# Detention Risk Assessment Instrument (DRAI) Validation Study



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#### **EXECUTIVE SUMMARY**

To aid decision-making regarding the appropriateness of secure detention, Maryland's Department of Juvenile Services (DJS) uses a Detention Risk Assessment Instrument (DRAI) during the intake process to objectively assess the degree to which youth pose a public safety and/or flight risk (i.e., reoffend and/or fail to show up for court). Risk scores calculated by the DRAI are used to create a recommendation for release, community-based alternative to detention (ATD), or secure detention. All ATD and secure detention decisions made by DJS are reviewed by the court on the next business day.

Beginning in July 2013, DJS implemented a DRAI that calculated an overall risk score by adding up points based on six individually scored items. In 2016, the University of Maryland School of Social Work's Institute for Innovation & Implementation completed analyses to evaluate the predictive validity of the 2013 version of the DRAI. These analyses were intended to: 1) assess how the DRAI's scored items are related to reoffending and failing to appear (FTA) in court; 2) determine whether the overall DRAI risk score predicts these outcomes; and 3) describe the changes that are necessary to implement a validated instrument. Key study findings are listed below.

- Analyses were conducted in two phases, each using a different sample of youth. Results from the validation indicated that the items included in the 2013 DRAI did not adequately predict youth's risk of short-term reoffending or failing to appear in court. A revised version of the tool, including several replacement items, performed substantially better in analyses at predicting these outcomes. The new, validated version of the DRAI was implemented in July 2017, with scored items including:
  - o Prior Charges Pending Adjudication
  - Current Supervision/Prior Adjudications
  - o FTA History (within past 12 months)
  - O History of Escape/AWOL (within past 12 months)
  - o Prior Detentions (within past six months)
  - Age at First Felony Complaint
- To support a structured decision-making process that aligns with DJS' intended use of detention and detention alternatives, the revised 2017 version of the DRAI places primary emphasis on empirically valid criteria, but it also incorporates policy factors that should be given consideration in the decision-making process. The revised DRAI also retains the ability of workers to use their discretion when circumstances not accounted for by the scored risk items, such as the youth's alleged victim living in the home, are present.
- Applying risk scores based on Most Serious Pending Offense under the 2013 DRAI was found not to
  be justified due to the item's negative and non-significant correlation with the outcomes. However,
  because some offenses represent a threat to public safety, policy considerations incorporated into the
  revised DRAI mean that mandatory detention is required for those youth whose most serious new
  alleged offenses are classified by DJS as either Category I or II offenses.
- Cut points using the revised overall DRAI risk score were established based on the detention recommendation, with the goals of maximizing the proportion of youth released or placed in detention alternatives while minimizing the risk to public safety. Youth who score seven points or fewer are classified as low risk and recommended for release back into the community. Youth who score between eight and 12 points are considered moderate risk and recommended for a community-based ATD. Those who score 13 points or higher are considered high risk and recommended for detention. Again, DJS policy determines the specific categories of offenses eligible for mandatory detention, regardless of the youth's risk score.

#### INTRODUCTION

Maryland statute defines secure detention as "the temporary care of children who, pending court disposition, require secure custody for the protection of themselves or the community, in physically restricting facilities" (*Md. Code, Courts and Judicial Proceedings, 3-8A-01(n)*). In addition, the code directs the use of detention prior to court hearings if the youth is likely to leave the jurisdiction of the court.

Although typically a relatively short-term step in juvenile justice system processing, secure detention often is associated with long-term consequences. Detention disconnects youth from their families, schools, and social systems, and it increases their exposure to delinquent peers (*Holman & Ziedenberg, 2006*). Despite the high costs of detention, educational and other resources tend to be limited, and youth are more vulnerable to violence-related injuries and self-harm (*Mace, Rohde, & Gnau, 1997*). Ultimately, the consequences of detention may be cumulative; research has shown that youth who are held in detention prior to adjudication often receive harsher dispositions (*Bortner & Reed, 1985*; *Frazier & Bishop, 1985*; *McCarthy, 1987*; *Wu, 1997*).

Given the potential harms associated with the use of secure detention, DJS policy indicates that its use should be reserved for only those youth who present a clear risk to public safety or who are likely to leave the jurisdiction of the court. To aid decision-making regarding the appropriateness of detention for

individual youth, DJS uses a Detention Risk Assessment Instrument (DRAI) during the intake process to objectively assess the degree to which the youth poses a public safety and/or flight risk. Though empirically based, risk assessment instruments cannot account for every possible factor contributing individual to delinquency, nor are they designed to be used in a vacuum. Rather, staff are encouraged to use scores and recommendations derived from these instruments as a starting point for decision-making, and, at the same time, they are expected to rely on their professional expertise to make decisions that consider all factors relevant to the case.

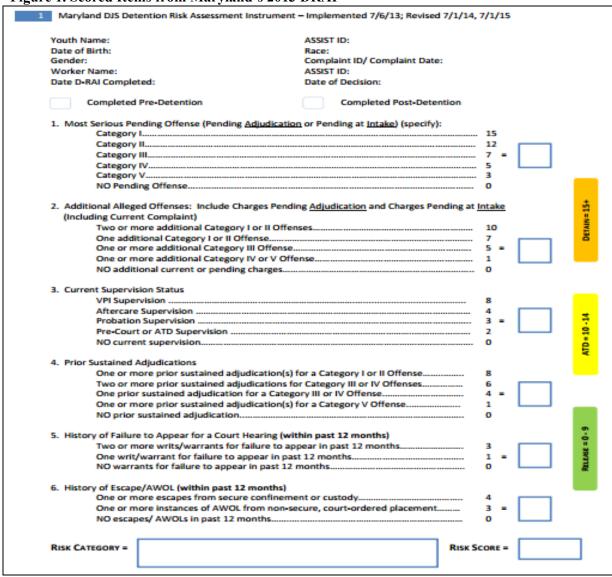
DJS has a long history of using objective criteria to make decisions regarding the appropriate use of secure detention (see right insert). The DRAI analyzed in this report was implemented by DJS in July 2013, with some minor revisions to items and scoring occurring in

#### **History of Objective Detention Tools in Maryland Since 2000**

- 2000 An offense-based system targeted both serious offenses (e.g., murder) and those particularly concerning to stakeholders (e.g., car theft). This approach failed to adequately account for youth's flight risk or threat to public safety.
- 2003 A statewide DRAI was implemented after a review of other states' tools. Input was provided by a stakeholder workgroup composed of members of the police, the State's Attorney's Office, the Office of the Public Defender, DJS staff, and others.
- 2006 The Institute for Governmental Service and Research completed validation analyses of the DRAI. Based on the results, DJS implemented six *locally validated* instruments, which included variations in scoring as well as scored items. As a result of stakeholder influence, each DRAI also included locally determined lists of override reasons resulting in mandatory detention. Rather than predictive risk, these "special decisions" reflected regional attitudes about the delinquent acts that warranted detention.
- 2013 A new, statewide version of the DRAI was implemented, and local variations in items and scoring were eliminated, as were "special decisions." A review of other states' instruments helped DJS determine items and scores. Non-scored detention "rationales" were added to track various "doors" to detention (i.e., policy reasons for detention, such as writs/warrants, adult court involvement, etc.).

subsequent years (Figure 1). The instrument assigned points based on six scored items: Most Serious Pending Offense; Additional Alleged Offenses; Current Supervision Status; Prior Sustained Adjudications; History of Failure to Appear for a Court Hearing (within past 12 months); and History of Escape/AWOL (within past 12 months). Points from each item were added together to form a risk score. Youth who scored nine points or fewer were considered low risk and recommended for release back into the community. Youth who scored between 10 and 14 points represented a moderate risk and were recommended for a community-based alternative to detention (ATD). Those who scored 15 points or higher were considered high risk and recommended for detention.

