdictions



Shifts in the use of court-mandated treatment may be the result of changes in the treatment needs of people who are diverted, the courts enforcing longer treatment mandates for extra-clinical reasons, or other system-wide changes in the structure of decision making within the courts. As demonstrated in the previous section, the drug of choice for people who are diverted to treatment and their demographic characteristics has not changed significantly over this period. However, the profile of prior arrests and convictions has shifted, lending weight to the hypothesis that the courts are mandating longer terms in residential services to reflect a population with longer histories of justice system involvement. Residential treatment is much more expensive than outpatient services, and the combination of increasing use of residential treatment and longer treatment plans has significant implications for the costs and cost-saving attributable to DLR (see Part IV).

The research team applied logistic regression modeling to explore factors that were independently associated with the decision to use residential treatment services (some residential

treatment or outpatient only). Independent variables in the regression models include participants' demographics (age, race, sex), top arrest charges (charge type and charge severity, prior criminal history, diversion counties), primary drug of choice, and whether the defendant was arrested in 2008 or 2010 (pre- and post-DLR).

Table 7-5 displays significant predictors of having a treatment plan that includes residential treatment services (findings of the full regression model are included in Appendix H). After controlling for the aforementioned factors, being younger, male, black, arrested on drug possession charges, reporting crack or heroin as a primary drug of choice, and having more prior drug crimes convictions were all predictive of being referred to residential treatment. The use of residential treatment was significantly lower in Bronx County, Kings County, and Queens County compared to New York County. After controlling for various factors, there was no significant difference in the use of residential services pre- and post-DLR.

Table 7-5. Predictors of Residential Treatment Services among Drug Court Treatment Participants, N= 652

Variables		B	S.E	Exp(B)	Sig.
Demographics	Age	-.038	.01	.963	.000**
	Female	-.532	.249	.587	.033*
	Black	.716	.295	2.047	.015*
Diversion County[a]	Bronx	-1.771	.348	.170	.000***
	Kings	-1.894	.398	.335	.025*
	Queens	-1.177	.503	.391	.019*
Arrest charges	Drug possession[b]	-.433	.203	.649	.033*
Prior Criminal Records	Prior drug crime convictions	.111	.036	1.117	.002**
Primary drug of choice[c]	Crack	1.384	.364	3.99	.000***
	Heroin	1.231	.304	3.425	.000***

[a] New York County is the reference category for diversion counties.
[b] Drug sale is the reference category for arrest charges.
[c] Marijuana is the reference category for primary drug choice.
[+]p<.01 *p<.05 **p<.01 ***p<.001

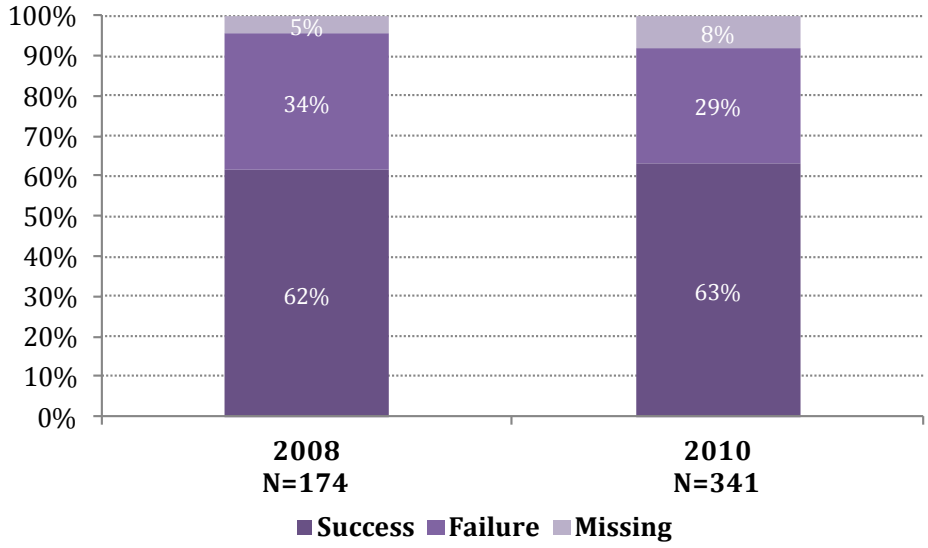
Graduation rates

The research team compared the proportion of diverted cases that successfully completed their treatment mandate ("graduation rates") for drug court cases pre- and post-DLR. For the

purpose of this analysis, only drug court cases with closed statuses were included in the analysis (either completed or revoked).[58] As a result, the analysis included a total of 174 cases from the 2008 matched implementation sample and a total of 341 cases from the 2010 matched implementation sample.[59] Citywide the treatment graduation rate increased from 62 percent (107 out of 174) pre-DLR to 63 percent (216 out of 341) post-DLR (Figure 7-26). At the jurisdiction level, graduation rates increased in Queens County (50 percent pre-DLR and 84 percent post-DLR) and Bronx County (60 percent pre-DLR and 72 percent post-DLR). By contrast, the graduation rate decreased in New York County and for cases handled by SNP. The graduation rate remained stable in Kings County (see Figure 7-27). The relatively high failure rate in New York County (46 percent) and for cases handled by SNP (44 percent) requires further examination to determine whether this is a function of the characteristics of drug court clients, the types of treatment offered, court practices, or other factors.[60]

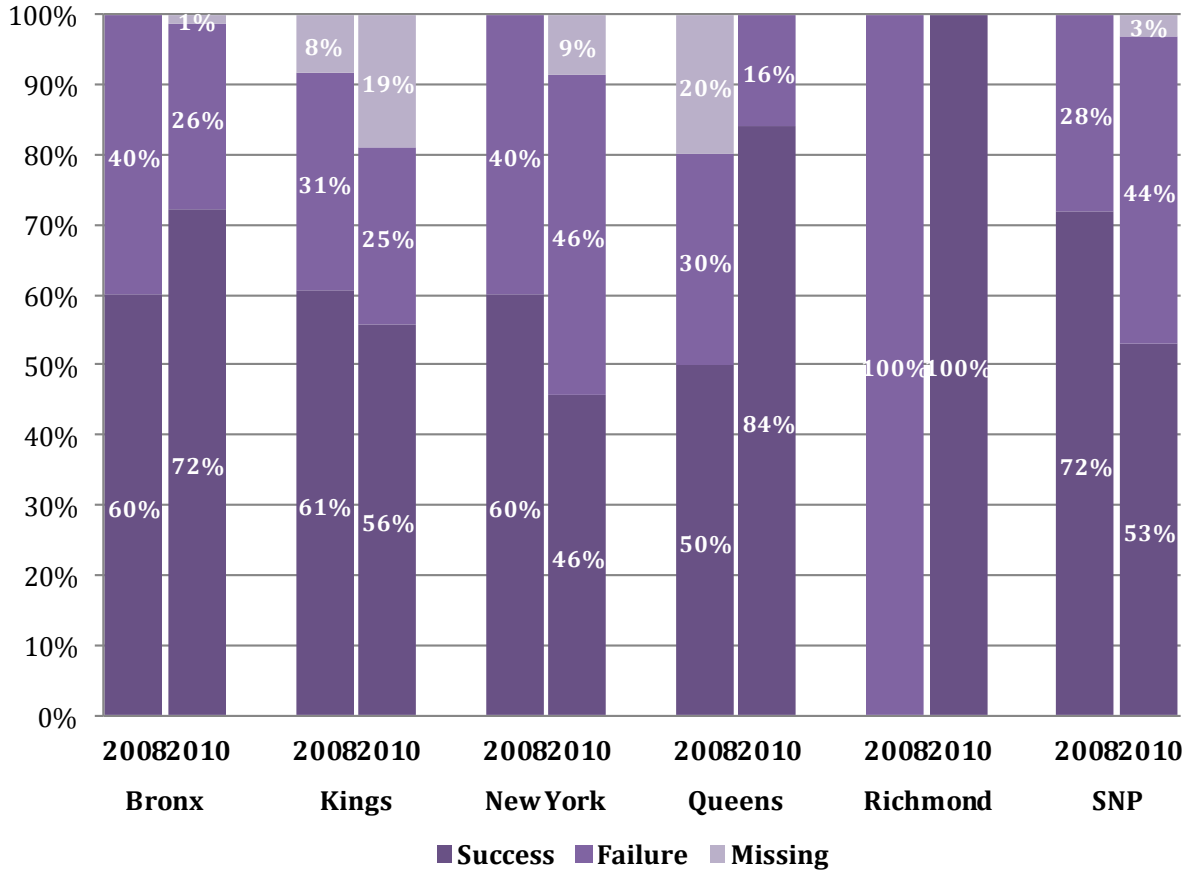
[58] A small number of cases were closed because the participant died or moved out of NYS.
[59] A total of 2 drug court cases from the 2008 matched implementation sample and a total of 135 cases from the 2010 matched implementation sample were still pending at the completion of data collection for this study.
[60] Of the 30 failed treatment cases post-DLR, 17 cases resulted in a prison sentence, and 10 cases resulted in a jail sentence.

Figure 7-26. Comparison of 2008 and 2010 Drug Court Participation: Treatment Outcomes



*Missing cases are coded in the UTA file as 'client deceased', 'transfer to other courts or jurisdictions' and 'case temporarily closed'.

Figure 7-27. Comparison of 2008 and 2010 Drug Court Participation: Treatment Outcomes by NYC Jurisdictions



The research team used logistic regression modeling to predict drug court graduation rates, controlling for participants' demographics (age, race, sex), top arrest charges (charge type and charge severity, prior criminal history, diversion county), primary drug choice, treatment plan, duration, and whether residential services were used. Table 7-6 includes significant predictors for treatment graduation (findings from the full regression model are included in Appendix I). After controlling for these factors, older participants and those with shorter mandated treatment plans were more likely to graduate. The graduation rate was significantly higher among those with fewer prior drug convictions; the odds ratio of graduating from drug court was reduced by 12 percent with each additional prior drug conviction. There was no significant difference in drug treatment completion rate between pre- and post-DLR drug court participants, after controlling for a range of factors.

Table 7-6. Predictors of Treatment Graduation among Drug Court Participants, N= 444[a]

Variables		B	S.E	Exp(B)	Sig.
Demographics	Age	.025	.012	1.026	.032*
Prior criminal record	Number of prior drug convictions	-.129	.046	.879	.005**
Duration of treatment plan (months)		-.099	.044	.905	.021*

[a] Of the 515 drug court cases with closed status included in the matched 2008 and 2010 implementation samples, 71 cases had missing values in one of variables included in the model.
*p<.05 **p<.01 ***p<.001

Summary of Findings from Quantitative Implementation Analysis

The quantitative implementation analysis examined the impact of DLR for two primary groups: cases with felony drug arrest charges, and cases indicted on specified property charges. Felony drug arrests and specific property indictments from 2008 and 2010 were matched, using PSM to control for temporal trends in the number of cases and baseline differences in

defendants' demographics, criminal history and features of their case. Outcomes for these two matched samples were compared using case-level administrative records from multiple sources.

Consistent with the intent of DLR, there was overall citywide reduction in prison and jail sentences, and an increase in the use of treatment diversion for cases generated by arrests on felony drug charges post-DLR. However, this analysis did not find a dramatic shift in the outcomes of the felony cases analyzed. Citywide, prison sentences for this group decreased by 7 percent and jail sentences decreased by 10 percent. Pre-DLR, prison sentences were used more frequently in New York County (10 percent) and SNP (43 percent) than in Bronx County (4 percent) and Kings County (3 percent). For cases handled by SNP, there was a shift from prison sentences (43 percent in 2008 and 36 percent in 2010) towards jail sentences (14 percent in 2008 and 21 percent in 2010). Post-DLR, eligible drug felony cases handled by the New York County Courts were more likely to receive a prison sentence than to be diverted to treatment. In Bronx and Kings County the reverse was true; with a greater number of these cases diverted to treatment than sentenced to prison.

While the charge profile of pre- and post-DLR felony drug samples were held constant as part of the matching process there were 2.6 times as many cases disposed as B Felonies post-DLR. However, as a result of changes to the sentencing statutes, the proportion of B Felony arrests that resulted in a prison sentence post-DLR declined by about 13 percent.

The analysis found significant racial disparity in sentencing outcomes. In 2008, Hispanics included in the study sample were 3.2 times as likely to receive a prison sentence when compared to whites. Blacks were 2.9 times as likely to be sentenced to a prison term. In 2010, disparities in sentencing outcomes decreased somewhat. Yet, post-DLR, blacks and Hispanics

were roughly twice as likely to receive a prison sentence when compared to whites. This disparity is not explained by the severity of charge or criminal history of the defendant.

Treatment diversion increased by about 60 percent post-DLR, in large part due to the increased use of pre-existing treatment diversion programs (DTAP, felony drug courts, and misdemeanor drug courts). In New York County, judicial diversion created a drug court option for diverting felony drug cases to treatment, and the majority of post-reform treatment cases were diverted via judicial diversion court parts. Judicial diversion court parts however were rarely used in other jurisdictions.

The analysis of drug court screening found that much of the increase in diversion is attributable to higher rates of acceptance for cases screened to determine drug court eligibility. The admission rate increased from 13 percent of all case screened pre-DLR to 25 percent post-DLR. Post-DLR drug court participants had longer criminal histories in general, and were more likely to have a history of drug arrests. Both the planned duration of treatment and use of residential treatment increased post-DLR. This may be a system response to the changing profile of drug court and DTAP participants post-DLR, with a shift towards arrestees with more extensive criminal histories possibly indicating a need for more intensive treatment. In addition, the findings on treatment outcomes found that treatment completion has increased slightly post-DLR; however, this finding is provisional as 28 percent of post-DLR drug court participants were still in treatment at the end of the data collection period.

Chapter 8. Qualitative Analysis of Implementation of Reform

The qualitative analysis of DLR implementation includes information gathered via stakeholder interviews and case file reviews. Section 1 describes the methodology of qualitative data collection and analyses, section 2 outlines findings from stakeholder interviews, and section 3 includes findings from review of case files from two indigent defense agencies– sampled from two periods, pre- and post-DLR.

Methods

Analysis of Stakeholder Perceptions and Case Records

Data

Qualitative data collection consisted of interviews with NYC legal practitioners (prosecutors, defense lawyers and judges), and review of files of felony drug cases.[61] The planned 18-month data collection period was extended by one month due to delays securing interviews, and gaining access to the redacted files of felony cases from before and after DLR.

The John Jay team conducted structured qualitative interviews from July 2011, when all necessary human subjects clearances were received, through February 2013. Legal professionals in NYC were selected for interviews using a structured convenience sampling method. The interviews explored the opinions of defense lawyers, prosecutors, and judges regarding DLR and its implementation.

Interviews were structured as a series of open-ended questions designed to track the procedural stages of a drug felony case from arrest to final resolution, with additional detailed questions about pre-existing diversion programs, any changes in the utilization of these programs since 2009, and uptake of the newly-created judicial diversion option (see Appendix J for the

[61] For the case file reviews, we only reviewed felony cases involving narcotics including opioids, commonly morphine, heroin and derivatives, and excluded marijuana cases.

interview questions and topics). All interviews were audio-recorded and participants were read a statement assuring them of anonymity and confidentiality. All interviews were conducted by Travis Wendel, JD/PhD, of the Department of Anthropology at John Jay College of Criminal Justice, who has been engaged in qualitative research about criminal justice, drugs, and public health in New York City since 1995.

Sample

The interviewer conducted one- to two-hour interviews with a convenience sample of 16 prosecutors, 16 defense attorneys, and three judges who deal with treatment diversion cases in Bronx County (15 interviews), Kings County (11 interviews), and New York County (9 interviews). The New York State Office of Court Administration nominated potential participants for the judicial interviews who were then contacted by the research team and invited to participate in interviews.

Analysis Strategy

The analysis of interview data applied grounded theory-based iterative analytic techniques to identify themes relating to DLR and their implementation in practice. The audio recordings of the structured practitioner interviews were segmented by question, reviewed by the study team, and coded using an audio-file tagging application. Selected audio segments were transcribed for inclusion in this report.

Extensive quotations from the interviews are included below, including areas where interviewees expressed divergent views. This strategy reveals the diversity of perceptions regarding the practical significance of DLR in each of the three counties where the research team conducted interviews.

Case File Analysis

Data

The John Jay team reviewed all case files that met specified selection criteria from two indigent defense agencies (one in Bronx County and one in Kings County) to examine the nature of the cases, defendants, and case processing patterns pre- and post-DLR. Cases that were more likely to receive custodial sentences were included by selecting cases that were open for at least six months.[62] A second reason for restricting the review to cases open for at least six months was to avoid selecting files that contained very little information to review. We also did not review cases that were dismissed pre-indictment, cases with charges that were reduced pre-indictment, or cases where the defendant pled to a misdemeanor pre-indictment. Therefore, the sample only included cases that proceeded for at least six months as felonies.

Case file analysis inclusion criteria:

- At least one prior felony conviction
- Indicted on the following B Felony offenses:
    - §220.16 New York Penal Law ("Criminal possession of a controlled substance in the third degree", most often "possession of a narcotic substance with intent to sell") and
    - §220.39 New York Penal Law ("Criminal sale of a controlled substance in the third degree", usually "knowingly and unlawfully selling a narcotic drug") cases,
- With no record of convictions for violent offenses
- Where the case remained open for at least six months (the period within which the prosecution must indict on a felony)
- Where the defendant pled to a felony pre- or post-indictment, or was convicted at trial

[62] Based on data collected as part of this study, more than 80 percent of felony drug arrests that are disposed within six months of arrest are either dismissed or the charges are dropped to a misdemeanor, compared to 65 percent with these outcomes for cases that are still pending six months after arrest.

- Included cases were disposed during:
    - January through June 2008 (pre-DLR)
    - July through December 2010 (post-DLR)

We confined the analysis to cases handled by the Bronx County and Kings County courts, as these two counties represent the majority of felony drug arrests in NYC: 33 percent and 27 respectively (see Table G-1 in Appendix G). The procedures for case file retrieval varied between the two counties because of differences in the two indigent criminal defense organizations' filling systems.

At the Bronx County defense organization, staff was able to perform computer file searches based on charge and outcome, but it was not possible to determine whether the defendant was a prior felon, or whether the defendant had a prior history of violent felony offenses using the agency's computerized data system. Therefore, several hundred case files were reviewed by study staff to select those that met selection criteria. A total of 42 Bronx County cases were ultimately selected, including 24 pre-DLR cases and 18 post-DLR cases.

In Kings County, the process for gathering the case files for review was considerably more labor-intensive. The Kings County indigent defense agency was unable to perform computer searches on the study criteria and sought cooperation from the Kings County DA's office; they too were unable to perform computer searches on the study criteria. Files were not stored as computer images; approximately 60-75 archival storage boxes had to be requisitioned from a warehouse. Study staff then reviewed each potentially eligible case file. A total of 27 cases met selection criteria in Kings County; 15 pre-DLR cases and 12 post-DLR cases.

The files included in the review do not represent all the cases meeting study criteria for these time periods in the Bronx and Kings County, or even all the indigent criminal defense

cases meeting those criteria. Defendants in both counties were represented by other indigent defense agencies that worked different arraignment days, some were represented by court-appointed attorneys[63], and still others were non-indigent offenders represented by private counsel.

All case files were redacted by research staff and the two criminal defense agencies to remove attorney work-product, privileged material and other items that might enable identification of the defendants.

Analysis Strategy

Case files were reviewed, coded for defendant demographics (race/ethnicity, gender, education); arrest type ("observation sale", "hand-to-hand sale" (aka "buy and bust") "stop and frisk", auto stop, other arrest); criminal history[64]; procedural history of the instant case; and case outcome (e.g. the case was diverted, defendant was incarcerated). Any unusual features of each case were also noted (See Appendix K for the case file coding instrument).

Qualitative interview results by interview topic

This section presents qualitative findings from interviews with judges, prosecutors and defense attorneys. The responses of interviewees are analyzed by the following typical stages of the legal process for such cases:

A. Investigation and arrest
    1) Types of cases
    2) Defendants
B. Court procedures, pleas, and adjudication
    1) Structures, policies, and practices of drug prosecutions by borough

[63] When co-defendants have potentially opposing interests, they cannot be represented by the same defense agency.
[64] All defendants had prior felonies, no defendants had prior violent felonies, but there was variation in the often long prior felony and misdemeanor arrest histories of defendants (e.g. one 2008 defendant's first drug arrest was for marijuana possession in 1964).

2) Charging patterns
3) Use of Bail/Release on own recognizance (ROR)[65]
4) Grand jury and practice prior to indictment
5) Trials

C. Diversion decision-making in the courts
1) Changes in utilization of pre-existing programs
2) Structure of judicial diversion
3) How often do judges divert cases over DA objections?
4) Diversion: who gets diversion?

D. Diversion to drug treatment: processes and outcomes
1) Diversion completion time and completion rates
2) Types of treatment programs: "Inpatient" versus "outpatient treatment"
3) Treatment monitoring
4) What happens on completion of diversion treatment?

Investigation and arrest

Types of cases

Most interview participants (both prosecutors and defense counsel) appeared to believe that there had been little change in how drug arrests are made or how felony drug cases are investigated since DLR, and that any changes were not a result of DLR *per se*, but rather might be related to changes in NYPD arrest and charging practices. However, one ADA said "the way that the cases are investigated, from a PD [police department] point of view, hasn't changed at all since the law has changed." *Kings County ADA.*

> **The NYPD is no different, they'll go out and make their buys regardless [of what the law says].** ***Bronx ADA***

> **As far as I know, we have no control over what the police are doing. They do what they do, they bring it to us and we triage it.** ***New York County ADA***

> **No, not at all—I mean, the methods by which the police department go out and investigate cases and work up cases are methods that have been**

[65] Under ROR, defendants released on own recognizance without posting bail.

> **proven to work in the past, and, um, from what I can tell, and again, I don't speak to police officers on a daily basis, but I handle their paper work on a daily basis, in terms of the new cases that come in, and the way that the cases are investigated, from a PD [police department] point of view, [they] haven't changed at all since the law has changed.** ***Kings County ADA***

Other interviewees noted that other factors that are largely unrelated to the sentencing reform impacted policing practice.

> **I think that the police department does, over time, change their enforcement methods… and by enforcement methods I mean how they deploy their resources…** ***Kings County ADA***

> **[As to arrests being down in Bronx County:] I don't think it has anything to do with the sentencing. I think it has to do with changes in the focus of the NYPD and other things that have happened via Bronx County D.A.'s office…there was recently the ticket-fixing thing [a major scandal involving the indictment of numerous Bronx police officers by Bronx County DA] and a lot of [police] were very hesitant to be out on the street and interacting.** ***Bronx ADA***

Defendants

Both prosecutors and defense counsel largely agreed that there has been little change in the characteristics and case circumstances of defendants facing felony drug charges since DLR. However, several interviewees mentioned that there had been an increase in the number of felony drug "pill cases" involving diverted prescription opioids such as Oxycontin.

> **There's been a large influx of oxycodone type cases. People that are like selling oxycodone on the street. Pain killers—that's a big problem right now… It's problematic because there's been like an explosion of that. Oxycodone can be a lot easier to obtain. It's very easy for a lot of these people to get it because they can go into a doctor's office—and there's a lot of this doctor shopping.** ***Kings County ADA***

> **We have more of the ecstasy, more of the [prescription opioid] pills…not fewer ["traditional" narcotics cases]… just more in addition.** ***Bronx ADA***

One Kings County practitioner active in a diversion/treatment court noted that, as a result of prescription opioid abuse cases becoming more frequent, younger felony narcotics defendants

"like under 40" were becoming more common, and that "[we're] seeing young women, for the first time in years", as well as a few white defendants. This observation is supported by recent increases in prescription opioid related drug overdoses and treatment admissions (both voluntary and originating from criminal justice referrals) among this demographic. Indeed, over the last few years, the largely white working class population of Staten Island has seen the sharpest increases in opiate overdoses among the residents of the five boroughs of NYC.

Both prosecutors and defense counsel noted an overall decline in the number of felony drug cases in NYC, an observation that is supported by the quantitative findings from this study (see Figure 6-1 on page 36). This decline may be the result of a number of phenomena that are beyond the control of the courts, including, a steady reduction in the numbers of narcotics officers and detectives assigned by the NYPD to drug enforcement[66], the two-decade increase in the number of marijuana arrests (as opposed to narcotic cases) and related changes in NYC drug markets.[67]

Court procedures, pleas and adjudication

In the following section, we discuss how DLR has affected the movement of cases through the courts. A combination of changes in court procedures and the range of options available for case resolution have affected the dispositional outcomes for felony drug cases.

[66] In 1999, there were 2,955 NYPD detectives assigned to narcotics duty, compared to 1,156 in 2011 with additional undercover non-detective officers not included in those figures (Goldstein, 2013). Increasing numbers of marijuana arrests made by these units over recent years may leave less time and resources for felony narcotics arrests.

[67] Another factor affecting arrests has been the shifting tactics and changing organization of illegal drug markets in NYC since the late 1990s (Curtis and Wendel, 2000, 2007; Curtis, et al., 2001; Wendel and Curtis, 2000) including the shift from fixed-location sales to delivery/mobile sales (facilitated by first beepers' and then cellphones' mass-market penetration and availability) that accompanied the gentrification of many NYC communities long known for open-air and indoor public drug markets (Curtis, 1998, 2003, Curtis and Wendel, 2000, 2007; Curtis, et al., 2001, Wendel and Curtis, 2000). The retail cocaine market, for example, has shifted almost entirely to a cellphone-based delivery market that, crucially for our purposes, takes place almost entirely in evening, night and weekend hours when few narcotics units are active (Curtis and Wendel 2007). Retail heroin markets have also shifted from street sales to delivery-based sales, as markets have shifted away from once abandoned buildings (Curtis & Wendel, 2007).

These factors must also be seen in the context of the high volume of cases handled by NYC courts and the need to handle cases rapidly.

Varying structures, policies, and practices of drug prosecutions in Bronx County, Kings County and New York County

The flow of felony drug cases through the system is different in each of the three boroughs where the majority of NYC drug arrests occurred over the study period and where qualitative data collection took place (Kings County, Bronx County, and New York County). Procedures for identifying, assessing and adjudicating cases eligible for diversion are different in each of the three District Attorney's offices and this has a bearing on the number and type of cases that are diverted to treatment as an ATI – as evidenced in the quantitative component of this study. The following descriptions reflect prosecution practices during the data collection period of 2010-2012. It is possible that these procedures may have changed since that time; in particular, the election of a new DA in Kings County may have resulted in significant changes.

Bronx County: All drug cases, including major felony cases, routine street felony arrest cases, and misdemeanor cases, were handled by a specialized Narcotics Bureau.

Kings County: The Kings County District Attorneys' office was organized primarily around five geographic "color zone bureaus" (Grey, Blue, Red, Orange and Green). Each zone handled all criminal cases arising within a specified geographical area, unless the case fell under the remit of one of the specialized units handling particular categories of cases, such as sex crimes and domestic violence, and, of particular relevance to the current analysis, "Major Narcotics" cases. The Major Narcotics Bureau handled large-scale or long-term cases against entrenched drug distributors. These cases are very different from the routine daily street arrests

that make up the vast majority of felony narcotics cases handled by the ADAs that took cases in each of the color zones. If a case was diverted or referred for diversion, the file was handed off to a unit specialized in handling diverted cases and the "color zone" ADA no longer handled the case in court.

New York County: The New York County (Manhattan) District Attorney's office is organized around six "Trial Bureaus" that are assigned cases based on the arraignment day and maintain "vertical representation" thereafter: the same attorney will normally handle a case from start to finish. If, however, a case is diverted, responsibility for that case passes from the "Trial Bureau" ADA to one of three ADAs who work in a "Special Diversion Bureau."

Special Narcotics Prosecutor: The SNP was created by the New York State legislature in 1971. The SNP's jurisdiction is city-wide, encompassing all five boroughs of NYC for cases involving heroin and other opiate and opioid drugs, cocaine (including crack) and several other less-often-prosecuted substances that fall under §220 *New York Penal Law*, "Controlled Substances Offenses": as a Kings County ADA explained, "It has to be a penal law 220 violation—so if it's like a marijuana operation, Special Narcotics can't be involved with that, because it's not a 220" (criminal offenses involving cannabis fall under §221 *New York Penal Law*, "Offenses Involving Marihuana"). Some of their cases originate from investigations undertaken by the SNP in isolation or in conjunction with local, state and Federal law enforcement agencies. The SNP has a staff of 200 attorneys, investigators, and support staff. According to the SNP webpage,

> **Cases are brought to SNP by federal, state and local law enforcement agencies, including the Drug Enforcement Administration; New York Drug Enforcement Task Force; the U.S. Postal Service; the New York City Police Department's Organized Crime Control Bureau, Patrol Bureau and Organized Crime Investigation Division; New York State Police; Port**

Authority Police; and the office's Investigators Division.
(http://www.nyc.gov/html/snp/html/about/about.shtml)

SNP cases are automatically assigned to dedicated court parts[68] in New York County that are staffed by judges who hear only SNP cases; the office also has its own dedicated diversion program, the Manhattan Treatment Court, that existed prior to the 2009 DLR.

Both prosecutors and defense counsel said they could see little that distinguished most SNP cases from any other routine narcotics cases. The clearest explanation of the SNP's case-finding mechanisms came from an ADA[69]:

> **A lot of times [the DAs office where the case is filed] is a function of the police unit who's working it, you know, the prosecutor's office they're working with. Sometimes they work with one office as opposed to another. It depends, you know. One office may have money committed into a certain area, you know, and one prosecutors' office may be committing resources to the investigation as well—in terms of investigators, buy money. Police officers have developed rapports with certain prosecutors in one office versus another.**

Charging patterns

Most of the legal professionals interviewed for this study agreed that there had been little change in the charges filed by prosecutors in felony narcotics cases as a result of DLR. In general, the interviewees noted that the same fact-pattern is likely to lead to the same charges pre-and post-DLR. Interviewees mentioned that charges are largely based on the type of arrest, and the weight of drugs involved across all three counties where we conducted interviews. The 2009 DLR did not change the weight limits related to different classes of drug offenses, unlike the earlier reforms that came into effect in 2005.

Bail/"Release On [One's Own] Recognizance ('ROR')"

[68] A court "part" is a specialized court of limited jurisdiction hearing a specific category of cases, such as cases on for initial arraignment, cases on for trial, felony narcotics cases, prostitution cases, or gun possession cases (all these exist in NYC courts). In practical terms, a court "part" is a specific courtroom with a specific assigned judge, staff, and case calendar.

[69] The ADA's County is not specified here as the interviewee requested as a way to protect his/her identification.

One of the most important inflection points in any criminal case is the decision to hold the defendant in custody while awaiting trial (an "in" case), or to release him/her pending trial (an "out" case). The effects of this decision on the course of the case and the defendant's life are hard to overstate. An "out" defendant can enter a drug program while awaiting trial, get a job, or enroll in school, all factors that may influence decision making about a case by prosecutors and judges. All these opportunities are denied to an "in" defendant. Defendants incarcerated awaiting trial may lose employment, fall behind in school, or experience a weakening of family and social support, and are unable to support other family members while they are incarcerated. Additionally, an "in" defendant is more likely to accept any prosecution offer in order to be released from jail:

> **As you know, it becomes much easier to get the defendants to agree to certain things if they're in jail. As a perfect example—if you have someone that's "in" on bail [that they are unable to post] and they want to be assessed for drug treatment, and they've been assessed, and they're deemed eligible, and [if] there's a recommendation for an outpatient program… Yeah—that person is almost certainly going to plead guilty, because they're gonna get ROR'd *that day* to participate in an outpatient program. *Kings County ADA***

Most interviewees agreed that defendants are now somewhat more likely to make bail or to be "ROR'ed" ("released on recognizance", i.e., without posting bail) in the post-DLR period, presumably reflecting judges' belief that defendants pose lower flight risks given the lower sentences now available and the possibility that the case will be diverted and thus dismissed:

> **My belief is that [bail] is lower as a result of DLR, based on sitting on arraignments and what I hear from other judges who do. *Kings County Judge***

> **The people that are clearly drug addicts…I'm seeing lower bail. The court seems to recognize the difference between people that are doing it to make a living and those that are doing it to support a habit. *New York County ADA***

> **It has changed. I think they let them out more often than they would because they know there's an increased likelihood of them getting diversion or outpatient treatment. *Bronx ADA***

I know from personal experience. Having done arraignments, I am able to see what the judges are granting and Brooklyn has a very—the reputation of the Brooklyn judiciary is that the bail is on the low side…they've gone down…any practitioner in Brooklyn is going to tell you that they're low. ***Kings County ADA***

It's either very low or no bail at all. The drug laws have changed their feelings about whether to set bail or not. But I also think they don't take them as seriously as they do other crimes. ***Bronx ADA***

They are more likely to be released from arraignments than in the past. ***Bronx ADA***

Some prosecutors attributed this to inexperienced judges:

If they're pathetically looking like an addict in front of them, I can see where a judge is going to release that person even though there's a B Felony – I don't know if it's a function of judges being appointed without any criminal law background, but back when I had cases, it was unheard of that an A-1 Felony or an A-2 Felony would get anything less than remand [to incarceration pending trial], high bail, and an examination of surety[70]. You have some judges now that are trying cases in arraignment and are R.O.R.-ing those defendants. ***ADA***

We've also had an influx of judges who have come from civil backgrounds or non-criminal backgrounds who kind of don't get the process…who set a $1500 bail on an A-1 Felony because its drugs. If it was homicide, the person would be remanded…even though they're the same level felony. ***ADA***

Others disagreed:

I sit in arraignments a portion of the year also. So I see all cases coming into the system and so I'm telling you based on experience, based on what I have observed, I have seen no change in bail, I have seen no change in arrest patterns. ***Kings County Judge***

Grand jury & practice prior to indictment

One of the key deadlines in a criminal case is "one eighty-eighty day." For defendants that are detained pending trial, the prosecution has roughly 6 days from the date of arrest to indict or be ready for a preliminary hearing (the latter a right the defendant can waive), as required by §180.80 New York Criminal Procedure Law.

