Juvenile Detention Reform in New York City: Measuring Risk Through Research

I. Introduction

In 2006, New York City’s juvenile justice system was nearing a crisis. The city had closed its only alternative to detention. The average daily populations in detention facilities—equivalent to jail in the adult context—were at their highest numbers in three years. The average daily cost of housing a youth in detention had risen from $439 in the previous fiscal year to $468.1

Faced with these challenges, New York City officials concluded that they had to rethink the city’s juvenile detention policies and practices. The Office of the Criminal Justice Coordinator (CJC) in collaboration with a group of diverse stakeholders from the Department of Probation, the Department of Juvenile Justice, and the Administration for Children’s Services, among others, sought to identify reforms that would use expensive resources more efficiently and improve outcomes for arrested youth, without compromising public safety.

With research and technical assistance from the Vera Institute of Justice, the city stakeholder group undertook a two-part reform process. First, it designed an empirically based risk-assessment instrument (RAI), which provides information about an arrested youth at his or her first court appearance to help judges decide whether the young person in question may require secure detention or be better suited for release to the community, with or without supervision. Second, the group developed a variety of community-based, non-residential programs that provide an alternative to detention for eligible youth. This report focuses on the research component of this reform, and specifically on how New York City used research to guide its detention reform efforts.

The report begins with background on, and context for, the reforms. The second section describes the RAI and the process by which it was developed. Next, the report briefly discusses the continuum of community-based alternatives to detention (ATDs) that was created.

II. Background

On January 3, 2006, the New York City Department of Probation (DOP) shut down the city’s only alternative to juvenile detention in response to concerns that the program was not reaching the right youth and that youth were being removed from their home schools and held in the program for much longer than needed. The unexpected closure created a clamor among many groups involved in the juvenile justice system. Judges expressed concern that they had lost an important pretrial supervision option. The Department of Juvenile Justice (DJJ)—the agency then responsible for the city’s detention facilities—fear an influx of new admissions into its already crowded detention facilities. The advocacy community complained that New York City—home to one of the nation’s largest juvenile justice systems—now had no alternative to detention for youth charged with delinquent offenses.

The vacuum that the closure of DOP’s program created also presented a unique opportunity to improve the city’s practices and policies regarding juvenile detention and its alternatives. The CJC quickly convened a group of juvenile justice stakeholders that included representatives from the probation department; DJJ, the city’s Law Department, which prosecutes juvenile offenses, the judiciary, the Administration for Children’s Services (Children’s Services), the Police Department, and the Department of Education. The group’s central task was to identify reforms that would improve outcomes for arrested youth, use resources wisely and efficiently, and protect communities. In particular, following state statute, the city sought to limit the use of costly detention beds to arrested youth who posed the most significant risk of either committing a new crime or failing to appear in court while their case was pending (prior to sentencing). The city hoped to achieve this through better decision making at arraignment about which youth were most in need of detention. But there was little data available about the family court’s juvenile detention decision-making process and, therefore, no empirically based way to predict which youth would do well in the community and which youth posed enough risk to require detention.

The city recognized this dilemma as an opportunity to develop an empirically based risk-assessment tool that could offer more information to practitioners in family court, helping them to make better decisions about whether arrested youth should be detained. Although the concept of a risk-assessment instrument was certainly not new, the empirically based approach to designing an...
instrument, similar to that used in some places, including New York City’s adult criminal justice system, had not yet been applied to juvenile detention. In recent years, the Annie E. Casey Foundation’s Juvenile Detention Alternatives Initiative (JDAI) has helped jurisdictions across the country develop and implement normative risk assessment instruments. These instruments are typically designed based on the values and experiences of juvenile justice stakeholders in each locality. Together, stakeholders determine the factors that are most critical to include based on their experience, knowledge of the local population, and on a review of other instruments in the field. Once the instruments are in place, the jurisdictions then collect and analyze data to test whether the assessment tools are, in fact, classifying youth into risk categories that appropriately match their actual rates of rearrest and failure to appear in court, and changes are made as needed. These instruments often gain critical support from stakeholders and, when used in tandem with community-based detention alternatives, can be very effective in reducing the use of detention without increasing re-offense or failure-to-appear rates.