Figure 1. Scored Items from Maryland's 2013 DRAI



It should be noted that staff could use their discretion to override the DRAI's indicated recommendation either up (to ATD or secure detention) or down (to ATD or release). The 2013 DRAI listed override reasons and allowed staff to select all that applied. In addition, the DRAI also captured Detention

<sup>&</sup>lt;sup>1</sup> Overrides up to ATD or secure detention could occur because: the parent refused to collect the youth; the parent was unavailable; the youth had a history of violence in the home or lived with the victim; the ATD/shelter refused to

Rationales, which represent the "doors" through which youth enter detention. Though detention is primarily intended for pre-adjudicated youth who are processed through intake, some youth may be detained for other reasons, such as probation violations, adult court involvement, or outstanding writs/warrants. Youth who enter detention through these alternative processes typically have a DRAI administered while they are in detention so that their levels of risk may still be assessed and recorded. These youth were not the focus of the current study.

This report is presented in three parts. The first section is focused on short-term risk and presents the results of the validation analysis, which was intended to: 1) assess how the DRAI's scored items are related to reoffending and FTA outcomes; 2) determine whether the overall DRAI risk score predicts these outcomes; and 3) describe the changes that are necessary to implement a validated instrument. The second part of the report reviews policy considerations related to specific categories of offenses and other factors that may result in the DRAI recommendation, as determined by the risk score, being overridden. Taking both risk and policy into account, the third part of the report reviews analyses used to assess the impact that these changes would have on DRAI recommendations and outcomes. Results also are disaggregated by race and region. Study limitations are summarized at the end of the report.

#### PART ONE: VALIDATION

#### Methodology

Maryland's DRAI validation study involved a two-step process. During the first phase, an initial sample was used to assess the predictive validity of the current DRAI. Because these analyses showed that the items in the current instrument were not sufficiently predicting risk, several alternative items were assessed using the same sample. During the second phase of the validation process, a new sample was used to determine the extent to which the findings from the first phase held true for a different group of individuals. Though summaries from both phases of the study are presented below, much of the discussion is focused on findings from the second phase of the study.

#### Time at Risk

Because the primary intention of secure detention is to be a short-term step that occurs prior to adjudication, the DRAI is intentionally designed to predict short-term reoffending and/or failing to appear in court. Maryland statute requires an adjudicatory hearing to occur within 60 days,<sup>2</sup> so a uniform 60-day period following the youth's complaint was selected as the time at risk.

#### **Outcomes**

Outcomes relevant to the validation include:

- 1. Complaints to DJS within the time at risk for new offenses (excluding those that were disapproved at intake or missing a case forwarding decision); and/or
- 2. Failures to appear (FTAs) in court during the time at risk.

admit the youth; or there was no ATD/shelter available. Overrides down to ATD or release could occur due to: lesser offenses being included in the risk score; the age of the youth; the parent's willingness/ability to provide supervision; the fact that the youth lacked a prior record; the offense being less serious than what was indicated by the charge; or the new charge not being a recent charge.

<sup>&</sup>lt;sup>2</sup> This time frame does not apply if jurisdiction is waived to the adult criminal justice system by the juvenile court. In addition, if youth are detained, adjudication hearings must occur within 30 days.

Validation efforts in other states (e.g., Hennepin County, Minn.) have focused on these two outcomes separately, as different predictors may be relevant for each. Unfortunately, due to very low base FTA rates in Maryland,<sup>3</sup> these two outcomes are examined as a combined measure in this report.

<sup>&</sup>lt;sup>3</sup> FTAs are captured as alerts in DJS' ASSIST database. Due to definitional issues, FTAs may be undercounted, as workers may alternatively capture FTAs as writs/warrants or AWOLs.

### **Validation Phase One**

#### Sample

The initial stage of the validation analysis used a sample comprised of cases that had: 1) a new complaint filed with DJS from September 2014 through February 2015; 2) a matching DRAI<sup>4</sup>; and 3) been at-risk (i.e., not detained during the follow-up). The sample (n=941) included youth who were immediately released to a parent/guardian (n=515) or placed in a community-based ATD (n=246). Detained youth were excluded from the sample unless they were initially and briefly (1-3 days) detained by DJS but subsequently released (n=61) or placed in an ATD (n=119) by the court. Figure 2 displays the descriptive characteristics of the youth in the sample.

Figure 2. Descriptive Statistics — Phase One Sample

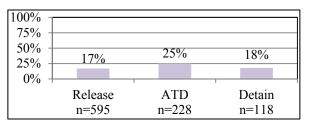
Figure 2. Descriptive Statistics — Phase	One Sample
<b>Total Number of Youth</b>	941
Male	759 (81%)
Female	182 (19%)
African-American/Black	844 (90%)
Caucasian/White	75 (8%)
Other (including Hispanic/Latino)	22 (2%)
Age at Complaint – Mean (S.D.)	15.4 (1.4)
Baltimore City	720 (77%)
Central	75 (8%)
Western	22 (2%)
Eastern Shore	37 (4%)
Metro	53 (6%)
Southern	34 (4%)
Outcomes	
New complaint within 60 days	153 (16%)
New FTA within 60 days	35 (4%)
New complaint/FTA within 60 days	176 (19%)

Figure 3. New Complaint/FTA within 60 Days by DRAI Recommendation — Phase One Sample

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<sup>&</sup>lt;sup>4</sup> DRAIs were considered to be valid matches if they occurred within one day prior to or four days following the complaint date. Cases were dropped from the analysis if their DRAI Actual Decision was not consistent with data in the ASSIST placement history file (n=286).

Of the 941 youth in the sample, 19% (n=176) had a new complaint and/or FTA within 60 days. Notably, compared to reported statewide detention trends (Maryland Department of Juvenile Services, 2015), the sample is



overrepresented by both African-American/Black youth (90% in the sample vs. 76%, 86%, and 87% statewide in FY 2013 through FY 2015) and youth from Baltimore City (77% in the sample vs. 75% in

FY 2014 and 62% in FY 2015). These disproportionalities may be due, in part, to the requirement that members of the sample have a matching DRAI. Efforts to achieve a more representative sample are described for the Phase Two sample below.

Most Serious Pending New Offense is not predictive of risk, and the association between this item and the outcome is negative, suggesting that youth who commit offenses that are more serious are less likely to reoffend or fail to appear in court than those who commit lower-level offenses.

#### Outcomes by DRAI Recommendation

Successful risk assessment instruments should provide recommendations that increase in severity based upon the increased likelihood of youth having a

new complaint and/or failing to appear in court. Accordingly, the highest proportions of these outcomes should be associated with youth whose DRAI scores indicate that they are high risk (i.e., those recommended for detention). Figure 3 shows new complaint/FTA rates by DRAI recommendation. These rates were highest among those youth identified as moderate risk and therefore recommended for an ATD (25%). Youth identified as low risk (i.e., those recommended for release) had similar outcomes to those identified as high risk (17% and 18%, respectively).

#### Outcomes by DRAI Risk Items and Overall Risk Score

Figure 4 shows descriptive statistics for each of the six scored DRAI risk items, along with their respective correlations with the outcome. Notably, these analyses indicate that Most Serious Pending Offense is negatively and non-significantly correlated with the outcome (new complaint/FTA within 60 days). Although offense severity is not predictive, the negative direction of this association suggests that those who commit offenses that are more serious are less likely than those who commit lower-level offenses to reoffend or fail to appear in court. This suggests that applying risk scores based on the category of Most Serious Pending Offense is not justified.

Only two items — Current Supervision Status and Prior Sustained Adjudications — are significantly correlated with the outcome. In addition, these two items are significantly correlated with each other (r=.663), which suggests that both should not be included in the instrument as separate items. For example, youth who are currently under probation supervision also must have prior sustained adjudications, which means they are receiving scores for two separate items that are essentially measuring the same construct. Further, the overall DRAI risk score, an additive score composed of all six items, is not significantly correlated with the outcome (r=.060).

