



Revisions to the Iowa Juvenile Detention Screening Tool Validation Study

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May 2014

I. History

The State of Iowa was awarded a grant by the Annie E. Casey Foundation in 2007 to partner in the Casey Juvenile Detention Alternative Initiative (JDAI). One of the fundamental purposes of JDAI is to reform juvenile detention practices to ensure the appropriate use of secure confinement for youth. In response, the Iowa Division of Criminal and Juvenile Justice Planning (CJJP), the JDAI grant recipient on behalf of Iowa, awarded contracts to three sites to participate in the initiative. These sites included Black Hawk, Polk, and Woodbury counties.

As a result, Governor Chet Culver signed a proclamation for the implementation of the Youth Race and Detention Task Force. The purpose of this task force was to review the inappropriate use of secure detention, the appropriate conditions of confinement, and the overrepresentation of minority youth in detention. The task force met between 2007 and 2009 and submitted a final report to the Governor's office in May of 2009. A key recommendation from this report was for *“the development of a single, concise, racially-neutral detention screening instrument to be piloted in Black Hawk, Polk, and Woodbury counties.”*

In January, 2009 the Casey Foundation conducted risk assessment training in Iowa to demonstrate the basic elements of detention screening. Approximately 40 staff from the three JDAI sites and state staff participated in the training. Training indicated that there are two main risk factors for consideration regarding the decision to detain; risk of re-offense pending disposition and risk of failure to appear in court. These risk factors would provide the basis for the development of the pilot tool in Iowa. The first meeting of the Iowa Juvenile Detention Screening Tool Committee (DST committee) was then held to develop an objective screening tool to measure the need for secure detention.

The original DST committee held a series of meetings to draft the first Iowa Juvenile Detention Screening Tool (DST) that was piloted in the three participating counties from June through December, 2009. The intent was to screen all youth presenting for detention utilizing the pilot tool.

Detention screening tools are designed to measure risk to re-offend. Therefore, the process for validating such an instrument focuses on the number of youth who are re-arrested during the initial 30-day period following screening, and determines whether the tool identified these youth as high risk. After the first validation study was conducted in January, 2010, results indicated that 9.7% of youth who scored for release or release to programming were charged with a new offense within 30 days of screening. General guidelines suggest a “passing” public safety score for detention screening is a 10% recidivism rate.

While it appeared the tool was adequately measuring risk, the committee revised the tool, resulting in a second pilot period and validation between October, 2010 and May, 2011. Results from the second validation study indicated an increase in recidivism rate for youth scoring for release to 12.6%. While fluctuations in recidivism rate can be attributed to a variety of factors, further modifications were made to the tool and, thereafter, the rate has been periodically monitored by CJJP staff. This version of the tool was utilized between October, 2010 and December, 2013 with no further revisions by the committee.

In an effort to streamline the screening process, the original DST committee worked toward the creation of a web-based version of the screening tool. A state developer committed to the project, however, was unable to deliver a final product due to a lack of resources. As funding to hire a new developer was not available, new resources were sought to continue efforts to automate the DST.

II. Community and Strategic Planning Grant

In an effort to address the goal of automating the juvenile detention screening tool, CJJP submitted an application, in partnership with the Iowa State Court Administrator’s office (SCA), for the Community and Strategic Planning grant. This one-year grant, sponsored by the Office of Juvenile Justice and Delinquency Prevention, was awarded in October, 2013. The two principal initiatives within this grant project include the development of a strategic plan to reduce disproportionate minority contact in the juvenile system, and the review and automation of the DST. The SCA office serves as lead agency for the project, with CJJP providing staffing and research support.

In October, 2013, the first meeting of the CASP Advisory Group was held and subcommittees were formed to complete the work of the grant. A new CASP Detention Screening Tool (DST) subcommittee was formed and charged with the review of the current detention screening tool, as well as working with the Iowa Courts Information System (ICIS) staff to automate the tool. The new DST subcommittee met for the first time in November, 2013. A membership roster can be found in Appendix A.

During a series of meetings, the DST subcommittee revised the previous tool. While the screening process previously differed for youth arrested on a new offense and youth presenting for detention due to a violation of probation, the current tool screens all youth under the same scoring structure. Given the changes to the tool, trainings were conducted during January, 2014 for juvenile court staff and a pilot period commenced shortly thereafter. While the DST has been utilized for screening youth in Black Hawk, Polk, and Woodbury counties since 2009, Pottawattamie County (Council Bluffs) also began utilizing the DST for detention decisions during the pilot. The revised DST utilized during the pilot period can be found in Appendix B.

The remainder of this report will analyze the revised Iowa DST and any findings that need to be addressed prior to institutionalization of the tool within the court system. For further research concerning the use of detention screening instruments, please see Appendix C.

III. Iowa Juvenile Detention Screening Tool Analysis

Results include all data collected from the revised DST between January and April, 2014. Data do not represent a unique count of youth, as any given youth may have been screened on more than one occasion. Of the 400 screening tools submitted, there were 41 youth screened more than once. The average age of youth screened was 15.7 years, with an age range of 10 to 18 years.

A. POPULATION SCREENED

Table 1. Race By Gender

	Male		Female		Total	
	N	%	N	%	N	%
Caucasian	107	35.8%	37	36.6%	144	36.0%
African-American	138	46.2%	52	51.5%	190	47.5%
Hispanic	34	11.4%	6	5.9%	40	10.0%
Native American	4	1.3%	0	0.0%	4	1.0%
Asian/Pac Islander	4	1.3%	0	0.0%	4	1.0%
Mixed/Other	12	4.0%	6	5.9%	18	4.5%
Total	299	74.8%	101	25.2%	400	100.0%

Utilizing 2012 population estimates for youth ages 10 to 17¹; the African-American youth population in the four participating counties was approximately 9%. From January through March, 2014 African-American youth in the four counties comprised 31% of referrals to the juvenile system and were nearly 48% of the population screened, as evidenced in Table 1 above. Table 2 provides a review of screening cases by facility and race.