Empirically developed risk-assessment instruments are slightly different, as they comprise—from the earliest design phase—only those factors that have been statistically shown to correlate significantly with or predict future risk of failure to appear in court or rearrest. Although empirical instruments can be comparatively expensive and time-consuming to design, they may—in the case of some jurisdictions—help to garner additional support because of their basis in scientific research. Deciding on the empirical approach, New York City stakeholders developed an RAI that includes only those risk factors that are statistically correlated with failure to appear in court and rearrest during the period between arrest and sentencing.

To complement their tool, the New York stakeholder group also developed a new set of community-based supervision programs. Drawing on models designed and sustained under JDAI (in places such as Cook County, Illinois, and Santa Cruz County, California), New York City created a continuum of ATDs at three supervision levels. The two lower-supervision options, community monitoring and after-school supervision, are run by nonprofit organizations. The third, intensive community monitoring, is run by the probation department.

III. Developing an Empirically Based Risk-Assessment Instrument

New York City’s juvenile justice stakeholders had a number of hypotheses about the factors that were most apt to predict youths’ likelihood of rearrest and failure to appear in court, but those hypotheses had to be tested to verify their predictive reliability. To do this, stakeholders and Vera staff collected intake data for a sample of arrested youth, tracked rearrest and court appearance records for the sample through sentencing, and then conducted a statistical analysis to determine the strength of correlation between specific data factors and the risk of either rearrest or failure to appear. Each of these procedures is discussed in more detail below.

A. Research Process

The stakeholder group began by examining risk-assessment models used in other jurisdictions and by sharing their experiences working with youth in New York City’s juvenile justice system. Based on this information, the group generated an extensive list of potential factors that they believed might predict failure to appear in court and rearrest. These factors included, but were not limited to, current charge type, charge severity, prior offense history, school attendance, current or prior warrants, parental involvement, and prior or current involvement with Children’s Services.

Next, the stakeholders created a four-page data-collection form to gather information on youth who were arrested in the city’s five boroughs and sent to probation for intake and screening. Vera researchers worked with the DOP, training probation officers to complete the form during the intake appointment. Between May 1, 2006, and August 15, 2006, the DOP used the form on all 1,782 cases across the city that the probation department referred to the Law Department for screening and possible prosecution. Of these, the Law Department prosecuted, through the filing of a court petition, 1,053 cases. These petitioned cases became the basis of all analyses going forward. It should be noted that in New York State, the age of juvenile jurisdiction is capped at 15. Youth arrested at age 16 and over are automatically screened and handled in the adult criminal justice system, in addition to some youth—termed juvenile offenders—who are arrested under the age of 16 for acts that are deemed serious enough to be prosecuted in the adult criminal court; juvenile offenders and youth arrested for acts committed at age 16 or above were not included in this study.

B. Research Findings: Identifying Factors That Correlate Significantly with Failure to Appear and Rearrest

[The characteristics of the 1,053 petitioned cases were examined and revealed, among other things, that the majority were male (82 percent) and youth of color (black or Hispanic, 90 percent combined). Fewer than 10 percent were arrested for the most severe charges (A or B felonies), and 51 percent were arrested for robbery or assault. Notably, the sample largely comprised first-time offenders: 64 percent had no prior unsealed arrests. By tracking the sample through sentencing, or for about one year (whichever came first), using data from the New York State Office of Court Administration, DJJ, and the Criminal Justice Agency, Vera staff identified factors that were most closely related to failure to appear and rearrest.]