<sup>5</sup> Validation efforts in other states also have found negative relationships between the most serious instant/current offense and short-term reoffending and/or failing to appear in court (*Dedel & Davies*, 2007; *Podkopacz*, 2009).

Figure 4. 2013 DRAI Scored Risk Items: Descriptive Statistics and Correlations with Outcome — Phase One Sample

Phase One Sample			New DJS Complaint/FTA	Completion
1.36 . 0	Item	n	within 60 Days	Correlation
1. Most Serious	Category I (15 pts.)	5	0 (0%)	
Pending Offense	Category II (12 pts.)	61	6 (10%)	
	Category III (7 pts.)	274	61 (22%)	058
	Category IV (5 pts.)	337	48 (14%)	
	Category V (3 pts.)	264	61 (23%)	
2. Additional Alleged Offenses:	Two or more additional Category I or II Offenses (10 pts.)	0	0 (0%)	
Include Charges Pending	One additional Category I or II Offense (7 pts.)	18	2 (11%)	
Adjudication and Charges Pending	One or more additional Category III Offense (5 pts.)	74	19 (26%)	.042
at <u>Intake</u> (including Current	One or more additional Category IV or V Offense (1 pt.)	423	87 (21%)	
Complaint)	No additional current or pending charges (0 pts.)	417	66 (16%)	
3. Current	VPI Supervision (8 pts.)	47	4 (9%)	
Supervision Status	Aftercare Supervision (4 pts.)	33	12 (36%)	
•	Probation Supervision (3 pts.)	148	50 (34%)	.076*
	Pre-Court or ATD Supervision (2 pts.)	46	11 (24%)	
	No current supervision (0 pts.)	667	99 (15%)	
4. Prior Sustained Adjudications	One or more prior sustained adjudication(s) for a Category I or II Offense (8 pts.)	8	0 (0%)	
-	Two or more prior sustained adjudications for Category III or IV Offenses (6 pts.)	33	11 (33%)	
	One prior sustained adjudication for a Category III or IV Offense (4 pts.)	152	39 (26%)	.099**
	One or more prior sustained adjudication(s) for a Category V Offense (1 pt.)	111	29 (26%)	
	No prior sustained adjudication (0 pts.)	637	97 (15%)	
5. History of Failure to Appear	Two or more writs/warrants for failure to appear in past 12 months (3 pts.)	2	0 (0%)	
for a Court Hearing (within	One writ/warrant for failure to appear in past 12 months (1 pt.)	36	13 (36%)	.060
past 12 months)	No warrants for failure to appear in past 12 months (0 pts.)	903	163 (18%)	
6. History of Escape/AWOL	One or more escapes from secure confinement or custody (4 pts.)	1	0 (0%)	
(within past 12 months)	One or more instances of AWOL from non-secure, court-ordered placement (3 pts.)	68	14 (21%)	.011
	No escapes/AWOLs in past 12 months (0 pts.)	872	162 (19%)	
Overall DRAI Risk	Score			.060

<sup>\*</sup>p<.05; \*\*p<.01

#### Alternative Items

Because the analyses described thus far suggest that the scored items included in the 2013 DRAI do not adequately identify youth with the highest risk of new complaints/FTAs within 60 days, it is necessary to examine alternative items that may improve the DRAI's predictive ability. The items included in Figure 5 were largely suggested

The 2013 DRAI's overall risk score is not significantly correlated with the outcome, and analyses suggest that alternative items may serve as stronger indicators of risk.

through a review of instruments used by other states (Appendix 1). Though not collected as part of the DRAI, these data are available through DJS' administrative information system for all cases.

Figure 5. Alternative Items: Descriptive Statistics and Correlations with Outcome - Phase One Sample

8	Item	n	New DJS Complaint/FTA within 60 Days	Correlation
Prior Charges	One or more pending petitions for a felony offense	159	46 (29%)	
Pending	One or more pending petitions for other offenses	220	52 (24%)	.155**
Adjudication	No pending petitions	562	78 (14%)	
Current Supervision /	One or more prior sustained adjudications for a Category I or II Offense OR VPI Supervision†	48	4 (8%)	
Prior Adjudications	Two or more prior sustained adjudications for Category III or IV Offense OR Aftercare Supervision	45	15 (33%)	
	One prior sustained adjudication for a Category III or IV Offense OR Probation Supervision	179	52 (29%)	.094**
	One or more prior sustained adj. for a Category V Offense OR Pre-Court or ATD Supervision	74	13 (18%)	
	No prior sustained adjudication AND No Current Supervision	595	92 (16%)	
Prior	No	842	147 (18%)	
Detentions (within prior 6 months)	Yes	99	29 (29%)	.093**
Age at First	Under 13	73	23 (32%)	
Felony	13 to 14	193	59 (31%)	
Complaint	15	97	23 (24%)	160**
	16	79	17 (22%)	
	Over 16 or no prior felony complaint	499	68 (14%)	

<sup>\*\*</sup>p<.01

All four alternative items are shown to be significantly correlated with the outcome. Three of these items — Prior Charges Pending Adjudication, Prior Detentions, and Age at First Felony Complaint — represent new items. The remaining item — Current Supervision/Prior Adjudications — combines the two existing DRAI items that were previously shown to be significantly correlated with both the outcome and one another. Although the correlation between this combined item is slightly weaker than the original Prior

<sup>†</sup> VPI Supervision was still in operation at the time of the study.

<sup>&</sup>lt;sup>6</sup> Additional items, beyond those listed in the table and including items collected as part of Maryland's MCASP Risk Assessment at Intake, were tested, but their correlations with the outcome were shown to be non-significant.

Sustained Adjudications item, combining these two items is justified to prevent doubly penalizing youth for being under some form of supervision and for having prior sustained adjudications.

After this process of identifying and testing items to be included in a revised version of the DRAI, analyses were completed to assess appropriate scores for individual items and to determine the number of overall risk points that should be included in each risk level. These analyses are excluded from the report due to space considerations, but the replicated analyses that were completed in Phase Two of the study are discussed in the section that follows.

#### **Validation Phase Two**

#### Sample

To confirm the findings from the first phase of the analyses, a new sample was created. Although DJS policy requires that the DRAI must be administered to all youth for whom detention is requested, the second phase of the analysis began with the assumption that other youth who are processed through intake may present with similar risk levels but may not be subject to a request for detention. Such requests may reflect local policing practices, and DRAI completion may also be a function of jurisdictional-level differences across DJS offices. To reduce these potential biases, we started with a sample of all youth who had a new complaint between July 2015 and February 2016. As with the Phase One sample, youth had to be at risk (i.e., not detained during the follow-up) to be considered for inclusion in the Phase Two sample (n=12,402). Bivariate analyses were used to compare youth with (12%, n=1,505)<sup>7</sup> and without matching DRAIs (88%, n=10,897), and they showed that youth who had DRAIs administered were significantly more likely to: be male; be African-American/Black; be marginally older at the time of complaint; be from Baltimore City; have a pending Category I, II, or III offense as well as at least one additional alleged offense; be currently under some form of DJS supervision; have one or more prior sustained adjudications; and have at least one prior detention within the past six months.

To retain a broader intake sample while still accounting for these differences, we used propensity score matching (PSM). PSM is a statistical matching technique that seeks to overcome the difficulties associated with selection bias (e.g., some youth being more likely to have DRAIs completed) within quasi-experimental designs by allowing matches to be created based on the characteristics of youth. In other words, our goal was to create a sample, including both youth with and without DRAIs, whose members proportionally resembled one another in terms of demographics and risk. Characteristics of the validation sample, both before and after PSM, are provided in Figure 6.

While youth with and without DRAIs significantly differed from one another on all of the listed matching characteristics before PSM, no significant differences were found between the two groups after PSM was completed. The PSM sample (n=1,840) contains equal numbers of youth with and without completed DRAIs. As the table also shows, the matched sample achieves a much better balance of youth by jurisdiction than was evident in the Phase One sample, and this distribution is preferable for validating a statewide risk assessment instrument.