[70] 'Examination of surety' refers to the requirement that defendants demonstrate that any funds used to pay bail come from legitimate sources.

SCIs are commonly used if there is a deal in place (or likely) for diversion of the case:

> **I think the DA's making more offers, more offers early, so they [defendants] take the SCI.** ***Kings County Judge***

The expansion of post-indictment/SCI diversion options means that defendants who decline a pre-indictment treatment offer may still be assessed for treatment later in their case- they get "another crack at the apple" (a phrase used by several interviewees in this context). As a result, defense attorneys may be more likely to advise their clients to decline pre-indictment offers in the hope that the charges may be ultimately reduced, that the case will be dismissed, or that the prosecution will exceed statutorily-defined time limits for proceeding with the case.[71] Interviewees commented on this phenomenon:

> **50% of all B Felonies are dismissed or reduced before indictment[72].** ***Bronx defense***

> **Since 2009, more drug cases are dismissed or proceed as misdemeanors, 10-15% of all my cases.** ***Kings County defense***

> **[Post-DLR], they're more likely to get a dismissal.** ***Bronx ADA***

> **One thing I think has happened is that the jail alternatives have gotten better. The person's charged with a B felony, but the DA will offer them to plead to a D, more so than pre-DLR. So a D prior nonviolent, 1 1/2 to 4, that's a big range. Pre-DLR, I may have been seeing two and a half to 5, 3 to 6, but I'm not seeing that anymore; I'm seeing what I would consider much fairer alternatives.** ***Kings County Judge***

Trials

Trials are rare in the New York City courts; over 90% of cases are resolved on a plea (or dismissed). No interview participants had participated in a tried drug case since DLR.

[71] New York State's "Speedy Trial Law", §30.30 *New York Criminal Procedure Law* stipulates that prosecutors have six months from the date of arraignment for prosecutors to prepare felony cases.
[72] According to quantitative analysis included in Chapter 7 of this report, 79% of B Felony drug cases in the pre-DLR sample and 74% of matched cases in the post-DLR sample citywide are not indicted.

Diversion decision-making in the courts

Changes in utilization of pre-existing programs

The qualitative interviews revealed a range of perspectives regarding implementation of DLR by prosecutors and defense attorneys. There were also notable county-level differences in interviewees' views of the impact that the judicial diversion component of DLR has had on the use of pre-existing treatment based ATI programs. According to interviews with prosecutors: the Bronx DA's office has enthusiastically embraced DLR and this has increased diversion; New York County has expanded from essentially no diversion of felony cases to some availability of treatment-based ATIs; the SNP had a small diversion program pre-DLR; and Kings County prosecutors believed that they were already identifying all cases that could be diverted without jeopardizing public safety pre-DLR and that little has changed. Some of these views are supported by the quantitative analysis conducted for the current study, whereas other perspectives are not supported by our analysis. For example, Kings County experienced a 71 percent increase in diversion via drug court and DTAP over the period covered by the study.[73]

The views of defense attorneys interviewed for this study in Kings and Bronx Counties largely mirrored the perspective of their ADA peers. Kings County defense counsel agreed that little has changed, but they also believed there was potential for diversion efforts to be expanded without jeopardizing public safety; Bronx defense counsel generally agreed with Bronx ADA's self-characterization "we put more in treatment and more in prison than anyone else, we're fair." The camaraderie, mutual respect and commitment to problem-solving approaches (within an adversarial context) across the prosecution/defense divide in Bronx County was one of the most

[73] Over the same period, the overall number of drug felony arrests in Kings County decreased by 21 percent, which may have masked the proportional increase in rates of diversion.

striking characteristics of the interviews as a whole, and a notable contrast to the prosecution/defense relationships in Kings County and New York County:

> **Manhattan is the center of the world, the Manhattan DA's the king of the world. Our work as an indigent defense lawyer is harder here in Manhattan than it is in the Bronx or Brooklyn or Staten Island, because we're dealing with stronger enemies, more arrogant enemies, more condescending enemies.** ***New York County defense***

Interviewees reported that some cases that were formerly diverted by DA-controlled programs which still exist are now more difficult to divert post-DLR:

> **This law gives judges the power but they're not using their discretion the law gave them, they won't divert cases that *I* [as a prosecutor] would, like a case with some old violence a little less than 10 years ago.** ***Bronx ADA***

> **Some non-violent non-drug felony cases that used to get diverted in Kings County aren't getting diverted now because they're not among the statutory specified offenses for diversion...the issue is did the legislature mean the list to be exhaustive or exemplary? The crimes they didn't specify, we call them 'diversion- neutral' crimes.** ***Kings County Judge***

> **Subsequent to DLR we were getting more cases, not a lot more cases, Post-indictment cases article 216 cases you call them for obvious reasons. We were getting a new stream of cases. Before DLR, I was considering cases that did involve violence, consistent with the consent of the people; post-DLR, the 216 diversion cases I was seeing were for the most part non-violent.** ***Kings County Judge***

A treatment court Judge explained the process for identifying cases that are eligible for diversion in Kings County:

> **At the time of arraignment, the clerk reviews the paperwork and sees are they paper eligible? There's no prior conviction for arson, there's no prior conviction for a sex offense, it's not a violent charge on its face, and there's no violent felony in the recent past. As a result, it'll get stamped to the treatment court, and tracked to the treatment court, depending on the [varying] treatment court eligibility- we have three treatment courts in Brooklyn: Misdemeanor Treatment Court, the STEP court, the Brooklyn Treatment Court they all have different criteria.**
>
> **So assuming the person's paper eligible, it will get tracked to us as a matter of policy. Judges are of course empowered to decide where a case is adjourned to, but it is the overall policy of the Kings County courts to track them to the treatment parts if they are so stamped. That's a 24-hour**

> **turnaround time from arraignment to the courtroom, assuming it's a weekday. During that window, a DA will look at the case and determine whether or not an offer is appropriate- there may be some reason other than a categorical disqualifier that treatment may not be offered. The treatment door is wide open if someone is eligible and wants treatment, it's going to be offered, absent exceptional circumstances.** ***Kings County Judge***

Kings County also has a mental health court part that supervises treatment and diversion for defendants with "dual diagnosis": mental health and substance abuse issues. These "MICA patients" (an acronym for "mentally ill chemical abusers") can be difficult to place in treatment and often require specialized treatment to deal with mental health issues that may have resulted in self-medication with illicit drugs. Many defense lawyers mentioned that a large number of their clients qualified as "MICA-lite"; a frequent participant in the Kings County mental health courts' diversion activities observed "In the treatment court, they've got MICA-lite, here it's more like MICA-*heavy*."

New York County defense counsel were universally scathing in their discussion of the pre-existing DTAP programs in New York County:

> **Morgenthau [the former New York County DA] never believed in diversion. He had one attorney in the office. You'd think that Vance [the current New York County DA], being theoretically more enlightened, would say "More treatment."** ***New York County defense***

> **These programs, they still exist but *now,* why would anyone ever do it? We don't *ever* submit ourselves to it [the pre-existing treatment court] anymore. They're dying out. It's either prison or diversion now and diversion is much better [than the prior programs]. You can try to appeal to a judge's common sense, you can say "He had a relapse; relapse is part of recovery."** ***New York County defense***

> **DTAP never wanted to screw up their statistics; they give a lot of second chances- you might get arrested and go to Rikers, and now you're not Phoenix House anymore, now you're in another program.** ***New York County defense***

> **DTAP drove us crazy with their arcane rules and totalitarian system.** ***New York County defense***

Structure of judicial diversion

In Bronx County, a series of new and re-organized Judicial Diversion court parts and diversion procedures were created post-DLR. Several interviewees in Bronx County, representing both defense and prosecution, echoed versions of the joke a Bronx defense lawyer made about procedures in the Bronx: "Well, the way it's happening *this* week…", reflecting a widespread perception of the changeable nature of how Bronx felony narcotics cases are dealt with by the courts in that county.

Three new Judicial Diversion court parts, the Manhattan Diversion Courts (MDC) were created in New York County post-DLR, handling judicial diversion cases from both Office of the District Attorney of New York County and SNP.

For a brief period in late 2009, OCA created a "Kings County Judicial Diversion Court" part, which heard a few cases. The part was closed in early 2010, for reasons that are not entirely clear, with post-indictment/SCI diverted cases channeled into pre-existing programs.[74] One interviewee attributed the lack of judicial diversion to the prevalence of treatment-based alternatives that pre-existed DLR:

> **There are so many drug treatment courts in Kings County [that] if a case is treatment eligible, it can be routed to one of the established courts. The only wrinkle is if the DA objects, if the court will order diversion over that objection on a finding that the treatment is appropriate, the judge can order treatment over the DA's objection. I think the diversion part [that existed briefly in fall 2009] was hearing those kinds of cases and in Kings County there are very, very, very few of those cases if a person is drug dependent that the DA's not consenting in nonviolent cases. *Kings County Judge***

[74] The quantitative analysis of DLR implementation\ found that two cases from the post-DLR matched felony drug arrest sample were diverted via this new mechanism (see page 80).

How often do judges divert cases over DA objections?

DLR permits judges to divert cases for treatment over the objection of prosecutors; interviewees differed as to how often this has in fact happened since it became a theoretical possibility:

> **Diversion over the DAs objection? It's not unheard-of, it's not rare, how common it is, I couldn't say. I don't know the percentage.** ***New York County defense***

> **It depends a lot on the judge, some judges, you say "Diversion", they say "Diversion, fine"; some judges give you an extremely hard time, probably because they're trying to protect DTAP. They refuse to send it to diversion. It depends more on the judge than the defendant.** ***New York County defense***

> **I think that there's two different levels of objections by the DAs. Sometimes they say "We object"; the judge says "I'm doing it anyway", and I feel like it's just that they're noting their objection for the record, and then there are times when the DA will get particularly involved, and say "Here's why I don't think this person should get it". Like there were multiple sales, or he had $10,000 on them at the time he was arrested. If they make a real objection and they have some sort of articulable reason, the judge will rarely divert; it rarely works in those cases [but] you could say that cases where they're objecting, the judge would've made a similar determination.** ***New York County defense***

> **How often are cases diverted over our objection? Never; I think [judges] think 'Why put your ass in a sling [diverting over DA objections]? You could end up on the cover of the** ***New York Post*****!' Now [if they divert over DA objections using their post-DLR discretion] it's** ***their*** **ass, not ours.** ***Bronx ADA***

> **How often do cases get diverted over our objection [in Bronx County]? Never, because we don't object!** ***Bronx ADA***

> **We're very, how shall we say, we're very liberal in Brooklyn in terms of who we take into the program. We don't limit ourselves to an individual who has only one prior offense in their background.** ***Kings County ADA***

> **In other parts of the city, I'm sure it made a big difference. In Brooklyn…I'm going to consent to drug treatment on most of the cases anyway. So it's never going to get to that stage where an attorney's going to have to ask for it over my objection.** ***Kings County ADA***

> **Since 2009, there have been at least 50 defendants I've allowed assessments over the Peoples' objection, you won't see this in the OCA records because of how they count things.** ***Kings County Judge***

Diversion: who gets diversion?

The NYS legislature intended to make diversion to treatment widely available, and enacted a statutory definition for treatment eligibility that has seldom been employed in NYC (see below). Instead, diversion to treatment is dependent on many factors that the state legislature may not have considered in enacting the 2009 DLR, including the personalities and folk-beliefs of prosecutors and judges, the particular histories of drug prosecutions in each of the counties of NYC, and the social relationships among legal practitioners who deal with drug cases in the city.

A diversion part judge observed that "there *is* no danger to public safety [caused by diverting felony narcotics defendants], this is a non-violent population." Prosecutors argued that a defendant who is employed, in school or stable housed may not be a "drug addict" "deserving" diversion, but rather a "recreational drug user" or a "'drug dealer' whose sales are motivated by economic gain and not addiction". These commonly used folk characterizations are notable in their departure from the statutory language and have implications for the number of people who received treatment as an alternative to incarceration. While legal professionals working in the courts explain that they leave the screening to trained professionals ("the letters after my name are JD, not MD"), they play a vital role in determining who is referred for initial screening.

Defense attorneys and prosecutors had differing perceptions of who is an "addict" and who is a "dealer":

> **One of the unfortunate side-effects of allowing the court to do it [divert cases to treatment] over our objections is that whenever you have a statute like this, which has the potential of keeping people charged with felonies…people, some of them are predicates, out of jail—you are going to have defendants that are going to try to game the system and claim that they are addicts when they're really not.**
>
> **I do review cases where there are going to be requests [for diversion]—because under the statute, they're eligible based upon their charges and prior record or lack of prior record—and I don't deem it an**

appropriate case. Just, based upon a criminal justice standpoint, the person strikes me as someone who is a dealer and I'll oppose it.

When the statute was first passed, I unfortunately saw a lot of them [diversion applications from arrestees who do not use drugs] because a lot of attorneys did it. But now it's starting to trickle down a little bit because … most of the [diversion] cases we deal with go before one judge in Brooklyn. And now, word is now getting out that she's not gonna take a case [for diversion] where a guy has got tons of packaging material [thought to be indicative of being a "dealer" engaged in for-profit sales]; she's just gonna find it an inappropriate case to take. Sometimes she'll have the people assessed…most of the time she won't. ***Kings County ADA***

I have never, ever, ever, ever, ***ever*** **had a case, and I bet I had a million of them, where the clinical workers came back and said "This guy is not a drug addict", not one single time since 1974.**

They [DAs] do have a paranoid delusion about being fooled by clients. They say, "Let's do a "queen for a day" [aka "special proffer of immunity": the client talks to the ADA with immunity from what is said being used in court]; my boss isn't comfortable with that [diversion]." I say "What does your boss know about it?" and I say, "What the [f---] is wrong with you people? He's a goddamned drug addict!" They're afraid they're going to be fooled and someone can get back out there and sell drugs. He's not a serial rapist that can go out there and rape ten more women! If he somehow beats the system and goes out there to sell more drugs, so what? If you're not out there selling drugs, someone else is going to be, someone else will take his spot, the drug addicts are going to buy their drugs anyway. What's the risk? I don't see it. As opposed to to saving somebody's life which is if he's a drug addict and gets cured, that's terrific. So why the extreme reticence, the extreme paranoia? ***New York County defense***

He had eleven bags of crack and the judge said to me, "Don't you think that's an issue of addiction?" I said, "I don't think that's an issue of addiction because most addicts can't hold onto ***one*****, let alone eleven."** ***Bronx ADA***

Nowadays it drives you f---ing nuts. I've got a client who is a dime-a-dozen drug dealer, I don't mean to demean my own cases, but they are regular corner drug dealer guys, out on the corner selling drugs, been using drugs for the last 20 years, his mother says he's a drug addict, his wife says he's a drug addict, all his cases involve drugs, he's a drug addict. They want to determine if he is really a drug addict and if he wants to go to a drug program because he wants to get rid of drugs, as opposed to just not going to jail. The DAs are totally paranoid about that: "I don't see any arrests for

220.03[75], so how do we know that he's a drug addict?" I feel like I should tell the client "Go get a few arrests for 220.03!" ***New York County defense***

We were told that NYC diversion gatekeepers (prosecutors and, rarely, judges) universally demand a positive screen for DSM-IV "substance dependence" and reject positive screens for "substance abuse" despite the legislature allowing diversion based on either diagnosis.[76]

Diversion to drug treatment: processes and outcomes

Diversion completion time and completion rates

A key element affecting defendants' interest in accepting diversion vs. jail or prison time is the fact that treatment may involve a longer time served under the control of the courts - albeit in drug treatment.

Before, they'd give 12-18 months out-patient [non-residential treatment] on a non-predicate felony case and 18-24 months in-patient on a predicate case.[77] Now it's 12 months up, with no maximum, for everyone. There aren't any more defendants getting treatment now, but it's become equalized between the predicates and the non-predicates. ***Bronx defense***

Initially, the defense bar wanted these finite periods of treatment, now they're OK with it [indeterminate treatment until performance goals are met] because of the benefits. ***Kings County Judge***

Treatment offers are all standardized. On a misdemeanor, it's an eight month treatment offer assuming compliance On a felony, first felony offender, it's a one-year mandate, assuming compliance, and the mandate can be extended if there's non-compliance. Noncompliance can be relapse, can be criminal behavior, can be not going to the treatment. On this second felony offender mandate, that's 15 to 24 months residential, followed by six months outpatient, on a one-year mandate, that person is in treatment for 18 months on average. On a DTAP mandate, that's the long term residential, the mandate itself is 2 1/2 years. The 2 1/2 years can take three years, four

[75] Misdemeanor narcotics possession charge common for street drug users; the reference is to §220.03 of the New York Penal Law, "Criminal possession of a controlled substance in the seventh degree".
[76] A "substance abuse" diagnosis is a much lower bar that most repeat arrestees who use drugs meet as "recurrent substance-related legal; problems…such as arrests…" for substance use related reasons within the last 12 months (DSM-IV) is sufficient to support the diagnosis.
[77] Interviewees frequently referred to residential treatment as "in-patient" treatment. Actual in-patient treatment requires diagnosis by a licensed medical professional.

years, five years, because of the employment requirement. ***Kings County Judge***

Both prosecutors and defense lawyers largely agreed that a defendant would have to "really want drug treatment" to accept diversion, as treatment mandates are both indeterminate, and longer than minimum sentences for first and predicate non-violent B felonies.

Clients reject treatment offers quite a bit. Some clients really want treatment and some realize there's a lot to it. A lot depends on what the jail alternative is. If it's five years imprisonment versus two years in a program, the choice is clear, but if it's a year in jail verses 18 to 24 months in a program, now the year in jail starts to sound a bit easier, plus in the program after 18 to 24 months maybe you won't graduate, maybe you'll get delayed, maybe end up going upstate [to state prison] ***anyway*****. Eight months on Rikers Island, which is what [the time actually served on a nominal one-year "city time" sentence of] a year is, is guaranteed and you know what you're gonna get.** ***New York County defense***

The treatment offer's rejected a lot on the misdemeanor level. On the felony level, it's another story. Where the jail alternative is higher and a felony conviction is much more prejudicial than a misdemeanor conviction, you're seeing a lot more buy-in. The offers get rejected a lot less percentagewise. You're absolutely right that for some felons the upstate exposure might be a wash compared to the treatment time, [for example] on a second B [felony].

So many of the second felony offenders who've done state time already are, or are on the path to being or becoming institutionalized, but a residential treatment program, as intensely supervised as it is, I think most will say is better than state prison. For the predicate felony, it's roughly a two and a half year treatment mandate and I don't know what that persons is going to get offered, if they're going to get offered a comparable period of state time. When you're in a residential treatment program, you can get passes to visit your family; you're much more accessible than when you're in state prison for your family to visit. You get vocational training; there's the possibility of employment while you're in the residential treatment program, so it can yield benefits that are better than state time. ***Kings County Judge***

It isn't an overwhelmingly large number of defendants that actually ***want*** **to go to the drug program. We tell them it's a minimum of 18 months in the program [but] almost no one finishes in 18 months, it could be two years, three years, four years.**

Rikers is very free, you do what you want to do- you want to stay in your cell, you stay in your cell. You don't want to play ball, you don't play ball. The ***program*****, on the other hand … Not an overwhelmingly large**

number of people who use drugs actually want to go to a drug program. ***New York County defense***

[T]here are other people who would rather just—it's incredible, there are certain people that are just destined to spend their lives wandering the halls of pens. They're just destined—I mean, some of these people are just so institutionalized … that 120 Schermerhorn Street, the criminal court building, is, like, almost another home to them. ***Kings County ADA***

One judge disagreed:

Defendants don't think like that [comparing sentence time to treatment time], they think, "This crazy judge is going to let me *beat this case*?" Also, if they complete treatment they are looking at a dismissal, not adding to their criminal record- that's huge. I don't know if defendants understand that, but I know their lawyers know that, and I'm sure they counsel their clients appropriately. ***Kings County Judge***

Treatment graduation criteria not related to cessation of drug use vary greatly from court to court and may include stable housing, steady employment, high school diploma or GED, maintaining a specified checking account balance for e.g. a six-month period:

You have to obtain employment on the books, and stable living before you can move to outpatient, and you have to remain working, and live stably while you're in the outpatient phase. That's only for the predicates, second felony offenders in DTAP. They have that requirement in place. In the other models other than DTAP, there is a vocational requirement and there is an educational requirement. You have to engage in either employment or vocational training, or go to school. ***Kings County Judge***

Some defense counsel suggested these requirements could be very onerous for clients to complete:

One of the requirements for graduation, you got to have a GED. I just heard about this case the other day. The guy is retarded- what do you mean get a GED? He's *retarded*! He'll never get a GED- he'll be in the program 40 years or whatever, he won't get a GED. Some judges will lean on them a bit to bend the rules. Usually, you have to have a place to live, you have to have a job, you have to have some money saved, you have to have a telephone working, a GED, and stop using drugs. I had a client who is in DTAP seven years looking for a job, seven years, she couldn't find a job because she's got felony convictions, or because she's a drug addict. ***New York County defense***

A judge active in treatment court for many years explained the rationale for these additional completion requirements[78]:

> **So much of what drives individuals to engage in the drug trade are economic pressures. And we want to ensure economic self-sufficiency, or at least working toward that, so that drug dealing is not an exclusive option in an individual's life. Education and vocational training employment are all parts of a holistic approach to recovery.**

The Judge admitted that these requirements could prove difficult for treatment participants to surmount:

> **The employment requirement, that can be tough, but if there's good faith on the defendants end, there's good faith on the courts end. I have a saying, but it's really true: "This is a model for success, not a trap for failure". A lot depends on the individual's personality**

Methadone patients are often required to cease their use of this medication as a requirement of graduation from DTAP or drug court:

> **Buprenorphine use wouldn't be a bar to treatment graduation but methadone usually is, for social reasons, methadone clinics are full of drug users, people who don't want to get clean and who drink and abuse cocaine.** ***Kings County Judge***

Most interviewees said they were uncertain how many defendants successfully completed treatment, since they were only familiar with the individual cases they had worked on:

> **My impression is that treatment success rates have probably gone up since 2009, it used to be about 52% on felonies and 40% on misdemeanors.**[79] ***Bronx defense***

Types of treatment programs: Residential "in-patient" versus "out-patient" treatment

Many of the court professionals interviewed for this study referred to residential rehabilitation services as "in-patient" treatment and non-residential services as "out-patient"

[78] County of jurisdiction is not specified here to protect the interviewee's identity (on request).
[79] Quantitative analysis of cases disposed to drug court in Bronx County found a 60% treatment graduation in 2008 and a 72% graduation rate in 2010.

treatment. Actual "in-patient" treatment (in a health facility, under medical supervision) differs from residential services, which are typically based in non-medical, group settings.

Interviewees reported that the majority of felony drug cases diverted for treatment are given an initial residential treatment period living in a "therapeutic community" environment, with a follow-up period of court-monitored outpatient treatment. An additional study conducted by Vera and John Jay College, based on interviews with personnel in several of the NY treatment programs (both residential and outpatient) which serve mandated ATI patients, found that there was very little interaction between the programs and the courts at time of initial referral and even less ongoing contact once the individual was mandated to a particular program (Riggs, Parsons, Wei, & Drucker, 2014).

> **Everyone has a voice, the district attorney may have a point of view, an opinion from the criminal justice point of view that they want the residential program for the individual, that they do not want him to be in the community, that they want a highly structured environment for this individual, where they know they are comfortable. The defendant may try to argue, "I'm a working man, I have a family to support", there are compelling circumstances that he should stay in the community. The treatment staff may argue "There's a long-standing dependence and opiate addiction; he can't stop, he really needs a highly structured environment" or "Judge, he's got stable ties in the community, he's working, he's going to school, he's marijuana dependent and we can work around this problem in a nonresidential treatment situation" and the court considers all the views and ultimately has the final decision.** ***Kings County Judge***

> **The defense lawyers want their own treatment programs, then they want "out-patient" [if they don't succeed in that]. .... We prefer "in-patient"; first because we won't allow the defendant a second crack at the apple, if they screw up in out-patient, we won't give in-patient after that, they're going away.** ***Bronx ADA***

> **In the past [pre-DLR], with a different judge, a lot [of felony narcotics cases] got "out-patient". Now it's more tailored to individual cases who gets it. But that's not because of [DLR], it's because the [felony diversion court] judge changed at the same time the law changed.** ***Bronx ADA***

Some defendants may require specialized treatment placement because of their circumstances or other issues in their lives:

There are not enough [treatment] programs for women with kids, they're f---ed up on drugs and they're taking your kids away, it's tough. There should be a women's drug court. ***Bronx ADA***

Treatment monitoring

Treatment diversion cases are closely supervised by both treatment programs and the courts and participants have frequent appointments to monitor treatment compliance with both courts and programs. Defendants are also typically subject to urine testing by both courts and treatment programs.

There's case monitoring at the treatment program level, at the Court level also, so there's two levels of monitoring. They're going to be drug tested two times a week at their program, they are going to be drug tested one time a week when they see their case manager, at the courthouse they'll be drug tested on every court date, so there's a minimum of 2 to 3 drug tests every week. The case manager is monitoring their attendance at treatment, the Department Of Education liaison is monitoring their attendance at school, so on the court date, we're going to know if they've been going to class, if they've been going to their program. From the toxicologies the court is going to know whether there's been relapse. It's really intensely supervised. If the person's in a residential program, it's simpler because there's only ***one*** **place the person's supposed to be, and if they're not there, the court is notified, and typically a warrant is issued at that juncture, because they were mandated to a residential program.** ***Kings County Judge***

There has got to be a hammer… I do not get off on putting people in prison for no reason but if you f--- up [in treatment], I have no mercy. ***Bronx ADA***

The treatment court in Kings County is post-plea- after the plea is taken, it is no longer voluntary you've got to do it, or face the jail alternative set down at the time of the plea. ***Kings County Judge***

[Post-DLR], we're not involved in supervision after diversion, but I have no problem with that because the judge will do the right thing. ***Bronx ADA***

The drug programs are ***very*** **rigid; they have a lot of rules. There are plenty of clients who're better off doing a couple years in Coxsackie or whatever where they can do whatever the hell they want to. They're comparatively free not to have to do what they** ***don't*** **want to do, not have to go to group therapy, not have to talk about their feelings or whatever, do your time and get out instead of having to spend two or three years in Daytop or Phoenix House or whatever.** ***New York County defense***

Interviewees agreed that the courts were much more tolerant of participants who used drugs than of those who were re-arrested while in a mandated treatment program.

> **I give a lot of second chances, more than one second chance. You have to, what's the point? It's not like once the person takes the plea a lifetime of drug dependency; a lifetime of unaccountability is going to change. It's not Aladdin's lamp, it's not a magical process, and to expect a person to make such a radical change in such a short period of time is not realistic. In the case of a new arrest, a violent arrest, a case involving a victim, there's a good chance the treatment will not be reoffered; the jail alternative will be imposed. If it's a drug sale, well, the DA is going to have to evaluate that. In an extreme situation it may be appropriate to continue treatment in less serious arrests, not involving a victim, there's a good chance the treatment is going to be offered again, but the clock is going to start over.** ***Kings County Judge***

> **I give a lot of "second chances" to a defendant, maybe three or four. If you give a dirty urine or are missing appointments [for "out-patient" non-residential treatment or court staff monitoring of treatment progress], you start over in your treatment mandate, you might be five months into a period, now you're back at month one. If you get re-arrested, as long as it's not another narcotics sale or a gun case, I'm going to give you a second or third, maybe a fourth chance, but you're going to start over, completing that phase of treatment.** ***Kings County Judge***

> **People that are relapsing or testing positive from relapses get the most second, third and fourth chances, because relapse is part of the whole process. So someone who is relapsing, but otherwise making an attempt, is gonna get a lot of compassion and understanding from the judge and the treatment staff, [more] than someone that's just blowing the program off and not following the rules.** ***Kings County ADA***

What happens on completion of diversion treatment?

Typically on completion of diversion treatment requirements, cases are dismissed:

> **In Bronx County, we give you your felony back! [the felony charge is dismissed] They get their felony back, but we were doing that anyway [before DLR].** ***Bronx ADA***

> **If for some crazy reason, like you had a job at a bank, or were joining the military, having a felony would screw up [the defendant], we would dismiss at the end of treatment [pre-DLR].** ***Bronx ADA***

Some cases are sealed, in the sense that the records are not available to prospective employers; however, internal records of district attorney's offices, defense law firms and

treatment programs may identify re-arrested treatment participants. There is some variation in sealing practices among the different boroughs. Some cases are "conditionally" sealed, meaning that the records remain sealed as long as the person is not re-arrested, but if this occurs, the records are automatically unsealed:

> **On completion of treatment, misdemeanors, dismissed and sealed; felonies in the STEP program, dismissed and sealed; DTAP, dismissed, but not sealed, and that's explicit; that's part of the upfront contract**
> **The cases that are sealed, are expunged from the record; as far as I know, no one can see them. Of course, it's the case that prosecutors keep internal records, and the treatment courts and programs keep internal records. They need to know if an individual has been before them before, or how many felonies are going to get dismissed? And the institutional defenders want to know if they've represented the person before. So there has to be a mechanism.** ***Kings County Judge***

Another provision of the 2009 DLR legislation allows judges to seal not only the instant case but also up to 3 prior drug or marijuana misdemeanor convictions, in the court's judgment, from the defendants history of substance abuse or dependence.

Case file analysis results

The John Jay team reviewed files relating to predicate B Felony drug cases that met a set of predefined inclusion criteria (n= 69).[80] Case files were obtained from indigent criminal defense law firms in Kings and Bronx Counties. Researchers extracted data relating to charges, indictment, court motions, court orders, and treatment evaluation. This section describes defendant characteristics, case characteristics, and case outcomes.

Case file documents

The case file review found that the overwhelming majority of those arrested on felony narcotics charges in both the pre- and post-DLR periods were middle aged men of color, with little education, and long arrest histories. There were no significant differences in characteristics

[80] See introduction to this chapter (Page 100) for a discussion of the selection criteria used.

of defendants or their case outcomes between the pre- and post-DLR periods, although the analysis was limited by the small number of cases that met the study's inclusion criteria.

Defendant characteristics, pre-and post-DLR

There was little change observable in demographic and other recorded characteristics of Bronx and Kings County defendants in the pre- and post-DLR periods- the same middle-aged, predominantly male, poorly-educated minority drug users with frequent previous arrests were being arrested and charged with B Felony narcotics offenses in both periods. Almost all Bronx arrestees in both periods were non-White; the majority were black (16 of 24 pre-DLR, 10 of 18 post-DLR) and almost all of the remainder were Hispanic. Most defendants were male (17 of 24 pre-DLR, 13 of 18 post-DLR) aged 36 years or older (14 of 24 pre-DLR, 10 of 18 post-DLR). Most arrestees had not completed high school, and had many prior arrests.

Similarly, almost all Kings County arrestees in both periods were non-White; majorities were black (8 of 15 pre-DLR, 9 of 12 post-DLR), almost all of the remainder were Hispanic. Most were male (15 of 15 pre-DLR, 9 of 12 post-DLR). Large majorities were 36 or older in both periods (11 of 15 pre-DLR, 10 of 12 post-DLR). Most arrestees had not completed high school, and had many prior arrests.

Case outcomes, pre- and post-DLR

In this relatively small sample of cases, there is little change observable in case outcomes for Bronx and Kings defendants that might be attributed to DLR. No cases were diverted through the Article 216 DLR procedure, i.e. judicial diversion, in either borough. All cases diverted in both the pre-DLR and post-DLR periods were diverted with prosecutors' consent.

Table 8-1. Case Outcomes for Bronx Arrestees, Pre- and Post-DLR

Case outcome		Bronx cases, pre-DLR (*n*=24*)	Bronx cases, post-DLR (*n*=18)
Diversion to treatment	By DA	13[a]	7[a]
	By judge	0	0
Incarceration, state prison [b]		5	8
Incarceration, "city time"		1	2
Plead to misdemeanor		5	2
Dismissal		0	1
Other outcome		0	0

[a] case missing data, each of pre-DLR & post-DLR outcomes.