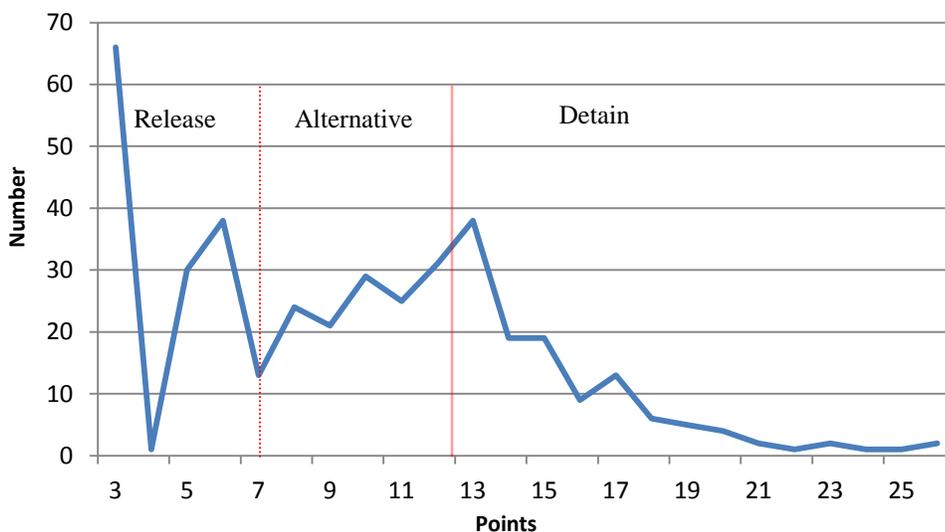
It should be noted that during previous pilot periods of the DST, dating back to 2009, staff in Black Hawk County did not screen youth taken into custody on offenses below an aggravated misdemeanor against person unless there were extenuating circumstances. However, for purposes of data collection during this pilot period, staff screened all youth taken into custody, excluding those with statutory offenses.

Table 2. Race By Facility

	Black Hawk		Polk		Pottawattamie		Woodbury	
	N	%	N	%	N	%	N	%
Caucasian	36	31.9%	68	30.5%	29	85.3%	11	36.7%
African-American	73	64.6%	111	49.8%	1	2.9%	5	16.7%
Hispanic	3	2.7%	25	11.2%	3	8.8%	9	30.0%
Native American	0	0.0%	0	0.0%	0	0.0%	4	13.3%
Asian	0	0.0%	4	1.8%	0	0.0%	0	0.0%
Mixed Racial	1	0.9%	15	6.7%	1	2.9%	1	3.3%
Total	113	28.3%	223	55.8%	34	8.5%	30	7.5%

Note - For the remainder of this report, Native American, Asian, and mixed racial youth are combined under *Other* due to low counts.

Table 3. Score Distribution



A large number of youth, 66 (17%), had a risk score of three points, which indicates youth were screened on a low-level misdemeanor offense with no other offense history. Otherwise, scores were distributed within a range of 3 to 28 points, with an average score of 9.7 points.

¹ http://www.ojdp.gov/ojstatbb/ezapop/asp/profile_selection.asp

There were 148 cases that scored for release, and 130 cases that scored for placement in an alternative program. As Table 4 indicates below, of these 278 cases, 85 (or 31%) resulted in detention.

Table 4. Risk Score By Actual Outcome

Scored For	Actual Outcome						
	Screened	Release	% Release	Alternative	% Altern	Detain	% Detain
Release	148	131	88.5%	6	4.1%	11	7.4%
Alternative	130	43	33.1%	13	10.0%	74	56.9%
Detain	122	30	24.6%	4	3.3%	88	72.1%
Total	400	204	51.0%	23	5.8%	173	43.3%

Data indicate that nearly 89% of youth who scored for release were released and roughly 72% of youth scoring for detention were detained. As has been the case since initial use of a detention screening instrument in Iowa, youth scoring for placement in alternative programming are infrequently placed in services and are more often detained.

B. OVERRIDES

Of the 400 cases screened during this pilot, 42% received an outcome contrary to the risk level measured by the Iowa DST. Of the 168 cases screened that did not receive the outcome indicated by the DST, 24% were female and 64% involved minority youth; which matches their composition of cases screened.

Table 5. Overrides by County

	Total		Black Hawk		Polk		Pottawattamie		Woodbury	
	N	%	N	%	N	%	N	%	N	%
OR To Release	73	43.5%	40	95.2%	26	26.5%	2	15.4%	5	33.3%
OR To Altern	10	6.0%	0	0.0%	9	9.2%	0	0.0%	1	6.7%
OR To Detain	85	50.6%	2	4.8%	63	64.3%	11	84.6%	9	60.0%
TOTAL	168	100.0%	42	25.0%	98	58.3%	13	7.7%	15	8.9%
<i>Total Screens</i>	<i>400</i>		<i>113</i>		<i>223</i>		<i>34</i>		<i>30</i>	
<i>% Overrides</i>	<i>42.0%</i>		<i>37.2%</i>		<i>43.9%</i>		<i>38.2%</i>		<i>50.0%</i>	

A detention override is defined as an instance in which a youth is detained contrary to their risk score. The National Council on Crime and Delinquency established a maximum threshold for the detention override rate, when combining youth scoring for release or release to programming, as 15 percent. As indicated below, the detention override rate during this pilot was nearly 31%.

Table 6. Detention Overrides

Scored For	Detention Overrides		
	Screened	Override	OR Rate
Release	148	11	7.4%
Alternative	130	74	56.9%
Total	278	85	30.6%

Of the 85 cases detained based on an override, the type of override indicated was as follows:

- Court Order/Warrant – 37 (43.5%)
- Administrative – 22 (25.9%)
- Flight Risk – 10 (11.8%)
- Risk to Self – 9 (10.6%)
- No Alternative Available - 4 (4.7%)
- Domestic Abuse – 2 (2.4%)
- Firearm – 1 (1.1%)

Of the overrides defined as “Administrative” the specific reasons most often cited were; violation of probation, multiple charges, or lack of supervision. Table 7 below provides the detention override rate by race and gender.

Table 7. Detention Overrides by Race and Gender

	MALE			FEMALE		
	Screened	Detention Override	Override Rate	Screened	Detention Override	Override Rate
Caucasian	107	24	22.4%	37	9	24.3%
African-American	138	24	17.4%	52	7	13.5%
Hispanic	34	12	35.3%	6	1	16.7%
Other	20	7	35.0%	6	1	16.7%
TOTAL	299	67	22.4%	101	18	17.8%

The highest detention override rate was found within the Hispanic male population. Overall, females comprised 21% and minorities were 61% of the population placed in detention based on an override of the DST. As a means of comparison, cases involving females were 25% and minorities comprised 64% of the population screened.

Table 8. Release Overrides

	Release Overrides		
	Screened	Override	OR Rate
Scored For Alternative	130	43	33.1%
Detention	122	30	24.6%
Total	252	73	29.0%

A release override is defined as an instance in which a youth is released when the screening tool indicates either placement in secure detention or in a detention alternative program. Of these cases, 23% involved females and 70% involved minority youth. This indicates that a higher percentage of females and minorities were *released* based on an override of the tool compared to those *detained* based on an override. It will be noted later in this report that the high rate of overrides to release has a distinct impact upon recidivism rates.