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<sup>&</sup>lt;sup>7</sup> DRAIs, as well as ATD and detention placements, were considered to be valid matches if they occurred within one day prior to or three days following the complaint date.

Figure 6. Descriptive Statistics — Phase Two Sample: Full Sample vs. Propensity Score Matched

Sample

Sumpre	Full S	Sample	PSM S	Sample
	DRAI (n=1,505)	No DRAI (n=10,897)	DRAI (n=920)	No DRAI (n=920)
Male	1,291 (86%)	7,700 (71%)**	736 (80%)	759 (83%)
African-American/Black	1,294 (86%)	6,538 (60%)**	734 (80%)	740 (80%)
Age at Complaint – Mean (S.D.)	15.4 (1.6)	15.2 (1.9)**	15.2 (1.6)	15.3 (1.7)
Baltimore City Central Region Western Region Eastern Shore Region Metro Region Southern Region Most Serious Pending Offense – Category I to III	905 (60%) 201 (13%) 48 (3%) 124 (8%) 155 (10%) 72 (5%) 671 (45%)	376 (4%)** 3,155 (29%)** 1,110 (10%)** 1,727 (16%)** 1,987 (18%)** 2,542 (23%)**  1,336 (12%)**	320 (35%) 201 (22%) 48 (5%) 124 (14%) 155 (17%) 72 (8%) 307 (33%)	320 (35%) 218 (24%) 48 (5%) 105 (11%) 159 (17%) 70 (8%) 320 (35%)
Additional Alleged Offenses – Any	1,058 (70%)	5,588 (51%)**	611 (66%)	626 (68%)
Current Supervision Status – Any Supervision	491 (33%)	1,801 (17%)**	283 (31%)	318 (35%)
Prior Sustained Adjudications – Any	529 (35%)	1,916 (18%)**	286 (31%)	324 (35%)
Prior Detentions (Past Six Months) – Any	220 (15%)	595 (6%)**	115 (13%)	135 (15%)

<sup>\*\*</sup>p<.01

#### Recommended Changes to Items and Scoring

The purpose of completing a second phase of validation analyses is to ensure that findings from the first phase still hold when a different sample of youth is examined. Accordingly, the same bivariate analyses completed during the first phase of the validation were repeated with the Phase Two sample. Because the findings from these analyses were largely consistent across the two phases, the next step was to repeat Phase One analyses to determine necessary changes to the included items and their associated scoring, with the goal of improving the DRAI's effectiveness at assessing risk and making appropriate recommendations for youth screened for detention.

Figure 7 displays the proposed items to be included in the validated version of the DRAI, along with their descriptive statistics and the suggested number of points assigned to each. After several iterations of testing, the suggested scoring was based on findings from a final logistic regression model estimating occurrence of a new complaint/FTA within 60 days, with the listed items serving as independent variables. Most Serious Pending Offense was excluded based on previous analyses that showed this item to be negatively and non-significantly related to the outcome.

Figure 7. Validated DRAI Risk Items, Descriptive Statistics and Scoring — Phase Two Sample

, and the second	Item	N	New DJS Complaint/FTA within 60 Days	Scoring
1. Prior Charges	Two or more additional Category I or II Offenses	10	3 (30%)	8
Pending Adjudication	One or more additional Category III, IV, or V Offense	676	134 (20%)	4
(r=.069**)	One additional Category I or II Offense	16	3 (19%)	2
	NO additional pending charges	1,138	117 (10%)	0
2. Current Supervision	One prior sustained adjudication for a Category III or IV Offense OR Probation	284	66 (23%)	5
& Prior Adjudications (Combined)	One or more prior sustained adjudications for a Category V Offense OR Pre-Court or ATD Supervision	139	24 (17%)	3
(r=.105**)	One or more prior sustained adjudications for a Category I or II Offense OR Intensive Supervision	79	14 (18%)	1
	Two or more prior sustained adjudications for Category III or IV Offense OR Aftercare Supervision	218	39 (18%)	1
No prior sustained adjudication AND No Curre Supervision		1,120	114 (10%)	0
3. History of Failure to Appear	One or more writs/warrants for failure to appear in past 12 months	57	16 (28%)	5
(within past 12 months) (r=.073**)	NO writs/warrants for failure to appear in past 12 months	1,783	241 (14%)	0
4. History of Escape / AWOL	One or more instances of escape/AWOL in the past 12 months	117	30 (26%)	4
(within past 12 months) (r=.102**)	NO escapes / AWOLs in past 12 months		227 (13%)	0
5. Prior Detentions (within past	One or more prior detention in the past 6 months	250	55 (22%)	2
6 months) (r=.092**)	NO detentions in the past 6 months	1,590	202 (13%)	0
6. Age at First Felony	16 and under	688	138 (20%)	4
Complaint $(r=.136**)$	Over 16 or no prior felony complaint	1,152	119 (10%)	0

<sup>\*\*</sup>p<.01

Justifications for each of the items proposed for inclusion in the new, validated DRAI are provided below.

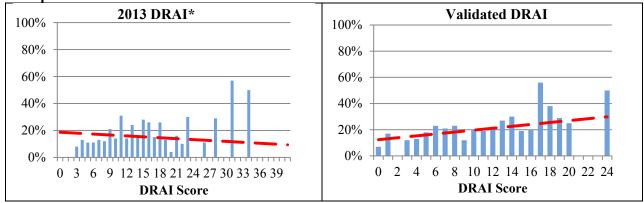
1. <u>Prior Charges Pending Adjudication (new DRAI item):</u> The 2013 DRAI includes an item that combines both additional charges pending at intake and additional charges pending adjudication. However, analyses completed as part of the validation separated these two types of additional charges

and found only those pending adjudication to be positively and significantly related to having a new complaint and/or FTA within 60 days.

- 2. <u>Current Supervision Status/Prior Sustained Adjudications (new DRAI item):</u> This item combines two original DRAI items that were found to be significantly related to the outcome but also were highly correlated with each other. The combined item accounts for both supervision status and prior sustained adjudications without counting them against youth twice.
- 3. <u>FTA History (retained 2013 DRAI item):</u> Though just 3% of youth in the sample (n=57) were indicated as having one or more FTA within the past 12 months, 28% of these youth had a new complaint/FTA within 60 days. By comparison, among youth with no FTAs within the past 12 months, 14% reoffended and/or failed to appear in court during the same time frame.
- 4. <u>History of Escape /AWOL (retained 2013 DRAI item):</u> Bivariate analyses using the sample from Phase Two of the validation analyses found a positive and significant correlation between the item and the outcome. More than one-quarter (26%) of the youth with one or more instance of AWOL in the past 12 months had a new complaint/FTA within 60 days, while 13% of those indicated as having no prior AWOLs experienced this outcome during the same time frame.
- 5. <u>Prior Detentions (new DRAI item):</u> Having a prior detention within the past six months was found to be positively and significantly related to having a new complaint/FTA for both validation samples.
- 6. Age at First Felony Complaint (new DRAI item): Both samples confirmed that youth who were younger at the time of their first felony complaint were more likely to fail within 60 days. This is consistent with a large body of criminological research that has found that delinquency is more likely to persist for those youth who start offending when they are younger (*Loeber and Farrington, 2011*).

Figure 8 compares new complaint/FTA rates by the overall DRAI risk score for the 2013 DRAI vs. the validated version.

Figure 8. New Complaint/FTA Rates by Risk Score: 2013 vs. Validated DRAI — Phase Two Sample



<sup>\*</sup>For the current DRAI, the trend line is shown as decreasing due to smaller numbers of youth with higher scores failing within 60 days.

The trend lines suggest that the validated DRAI is generally characterized by higher reoffending/FTA rates for those who have higher risk scores, while these rates do not follow a clear pattern based on the 2013 instrument's risk scores. In addition, the correlation between the overall risk score and the outcome improved for the validated DRAI (r=.190) compared to the 2013 version (r=.069), though both are fairly

modest and statistically significant. In addition, area under the curve (AUC) statistics were calculated to determine how well the different versions of the instrument distinguished between groups. Though significant for both versions, the AUC improved from .574 ("poor") for the 2013 DRAI to .649 ("modest") for the validated version.