[b] cases incarcerated after treatment compliance failure, pre-DLR set; 3 cases incarcerated after treatment compliance failure, post-DLR set.

A greater number of Bronx defendants were incarcerated in state prison in the post-DLR set, while the rate of diversion to treatment declined somewhat (Table 8-1). No cases were diverted using the new judicial diversion procedures created by DLR; all were diverted with the consent of the Bronx County DA. Post-DLR, more cases were resolved with non-felony outcomes (sentenced to serve time in the NYC jail, also known as "city time," misdemeanor plea with no incarceration, or dismissal)

Table 8-2. Case Outcomes for Kings County Arrestees, Pre- and Post-DLR

Case outcome		Kings County cases, pre-DLR (*n*=15)	Kings County cases, post-DLR (*n*=12)
Diversion to treatment	By DA	2	0
	By judge	0	0
Incarceration, state prison		6	0
Incarceration, "city time"		3	3
Plead to misdemeanor		2	3
Dismissal		1	4
Other outcome		1 (probation)	2 (violation[81])

[81] A "violation" is the lowest level of offense in NY State, with a maximum sentence of 15 days; a violation is not a criminal offense.

In Kings County, no cases were diverted to treatment or incarcerated in the post-DLR set (compared to two cases in the pre-DLR set); *no* case received a felony-level punishment, with the most severe sanction being "city time" served at the Rikers Island sentenced facility (Table 8-2). This is in contrast to the pre-DLR set, where 6 out of 15 cases got "upstate time" in state prison. No cases were diverted using the new judicial diversion procedures created by DLR; none were diverted in the post-DLR set, while two were diverted pre-DLR.

Summary of qualitative analysis of interviews and case files on the implementation of DLR

Researchers from John Jay College of Criminal Justice conducted 1-2 hour interviews with 35 current legal practitioners (3 judges, 17 defense attorneys and 15 prosecutors) in three NYC boroughs (Bronx County, Kings County and New York County). We reviewed case files from two indigent criminal defense law firms of persons arrested on predicate B Felony drug charges in Kings County and Bronx County in the periods before and after the October 2009 DLRs. Most of the legal practitioners interviewed reported that the October 2009 DLR implementation of judicial review had little impact on drug felony arrests, defendant characteristics, or policing practices.

The respondents (and the quantitative analysis conducted for this study in Chapter 6) emphasized that important changes in sentencing and diversion to treatment were already underway in the years prior to the 2009 reforms. The general consensus was that the new judicial diversion initiatives had a limited impact on rates of diversion in NYC because treatment ATIs were already used in most counties prior to DLR. Interviewees did report that, post-DLR, rates of pre-trial release had increased and this meant that defendants were less likely to accept offers of treatment diversion. Similarly, interviewees reported that the decreases in mandatory minimum sentences as a result of DLR have changed the incentive structure for accepting treatment diversion offers.

There was a general perception amongst interviewees that the decreased drug felony sentences promulgated by the legislature in the April 2009 DLR have had a far greater impact on case outcomes in NYC than the implementation of judicial diversion in October 2009. Practitioners noted that judicial diversion in NYC has been inconsistently applied (e.g., there is no judicial diversion court in Kings County, one of the largest court systems in the State). Interviewees reported that the courts often imposed graduation requirements on participants in legally mandated treatment beyond simply ceasing to use illicit drugs, which may be extending time under the control of the criminal justice system beyond what defendants might expect if sentenced.

The review of case files from indigent criminal defense law firms in Brooklyn and the Bronx covering the pre- and post-DLR periods found very little noticeable difference in defendant characteristics, and none that could be attributed to DLR.

Part III. The Impact of Diversion to Treatment as an ATI on Reoffending

The 2009 drug law reform expanded treatment diversion opportunities for people indicted on a number of felony drug and specified property charges. As the literature review in Part I discusses, previous studies have shown that treatment diversion programs can lead to reductions in recidivism. On the other hand, opponents of DLR have argued that eliminating mandatory minimums may lead to an increase in crime. The analysis included in Part II of this report describes the impact of treatment diversion on subsequent rates of offending as measured by rearrest (the best available proxy for re-offending). As our results demonstrated, there was a significant increase in the number of cases that are diverted to court-ordered treatment in the post-DLR period. This analysis investigates the effect of the post-DLR increased use of diversion on rates of reoffending. These chapters address two related questions: to what extent did the *rate of rearrest* differ between post-DLR drug court participants and otherwise similar defendants who were sentenced to prison, jail, or probation pre-DLR? And, how does *time to rearrest* differ between these two groups?

To compare the impact of treatment diversion on reoffending, the analysis presented in this chapter describes rearrests for two groups: 1) individuals who were indicted on drug felony or specified property charges and *diverted to treatment* in the post-DLR period, drawn from the study sample of 2010 cases; and, 2) individuals indicted on the same set of charges who *received corrections sentences* (including jail, prison, probation, "time served", and split sentence) selected from all 2008 sample cases. These two subgroups were matched on a variety of charges, demographics and criminal history variables to control for factors that may independently influence rates of rearrest.

Chapter 9 provides detail on the recidivism study methodology, including the data used in the analysis, sampling, and analytic strategy. Chapter 10 describes the findings of the reoffending analysis.

Chapter 9. Methodology

Data

In preparation for the implementation analysis, presented in Chapter 7, the research team collected administrative records from DCJS, OCA, and DOC for all arrests on felony drug charges or indictment on specified property charges in 2008 and 2010 that met specific arrest and case disposition date criteria (see Chapter 2 for a detailed description of selection criteria). These records included information on criminal history, charges, disposition, sentencing, and treatment diversion. To conduct the recidivism analysis, the research team collected additional information from DCJS and DOC including data on all arrests and periods of incarceration that occurred prior to December 1, 2012. These records were merged with the original file using the same anonymization procedures described in Appendix F to incorporate all new arrests, including those that were sealed by the courts. The resultant dataset included information on arrest dates, charges, sentencing, and treatment diversion for index arrests,[82] in addition to information pertaining to charges and sentences for subsequent rearrests.[83]

Sample

From the 2008 and 2010 samples, the research team selected two sub-groups for the study of recidivism outcomes. Whereas the implementation analysis described in Chapter 7 was at the arrest level, the analysis of recidivism outcomes was conducted at the individual level. Therefore each case included in the recidivism analysis sample represents a unique individual.

The pre-DLR "unmatched sentenced group" was selected from the 2008 sample, using the following three criteria:

[82] If an individual appears in the 2008 or 2010 samples more than once, the "index arrest" refers to their first arrest. Subsequent arrests for the same individual are registered as recidivism events.
[83] Information on treatment diversion for rearrest events was not available.

1. The individual had no prior convictions on violent felony offenses (VFO) and was indicted on either B through E Felony drug charges or specified property charges (the criteria for "paper eligibility" for judicial diversion).

2. The case was disposed before the reforms took effect on April 7, 2009 and resulted in a (custodial or community) "corrections sentence", i.e. prison, jail, probation, split sentence, or "time served."

3. The sentence did not have any treatment component; based on the data available, this was defined as cases that had not been diverted to drug court programs, DTAP, or other OPCA funded ATI programs.

The "unmatched diverted group" included cases from the 2010 cohort that satisfied the following criteria[84]:

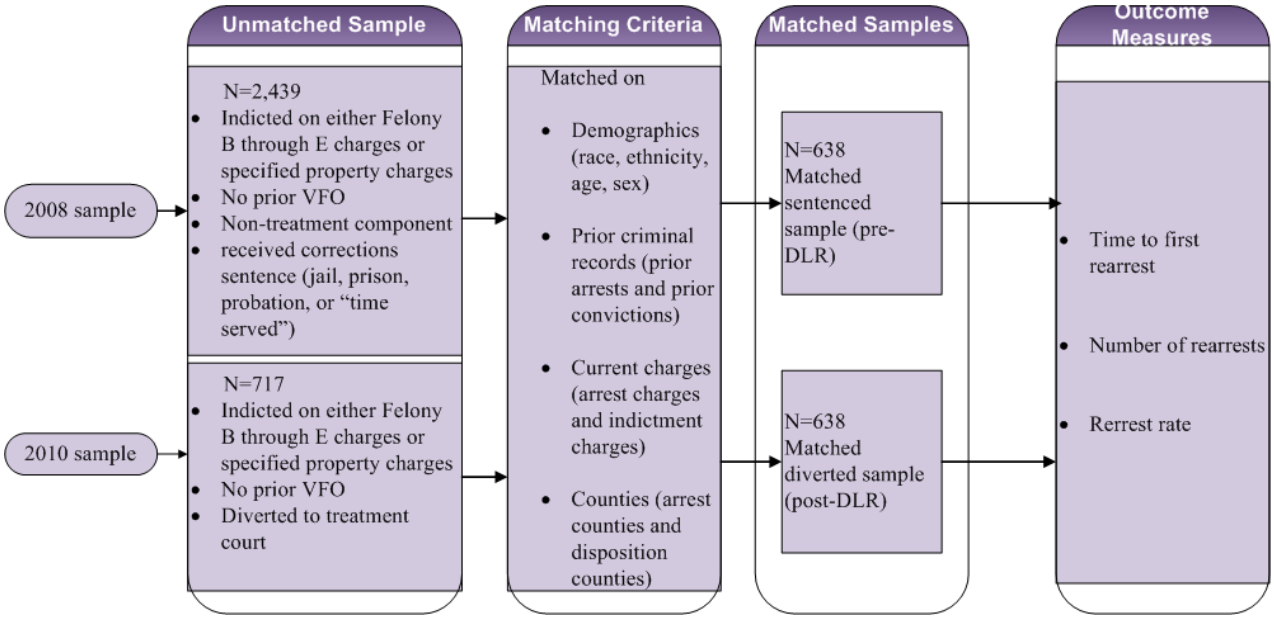
1. The defendant was indicted on B through E Felony drug charges or specified property charges in 2010.

2. The case was admitted to a drug court program as a result of an index arrest before 12/1/2011.[85] The analysis was based on drug court data provided by OCA. Treatment diversions via DTAP, TASC, and non-court-mandated ATI programs were not included.

[84] Based on these criteria, researchers identified a total 771 defendants who had been diverted to drug court during 2010 (the reoffending analysis). The implementation analysis section of the report describes outcomes for a smaller sample of 476 drug-court diversion cases (see chapter 7). The selection criteria for these samples differed in the following key ways: 1) the reoffending analysis sample included all diversions to drug courts during 2010; the implementation analysis sample was drawn from a subset cases drawn from the first nine months of 2010 that were included in the matched 2010 sample; 2) the reoffending analysis included case indicted on A-E Felony charges, whereas the implementation analysis was restricted all the cases arrested on B through E Felonies.

[85] The end date of recidivism data collection was 11/30/2012. Including cases diverted to treatment prior to 12/1/2011 allowed for a minimum of one-year follow up for the diversion cohort.

Figure 9-1. Sample Selection and Outcome Measures for Analysis of Reoffending



Propensity score matching **(**PSM) was then used to select similar cases from the unmatched sentenced sample and unmatched diverted sample, controlling for observed differences in demographics, the county where the individual was arrested, where the case was disposed, criminal history, and index arrest charges (See Appendix G for a discussion of the PSM procedure). The PSM resulted in a sample of 638 matched pairs of diverted and sentenced cases with statistically similar baseline characteristics.

Recidivism Measures and Analytic Strategy

In order to assess rates of reoffending, the analysis presented here describes two related measures of recidivism: 1) the time to reoffending, or how quickly someone reoffends; and 2) the frequency of reoffending, or how often someone reoffends. The analysis compares outcomes for each of these measures for defendants receiving corrections sentences pre-DLR and those diverted to treatment post-DLR.

Analysis of Time to Reoffending

Measures: Time to reoffending was defined as the elapsed time between the date that the person was sentenced or diverted ("the initial disposition date") and the date of their *first* rearrest, measured as days in the community ("community time"). Community time refers to the number of days that an individual was at risk of rearrest, discounting time spent incarcerated (in prison or jail) or in residential treatment facilities.[86]

For the matched diverted sample, rearrests were tracked between the date of admission to treatment court,[87] and the end of the data collection period (11/30/2012). For the matched sentenced sample the initial disposition date was defined as the day that the person received a corrections sentence. Since the matched diverted sample was limited to those cases that were admitted to drug treatment on or before 11/30/2011, time to rearrest was tracked over a follow-up period that ranged from 12 to 35 months.[88] Since only those cases that were disposed before April 7, 2009 met criteria for inclusion in the matched sentenced sample there was a much longer follow-up period to track time to rearrest for pre-DLR cases, ranging from 43 to 59 months. Methods used to control for the different follow-up periods are discussed in the following sections.

Analysis strategy: To explore the impact of DLR on time to rearrest, the research team used survival analysis, comparing cumulative survival rate between the pre-DLR sentenced group and post-DLR diverted groups. Cox regression was used to explore the extent to which

[86] Based on our conversation with service providers, it is very rare that treatment participants commit a crime during their stay in residential treatment because of the high level of supervision.
[87] The date that a plea offer was made was used as the treatment start date. For cases missing information on plea-offers (N=25) the drug court screening date was used instead.
[88] Cases admitted to drug court prior to 11/30/2011 were included to: 1) maximize the number of diverted cases that were included in the analysis; and 2) allow for a minimum of one-year follow up post diversion.

survival curves differed between the sentenced and diverted samples and whether these differences met criteria for statistical significance.[89]

Frequency of Reoffending

Measures: In order to assess the frequency of reoffending, researchers measured both the number of rearrests and the "rate of rearrest," defined as the total number of rearrests divided by the total community time between the disposition (i.e. when the case is sentenced or diverted to treatment) of the index arrest and the end of the follow-up period.

To ensure that the frequency of rearrest could be appropriately compared across the matched sentenced and diverted samples, the two samples were tracked over equivalent periods of time following initial disposition.[90] Therefore, the follow-up period for the matched sentenced sample was truncated, using 11/30/2010 as the end of the tracking period. Thus, the matched sentenced sample was tracked for a minimum of 19 months (04/07/2009 to 11/30/2010) and a maximum of 35 months (01/01/2008 to 11/30/2010). The matched diverted sample was tracked for a minimum of 12 months (11/30/2011 to 11/30/2012) and a maximum of 35 months (01/01/2010 to 11/30/2012).

Figure 10-1 and Figure 10-2 display the time between the date that the case was disposed and the end of the data collection period (the "follow-up period), for both samples. While the range of the follow-up period for the pre-DLR sample was 19 months to 35 months and the range for the post-DLR sample was 12 to 35 months, the average (mean) time available for follow-up is similar for both samples (754 days vs. 759 days).

[89] Survival analysis compares time to an event for two or more samples, controlling for differential follow-up periods by 'dropping' cases from the analysis as they time out (or censored). Therefore, for the 2010 diverted sample, the denominator decreases over time. By controlling for censoring in this way the analysis allows for a comparison survival rates between the 2008 and 2010 samples.

[90] For the matched sentenced sample, the initial disposition date refers to the date that defendants were sentenced; for the matched diverted sample, the initial disposition date refers to the date that defendants were diverted to treatment.

Figure 10-1. Distribution of Follow-up Periods for Matched Pre-DLR Sentenced Sample

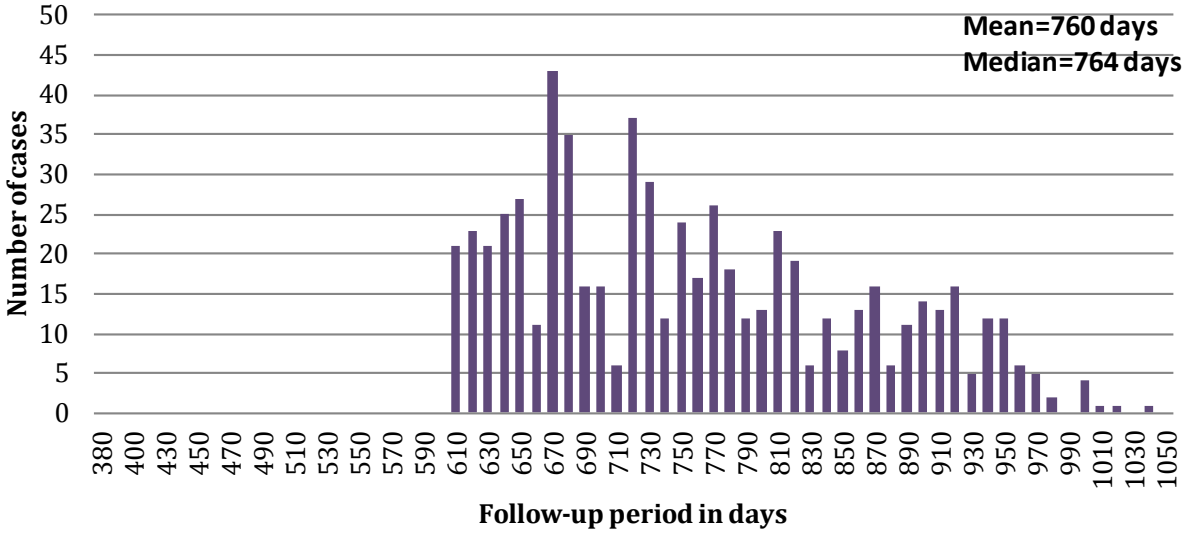
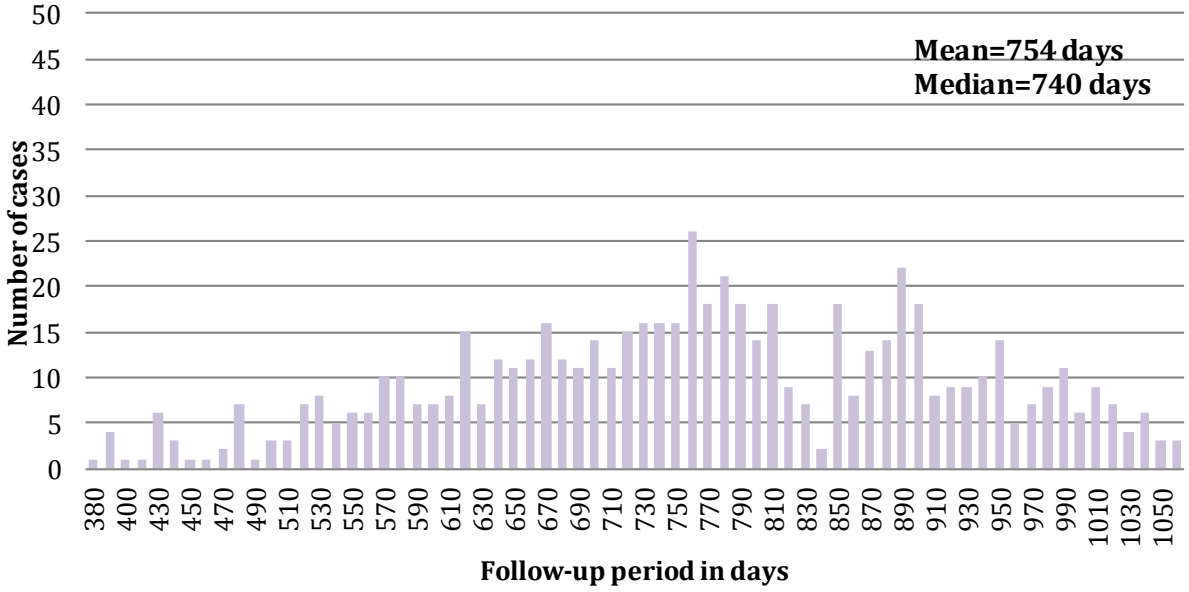


Figure 10-2. Distribution of Follow-up Periods for Matched Post-DLR Diverted Sample



To facilitate comparison between the two samples, rearrests are presented as both unadjusted counts and standardized yearly rates. Both measures are presented as differences in the absolute numbers of rearrests could be a function of different lengths of community time

(and thus different amounts of time at risk for rearrest), rather than a change in offending behavior (Piquero et al., 2001, Loughran et al., 2009).

Analysis strategy: To examine the impact of treatment diversion on recidivism, the average rearrest rate for the matched sentenced and diverted samples were compared using independent sample t-tests. As the PSM ensures that cases included in the matched samples are similar in terms of demographics, arrest counties, charges, and criminal history, it is possible to directly compare the rearrest rate of the two samples.

Chapter 10. Recidivism Analysis Findings

This chapter presents findings from the recidivism analysis, including a description of the study samples, the results of the survival analysis of time to first rearrest, and a comparison of recidivism rates for the matched, diverted, and sentenced samples.

Characteristics of Study Samples

Following PSM, baseline characteristics of defendants included in the matched samples were similar, as illustrated in Table 10-1. The average age of defendants in the matched samples was 33-34 years old, and the majority of defendants were male and either African American or Hispanic. More than 80 percent of matched cases were arrested and disposed in three of the five NYC counties (Bronx, Kings, and New York). On average, individuals in the matched samples had four prior felony arrests, and six prior misdemeanor arrests. The majority of prior arrests and convictions for both matched samples involved drug offenses, with an average of six prior drug arrests, and three prior drug convictions. More than three quarters of matched sample cases had index arrests on B Felony offenses. Of the 638 matched cases, 555 were from the felony drug sample, and 83 were from the specified property crime sample. The most common index charge for cases in the felony drug sample was the sale of controlled substances other than opium, cocaine, or derivatives; the most common charge in the specified property sample cases was larceny.

Table 10-1. Descriptive Characteristics for Unmatched and Matched Reoffending Analysis Samples

		Matched Pre-DLR Sentenced Sample N=638	Matched Post-DLR Diverted Sample N=638	Unmatched Pre-DLR Sentenced Sample N=2,439	Unmatched Post-DLR Diverted Sample N=717
Demographic Characteristics	Age (mean)	32.97	33.50	32.70	33.22
	Sex (Percent Male)	84.5%	84.8%	85.5%	84.2%
	White	10.7%	13.3%	8.5%	16.6%***
	Black	44.4%	43.3%	49.8%*	41.6%***
	Hispanic	41.8%	41.4%	39.5%	39.7%
	Asian/Indian	2.5%	1.6%	1.8%	1.4%
County of Arrest	Bronx	35.3%	35.0%	17.1%	35.1%***
	Kings	24.6%	26.3%	19.6%	24.4%**
	New York	24.6%	25.4%	44.6%	23.4%***
	Queens	13.5%	10.8%	15.4%	9.8%***
	Richmond	2.0%	2.5%	3.4%	7.3%***
Prior Arrests (mean)	Felony	4.33	4.00	4.25	3.85
	Misdemeanor	6.79	6.50	5.83	6.16
	Drug	6.12	5.58	4.71	5.35*
Prior Convictions (mean)	Felony	1.00	0.89	.96	.84
	Misdemeanor	4.60	4.25	4.18	4.04
	Drug	3.10	2.74	2.33	2.61
Index Offense – Top Arrest Class	A- Felony	1.6%	1.6%	8.0%	1.4%***
	B Felony	77.3%	78.0%	54.9%	77.7%***
	C Felony	2.7%	2.5%	6.4%	2.6%***
	D Felony	11.9%	11.9%	19.1%	12.0%***
	E Felony	6.3%	6.0%	10.3%	6.1%***
	A Misdemeanor	0.3%	0.2%	1.2%	.1%***
Index Offense – Top Indictment Charge	Sale: Opium, Cocaine, or Derivatives	14.7%	12.5%	6.6%	11.7%***
	Sale: Synthetic Narcotics	0.2%	0.9%+	.6%	.8%
	Sale: Other	40.8%	44.2%	27.1%	43.7%***
	Poss: Opium, Cocaine, or Derivatives	0.6%	0.5%	2.7%	1.4%*
	Poss: Marijuana	0.6%	0.8%	1.6%	.7%*
	Poss: Other	30.1%	28.1%	29.3%	29.0%
	Burglary	2.4%	2.8%	10.3%	2.5%***
	Larceny	7.2%	6.9%	13.4%	6.8%***
	Motor Vehicle Theft	0.6%	0.3%	1.0%	.3%**
	Forgery & Counterfeiting	0.8%	1.1%	2.0%	1.1%+
	Stolen Property	1.4%	1.6%	4.0%	1.5%
	Criminal Mischief	0.6%	0.3%	1.1%	.3%**
Index Offense – Top Indictment Class	B Felony	61.3%	61.1%	47.8%	61.1%***
	C Felony	4.4%	4.2%	7.7%	4.5%***
	D Felony	26.0%	27.1%	27.3%	27.2%
	E Felony	8.3%	7.5%	17.1%	7.3%***

Table 10-2 describes drug court participation for the 638 defendants included in the matched diverted sample. More than a quarter of the matched diverted sample participated in judicial diversion courts, while the majority, 71 percent of the sample, was diverted to treatment via other felony drug courts. The average duration of treatment plans for these cases was about 14 months.[91] On average, treatment court participants spent 293 days in residential treatment and 211 days in outpatient treatment.[92] Forty-five percent of drug court participants completed their treatment program successfully, and twenty-three percent failed treatment. Twenty-eight percent of drug court cases were still pending at the end of the data collection period (December 1, 2012).

Table 10-2. Characteristics of Drug Court Participation, Matched Post-DLR Diverted Sample

		Matched Post-reform Diverted Sample N=638	
		Number	Percent
Court Parts	Judicial diversion courts	183	28.7%
	Felony drug courts	455	71.3%
Treatment Plan	Average treatment length of treatment plan (days)	414.51	
	Number of participants receiving residential treatment services	351	55.0%
	Average length of stay in residential treatment (days)	292.78	
	Number of participants receiving outpatient treatment services	351	55.0%
	Average length of stay in outpatient treatment (days)	210.89	
Treatment outcomes	Completion	286	44.8%
	Failure	147	23.0%
	Open status	181	28.4%
	Missing status information	24	3.8%

[91] The treatment plan refers to the duration of treatment as specified in the contract between the defendant and the court. The treatment plan provides an indication of how long drug court participants will stay in treatment, however, the actual time depends on a range of factors, including achievement of treatment milestones.

[92] Twenty eight percent of treatment cases included in the matched diverted sample were still receiving court mandated treatment services at the end of data collection period ("open cases"). Researcher estimated the length of stay in treatment for open cases using treatment information from the 2008 cohort; see Appendix N for details.

Table 10-3 displays the sentencing outcomes for the 638 individuals in the matched sentenced sample. About 40 percent of these cases resulted in prison sentences, 26 percent received jail sentences, 25 percent received probation sentences, and another 9 percent received either split sentences or were sentenced to time served.

Table 10-3. Breakdown of Sentence Outcomes, Matched Pre-DLR Sentence Sample

	Pre-DLR sentence Sample N=638	
	Number	**Percent**
Prison Sentence	*258*	*40.4%*
Average Sentence (days)	687.60	
Average Length of Stay (days)	360.89	
Jail Sentence	*168*	*26.3%*
Average Jail Sentence (days)	249.35	
Average Length of Stay(days)	159.40	
Probation Sentence	*157*	*24.6%*
Average Probation Sentence (days)	1,740.30	
Average Length of Stay (days)	941.48	
Split Sentence	*45*	*7.1%*
Time Served	*10*	*1.6%*

Analysis of Time to Re-arrest

The researchers conducted survival analysis to assess the time to first rearrest for the matched sentenced and diverted samples. Figure 10-3 presents survival curves for the matched diverted and matched sentenced samples, displaying the cumulative percentage of individuals who avoided arrest for each month following reentry to the community following the initial disposition.[93] For both groups, defendants were at the greatest risk of being rearrested during the first six months of community time following disposition. As Figure 10-3 demonstrates, 19 percent of the post-DLR matched diverted sample and 29 percent of the pre-DLR matched sentenced sample were rearrested at least once during this period. The survival trajectory for the

[93] This survival analysis measures time to first post-disposition arrest only. Once an individual in either sample has been arrested, they are removed from the analysis. For arrestees sentenced to jail or prison (pre-DLR) and those diverted to residential treatment (post-DLR), recidivism is measured from the day they first renter the community following the case disposition.

two groups diverges after six months in the community, and a greater difference is seen one year out when 74 percent of the matched diverted sample were arrest-free, compared to 57 percent of the matched sentenced sample. The magnitude of the difference between the matched samples remained stable during the second year (with 46 percent of the matched sentenced sample remaining arrest-free, compared to 64 percent of the matched diverted sample). As noted previously, since the study spans the pre- and post-DLR periods, the rearrest follow-up period for the matched diverted sample is shorter than the matched sentenced sample. Accordingly, the survival curve for the matched sentenced sample is censored at 35 months. The survival curve for the matched diverted sample stabilized at month 27 at about 63 percent, with most cases that survived until that point staying in the community without being rearrested.[94] The survival rate for the matched sentenced sample continued dropping after month 24, and only 36 percent of the sample were arrest-free four years after the initial disposition.

To explore whether the difference in survival patterns between the pre-DLR matched sentenced sample and the post-DLR matched diverted sample reached statistical significance, we also conducted Cox regression analysis using enrollment in treatment as a binary variable to predict time to first re-arrest. The results in Table 10-4 show that, compared to the matched diverted sample, time to first re-arrest is 44 percent shorter for cases in the matched sentenced sample. The difference between the two groups' survival patterns is statistically significant at .001 level. Therefore, when controlling for a range of background factors, enrollment in treatment leads to statistically significant reductions in time to re-arrest.

[94] At the 30-month point, only 10 percent of the original post-DLR sample remained in the analysis (68 people). These were mostly diversion cases that were referred to outpatient treatment and that typically had longer periods of community time.

Figure 10-3. Survival Curve of Community Time to First Re-arrest, Matched Pre-DLR Sentenced Sample vs. Matched post-DLR Diverted Sample[95]

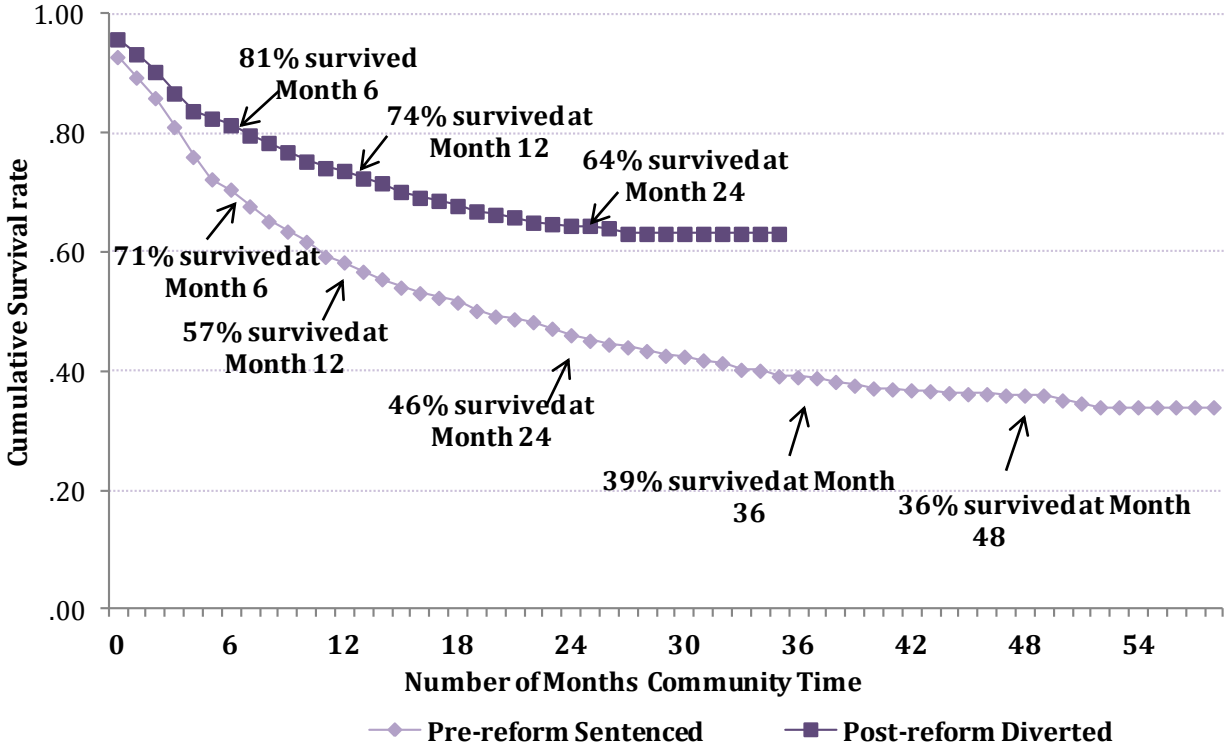


Table 10-4. Results from Cox Regression Analysis on Time to First Re-arrest

Predictor	Standardized Coefficient (B)	Exponential standardized Coefficient (Exp B)	Significance
Being in post-DLR diverted sample	-0.57	0.56	<.001

Comparison of Rearrest Rate

To further explore the impact of treatment diversion on reoffending, we compared the *rearrest rates* of the matched sentenced and diverted samples (i.e. the number of rearrests divided by community time). As discussed above, the rearrest data for the pre-DLR sentenced sample were truncated to ensure that rearrest events for both groups were tracked for similar periods of time (from initial disposition for a minimum of 12 months and a maximum of 35 months). As Table 10-5 shows, on average, each defendant in the matched sentenced sample

[95] The analysis of community time to rearrest discounted time in prison, jail, and residential treatment.

accumulated one rearrest during the follow-up period, as compared to 0.57 rearrests per person in the matched diverted sample.[96] Therefore, the average number of rearrests is 43 percent lower for the diverted group than for the sentenced group. Disaggregating rearrests by different types of crime, we found that there were statistically significant differences between matched diverted sample and matched sentenced sample on average number of rearrests for felony violent crimes, felony drug crimes, and misdemeanor crimes. The average number of felony violent rearrest was 50 percent lower for the diverted sample compared to the sentenced sample. However, it is important to note that the number of violent felony rearrests over the study period was very low for both samples with only six percent of the sentenced sample and three percent of the diverted sample rearrested on violent felony charges. As for felony drug rearrests, the diverted sample had a rearrest rate which was 42 percent lower than the sentenced group. However, matched sentenced cases accrued significantly more community time than matched diverted cases, providing greater 'opportunity' for rearrest; the average community time for the matched sentenced sample is 18 percent longer than for cases included in the matched diverted sample.[97] In large part, this represents diverted cases spending longer periods in residential treatment when compared to the average time served in jail or prison amongst the pre-DLR sentenced sample.[98] Therefore, the higher prevalence of rearrest for the sentenced group may be a function of increased exposure to the community.