C. CONSTRUCTS

The Iowa Juvenile Detention Screening Tool incorporates three main scoring constructs to determine risk to reoffend. These three measures are; current referral offense, offense history, and supervision status. Each of these three constructs will be reviewed independently below.

Most Serious Referral Offense

This construct is scored based upon the single, most serious offense for which the youth is currently being taken into custody. While the charges filed by the courts may later be modified, the offense scored is the most serious current allegation supplied by the arresting officer. For the scoring structure for this construct, please see Appendix B.

Youth who are taken into custody based upon a violation of probation, in the absence of a new offense, are scored under this construct and would receive three points. This addition of scoring for violation of probation and an increase to three points (from two points) for All Other Misdemeanors and Local Ordinances were two of the revisions made to the DST during this pilot.

Table 9. Most Serious Referral Offense by Outcome

	# Screened		Released		Alternative		Detained	
	N	%	N	%	N	%	N	%
Felony Person/Weapon/Narcotic	15	3.8%	5	33.3%	0	0.0%	10	66.7%
Other Felony/Agg Misd Person	45	11.3%	12	26.7%	10	22.2%	23	51.1%
Other Agg Misd/SRMS Person	51	12.8%	27	52.9%	6	11.8%	18	35.3%
All Oth Misdemeanors/Locals	185	46.3%	152	82.2%	7	3.8%	26	14.1%
Violation of Probation	97	24.3%	1	1.0%	0	0.0%	96	99.0%
All Other Offenses/Statutory	7	1.8%	7	100.0%	0	0.0%	0	0.0%
TOTAL	400	100.0%	204	51.0%	23	5.8%	173	43.3%

As evidenced in the table above, the most serious referral offense had a direct correlation to whether a youth was detained. Arrests for felony or aggravated misdemeanor charges more often resulted in detention, while a higher percentage of youth were released when low-level offenses were alleged. The statutory offenses included in the table above were all minor in possession of alcohol charges.

For a detailed review of the most serious referral offense and resulting detention rate, please see Appendix D.

Offense History

A good deal of research in the area of juvenile recidivism supports offense history as being a leading predictor of risk to reoffend. Mark Lipsey, a noted doctoral researcher with the Peabody Institute at Vanderbilt University, recently noted that across his many years of work in juvenile delinquency research, history of arrest has consistently been one of the leading predictors of future arrest. Previous validation studies of the Iowa DST have also found a correlation between offense history and recidivism.

Scoring for offense history includes a score for the single, most serious prior offense, and a point for each incident that occurred within the past 24 months. Counts for incidents are based upon date; therefore, multiple charges on a given day would constitute one incident. The current referral offense is not scored

under this construct and charges dismissed are also excluded. For the scoring structure for this construct, please see Appendix B.

Risk levels would indicate that youth with no prior history or a pattern of simple misdemeanor offenses should most often be released and youth with a history of felony or aggravated misdemeanor level offenses would more likely require secure confinement. Tables 10 and 11 provide the outcome level based upon both the most serious prior offense and the number of incidents.

Table 10. Most Serious Prior Offense by Outcome

	# Screened		Released		Alternative		Detained	
	N	%	N	%	N	%	N	%
Felony Person/Felony Weapon	9	2.3%	3	33.3%	1	11.1%	5	55.6%
Felony Narcotic Dist Class A, B, C	1	0.3%	1	100.0%	0	0.0%	0	0.0%
Other Felony/Agg Misd Person	72	18.0%	26	36.1%	2	2.8%	44	61.1%
Agg Misd Non-Pers/Ser Misd Pers	66	16.5%	21	31.8%	3	4.5%	42	63.6%
Other Misdemeanor	147	36.8%	66	44.9%	9	6.1%	72	49.0%
No Prior History	105	26.3%	87	82.9%	8	7.6%	10	9.5%
Total	400	100.0%	204	51.0%	23	5.8%	173	43.3%

Of the 252 screening cases with a history of low-level offenses or no history of offending, 61% were released. There were 82 cases, resulting in detention, reflecting either no prior criminal history or a history of low-level misdemeanor offenses within the previous 24 months. Of these cases, 43 (or 52%), were held on a violation of probation, with the majority of these (79%) ordered to detention by the courts.

The table below provides the number of cases with prior incidents that were incurred within a 24-month period prior to screening.

Table 11. Prior Incidents by Outcome

	# Screened		Released		Alternative		Detained	
	N	%	N	%	N	%	N	%
6+	13	3.2%	4	30.8%	1	7.7%	8	61.5%
4-5	39	9.8%	14	35.9%	0	0.0%	25	64.1%
2-3	130	32.5%	42	32.3%	9	6.9%	79	60.8%
1	113	28.3%	57	50.4%	5	4.4%	51	45.1%
None	105	26.3%	87	82.9%	8	7.6%	10	9.5%
Total	400	100.0%	204	51.0%	23	5.8%	173	43.3%

Again, past offense history is correlated with the detention decision, as youth scoring three or more incidents were most likely to be detained and youth with no prior history were released 83% of the time.

Supervision Status

Supervision status was added as a scoring construct during the most recent revision of the DST. Previous iterations of the screening tool scored youth presenting on a new offense separately from those being screened due to a violation of probation. Youth being ordered to detention by the courts were previously not scored at all and were deemed a “mandatory hold.”

A review of the juvenile detention screening tools utilized in multiple other states indicated that other jurisdictions are utilizing one tool for all populations. Therefore, a recommendation was made, and the DST committee voted in favor of, revising the DST to add a construct that would appropriately measure risk for youth new to the system, as well as youth who are deeper into the court system. The revised DST included a construct for supervision status in an effort to adequately measure risk for all populations. Under this construct, youth new to the juvenile court system would not score any points and those under formal probation would score the highest number of points.

For the scoring structure for supervision status, please see Appendix B.

Table 12. Supervision Status by Outcome

	# Screened		Released		Alternative		Detained	
	N	%	N	%	N	%	N	%
Formal Probation	100	25.0%	20	20.0%	1	1.0%	79	79.0%
Pending Disposition	20	5.0%	6	30.0%	0	0.0%	14	70.0%
Petition Filed Pending Court	45	11.3%	9	20.0%	2	4.4%	34	75.6%
Informal Probation	28	7.0%	18	64.3%	2	7.1%	8	28.6%
No Probation or Petition	207	51.8%	151	72.9%	18	8.7%	38	18.4%
TOTAL	400	100.0%	204	51.0%	23	5.8%	173	43.3%

As anticipated, youth on formal probation were most often detained, and youth under no formal probation or court action were most often released. The predictive value of supervision status in determining risk to re-offend will be discussed in the validation section of this report.