The results of validation analyses suggest that risk scores generated by the revised version of the DRAI are better at predicting risk than those generated by the 2013 instrument. While risk is a primary factor for making detention decisions, some policy factors play a role in these decisions as well. Chief among these policy factors is the most serious new alleged offense, which must be considered as part of the decision-

The results of the validation analyses suggest that risk scores generated by the revised version of the DRAI are better at predicting risk than those generated by the 2013 instrument.

making process, as many offenses undeniably threaten public safety. Part Two of this report examines the role of offense as well as other policy factors that may override the recommendations determined by the DRAI risk score.

#### **PART TWO: POLICY**

Risk assessment instruments, such as the DRAI, are only effective if they are utilized as designed. Workers may resist agency-mandated risk instruments and their recommendations due to "a lack of knowledge of cognitive biases or statistical remedies for them, a persistent belief in the efficacy of clinical judgment based upon experience and training, overconfidence, the dehumanizing feel of statistical equations, fear of computers, and an ethical belief against the standardization that accompanies the statistical method" (*Schwalbe*, 2004: 569).

Structured decision-making places primary emphasis on scientifically valid criteria, but it recognizes that other policy factors may be given consideration in the decision-making process as well. This means that, though a validated risk assessment instrument is critical to achieving fair detention recommendations for youth, risk cannot be the only factor that is considered in decision-making. By using a structured decision-making framework for detention, an agency can ensure that key factors drive decision-making and also can track when and why staff deviate from the decisions. The sections that follow more fully describe detention-related policies related to offense categories, mandatory holds, and discretionary overrides.

#### Offense Categories

The analyses described in Part One of this report confirmed that that Most Serious Pending Offense is not positively or significantly related to reoffending or failing to appear in court, and, accordingly, should not be scored for risk. However, using offense seriousness as the basis for a detention decision is warranted when the current offense is egregious and the youth's release would pose a threat to public safety. Thus, DJS policy indicates that youth who commit specific types of offenses (i.e., those with Category I or II offenses) automatically qualify for mandatory detention. While risk scores are still calculated for these youth under the revised version of the DRAI, the seriousness of their offense(s) is the determining factor in the detention decision. A list of Category I and II offenses is provided in Figure 9.

Figure 9. Category I and II Offenses

Figure 9. Category I and II Offenses	
Category I Offenses	Category II Offenses
Crimes of Vie	olence (COV)
Attempted Murder Attempted Rape or Sex Offense Carjacking – Armed Child Abduction of Individual Under 16  Child Abuse 1st Degree  Kidnapping Murder 1st Degree Murder 2nd Degree Prostitution – Abduct, Persuade, Entice for Prostitution or Certain Sex Crimes Rape 1st Degree Rape 2nd Degree Sex Offense 1st Degree Sex Offense 2nd Degree Use of Handgun in Commission of Felony or COV, 2nd Offense	Assault 1st Degree Carjacking – Unarmed In-State Abduction of Child Under 12 Robbery with Deadly Weapon Use of Handgun in Commission of Felony or COV, 1st Offense
·	Offenses (Felony)
Poisoning Prostitution – Human Trafficking Sex Abuse by Household Member	Burglary – Home Invasion Controlled Dangerous Substance – Weapons Use Destructive Devices Gang Offense – Commission of Crime Gang Offense – Manage, Fund Gang Hate Crime Involving Death of Victim Use of Machine Gun for a Crime
Person-to-Person Off	Penses (Misdemeanor)
	Handgun Violation – Wear, Carry, Subsequent (including on school property) Prostitution – Abduction, Persuade, Entice

#### Mandatory Court and Policy Holds

Though the DRAI validation analyses focused on the traditional detention population (i.e., pre-adjudicated youth processed through intake), both pre- and post-adjudicated youth may be detained in Maryland as a result of a variety of alternative scenarios. These alternative "doors" to detention are captured in the "Mandatory Court and Policy Holds" section of the DRAI. The DRAI is still administered for these youth, typically after detention occurs, but the rationale, rather than risk, provides the overarching justification for the detention placement. Reasons resulting in mandatory policy holds, along with an explanation of each, are listed below.

- ATD Violation (Court Order Requires Detention at First Infraction): The court order requires that the youth be placed in detention upon his/her first violation of the terms of ATD supervision.
- Non-ATD GPS Violation (Court Order Requires Detention at First Infraction): The court requires that the youth be placed in detention upon his/her first violation of the terms of GPS monitoring.
- Writ or Warrant: Placement in detention results from a writ or warrant.

- Detained for Adult Court Pending Transfer Hearing, or Transferred Pending Juvenile Charging: Placement in a juvenile detention center occurs when youth are held for adult court pending their transfer hearing or are already transferred to adult court jurisdiction but still pending charging by the juvenile court.
- Court-Ordered Detention at Hearing (including Committed Youth Held for Court Hearing): Placement in detention results from proceedings in a juvenile court hearing.
- Interstate Hold: Detention is a courtesy placement related to pending delinquency matters in another state or the District of Columbia.
- Firearm Use/Possession (excluding BB guns): Detention results from the use or possession of a firearm.
- Escape-Secure Facility: Detention occurs following an escape from a secure facility.
- Ejected-Committed Placement: Detention occurs following an ejection from a committed placement.

In addition to these mandatory policy holds, the DRAI provides space to capture other "Non-Mandatory Rationales" that do not require mandatory detention. These include:

- Transferred from Adult Court: Placement in detention occurs as a result of transfer from adult court jurisdiction.
- Violation of Probation/Violation of Commitment: Placement in detention is the result of a violation related to supervision (i.e., probation, aftercare, and court-ordered community based programs).
- Pre-Adjudicated ATD Violation (no new offense): Placement in detention results when a non-adjudicated youth violates the supervision terms of an ATD.
- Post-Disposition ATD Violation (no new offense): Placement in detention follows violation of the terms of an ATD used for disposed youth.

#### **Overrides**

Even in the context of a validated DRAI, there may be factors or circumstances that are not accounted for by the scored risk items that should play a role in decision-making. In such instances, staff may override the DRAI's indicated recommendation either up (to ATD or secure detention) or down (to ATD or release), subject to supervisor approval. The DRAI provides a list of override reasons (Figure 10), and staff are permitted to select all that apply.

Figure 10. Override Reasons

Reasons for Override Up to ATD or Secure Detention	Reasons for Override Down to ATD or Release
<ul> <li>Parent refusal</li> <li>Parent unavailable</li> <li>Youth has a history of violence in the home or resides in the home</li> <li>ATD refusal (specify name of ATD(s))</li> <li>Shelter refusal (specify name of shelter(s))</li> <li>Shelter unavailable</li> <li>Other (please specify)</li> </ul>	<ul> <li>Age of youth</li> <li>Parent willing/able to provide supervision</li> <li>Category I or II offense less serious than indicated by the charge</li> <li>New charge is not recent</li> <li>Other (please specify)</li> </ul>

#### PART THREE: IMPACT OF PROPOSED CHANGES

The new, validated version of the DRAI accounts for both short-term risk as well as policy considerations to assure fairness and public safety. While additional data and analyses are needed to examine the impact of detention policies and overrides, this section assesses how the changes to risk scoring, along with instituting a policy requiring mandatory detention for Category I and II offenses, were predicted to affect the distribution of DRAI recommendations and outcomes. Future analyses should utilize data collected since the new DRAI's implementation in July 2017 to assess how actual distributions may differ from those described below.

In the figures that follow, the cut points associated with each of the DRAI recommendations reflect the updated risk scoring, which was adjusted to maximize the proportion of youth released or placed in ATDs while minimizing risk to public safety. Under the revised scoring system, youth who score seven points or fewer are classified as low risk and recommended for release back into the community. Youth who score between eight and 12 points represent a moderate risk and are recommended for a community-based ATD. Youth who score 13 points or higher are considered high risk and therefore are recommended for detention. All figures are based on data from the Phase Two sample.