[96] It is important to note that there may be some effect of DLR on pre-DLR cases, as pre-DLR cases that are re-arrested after April 7, 2009 may be eligible for Article216 diversion. As noted previously, data were not available on treatment episodes related to recidivism (rearrest) events.
[97] As described above, the average follow-up period is similar for both samples. However, on average the diverted sample spent more time in residential treatment than the sentenced sample spent in custody during the follow-up period. Therefore, the sentenced sample accrued more time in the community.
[98] The average length of stay for cases referred to residential treatment was 293 days for the matched diverted group.

Table 10-5. Comparing Re-arrest Rate between Matched Pre-DLR Sentenced Sample and Post-DLR Diverted Sample

	Pre-DLR sentenced sample N=638	Post-DLR diverted sample N=638
Average number of rearrests per person	*1.00*	*0.57****
Average violent felony rearrests	0.08	0.04**
Average property felony rearrests	0.05	0.03
Average drug felony rearrests	0.19	0.11**
Average misdemeanor rearrests	0.65	0.37***
Average community time (days)	*537.32*	*465.39****
Average daily re-arrest rate	*0.0025*	*0.0018**
Average daily felony rearrest rate	0.0011	0.0007**
Average daily misdemeanor rearrest rate	0.0014	0.0012
Average yearly re-arrest rate	*0.91*	*0.67**
Average yearly felony rearrest rate	0.40	0.26**
Average yearly misdemeanor rearrest rate	0.51	0.44

*p<.05 **p<.01 ***p<.001

As described previously, to account for this potentially confounding difference in community time between the two groups, the research team calculated the rate of rearrest. The daily and yearly rearrest rates for each group represents the mean number of rearrests per person per day/year in the community. Controlling for community time, the rearrest rate for the diverted group was 28 percent lower than the sentenced group. An average person in the matched sentenced sample accumulated 0.91 rearrests per year in the community as compared to 0.67 in the matched diverted sample. The difference in rearrest rates between two groups reached statistical significance at the 95 percent confidence level. The rearrest rate for felony-level offenses for the diverted group was 36 percent lower than the matched sentenced group, and differences reached statistical significance at the 95 percent confidence level.

Summary of Findings from Analysis of Reoffending

This part of the report explores the impact of treatment diversion on recidivism outcomes by comparing rearrests for people who were sentenced to jail, prison, probation, or "time served" before DLR came into effect with a similar sample of arrestees who were diverted to treatment in

the post-DLR period. The analysis used PSM techniques to control for baseline differences between these two samples. Recidivism has been measured in two ways: a survival analysis of time to first rearrest and an analysis of the frequency of rearrests, controlling for the period of time that people were in the community and therefore at risk of arrest ("community time").

Consistent with prior research on drug court programs (Belenko, 2001; Spohn, Piper, Martin, & Frenzel, 2001), the research team found that the treatment diversion sample was rearrested at significantly lower rates. For those who were rearrested at least once, the time to first rearrest was 44 percent less for the pre-DLR sentenced sample. This suggests that treatment diversion reduces future criminal justice involvement. Using average daily arrest rates to control for differences in time in the community, those who were diverted to treatment post-DLR were arrested an average of 0.0018 times per day (0.66 arrests per year), 28 percent lower than those sentenced pre-DLR (0.0025 rearrests per day equivalent to 0 .91 rearrests per year).

Our analysis has some limitations. First, the follow-up period for the post-DLR matched diverted sample is relatively short. Although the data makes it possible to track case defendants for a minimum of 12 months and a maximum of 35 months following diversion to treatment, about 20 percent of the matched diverted sample had less than six months of community time as a result of lengthy stays in residential treatment (see page 88 in Chapter 7 of Part II on findings from quantitative analysis of implementation of the reform). Therefore, the effects described by this analysis reflect short-term differences in recidivism rates; they may decay or disappear over time.

Second, defendants included in the matched sentenced sample may have received treatment during their stay in prison, jail or probation, or may have been referred to treatment following rearrest. Because of a lack of treatment information in the rearrest data and

correctional data, we cannot completely ensure individuals in the matched sentenced sample did not receive drug treatment at any point following the initial disposition. With this limitation, we may underestimate the difference of rearrest rates between matched samples, thus underestimating the impact of reform on recidivism outcomes.

Finally, while this analysis takes steps to ensure that the two samples were comparable, there may be differences in the baseline risk of recidivism between the sentenced and diverted groups. The analysis capitalizes on the expansion of treatment diversion over the period of the study and uses PSM to identify cases that have similar baseline characteristics, including a range of factors that are known to impact recidivism. However, we were not able to access information on socio-economic status, homelessness, or other 'lifestyle' variables, that may impact risk of reoffending.

Part IV Cost-Benefit Analysis

The cost-benefit analysis (CBA) builds upon the implementation and impact analyses to examine the economic effects of DLR. The implementation analysis finds that post-DLR, the number of felony drug arrests resulting in corrections sentences declined by about seven percent and the number of felony drug cases diverted to treatment increased by about 60 percent (3 percent pre-DLR to 5 percent post-DLR). The impact analysis finds that diversion to drug treatment programs substantially delayed and/or prevented defendants' future involvement with the criminal justice system.

CBA is a tool used by decision makers to weigh the economic pros and cons of policy investments from multiple perspectives. This analysis examines the costs and benefits of DLR from the perspectives of taxpayers and victims. The taxpayers' perspective examines how DLR affected justice system resources. The victims' perspective measures the effect of DLR on reducing the costs of victimization.

For example, greater use of drug treatment will lead to higher taxpayer costs for these resources. A reduction in the use of other resources—such as prison, jail, probation, and parole—however, are taxpayer benefits. To the extent that DLR reduces participants' likelihood of re-offending, there will be benefits to both victims and taxpayers because a decline in crime avoids both the cost of crime to victims as well as the cost to the justice system of responding to those crimes.

The question from the taxpayers' perspective is whether the benefit of reductions in the use of justice system resources offsets the cost of increased drug court diversions. The question from the victims' perspective is whether post-DLR sentencing outcomes lead to a reduction in

crime. A reduction in re-offending leads to fewer victims, which in turn leads to fewer victimization costs.

This CBA seeks to answer two questions: (1) What are the economic implications of DLR for taxpayers and crime victims in NYC? (2) What are the costs and benefits of diverting an individual from a corrections sentence to drug treatment?[99]

To answer the question "What were the economic implications of DLR for taxpayers and crime victims in NYC?" researchers compared the costs that stem from pre-DLR and post-DLR samples of arrests.[100] These include costs for criminal justice system and drug treatment resources as well as costs to victims. Costs are measured for 26 to 35 months post arrest. *See Appendix D for more information on study periods.*

To answer the question "What are the costs and benefits of diverting an individual from a corrections sentence to drug treatment?" researchers compared taxpayer and victim costs for a post-DLR sample of individuals who were diverted to drug court with a matched sample of individuals who received a corrections sentence pre-DLR.[101] Costs and benefits are measured for 12 to 35 months post disposition. *See Appendix D for more information on study periods*.

The methodology for these analyses is described in Chapter 11. The findings and discussion are presented in Chapter 12.

[99] In this report, the term "corrections sentence" refers to both traditional correctional sentences (jail, prison, and time served) and a community correctional sentence (probation).
[100] See the section "Data" and "Samples" in Part II, Chapter 7 for more information on the 2008 and 2010 matched implementation samples.
[101] See the section "Characteristics of Study Samples" in Part III, Chapter 10 for more information on the matched sentenced and diverted samples.

Chapter 11: Methodology

The net cost, or benefit, of DLR is modeled by measuring—for both the pre-DLR and post-DLR samples—taxpayer costs that accrue when individuals are arrested for a drug felony, as well as the ensuing taxpayer and victim costs for these individuals up to 35 months post disposition. This analysis measured the difference in costs between these two samples to calculate the net cost or benefit of DLR. The taxpayer costs of justice system and drug treatment resources are derived for each sample by making the following calculation for each resource:

resource use × length of stay (if applicable) × marginal cost

Resource use—that is, the number of criminal cases that lead to an individual using a given government-funded resource (such as corrections or drug treatment)—and length of stay were calculated for both the pre- and post-DLR samples. The data for those variables were obtained from administrative records from DCJS, OCA, DOC, and individual district attorneys' offices in NYC. Researchers obtained the data used to calculate marginal costs from state and city budget documents, public information on reimbursement rates for treatment, and discussions with criminal justice agencies. The marginal cost is the amount government agency costs change when justice system workload changes. *For more information about the marginal costs used in this analysis, see page 161.*

This cost-benefit analysis considers the perspectives of taxpayers and crime victims. DLR affects the criminal justice system resources paid by taxpayers. If there are fewer re-arrests post-DLR, then there will be the benefit of avoided victimization due to a reduction in crime as well as benefits to taxpayers because there will be fewer cases to adjudicate in the criminal justice system. This study examined the net effect of the reform on victim costs by measuring the

impact of DLR on reducing reported crime. The perspective of crime victims is a critical part of criminal justice CBAs because public safety is the central goal of many justice policies. Crime victims experience some combination of financial, psychological, and physical harms. When victimization is prevented or reduced, the avoided harms are counted as benefits. Reductions in drug offenses also have a range of benefits for individuals undergoing drug treatment, their families, and society at large. This CBA, however, looks only at the perspectives of taxpayers and victims, but not of program participants and the wider societal benefits of reductions in drug use. As such, we may undercount the economic benefits of increased access to drug treatment.

This chapter provides further detail on the calculations of resource use, length of stay, and marginal costs.

Resource use

The effect of DLR on the use of criminal justice and drug treatment resources was calculated by comparing the differences between the number of individuals who used each resource pre- and post-DLR.

The system resources measured are law enforcement (arrests), courts (arraignment, indictment, and sentencing), corrections (jail, prison, probation, and parole), and substance abuse treatment (drug screening, inpatient treatment, outpatient treatment, and residential treatment). [102] The remainder of this section describes the data used to calculate the effect of DLR on resource use.

Matched implementation samples. The "matched implementation samples" were used to answer our first research question: How did DLR affect taxpayer and victim costs in NYC? The

[102] The research team was not able to access reliable comprehensive information form ATI programs that utilize of variety of screening, assessment and case management mechanisms. Therefore, the study undercounts all diversion for both periods. Prosecutors working in Bronx County reported that problems with the courts administrative record keeping system may have led to some underreporting of diversion pre-DLR.

pre-DLR sample consists of arrests for A-E Felony drug offenses between January 1, 2008 and September 30, 2008, with cases that were disposed by April 6, 2009. (The sentencing reforms were enacted on April 7, 2009.) The post-DLR group includes arrests for A-E Felony drug offenses between January 1, 2010 and September 30, 2010, with cases disposed by April 6, 2011. To compare these samples, researchers used PSM techniques to generate matched samples for pre-DLR and post-DLR groups.[103] The matched comparison group allows for an investigation of the independent effect of DLR on sentencing outcomes.

The effect of DLR is measured by comparing the differences in resource use before and after DLR. The measure of resource use is built upon the case outcomes (sentencing outcomes and treatment diversions) presented in Part II. Whereas the implementation analysis focused on the immediate outcome of case disposition, the CBA also considers long-term consequences to include violations of community release, rearrests and/or resentencing for up to 35 months post-initial arrest. For example, in the implementation analysis, a felony drug case that was initially diverted to drug court was included as a treatment diversion case, based on the *initial* decision to divert the case, even if it ultimately resulted in a prison term (following a failure to comply with court mandates). For the purposes of CBA, the treatment diversion *and* the prison sentences were counted because each have associated costs. Therefore, the CBAs incorporated the court's *final decisions* for cases diverted to treatment. Table 11-1 provides a breakdown of the numbers of individuals to use the relevant justice system resource that were used in the implementation analysis and cost-benefit analysis. In addition to measuring the resources used related to felony drug offenses that occurred in 2008 and 2010 (the "initial arrests"), this study examined the resources used as related to rearrests following the disposition of initial arrests. To measure the

[103] See the "Data" and "Samples" sections in Part II, Chapter 7 for additional information.

resource use from rearrests, this study followed both the pre-DLR sample and the post-DLR sample for up to 35 months, to include the number of rearrests in each group.[104]

Table 11-1. Comparison on the Measure of Case Outcomes between Quantitative Implementation Analysis and Cost-Benefit Analysis[105]

Case outcomes	Implementation Analysis		Cost-benefit Analysis	
	Pre-DLR N=14,410	Post-DLR N=14,410	Pre-DLR N=14,410	Post-DLR N=14,410
Prison	1,024	951	1,052	1,009
Jail	2,611	2,359	2,680	2,424
Probation	470	482	476	492
Split sentence	146	106	150	108
Time served	1,755	1,466	1,791	1,482
Dismissed or discharged	7,842	7,987	8,101	8,457
Treatment diversion[a]	405	647	405	647
Other	9	5	9	5
Pending Disposition	148	407	151	433

[a] In the CBAs, treatment diversion includes both diversion to a DTAP program and diversion to a drug court program.

Because each sample includes only nine months of arrests (from January 1 – September 30), the *annual* difference in resources used is extrapolated by dividing the net costs or benefits for the 9-month sample by 0.64. In our 2010 sample (post-DLR), 64 percent of felony drug arrests for the year occur in the months January through September.[106]

Matched sentenced and diverted samples. The "matched sentenced and diverted samples" from the reoffending analysis were used to answer our second research question: What are the costs and benefits of diverting an individual from a corrections sentence to drug treatment? Using the same methodology as with the matched implementation sample, to compare

[104] In the CBA, the measures of rearrest used to assess the cost implications of recidivism is different from those used to determine the impact of treatment diversion on reoffending (Part III). The results of these two sets of analyses are not comparable.

[105] In the CBAs, treatment diversion includes both diversion to a DTAP program and diversion to a drug court program.

[106] This sample includes cases with arrest dates during the first nine months of 2010 that were disposed prior to 04/07/2011. The 36 percent of 2010 cases that are missing from the analysis includes a combination of cases with arrest dates between 10/01/2010 and 12/31/2010 and those that were arrested during the first 9 months of the year, but disposed after 04/07/2011.

the cost implications of treatment diversions with corrections sentencing options (prison, jail, probation or time served), PSM techniques were used to generate matched samples for a pre-DLR **Sentenced Group** and a post-DLR **Diverted Group**. The Sentenced Group includes individuals in 2008 who were indicted **pre-DLR** on a B through E Felony drug charge or a property charge specified in Article 216 and disposed by April 6, 2009 who received a corrections sentence (jail, probation, prison, split sentence, or "time served"). The Diverted Group includes individuals in 2010 who were indicted **post-DLR** on a B through E Felony drug charge or a property charge specified in Article 216 and were diverted to treatment before December 1, 2011.[107] By comparing the Sentence and Diverted groups, the CBA can compare the costs and benefits of a corrections sentence with the costs and benefits of a treatment sentence. Table 11-2 compares resource use between matched sentenced and matched diverted samples.

Similar to the matched implementation analysis of the costs and benefits of DLR, the analysis of diversion incorporated criminal justice costs associated with revocation of treatment orders. As Table 11-2 shows, a portion of individuals in the Diverted Group received prison sentences (95 out of 638) and jail sentences (41 out of 638) following revocation of treatment orders.[108] In addition, both groups were tracked for similar amounts of time to calculate the number of rearrests (See part III, chapter 9 for additional information). As a primary aim of CBA is to provide a description of costs, these analyses do not control for the time individuals spent in the community when calculating the number of rearrests. In other words, crimes avoided due to

[107] Indictments include cases processed using a Superior Court Information. See the methods section in Part III, Chapter 9 for additional information.
[108] There were also three cases sentenced to probation after failing treatment and 14 cases disposed as convicted with no sentence after failing treatment.

incapacitation in correctional facilities or residential treatment settings are counted as benefits that offset some of the costs associated with treatment and incarceration.

Table 11-2. Comparison of Matched Sentenced Sample and Matched Diverted Sample: Resource Use

Case outcomes	Resource Use	
	Sentenced Sample (Pre-DLR), N=638	Matched Diverted Sample (Post-DLR), N=638
Prison	258	95
Jail	168	41
Probation	157	8
Split sentence	45	0
Time served	10	0
Dismissed or discharged	0	476
Treatment diversion	0	638
pending disposition	0	18

Length of stay

To calculate mean length of stay for each resource, researchers tracked each sample through the criminal justice system and back into the community using administrative records from several New York State and city agencies.[109] These data were collected for the period January 2008 – November 2012 (a maximum of 59 months).

Using these data, researchers measured—for each sample—the amount of time used per case between the entrance and exit dates for each system resource (jail, prison, probation, parole, or treatment) to calculate the mean length of stay at that resource.[110] Because of the evaluation

[109] Administrative records used in these analyses were from the NYS Division of Criminal Justice Services; NYS Office of Court Administration; NYS Department of Corrections and Community Supervision; NYC Department of Correction; and the district attorney's office for each county in NYC. See the "Data" and "Samples" sections in Part II, Chapter 7 for additional information.

[110] The datasets used in these analyses only included treatment information for cases diverted to drug courts. Therefore, for cases diverted to DTAP programs, it is assumed that those cases have the same length of stay for each mode of treatment as cases from drug courts. The city's drug treatment courts operate similarly, but DTAP programs

design, we were able to follow the pre-DLR sample for a longer period than the post-DLR sample (50-59 months versus 26-35 months). The 26-35 months follow-up period was not long enough to observe a completed sentence for all cases either because the sentence was longer than the follow-up period, or the sentence was issued just before the end of the observation period. Thus, there were cases that are "right censored," which means that exit dates were not available because the observation period ended before the sentence was completed. This is more common in the post-DLR sample because of the shorter follow up period.

An assumption that the length of stay in corrections or treatment concluded at the end of the follow-up period (November 30, 2012) would undercount the length of stay for cases in which the sentence and treatment had not yet been completed. Because of the shorter follow-up period available for the post-DLR sample, undercounting would disproportionately affect these cases leading to a systematic bias in the findings. To get a more accurate picture of how long individuals used each resource, researchers imputed the length of stay for cases missing exit dates for prison, jail, probation, parole, and treatment based on data from the pre-DLR samples. Total length of stay was estimated using data from the pre-DLR sample, which is more comprehensive due to a longer observation period (50-59 months compared to 26-35 months). Program staff then adjusted right-censored cases using these estimates. Some treatment cases were also right censored and similarly adjusted in this analysis (see detailed discussion below).

The remainder of this section explains the calculations for determining the length of stay for each system resource when data are right censored.

Prison. Length of stay was imputed by multiplying the length of the prison sentence by the observed percentage of "time served," on average, in the pre-DLR sample. Pre-DLR sample

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are considered to be more intensive, so drug treatment length of stay for DTAP participants may be conservatively estimated.

members who exited prison during the follow-up period served 53 percent of their sentence. This approach assumes the percentage of sentence served remains stable post-DLR, which was confirmed through analysis of 2006-2011 data. Researchers used this method to impute length of stay for right-censored cases with prison sentence, accounting for 13 percent of the cases sentenced to prison in the study sample.

Parole. Length of time on parole was imputed by subtracting the mean "time served" in prison from the mean prison sentence. Individuals, upon release from prison, serve the remainder of their prison sentence on parole. The mean percentage of time served in prison during the follow-up period is 53 percent. Therefore, every right-censored parole case is imputed to be 47 percent of its prison sentence. This method was used on 27 percent of cases with a prison sentence.

Jail. Length of stay was imputed by multiplying the length of the sentence by 0.66. Pre-DLR sample members who exited jail during the follow-up period served 66 percent of their sentence. Researchers used this method to impute length of stay in jail for cases sentenced to jail with missing information on jail stay, accounting for 7 percent of the sample with jail sentence.

Probation. Length of stay was imputed by multiplying the length of the sentence by 0.66. Pre-DLR sample members who exited probation served 66 percent of their sentence during the follow-up period. This method was used to impute length of stay for 59 percent of cases with a probation sentence.

Treatment. For "right-censored" treatment cases,[111] researchers used data from the pre-DLR sample to estimate when treatment was completed. Treatment data from the pre-DLR sample was first truncated using 11/30/2010 as an end date of data collection (a 26-35 month follow-up period), then researchers calculated, for closed cases, the proportion of the total

[111] "Right-censored" refers to cases with an open treatment status at the end of the data collection period.

treatment stay completed by the end of November 2010. The estimates from the pre-DLR sample were used as a multiplier to predict length of stay for right-censored treatment cases in the post-DLR sample. In other words, observations of treatment length of stay for the pre-DLR sample were used as the best available estimate for predicting length of stay for post-DLR cases. On average, closed cases in the pre-DLR sample had completed only one-third of their court-mandated treatment within the first 26-35 months of follow up (the period available to track cases in the post-DLR samples). To impute treatment length, the length of stay for all right-censored treatment cases in the post-DLR sample was increased by dividing them by one-third. Of the cases diverted to treatment post-DLR, 28 percent were right censored. See Appendix N for a detailed discussion of this technique and alternative methods of imputation that were considered.

Marginal Costs. Researchers calculated the marginal cost for each criminal justice resource (such as prison and parole) and each mode of treatment (inpatient, residential, and outpatient). The marginal cost is the amount the total cost changes when justice system resource use changes (Henrichson and Galgano, 2013). For this analysis, the marginal cost is the cost related to the change in total costs that is caused by a change in workload (such as reduced prison days) because of drug law reform.

Average costs, in contrast, include fixed costs that will not change as a result of DLR and will overstate costs and savings. As Mark Cohen explains: "Unless fixed costs change with a policy decision under review, they should be ignored for the purpose of assessing that policy" (Cohen, 2000). "There is a fundamental economic principle at work here: Only the costs (and benefits) that vary with the decision should be considered. This is a general rule that should be applied to virtually any policy decision" (Cohen, 2000). For instance, the marginal cost of a year

in prison in New York is about $18,396 in 2009 dollars, but the average cost of a year in prison in New York is about $59,100 (Henrichson & Delaney, 2012). Using the average cost of prison to estimate the savings that result from treatment diversions would overstate the budgetary savings because it assumes that the corrections department could reduce fixed expenses for administration, legal, human resources, debt service, policy and planning, information technology, communications, finance, and many other activities. The marginal cost, in contrast, includes only inmate-specific needs (for food, clothing, and medical care) and the corrections officers who supervise them.

This section explains the marginal cost estimates in Table 11-3. The source data come from a variety of years and are adjusted to 2009 dollars (BLS, 2013). Cost estimates in this chapter are rounded to the nearest dollar.

Table 11-3. Marginal Taxpayer Costs per Offender (In 2009 Dollars)

Segment of Justice System	Resource	Marginal Cost	Unit
Law Enforcement	**Arrest**	$359	1 arrest
Corrections	**Jail**	$74	1 day
	Prison	$50	1 day
	Probation	$5	1 day
	Parole	$7	1 day
Courts	**Arraignment**	$720	1 arraignment
	Indictment	$1,807	1 indictment
	Sentencing hearing	$1,001	1 hearing
Treatment	**Drug treatment eligibility screening**	$769	1 screening
	Inpatient treatment	$361	1 day
	Outpatient treatment	$73	1 session
	Residential treatment	$71	1 day

Arrest. Should the reform reduce crime, there will be a reduction in the number of arrests, and therefore a reduction in law enforcement costs. The CBA model uses a marginal cost of $359 per arrest based on the assumption that for every avoided arrest, the New York Police Department will forego $359 in overtime costs (Redcross, Millenky, Rudd, & Levshin, 2012). This cost assumes that a reduction in arrests would not lead to a reduction in the number of police officers but would lead to a reduction in the overtime hours—and costs—used for booking the arrestee and for making court appearances.

Court. Reductions in court activity may reduce workloads. To determine marginal costs of court processes in NYC, researchers looked to the criminal justice literature. A 2005 cost-benefit analysis of Brooklyn's Drug Treatment Alternative to Prison (DTAP) program used estimates that included costs for the judge, district attorney, and defendant's attorney for several court proceedings in NYC (Zarkin et al, 2005).

The study estimates the cost of an arraignment to be $720 and the cost of a sentencing hearing to be $1,001. The report also estimates a cost of $1,807 for a felony hearing, which this study uses as the cost of an indictment, because all indictments in the CBA were made by a grand jury.[112]

The CBA model also uses this study's estimate of the cost of a drug treatment eligibility screening ($769) because screenings include significant court elements through prosecutorial and judicial review. This amount includes the cost of judicial/prosecutorial review and the reviews conducted by treatment providers. The research team believes this study is representative of post-DLR costs because conversations with treatment providers indicate that eligibility screenings did

[112] For the CBAs, the cost of an indictment was only applied to cases that received a grand jury indictment. Plea deals are sometimes reached before the indictment. Many people elect to plead off a Superior Court Information (SCI).

not change with DLR and are virtually identical across NYC boroughs and diversion pathways.[113]

Prison. DCJS provided a marginal cost of $18,396 per inmate, per year ($50 per day). This marginal cost assumes that the inmate decline is substantial enough for the prison system to close the wing of a prison and that staff could either be reduced or assigned to other duties. [114]

Jail. The NYC Department of Correction (DOC) provided a marginal cost of $26,896 annually ($74 per day) per inmate on Riker's Island (NYC's primary corrections facility). This marginal cost assumes that the inmate decline is substantial enough for DOC to close a housing unit and reduce corrections officers in that unit. Individuals are incarcerated in the NYC jail system during pre-trial detention, as part of a corrections sentence, or as a sanction for failing drug treatment.

Parole. The marginal cost of parole is $2,427 per year ($7 per day). This is based on a 2010 presentation from the New York State Division of Budget, which reports: "The parolee population is projected to decline by nearly 1,500; therefore, fewer parole officers are needed. This decline is largely attributed to Rockefeller Drug Law Reform which permitted drug offenders who were presumptively released from State prison to be released earlier from parole supervision, as well as continued decline in the inmate population resulting in fewer parole releases. Savings are estimated at $3.7 million" (State of New York, 2010). Thus, if a capacity reduction of 1,500 parolees leads to a corresponding savings of $3.7 million, the marginal annual cost of a parolee is $2,427.

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[113] TASC officials interviewed for this report were Yolanda Cardona, the director of TASC, Bronx County (March 9, 2012), Henry Algrain, the director of TASC, Kings County (March 8, 2012), Erin Mahoney, the director of TASC, Queens County (March 9, 2012), Sarah Anderson, the director of TASC, Richmond County (March 12, 2012), and Tania Chandler, Regional Director of NYC Services EAC, Inc. (April 10, 2012).

[114] This is the marginal cost of the average offender. Inmates requiring substance abuse treatment while they are in custody may consume more resources and their costs may be higher than average. On the other hand, these inmates are largely non-violent offenders and therefore may be housed in less restrictive and less-costly housing units.

Probation. The marginal cost of probation is $1,999 per year ($5 per day). Our calculation is a combination of the salary cost ($885), fringe benefits ($796), and variable costs ($318) used by each probationer annually. Determining the salary cost used by each probation case required dividing the average salary of a probation officer by the average probation caseload (Storey, 2012).[115] According to supplemental data from the NYC Executive Budget, fringe benefits amount to over 90 percent of controllable expenses for corrections employees (NYC Comptroller, 2012). Finally, the variable cost used by each probation case per day was estimated from the department's Other Than Personal Services budget.

Treatment costs. Court-mandated treatment in New York State primarily utilizes a combination of three modalities: inpatient, residential, or outpatient. It is common for people diverted to treatment to spend some time in multiple modes of treatment. Taxpayers pay for treatment on a per-diem basis per client. The per diem rate is the same regardless of increases or decreases in workload. Therefore, the marginal cost is the rate the government pays to treatment providers.

Inpatient treatment. The marginal cost of inpatient treatment used in this study is $361 per day. "Inpatient" is an umbrella term that describes a range of treatment modalities that occur in medically supervised hospital settings such as medically supervised detoxification and inpatient residential drug treatment. Using the data available for this study, it was not possible to determine the type of inpatient treatment provided, which have different costs. Therefore, the daily inpatient cost rate is estimated at $361, which is a blended average of the various modes of inpatient care and is based on 2011 Medicaid data provided by the New York State Office of Alcohol and Substance Abuse Services.

[115] Based on NYC pay records, the average pay for a probation officer was $53,954 in 2010. There were 35,675 probation cases as of May 22, 2012 according to a New York Law Journal article. By dividing this number by the number of probation officers on NYC payroll (590), it was estimated that the average caseload was 60.

Outpatient treatment. Outpatient treatment costs $73 per session based on reimbursement rates for NYC (NY OASAS). Outpatient treatment is provided on a per session basis according to an individual's treatment plan. The administrative data for the samples indicate how many days it took for a client to complete outpatient treatment. Outpatients, however, do not attend treatment seven days a week. Treatment providers said that someone in outpatient treatment for 90 days would attend about 40 sessions, which equates to one outpatient session every 2.25 days.[116] Therefore, the average length of stay as an outpatient was divided by 2.25 to estimate the number of outpatient sessions they attended.

Residential treatment. Residential treatment costs $71 per day. Residential treatment is long-term, live-in treatment that is not medically supervised. The cost of residential treatment is funded by several agencies. For each person in residential treatment, the providers receive an average of $31 per day from the New York State Office of Alcoholism and Substance Abuse Services (OASAS) for treatment services, as well as $40 from the NYC Human Resources Administration for food stamps, personal needs allowance, and congregate care.[117] The daily cost for residential treatment is less than the per session cost for outpatient treatment because outpatient treatment is conducted in medically-supervised settings.

Cost and benefits of crime reduction. When individuals are rearrested, it imposes a cost to both victims and the criminal justice system by using law enforcement, courts, and corrections resources. Therefore, DLR's effect on reoffending is an important component of a cost-benefit analysis. Calculating these effects requires estimation of (1) future justice system resource use and (2) the cost of victimization, which is discussed further in this section.

[116] Seep Varma, Executive Vice President for New York Therapeutic Communities, Inc., and Marcus Daugherty, Director of Continuing Care Treatment at Palladia, Inc.
[117] This is based on Level 2 congregate care shelter rates from the NYC Human Resources Administration.

Justice system resource use. To estimate how the reduction in rearrests caused by DLR affects taxpayer and victim costs, program staff tracked both pre-DLR and post-DLR groups to calculate how many times sample members were rearrested for up to three years post-disposition. By measuring the number of rearrests, researchers estimated the offenders' use of criminal justice resources based on the type of arrest charge. The administrative records data disaggregated arrests into three categories of charges: (1) new felony drug charges, (2) new non-drug-related felony charges, and (3) misdemeanors.

For each of these offenses, researchers used the following methods to estimate how many of those arrestees reach each part of the criminal justice system and how long they stayed at each stage multiplied by the relevant marginal costs, which were described earlier in this chapter.

*Drug Felony***.** For those who committed another felony drug offense, the resource use and length of stay data from the pre- and post-DLR matched implementation samples was used to estimate resource use as a result of subsequent drug felony arrests (i.e., the likelihood that individuals rearrested would be sentenced, incarcerated, etc. (DCJS, 2013a) This is likely a conservative estimate because repeat offenders generally receive more punitive sentences for subsequent convictions.

*Non-drug Felony***.** For those who committed a non-drug felony, the CBA model used 2011 statewide data from DCJS to estimate criminal justice resource use that results from these arrests (DCJS, 2013a). Researchers used these data to estimate both the percentage of arrests that resulted in a conviction and the sentence types (prison, jail, or probation). The average length of stay in prison was estimated by calculating a weighted average of minimum sentences for all (A-E) felonies for second offenders. Because this is the minimum sentence, and not the average sentence, this may be a conservative estimate. The length of jail sentences was estimated using

the 2011 average jail stay for those sentenced to jail according to the DOC. Program staff could not obtain an estimate for length of stay in probation. Therefore, the average probation length of stay (pre-DLR and post-DLR) from the matched implementation samples was used.

Misdemeanor. For those who were rearrested on a misdemeanor charge, DCJS files were used to estimate the flow of misdemeanor cases through the criminal justice system.[118] Using this information, researchers estimated the number of misdemeanants who were convicted and sentenced to jail or probation. Of almost 70,000 misdemeanor arrests, only 76 went to prison[119], equivalent to 0.11 percent of arrests. Therefore, it was assumed that misdemeanor arrests would not result in a prison sentence.

Victimization Costs. Crime often imposes substantial costs upon victims. Some victims incur direct out-of-pocket expenses, such as medical costs or the value of stolen property. Other victims suffer lingering physical injuries or endure psychological pain. As crime decreases, fewer people incur the costs associated with crime (Henrichson and Levshin, 2011). Over the past few decades, criminal justice scholars have developed methods to place a dollar value on the monetary and non-monetary costs of crime. A recent study by Mark Cohen and Alex Piquero (2009) provides victim costs for serious crimes such as murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. Cohen also estimates the cost to victims for less serious crime categories, such as fraud, vandalism, and simple assault.

Because the number of victimizations that are prevented cannot be observed directly, they must be estimated from DLR's impact on the number of rearrests. Applying victim cost estimates to only the number of avoided rearrests would undercount the cost of victimization

[118] Rearrest files cover all misdemeanor rearrests for the study cohort after the index arrest and before November 30, 2012.
[119] A very small number of cases arrested on misdemeanor charges received prison sentences, which may be due to outstanding warrants or additional arrests for felony offenses between the point of arrest and case disposition.

because not every reported crime results in an arrest. To estimate the number of crimes avoided, researchers compared the total number of arrests by crime category from 2008 – 2011 with the total number of crimes reported to police in similar categories. The 4-year average of these comparisons serves as a multiplier used to adjust the number of avoided rearrests to better reflect the number of avoided crimes.[120]

This analysis assigned a victimization cost of $0 for all drug felonies and misdemeanors. Drug possession or sale is generally considered "victimless" in the economic literature because these transactions are a willing exchange between two parties (Redcross et al., 2012). As Kathryn McCollister (2010) notes, "Absent any negative externalities (e.g., violence associated with drug dealing, transmission of a communicable disease), the net effect on society is negligible." This is not to say that there are not negative consequences of substance use. It is only to say that the drug sale, in and of itself, does not impose a direct cost to public safety.

To estimate the victim costs of non-drug crimes, this analysis draws on Cohen's estimates (adjusted to 2009 dollars). Because Cohen's data presents victim costs for specific offense categories—such as assault, burglary, and motor vehicle theft—and the study data only record broad offense categories (violent felonies, other felonies, and misdemeanors) researchers calculated weighted averages of Cohen's victim costs within these categories based on the proportion of crimes reported in each category. The details of these estimates are provided below, and further information on the calculations is in Appendix L.

Cost of violent felonies. The victimization cost of a violent felony is estimated at $32,360 using Cohen's estimates (Cohen, 2009). DCJS data on the distribution of violent felonies by offense (rape, robbery, and aggravated assault) in NYC were used to calculate a weighted

[120] The study period for this analysis was from 2008 until 2012. The most recent available year for these data was 2011.

average of Cohen's victimization costs. DCJS data indicates that 4 percent of violent felonies were rape, 37 percent were robberies, and 59 percent were aggravated assault. Cohen estimated the victim's cost of a rape to be $139,685, the cost of a robbery to be $12,416, and the cost of an aggravated assault to be $38,284.

Note that we exclude the price of murder from this analysis, thereby assuming that DLR does not prevent murder. This assumption means that the benefit of an observed reduction in violent crime will be conservatively estimated in this analysis. While it is possible that DLR could prevent murder, the population of cases affected by DLR is a small proportion of all criminal cases, and murder is a rare event (1 percent of all violent felonies). Including the victim cost of murder ($4.7 million, per Cohen) in the weighted average of a violent felony would imply that any observed reduction in violent felonies meant there was *certainly* an avoidance of murder. Although the avoidance of murder is possible, it is clearly not certain, and therefore omitted from the calculation of averted victimization to provide a more likely estimate of the probable effect on victimization.

Cost of other felonies. The victimization cost of all other felonies (non-violent, non-drug) is an estimated $1,024 using the victimization costs in Cohen (2009) and DCJS data on the types of property felonies in NYC to calculate a weighted average of Cohen's victimization costs. Cohen estimated that burglary had a victim's cost of $2,069, larceny had a victim's cost of $466, and motor vehicle theft has a victim's cost of $5,691. DCJS data indicates that 13 percent of property crimes in NYC are burglaries, 80 percent are larcenies, and 7 percent are motor vehicle thefts.

Cost of non-drug misdemeanor. The victimization cost of non-drug misdemeanors is estimated at $466. Based on study data, the majority of misdemeanor crimes that were not drug

related were property crimes. Therefore, the CBA model used Cohen's victim's cost estimate of larceny ($466) for all non-drug misdemeanors.

Chapter 12. Findings and Discussion

New York State passed Drug Law Reform (DLR) in the midst of a financial crisis, and DLR is one of many efforts nationwide that aimed to reduce corrections costs while maintaining public safety. This study seeks to answer two research questions: (1) What were the economic implications of DLR for taxpayers and crime victims in NYC? (2) What are the costs and benefits of diverting an individual from a corrections sentence to drug treatment?

To answer the first question, researchers calculated the cost of criminal justice and drug treatment resources and the costs to crime victims for pre-DLR and post-DLR samples of arrests. The analysis found that, based on these matched samples, drug law reform has a net annual cost of $7.3 million in NYC, from the combined perspective of taxpayers and victims. This net cost is the sum of the costs and benefits from the taxpayer perspectives of law enforcement, courts, corrections, and treatment ($16.8 million cost) and the perspective of victims ($9.4 million benefit).

To answer the second question, researchers calculated the costs of criminal justice and drug treatment resources and the costs to crime victims for a sample of individuals who were diverted to treatment post-DLR, with a matched sample of individuals who received a corrections sentence pre-DLR. The analysis found there is a net cost of $12,989 per person when comparing someone who went to treatment post-DLR with a similar person who received a corrections sentence pre-DLR. This net cost is the sum of the costs and benefits from the taxpayer perspectives of law enforcement, courts, corrections, and treatment ($15,439 cost) and the perspective of victims ($2,450 benefit).

The methodology for these analyses is described in Chapter11. Further detail on the findings of the citywide costs and benefits is included in the first part of Chapter 12, followed by a discussion of the results.

Question 1: What were the economic implications of DLR for taxpayers and crime victims in NYC?

Table 12-1 shows that drug law reform has a net annual cost of $7.3 million in NYC, from the combined perspective of taxpayers ($16.8 million cost) and victims ($9.4 million benefit). This cost is the sum of the costs and benefits from the taxpayer perspectives of law enforcement, courts, corrections, and treatment and the perspective of victims.

The annual taxpayer cost of DLR is $16.8 million, which includes costs from the original felony drug arrests and any subsequent rearrests after release. DLR had a benefit of $6.3 million from the perspectives of law enforcement, courts, and corrections.[121] While fewer resources were spent on law enforcement, courts, and corrections, $23.2 million more was spent on drug treatment. The total taxpayer impact is therefore a net cost of $16.8 million. Because the reforms reduced re-offending, there is also a reduction in victimization post-DLR. There was a decline in arrests post-DLR, which means there was a decline in victim costs. This is estimated to be a $9.4 million benefit annually based on the number of rearrests for each group.

The net taxpayer cost of $16.8 million is a sizable amount in absolute terms, but it should also be considered in relative terms. NYC is the largest American city and total justice system expenditures exceeded $10 billion in 2009 (City of New York, 2010).[122] Therefore, the net

[121] $1.8 million law enforcement benefit - $1.8 million court cost + 6.3 million corrections benefit = $6.3 million.
[122] In 2009, total expenses for the New York Police Department were $7.9 billion and total expenses for the NYC Department of Corrections was $1.8 billion. In addition, justice system costs for NYC also include the cost of incarceration in a state prison. In 2010, the State Corrections Department spent $3.6 billion to house 59,237 inmates (Henrichson, 2012). 49.2 percent of these inmates were committed from NYC (State of New York, Department of Correctional Services, 2010).

taxpayer cost of DLR amounts to less than two-tenths of a percent (0.2%) of justice system costs in NYC. (See the discussion in Part V for additional information on budgetary effects.) Furthermore, while DLR was associated with an average per-case cost increase, the overall number of drug felony arrests has been in steady decline since the late 1990's (see Chapter 6). Therefore, the increased per-case cost to city and state are likely outweighed by an overall reduction in workload associated with declining numbers of arrests.

Table 12-1. Summary of Annual Costs and Benefits of DLR in NYC, Matched Implementation Samples

Costs	Pre-DLR (n=14,410)	Post-DLR (n=14,410)	Net Benefit/ (Cost)
Law Enforcement	$25,399,846	$23,528,765	$1,871,081
Courts	$48,246,195	$50,060,231	($1,814,036)
Corrections	$163,646,801	$157,336,662	$6,310,139
Treatment	$19,878,026	$43,091,008	($23,212,982)
Total taxpayer costs	**$257,170,868**	**$274,016,667**	**($16,845,798)**
Victim costs	$190,946,759	$181,448,965	$9,497,794
Net Benefit / (Cost)	**$448,117,627**	**$455,465,632**	**($7,348,004)**

*Numbers may not sum because of rounding.

Corrections costs declined post-DLR, which resulted in a $6.3 million benefit. Table 12-2 shows that the largest decrease was in prison costs, which declined by $4.1 million post-DLR. Following DLR, there was an increase in treatment costs. Following an initial screenings to determine eligibility, participants spent time in some mix of short-term inpatient treatment, outpatient treatment, and long-term residential treatment. Spending increased for all modes of drug treatment because of both a greater number of sentences to treatment and longer lengths of stay in treatment. The largest increase in treatment spending was associated with residential treatment, which increased almost 300 percent from the pre-DLR sample (from $9.1 million to $27.2 million).

Table 12-2. Detail of System Resource Use, Matched Implementation Samples

		Pre-DLR (n=14,410)	Post-DLR (n=14,410)	Net Benefit/ (Cost)
Law Enforcement	Cost of arrests	$25,399,846	$23,528,765	$1,871,081
Courts	Arraignments	$22,190,770	$22,320,965	($130,195)
	Indictments	$10,766,764	$13,970,715	($3,203,951)
	Sentencing	$15,288,661	$13,768,552	$1,520,109
Corrections	Jail	$56,231,763	$55,544,946	$686,817
	Prison	$91,663,989	$87,511,711	$4,152,278
	Probation	$8,070,662	$7,276,519	$794,143
	Parole	$7,680,387	$7,003,486	$676,901
Treatment	Drug treatment eligibility screenings	$4,009,348	$4,353,115	($343,767)
	Inpatient treatment	$695,570	$1,118,333	($422,764)
	Outpatient treatment	$6,028,592	$10,351,267	($4,322,675)
	Residential treatment	$9,144,517	$27,268,293	($18,123,776)
Total Taxpayer Cost		**$257,170,868**	**$274,016,667**	**($16,845,798)**
Victim cost		$190,946,759	$181,448,965	$9,497,794
Total Net Present Value		**$448,117,627**	**$455,465,632**	**($7,348,004)**

***** Numbers may not sum because of rounding

Changes in resource use. The costs and benefits in this analysis are a function of the number of people who use justice system resources (such as prison or treatment) and the duration for which they use that resource. DLR impacted both of these variables. Table 12-3 includes detail on prison resource use and shows that the $4.1 million benefit to the state prison system is due to a 4 percent reduction in the number of commitments.

Table 12-3. Prison Resource Use, Matched Implementation Samples[123]

	Pre-DLR (n=14,410)	Post-DLR (n=14,410)	Difference	Percentage change
Number sentenced	1,052	1,009	(43)	-4%
Length of stay	481.2	481.6	0.4	0.1%

[123] The average length of stay in custody used as part of the CBA includes prison and jail sentences imposed following failure to comply with court mandated treatment conditions and is, therefore, not directly comparable to the figures provided in Chapter 7 of this report (Implementation Analysis).

Table 12-4 shows that the $23.2 million increase in treatment costs is driven by both a greater numbers of diversions and longer durations of treatment service. The number of treatment diversion increased by 60 percent post-DLR. The number of outpatient treatment sessions increased by 14 percent (from 88 sessions to 101) and the average length of time individuals spent in residential treatment increased 98 percent post-DLR (from 139 days to 274 days).

Table 12-4. Treatment Resource Use, Matched Implementation Samples

	Pre-DLR (n=14,410)	Post-DLR (n=14,410)	Difference	Percentage change
Number sentenced	405	647	242	60%
Inpatient treatment (days)	2.08	2.22	0.14	7%
Outpatient treatment (sessions)	88	101	12	14%
Residential treatment (days)	139	274	136	98%

Benefit of reduced crime. To draw a comprehensive picture of DLR's cost to taxpayers, the CBA model captures the costs incurred when offenders are processed for their initial arrest as well as the costs from any subsequent arrests for a minimum of 26 months and a maximum of 35 months, depending on when the individual was arrested originally. (Individuals arrested later in the cohort have a briefer follow-up period.) When there is less recidivism, there are both taxpayer and victims benefits. Taxpayers benefit because fewer justice resources (such as law enforcement, courts, and corrections) are expended when there is less crime. Victims benefit because a reduction in crime means there is less harm to victims.

Cases in the post-DLR sample were rearrested 0.24 fewer times per case on average than those in the pre-DLR group.[124] This reduces the cost of law enforcement, court, corrections, and treatment. As Table 12-5 shows, arrests for all categories in the study data declined post-DLR.

[124] This equates to 3,458 fewer arrests in the post-DLR sample.

The largest reduction in rearrests was for those arrested for drug felonies, which declined by an average of 0.09 rearrests per case. It is important to remember that the time at risk for both samples was not equal because treatment lengths were longer post-DLR, but the analysis tracks both samples from the initial disposition for an equivalent time (26-35 months).

Table 12-5. Number of Rearrests: Matched Implementation Samples

Offense	Pre-DLR (n=14,410)	Post-DLR (n=14,410)	Difference
Drug felonies	0.48	0.39	-0.09
Violent felonies	0.122	0.117	-0.005
Other felonies	0.177	0.166	-0.012
Drug misdemeanors	0.68	0.62	-0.06
Non-drug misdemeanors	0.75	0.67	-0.08
Total	**2.21**	**1.97**	**-0.24**

*Represents the average number of arrests per case. Numbers may not sum because of rounding

Each arrest leads to additional taxpayer costs as the case is processed in the criminal justice system. As described in the methodology section, researchers estimated the percentage of arrests that reached each part of the justice system and how long each case stayed there based on the type of arrest.

Victim costs also result from recidivism. The reduction in rearrests post-DLR resulted in a victim benefit of $9.4 million. It is likely that some of the reduction in re-offending resulted from an incapacitation effect because the post-DLR sample was in treatment for longer periods. Thus, they were not in the community to commit crimes for as long. This is included as a benefit in these CBAs because this lack of opportunity to commit new crimes is a benefit of treatment.

Conclusion. The net cost of $7.3 million illustrates that drug treatment is a more expensive option than a corrections sentence over a 26-35 month follow up period. This net cost is the sum of the costs and benefits from the taxpayer perspectives of law enforcement, courts,

corrections, and treatment ($16.8 million cost) and the perspective of victims ($9.4 million benefit).

Although DLR reduced the use of corrections resources, these benefits are offset by the high cost of substance abuse treatment. The marginal cost of treatment is greater than incarceration, and post-DLR, the duration of treatment services increased, thereby increasing the cost of treatment (see the discussion "Marginal Costs" and "Treatment Costs" in Chapter 11 for further information on these topics.)

Question 2: What are the costs and benefits of diverting an individual from a corrections sentence to drug treatment?

A central objective of DLR was to increase the use of drug treatment as an alternative to incarceration. Our second research question compares the costs and benefits of drug treatment to corrections sentences. To answer this question, researchers tracked 638 people from both pre- and post-DLR periods for a maximum of 35 months. The Diverted Group was made up of individuals who were diverted post-DLR. The Sentenced Group included individuals arrested pre-DLR who would be eligible for diversion under the terms of DLR eligible cases, and who received a prison, jail, probation or time-served sentence.

Table 12-6 reports the costs and benefits of drug court diversion. There is a net cost of $12,989 per diversion when comparing someone who went to treatment post-DLR with a similar person who received a corrections sentence pre-DLR. Individuals in the Diversion Group were rearrested at a lower rate than those in the Sentenced Group. Therefore, there is a law enforcement benefit of $146 and a court system benefit of $886 per person in treatment.

Individuals diverted to drug treatment used corrections resources only while awaiting

adjudication, as sanction for failing drug treatment, or for committing subsequent crimes. Therefore, the corrections system has a benefit of $12,678 per person diverted to drug treatment. The cost of treatment, however, is $29,149 per person. Because there is a reduction in rearrests for the treatment group, drug treatment yields a victim benefit of $2,450 per person.

Table 12-6. Costs and Benefits of Drug Court Diversion in NYC (per Individual), Matched Sentenced and Diverted Sample

Costs	Sentenced Group (n=638)	Diverted Group (n=638)	Benefit / (Cost)
Law Enforcement	$705	$559	$146
Courts	$3,800	$2,914	$886
Corrections	$19,013	$6,336	$12,678
Treatment	$225	$29,374	($29,149)
Total taxpayer cost	**$23,743**	**$39,182**	**($15,439)**
Victim cost	$5,002	$2,552	$2,450
Total	**$28,745**	**$41,734**	**($12,989)**

Numbers may not sum because of rounding.

Table 12-7 provides further detail on system resource use. As expected, the sentenced group had higher costs for all modes of corrections. The greatest corrections benefit from diversion was from a reduction in jail use ($5,822 per diversion). The greatest expense for the treatment group was for residential treatment, which costs $20,871 on average more than the sentenced group. The treatment expenses for the sentenced group result from rearrests for a drug felony.

Table 12-7. Detail of System Resource Use (per Individual), Matched Sentenced and Diverted Samples

		Sentenced Group (n=638)	Diverted Group (n=638)	Benefit / (Cost)
Law Enforcement	Arrest	$705	$559	$146
Courts	Arraignment	$840	$788	$52
	Indictment	$1,866	$1,851	$15
	Sentencing	$1,094	$275	$819
Corrections	Jail	$8,116	$2,283	$5,822
	Prison	$8,050	$3,509	$4,541
	Probation	$1,658	$94	$1,564
	Parole	$1,190	$450	$740
Treatment	Drug treatment eligibility screenings	$139	$783	($645)
	Inpatient treatment	$4	$750	($746)
	Outpatient treatment	$33	$6,920	($6,887)
	Residential treatment	$50	$20,921	($20,871)
Justice System Costs		**$23,743**	**$39,182**	**($15,439)**
Victim cost		$5,002	$2,552	$2,450
Total		**$28,745**	**$41,734**	**($12,989)**

*Numbers may not sum because of rounding.

Changes in resource use. In the Diverted Group, 163 fewer individuals went to prison. None of the people in the Diverted Group were initially sentenced to prison, but some went to prison if they failed drug treatment. Table 12-8 shows that those who failed treatment served longer sentences than they would have if sentenced to prison directly (410 days versus 361 days). Longer sentences were part of some offender's plea to enter treatment.

Table 12-8. Prison Resource Use, Matched Sentenced and Diverted Samples

	Sentenced Group (n=638)	Diverted Group (n=638)	Increase/ (Decrease)
Number	258	95	(163)
Length of stay	361	410	49

As a result of the criteria used to select the two samples, all 638 members of the Diverted Group were mandated to attend treatment by the court; none received a treatment mandate in the sentenced group. (It is possible that those in the sentenced group received treatment services without a court order). The Diverted Group, on average, spent 2 days in inpatient treatment, went to 94 outpatient treatment sessions, and spent 293 days in residential treatment.

Table 12-9. Treatment Resource Use, Matched Sentenced and Diverted Samples

	Sentenced Group (n=638)	Diverted Group (n=638)	Increase/ (Decrease)
Average court-mandated inpatient treatment (days)	0	2.07	2.07
Average court-mandated outpatient treatment (sessions)	0	94	94
Average court-mandated residential treatment (days)	0	293	293

Victim benefits. The treatment group was rearrested 0.42 fewer times per person during the study period for all crime types in our data (drug felonies, violent felonies, other felonies, violent misdemeanors, and misdemeanors). The largest absolute reduction was for non-drug misdemeanors. See Table 12-10.

The Diverted Group committed fewer crimes during the study period and they were in the community with the potential to commit crimes for less time because of more time spent in treatment. This is an incapacitation effect because the individuals were in treatment and not in the community able to re-offend. These avoided crimes equate to $2,450 in victim benefits per diversion. In addition to the benefit to victims, the treatment group also used fewer justice system resources that result from arrests.

Table 12-10. Number of Rearrests, Matched Sentenced and Diverted Samples

Offense	Sentenced Group (n=638)	Diverted Group (n=638)	Difference
Drug felonies	0.19	0.11	(0.08)
Violent felonies	0.075	0.036	(0.039)
Other felonies	0.086	0.064	(0.022)
Drug misdemeanors	0.29	0.15	(0.14)
Non-drug misdemeanors	0.36	0.22	(0.14)
Total	**0.99**	**0.57**	**(0.42)**

*Numbers may not sum because of rounding.

Conclusion. The net cost of $12,989 per person in drug treatment illustrates that drug treatment is a more expensive option than a corrections sentence in the short run. This net cost is the sum of the costs and benefits from the taxpayer perspectives for law enforcement, courts, corrections, and treatment ($15,439 cost) and the perspective of victims ($2,450 benefit).

Although DLR reduced the use of corrections resources, these benefits are offset by the high cost of substance abuse treatment. The marginal cost of treatment is greater than incarceration, and post-DLR, the duration of treatment services increased, thereby increasing the total cost of treatment (See the discussion "Marginal Costs" and "Treatment Costs" in Chapter 11 for further information on these topics.)

Discussion of CBAs.

This study finds that Drug Law Reform (DLR) increased rates of diversion to drug treatment, thereby reducing the use of corrections resources such as prison and probation. The research also demonstrated that drug court programs substantially delayed and prevented defendants' future involvement with the criminal justice system. The potential benefits of these effects are clear: When justice system involvement declines, it means there have been fewer costs imposed on the victims of crime, and taxpayer costs are averted because there is less crime to investigate, prosecute, and punish.

Yet these benefits come at a cost. While this analysis finds that drug treatment is effective, it is also costly. Moreover, because of the way that drug treatment is reimbursed by the state –on a fixed per-diem basis- it is costly "on the margin" (i.e., when resource use increases or decreases above or below historical levels), when compared to corrections resources such as prison and jail. Therefore, drug court has a net cost of $12,989 per diversion. Costs and benefits are tallied for a short study period (a 12-35 months following arrest) and include the combined perspective of taxpayers and victims. This net cost is the sum of the costs and benefits from the taxpayer perspectives of law enforcement, courts, corrections, and treatment ($15,439 cost) and from the perspective of victims ($2,450 benefit).

These results, however, do not mean that DLR was not effective at reducing crime or was necessarily a poor policy choice. These results indicate that DLR was effective at averting crime, yet it is costly—during the brief time frame of this study—owing, in part, to the manner in which services in the criminal justice system are funded. This section discusses several issues that affect policy-making: (1) how the marginal cost of treatment versus corrections affects the results, (2) how the net taxpayer cost of DLR had the greatest impact on the federal budget, and (3) how the courts' decisions about treatment affect costs. The section concludes with a discussion of the limitations of the analysis.

Marginal costs

One interesting aspect of the analysis is that it highlights that cost-effectiveness is not only dictated by the effectiveness of treatment but also by the cost structure for the criminal justice system. Often the high (average) cost of prison and the lower cost of alternative interventions are cited as evidence of the cost-effectiveness of the alternative. Yet the average cost has no bearing on the costs (and savings) of the policy choice because it includes fixed costs

that cannot change even if there is an enormous policy effect. As mentioned previously, in a cost-benefit analysis "only the costs (and benefits) that vary with the decision should be considered" (Cohen, 2000).

The marginal cost of prison in New York is $50 per day, whereas the marginal cost of residential drug treatment is $71. A straight swap of treatment for prison results in a net cost, despite the fact that prison—on average—is actually twice as expensive as treatment. (The average cost of prison is $165 per day (Henrichson & Delaney, 2012). This is because substance abuse treatment is provided by private agencies and paid for by the government on a "per diem" rate, which is close to the average cost.

The way governments finance the justice system often creates an apparent policy paradox: the option that is more effective, and less costly (on average), is actually not cost-effective on the margin. This is the case during the brief period of this study. It is possible that over a longer follow-up period the investment would break even, but there is no denying that this fiscal reality presents a dilemma for policymakers who are concerned with more immediate financial benefits.

If, instead, drug treatment were not paid on a per-diem rate (that approximates the average cost), the marginal costs of treatment would be lower, and the cost-benefit analysis would look more favorable. Similarly, if incarceration were paid on a per-diem rate, the cost-benefit analysis would also look more favorable.[125] Yet these scenarios are only hypothetical in New York, a state where all prisons are operated by the government and most treatment services (for drug court clients) are provided by private agencies and reimbursed on a per-diem rate.

[125] If the average cost of corrections (jail: $430 per day; prison: $162 per day; probation: $12 per day; and parole: $10 per day) are used instead of the marginal costs, the cost-benefit analysis has a much lower cost from the taxpayer's perspective and has a net benefit from the combined perspective from taxpayers and victims.

The results of cost-benefit analyses are generally interpreted as a reflection of the effectiveness of the program. But the system costs are also a key factor. The marginal cost of the investment, as well as the averted marginal costs related to the reduction in re-offending, has a huge impact on the results. While it may not seem "fair" to calculate cost-effectiveness based on a fiscal framework where, on the margin, incarceration is cheaper than treatment, it is a necessary assumption in this cost-benefit analysis because it reflects the true economic effects of the policy choice. It also may partly explain why despite the effectiveness of many proven sentencing alternatives, government officials are sometimes reluctant to expand these alternatives (because doing so would present a short-run budgetary cost).

Budgetary impacts

Policymakers consider decisions about legislation within the context of their own budgetary parameters. While the net taxpayer cost of the independent effect of DLR is important (i.e., the cost-benefit results presented earlier in this chapter), other budgetary issues surrounding drug crime and the effect of DLR on government budgets is just as important to the policy process. While the independent effect of DLR created a net taxpayer cost during the study period, it is important to keep in mind that the net taxpayer cost in this analysis does not mean there was necessarily a net budgetary cost for the state or city governments. There are two reasons: First, there were fewer drug arrests post-DLR, and second, the net cost was mostly borne on the federal Medicaid budget (which funds substance abuse treatment).

First, because drug arrests declined post-DLR, justice system costs to prosecute and sentence these cased declined as well. There were 3,100 fewer felony drug arrests and 1,600 fewer felony drug sentences post-DLR. While the reduction in arrests or sentences cannot be attributed to DLR, it does mean—from a broader budgetary perspective—that a portion of the

taxpayer cost due to DLR was offset by the cost-savings owing to the reduction in felony drug arrests. Thus, even though DLR had the near term effect of increasing costs, these budgetary increases are masked by the savings due to lower arrest rates. Although this trend may be exogenous to DLR, lower drug arrest rates post-DLR present the appearance of success, even if they cannot be unambiguously attributed to DLR.

Second, intergovernmental budgetary impacts are important because the budget that is affected (local, state, or federal) informs policy choices. Although from a taxpayer view this issue may be inconsequential—taxpayers are probably indifferent about *which* level of government is spending their money—these impacts have a tremendous bearing on local, state, and federal policy choices. A state policymaker is most concerned about fiscal impacts to the state budget, which directly affect state policy options, and is probably not concerned with federal budget impacts. (The state policymaker, however, may also be interested in local budget impacts, which will affect local taxes for their constituents.)

Most of the increase in taxpayer costs from drug law reform was due to greater use of drug treatment services, and these costs are largely paid for by the federal budget. Table 12-11 shows that of the total increase for taxpayer costs, 56 percent of the cost was borne on the federal budget; 26 percent was borne on the state budget. NYC bore only 18 percent of the net taxpayer cost.

NYC pays all the costs of law enforcement, jail, and probation, most of the cost of screenings for drug treatment eligibility, and 34 percent of the expense of residential treatment.[126] The state pays for courts, prisons, parole, 50 percent of the cost of inpatient and outpatient treatment for Medicaid eligible clients, and 28 percent of the cost of residential drug

[126] Drug treatment eligibility screenings are provided by contracted non-profits. Fiscal staff at TASC, a contracted human services agency, informed us that most, but not all, funding is from city sources, but we could not obtain a detailed break-down. It is assumed that drug screening is 100 percent city funded.

treatment.[127] The federal government pays the remaining 50 percent of Medicaid costs for inpatient and outpatient treatment costs in New York State, and 38 percent of the cost of residential treatment services.[128] Nearly all drug court clients are Medicaid eligible.[129]

[127] Residential treatment includes costs for both treatment and the residential care of the client. Treatment services are paid by the New York State Office of Alcoholism and Substance Abuse Services (OASAS) and funded 70 percent through the federal Substance Abuse Prevention and Treatment Block Grant and 30 percent through state funds. (The actual share varies slightly on an annual basis). Residential care for clients is paid by the NYC Human Resources Administration (HRA), which provides public assistance payments for eligible clients. These payments are for Food Stamps, personal needs allowance, and congregate care. Food Stamps are 100 percent federally funded. Personal needs allowance and congregate care is 70 percent city- and 30 percent state-funded. The combined cost for treatment and residential services are funded 34 percent City, 28 percent State, and 38 percent Federal.

[128] Medicaid costs are shared between the federal government and the states. The proportion of the federal share (called the Federal Medical Assistance Percentage or FMAP) varies by state depending on state income. The FMAP is 50 percent in New York.

[129] This analysis assumes that 100 percent of clients are funded by Medicaid. Government budget staff and treatment providers tell us that a small portion of clients pay for treatment through private insurance (less than 10 percent). Thus, our analysis slightly overestimates the federal and state costs

Table 12-11. Net Cost by Unit of Government for the Matched Implementation Samples Benefit/ (Cost)

		Total	City	State	Federal
Law Enforcement	Arrests	$1,871,081	$1,871,081	$0	$0
Courts	Arraignments	($130,195)	$0	($130,195)	$0
	Indictments	($3,203,951)	$0	($3,203,951)	$0
	Sentencing	$1,520,109	$0	$1,520,109	$0
Corrections	Jail	$686,817	$686,817	$0	$0
	Prison	$4,152,278	$0	$4,152,278	$0
	Probation	$794,143	$794,143	$0	$0
	Parole	$676,901	$0	$676,901	$0
Treatment	Drug Treatment Eligibility screenings	($343,767)	($343,767)	$0	$0
	Inpatient treatment	($422,764)	$0	($211,382)	($211,382)
	Outpatient treatment	($4,322,675)	$0	($2,161,338)	($2,161,338)
	Residential treatment	($18,123,776)	($6,122,241)	($5,014,407)	($6,987,129)
Total		**($16,845,798)**	**($3,113,968)**	**($4,371,983)**	**($9,359,848)**
Percent of total		100%	18%	26%	56%

Treatment Costs

The net cost of drug treatment post-DLR is a function of the increased number of diversions, the average length of treatment, the mode of treatment services, and the marginal costs of those services. It is expected that greater diversions would lead to greater costs, and the marginal cost of treatment is a variable that—for all practical purposes—cannot be changed. One interesting finding, however, is that the length of treatment plans increased post-DLR, and that clients were more likely to be referred to residential treatment.

The duration of treatment plans increased 30 percent citywide. Additionally, the use of (the more expensive) residential treatment increased 22 percent citywide, and this increase was also the largest in New York and Bronx counties (increases of 36 percent and 120 percent, respectively).

Although the demographic profile of clients has not changed post-DLR, the profile of prior arrests and convictions has shifted, and the use of longer terms in residential settings may be in response to a population with higher risks and needs. The change in both the duration and mode of treatment is notable because the net taxpayer cost of DLR ($15,439 per diversion) is driven by the cost of residential treatment. The average length of stay in residential treatment post-DLR is 274 days, an increase of 98 percent from before DLR (139 days). At a cost of $71 per day, 274 days of residential treatment costs $19,454 and 139 days costs $9,869.

This study finds that drug treatment is effective in reducing recidivism: those diverted to treatment are rearrested at significantly lower rates (see Part III, The Impact of Drug Law Reform on Reoffending). Therefore, the cost-benefit question posed by lengthy residential stays is not whether treatment is beneficial but whether the positive effects of treatment can be attained at lower cost by means of somewhat briefer stays. Given the linear relationship between length of stay and costs, even a small reduction in the use of residential treatment may attain cost-savings.

Conclusion

This study finds that Drug Law Reform (DLR) had the effect of diverting greater numbers to drug treatment and that drug court programs substantially delayed and prevented defendants' future involvement with the criminal justice system. The strength of this work is the measurement of the change in cost due to differences in sentencing outcomes post-DLR. There is clearly a net cost when greater numbers of clients are diverted to a pathway that, on the margin, is more costly than a corrections sentence. To the extent that the positive effects on recidivism persist, and should clients continue to accrue the positive effects of their treatment outcomes, the investment may be a net benefit in the future.

Part V. Conclusion and Recommendations

Drug law reform (DLR) in New York City (NYC) has led to a number of changes in the way that courts handle felony drug and specified property cases – affecting many aspects of the criminal justice system besides sentencing. More people were diverted to treatment as an alternative to incarceration since DLR came into effect (an increase from 3 percent to 5 percent) and the proportion of felony drug arrests resulting in a jail or prison sentence for drug felony cases decreased citywide. This study also found that diversion to treatment was associated with a statistically significant reduction in rates of reoffending. However, the majority of cases that meet the basic eligibility criteria for diversion (B through E Felony drug charges or specified property cases, without prior violent felony convictions) did not receive treatment as an alternative to incarceration. Furthermore, there is considerable variation in the use of diversion between the six NYC court jurisdictions; post-DLR cases in Kings County (Brooklyn) and Bronx County were more than twice as likely to be diverted to treatment when compared to cases in New York County (Manhattan). An often overlooked component of DLR is the extent to which changes to mandatory minimum sentences affects charging practices at various stages of a case, from the initial charging decision through disposition. The research found that the average severity of disposition charges increased over the period of the study; a greater number of the matched drug felony cases included in the research were disposed as A or B Felonies, post-DLR. Unraveling the collateral consequences of this change in practice for people arrested on drug felony charges requires further investigation.

The following section summarizes key study findings and provides recommendations for meeting the challenges associated with implementing and monitoring drug law sentencing reform in the nation's most populous city with implications nationally.

As the qualitative interviews demonstrate, the number of drug felony arrests entering the court system, and the nature of those cases, is largely the result of factors beyond the control of the courts, such as changes in patterns of drug use, and policing priorities and practices. Felony drug arrests in NYC declined, from 8,556 arrests in the first quarter of 2007 to 5,723 in the first quarter of 2011.The proportion of such arrests that resulted in an indictment or Superior Court Information (SCI)[130] also declined over this period: from 33 percent in the third quarter of 2006 to 28 percent in the second quarter of 2011. Furthermore, prison was used less frequently for felony drug cases, both in absolute number (from 917 to 357) and as a proportion of all arrests (from 12 percent to six percent). Researchers controlled for these historical shifts by tracking the same number of cases, matched on key individual and case level characteristics, for an equivalent time period to answer questions about the implementation of DLR and its impacts. However, it is important to note that sentencing practices were shifting in NYC before DLR came into effect and, to some extent, the 2009 reforms may have formalized a historical trend towards less punitive sentencing that was already well underway.

Of the two major components of DLR, the removal of mandatory minimum prison sentences had a greater impact on case outcomes in NYC than the creation of new judicial diversion drug courts. Post-DLR, nine percent fewer defendants received jail or prison sentences and there was a significant increase in rates of treatment diversion. However, only two of the six jurisdictions in the city (New York County and Special Narcotics Prosecutors (SNP)) had active judicial diversion courts. Judicial diversion may have the greatest impact in jurisdictions where existing DA-led mechanisms restricted the use of drug treatment as a sentencing option. While this finding is based on a small sample of NYC jurisdictions, it is supported by studies conducted

[130] As discussed elsewhere in this report, the definition of felony indictments includes Superior Court Information (SCI) hearings. New York State courts use SCIs to accept pleas on felony charges in lieu of an indictment, typically as a condition of pre-indictment diversion.

elsewhere in the state that have found that judicial diversion has the greatest impact in counties where there has been limited use of pre-DLR diversion (Waller, Carney, Farley, & Rempel, 2013).

While the proportion of drug felony cases resulting in a prison or jail sentences has declined, the average *length* of prison sentences increased by 10 percent and the average length of jail sentences increased by 24 percent. There has been a similar increase in the length of treatment plans mandated by the courts, from an average of 10 months pre-DLR to 13 months post-DLR.

Recommendation: Courts should conduct ongoing monitoring of factors associated with changes in the length of sentences.

The removal of mandatory minimum sentences for the majority of drug felony charges has changed the dynamics of plea-bargaining – the basis for over 90 percent of convictions. According to interviews with court professionals, the lack of sentencing discretion prior to DLR meant that prosecutors often reduced charges between the point of arrest and disposition to avoid mandatory minimum prison sentences (e.g. a defendant arrested on a B Felony charge may be convicted on a D or E Felony charge, therefore avoiding mandatory minimum sentences). DLR changed the incentive structure by removing mandatory sentences for most charges and as a result 2.6 times as many cases post-DLR were disposed as B felonies when compared to the pre-DLR period.

Recommendation: It will be important to track the longer term implications of the shift in charging practices to determine: a) the extent to which a B Felony conviction has collateral impacts on future sentencing decisions for those who are re-arrested; and, b) if people who

plea to a B Felony charge as a condition of diversion, but do not comply with treatment requirements, ultimately serve longer prison sentences than they would have done pre-DLR.

Policy reforms that increase the use of treatment diversion can lead to 'net-widening' if defendants who would not otherwise have received a custodial sentence are diverted to newly created ATI. This does not appear to be the case in NYC; the use of prison and jail declined citywide over the DLR period and drug court participants post-DLR had more prior felony convictions on average, when compared to those diverted pre-DLR.

The research literature shows that drug courts are most effective when they target arrestees who are at greatest risk of recidivism (Bhati, Roman, & Chalfin, 2008). Conversely, placing people who are unlikely to reoffend in high-intensity drug programs can increase their risk of recidivism (Lowenkamp, Holsinger & Latessa, 2006; Taxman & Thanner, 2006). Those who were diverted to treatment post-DLR had more extensive histories of prior arrest and conviction and the recidivism analyses suggest that diversion was associated with a decrease in reoffending for this higher risk group. This finding is consistent with prior research on expanding drug courts to high risk group, which often finds that drug courts are effective at mitigating the risk of recidivism for defendants with extensive criminal histories (Saum & Hiller, 2008; Mitchell et al., 2012). This study found that diversion to treatment as an ATI significantly reduced reoffending across a range of measures, including overall number of rearrests, time to first rearrest, number of rearrests on violent charges, and felony rearrest rate. However, post-DLR less than 30 percent of all those who were potentially eligible for treatment diversion were referred for drug court assessment and 12 percent of cases were ultimately diverted. If diversion to DTAP is included, 21 percent of felony drug cases that met the charge and criminal history criteria described by Article 216 were diverted. In the overwhelming majority of diversion cases,

public safety is not a plausible concern; the population served by drug courts in NYC is required to be "non-violent" and very few drug court participants were rearrested on violent charges.

Recommendation: Courts in NYC should further expand treatment as an alternative to incarceration to include those who are at greater risk of reoffending.

The significant county-level variations in the use of treatment as an ATI are largely explained by rates of referral for clinical assessment to determine diversion eligibility. For example, in Kings County, a court clerk screened all cases to determine if they met the charge and criminal history requirements for diversion (B through E Felony drug charges or specified property cases without a prior violent felony conviction) and eligible cases were forwarded to the treatment courts for further assessment. As a result, 46 percent of all DLR eligible cases were referred for drug court assessment and 15 percent were ultimately diverted to drug court as an ATI. In contrast, New York County considered eligibility for treatment diversion on a case-by-case basis and, as a result, only 18 percent of DLR eligible cases were referred for assessment and 7 percent were ultimately diverted to drug court.

Recommendation: Courts should adopt routine procedures for screening all felony drug and specified property cases to identify defendants that meet the basic criteria for diversion, as described in the DLR 'article 216' statutes. Agencies should monitor rates of diversion and document the specific reasons for declining diversion placement requests.

Post-DLR, the use of residential treatment increased from 47 percent of all diverted cases to 54 percent of cases and the amount of time spent in residential treatment averaged across all drug court participants increased by 97 percent (from 139 days to 274 days).[131] The increasing reliance on relatively long periods of residential treatment for drug court participants may be

[131] Pre-DLR 78 drug court participants received residential treatment, with an average length of stay of 279 days; Post-DLR 252 drug court participants received residential treatment, with an average length of stay of 478 days.

appropriate for those who require both intensive treatment and the level of supervision provided in a residential setting. However, there is no evidence that an emphasis on residential rehabilitation, as opposed to community-based treatment, is associated with reductions in recidivism (Krebs, Strom, Koetse, & Lattimore, 2009; Pérez, 2009). A number of justice professionals interviewed as part of this study believed that decisions to place felony drug court participants in residential treatment are often motivated by the desire for supervision, or punishment, rather than clinically informed decisions about the treatment modality that is most likely to be effective in reducing rates of substance abuse.

Recommendation: To maximize the effectiveness of drug court diversion, courts should adopt policies to ensure that treatment decisions are based solely on an assessment of clinical need conducted by trained treatment professionals.

DLR allowed courts to make graduation from mandated treatment conditional on achieving 'holistic goals', such as securing employment, finding a place to live, or gaining educational qualifications. Employment, housing and, educational supports are essential for many people who become involved in the criminal justice system. However, conditioning treatment graduation on these additional requirements may extend the time that a diversion participant is supervised by the courts. This may partly explain the lengthy periods in treatment for many of the post-DLR cohort.

Recommendation: Further research is needed to track the proportion of drug court participants who are achieving 'holistic' treatment goals and to determine the impact on rates of treatment graduation and subsequent recidivism. The evidence base for including completion of non-treatment goals as a condition of program graduation should be evaluated.

The analysis found that the implementation of DLR in NYC had a net annual cost of $7.3 million. This cost is the sum of net costs and savings from the perspective of taxpayers ($16.8 million cost) and victims ($9.4 million savings) over the 35-month follow-up period. The analysis also found that drug court had a net cost of $12,989 per diversion, from the combined perspectives of taxpayers and victims over the 35-month follow-up period.

Much of the costs associated with DLR were due to an increase in the use of residential treatment and escalating lengths of stay in court-mandated treatment post-DLR. The change in both the duration and mode of treatment is notable because the net taxpayer cost of DLR ($15,439 per diversion) is largely driven by the cost of residential treatment. The average length of stay in residential treatment post-DLR is 274 days, an increase of 97 percent from before DLR (139 days). At a cost of $71 per day, 274 days of residential treatment costs $19,454 and 139 days of costs $9,869. Given that there is a linear relationship between length of stay and costs, with each additional day in treatment costing the government another $71, even a small reduction in the use of residential treatment will reduce costs.

Drug law reform requires an initial investment in treatment capacity and it is essential that these investments are guided by an assessment of the clinical needs of arrestees. In particular, there is a need to reconsider the current reliance on lengthy periods of time in Therapeutic Community residential treatment programs – the primary model of court-mandated residential treatment used in New York State. Therapeutic Communities are primarily designed to serve opiate and stimulant drug users. However, 40 percent of defendants reporting marijuana as their primary drug were mandated to attend these services – with little evidence base for the efficacy of any form of treatment for marijuana.

Recommendation: There is a need to develop additional treatment options, including outpatient programs designed to serve primary marijuana users and others who require low-intensity treatment services.

In most cases, methadone assisted treatment and other forms of substitution therapy are not available to court mandated treatment clients who are dependent on opiates. The lack of appropriate treatment modalities for opiate users may partially explain the higher failure rates for participants reporting heroin as their primary drug.

Recommendation: Rules preventing providers of court-mandated treatment from offering opiate substitution therapy should be reevaluated.

One of the most enduring legacies of the Rockefeller Drug Laws was their disparate impact on people of color. This study revealed significant disparity in both the profile of people arrested and the sentences imposed by the courts prior to DLR, with blacks and Hispanics more likely to be arrested on drug felony charges and more likely to be sentenced to prison than whites. Drug law reform has narrowed this disparity, but Blacks and Hispanics arrested on felony drug charges in New York City post-DLR were still 1.9 and 2.1 times as likely to be sentenced to prison respectively, when compared to whites.

Recommendations: Metrics that track the racial impact of arrest and sentencing policies at each stage of the court process are needed as a way of holding the police, prosecutors and courts accountable for the disparate impact of their decisions.

Study Limitations

This study capitalized on the naturally occurring experiment created by revisions to New York State drug laws to document the impact of DLR on people arrested for drug felony and specified property offenses in New York City. This presented a unique opportunity to explore the logistical, political and economic factors that are associated with implementing significant legal reforms in the nation's most populous city. However, measuring the impact of a system-wide sentencing reform meant that it was necessary to compare cases arrested and disposed in two different time periods, pre and post-DLR. The research used propensity score matching to control for a range of individual, charge, and criminal history variables as a way of maximizing the comparability of cases selected from these two periods. However, it is not possible to fully assess the extent to which unobserved differences existed between the pre-DLR and post-DLR samples that could influence cases outcomes or reoffending rates independently of DLR. Information on treatment need as indicated by an assessment of substance abuse or dependence was only available for individuals assessed for drug court participation, and this may have affected the comparability of the samples included in the reoffending analysis. Interviewees consistently reported that policing had not changed as a result of DLR and the number of arrests on felony drug charges in New York City has been in decline since 1998, suggesting that any changes in policing practices predate the reforms. However, it is also possible that changes in arrest practices could affect the comparability of cases entering the courts in the pre and post DLR periods.

The quantitative analysis used multiple administrative datasets to track sentencing and diversion outcomes, reoffending, and the cost and benefits associated with drug law reform in NYC. However, there were some limitations in the data available for the study. First, a number

of cases are diverted to treatment via ATI programs that utilize a variety of screening, assessment and case management mechanisms. The research team was not able to access reliable, comprehensive information on all of these programs and, therefore, the study undercounts all diversions for both periods (pre- and post-DLR). Second, information was not available on the DA-led DTAP program in New York County post-DLR; researchers used available data to estimate the number of missing cases. Finally, prosecutors working in Bronx County told us that historical problems with the court's administrative record-keeping system may have led to some under-reporting of diversion pre-DLR. We were told that these problems do not affect the post-DLR cohort.

To assess rates of rearrest, the research team truncated the follow-up period for pre-DLR (older) cases to match the time available to track outcomes for the post-DLR (more recent) cases. However, differences in the length of residential treatment mandates and, to a lesser extent, prison and jail sentences, between the two groups meant that community time (the denominator for calculating rearrest rates) was not comparable. The study controlled for differences in community time using *average number of rearrests per day*. However, this is only a partial solution and there may still be some bias in the recidivism measure created by unequal opportunities for follow-up. This same bias did not exist for the survival analysis, which also found reductions in recidivism for those receiving treatment as an ATI. The citywide decline in felony drug arrests may mean that environmental risk factors for rearrest have shifted over the study period, including, but not limited to, lower levels of peer drug use, lower rates of drug dealing, changes in policing practices, or improved community cohesion and support.

It is well established that drug court is costly in the short run and the finding that treatment is more costly than the equivalent corrections sentence is not surprising, given the

relatively brief follow-up period of the study and the increased reliance on residential substance abuse treatment in NYC post-DLR (McCollister, et al., 2010; Downey & Roman, 2011). Greater victimization and justice system benefits could potentially accrue, thereby reducing net costs, if the observed reduction in recidivism persists beyond the 35-month study period. Further, as is common with drug court studies, these CBA results do not include societal benefits, which may potentially occur when someone stops using drugs such as higher productivity, lower healthcare costs, and improved relationships with family and community. Long-term follow up is required to assess the long-run impact of increased diversion on taxpayer costs and crime rates.

The qualitative portion of the study included interviews with prosecutors, judges, and defense attorneys in three NYC counties (Kings, Bronx and New York County). These counties handle 85 percent of all cases citywide, however their experiences and opinions do not necessarily represent those held by legal professionals elsewhere in the city. Of particular note, the research team was not able to interview prosecutors from SNP which handles more serious cases than the other offices, on average, and has higher conviction and imprisonment rates.

It is important to note that this study represents the use of treatment diversion for cases originating from arrests in 2008 and 2010. The patterns of case outcome described in this report may change over time. For example, the research found that the use of diversion increased in 2010, the year following implementation of DLR, ongoing monitoring indicates that treatment enrollment declined in the second (2011) and third years (2012) post-DLR (DCJS, 2013b). This is a weakness of all studies that adopt prospective analyses to track outcomes that emerge over time (e.g. case dispositions, sentencing and reoffending).

Finally, this study only assessed the implementation and impact of DLR in New York City and the findings are not necessarily representative of the rest of New York State or other jurisdictions elsewhere in the country.

Implications for Further Research

This study highlighted a number of areas for further investigation. The study described the role of prosecutors, defense attorneys, and judges in determining diversion outcomes for felony drug and specified property cases. However, researchers did not interview treatment providers or collect data on the type of treatment interventions that were provided to drug court participants. It is clear from the study findings that treatment providers are an essential, and often overlooked, partner in drug law reform.

A number of court professionals interviewed for the study discussed treatment as a form of quasi-punishment, with a preference for long terms of residential treatment that can exceed time-served under correctional sentences. A detailed exploration of the defendant, case, and county level factors that predict the use of residential treatment was beyond the scope of the current study, but warrants further examination. Similarly, the factors that influence defendants' decisions to accept or decline treatment offers are not well understood. This study found that rates of acceptance were not significantly affected by the removal of sentencing mandates, and further research is needed to explore how decisions to accept treatment are influenced by the 'stick' of punitive sentencing alternatives, and the relationship between long prison terms for noncompliance with court orders and treatment completion rates.

This study was limited by the period available to follow recidivism and cost outcomes for post-DLR cases. While there is a need to provide timely feedback on the implementation and

impact of drug law reforms, further studies employing longer follow-up periods will provide a more reliable estimate of the implications of drug law reform for government budgets and overall crime rates.

Also, this study did not collect information on mental health disorders for defendants passing through treatment courts. Given the high prevalence of co-occurring mental health and substance use disorders amongst those who come to the attention of the criminal justice system, and the challenges accessing adequate treatment, there is a need for research on the extent to which diversion options created by DLR serve this population and differential rates of treatment completion for those with mental health disorders.

Finally, there is a pressing need for research on the role of defendants' race in treatment court settings. The original Rockefeller Drug Laws were harshly criticized for their disproportionate impact on communities of color. This study has demonstrated that disparate outcomes still exist, in terms of both arrest and sentencing. A combination of detailed case-level analysis, observations in courtrooms, and interviews with defendants may provide the information needed to identify and address sources of racial bias.

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Appendices

Appendix A. New York Criminal Procedure Law - Article 216

§ 216.05 Judicial diversion program; court procedures.

1. At any time after the arraignment of an eligible defendant, but prior to the entry of a plea of guilty or the commencement of trial, the court at the request of the eligible defendant, may order an alcohol and substance abuse evaluation. An eligible defendant may decline to participate in such an evaluation at any time. The defendant shall provide a written authorization, in compliance with the requirements of any applicable state or federal laws, rules or regulations authorizing disclosure of the results of the assessment to the defendant's attorney, the prosecutor, the local probation department, the court, authorized court personnel and other individuals specified in such authorization for the sole purpose of determining whether the defendant should be offered judicial diversion for treatment for substance abuse or dependence, alcohol abuse or dependence and any co-occurring mental disorder or mental illness.

2. Upon receipt of the completed alcohol and substance abuse evaluation report, the court shall provide a copy of the report to the eligible defendant and the prosecutor.

3. (a) Upon receipt of the evaluation report either party may request a hearing on the issue of whether the eligible defendant should be offered alcohol or substance abuse treatment pursuant to this article. At such a proceeding, which shall be held as soon as possible so as to facilitate early intervention in the event that the defendant is found to need alcohol or substance abuse treatment, the court may consider oral and written arguments, may take testimony from witnesses offered by either party, and may consider any relevant evidence including, but not limited to, evidence that: (i) the defendant had within the preceding ten years (excluding any

time during which the offender was incarcerated for any reason between the time of the acts that led to the youthful offender adjudication and the time of commission of the present offense) been adjudicated a youthful offender for: (A) a violent felony offense as defined in section 70.02 of the penal law; or (B) any offense for which a merit time allowance is not available pursuant to subparagraph (ii) of paragraph of subdivision one of section eight hundred three of the correction law; and (ii) in the case of a felony offense defined in subdivision four of section 410.91 of this chapter, any statement of or submitted by the victim, as defined in paragraph (a) of subdivision two of section 380.50 of this chapter.

(b) Upon completion of such a proceeding, the court shall consider and make findings of fact with respect to whether: (i) the defendant is an eligible defendant as defined in subdivision one of section 216.00 of this article; (ii) the defendant has a history of alcohol or substance abuse or dependence; (iii) such alcohol or substance abuse or dependence is a contributing factor to the defendant's criminal behavior; (iv) the defendant's participation in judicial diversion could effectively address such abuse or dependence; and (v) institutional confinement of the defendant is or may not be necessary for the protection of the public.

4. When an authorized court determines, pursuant to paragraph (b) of subdivision three of this section, that an eligible defendant should be offered alcohol or substance abuse treatment, or when the parties and the court agree to an eligible defendant's participation in alcohol or substance abuse treatment, an eligible defendant may be allowed to participate in the judicial diversion program offered by this article. Prior to the court’s issuing an order granting judicial diversion, the eligible defendant shall be required to enter a plea of guilty to the charge or charges; provided, however, that no such guilty plea shall be required when:

(a) the people and the court consent to the entry of such an order without a plea of guilty; or

(b) based on a finding of exceptional circumstances, the court determines that a plea of guilty shall not be required. For purposes of this subdivision, exceptional circumstances exist when, regardless of the ultimate disposition of the case, the entry of a plea of guilty is likely to result in severe collateral consequences.

5. The defendant shall agree on the record or in writing to abide by the release conditions set by the court, which, shall include: participation in a specified period of alcohol or substance abuse treatment at a specified program or programs identified by the court, which may include periods of detoxification, residential or outpatient treatment, or both, as determined after taking into account the views of the health care professional who conducted the alcohol and substance abuse evaluation and any health care professionals responsible for providing such treatment or monitoring the defendant's progress in such treatment; and may include: (i) periodic court appearances, which may include periodic urinalysis; (ii) a requirement that the defendant refrain from engaging in criminal behaviors.

6. Upon an eligible defendant's agreement to abide by the conditions set by the court, the court shall issue a securing order providing for bail or release on the defendant's own recognizance and conditioning any release upon the agreed upon conditions. The period of alcohol or substance abuse treatment shall begin as specified by the court and as soon as practicable after the defendant's release, taking into account the availability of treatment, so as to facilitate early intervention with respect to the defendant’s abuse or condition and the effectiveness of the treatment program. In the event that a treatment program is not immediately available or becomes unavailable during the course of the defendant's participation in the judicial diversion program, the court may release the defendant pursuant to the securing order.

7. When participating in judicial diversion treatment pursuant to this article, any resident of this state who is covered under a private health insurance policy or contract issued for delivery in this state pursuant to article thirty-two, forty-three or forty-seven of the insurance law or article forty-four of the public health law, or who is covered by a self-funded plan which provides coverage for the diagnosis and treatment of chemical abuse and chemical dependence however defined in such policy; shall first seek reimbursement for such treatment in accordance with the provisions of such policy or contract.

8. During the period of a defendant's participation in the judicial diversion program, the court shall retain jurisdiction of the defendant. The court may require the defendant to appear in court at any time to enable the court to monitor the defendant's progress in alcohol or substance abuse treatment. The court shall provide notice, reasonable under the circumstances, to the people, the treatment provider, the defendant and the defendant's counsel whenever it orders or otherwise requires the appearance of the defendant in court. Failure to appear as required without reasonable cause therefore shall constitute a violation of the conditions of the court's agreement with the defendant.

9. (a) If at any time during the defendant's participation in the judicial diversion program, the court has reasonable grounds to believe that the defendant has violated a release condition or has failed to appear before the court as requested, the court shall direct the defendant to appear or issue a bench warrant to a police officer or an appropriate peace officer directing him or her to take the defendant into custody and bring the defendant before the court without unnecessary delay. The provisions of subdivision one of section 530.60 of this chapter relating to revocation of recognizance or bail shall apply to such proceedings under this subdivision.

(b) In determining whether a defendant violated a condition of his or her release under the judicial diversion program, the court may conduct a summary hearing consistent with due process and sufficient to satisfy the court that the defendant has, in fact, violated the condition.
(c) If the court determines that the defendant has violated a condition of his or her release under the judicial diversion program, the court may modify the conditions thereof, reconsider the order of recognizance or bail pursuant to subdivision two of section 510.30 of this chapter, or terminate the defendant's participation in the judicial diversion program; and when applicable proceed with the defendant's sentencing in accordance with the agreement.
Notwithstanding any provision of law to the contrary, the court may impose any sentence authorized for the crime of conviction in accordance with the plea agreement, or any lesser sentence authorized to be imposed on a felony drug offender pursuant to paragraph (b) or (c) of subdivision two of section 70.70 of the penal law taking into account the length of time the defendant spent in residential treatment and how best to continue treatment while the defendant is serving that sentence. In determining what action to take for a violation of a release condition, the court shall consider all relevant circumstances, including the views of the prosecutor, the defense and the alcohol or substance abuse treatment provider, and the extent to which persons who ultimately successfully complete a drug treatment regimen sometimes relapse by not abstaining from alcohol or substance abuse or by failing to comply fully with all requirements imposed by a treatment program. The court shall also consider using a system of graduated and appropriate responses or sanctions designed to address such inappropriate behaviors, protect public safety and facilitate, where possible, successful completion of the alcohol or substance abuse treatment program.

(d) Nothing in this subdivision shall be construed as preventing a court from terminating a defendant's participation in the judicial diversion program for violating a release condition when such a termination is necessary to preserve public safety. Nor shall anything in this subdivision be construed as precluding the prosecution of a defendant for the commission of a different offense while participating in the judicial diversion program.

(e) A defendant may at any time advise the court that he or she wishes to terminate participation in the judicial diversion program, at which time the court shall proceed with the case and, where applicable, shall impose sentence in accordance with the plea agreement.

Notwithstanding any provision of law to the contrary, the court may impose any sentence authorized for the crime of conviction in accordance with the plea agreement, or any lesser sentence authorized to be imposed on a felony drug offender pursuant to paragraph (b) or (c) of subdivision two of section 70.70 of the penal law taking into account the length of time the defendant spent in residential treatment and how best to continue treatment while the defendant is serving that sentence.

10. Upon the court's determination that the defendant has successfully completed the required period of alcohol or substance abuse treatment and has otherwise satisfied the conditions required for successful completion of the judicial diversion program, the court shall comply with the terms and conditions it set for final disposition when it accepted the defendant's agreement to participate in the judicial diversion program. Such disposition may include, but is not limited to:

(a) requiring the defendant to undergo a period of interim probation supervision and, upon the defendant's successful completion of the interim probation supervision term, notwithstanding the provision of any other law, permitting the defendant to withdraw his or her guilty plea and dismissing the indictment; or

(b) requiring the defendant to undergo a period of interim probation supervision and, upon successful completion of the interim probation supervision term, notwithstanding the provision of any other law, permitting the defendant to withdraw his or her guilty plea, enter a guilty plea to a misdemeanor offense and sentencing the defendant as promised in the plea agreement, which may include a period of probation supervision pursuant to section 65.00 of the penal law; or

(c) allowing the defendant to withdraw his or her guilty plea and dismissing the indictment.

Nothing in this article shall be construed as restricting or prohibiting courts or district attorneys from using other lawful procedures or models for placing appropriate persons into alcohol or substance abuse treatment.

Appendix B. New York State Penal Law Definition of B Felony Drug Offenses

§ 220.16 Criminal possession of a controlled substance in the third degree.

A person is guilty of criminal possession of a controlled substance in the third degree when he knowingly and unlawfully possesses:

1. a narcotic drug with intent to sell it; or

2. a stimulant, hallucinogen, hallucinogenic substance, or lysergic acid diethylamide, with intent to sell it and has previously been convicted of an offense defined in article two hundred twenty or the attempt or conspiracy to commit any such offense; or

3. a stimulant with intent to sell it and said stimulant weighs one gram or more; or

4. lysergic acid diethylamide with intent to sell it and said lysergic acid diethylamide weighs one milligram or more; or

5. a hallucinogen with intent to sell it and said hallucinogen weighs twenty-five milligrams or more; or

6. a hallucinogenic substance with intent to sell it and said hallucinogenic substance weighs one gram or more; or

7. one or more preparations, compounds, mixtures or substances containing methamphetamine, its salts, isomers or salts of isomers with intent to sell it and said preparations, compounds, mixtures or substances are of an aggregate weight of one-eighth ounce or more; or

8. a stimulant and said stimulant weighs five grams or more; or

9. lysergic acid diethylamide and said lysergic acid diethylamide weighs five milligrams or more; or

10. a hallucinogen and said hallucinogen weighs one hundred twenty-five milligrams or more; or

11. a hallucinogenic substance and said hallucinogenic substance weighs five grams or more; or

12. one or more preparations, compounds, mixtures or substances containing a narcotic drug and said preparations, compounds, mixtures or substances are of an aggregate weight of one-half ounce or more; or

13. phencyclidine and said phencyclidine weighs one thousand two hundred fifty milligrams or more.

§ 220.39 Criminal sale of a controlled substance in the third degree.

A person is guilty of criminal sale of a controlled substance in the third degree when he knowingly and unlawfully sells:

1. a narcotic drug; or

2. a stimulant, hallucinogen, hallucinogenic substance, or lysergic acid diethylamide and has previously been convicted of an offense defined in article two hundred twenty or the attempt or conspiracy to commit any such offense; or

3. a stimulant and the stimulant weighs one gram or more; or

4. lysergic acid diethylamide and the lysergic acid diethylamide weighs one milligram or more; or

5. a hallucinogen and the hallucinogen weighs twenty-five milligrams or more; or

6. a hallucinogenic substance and the hallucinogenic substance weighs one gram or more; or

7. one or more preparations, compounds, mixtures or substances containing methamphetamine, its salts, isomers or salts of isomers and the preparations, compounds, mixtures or substances are of an aggregate weight of one-eighth ounce or more; or

8. phencyclidine and the phencyclidine weighs two hundred fifty milligrams or more; or

9. a narcotic preparation to a person less than twenty-one years old.

Appendix C. Jurisdiction Level Description of Diversion Practices

Bronx County

In Bronx County, felony cases can be diverted using two basic mechanisms: 1) drug court; 2) prosecutor-led programs managed by Treatment Alternatives for Safer Communities (TASC), including DTAP.

Prior to the implementation of reform, drug courts in Bronx County (Bronx Treatment Court 'BxTC') handled first-time felony cases only. Post-DLR, drug courts in Bronx County have been expanded, handling both first-time felony cases and second-time felony cases. In addition to drug courts, prosecutor-led diversion programs have been widely used in Bronx County. These programs are managed by TASC, therefore, legal actors in Bronx County refer it as TASC programs. TASC programs in Bronx County are operated much like DTAP programs – and they are categorized as DTAP in the implementation analysis included in this report. However, the eligibility of TASC programs is more flexible than DTAP programs, including both first-time felony cases and second-time felony cases. TASC programs in Bronx County start with the district attorney (DA) screening the defendants' eligibility post arraignment. The treatment offer can be made either prior to indictment (using Superior Court Information 'SCI') or post-indictment. Based on our conversation with legal actors in Bronx County, TASC programs were the primary treatment diversion mechanism prior to the implementation of the reform. However, there has been a shift from TASC programs to drug court post-DLR.

Kings County

In Kings County, there are five routes to drug treatment services for felony cases: 1) the Brooklyn Treatment Court (BTC), 2) the Screening and Treatment Enhancement Part (STEP)

within the Kings County Criminal Court, 3) the King's County DTAP program, 4) the Judicial Diversion Court Part within BTC, and 5) other ATI programs managed by TASC.

BTC diverts first-time, non-violent felony drug cases and DTAP programs provide treatment diversion to predicate felony defendants. Distinct from other NYC jurisdictions, STEP is a designated part of the Kings County Criminal Court created to handle treatment diversion for first-time, non-violent, non-drug cases, such as cases with property charges. At criminal court arraignment, court staff screen felony drug cases for eligibility for BTC and non-drug cases for eligibility for STEP. Defendants who meet "paper-eligibility" and are assessed as having a clinical need for treatment may be diverted if the assistant district attorney (ADA), judge, and defense attorney can reach an agreement. Post-DLR, judicial diversion provides an additional post-indictment mechanism for diverting appropriate defendants to drug treatment. Finally, some felony cases that are not eligible for any of the previous options can still be diverted to treatment via ATI programs managed by TASC.

New York County

In New York County, post-DLR felony cases can be diverted through 1) DTAP programs; and 2) Judicial Diversion Court (Manhattan Diversion Court 'MDC').

Prior to the reform, DTAP programs were the only avenue for diverting felony cases to treatment in New York County. After defendants had been indicted and arraigned at Supreme Court, ADAs screened cases for eligibility. DTAP programs in New York County followed the standard model described in Chapter 3 of this report (see page 18-19). Post-DLR, judicial diversion became available for felony cases in New York County via Part 92 and Part 73 of MDC. Unlike many of the diversion options in the other jurisdictions, TASC does not manage treatment diversion cases in New York County. Rather, DAs or court staff contact service

providers directly to set up treatment arrangements for eligible defendants and provide ongoing monitoring of drug court cases.

Queens County

In Queens County, felony cases can be diverted to treatment via 1) Queens Treatment Court (QTC), 2) Queens' DTAP program, 3) the judicial diversion court part of QTC, and 4) the TASC conditional plea program.

QTC has treatment diversion options for first-time felony cases, including both drug cases and non-drug cases. Based on the results of eligibility screening conducted by ADAs, DTAP can divert predicate non-violent felony cases both pre-indictment and post-indictment. Judicial diversion is handled by a designated part within the QTC and provides treatment diversion options for post-indictment felony cases. The TASC conditional plea, ATI programs managed by TASC, provides another opportunity to divert non-violent felony defendants to treatment. As part of this program, defendants that are deemed suitable for treatment based on ADA review, can be diverted to treatment after entering a guilty plea. Typically, upon successful completion of the ATI program, the felony charge is downgraded to a misdemeanor and the defendant is sentenced to probation.

Richmond County

Similar to Queens County, there are four different mechanisms for diverting felony cases to treatment in Richmond County, including 1) Staten Island Treatment Court (SITC), 2) DTAP , 3) judicial diversion, and 4) the two-step plea program run by the Richmond County DA's office.

The eligibility criteria and process for felony drug court and DTAP in Richmond County are similar to those in other NYC jurisdictions. A new court part, the Richmond Diversion Treatment Court (RDTC), was created post-DLR to handle judicial diversion cases. In addition,

Richmond County's two-step plea program is a DA-led ATI program that diverts non-drug felony cases to treatment. ADAs screen cases for eligibility following indictment. As a prerequisite, eligible defendants are required to enter a guilty plea and pay restitutions before beginning to participate in the treatment program. Both DTAP and the two-step plea programs are managed by TASC.

Office of Special Narcotic Prosecutor (SNP)

The Office of the Special Narcotic Prosecutor (SNP) is an independent prosecutor office in NYC. It has jurisdiction to investigate and prosecute felony narcotics cases originating from arrests citywide. SNP prosecutes cases that were originally investigated by SNP, as well as cases that were referred by local, state, and federal law enforcement agencies. All SNP cases are prosecuted and disposed in Manhattan courts. These cases can be diverted to treatment through 1) the Manhattan Treatment Court (MTC), 2) the DTAP program, and 3) the Manhattan Diversion Court Part N.

MTC and DTAP predate the passage of DLR, handling first-time non-violent felony drug cases and predicate non-violent felony drug cases, respectively. ADAs working for SNP are responsible for eligibility screening and review of potential MTC and DTAP cases. Potential MTC cases are screened and reviewed at criminal court arraignment, whereas DTAP cases are usually screened and reviewed post indictment. In both instances, defendants have to enter a guilty plea before they are referred for clinical assessment. If defendants are assessed as clinically suitable for treatment, SNP contacts service providers in order to find appropriate treatment placements for defendants. Post-DLR, the MDC was created to handle judicial diversion cases prosecuted by New York County DAs and SNP. SNP uses Part N of MDC and follows the procedures described under Article 216 for judicial diversion cases (see appendix A).

Appendix D. Description of Study Samples

	Definition	Data Elements	Unit of Analysis	Analysis
The four-and-a-half year felony drug cohort	All cases arrested on felony drug A through E charges in NYC between October 1, 2006 and March 31, 2011.	Charges/dispositions/prior records/county/drug court screening and admittance	Case	Trend analysis of felony drug arrests
The 2008 and 2010 matched felony drug samples	The 2008 and 2010 matched felony drug samples included felony drug cases drawn from the 2008 and 2010 felony drug cohorts, matched using PSM to control for baseline difference. Both samples were tracked for a period of 26-35 months for the outcome evaluation. The 2008 felony drug cohort includes cases arrested on felony drug A-E charges in NYC in the first nine months of 2008 and disposed before April 7, 2009. The 2010 felony drug cohort includes cases arrested on A-E Felony drug charges in NYC in the first nine months of 2010 and disposed before April 7, 2011.	Charges/dispositions/jail stay/prior records/county/ rearrest/treatment court screening and admittance/DTAP	Case	The quantitative analysis of implementation of DLR Citywide cost-benefit analysis of DLR
The 2008 and 2010 matched specified property samples*	The 2008 and 2010 matched specified property samples include specified property cases, matched using PSM to control for baseline difference. The 2008 property cohort includes cases indicted on specified property charges in NYC and arrested in the first nine months of 2008 and disposed before April 7, 2009. The 2010 property cohort includes cases indicted on specified property charges and arrested in NYC in the first nine months of 2010 and disposed before April 7, 2011.	Charges/dispositions/jail stay/prior records/county/ rearrest/treatment court screening and admittance/DTAP	Case	The quantitative analysis of implementation of DLR: how DLR impacted treatment diversion for cases indicted on specified property charges
The 2008 and 2010 matched drug court samples	These samples were draw from both the 2008 and 2010 matched felony drug samples and specified property samples, including all cases that were diverted to drug court.	Treatment court screening and admittance / primary drug choice/treatment modality/drug court	Individual	Drug court participation analysis

		completion		
The matched sentenced and diverted samples	The matched sentenced and diverted samples include similar cases drawn from the pre-DLR sentenced sample and post-DLR diverted sample, using PSM to control for baseline differences. Both samples were tracked for a period of 26-35 months for the outcome evaluation. Pre-DLR sentenced sample includes cases indicted on B-E Felony drug charges or specified property charges in 2008 that received non-diversion sentences (prison, jail, probation, split sentences and time served) before April 7, 2009. Post-DLR diverted sample includes cases indicted on B-E Felony drug charges or specified property charges in 2010 and diverted to treatment court before the end of data collection (11/30/2012).	Charges/dispositions/jail stay/prior records/county/ rearrest/treatment court screening and admittance/DTAP	Individual	The analysis of reoffending The cost-benefit of treatment diversion

* Specified property charges are property charges specified in Article 216 including Burglary 3 (PL § 140.20); Criminal Mischief 3 (PL § 145.05); Criminal Mischief 2 (PL § 145.10); Grand Larceny 4 (PL § 155.30) (only as defined in subdivisions [1], [2], [3], [4],[5], [6], [8], [9] and [10]); Grand Larceny 3 (PL § 155.35); Unauthorized Use of Vehicle 2 (PL § 165.06); Criminal Possession of Stolen Property 4 (PL § 165.45) (only as defined in subdivisions [1], [2], [3], [5] and [6]); Criminal Possession of Stolen Property 3 (PL § 165.50) (except where the property stolen is a firearm, rifle, or shotgun); Forgery 2 (PL § 170.10); Criminal Possession of Forged Instrument 2 (PL § 170.25); Unlawful using slug 1 (PL § 170.60); An attempt to commit any of the above offenses if such attempt constitutes a felony offense (i.e., do NOT include if an attempt lowers the charge to a misdemeanor).

Appendix E. Gender of Felony Drug Arrestees Included Trend Analysis

Arrest Year	Male	Female	Total Arrests
2006	6,354	1,075	7,429
	86%	14%	100%
2007	2,6061	5,109	31,170
	84%	16%	100%
2008	23,688	5,052	28,740
	82%	18%	100%
2009	21,624	4,318	25,942
	83%	17%	100%
2010	19,029	3,734	22,763
	84%	16%	100%
2011	4,746	977	5,723
	83%	17%	100%
Total	101,502	20,265	121,767
	83%	17%	100%

Appendix F. Data Anonymization Protocol

In accordance with a provision of the DLR statutes, there are some instances in which an individual's case records can be sealed after completing court-mandated drug treatment. Sealed cases pose a challenge to researchers, as they are no longer a matter of public record and information on these cases cannot be accessed in the identifiable form that is generally necessary to link an individual's records from multiple agencies. If these cases were excluded, however, it would introduce substantial bias, under-representing more successful cases in the sample by systematically eliminating those who complete drug court. In order to overcome this barrier and ensure access to information on sealed cases, Vera requested that New York State Division of Criminal Justice Services (DCJS), New York State Office of Court Administration (OCA), New York City Department of Correction (DOC) and individual District Attorneys (DAs) Office in NYC adhere to an anonymization protocol that enabled Vera to match individual-level data from multiple agencies without requesting personal identifiers.

Under this protocol, DCJS randomly assigned each individual in the sample a person-specific "pseudo-ID." DCJS then shared a file linking the pseudo-ID and individual identifiers (such as a criminal justice system identifying number) with other city and state agencies that provided administrative records for the study. Then all agencies attached the pseudo-ID to their administrative records and removed all personally identifiable information from their files before sending them to Vera. After receiving all of the files, Vera matched the various agency files using the pseudo-ID.

Appendix G. Propensity Score Matching Analysis

Identifying an appropriate comparison group is a major challenge of quasi-experimental evaluation research. This study explores the impact of a change in policy that widens the range of sentencing options available to people charged with certain types of offenses in New York City by examining outcomes for cases pre- and post-DLR. However, as the result of selection bias, it is possible that the characteristics of individuals who are sentenced under the new guidelines may fundamentally differ from those who were sentenced before the policy change. If this is the case, it may be difficult to isolate the impact of DLR from the effect of these differential characteristics. For example, if people charged with the relevant charges pre-DLR were on average older than those charged post-DLR, any decreases in recidivism post-DLR may be related to the age difference between the groups. Thus, to accurately estimate the effects of DLR, it is necessary to minimize the influence of such selection biases.

The most rigorous way to control for selection bias is to randomly assign research participants to "treatment" and "control" groups, and then compare outcomes for the two groups; in the instance of DLR, this would require random assignment to a scenario where the wider range of sentencing options introduced by DLR are available (the treatment group) or to a scenario where the pre-DLR laws apply (the control group). While randomization can help ensure comparability between groups, it is often impractical for both logistical and ethical reasons (e.g. the logistical challenges of bifurcating the operation of the courts to accommodate these two scenarios and the ethical dilemma of limiting DLR to certain groups for the purpose of research).

Propensity score matching techniques (PSM) are designed as an alternative method to reduce selection bias when randomized assignment is not possible or unethical. Essentially, PSM

uses statistical techniques to make nonrandomized samples more comparable, "matching" people from two samples based on a number of baseline characteristics, or covariates, to account for inherent differences between the two groups. PSM uses regression analysis to develop a 'propensity score' for a pool of potential treatment and comparison cases (e.g. for all drug felony arrests pre- and post-DLR). The propensity score represents the likelihood that a case would receive the treatment condition (e.g. be in the post-DLR pool) based on a series of covariates that are predictive of selection into the treatment group. This allows for scores of those cases who actually receive treatment (e.g., those who had post-DLR sentencing options) to be matched with those cases who do not (e.g., those who had pre-DLR sentencing options), but otherwise have a similar propensity score. An effective PSM produces "balanced" samples, ensuring that cases included in the treatment and comparison groups are similar on their *overall* background characteristics. By balancing covariates between matched groups, PSM attempts to artificially adjust for selection bias and model the random assignment used in experimental design (Bryson, Dorsett, and Purdon 2002). That is, PSM seeks to minimize baseline differences in observed characteristics across matched groups.

In this study, we applied PSM in two ways: 1) to select pre-DLR samples and post-DLR samples for conducting quantitative analysis of implementation of DLR; 2) to select treatment samples and sentencing samples to examine cost benefit and recidivism outcomes. Below, we discuss separately the implementation of PSM for selecting appropriate samples for each analysis.

Propensity Score Matching for Quantitative Implementation Analysis

The quantitative implementation analysis was conducted at the case level separately for felony drug arrests and specified property indictments. In order to select appropriate pre-DLR

and post-DLR cases for analysis, the researchers first assessed salient individual-level and broader contextual characteristics (county of arrest/disposition) that predict selection into post-DLR group, using a binary probit model.[132] A set of 51 covariates (66 covariates for specified property samples) were included that might logically be related to selection into the post-DLR group. Broadly, these covariates included: arrestee demographic characteristics; county of arrest; prior criminal record (arrests/convictions); and the characteristics of the instant offense (arrest charges for felony drug offenses, indictment charges for specified property offenses).[133] This procedure produced an estimated propensity score for each case in the sample that represents their expected probability of being placed into the post-DLR group, based upon their values along a vector of 51 covariates (66 covariates for specified property samples). The resultant propensity score represents the likelihood of being assigned to the post-DLR group given the combination of arrestee (e.g. race, age, sex, charge, prior record) and contextual (e.g. county of arrest) characteristics for each case in the sample.

After calculating each case's propensity score, researchers employed nearest-neighbor 1-to-1 matching without replacement in order to match pre-DLR cases to post-DLR cases. In contrast to approaches that match within strata or quartiles, nearest neighbor 1-to-1 matching results in highly comparable samples, in which matched cases have very similar propensities to be selected in either the pre-DLR or post-DLR samples (Rosenbaum & Rubin, 1984). In order to enhance the comparability of matched pairs, matches between treatment and comparison groups were required to have propensity scores within a caliper of .001, meaning that matches' scores

[132] In simplest terms, a probit model is merely estimating an unobservable propensity to be treated based upon patterns observed across a set of pre-defined covariates. Additionally, we use the "psmatch2" STATA add-on to conduct the PSM, which uses a probit model by default (Leuven & Sianesi, 2003).
[133] An exhaustive list of covariates is contained within Tables G-1 and G-2.

could not differ by more than +/- .001. The same rule was applied to select both felony drug arrest cases and specified property indictment cases.

Using these standards, the original felony drug sample of 32,598 individual cases (17,853 pre-DLR cases, 14,745 post-DLR cases) was reduced to 14,410 matched pairs; the original specified property sample of 2,550 (1,210 pre-DLR cases, 1,340 post-DLR cases) was reduced to 921 matched pairs.

Prior to Matching

Prior to conducting the matching procedure, the pre- and post-DLR samples were analyzed in order to determine if there were any differences, or imbalances, between the samples across a series of 51 relevant covariates (66 covariates for specified property samples) that may have significantly influenced selection into treatment conditions. In order to examine the magnitude of imbalance across the pre- and post-DLR groups, we used a two-pronged approach, assessing simple mean differences through independent samples t-tests. Consistent with past research, any t-test value exceeding an absolute value of 1.645[134]; the matching procedure is designed to correct for this imbalance (Loughran et al., 2009; Rosenbaum & Rubin, 1984).

These initial analyses found substantial heterogeneity in the pre- and post-DLR felony drug cases before matching (see Table G-1); the post-DLR sample was significantly different from the pre-DLR sample in 26 out of 51 covariates including race, the county of arrest/disposition, prior criminal record, and characteristics of the instant offense. Specifically, when compared to the pre-DLR sample, the post-DLR group: was older; included a higher proportion of males and whites; and had more prior arrests and convictions (which is confounded with age). In addition, cases charged for the sale of opium, cocaine or derivatives, or possession

[134] T- value of 1.645 corresponds to a significance level of .10 in a two-tailed difference of means test, which means one has 90% confidence that the value of certain covariate differs between treatment sample and sentencing sample.

of marijuana were overrepresented among the post-DLR sample, while cases charged for possession of opium, cocaine, derivatives, or others are overrepresented in the pre-DLR sample. In addition, the post-DLR sample had fewer B Felony cases and more D Felony cases than the pre-DLR sample.

Heterogeneity was also present between pre- and post-DLR specified property cases before matching (see Table G-2). Significant differences were found between the pre- and post-DLR groups for 22 out of the 66 covariates for the specified property sample. Specifically, when compared to the post-DLR sample, the pre-DLR sample: included more black defendants, was older on average, and included more cases from the Bronx and fewer cases from Richmond. In addition, prior to matching, there were more burglary cases in the pre-DLR sample, and more larceny cases included in the post-DLR sample. Finally, as it relates to top indictment charges, the pre-DLR sample was more likely to be indicted for burglary and stolen property, while the post-DLR sample was more likely to be indicted for larceny and criminal mischief.

Table G-1. Balance of 51 Covariates for Felony Drug Samples, Pre-Matching

Covariates		Pre-DLR N=17,853	Post-DLR N=14,745	t-value of Mean Difference
Demographic Characteristics	Age (mean)	34.74	35.21	-3.45**
	Sex (Percent Male)	82.2%	83.5%	-3.16**
	White	9.2%	11.9%	-7.81***
	Black	50.7%	47.2%	6.31***
	Hispanic	38.6%	39.2%	-1.28
	Asian	1.0%	1.0%	.34
	Other Race	0.5%	0.7%	-1.96*
County of Arrest	Bronx	32.8%	33.4%	-1.16
	Kings	27.8%	26.7%	2.12*
	New York	24.9%	25.2%	-.73
	Queens	10.8%	10.8%	.20
	Richmond	3.7%	3.9%	-.76
County of Disposition	Bronx	32.2%	33.0%	-1.58
	Kings	26.8%	25.4%	2.85**
	New York	22.6%	22.6%	-.09
	Queens	11.0%	10.8%	.53
	Richmond	3.6%	3.9%	-1.07
	SNP	3.7%	4.2%	-2.22*
Prior Arrests	Felony	4.62	4.85	-3.61***
	Misdemeanor	6.10	6.72	-6.01***

	Violent Felony	1.26	1.30	-1.63
	Drug	5.46	5.83	-4.62***
	Child Victim	.25	.28	-3.99***
	Weapon	1.04	1.10	-2.89**
	Sex Offender Registry	.08	.09	-3.97***
Prior Convictions	Felony – Adult	1.02	1.07	-3.00*
	Felony – Youth	.13	.12	1.69+
	Misdemeanor – Adult	4.26	4.67	-4.22***
	Misdemeanor – Youth	.09	.10	-2.07*
	Violent Felony - Adult	.20	.21	-1.65+
	Violent Felony - Youth	.05	.05	.63
	Drug	2.69	2.86	-3.38**
	Child Victim	.02	.03	-.85
	Weapon	.19	.21	-3.51***
	Sex Offender Registry – Adult	.01	.02	-1.11
	Sex Offender Registry – Youth	<.001	<.001	-.34
Instant Offense – Top Arrest Charge	Sale: Opium, Cocaine, or Derivatives	5.1%	6.6%	-5.86***
	Sale: Marijuana	1.2%	1.1%	0.99
	Sale: Synthetic Narcotics	.3%	.2%	0.27
	Sale: Other	42.1%	41.3%	1.40
	Poss: Opium, Cocaine, or Derivatives	1.5%	1.2%	2.27*
	Poss: Marijuana	3.7%	4.4%	-3.18**
	Poss: Synthetic Narcotics	.7%	.6%	0.63
	Poss: Other	45.4%	44.4%	1.81+
	Other Fingerprintable Offenses	.1%	.1%	-0.40
Instant Offense – Top Arrest Class	A-I Felony, Non-Reducible	2.1%	2.3%	-1.37
	A-II Felony	2.3%	2.1%	1.05
	B Felony	73.9%	71.7%	4.43***
	C Felony	6.0%	5.8%	0.48
	D Felony	12.8%	14.7%	-5.15***
	E Felony	3.0%	3.3%	-1.49

+ p<.10; *p<.05; **p<.01; ***p<.001

Table G-2. Balance of 66 Covariates for Specified Property Samples, Pre-Matching

Covariates		Pre-DLR N=1,210	Post-DLR N=1,340	t-value of Mean Difference
Demographic Characteristics	Age	34.23	33.18	2.15*
	Sex (Percent Male)	84.7%	83.4%	.88
	White	15.5%	18.2%	-1.86+
	Black	53.2%	46.7%	3.29**
	Hispanic	27.4%	29.2%	-1.02
	Asian	3.1%	4.6%	-1.86+
	Other Race	0.8%	1.3%	-1.27
County of Arrest	Bronx	12.5%	10.0%	1.98*
	Kings	21.9%	22.2%	-.16
	New York	41.8%	42.5%	-.37
	Queens	19.7%	17.9%	1.13
	Richmond	4.1%	7.4%	-3.56***
County of Disposition	Bronx	12.1%	10.1%	1.54
	Kings	21.9%	22.1%	-.12

	New York	42%	42.8%	-.40
	Queens	19.9%	19.6%	1.49
	Richmond	4.1%	7.4%	-3.56***
Prior Arrests	Felony	5.86	5.89	-.11
	Misdemeanor	7.26	7.31	-.12
	Violent Felony	1.69	1.60	.92
	Drug	3.48	3.52	-.18
	Child Victim	.15	.15	-.02
	Weapon	1.12	1.09	.41
	Sex Offender Registry	.09	.11	-.84
Prior Convictions	Felony – Adult	1.37	1.37	-0.07
	Felony – Youth	0.13	0.13	.28
	Misdemeanor – Adult	6.06	6.03	.07
	Misdemeanor – Youth	0.15	0.16	-.57
	Violent Felony - Adult	0.31	0.31	-.22
	Violent Felony - Youth	0.06	0.06	-.39
	Drug	1.64	1.63	.04
	Child Victim	0.02	0.02	.03
	Weapon	0.21	0.20	.21
	Sex Offender Registry – Adult	0.02	0.02	-1.25
	Sex Offender Registry – Youth	<.001	<.001	0.49
Instant Offense – Top Arrest Charge	Sale: Other	1.2%	<.1%	3.90***
	Poss: Opium, Cocaine, or Derivatives	.1%	<.1%	1.00
	Poss: Other	.6%	.4%	.75
	Robbery	4.9%	3.7%	1.52
	Aggravated Assault	.5%	.2%	1.13
	Burglary	29.1%	25.1%	2.23*
	Larceny	38.6%	43.1%	-2.33*
	Motor Vehicle Theft	4.3%	5.7%	-1.68^{+}
	Dangerous Weapons	.8%	.6%	0.69
	Forgery & Counterfeiting	7.9%	7.4%	0.44
	Stolen Property	5.3%	3.9%	1.69^{+}
	Criminal Mischief	3.6%	4.8%	-1.44
	Fraud	1.3%	2.3%	-1.88^{+}
	Simple Assault	.8%	1.6%	-1.88^{+}
	Other Fingerprintable Offenses	.5%	.3%	.79
Instant Offense – Top Arrest Class	A-I Felony, Non-Reducible	.2%	<.1%	1.42
	A-II Felony	1.0%	.1%	3.11***
	B Felony	2.4%	.8%	3.13***
	C Felony	12.6%	9.9%	2.23*
	D Felony	49.9%	48.1%	.94
	E Felony	30.2%	37.8%	-4.06***
	A Misdemeanor	3.4%	3.1%	0.47
Instant Offense – Top Indictment Charge	Burglary	33.1%	26.7%	3.50***
	Larceny	42.2%	48.0%	-2.92**
	Motor Vehicle Theft	2.3%	2.7%	-.60
	Forgery & Counterfeiting	7.5%	7.8%	-.23
	Stolen Property	11.4%	8.9%	2.10*
	Criminal Mischief	3.3%	5.7%	-2.98**
Instant Offense – Top Indictment Class	C Felony	.1%	.1%	-.49
	D Felony	54.4%	54.1%	.14
	E Felony	45.5%	45.7%	-.11

$^{+}$ p<.10; *p<.05; **p<.01; ***p<.001

Balance Across Covariates After Matching

The differences between the pre-DLR sample and post-DLR sample were substantially reduced after PSM was applied to the samples. As Table G-3 illustrates, after PSM was complete, all of the 51 covariates in the felony drug samples were found to be balanced across the two groups. Additionally, as illustrated in Table G-4, all of the 66 covariates in the specified property samples are considered to be balanced across the two groups after matching.[135]

These results suggest that the matching procedure was effective in reducing the differences between pre- and post-DLR samples for both felony drug cases and specified property cases. After matching, there are no outstanding differences between the pre- and post-groups on demographics, current charges, jurisdictions, and prior criminal history. Therefore, with the resultant matched samples ("The matched implementation sample of felony drug arrests" and "The matched implementation sample of specified property crime"), assignment to either the pre- or post-DLR group is statistically independent of both individual and contextual observed characteristics (that could previously predict such assignment with the unmatched samples). This balance satisfies the critical assumption underpinning the analysis of the DLR implementation, which requires direct comparison of sentencing outcomes, treatment diversion, and charge progression between the matched pre-DLR and post-DLR samples.

[135] It is important to note that covariates pre-and post-matching differ slightly – four covariates drop out after the matching procedure has been completed because they no longer vary in the matched sample. Effectively, they become constants, and could be considered as perfectly balanced across groups.

Table G-3. Balance Across 51 Covariates for Felony Drug Samples, Post-Matching

Covariates		Pre-DLR N=14,410	Post-DLR N=14,410	t-value of Mean Difference
Demographic Characteristics	Age	35.14	35.15	-.10
	Sex	83.0%	83.3%	.65
	White	11.0%	11.2%	-.56
	Black	47.7%	47.8%	-.02
	Hispanic	39.6%	39.4%	.42
	Asian	1.0%	1.0%	-.12
	Other Race	.6%	.6%	-.07
County of Arrest	Bronx	33.7%	33.5%	.25
	Kings	26.8%	26.8%	-.03
	New York	25.0%	25.1%	-.12
	Queens	10.7%	10.8%	-.36
	Richmond	3.9%	3.8%	.31
County of Disposition	Bronx	33%	33.2%	.21
	Kings	25.7%	25.7%	.04
	New York	22.4%	22.5%	-.27
	Queens	10.8%	10.8%	-.23
	Richmond	3.8%	3.7%	.44
	SNP	4.1%	4.1%	-.09
Prior Arrests	Felony	4.80	4.81	-.18
	Misdemeanor	6.50	6.60	-.94
	Violent Felony	1.29	1.29	-.11
	Drug	5.75	5.77	-.21
	Child Victim	.28	.28	.13
	Weapon	1.08	1.08	-.24
	Sex Offender Registry	.09	.09	-.29
Prior Convictions	Felony – Adult	1.06	1.06	.05
	Felony – Youth	.12	.12	.03
	Misdemeanor – Adult	4.52	4.60	-.74
	Misdemeanor – Youth	.10	.10	.02
	Violent Felony - Adult	.21	.21	-.18
	Violent Felony - Youth	.05	.05	-.21
	Drug	2.83	2.83	-.02
	Child Victim	.03	.03	.07
	Weapon	.21	.21	.01
	Sex Offender Registry – Adult	.02	.02	<.001
	Sex Offender Registry – Youth	<.001	<.001	.14
Instant Offense – Top Arrest Charge	Sale: Opium, Cocaine, or Derivatives	6.1%	6.2%	-.49
	Sale: Marijuana	1.2%	1.1%	.06
	Sale: Synthetic Narcotics	.2%	.2%	<.001
	Sale: Other	41.8%	41.8%	.12
	Poss: Opium, Cocaine, or Derivatives	1.3%	1.2%	.27
	Poss: Marijuana	4.3%	4.1%	.56
	Poss: Synthetic Narcotics	.6%	.6%	.22
	Poss: Other	44.4%	44.5%	-.19
	Other Fingerprintable Offenses	.1%	.1%	-.35
Instant Offense – Top Arrest Class	A-I Felony, Non-Reducible	2.3%	2.3%	-.24
	A-II Felony	2.2%	2.1%	.49
	B Felony	72.0%	72.1%	-.20
	C Felony	6.1%	5.9%	.59

	D Felony	14.1%	14.3%	-.39
	E Felony	3.3%	3.3%	.26

$^{+}$ p<.10; *p<.05; **p<.01; ***p<.001

Table G-4. Balance Across 66 Covariates for Specified Property Samples, Post-Matching

Covariates		Pre-DLR N=921	Post-DLR N=921	t-value of Mean Difference
Demographic Characteristics	Age	33.74	33.53	.37
	Sex (Percent Male)	84.0%	84.1%	.06
	White	16.2%	17.4%	-.69
	Black	50.7%	50.3%	.19
	Hispanic	29.2%	28.1%	.52
	Asian	2.8%	3.1%	-.41
	Other Race	1.1%	1.1%	<.001
County of Arrest	Bronx	11.0%	10.9%	.08
	Kings	22.3%	23.1%	-.45
	New York	42.60%	42.2%	.14
	Queens	19.5%	18.7%	.47
	Richmond	4.7%	5.1%	-.43
County of Disposition	Bronx	11.1%	11.1%	. <.001
	Kings	22.3%	23.2%	-.50
	New York	42.60%	42.1%	.19
	Queens	19.4%	18.5%	.54
	Richmond	4.7%	5.1%	-.43
Prior Arrests	Felony	6.00	5.67	.95
	Misdemeanor	7.19	6.92	.53
	Violent Felony	1.69	1.60	.70
	Drug	3.53	3.27	1.00
	Child Victim	.14	.13	.16
	Weapon	1.10	1.05	.63
	Sex Offender Registry	.08	.10	.77
Prior Convictions	Felony – Adult	1.41	1.35	.73
	Felony – Youth	.13	.13	-.39
	Misdemeanor – Adult	5.99	5.71	.56
	Misdemeanor – Youth	.17	.15	1.07
	Violent Felony - Adult	.32	.31	.34
	Violent Felony - Youth	.06	.06	-.29
	Drug	1.64	1.50	.91
	Child Victim	.02	.01	.67
	Weapon	.19	.20	-.61
	Sex Offender Registry – Adult	0.02	0.01	.97
	Sex Offender Registry – Youth	<.001	<.001	<.001
Instant Offense – Top Arrest Charge	Poss: Other	.2%	.2%	<.001
	Robbery	4.5%	4.1%	0.35
	Aggravated Assault	.2%	.2%	<.001
	Burglary	27.7%	29.0%	-.62
	Larceny	42.0%	40.6%	.62
	Motor Vehicle Theft	5.1%	5.2%	-.11
	Dangerous Weapons	0.8%	0.8%	<.001
	Forgery & Counterfeiting	8.4%	8.9%	-.42

	Stolen Property	4.5%	3.9%	.58
	Criminal Mischief	3.9%	340%	.62
	Fraud	1.5%	1.6%	-.19
	Simple Assault	.8%	1.1%	-.73
	Other Fingerprintable Offenses	.1%	.3%	-1.00
Instant Offense – Top Arrest Class	B Felony	.4%	.4%	<.001
	C Felony	10.50%	11.8%	-.89
	D Felony	52.2%	51.8%	.19
	E Felony	33.6%	32.9%	.30
	A Misdemeanor	3.0%	2.7%	.42
Instant Offense – Top Indictment Charge	Burglary	30.2%	31.1%	-.40
	Larceny	45.8%	44.7%	.47
	Motor Vehicle Theft	2.6%	3.0%	-.56
	Forgery & Counterfeiting	7.6%	8.3%	-.52
	Stolen Property	10.4%	9.8%	.46
	Criminal Mischief	3.3%	3.0%	.27
Instant Offense – Top Arraignment Class	C Felony	.1%	.1%	<.001
	D Felony	55.4%	56.5%	-.47
	E Felony	44.5%	43.4%	.47

$^{+}$ p<.10; *p<.05; **p<.01; ***p<.001

Implementation of Propensity Score Matching for Analysis of Reoffending

Whereas the quantitative implementation analysis involved case level matching, analysis of reoffending was conducted at individual level, examining if participating in drug treatment could reduce future offending. Researchers utilized PSM to select similar individuals between those who had received correction sentences (prison, jail, or probation) pre-DLR and those who were diverted to treatment post-DLR, controlling for observed baseline differences in demographics, the county where the individual was arrested and where the case was disposed, criminal history, and index arrest charges.

For this analysis, researchers employed a two-staged process. First, we separated the full sample into two smaller samples, one consisting of diverted and sentenced felony drug offenders and the other consisting of diverted and sentenced property crime offenders. Then, researchers applied PSM within each sample to select matched cases. Equal weight was not applied to all co-variates with an initial match based upon substantially important characteristics that influence both selection and post-treatment behavior patterns. While not standard, this practice is

supported in the literature (see Nagin, Cullen, & Lero-Jonson, 2009). The nature of the instant offense, whether it is a felony drug or simple property offense, meets these criteria, as these two groups exhibit patently different offending trajectories. Therefore, in order to prevent an inappropriate match whereby a felony drug offender was matched to a property crime offender, these samples were initially separated and then re-combined after the full matching procedure had been implemented.

Similar to PSM conducted for the quantitative implementation analysis, this analysis used a binary probit model, the outcome being placement or non-placement into drug treatment, in unison with a set of 78 covariates that might logically confound our true estimate of the treatment effect. Broadly, these covariates included: demographic characteristics; county of arrest/disposition; prior criminal record (arrests/convictions); and the characteristics of the instant offense (arrest charge/class, indictment charge/class). This procedure produces an estimated propensity score for each individual in the sample that represents their expected probability of being in the post-DLR treatment diversion group, given their values along a vector of 78 covariates. The estimated propensity score then represents the likelihood of being assigned to drug court post-DLR given the multitude of individual (race, age, sex, prior record) and contextual (county of disposition/arrest) characteristics particular to each sample member.

After calculating each individual's propensity score, we employed a nearest-neighbor 1-to-1 matching without replacement approach in order to match untreated sample members who were sentenced to prison to treated sample members who were diverted to drug court. In order to further ensure equivalent matched pairs, we required matches between diverted and sentenced groups to have propensity scores within a caliper of .05.[136] This means that pre-DLR sentenced

[136] A .05 caliper was used to increase the size of the matched samples and maximize statistical power. After matching, covariates included in the PSM model were balanced between the diverted sample and sentenced sample.

individuals were matched to post-DLR diverted individuals whose propensity scores were most similar, and these matches could only occur if their propensity scores did not differ by +/- .05. Using these standards, our original sample of 3,156 individuals (2,439 sentenced, 717 diverted) is reduced to 638 matched pairs (555 were from the felony drug sample and 83 were from the specified property crime sample), resulting in an effective sample of 1,276 individuals evenly distributed across diverted and sentenced conditions.

Prior to Matching

Prior to conducting the matching procedure, researchers assessed how the diverted and sentenced groups differ across a set of 78 theoretically relevant covariates that might significantly influence both selection into drug-court and post-release recidivism patterns. In order to examine the magnitude of imbalance across groups, we compared simple mean differences through independent samples t-tests. Consistent with past research, any t-test value exceeding an absolute value of 1.645 will be considered imbalanced, and must be corrected during the matching procedure (Loughran et al., 2009; Rosenbaum & Rubin, 1985). [137]

As Table G-5 demonstrates there existed substantial heterogeneity between diverted and sentenced groups. Before matching, the diverted cohort was significantly different from the sentenced cohort in 51 out of 78 covariates including race, the county of arrest/disposition, prior criminal record, and characteristics of the instant offense. Specifically, the diverted group included significantly more whites and the sentencing group includes more blacks. Further, individuals arrested or cases disposed in Bronx, Kings and Richmond counties were more likely to be included in the diverted group. In contrast, individuals arrested or disposed in Queens or New York County were more likely to be included in the sentenced group. Prior to matching,

[137] T- value of 1.645 corresponds to a significance level of .10 in a two-tailed difference of means test, which means one has 90% confidence that the value of certain covariate differs between treatment sample and sentencing sample.

individuals in the sentencing group had more prior felony arrests and convictions, while individuals in the diverted group had a longer history of drug related arrests. In addition, cases charged for drug possession were more likely to be included in the sentenced sample and cases charged for sale of controlled substances other than marijuana, opium, cocaine, or other derivatives, and synthetic narcotics were more likely to be diverted.

Table G-5. Balance Across 78 Covariates for Full Sample, Pre-Matching

Covariates		Sentenced N=2,439	Diverted N=717	t-value of Mean Difference
Demographic Characteristics	Age	32.72	33.22	-.99
	Sex (Percent Male)	85.5%	84.2%	.81
	White	8.5%	16.6%	-5.40***
	Black	49.8%	41.6%	3.93***
	Hispanic	39.5%	39.7%	-.13
	Asian	1.8%	1.4%	.74
	Other Race	.4%	.7%	-.98
County of Arrest	Bronx	17.1%	35.1%	-9.33***
	Kings	19.6%	24.4%	-2.66**
	New York	44.6%	23.4%	11.27***
	Queens	15.4%	9.8%	4.23***
	Richmond	3.4%	7.3%	-3.76***
County of Disposition	Bronx	15.2%	35.1%	-10.35***
	Kings	17.8%	23.4%	-3.22***
	New York	33.1%	15.5%	10.65***
	Queens	15.7%	9.8%	4.46***
	Richmond	3.4%	2.8%	.80
	SNP	14.9%	13.4%	1.02
Prior Arrests	Felony	4.25	3.85	1.81+
	Misdemeanor	5.83	6.16	-.83
	Violent Felony	.82	.66	2.92**
	Drug	4.71	5.35	-2.24*
	Child Victim	.25	.27	-.94
	Weapon	.70	.60	2.24*
	Sex Offender Registry	.06	.04	2.30*
Prior Convictions	Felony – Adult	.96	.84	1.81+
	Felony – Youth	.10	.05	4.40
	Misdemeanor – Adult	4.18	4.04	.40
	Misdemeanor – Youth	.11	.09	1.56
	Drug	2.33	2.61	1.47
	Child Victim	.02	.01	1.70+
	Weapon	.09	.08	.72
	Sex Offender Registry – Adult	.01	<.001	1.58
	Sex Offender Registry – Youth	<.001	<.001	1.42
Instant Offense – Top Arrest Charge	Sale: Opium, Cocaine, or Derivatives	8.6%	8.2%	0.29
	Sale: Marijuana	.3%	<.1%	2.65**

	Sale: Synthetic Narcotics	.2%	<.1%	2.24*
	Sale: Other	33.4%	55.5%	-10.58***
	Poss: Opium, Cocaine, or Derivatives	.5%	.6%	-.21
	Poss: Marijuana	1.4%	1.0%	.96
	Poss: Synthetic Narcotics	0.2%	0.3%	-.34
	Poss: Other	24.2%	21.9%	1.29
	Robbery	1.6%	.1%	5.13***
	Aggravated Assault	.2%	<0.1%	2.24*
	Burglary	9.2%	2.8%	7.53***
	Larceny	11.9%	7.0%	4.29***
	Motor Vehicle Theft	1.5%	.4%	3.08**
	Dangerous Weapons Possession	.2%	.1%	.62
	Forgery & Counterfeiting	2.7%	1.1%	3.11***
	Stolen Property	1.8%	.3%	4.66***
	Criminal Mischief	1.2%	.6%	1.78+
	Fraud	.2%	<.1%	2.00*
	Simple Assault	.4%	<.1%	3.17***
	Other Fingerprintable Offense	<.1%	<.1%	1.00
Instant Offense – Top Arrest Class	A-I Felony, Non-Reducible	4.1%	.3%	8.60***
	A-II Felony	3.9%	1.1%	5.01***
	B Felony	54.9%	77.7%	-12.27***
	C Felony	6.4%	2.6%	4.81***
	D Felony	19.1%	12.0%	4.90***
	E Felony	10.3%	6.1%	3.78***
	A Misdemeanor	1.2%	.1%	4.14***
Instant Offense – Top Indictment Charge	Sale: Opium, Cocaine, or Derivatives	6.6%	11.7%	-3.89***
	Sale: Marijuana	.1%	<.1%	1.73+
	Sale: Synthetic Narcotics	.6%	.8%	-.59
	Sale: Other	27.1%	43.7%	-8.01***
	Poss: Opium, Cocaine, or Derivatives	2.7%	1.4%	2.46*
	Poss: Marijuana	1.6%	.7%	2.25*
	Poss: Other	29.3%	29.0%	.16
	Burglary	10.3%	2.5%	9.13***
	Larceny	13.4%	6.8%	5.67***
	Motor Vehicle Theft	1.0%	.3%	2.63**
	Forgery & Counterfeiting	2.0%	1.1%	1.77+
	Stolen Property	4.0%	1.5%	1.03
	Criminal Mischief	1.1%	.3%	2.86**
Instant Offense – Top Indictment Class	B Felony	47.8%	61.1%	-6.37***
	C Felony	7.7%	4.5%	3.49***
	D Felony	27.3%	27.2%	.08
	E Felony	17.1%	7.3%	7.98***

+ p<.10; *p<.05; **p<.01; ***p<.001

Balance Across Covariates after Matching

After the implementation of PSM, we find that the differences between the diverted and sentenced groups were substantially reduced. As Table G-6 indicates, a total of 69 out of 70 covariates were considered to be balanced across the two groups. [138] Only top indictment charge on sale of synthetic narcotics remains significantly imbalanced and only using a liberal interpretation of statistical significance (.10). However, this difference is not significant at .05 level, which is a conventional cutoff for assessing statistical significance. In addition, only a small number of individuals in the study sample were indicted on sale of synthetic narcotics (.2 percent of sentenced sample and .9 percent of diverted sample).

Overall, the matching procedure was effective in reducing the differences between the diverted and sentenced groups on the observed confounders that were entered into the propensity scoring procedure. [139] Post matching, there were no outstanding differences between the two groups based on demographics, current charges, jurisdictions, or prior criminal history. Therefore, the matched samples are now reasonably statistically independent of both individual and contextual observed characteristics that could previously predict both diversion and re-offending outcomes. Meeting this assumption allows for an evaluation of public safety by directly comparing recidivism outcomes between the matched diverted and sentenced groups.

[138] It is important to note that covariates pre-and post-matching differ slightly – eight covariates drop out after the matching procedure has been completed because they no longer vary in the matched sample. Effectively, they become constants, and could be considered as perfectly balanced across groups.

[139] A cautionary note – propensity score matching techniques are utilized in place of randomized control trials in order to approximate conditions of a true experimental design. Although such a procedure brings us closer to such conditions, it does not replicate them, it merely creates a comparable alternative. As such, we cannot rule out unobserved confounders (generally termed "hidden bias") that could still significantly predict both group assignment and post-treatment recidivism patterns (Rosenbaum, 2002; Shadish, Cook, & Campbell, 2002). However, given an extensive set of potential confounding covariates (78, in total) we can reasonably assume that we have reduced selection biases considerably and have arrived at more valid estimates of the effect of drug court treatment.

Table G-6. Balance Across 70 Covariates for Full Sample, Post-Matching

Covariates		Sentenced N=638	Diverted N=638	t-value of Mean Difference
Demographic Characteristics	Age	32.97	33.50	-.78
	Sex (Percent Male)	84.5%	84.8%	.16
	White	10.7%	13.3%	-1.47
	Black	44.4%	43.3%	.40
	Hispanic	41.8%	41.4%	.17
	Asian	2.5%	1.6%	1.19
	Other Race	.6%	.5%	.38
County of Arrest	Bronx	35.3%	35.0%	.12
	Kings	24.6%	26.3%	-.71
	New York	24.6%	25.4%	-.32
	Queens	13.5%	10.8%	1.46
	Richmond	2.0%	2.5%	-.56
County of Disposition	Bronx	35.3%	35.0%	.12
	Kings	24.1%	25.2%	-.45
	New York	16.8%	16.6%	.08
	Queens	13.5%	10.8%	1.46
	Richmond	2.2%	2.5%	-.56
	SNP	8.3%	9.9%	-.97
Prior Arrests	Felony	4.33	4.00	1.19
	Misdemeanor	6.79	6.50	.56
	Violent Felony	.69	.69	0.02
	Drug	6.12	5.58	1.33
	Child Victim	.33	.28	1.38
	Weapon	.62	.63	-.24
	Sex Offender Registry	.04	.04	.40
Prior Convictions	Felony – Adult	1.00	.89	1.27
	Felony – Youth	.07	.05	1.21
	Misdemeanor – Adult	4.60	4.25	.75
	Misdemeanor – Youth	.10	.09	.23
	Drug	3.10	2.74	1.30
	Child Victim	.02	.01	1.41
	Weapon	.08	.08	-.46
	Sex Offender Registry – Adult	<.01	<.01	-.45
Instant Offense – Top Arrest Charge	Sale: Opium, Cocaine, or Derivatives	8.9%	8.9%	<.001
	Sale: Other	54.5%	56.7%	-.79
	Poss: Opium, Cocaine, or Derivatives	.6%	.5%	.38
	Poss: Marijuana	.8%	.9%	-.30
	Poss: Synthetic Narcotics	.3%	.3%	<.001
	Poss: Other	21.9%	19.7%	.96
	Robbery	<.1%	.2%	-1.00
	Burglary	2.8%	3.0%	-.17
	Larceny	6.3%	6.9%	-.45
	Motor Vehicle Theft	.9%	.5%	1.00
	Dangerous Weapons Possession	<.1%	.2%	-1.00
	Forgery & Counterfeiting	.9%	1.3%	-.54
	Stolen Property	.8%	.3%	1.14
	Criminal Mischief	.9%	.6%	.64

Instant Offense – Top Arrest Class	A-I Felony, Non-Reducible	.2%	.3%	-.58
	A-II Felony	1.4%	1.3%	.24
	B Felony	77.3%	77.9%	-.27
	C Felony	2.7%	2.5%	.18
	D Felony	11.9%	11.9%	<.001
	E Felony	6.3%	6.0%	.23
	A Misdemeanor	.3%	.2%	.58
Instant Offense – Top Indictment Charge	Sale: Opium, Cocaine, or Derivatives	14.7%	12.5%	1.14
	Sale: Synthetic Narcotics	.2%	.9%	-1.90^{+}
	Sale: Other	40.8%	44.2%	-1.25
	Poss: Opium, Cocaine, or Derivatives	.6%	.5%	.38
	Poss: Marijuana	.6%	.8%	-.33
	Poss: Other	30.1%	28.1%	-.74
	Burglary	2.4%	2.8%	-.53
	Larceny	7.2%	6.9%	.22
	Motor Vehicle Theft	.6%	.3%	.82
	Forgery & Counterfeiting	.8%	1.1%	-.58
	Stolen Property	1.4%	1.6%	-.23
	Criminal Mischief	.6%	.3%	.82
Instant Offense – Top Arraignment Class	B Felony	61.3%	61.1%	.06
	C Felony	4.4%	4.2%	.14
	D Felony	26.0%	27.1%	-.44
	E Felony	8.3%	7.5%	.52

$^{+}$ p<.10; *p<.05; **p<.01; ***p<.001

Appendix H. Logistic Regression Model Predicting Use of Residential Treatment Services

Variables		B	S.E	Exp(B)	Sig.
Demographics	Age	-0.038	0.01	0.963	0.000***
	Female	-0.532	0.249	0.587	.033*
	Black	0.716	0.295	2.047	.015*
	Hispanic	0.055	0.288	1.057	0.848
	Asian	-1.763	1.188	0.171	0.138
	Unknown Race	-0.391	1.152	0.677	0.735
Disposition County[1]	Bronx	-1.771	0.348	0.17	.000***
	Kings	-1.093	0.34	0.335	.001**
	Queens	-0.94	0.452	0.391	.038*
	SNP	-0.667	0.373	0.531	.074+
Arrest charges[2]	Drug possession	-0.433	0.203	0.649	.033*
	Specified Property	0.33	0.39	1.392	0.397
Prior criminal records	Prior felony convictions	-0.092	0.091	0.912	0.308
	Prior drug convictions	0.111	0.036	1.117	0.002
Primary drug of choice[3]	Alcohol	0.902	0.511	2.465	.078+
	Cocain	-0.132	0.365	0.876	0.718
	Crack	1.384	0.364	3.99	.000***
	Heroin	1.231	0.304	3.425	.000***
	Other Drugs	0.297	0.267	1.346	0.267
Arrest in 2010		0.167	0.2	1.182	0.403

*p<.05 **p<.01 ***p<.001

Nagekeke R^2 =.229 N=652

[1] New York County is the reference category for diversion counties.

[2] Drug sell is the reference category for arrest charges.

[3] Marijuana is the reference category for primary drug choice.

Appendix I. Logistic Regression Model Predicting Drug Court Graduation

Variables		B	S.E	Exp(B)	Sig.
Demographics	Age	0.025	0.012	1.026	0.032*
	Female	-0.009	0.306	0.991	0.975
	Black	-0.024	0.351	0.977	0.946
	Hispanic	0.038	0.344	1.039	0.912
	Asian	0.37	1.3	1.447	0.776
	Unknown Race	-0.691	1.499	0.501	0.645
Diversion County[2]	Bronx	0.658	0.434	1.93	0.13
	Kings	-0.103	0.434	0.902	0.813
	Queens	0.677	0.584	1.968	0.246
	SNP	0.168	0.463	1.183	0.716
Arrest charges	Drug possession	0.122	0.253	1.129	0.631
	Specified Property	-0.025	0.445	0.975	0.956
Prior criminal records	Prior felony convictions	0.084	0.119	1.088	0.48
	Prior drug convictions	-0.129	0.046	0.879	.005**
Primary drug of choice[3]	Alcohol	-0.323	0.586	0.724	0.582
	Cocaine	-0.246	0.43	0.782	0.567
	Crack	-0.366	0.436	0.694	0.402
	Heroin	-0.353	0.381	0.703	0.354
	Other Drugs	0.3	0.344	0.741	0.383
Treatment Plan	Duration	-0.099	0.044	0.905	0.025*
	Residential Services	-0.192	0.229	0.825	0.402
Arrest in 2010		0.411	0.241	1.508	.088

*p<.05 **p<.01 ***p<.001
Nagekeke R^2 =.118
N=444. Of the 515 drug court cases with closed status included in the matched 2008 and 2010 implementation samples, 71 cases had missing values in one of variables included in the model.
[1]New York County is the reference category for diversion counties.
[2] Drug sell is the reference category for arrest charges.
[3] Marijuana is the reference category for primary drug choice.

Appendix J. Qualitative Interview Guide

Investigation/arrest:

- Have you noticed any difference in the types of cases that are brought post-DLR?
- Have you noticed any difference in the types of defendants that are arrested post-DLR?
- Have the tactics of law enforcement changed post-DLR? [Probe re buy'n'bust, informant buys, use of recording, use of pen registers, wiretap evidence]

Bail:

- Have you noticed any difference in bail practice post-DLR?

Charging:

- Have you noticed any change in the types of charges a given fact-pattern might give rise to post-DLR? [follow-up as needed]

Trial:

- Have you noticed any change in trial practice of an Article 216 case post-DLR? [follow-ups as needed]

Plea bargaining:

- Have you noticed any change in plea bargaining post-DLR? [follow-ups as needed]

Diversion:

Pre-DLR diversions:

- What are the options of diverting cases to treatment in your county pre-DLR? Drug courts? DTAP? What else?
- Have you noticed any change in pre-existing diversion options post-DLR? And how?

- Please describe the process for diverting article 216 eligible cases post-DLR, how many of these diversion utilize newly created options?

Judicial diversion:

- Does your county have a separated judicial diversion court to handle judicial diversion cases?
- How often cases have been diverted through judicial diversions post-DLR? How frequently cases have been diverted without ADA consent?
- What determines which defendants are offered alternative sanctions?
- Who conducts screening/assessments for judicial (article 216) diversions? Is it different from screening/assessment for drug courts/DTAP?
- Who exerts an influence on the choice of diversion option and how? Please describe how the use of diversion is influenced by the preferences of judges/defenders/DAs.

Treatment:

- What are the standard treatment offers for article 216 cases (residential/outpatient, time, other requirements)? How does this differ from DTAP and drug court offers?
- What determines the types of treatment that defendants are offered?
- How often do defendants reject treatment offers? What factors influence acceptance of treatment offers?
- How are treatment cases supervised by the judicial diversion courts? Does this differ from drug courts in terms of treatment conditions, case management and completion of milestones?
- Do you have a sense of treatment graduation rates for treatment mandated by the judicial diversion court? How does this differ from graduation rates for drug courts or DTAP?

- What typically happens upon completion of treatment? What factors influence whether charges are reduced, dismissed, or cases conditionally sealed?

Please share any other comments you have on the use of judicial diversions in your county.

Appendix K. Case File Review Coding Instrument

Note that not all items apply to all defendants; in many cases the information was redacted or otherwise not available.

- Defendant
- Defendant: (random numbers assigned by project)
- County/borough: Kings, Bronx
- Race/ethnicity: Black, White, Hispanic, Asian, Other
- Gender: Male, Female, Transgender
- Education level : grade and years completed
- Arrest charge: Article 220/239 Felony [specify]
- Current charge (if different): Article 220/239 Felony [specify]
- Arrest year
- Resolution year: 2008 (pre-DLR cases), 2010 (post-DLR cases)
- Priors: Prior Non-Violent Felony record (all cases were prior felons; persons with Prior Violent Felony, Prior Persistent Violent Felony Adjudication, or Prior Second Violent Felony Adjudication were excluded)
- Indicted: Indicted by Grand Jury, Proceeded on Supreme Court Information, Reduced to misdemeanor, Dismissed
- Arrest
- Type of case: Buy'n'bust, Observation, Other [specify other]
- Pre-marked buy money? Yes, No
- Any evidence other than drugs, pre-marked buy money? Yes [specify other evidence], No

- Any evidence suppressed? Yes [specify suppressed evidence], No
- Diversion
- Pre-indictment diversion offer by ADA? Yes, No
- Pre-indictment diversion offer accepted by defendant? Yes, No
- Defense request for post-indictment judicial diversion? Yes, No
- Request opposed by ADA? Yes, No
- Defendant approved by court for treatment assessment? Yes, No
- If treatment assessment denied, why? "Dealer" indicia (large amounts of cash, packaging materials, etc.), Gun involved, Other [specify]
- Did court seek ADA consent to assessment? Yes, No
- Defendant accepted for treatment after assessment? Yes, No
- Court approved diversion after assessment? Yes, No
- Did ADA oppose diversion? Yes, No
- Did ADA request hearing opposing diversion? Yes, No
- Did defendant request hearing opposing denial of diversion? Yes, No
- If diversion denied, why? Did not meet diagnostic criteria, Could not be placed in program, other [specify]
- Hearing held? Yes, No
- Defense request that defendant not enter guilty plea prior to diversion to avoid collateral consequences? Yes, No
- Defense request that defendant not enter guilty plea prior to diversion to avoid collateral consequences granted by court? Yes, No
- If defense request that defendant not enter guilty plea prior to diversion denied, why? n/a

- Outcome promised for successful completion of treatment? Original charge, Lesser Charge (Felony), Lesser Charge (Misdemeanor/Violation), Probation [specify probation period], Conditional discharge, Conditional sealing, Dismissal of all charges, Other [specify other]
- Sentence promised for failure to successfully complete treatment? City time [specify city time amount], State time [specify state time amount], Post-release Supervision [specify post-release supervision type & period], Original charge maximum, Other [specify other]
- Was defendant placed in diversion treatment program? Yes, No
- Treatment modality: Methadone, In-patient residential, Out-patient, Other [specify other]
- Treatment period: [specify treatment period]
- Treatment completed: Yes, No
- Resolution
- Trial held: Yes, No
- Final resolution of case: Conviction on original charge, Lesser Charge (Felony), Lesser Charge (Misdemeanor/Violation), Probation, Conditional discharge, Conditional sealing, Dismissal of all charges, Local time, State time, Post-release Supervision, Original charge maximum, Other [specify other]

Appendix L. Victim Cost Calculations

The table below illustrates how the victim's benefits of DLR were calculated based on the work of Cohen and Piquero (2009). This work provides estimates for the costs experienced by crime victim's and include the cost of lost productivity, pain, suffering and lost quality of life.

To create weighted averages for violent and property felonies in New York, researchers utilized New York City data from DCJS for 2011, the most recent year available. These estimates assume that DLR had no effect on murders. Cohen's victim's costs were updated to 2009 dollars using the BLS inflation calculator.

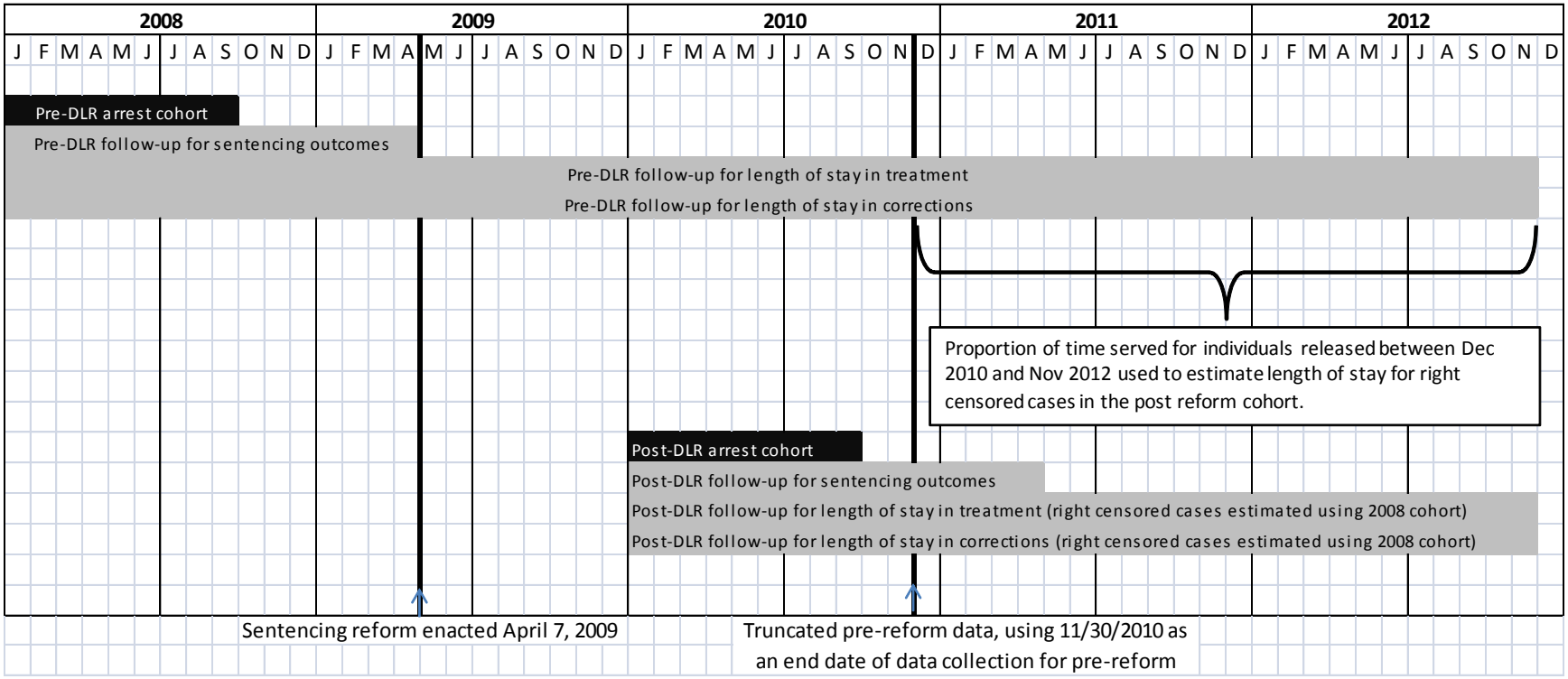
Table L-1. Method for calculating weighted averages for victim's costs

	2011 crimes (NYC)[140]	Percent of Total	Crime Cost (2009 dollars)[141]
Violent Felonies			
Rape	2,755	4%	$139,685
Robbery	28,317	37%	$12,416
Aggravated Assault	45,423	59%	$38,284
Cost of a violent felony (weighted average)			**$32,360**
Property Felonies			
Burglary	18,159	13%	$2,069
Larceny	112,864	80%	$466
Motor Vehicle Theft	9,434	7%	$5,691
Cost of a property felony (weighted average)			$1,024

Numbers may not sum because of rounding.

[140] From New York Division of Criminal Justice Services, *Index Crimes Reported to Police by Region: 2002-2011*, http://www.criminaljustice.ny.gov/crimnet/ojsa/indexcrimes/Regions.pdf, 2012.
[141] From Cohen, Mark A. and Piquero, Alex, "New Evidence on the Monetary Value of Saving a High Risk Youth," *Journal of Quantitative Criminology*, 2009: 25-49.

Appendix M. Follow-up Period and Length-of-Stay Methodology for Cost-Benefit Analysis



Appendix N. Alternative Imputation Methods for Treatment Length of Stay in Cost-Benefit Analysis

Researchers used a number of methods to control for potential systematic biases created by the different lengths of time available to track cases in the pre-DLR and post-DLR samples using administrative records. Specifically, because the pre-DLR sample included cases originating from 2008 arrests, there was more opportunity for follow-up, compared to post-DLR (2010) cases; 53-59 months versus 26-35 months). For 34 percent of cases that were diverted to residential treatment post-DLR, the observation period ended before the treatment was completed, compared to one percent of cases pre-DLR. In other words, the treatment information for these cases was truncated, or "right censored," providing incomplete information on the actual length of stay in residential treatment. This is significant, both because residential treatment is a commonly used modality for DTAP and drug court cases and an important driver of the costs associated with treatment diversion. To account for right censoring, researchers applied a variety of methods to impute length of stay in residential treatment for the post-DLR sample. This appendix presents the results of different imputation methods and provides a rationale for the selection of the method that was used to estimate missing values.

Truncation Method. Researchers began by truncating treatment data for the pre-DLR sample using 11/30/2010 as a cut off. This method ensured the same follow-up period for both pre-DLR and post-DLR cases (the end of the observation period for the post-DR sample is 11/30/2102) and did not require imputation of the length of stay data. However, truncation under-estimates the length of stay for both pre-DLR and post-DLR cases and does not provide an accurate description of the resource implications of treatment diversion. Furthermore, the use of residential treatment increased post-DLR and a greater proportion of cases were still truncated

using this method, suggesting overall longer lengths of stay in residential treatment post-DLR. Therefore, this method disproportionately under-represents treatment costs for the post-DLR sample.

Using the first-three months of post-DLR data to impute the post-DLR data. Researchers then used the average total length of stay in different types of treatment for cases entering drug court during the first three months of 2010 to estimate average treatment stays. The follow-up period for the first three-months of 2010 diversion cases (32-35 months) was longer than the full 2010 cohort (26-35 months) and less than 10 percent of the first three-month 2010 cohort had open cases at the end of the follow-up period. Average values were then used to estimate length of stay for the right-censored cases in the post-DLR sample. However, compared to the full 2010 sample, cases with completed treatment information in the first three-months sample had significantly shorter treatment plans (the average treatment plan for the first three-month 2010 cohort was 10.8 months as compared to 13 months for the full 2010 cohort). Therefore, this method may underestimate the length of stay in treatment for the 2010 sample. In addition, 10 percent of cases from the 3-month cohort were still open at the end of the observation period, suggesting that the average length of stay for closed cases will be an underestimate. Finally, less than 20 percent post-DLR diversion cases (n=76) entered treatment in the first three-months of 2010. The accuracy of the estimate could be reduced by the small sample size.

Multiple Imputation. Researchers considered using multiple imputation (MI) methods to estimate missing values. MI is based on the assumption that cases with missing data are distributed randomly and that their values can be estimated using observed data (Little and Rubin, 1987). However, it is likely that there are systematic differences in the characteristics of

treatment cases that were still pending at the end of the data collection period. Furthermore, findings from the pre-DLR sample suggest that there are outliers, with treatment times that are significantly greater than the average. In scenarios where missing data are not randomly distributed, MI methods can produce biased results (Little and Rubin, 1987).

Use the pre-DLR data to impute length of stay for the post-DLR sample. Finally, researchers used observations from the pre-DLR sample to estimate right-censored values for the post-DLR sample. This was the method that was ultimately used to impute right censored residential treatment data for the study.

To approximate the follow-up period for the post-DLR sample, pre-DLR cases were first truncated using November 30, 2010 as an end date of data collection (an equivalent 26-35 month follow-up period). Researchers calculated the proportion of total treatment completed within the artificially truncated 26-35 month follow-up period. The estimates from the pre-DLR sample were then used as a multiplier to predict length of stay for right-censored post-DLR treatment cases. On average, closed cases in the pre-DLR sample had completed only one-third of their court-mandated treatment within the 26-35 follow up period. To impute treatment length, the length of stay for all right-censored treatment cases in the post-DLR sample was increased by dividing them by one-third.

Table N-1 describes estimated lengths of stay in residential treatment using: 1) the truncation method; 2) imputation based on three months of post-DLR data; and 3) imputation using pre-DLR data (estimates were not developed for the MI methods for the methodological reasons stated above). It is important to note that these estimates are the averages across the whole sample, used for the cost benefit analysis component of the study. The imputed length of stay for the 252 individuals who entered residential treatment post-DLR was 478.9 days, over an

average of 1.7 episodes. The average for the whole sample was estimated by calculating the total days in treatment for this group and dividing by the number of cases in the post-DLR sample; i.e. (478.9*252)/440=274.3.

Compared to the truncation method and the imputation based on three months of post-DLR data, imputation using the pre-DLR data produced the most highest estimate (e.g. was least likely to *underestimate* the length of stay in treatment). However, this method is based on the assumption that the use of residential treatment has not changed as a result of DLR. By definition, many of the open cases in both samples had very long treatment stays (outliers), and we assumed that the impact of DLR had a limited impact on outliers. Court professionals interviewed as part of this study reported the use of long, indeterminate treatment stays for drug court and DTAP cases post-DLR (see Chapter 8).

Table N-1. Comparison of methods for imputing average Length of Stay in Residential Treatment

Imputation Methods	2008	2010
Average length of stay imputed using truncation method	105 days	176.5 days
Average length of stay imputed using first three-month data	138.6 days	192.6 days
Average length of stay imputed using 2008 data	138.6 days	274.3 days