16 FEDERAL SENTENCING REPORTER • VOL. 24, NO. 1 • OCTOBER 2011
Four factors were found to correlate significantly with a youth’s failure to appear in family court while a case is pending:

- An open warrant for a previous juvenile delinquency case;
- No parent or responsible adult present at probation intake;
- School attendance of less than 30 percent in the last full semester of school; and
- A prior warrant for a juvenile delinquency or Persons in Need of Supervision (PINS) case.16

Six factors correlated significantly with re-arrest while a case is pending:

- Prior arrest(s) at the time of probation intake;
- Prior arrest(s) for a felony offense at the time of probation intake;
- Prior juvenile delinquency adjudication(s);77
- Previous adjudication(s) for a designated felony offense;18 and
- Being on probation for a previous adjudication at the time of probation intake.

One factor was found to be inversely correlated with rearrest, which means the presence of this factor decreased the likelihood of rearrest:

- Eighty percent or greater attendance in the last full semester of the school year.

Notably, the research also revealed factors that do not correlate with failure to appear and rearrest during the pretrial period. These include

- current charge type;
- current charge severity;19
- prior juvenile delinquency placement;20
- intake source (detention facility drop-off or appearance ticket);21
- parent not willing to supervise;22
- no adult arrived at the precinct in the period immediately following the arrest;
- victim of the charged offense lives in the juvenile’s home;
- pending juvenile delinquency petitions (open family court delinquency cases) at the time of intake;
- having previously been sentenced to probation supervision as a juvenile delinquent, as a result of a previous adjudication;
- past adjudication as a juvenile offender; and23
- being in foster care under the supervision of the Administration for Children’s Services.

These findings challenged some of the New York City stakeholders’ long-standing assumptions about the risk of failure to appear and rearrest between arrest and sentencing. Neither charge type nor charge severity, for example, were found to be associated with failure to appear or rearrest, even though these factors are often included in normatively based detention risk assessments.24

C. Applying the Factors to Determine Risk Score

Once the factors that signal a risk of failure to appear or rearrest were identified, the stakeholders developed a way to determine an overall risk score for each youth.

Today, at intake, probation officers enter information for each case into a database. They assign one point for each factor identified with risk of failure to appear, one point for each factor associated with risk of rearrest, and subtract a rearrest point for high school attendance rate of 80 percent or higher (the factor shown in the previous section to correlate inversely with rearrest). They create two summary scores—one for risk of failure to appear and another for risk of rearrest.

The database then processes this information according to the matrix in the figure below. The vertical axis shows the number of rearrest points for a given youth. The horizontal axis measures failure-to-appear points. The intersection of these two axes represents the youth’s overall risk score, which a judge can consider in deciding whether a youth should be released without court-ordered supervision, released to a detention alternative, or detained while his or her case is pending.25

![The Risk Score Matrix](image-url)

Of the sample of youth Vera followed, those with the lowest rates of failure to appear and rearrest were designated as low risk; those who had the highest rates were designated as high risk; and those with rates falling between low and high were designated as medium risk. Approximately 55 percent of the youth were low risk, 32 percent were medium risk, and 13 percent were high risk.

Every three months for a year during the baseline study period, Vera researchers conducted statistical analyses to confirm that the low-risk group continued to have the lowest rates of failure to appear and rearrest and that the high-risk group continued to have the highest rates. At each assessment, cut-off points for the three risk levels
were adjusted to increase the matrix’s capacity to accurately identify youth’s level of risk—that is, to identify as high risk those youth who reoffended and/or failed to appear at the highest rate, as compared to youth in the other two risk categories.

Youth who score low on this matrix are deemed most suited for release with no formal supervision; youth who score high are deemed most suited for detention; and youth with a medium risk score are eligible for supervision by the city’s newly designed ATD programs.26

IV. Preliminary Outcomes
Information from the Juvenile Justice Research Database—the database used to monitor and assess the RAI and ATD programs—suggests that the city’s reform effort is being adopted successfully by staff and is generating positive outcomes for youth on a variety of measures.