#### Recommendations Based on Risk Only

Figure 11 shows how the new scoring scheme was predicted to affect the distribution of youth recommended for each outcome. In this section, recommendations and outcomes are based purely on levels of risk, as determined by the validated DRAI risk score; separate analyses described below additionally will assess the impact of policy decisions related to mandatory detention for specific categories of offense.

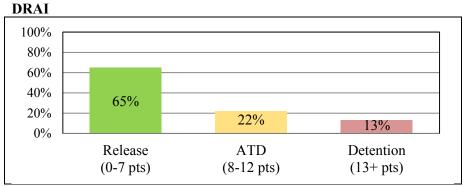
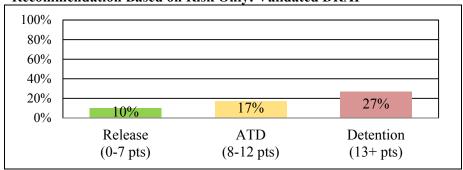


Figure 11. DRAI Recommendations Based on Risk Only: Validated

Based on the new cut points in the validated DRAI, nearly two-thirds (65%) of youth in the Phase Two sample are considered low risk and would be recommended for release, nearly one-quarter (22%) represent a moderate risk and would be recommended for placement in an ATD, and 13% are categorized as high risk and would be recommended for detention.

Figure 12 displays the new complaint/FTA rates for each of these groups.

Figure 12. New Complaint/FTA Rates within 60 Days by DRAI Recommendation Based on Risk Only: Validated DRAI

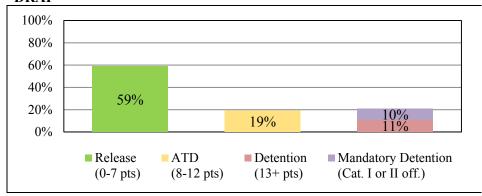


New complaint/FTA rates increase as the severity of the outcomes increases, such that, while only 10% of youth in the release recommendation group have a new complaint/FTA within 60 days, more than one-quarter (27%) of youth in the detention recommendation group experience these outcomes during the same time period.

#### Recommendations Based on Risk and Most Serious New Alleged Offense Category

Although the analyses in the previous section exhibit the appropriate trends, they account only for scored risk. The analyses presented in this section (and the sections that follow) also account for DJS' policy related to Most Serious New Alleged Offense, which requires detention for Category I and II offenses. Figure 13 shows the percentage of youth who would be recommended for each outcome.

Figure 13. DRAI Recommendations Based on Risk & Offense: Validated DRAI

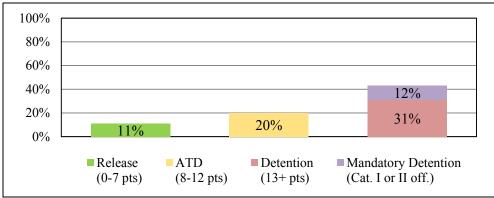


Similar to the recommendations based on risk scores only, analyses using the Phase Two sample suggest that the largest percentage (59%) of youth would be recommended for release. Although a slightly larger percentage (21%) of youth would be recommended for detention compared to ATD (19%), the detention category includes both those youth whose detention was recommended based on their risk score (11%) and those whose detention resulted from DJS' policy pertaining to Category I or II offenses, regardless of their risk scores (10%). Notably, youth in the mandatory detention group draw from all risk levels; this group includes 116 low-risk youth (61%) who would have been recommended for release, 44 youth (23%) who would have been recommended for an ATD, and 31 high-risk youth (16%) who would have been recommended for detention based on risk alone.

Figure 14 presents the new complaint/FTA rates for these four groups.

Figure 14. New Complaints/FTA Rates within 60 Days by DRAI



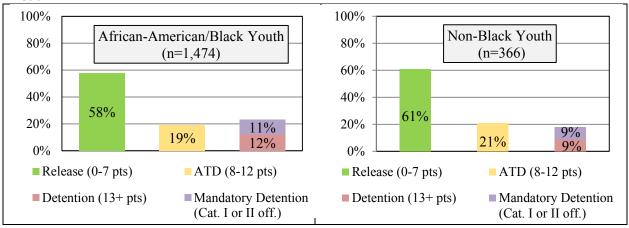


Consistent with the results based on risk only, new complaint/FTA rates increase as the severity of the outcomes increases for youth in the release, ATD, and detention groups. Compared to youth in the ATD and detention groups, youth in the mandatory detention group have substantially lower new complaint/FTA rates. In fact, their outcomes are similar to those of youth in the release group. This result is consistent with earlier analyses, which found a negative relationship between offense severity and the outcome, and it also underscores the fact that 61% (n=116) of the youth in mandatory detention group were classified as release-eligible based on risk alone.

#### Racial Impact

This section repeats the same set of analyses based on race group membership; although separate analyses also were completed by gender, they are excluded from the report due to space constraints. The use of a validated DRAI is intended to help DJS accomplish a key goal of advancing fairness in the agency's decision-making for youth of color. A validated instrument that is more predictive of risk and eliminates double penalties for prior system involvement will yield better outcomes for low- and moderate-risk youth of color. Figure 15 shows the proposed DRAI's recommendations for both African-American/Black youth and non-Black youth.

Figure 15. DRAI Recommendations (Risk & Offense) — Validated DRAI: Black vs. Non-Black Youth



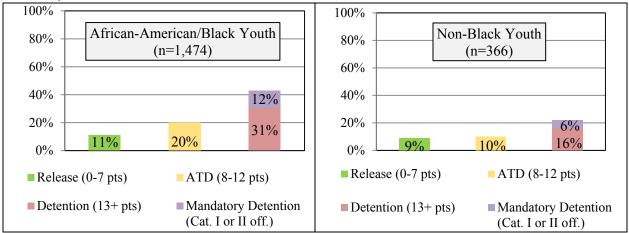
Because 80% of the sample is comprised of African-American/Black youth, the recommendations for these youth look very similar to those for the full sample (Figure 12). Slightly higher percentages of non-Black youth are classified as low risk and would be recommended for release (61% vs. 58%) and for ATDs (21% vs. 19%) under the revised DRAI, while smaller percentages of non-Black youth are classified as high risk and would be

Consistent with the findings for the full sample, analyses for Black vs. non-Black youth suggest that those recommended for release have the lowest new complaint/FTA rates under the revised DRAI, while those recommended for detention have the highest rates.

recommended for detention (9% vs. 12%). In addition, a slightly larger percentage of Black youth would be mandatorily detained based on their having a Category I or II offense (11% vs. 9%).

Figure 16 displays new complaint/FTA rates by each of the DRAI recommendation categories for African-American/Black youth and non-Black youth.

Figure 16. New Complaint/FTA Rates within 60 Days by DRAI Recommendation (Risk & Offense) — Validated DRAI: Black vs. Non-Black Youth



As with the recommendations, new complaint/FTA rates for African-American/Black youth closely mimic those of the validation sample more broadly. Non-Black youth in the sample had a lower base new complaint/FTA rate (9% vs. 15%), so their graph reflects a less-steep progression between recommendation categories.

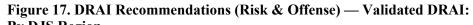
#### Impact by DJS Region

Because the DRAI serves as a statewide tool, its recommendations and outcomes should be consistent across jurisdictions. This section disaggregates analyses by DJS region, beginning with distributions of the DRAI's recommendations (Figure 16). Although sample sizes vary considerably by region, the same general pattern — higher proportions of youth recommended for release and declining proportions recommended for ATDs or detention — holds across the regions, albeit with some noticeable variations in the percentages for each category.