D. SCREENING DECISIONS

Another revision to the DST included a check box for the screener to indicate whether the detention decision was based on an order from the courts or the outcome decision was being made by juvenile court staff. While court-ordered holds were previously not scored, all youth now receive a risk score in an effort to provide a complete overview of the youth being screened. This section will provide an analysis of risk level of youth ordered into detention by the courts, as well as youth whose outcome was determined by JCS staff.

Court-Ordered Holds

Of the 400 screening cases completed during this pilot period, 73 (18%), were detention holds ordered by the court prior to screening. Verification within the ICIS system indicated that all of these youth were detained.

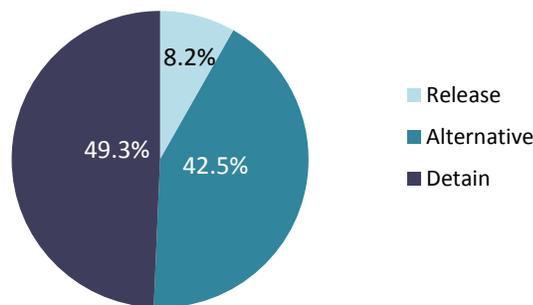
There were few females (eight) ordered to detention by the courts during this pilot period. Of the 144 cases screened involving Caucasian youth, 22% were ordered to detention, while minority youth were court-ordered to detention 16% of the time.

Table 13. Court-Ordered Holds by Race and Gender

	Male		Female		Total	
	N	%	N	%	N	%
Caucasian	28	43.1%	3	37.5%	31	42.5%
African-American	23	35.4%	4	50.0%	27	37.0%
Hispanic	9	13.8%	0	0.0%	9	12.3%
Other	5	7.7%	1	12.5%	6	8.2%
Total	65	89.0%	8	11.0%	73	100.0%

The figure below charts the 73 cases ordered into detention to determine whether the risk level for these cases, as scored by the DST, indicated a need for secure confinement.

Figure 2. Court-Ordered Holds by Risk Score



Of the cases ordered into detention, there were 37 that scored for release or release to an alternative, resulting in a detention override rate of 51%. Risk level, as measured by the DST, for nearly 43% of the cases detained by the courts indicated placement in alternative programming. Information as to why services were not ordered is not readily available, but could be due to various factors; such as a lack of service availability, lack of appropriate service, or perhaps the youth’s risk level as measured by the DST is not being shared with the courts.

The rate of recidivism, over the defined 30-day period, for the population of court-ordered holds cannot be analyzed as these youth were all confined. Future studies could, however, review long-term recidivism for this population. Of the court-ordered holds, approximately 18% of cases were detained on a new criminal offense, while approximately 82% were held on violation of probation. For court-ordered holds by charge class, please see Appendix D.

Juvenile Court Cases

The outcomes for the cases included in this section were determined by Juvenile Court Services (JCS) staff. While the process for decision-making varies based upon jurisdiction, typically, a risk score is obtained and the officer assigned to the case makes a determination as to whether or not the case warrants detention. Of the cases with outcomes decided by JCS, nearly 35% were Caucasian and nearly 50% of the cases involved African-American youth. For a table by race and gender for outcomes determined by juvenile court staff, please see Appendix D.

Table 14. Juvenile Court Cases by Risk Score and Outcome

Scored For	Actual Outcome						
	Screened	Release	% Release	Alternative	% Altern	Detain	% Detain
Release	142	131	92.3%	6	4.2%	5	3.5%
Alternative	99	43	43.4%	13	13.1%	43	43.4%
Detain	86	30	34.9%	4	4.7%	52	60.5%
Total	327	204	62.4%	23	7.0%	100	30.6%

While 92% of youth scoring for release were released, approximately 60% of youth scoring for detention were detained. This may suggest that staff find the screening instrument too punitive, as nearly 40% of cases scoring for detention were released or released to services.

Table 15. Detention Overrides by Race – JCS Holds Only

	Screened	Detention Override	Override Rate
Caucasian	113	15	13.3%
African-American	163	16	9.8%
Hispanic	31	10	32.3%
Other	20	7	35.0%
TOTAL	327	48	14.7%

As noted earlier, the acceptable detention override rate for a screening instrument is approximately 15 percent. Table 15 indicates that override rates for cases decided by JCS staff are within that threshold. While counts are somewhat low, which could affect reliability, Hispanic and other minority (mostly mixed racial) youth had detention override rates outside the acceptable range.

Of the 131 overrides executed by JCS staff, 73 (56%) were for release. The table below indicates African-American youth had a higher release override rate than Caucasian youth.

Table 16. Release Overrides by Race – JCS Holds Only

	Screened	Release Override	Override Rate
Caucasian	113	22	19.5%
African-American	163	44	27.0%
Hispanic	31	4	12.9%
Other	20	3	15.0%
TOTAL	327	73	22.3%

Of the overrides to release, 43 (59%) scored for placement in alternative programming and 30 (41%) scored for detention. The recidivism rate for this group was nearly 22%, which indicates that the tool is more accurately predicting risk level.

E. PROBATION VIOLATORS

When the initial DST committee was formed and the original instrument was designed, the tool was developed with the forethought that all youth presenting for detention would be screened with the same instrument in an effort to maintain objectivity. Since then, and across three additional iterations of the tool, much discussion has taken place concerning whether or not one tool can capture a validated risk level for all populations of youth; whether they are presenting with a new offense or are being scored based on a violation of probation.

While previously youth being screened due to a violation of probation were screened separately, or not screened at all, the current version of the DST was designed to objectively screen all populations. The following provides a brief analysis of the population of probation violators screened during this pilot period and their outcomes.

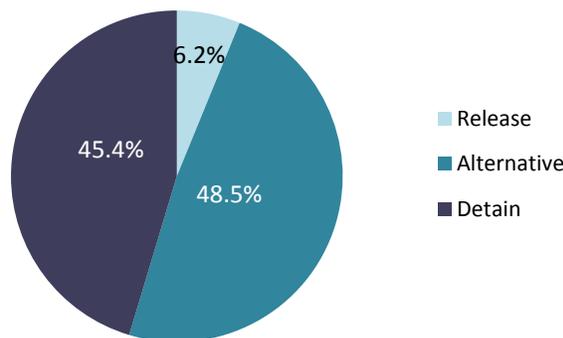
Table 17. Probation Violators by Race and Gender

	Male		Female		Total	
	N	%	N	%	N	%
Caucasian	31	38.8%	7	41.2%	38	39.2%
African-American	32	40.0%	7	41.2%	39	40.2%
Hispanic	10	12.5%	0	0.0%	10	10.3%
Other	7	8.8%	3	17.6%	10	10.3%
Total	80	82.5%	17	17.5%	97	100.0%

Comparing the population of youth held on violation of probation to the population of all youth screened, Caucasians were more often detained due to probation violations than minority youth. Of the 144 Caucasian youth screened, 26% were for violations of probation; while African-American youth were screened due to probation violation 21% of the time. Of the 97 youth screened due to a probation violation, 96 were detained.

The following chart provides risk score as calculated by the DST. There was only one youth screened on violation of probation that scored for release, and this youth was released. Although nearly half of probation violators scored for release to alternative programming, they were detained. Of the 96 youth detained, 60 (63%) were placed in detention based on a court-order.

Figure 3. Risk Score – Probation Violators



IV. VALIDATION

While validation studies have been completed for previous versions of the Iowa DST, it is important to emphasize that, due to differences in population screened, a direct comparison to these earlier studies would be compromised due to a variety of factors.

Not only was the tool revised to include a new construct to score the probation status of youth, but the population screened by most of the jurisdictions involved in the pilot varied from previous populations. Some of the dissimilarities are noted below:

- Black Hawk County has historically screened and submitted tools for youth presenting for detention based on a referral offense rising to the level of an aggravated misdemeanor against person or felony offense. In an effort to provide more cases for validation purposes, Black Hawk staff submitted DSTs for all cases involving a simple misdemeanor offense or above. This will add to the numbers of low risk cases and will affect recidivism rates.
- Woodbury County had fewer cases than in previous studies. This is believed to be a result of contagion, as this jurisdiction has been involved in the screening process since inception. Over a five-year period of screening, an increase in awareness of the type of case that would constitute detention likely becomes apparent and fewer low risk cases are screened. This occurrence could likely materialize across all jurisdictions that have been screening over time and would increase recidivism rates due to an inherent higher level of risk associated with youth screened.
- Pottawattamie County is a new jurisdiction enlisted during the pilot. They are contributing mostly higher risk cases to be reviewed for secure detention. Therefore, their screening numbers are low and are weighted toward high-risk cases, which will affect recidivism rates.
- As noted earlier, the most recent versions of the DST screened only youth presenting with a new offense. The current screening tool was designed, and is being utilized, to screen any youth presenting for detention; including youth who have violated probation.

Measurement

It is also of importance that the underlying factors of detention risk assessment be emphasized. There are two main factors to consider when determining the accuracy by which a detention screening tool assesses for risk and preserves public safety;

- ✓ whether a youth re-offends pending appearance in court, and
- ✓ whether they fail to appear for their court hearing.

Juvenile court offices across Iowa utilize the Iowa Court Information System (ICIS), a case management system designed to capture data pertaining to each case processed. While this system is recognized as one of the more comprehensive data systems in the nation, some shortcomings exist, as it is case-based as opposed to offender-based.

One of the stipulated measures cited, not only by risk assessment experts, but also across validation studies conducted in other states, requires a review of recidivism while awaiting court appearance. The data maintained in ICIS cannot produce this timeline without a manual review of individual cases. Therefore, a period of 30 days post-screening is reviewed to determine recidivism. Judicial parties involved in the development of the DST have reached consensus that this is a representative period of time youth would await a hearing.

The second measure for review in validating the DST is a determination of the number of youth who fail to appear at their court hearing. Youth in Iowa are rarely officially charged if they fail to appear, and it is believed that there are few occurrences, as there are systems in place to ensure their presence.

While ICIS lacks reliable data concerning failure to appear, a separate detention database is maintained by CJJP that captures the hold reason for detention placements. An analysis of the 3,219 detention holds during calendar year 2013, indicated that 49 cases (or 1.5%) were held due to failure to appear in court. This seems to substantiate the claim that failure to appear is not an issue prevalent in Iowa. Therefore, validation of the Iowa DST is based upon recidivism.

A. YOUTH RELEASED

Recidivism for purposes of this study is defined as;

Youth who were screened and released, or released to an alternative program, with any new complaint filed, rising to the level of a simple misdemeanor or above, within a 30-day period post-screening.

As a point of clarification, no cases resulting in detention, regardless of risk score, were included in the validation portion of this study as a review of recidivism cannot be conducted on a population of youth securely detained. There was one youth screened based on violation of probation that was not detained. (This youth scored for release, was released, and did not recidivate.)

Therefore, the analysis in this section includes, with the exception of one youth, only new offenders.

Table 18. Recidivism Rate for Youth Released or Released to Programming

DST Score	Actual Decision	N	Number Recid	New Offense Rate
<i>Score Matches Outcome</i>				
Release	Release	131	13	9.9%
Alternative	Alternative	13	3	23.1%
	Subtotal	144	16	11.1%
<i>Score is an Override</i>				
Release	Alternative	6	1	16.7%
Alternative	Release	43	11	25.6%
	Subtotal	49	12	24.5%
	TOTAL	193	28	14.5%

When youth received the outcome denoted by their score on the tool, the rate of re-offense was 11%. However, when youth did not receive the level of outcome indicated by their score, the recidivism rate approached 25%. This is an indicator that the tool is more accurately predicting risk of re-offense compared to staff intervention.

Of the 28 recidivists with new charges, nearly 15% of cases involved a felony or aggravated misdemeanor charge, while 85% of new charges were serious or simple misdemeanor cases. Crimes against persons constituted approximately 36% of the charges.

While the overall recidivism rate, 14.5%, is slightly higher than previous validation studies, as noted earlier in this section, there are several factors that are likely contributing to a higher rate. While guidelines suggest that a passing “failure” rate for a detention screening tool is 10% or below, there is no validated standard for acceptable detention risk.

According to correspondence received from David Steinhart, a noted risk assessment expert who provided training in Iowa, “The 10% failure rate threshold is a suggested guideline based on the results we have seen from validation studies in several JDAI sites, and by comparison to bail studies as referenced in the Risk Assessment Practice Guide. It is not a hard line but rather a general guideline by which to measure RAI and risk screening performance. The validation results you get will be heavily influenced by the methodology applied and by how a failure is defined....”

According to results for youth released or released to programming, the DST is accurately measuring risk of re-offense more than 85% of the time. Another measure of the tool’s ability to adequately predict risk for youth released back into the community would take into consideration the youth who scored for detention (high risk) yet were released. This cohort should have higher rates of recidivism than youth who scored for release (low risk).

B. YOUTH SCORING FOR DETENTION

The following provides the recidivism rate for youth who scored for detention yet were released or released to alternative programming. There were 34 youth released in spite of a risk score that indicated detention.

Table 19. Recidivism Rate for Youth Scoring for Detention

DST Score	Actual Decision	N	Number Recid	New Offense Rate
Detain	Release	30	5	16.7%
	Alternative	4	2	50.0%
	Overall	34	7	20.6%

Rates of recidivism for this population were higher than for youth scoring for release, which is another indicator of the predictive validity of the DST. Counts for youth placed in detention alternatives were somewhat low to establish reliability, however. Of the seven cases with new offenses post-release; one was a felony level crime, one was an aggravated misdemeanor, and the remaining five offenses were serious or simple misdemeanors. None of these crimes were against persons.

C. SUPERVISION STATUS

As noted earlier, one of the significant changes to the DST during the current pilot period was the addition of a construct to score supervision status. The primary reason for the addition of this construct was to provide for the potentially higher risk level of youth who are presently under court probation. Since previous tools were based solely on current offense and offense history, the desire was to include a construct that would measure risk for both youth presenting for detention based on a new offense, as well as those who violated probation.

In an effort to determine whether this construct is contributing to the predictive reliability of the DST, the table below provides a review of the failure rate of the tool in the *absence* of this construct.

Table 20. Recidivism Rate for Youth Released - Supervision Status Scoring Excluded

DST Score	Actual Decision	N	Number Recid	New Offense Rate
<i>Score Matches Outcome</i>				
Release	Release	146	16	11.0%
Alternative	Alternative	13	3	23.1%
	Subtotal	159	19	11.9%
<i>Score is an Override</i>				
Release	Alternative	7	1	14.3%
Alternative	Release	45	12	26.7%
	Subtotal	52	13	25.0%
	TOTAL	211	32	15.2%

The data indicate that the failure rate of the tool increases from 14.5% to 15.2% when scoring excludes the construct for supervision status. While the contribution to risk measurement may appear slight, this construct is adding to the predictive nature of the tool. This construct was also measured over a short period of time with a smaller cohort than those analyzed during previous DST validation studies.

The addition of the supervision status construct was primarily an effort to measure risk for youth on probation. Given that during this study all but one of these youth was detained, recidivism rates for this corresponding population cannot be calculated at this time. In order to validate the predictive nature of supervision status, this construct will require evaluation over time, as a recidivism period post-detention will be necessary to identify future criminal activity of this cohort.

D. GENDER AND RACIAL NEUTRALITY

It is important to also demonstrate whether the predictive nature of the tool is gender and racially neutral. In other words, is the instrument equally predictive for females and males, and also for various racial groups? A review of failure rates by gender indicated cases involving females reflect a higher rate of recidivism, 19.0%, compared to males at 12.1%. While this suggests the tool may not be as predictive for females, the population of females studied was rather small. It is also widely recognized that females tend to receive less severe sanctions than their male counterparts. Therefore, less punitive sanctions involving less oversight, may lead to higher rates of re-arrest. To review the complete table of failure rate by gender, please see Appendix D.

As for the neutrality of the tool by race, failure rates for cases involving Caucasian youth, 14.1%, nearly paralleled rates for cases involving minority youth, 14.8%. When analyzing specific minority populations, the failure rate for cases involving African-American youth was 12.0%, while the rate for cases involving Hispanic youth was 35.7%. While the rate involving Hispanic youth appears to be quite high, there were only 14 cases released involving Hispanic youth. Therefore, this population should be reviewed over time to identify any racial inequity within the instrument. For the complete table of failure rate by race, please see Appendix D.

V. Considerations for the Detention Screening Tool Subcommittee

The Iowa DST was developed as a predictive tool, to measure risk to re-offend, in an effort to objectively determine the need for secure confinement. While detention screening was initiated in Iowa during 2009, recent revisions to the instrument were completed and piloted in an effort to produce a validated tool to screen all youth for detention. The following provides a summary of the findings from the most recent pilot study of the revised tool and items for consideration.

Findings From This Study

1. *The Iowa DST is providing a higher level of predictive reliability to measure risk to re-offend compared to decisions made contrary to the tool.*
 - The “failure rate” of the instrument demonstrates the percentage of cases that re-offended within a 30-day period after screening when the tool indicated the case did not pose a threat to public safety and should be released (or released to services). As stated in this report, the acceptable failure rate should be determined locally and needs to take into consideration the fluidity of factors and populations over time. The generally accepted failure rate on a national level is 10%. Regardless of the threshold established as an acceptable failure rate for the Iowa DST, a more important factor is whether the instrument is providing a level of predictive validity for risk to re-offend that surpasses that of decisions being made in the normal case of business. During this pilot study, the failure rate was 11% when the prediction of the tool was followed. However, when youth received an outcome contrary to the measurement of the tool, the failure rate was 25%. While these rates would need to be measured over time, it appears that the DST is more reliably predicting risk to re-offend.
2. *The override rate of the instrument is higher than the 15% acceptable rate for overrides.*
 - The DST subcommittee will need to address the high rate of overrides. Of the 400 cases screened during this pilot, 168, or 42%, followed an outcome contrary to the risk level measured by the DST. Whether the override was to detain or release, the high rates of overrides are largely due to a lack of placement in alternative services. Of the 130 cases that scored for placement in a detention alternative, 10% were placed in services. Of the 43 youth released (who scored for services), nearly 26% were re-arrested within 30 days. One might posit that had these youth received services or a higher level of supervision, as indicated by the tool, they may not have committed a new offense.
3. *There were two other factors identified as contributing to the high rate of overrides.*
 - Court-ordered holds are contributing to a higher rate of overrides, possibly due to unawareness of risk level as measured by the Iowa DST.

Of those cases resulting in an override to detain, nearly 44% were due to court orders. Some discussion has taken place with the sites participating in detention screening in regard to whether the scores from the instrument are being shared with the courts. It does not appear that, in many cases, the risk level of the DST is being included as part of the court hearing. Given the tool’s predictive power in measuring risk to public safety, risk level from this instrument could assist the courts in making a more informed decision for youth.

- Scoring a two-year period of offense history under the Offense History construct is contributing to a higher rate of overrides.

A review of 50 cases from the current pilot period was conducted. Of these, 25 cases involved youth who recidivated and 25 cases were youth who did not recidivate. Cases reviewed were also selected based on whether the youth had past offense history, as a review of cases with little or no history would not influence the results. A new score was generated for each case using only 12 months of history, as opposed to the current 24-month period. The results found that of the 50 cases, the original override rate for this cohort was 80%, while with a new scoring structure that reduced the period of review to 12 months, this rate dropped to 68%.

Since reducing the period of offense history to 12 months will reduce risk level for some youth, an analysis of the potential threat to public safety was also conducted. Specifically, the cases associated with youth who recidivated were reviewed to determine whether reducing the period of history scoring to 12 months affected the ability of the tool to identify these cases. Of the 25 cases involving youth who re-offended within 30 days of release, there were three cases (12%) that would have lowered from a score to detain to a score for placement in alternative programming. Of these three, the actual outcome that occurred was that they were all released.

4. *Cases identified by the DST as candidates for placement in alternative programming are infrequently being placed in services.*
 - As noted, there were 130 cases scoring for placement in alternative programming, although only 13 of these cases were placed in services. Of the remaining cases, nearly two-thirds were placed in detention. While the CASP Advisory Group recently conducted a survey of available detention alternative programs across the state, an assessment should also be conducted as to the reasons contributing to the lack of placement for youth scoring for services.
5. *Increasing scoring, from two points to three points, for low-level misdemeanor offenses under Most Serious Referral Offense increased the predictive ability of the tool.*
 - During this pilot period, one of the revisions to the DST included a scoring increase to three points for low-level misdemeanor offenses under Most Serious Referral Offense. In a review of these cases, it was determined that there were 15 cases that would have reduced to a risk level of release or release to alternative under the previous scoring structure of two points. Of these 15, there were 4 cases that previously indicated detention and now indicate placement in alternative programming. Since two of these cases involved youth who were re-arrested within 30 days, they would have contributed to a higher failure rate of the tool.
6. *The tool is racially neutral.*
 - The ability of the tool to predict risk of re-offense did not vary much between Caucasian and minority youth (as a group). While cases involving Hispanic youth reflected much higher rates of recidivism when released, the population screened was relatively small. This occurrence would need to be monitored over time, with a review of more cases than those available during the pilot. Prior to this study, the most recent validation did not find a failure rate for Hispanic youth that exceeded that of other populations.
7. *The failure rate by gender will need to be periodically reviewed.*
 - The failure rate for cases involving females was 19%, compared to cases involving males, which was closer to 12%. The population of cases involving females will likely require further review to ensure the instrument is not providing an erroneous low score for girls who pose a threat to public safety. As with race, the most recent validation study did not find a failure rate for females that exceeded that of males.

Appendix A

Membership – CASP Detention Screening Tool Committee

Gary Niles, Chair
Chief Juvenile Court Officer
3rd Judicial District

The Honorable Daniel Block
Associate Juvenile Judge
1st Judicial District

The Honorable Romonda Belcher
District Associate Judge
5th Judicial District

Bill Aspengren*
Juvenile Court Intake Officer
5th Judicial District

Tim Coughlin*
Juvenile Court Officer
3rd Judicial District

Todd Meyerhoff*
Juvenile Court Officer
1st Judicial District

Miguel Trevino
Juvenile Court Officer
7th Judicial District

Kevin McKeever
Muscatine County Attorney

Melvin Williams*
Captain
Sioux City Police Department

Betty C. Andrews
President
Iowa/Nebraska NAACP

Rita Ferneau
Chair
Juvenile Justice Advisory Council

Dawn Schott
Detention Director
Linn County Juvenile Detention

Staff

Mark Headlee
Deputy Director Information Systems
Iowa Judicial Branch

Paul Stageberg
Administrator
Criminal and Juvenile Justice Planning

Laura Roeder-Grubb
IT Specialist
Criminal and Juvenile Justice Planning

Kile Beisner
Statistical Research Analyst
Criminal and Juvenile Justice Planning

**These members were also members of the original Iowa Juvenile Detention Screening Tool Committee formed in 2009*

Appendix B – Iowa Juvenile Detention Screening Tool



Iowa Juvenile Detention Screening Tool

Last Name: _____ First Name: _____
 DOB: _____ Date: _____
 Screened By: _____ Time: _____
 County # of Residence: _____ Det Facility: _____

Gender: Male Female

Race: Caucasian
 African-American
 Hispanic
 Native American
 Asian/PacIslander
 MultiRacial

For Informational Purposes Only

RISK SCORE

Complete the following for all youth presenting for detention.

Most Serious Referral
 Offense: Statute Description

A. Most Serious Referral Offense <i>(Select one)</i>	Points	SCORE
Felony Against Person/Felony Weapon/Felony Narcotic Distribution Class A,B,C	13	
All Other Felonies OR Aggravated Misdemeanor Against Person	10	
Aggravated Misd Non-Person OR Serious Misdemeanor Against Person	6	
All Other Misdemeanors or Local Ordinances	3	
Violation of Probation	3	
All Other Offenses Below Simple Misdemeanor	0	_____
B. Offense History <i>(Do not include dismissed charges)</i>		
Count Most Serious Prior Offense Only <i>(Select only one of the following)</i>		
Felony Person/Felony Weapon w/within past 24 months	6	
Felony Narcotic Distribution Class A,B,C w/within past 24 months	4	
Other Felonies OR Aggravated Misd Against Person w/within past 24 months	3	
Aggravated Misd Non-Person OR Serious Misdemeanor Person w/within past 24 months	2	
Other Misdemeanor w/within past 24 months	1	
Count Prior Incidents		
Incidents for Youth w/within past 24 months <i>(Score 1pt for each sequence number-Excluding dismissed)</i>	1	_____
C. Supervision Status <i>(Current Milestone Status - Select one)</i>		
Currently on Formal Probation	6	
Currently Pending Disposition	4	
Current Petition Filed Pending Court Decision	3	
Currently on Informal Probation	2	
Not on Probation; No Pending Petition	0	_____

RISK SCALE 0-7 = Release 8-12 = Detention Alternative 13+ = Detain **SCORE** 0

OUTCOME

This Youth Was: Released Placed in an Alternative Detained If Detention Alternative, list service: _____

This Outcome Was: Court-Ordered Prior to Screening (Mandatory Hold) Requested by Juvenile Court Service Staff

Detention Override

Detention Override Reason (Please provide specific detail):

- Interstate Compact/Out of State Hold
- Youth is risk to self/others (Code 232.22) _____
- Failure to Appear/Escape/Flight Risk _____
- Youth held due to domestic abuse charge (708.2A) _____
- Youth held on Section 232.47(11) _____
- Possession of offensive weapon/firearm _____
- Allegation of sex offense with access to victim _____
- No responsible parent/adult relative to assume custody _____
- Detained due to lack of appropriate or no alternative available _____
- Administrative

Release Override Reason: _____

Release Override

- Release
- Release to Alternative _____
- Released due to lack of appropriate or no alternative available _____

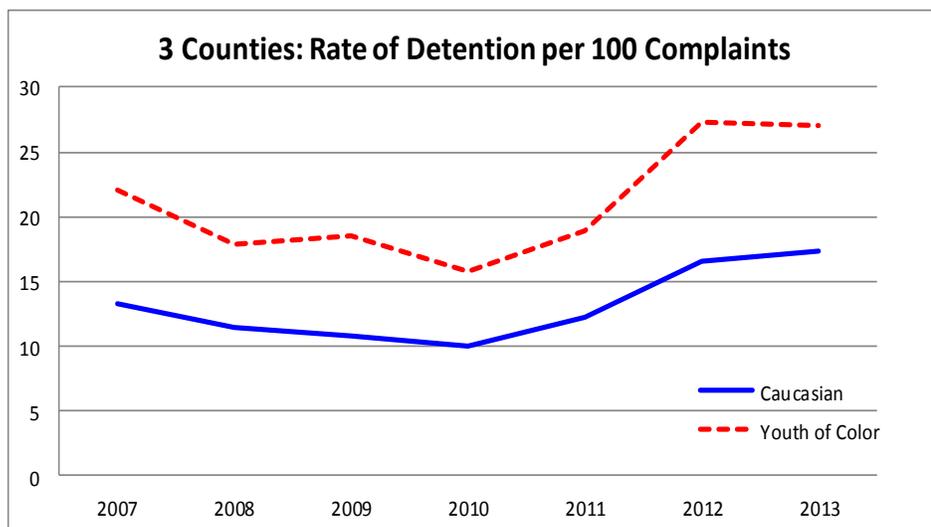
Appendix C. Research

Juvenile detention risk assessment tools are becoming common practice across the nation. According to the Casey Foundation, 39 states and more than 200 jurisdictions are utilizing either statewide or local risk assessment tools to determine secure detention. Research into the use of these instruments has indicated three primary benefits:

- they provide structure to help ensure that all youth are treated objectively and equitably;
- they identify a youth's risk of reoffending; and
- when validated, they are reliable and more accurate than subjective or clinical judgments^a.

Use of a juvenile detention screening instrument was initiated in Black Hawk, Polk, and Woodbury counties in 2009. The figure below demonstrates the rate of detention in these three counties, based on number of complaints filed, for Caucasian youth compared to minority youth between 2007 and 2013.

Figure 1. Detention Rate Based on Complaints – Black Hawk, Polk, and Woodbury Counties



While the rate of detention steadily declined for both populations through 2010, the use of detention increased during 2012, and disproportionately so. Between 2011 and 2012, the total number of detention holds for Caucasian youth increased 26%, while holds for minority youth increased 33%. During 2013, the rate of detention leveled off; however, the total number of holds increased 33% from 2010.

National studies indicate that there are multiple negative effects in placing youth, especially low-risk youth, in detention. Dr. Edward Latessa, a researcher from the University of Cincinnati, found low-risk youth to be more than twice as likely to recidivate after placement in detention compared to treatment in a community-based setting^b.

Beyond the social implications of incarcerating youth, there is also a fiscal impact concerning the high cost of detention. A cost analysis of placement in alternative programming compared to placement in detention indicated a savings of \$300 per day, per youth can be realized in Iowa.

^a Administrative Office of the Courts Briefing. *Screening and Assessments Used in the Juvenile Justice System*. Feb 2011, p.2.

^b Latessa, Edward J., "Applying the Principles of Effective Interventions with Juvenile Offenders," Center for Criminal Justice Research, Division of Criminal Justice, University of Cincinnati.

Appendix D – Additional Data Tables

Table A. Detention Rate by Charge Class

	Screened	Detained	Detention Rate
FELB	8	4	50.0%
FELC	10	7	70.0%
FELD	32	15	46.9%
AGMS	37	15	40.5%
SRMS	73	16	21.9%
SMMS/LOCAL	136	20	14.7%
OTHER	7	0	0.0%
VIOL PROB	97	96	99.0%
TOTAL	400	173	43.3%

Table B. Court-Ordered Holds by Charge Class

	Screened	Detention Rate
FELC	4	5.5%
FELD	1	1.4%
AGMS	2	2.7%
SRMS	2	2.7%
SMMS	4	5.5%
VIOL PROB	60	82.2%
TOTAL	73	100.0%

Table C. Juvenile Court Cases by Race and Gender

	Male		Female		Total	
	N	%	N	%	N	%
Caucasian	79	33.8%	34	36.6%	113	34.6%
African-American	115	49.1%	48	51.6%	163	49.8%
Hispanic	25	10.7%	6	6.5%	31	9.5%
Other	15	6.4%	5	5.4%	20	6.1%
Total	234	71.6%	93	28.4%	327	100.0%

Table D. Recidivism Rate for Youth Released By Gender

DST Score	Actual Decision	Female			Male		
		N	# Recid	New Offense Rate	N	# Recid	New Offense Rate
<i>Score Matches Outcome</i>							
Release	Release	47	8	17.0%	84	5	6.0%
Alternative	Alternative	4	1	25.0%	9	2	22.2%
	Subtotal	51	9	17.6%	93	7	7.5%
<i>Score is an Override</i>							
Release	Alternative	4	0	0.0%	2	1	50.0%
Alternative	Release	14	4	28.6%	29	7	24.1%
	Subtotal	18	4	22.2%	31	8	25.8%
	TOTAL	69	13	19.0%	124	15	12.1%

Table E. Recidivism Rate for Youth Released By Race

DST Score	Actual Decision	Caucasian			Minority		
		N	# Recid	New Offense Rate	N	# Recid	New Offense Rate
<i>Score Matches Outcome</i>							
Release	Release	49	5	10.2%	82	8	9.8%
Alternative	Alternative	4	1	25.0%	9	2	22.2%
	Subtotal	53	6	11.3%	91	10	11.0%
<i>Score is an Override</i>							
Release	Alternative	3	0	0.0%	3	1	33.3%
Alternative	Release	15	4	26.7%	28	7	25.0%
	Subtotal	18	4	22.2%	31	8	25.8%
	TOTAL	71	10	14.1%	122	18	14.8%