- As of June 2010, more than 33,000 cases had been screened using the RAI at probation intake. More than 10,000 of these cases were subsequently petitioned in court and have had an arraignment hearing where a decision to detain or release the youth was made.27
- Of the 10,485 cases that were screened and petitioned, the majority (55 percent) were low risk. 32 percent were mid risk and 13 percent were high risk.
- The family courts frequently refer youth who score mid-risk on the RAI to ATD programs. According to intake numbers maintained by the city, ATD programs have reported a total of 2,850 admissions since implementation.
- Detention use at arraignment for all risk levels has shifted. (Rates of detention at arraignment for the 2006 study sample (prior to RAI and ATD implementation) were compared to rates for a 2008 sample (post-implementation).) Overall, the use of detention at arraignment has dropped from 32 percent to 24 percent—a 25 percent decrease.
- Most notably, detention at arraignment for the largest proportion of cases—youth who score as low risk on the RAI—is down from 24 percent to 9 percent (a 62 percent decrease). Detention of the smallest population—high-risk youth—increased from 49 percent to 72 percent, indicating that the family courts are more frequently reserving detention for youth most at risk for rearrest or failure to appear in court.
- Instances of rearrest while a case is pending have decreased for all risk groups since the RAI and ATD programs were implemented.28

Before New York City implemented the RAI and ATD programs, youth in 26 percent of cases were rearrested for a new offense prior to sentencing for the prior offense. In the 2008 comparison sample, only 18 percent were rearrested in the same period. Overall, there has been a 30 percent reduction in the rate of rearrest for youth during the time their cases are pending. While the reduction is noticeable in all groups, it is most pronounced in the high-risk group, whose rate decreased by more than half (from 39 percent to 15 percent). These preliminary outcomes suggest that the reforms are working in favor of public safety by having an appreciable impact on recidivism during the pendency of delinquency cases—a difficult result to obtain and one that is critical to the initiative’s longevity and success.

These outcomes are encouraging, but still preliminary. Vera researchers plan to continue to quantify the impact of the RAI and ATDs on juvenile justice system outcomes, controlling for factors such as time at risk and type of offense, focusing on primary outcomes of interest: rearrest during the pendency of the case and failure to appear. In addition, Vera will measure the effect of the reforms on other important points in the system, including admissions to and lengths of stay in detention and disposition decisions. Also, through ongoing analyses of, researchers plan to monitor crucial system indicators—such as volume and risk distribution of probation, ATD, and detention intakes; ATD program outcomes; and rearrest and failure to appear—over time.

V. Conclusion
The development and implementation of the RAI and ATD programs represent an important shift in New York City’s juvenile detention policy. The RAI provides reliable guidance on risks of failure to appear or rearrest. The ATDs provide effective program alternatives to detention for moderate-risk youth. Judges are therefore able to make better decisions at arraignment: detained youth are more likely to be those at high risk for failure to appear and rearrest, and youth released to their communities are doing well on their own or with supervision under the new ATDs. In collaboration with juvenile justice officials in New York City, Vera staff are collecting information for a comprehensive evaluation of the RAI and ATD programs. Given early outcomes, it appears that New York City’s reform effort could serve as a model for other jurisdictions seeking to improve outcomes for youth while preserving public safety.

Notes
1. Excerpted from Jennifer Fratello, Annie Salsich, & Sara Mogulescu, Juvenile Detention Reform in New York City: Measuring Risk through Research (Vera Institute of Justice, 2011).
2. Detention in this context refers to secure confinement of youth during the pendency of a delinquency case, similar to jail in the adult context.
4. Vera’s assistance was funded by the CJC and New York State’s Office of Children and Family Services.
5. The program, run by the City’s Department of Probation, provided school, counseling, and supervision to youth who remained at home but were court ordered to report to “ATD...
Following probation intake, arrested youth can appear in family court in a variety of ways, depending on the probation officer’s assessment of whether his case can be successfully diverted—or adjusted—without formal court processing. An officer can refer the case immediately, on the same day as intake, to the Law Department or can open the case for diversion services, with the possibility of later referring the case to prosecution if diversion services are deemed unsuccessful.

The sample comprised only cases that were referred to the Law Department immediately. This was an intentional decision based on a desire to identify cases that were most likely to go to court. By using this design, we excluded a portion of the total caseload referred to the Law Department—including cases referred to prosecution and potentially petitioned to court following an attempt at diversion.

A juvenile offender is defined by the New York Penal Law Sec. 10(18) as a 13-year-old found responsible for either second-degree murder or felony sexual assault; or a 14- or 15-year-old found responsible for those acts in addition to first-degree kidnapping, arson, assault, manslaughter, rape, criminal sexual act, robbery, or burglary, or second-degree arson, burglary, or robbery, or found with a firearm on school property.

Under Family Court Act Sec. 375.1(1), when a delinquency proceeding is terminated in favor of the respondent, the records of that proceeding are to be automatically sealed, unless the court directs otherwise. If, however, the respondent is found delinquent, the records of the proceeding are only sealed if the respondent makes a motion to seal and the court grants that motion. The adjudicated youth may not bring such a motion until he or she turns 16. See Family Court Act Sec. 375.2.

The analysis was conducted using the Burgess method. This method uses an equal weighting system that assigns one point to independent variables that are found to be significantly correlated with the dependent (outcome) variables of interest. Some important advantages of the Burgess method are ease of use in both scoring and interpretation. This method has several known disadvantages when compared to multivariate modeling techniques. For example, it does not account for correlations between variables, which can lead to redundancy. This method also does not allow researchers to model and control for extraneous explanatory variables such as race, gender, and time at risk. However, multivariate analyses conducted during a follow-up period have found that demographics are not predictive once the impact of other factors is accounted for. In addition, the stakeholder group chose this method because it lends face validity and is credible and usable to practitioners. Follow-up validations have shown that the factors chosen through the Burgess method are highly predictive of both failure to appear and rearrest. See also, see Ernest W. Burgess, “Factors Determining Success or Failure on Parole,” in The Workings of the Indeterminate-Sentence Law and the Parole System in Illinois, Andrew A. Bruce, et al. (Springfield, IL: 1928).

Persons in Need of Supervision (PINS) in New York State are children under the age of 18 who are truant, run away from home, disobey their parents, or are otherwise incorrigible. They are known nationally as status offenders because they commit offenses that are considered offenses only because of their status as minors.

Adjudication is a finding of delinquency in the juvenile court, comparable to a conviction in adult criminal court. Designated felony is the category for the most serious offenses prosecuted in family court; it can result in the longest periods of confinement.

According to New York State penal law, charge severity is measured in two tiers—first felony or misdemeanor—then in grades noted by a letter. The most serious charges are A felonies; the least serious are B misdemeanors. Placement is defined as an out-of-home disposition—or sentence—for an adjudicated juvenile delinquency offense. These
placements are typically in state-run facilities in upstate New York and are separate from detention.

21 Arrested youth arrive at probation intake in one of two ways. Police drop them off at the detention center immediately following the arrest and DJJ takes them to intake, or the police or DJJ send them home after issuing a Desk Appearance Ticket that instructs them to show up at probation intake at a specific date and time.

22 This is defined as a parent or guardian making a definitive statement that they are unwilling to supervise the child.

23 A juvenile offender is a youth who commits an offense that is automatically waived to adult criminal court based on the severity of the offense.

24 Multnomah County, Oregon, recently conducted a validation exercise of its normatively designed detention risk assessment instrument and reached a similar conclusion: charge type and charge severity were not predictive of failure to appear or rearrest while a case was pending. See Kelly Dedel and Garth Davies, Validating Multnomah County’s Juvenile Detention Risk Assessment Instrument, (Portland, Oregon: One in 37 Research, Inc., 2007).

25 The scoring scheme takes the differences between the factors predicting failure to appear and those predicting rearrest into account.

26 The final decision to detain or release a youth rests with the judge; however, the instrument offers an informed recommendation for judicial review.

27 The analyses are presented for cases, rather than youth, as some youth may account for multiple cases.

28 The comparison group comprises a six-month sample of youth who were arrested in the first half of 2008, assessed using the RAI, referred for petition on the same day, subsequently petitioned, and whose cases have since reached completion.