• Of the 640 Baltimore City youth in the sample, two-thirds (67%) are classified as low risk and would be recommended for release, 17% are considered to be moderate risk and would be recommended for an ATD, and 11% are classified as high risk and would be recommended for detention. An additional

6% of Baltimore City youth would be placed in detention based on their most serious new alleged offense, regardless of their indicated risk levels.

- Slightly more than half (52%) of the 419 Central Region youth in the sample would be recommended for release, and 22% would be recommended for an ATD. Fourteen percent of youth are indicated as being high risk and would be recommended for detention, and a similar percentage (13%) would be placed in detention based solely on their most serious new alleged offense.
- Nearly half (47%) of the 96 Western Region youth in the sample are considered low risk and would be recommended for release, and more than one-quarter (29%) are considered moderate risk and would be recommended for an ATD. Fourteen percent of youth would be recommended for detention based on being classified as high risk, and a slightly smaller percentage (10%) would be placed in detention because their complaint was for either a Category I or a Category II offense.
- More than half (56%) of the 229 Eastern Shore youth in the sample would be recommended for release and 20% would be recommended for an ATD. Equal proportions of youth would be placed in detention due to risk (20%) or based on their most serious alleged new offense (20%).
- Perhaps most striking among the regions are the distributions for the Metro Region, where 63% of the 314 youth in the sample would be recommended for release, 14% would be recommended for an ATD, and only 6% would be recommended for detention but 17% of youth would be placed in detention based solely on their most serious current alleged offense.
- Nearly half (49%) of the 142 sampled youth from the Southern Region are classified as low risk, 28% are considered moderate risk, and 16% are indicated as high risk. An additional 8% of these youth would be detained based on their most serious new alleged offense.



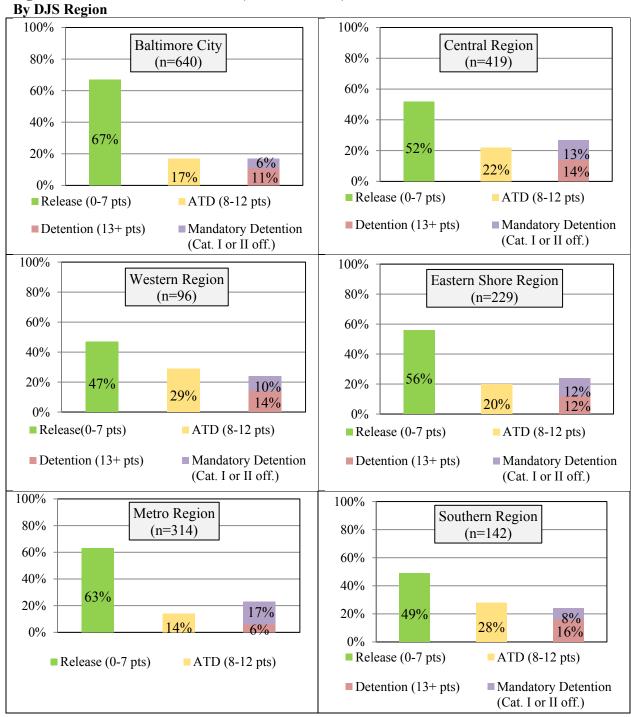
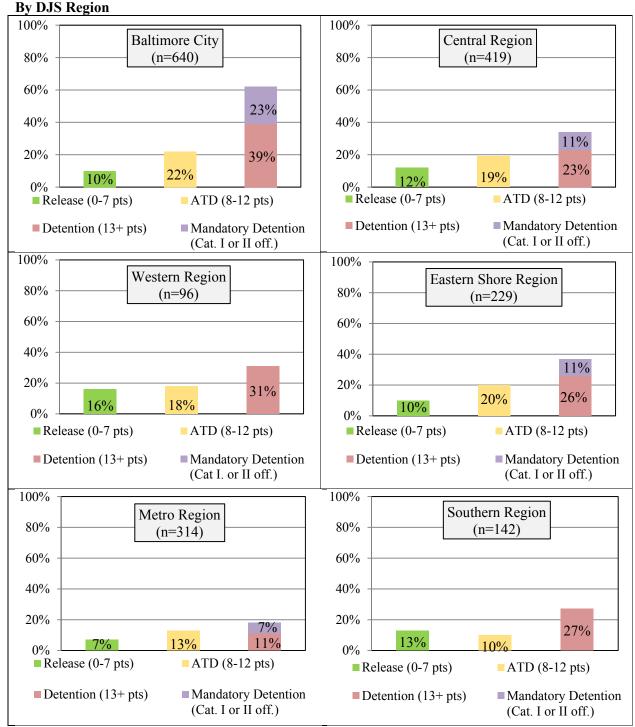


Figure 18 displays new complaint/FTA rates by each of the DRAI recommendation categories for the six DJS regions.

Figure 18. New Complaint/FTA Rates within 60 days - Validated DRAI:



With two exceptions, each region follows the same general pattern — new complaint/FTA rates increase as the severity of the outcomes increases (excluding mandatory detentions based on most serious pending

offense). Overall, thirteen 13% of youth in the Southern Region reoffended or failed to appear, and though those in the detention group had the highest new complaint/FTA rates, the rates for the release and ATD groups are in descending, rather than ascending, order. In the Metro Region overall, only 8% of youth in the sample reoffended or failed to appear in court, and youth in the detention group experienced slightly lower rates than those in the ATD group (11% vs. 13%). The lower-than-average overall new complaint/FTA rate for the Metro Region may be the result of slow case processing times, particularly in Prince George's County. Separate analyses completed by DJS indicate that, on average, the time between arrest and complaint to DJS in the Metro Region is over two months (67 days), with cases in Prince George's County taking an average of 108 days to be processed. This suggests that the 60-day window for new complaints used for the DRAI validation may not be sufficient to detect all failures by youth in this region.

#### **LIMITATIONS**

Though steps were taken to make the validation analyses as methodologically sound as possible, several important study limitations are noted below.

- Use of complaint dates for the reoffending outcome: As noted for the Metro Region in the previous section, police delays in making complaints to DJS may cast some doubt on the outcome, which accounts for new complaints within 60 days. However, it should be stressed that the Metro Region is an anomaly. The average time between arrest and complaint for the state of Maryland is 28 days. Aside from the Metro Region, the Central Region has the next longest processing time at 21 days. Within the Metro Region, processing lags are largely attributable to delays in Prince George's County (108 days); complaints are received by DJS from the Montgomery County Police Department after an average of 46 days. The use of the complaint date for the outcome remains appropriate for the state as a whole.
- *Measuring FTA*: FTAs are entered as alerts into DJS' ASSIST database, but there are inconsistencies in the way these events are captured across case managers and jurisdictions. Events that are truly failures to appear in court may alternatively be categorized as AWOLs or writs/warrants. This means that FTAs likely are under-represented in the data. For that reason, new complaints and FTAs were combined into a single outcome, rather than treating them as separate outcomes, as has been done in other states.
- *Measuring AWOL*: Similar to FTAs, AWOLS are captured as alerts in ASSIST, and they also may be categorized alternatively and therefore be undercounted.
- Potential for sampling bias: Because the sample drew upon youth who were released or placed in an ATD, the youth with the highest risk levels likely were not included in the sample. However, because the goal of the DRAI is to determine which youth are likely to reoffend or fail to appear in court, it is necessary to limit the sample to those youth who are actually at risk for these types of failures.

#### CONCLUSION

Results from the DRAI validation indicate that the items included in the 2013 DRAI did not adequately predict youth's risk of short-term reoffending or failing to appear in court. A revised version of the tool, including several replacement items, performed substantially better in analyses at predicting these outcomes. In addition, the revised version of the tool no longer scores the youth's most serious current offense — which was found not to be predictive of risk — but allows DJS to separately give consideration to offenses that may threaten public safety. The revised DRAI also retains the ability of workers to use their discretion when circumstances not accounted for by the scored risk items, such as the youth's alleged victim living in the home, are present. Accordingly, the revised DRAI seeks to provide a

structured decision-making factors may be considered.	process	whereby	scored	risk	is given	primary	importance	but other p	olicy

#### **WORKS CITED**

Bortner, M.A., and Reed, W.L. (1985). The preeminence of process: An example of refocused justice research. *Social Science Quarterly* 25: 413-425.

Dedel, K., and Davies, G. (2007). Validating Multnomah County's juvenile risk assessment instrument. Portland, Ore.: One in 37 Research, Inc.

Frazier, C.E., and Bishop, D.M. (1985). The pretrial detention of juveniles and its impact on case dispositions. *Journal of Criminal Law and Criminology* 76:1132-52.

Holman, B., and Ziedenberg, J. (2006). The dangers of detention: The impact of incarcerating youth in detention and other secure facilities. Washington, D.C.: Justice Policy Institute.

Mace, D., Rohde, P., and Gnau, V. (1997). Psychological patterns of depression and suicidal behavior of adolescents in a juvenile detention facility. *Journal for Juvenile Justice and Detention Services* 12: 18-23.

Maryland Department of Juvenile Services. (2015). *Data Resource Guide: Fiscal Year 2015*. Maryland: Department of Juvenile Services.

McCarthy, B.R. (1987). Case attrition in the juvenile court: An application of the crime control model. *Justice Quarterly* 4: 237-255.

Podkopacz, M.R. (2009). Validation of the risk assessment instrument. Hennepin County, Minn.: Fourth Judicial District Research Division.

Schwalbe, C. (2004). Re-visioning risk assessment for human service decision making. *Children and Youth Services Review* 26(6):561-576.

Wu, B. (1997). The effect of race on juvenile justice processing. *Juvenile and Family Court Journal* 48(1): 43-52.

Appendix 1. Comparison of DRAIs Across Other States/Jurisdictions

Current Maryland DRAI	Cook County (Illinois)	Hennepin County (Minnesota)	Montana	Multnomah County (Oregon)	Virginia	
Most Serious New Offense	Most Serious Instant Offense	Current Offense (mandatory vs. non- mandatory holds)	Most Serious Offense Alleged in Current Referral	Most Serious Pending Offense	Most Serious Alleged Offense	
Additional Alleged Offense			Additional Offenses Alleged in Current Referral		Additional Charges in the Referral	
Current Supervision Status	Current Case Status Under Detention Alternative Restrictions		Supervision Status	Currently Under Supervision	Supervision Status	
Prior Sustained Adjudications	Past Findings of Delinquency – Closed Proceedings	Prior Adjudications	Prior Admissions of Guilt		Prior Adjudications of Guilt	
History of FTA (within		Prior Failure to Appear	Woment History		History of ETA	
past 12 months)		Non-County Residence	Warrant History		History of FTA	
History of Escape / AWOL (within past 12 months)				Runaway from Home or Placement (aggravating factor)	History of Escape / Runaway	
	Prior Authorized Secure Detentions					
	Petitions Pending Adjudication	Pending Petitions	Referrals Pending Adjudication		Petitions Pending Adjudication / Disposition	
		Not regular school or work attendance		In School/Employed (mitigating factor)		
		First offense (misdemeanor or higher) at less than 16		First offense at age 16+ (mitigating factor)		
	Warrant Cases		Youth taken into custody on valid warrant or pick-up order (automatic detention)	Instant offense is first offense (mitigating factor)		

# Appendix 2. Validated Risk Assessment Instrument

	DETENTION RISK ASSESSMENT INSTRUMENT (	(DRAI), PAGE 1
	Youth Name: Date of Birth: Gender: Worker Name: Date DRAI Completed:	ASSIST ID: Race: Complaint ID/Complaint Date: County of Jurisdiction: Date of Decision:
	Police Requested Detention: □Yes □No Completed by Night Intake: □Yes □No	
• • • • • • • • • • • • • • • • • • •		<u> </u>
2.	<ul> <li>One prior sustained adjudication for a Conception of the conception of</li></ul>	ategory III or IV Offense OR Probation Supervision: <u>5 Points</u> n for a Category V Offense OR Pre-Court or ATD Supervision: <u>3</u> ns for a Category I or II Offense OR Intensive Supervision: <u>1 Point</u> ns for Category III or IV Offenses OR Aftercare Supervision: <u>1 Point</u>
3.	<ul> <li>History of Failure to Appear for a Court Hea</li> <li>One or more writs/warrants for failure to</li> <li>NO writs/warrants for failure to appear in</li> </ul>	p appear in past 12 months: <u>5 Points</u>
1.	<ul> <li>History of Escape/AWOL (within past 12 n</li> <li>One or more instances of escape/AWOL</li> <li>No escapes/AWOLS in past 12 months:</li> </ul>	in the past 12 months: <u>4 Points</u>
5.	<ul> <li>Prior Detentions (within past 6 months)</li> <li>One or more prior detention in the past 6</li> <li>No prior detentions in the past 6 months</li> </ul>	
ó.	Age at First Felony Complaint  o 16 or under: <u>4 Points</u> o Over 16 or no prior felony complaint: <u>0</u>	<u>Points</u>
	DRAI RISK SCORE: DRAI	I Risk Level:

# DETENTION RISK ASSESSMENT INSTRUMENT (DRAI), PAGE 2

	nplaint?
Mand	atory Court and Policy Holds  ATD Violation (Court Order Requires Detention at First Infraction)  Non-ATD GPS Violation (Court Order Requires Detention at First Infraction)  Writ or Warrant  Detained for Adult Court Pending Transfer Hearing, or Transferred Pending Juvenile Charging  Court-Ordered Detention at Hearing (include Committed Youth Held for Court Hearing)  Interstate Hold  Firearm use / possession (exclude BB guns)  Escape – Secure Facility  Ejected – Committed Placement
Non-N	Mandatory Rationales Transferred from Adult Court Violation of Probation / Violation of Commitment (No New Offense) Pre-Adjudicated ATD Violation (No New Offense) Post-Disposition ATD Violation (No New Offense)
	ED DECISION:  N COMPONENTS:  (Risk Score, Offense Seriousness, Mandatory Hold)

# DETENTION RISK ASSESSMENT INSTRUMENT (DRAI), PAGE 3

ACTUAL DECISION:
☐ RELEASE ☐ DETENTION ALTERNATIVE (ATD) ☐ SECURE DETENTION
Please check ALL aggravating and mitigating factors below that impact your decision to override.
REASON(S) FOR OVERRIDE UP TO ATD OR SECURE DETENTION
☐ Parent refusal
☐ Parent unavailable
Youth has a history of violence in the home or victim resides in the home
ATD refusal (specify name of ATD(s))
Shelter refusal (specify name of shelter(s))
Shelter unavailable Other (places specify, required)
Other (please specify, required)
REASON(S) FOR OVERRIDE DOWN TO ATD OR RELEASE
Age of youth
<ul> <li>□ Parent willing/able to provide supervision</li> <li>□ Category I or II offense is less serious than indicated by charge</li> </ul>
New charge referred is not recent
Other (please specify, required)
OVERRIDES:
SUPERVISOR APPROVAL OBTAINED □Yes □No
Intake Worker Signature:
Authorizing Supervisor (please print):
Supervisor Signature:

# DETENTION RISK ASSESSMENT INSTRUMENT (DRAI), PAGE 4 $\,$

## FIRST COURT APPEARANCE:

Current Detention Status (prior to Court Action)
□Detained □Detention Alternative: □CD □Shelter □DRAP □ERC □Other: □Released
DJS Recommendation to Court
□ Detained □ Detention Alternative: □ CD □ Shelter □ DRAP □ ERC □ Other: □ Release to: □ Parent □ Sibling □ Grandparent □ Aunt/Uncle □ Other:
Court Detention Decision
□Detained         □Detention Alternative:       □CD       □Shelter       □DRAP       □ERC       □Other:         □Release to:       □Parent       □Sibling       □Grandparent       □Aunt/Uncle       □Other:         Special Circumstances Affecting Detention Decision: