Appendix 1 – 7th Assessment Study Part of 11th Equal Protection Compliance Report June 27, 2018

ASSESSMENT BRIEF

The summary and impressions discussed reflect activities by Shelby/Memphis Juvenile Court (Juvenile Court) up to April 21, 2018 and the results from all the assessment studies and in particular, the seventh. Many of the areas of concern that were the impetus for the Memorandum of Agreement (MoU), to some extent, have continued to exist over the last 58 months or so. However, the Juvenile Court has shown leadership, and for the most part, has made strides in implementing strategies and programs. But, how successful these have been in reducing disproportionate minority contact (DMC) and the disparate treatment of Black youth is yet to be determined. This is because of several factors that are: either not enough time has passed to evaluate how successful these efforts have been; not enough youth or participants have been involved in the effort(s); or the Juvenile Court has not provided aggregate data to assess the initiatives' effectiveness. More specifically:

- **DMC** and in terms of assuring equity for similar offenders, irrespective of race, continues to be a problem in the Juvenile Court's decision-making at key stages.
 - Support for this claim comes from both the relative rates and the numerous assessment studies, including the results from the 7th assessment study to be discussed within this brief.
 - The areas of most concern continue to be at the front-end of the system: referral, secure detention and the petition/judicial stage.
- The Juvenile Court has implemented a number of strategies to address these issues; though there is a need for (1) a greater number of youth to participate in some of these programs; (2) further evaluation is needed to determine if the strategies are attaining the desired objectives of reducing DMC and improving the equitable treatment of all youth. Concomitantly, some of the initiatives have not been implemented long enough to have an impact and/or data has not been provided to make such a determination.

Key findings from the 7th Assessment study are summarized below:

Figure 1 provides the odds at detention and petition for Whites and Blacks once factors such as crime severity, prior record, etc. are taken into account for the years 2013-2017. See next page (pg. 2).

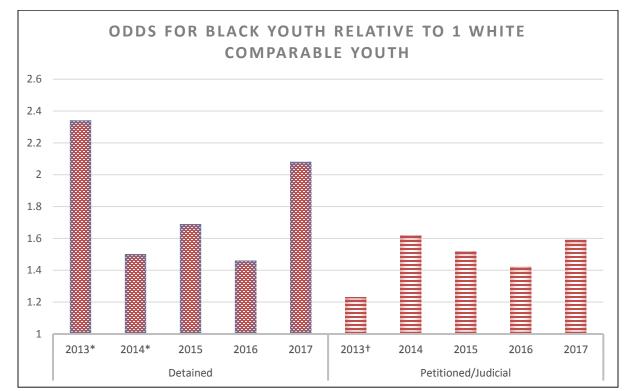


Figure 1. Logistic Regression Odds by Race and Stage, 2013-2017

Note: How to read odds ratio, for example in 2013, detained 2.34 Blacks to 1 White.

The log odds is derived from the use of logistic regression where severity of the offense, the number of prior court referrals, the age of the youth, school and work involvement, etc. is taken into account to predict detention and petition. In Figure 1, we can see that even taking into account all of the relevant variables kept in court information files, there remains a persistently unequal treatment of Black youth. Even after taking all factors into consideration Black youth are twice as likely to be detained, and one and half times as likely to have a petition filed resulting in formal treatment within the court system.

Overall, the above findings have been consistently reported by all 7 assessment studies to date. The role of race and DMC in court referrals, detention and petition court outcomes continues despite the use despite the use of *a variety of initiatives that help divert youth away from formal court involvement (e.g.*, SHAPE, Porter Leath, the Summons Review Team, the Precinct Liaison Program, the Expedited Review, the SUMMONS program or LEAP, JDAI reform at detention, and the implementation of structured decision-making tools at detention and at the petition stage).

^{*} Logistic regression represents interaction between race and person offense; Main race effect not significant

[†] Logistic regression coefficient not significant

Recommendations

- The Juvenile Court needs to develop a systematic tracking for the outcomes and successes of its programmatic efforts to address DMC. The Juvenile Court, for the most part, has provided leadership of the DMC issue and this is evident among other things by the use and expansion of SHAPE and Porter Leath, the use of beds at Youth Villages, discussions/training of the Memphis Police Department, including those in higher administration, and greater use of summons, the Diversion Team, and the Precinct Liaison as means to avoid juvenile court contact and/or reduce the stay in the Court (such as the Cease-Fire Program and the Expeditor Evaluation initiative). **But**, each program/initiative needs continued evaluation to assess if such efforts are producing the intended results AND whether they should be used in greater frequency to reduce the number of youth, especially Black youth, especially in terms of referrals. As an example of the attention needed, consider the Precinct Liaison initiative, where one of the stated goals was to divert youth away from Juvenile Court contact and the greater use of the unofficial warning was expected to help achieve this objective. However, looking at data for a three-month period for the Precinct Liaison initiative, only 23 youth of 187 received an unofficial warning; 88 received a summons and 76 involved the Memphis Police Department using a transport. One goal of this initiative is to divert youth away from Juvenile Court contact and the greater use of the unofficial warning would help achieve this objective. A similar recommendation has been given to the use of the Summons Review Team (SRT) where more Black youth should be involved in the program. Whether the Juvenile Court has followed this recommendation remains unknown since the Juvenile Court declined to provide updated SRT data despite several requests by the DMC monitor. The Juvenile Court should provide the Equal Protection Monitor with aggregate data.
- The Court needs to further refine and develop the DAT system, both with respect to inclusion of statutory requirements and with careful examination of the components and scoring of the DAT3. The Juvenile Court has attempted to revise the DAT on several occasions. Following a detailed examination of the implementation of the DAT3 and subsequent discussions, greater insights or contexts has emerged concerning the overrepresentation of Black youth at detention and the existence of race effects when multivariate analyses of detention decision-making are performed. In particular, statutory items denying release or granting detention are being used as justifications for an override in DAT3. It has been recommended that instead, statutory mandatory offenses or items be placed on the top or first page of the DAT3, indicating a non-DAT3 decision to detain. By doing this, the use of overrides would decline. In addition, the DAT3 would more accurately reflect the decision-making process. The Juvenile Court was asked to further examine the criteria and weights contained within the DAT3. More specific, examine for duplication, double counting; examine questions to see if can be further defined – severity versus less serious, etc.; examine the weights; and examine and determine if mitigating factors that are more urban-related and attainable could be incorporated. Maybe even broader factors could be considered, such as engages in positive activity- e.g. school, GED prep, employment, family care, significant service activity.

- The Juvenile Court needs to continue to work with the MPD to ensure that MPD calls the Juvenile Court before transporting a youth to detention to determine if a transport is necessary. This is the goal of both the Summons and the call-in programs. In one time-frame, MPD failed to call in 48% of the transports (54 of 111 transports). The greater use of the Expeditor review and electronic monitoring may aid in reducing the number of Black youth and the length of stay in secure detention.
- The Juvenile Court needs to place a higher priority on the examination of the Graduated Response Grid (GRG), its implementation, and its impact on the disparate treatment of Black youth at the petition stage. The Response Grid has been revised and was implemented in November of 2016. In April of 2017, the Juvenile Court posted an RFP to secure help in evaluating the Revised Graduated Response Grid. While this is good, too much time had passed since the meeting in July of 2016, where the Graduated Response Grid was discussed as a contributing factor to DMC, to the posting of the RFP in April of 2017. A contract was given to DATA FOR GOOD to evaluate the GRG. In writing this report, requests to the Juvenile Court by the DMC monitor (Leiber) for specific information on progress/status, for the most part, had been ignored. I was referred by the Court to the monthly strategic committee reports and Judge Summers' 11th Compliance Report from March 5, 2018. An examination of those documents failed to provide specific information other than broad, generic statements. For example, "The Graduated Response Grid (GRG) used by Probation has done much to provide consistency in determining appropriate non-judicial dispositions, and is currently being validated by an independent contractor, Data for Good. The DMC Coordinator, the Research Specialist/Analyst, and the Administrator of Children's Bureau work daily on policies, procedures, & working to engage objective decision-making..." (Summers, 2018: p. 12). What is stated may be true but **nothing specific is provided** as to what has been done to revise the GRG, if a revised GRG has been implemented, or if an alternative instrument has been implemented and if so, has it been evaluated, and whether the revisions achieved the intended objectives. In June, the Equal Protection Monitor received a review of key tasks concerning the GRG from the Juvenile Court that provided some base counts. Documentation of the flow of cases through the Children's Bureau and the entire Juvenile Court is being worked on but not finalized. A final report from DATA FOR GOOD is expected sometime in late June/early July. Overall, the Juvenile Court has contracted with DATA FOR GOOD to study the GRG and some very preliminary information has been produced. But since the DMC issue at the petition stage (non-judicial/judicial decision-making) has been discussed for many years and especially in July of 2016 as a key point of inquiry, given that almost two years has past, little has been accomplished by the Juvenile Court in addressing this concern at this stage in the proceedings.

In short, the Juvenile Court has taken positive steps to address the DMC issue it is facing. However, a number of the initiatives and strategies employed have not been in use for a significant amount of time to allow for change. The efforts that have been implemented and are underway must be aggressively used, monitored, evaluated, and refined before the continuing presence of DMC can be altered and the attainment of equal protection for all youth can occur. This aspect of evaluation, revision and evaluation has a process is something the Juvenile Court has had a difficult time accepting. The Juvenile Court also needs to be more transparent in the reporting of data in order to fully evaluate where the programs/initiatives stand.

Next, the seventh assessment study is presented (see the next page, pg. 6).

7th ASSESSMENT STUDY

Background

A Memorandum of Agreement (MoU) regarding the Juvenile Court of Memphis and Shelby County was signed December 17, 2012 by the United States Department of Justice, Civil Rights Division, and the County Mayor and County Attorney, and the Juvenile Court of Memphis and Shelby County (JCMSC) to address the administration of juvenile justice for youth facing delinquency before the juvenile court and the conditions of confinement of youth at the detention center operated by the juvenile court. The Parties selected Dr. Michael J. Leiber as the Equal Protection Monitor of the Agreement. The Agreement requires the Monitor to assess the level of compliance by the juvenile court every six months and to produce reports. A ninth Equal Protection Monitor Report that included an Assessment Study has been completed as part of the MoU.

Before the studies are discussed, it is important to provide additional background. More specific, the existence and level of Disproportionate Minority Contact ("DMC") occurring at each phase of the juvenile court process can be captured by the relative rate index (RRI). DMC is the term used to describe the overrepresentation of minority youth in the juvenile justice system. The RRI provides a snapshot or a description of the youth in the juvenile justice system during a specified time-frame and at stages in the system. The RRI was and will be used to measure the level of DMC at stages for Black youth as compared to White youth. While valuable, the RRI can only provide insight on the level of DMC at stages and cannot tell us why DMC is occurring.

Instead, an assessment study using multivariate statistics in the form of logistic regression permits such an inquiry. Logistic regression is a statistical technique that takes into consideration a variety of factors to predict the likelihood of a case outcome. In essence, the logistic regression creates a mathematical model showing which combinations of legal and extralegal factors are represented in the decisions and outcomes of court processes. Legal factors and to some extent extra-legal factors can be relied upon to make a juvenile justice outcome due to its *parens* patriae foundation, such as crime severity and assessments about the family environment. Race, however, should not be predictive of a stage outcome once all legal and other extralegal factors are considered. If race does not indicate a statistically significant presence, then DMC is explained by differences, for example, in legal characteristics (i.e. crime severity). If race is a statistically significant indicator, then something else in addition to legal and other extra-legal factors accounts for DMC. One possibility is bias that may be present in the form of overt and/or indirect or subtle bias.

An example of direct bias is arriving at a decision solely on the basis of a youth's race. An example of subtle bias is making a decision that is not necessarily based on race but on a reliance on a legitimate criterion. For example, prior record can be used by court personnel when assessing what the court should do with a youth. Prior record, however, may be a racially tainted criterion since in many jurisdictions, including Shelby County, Black youth are overrepresented in court referrals by law enforcement in the form of arrests. While arrest can be an indicator of law breaking behavior, arrest can also be a function of police procedures and deployment. Consequently, if Black youth are more likely to have a large number of arrests (whether it is

because of unlawful behavior and/or as a by-product of where police patrol), Black youth are likely to receive harsher outcomes than Whites.

DOJ Findings Prior to Agreement

As stated in the Agreement between Shelby County and the Department of Justice, within nine months, the Juvenile court "shall augment the appropriate data collection method to assist in its evaluation of its DMC levels, causes, and reduction.... This includes information on points of contact, the relative rate indexes, and available diversion options for youth appearing before JCMSC..." (p. 22). As part of the Agreement, the Equal Protection Monitor, Michael Leiber, conducts assessment studies of the level and causes of DMC. Seven assessment studies (including the present assessment research) have been conducted to date following the Agreement. Next, the results from the seventh assessment study are presented.

Logistic Regression Results

An examination of the relative rate indexes show that DMC continues to exist. The RRI's reveal the most overrepresentation at referral to the juvenile court, secure detention, and cases petitioned. Although in decline, Blacks comprised most of the youth that received a notice for waiver to adult court. Black youth are underrepresented in receiving probation. Recall that the RRI provides information concerning the extent of DMC and does not inform us of the causes of DMC. Refer to Appendix 2 for the relative rate information. Next, multivariate analyses in the form of logistic regression, is used to give added insight into the predictors of case outcomes or the underlying causes of DMC. The DOJ study and the previous six assessment studies by Leiber reported evidence of race effects once this statistical technique was utilized. The purpose of this seventh assessment study is to examine the extent to which race still matters once legal (i.e., crime severity) and extralegal (i.e., age) factors are taken into account.

Data for the Current Study

For the purpose of this study, data was obtained directly from the Shelby County Juvenile Court. This data was cleaned for the objective of conducting the research. More specific, raw data of all delinquent referrals in Shelby County for the year 2017 (N= 148,695) were provided. The dataset was converted from Excel to SPSS format and all analyses were conducted using the SPSS statistical software.

The data was first sorted according to three variables: juvenile id, complaint date, and disposition severity (disposeverity). Based on this command, only the referral/complaint with the most severe disposition outcome for a given complaint date would be retained for each juvenile. In addition, complaints filed within 7 days of one another under the same juvenile id were assumed to be linked to the same incident, and therefore only the complaint with most severe disposition outcome within 7 days was retained. The steps taken to clean the data for analysis purposes are consistent with those used in the previous six Assessment studies.

The final data consists of N=3,126 distinct referrals for the one-year period of January 1, 2017 through December 31, 2017. The data distributions parallel the Shelby county Court data by distinct complaints, as evidenced in Table 1 on the next page (pg. 9).

As can be seen in Table 1, our final data for 2017 (N=3,126) is much less than Shelby's (N=5,369) as reported in the RRI report. The initial data consisted of 148,695 cases. The data was cleaned/coded using the same process as for previous assessment reports. The data were recleaned a second time to ensure accuracy and arrived at the same final sample size. The discrepancy in the sample size may be due to the implementation of SRT program. Since youth approved by SRT do not enter the system, they are never assigned a juvenile ID which means that they would not be included in the data that was sent. While the Juvenile Court declined to provide the data for the SRT program for 2017, they did confirm this is the reason for the discrepancy between the two data sets. Despite the discrepancy in data sets, the overall trends parallel those from previous assessment studies where such a discrepancy was not apparent.

Table 1. Data and Distributions by Stages from January through December 2017

	Shelby Juv. Court ^a (N=5,369)	<u>Leiber</u> ^b (N=3,126)	
<u>Stages</u> ^c	N	N	
Detention			
No	4,500	2,351	
Yes	869	775	
Non-judicial			
Yes	4,705	1,923	
No	1,488	1,203	
Adjudication			
No	280	549	
Yes	1,208	654	
Judicial disposition			
Probation	668	398	
Placement	498	256	
Waiver ^d			
No		196	
Yes	140	65	

a: Shelby county data counted by distinct complaints as taken from JCMSC 2017 RRI Report

b: Dataset provided by Shelby county and cleaned to represent distinct referrals

c: Stages created using disposition outcomes of the data cleaned to represent distinct referrals

d: Waiver as presented in JCMSC 2017 RRI Report includes all transfers to adult court in 2017 regardless of the initial complaint date; Waiver as created from dataset provided by Shelby county represent all transfers to adult court with a complaint date in 2017 only

⁻⁻⁻⁻ Information not provided

Variables

Table 2 (pgs.12-13) provides the independent and dependent variables used for the logistic regression analyses. The selection of variables was based on available data, the DOJ study, and past research dealing with assessment studies. The first assessment study and the present assessment study include independent variables (e.g., prior referrals, custody) and stages (e.g., adjudication, judicial disposition) not included in the DOJ study. The inclusion of these variables was done to provide a more detailed examination of the factors that may impact decision-making and possibly provide a better context for understanding the presence and/or absence of bias.

Independent. Eighty-nine percent of the sample is Black. Males comprise 77 percent of the sample and the average age of youth is 16 years old. Two measures of school status are used: attending school v. else and whether the youth was in special education. Eighty-nine percent of the sample was reported to be in school full-time while just 10 percent were in special education. The current living situation of a youth is captured by two dummy variables: own home with one parent and home of relatives. Living in his/her own home with two parents is the reference group for both variables. Eighty percent of the youth reside in their own home with one parent, 9 percent live at home with both parents and 11 percent live with relatives.

The extent of past involvement with the juvenile justice system is measured by the number of prior referrals. While the juvenile court collects information on each referral, data representing the number of prior referrals is not reported. Data was gleaned using data from 2010 through 2017 to create this variable. Thus, the count making up prior referral could be underestimated. Still, on average the sample evidenced on average 2.11 referrals and variation on the variable is present ranging from no past referrals to 10 or more past referrals.

Referral method is categorized as either summons/other or custody. The summons/other category mainly reflects summons referrals (1,397 summons, 203 other). In all, 51 percent of the sample was referred by a summons/other, while 49 percent were taken into custody. The number of charges, crime severity, and four indicators of crime type are also included as legal variables. The average number of charges is a little over 1; most offenses are classified as a misdemeanor (55%) and the most common crime type is a person offense (46%), followed by a property offense (37%), domestic (11%), and drugs (7%). The reference category for the four crime type variables is other.

Dependent. Decision-making is examined at five stages and each stage constitutes the dependent variables. Detention is defined as a youth held in an actual center/facility and excludes waiting room/holds and those waiting to be picked up. Twenty-five percent of the sample was held at some point in secure detention. Since being detained has been found elsewhere to have an indirect influence on case outcomes through race, detention will also be considered as an independent variable. For example, Blacks have been found in prior research to be more likely to be detained than similarly situated Whites; in turn, being detained predicts placement at judicial disposition. If this is found, because Blacks were more likely to be detained in the first place, Blacks then will receive placement at judicial disposition through the effects of detention on decision making at this stage.

Non-judicial is differentiated by yes (receive some type of non-judicial outcome – diversion, fine, release, etc.) and no or petitioned (moving forward in the court proceeding thus recipient of a judicial outcome). Sixty-two percent of the sample receive a non-judicial outcome; thus a significant percent of youth were diverted away from the system. Following the DOJ report, the non-judicial option is further delineated to examine decision making involving warning (no, yes), 61 percent, and diversion (no, yes), 9 percent. The reference group for both variables is dismissed. Formal stages are represented by *adjudication* and *judicial disposition*. Fifty-four percent of the youth that reach adjudication are adjudicated delinquent. Sixty-one percent received probation at judicial disposition while 39 percent received an outcome involving out-of-home placement.

Waiver. In the DOJ report race was found to be a predictor as Blacks were more likely than similarly situated Whites to be waived. There was not enough variation among race (i.e., not enough Whites) in our sample for 2017 to run statistically sound or stable models for the decision to waive youth to adult court.

The possibility of collapsing waiver hearing data from 2012 through 2017 also failed to produce enough variation. In 2017, almost all youth receiving a notice of transfer and those actually waived were Black (only seven waived were White).

- Table 2 next page (pgs. 12-13) -

Analysis Procedures

As stated previously, this part of the assessment study used multivariate procedures in the form of logistic regression. This procedure allows for the estimation of the relative effects of each of the independent variables on a dependent variable. The Exp(B) will be also used to calculate the odds ratio to discuss the relative impact of an independent variable on a dependent variable. The first model will represent the full or additive equation, which allows for the examination of a direct or main effect of an independent variable on an outcome (e.g., race with detention). Next, separate models were estimated for Whites and Blacks to address the possibility of race interaction relationships with independent variables and in predicting a case outcome. For example, race and gender may act in combination to impact decision making. That is, it is possible that being a White female may result in different treatment than a Black female. The estimation of separate models along with tests involving Z-score comparisons allows for the examination of this possibility.

Past research has also shown that as youth move through the juvenile justice system the sample becomes more alike; thus, increasing the chance for error or selection bias. To correct for this possibility, a hazard rate was created and included in the model at judicial disposition. A check for multi-collinearity showed acceptable levels of sharedness among the variables.

Table 2. Distribution of Variables (N=3,126)

Variable	Value	N	%
<u>Independent</u>			
Race	0 - White	342	11
	1 – Black	2784	89
Gender	0 – Male	2417	77
	1 – Female	709	23
Age	Years	M = 16.10	
(young to old)		SD = 1.61	
	F	Range = 8-18	
School status	0 – In school full time	2790	89
	1 – Else	336	11
Special education	0 - No	2813	90
	1 – Yes	313	10
Current living situation ^a	0 – Own home, two parents	285	9
	1 - Own home, one parent	2491	80
	2 – Home of relatives	350	11
Prior referrals	Number	M = 2.11	
(low to high)		SD = 2.67	
	F	Range = 0-10	
Referral method	0 – Summons/Other	1600	51
	1 – Custody	1526	49
# Charges	Number	M = 1.20	
(low to high)		SD = 0.63	
	R	ange = 1-10	
Crime severity	0-Misdemeanor	1731	55
	1 – Felony	1395	45
Property ^b	0 - No	1972	63
	1 – Yes	1154	37
Person ^b	0 - No	1677	54
	1 - Yes	1449	46

Table 2. continued

Value	N	%
0 - No	2774	89
1 – Yes	352	11
0 - No	2911	93
1 – Yes	215	7
0 - No	2351	75
1 – Yes	775	25
0 – Yes	1923	62
1 – No	1203	38
0 - No	755	39
1 – Yes	1168	61
0 - No	3111	91
1 –Yes	164	9
0 - No	549	46
1 – Yes	654	54
0 – Probation	398	61
		39
	0 - No 1 - Yes 0 - Yes 1 - No 0 - No 1 - Yes 0 - No 1 - Yes 0 - No 1 - Yes	0 - No 2774 1 - Yes 352 0 - No 2911 1 - Yes 215 0 - No 2351 1 - Yes 775 0 - Yes 1923 1 - No 1203 0 - No 755 1 - Yes 1168 0 - No 3111 1 - Yes 164 0 - No 549 1 - Yes 654 0 - Probation 398

a: Variable will be treated as dummy variable; Own home, two parents reference group.

Note: Insufficient cases or variation to study waiver; all but seven youth waived were Black.

Findings

Detention. Table 3 (pg. 15) presents the logistic regression result for estimating the decision to detain. In the present study, race is a statistically significant determinant of the detention outcome. **Black** youth have a **two times** greater likelihood to be **held in detention** than a White once other factors are taken into consideration (Column 1).

There is the presence of an interaction effect involving race and gender with the detention decision. Being Black and female substantially decreases the chances of being detained by 51% (column 3). Most of the legal and extralegal variables predict detention as one would expect. For example, crime severity is predictive of detention and has the strongest impact on the detention process.

b: Reference category is Other offense, e.g. weapon possession, disorderly conduct.

c: Treated as both independent and dependent variable.

Overall, in 7 of the 8 assessment studies, race has been found either individually or in combination with other factors, such as gender, to influence the decision to detain net considerations of other variables. Recall that the DOJ study reported a strong relationship between race and detention in that Black youth were almost 23/4 times more likely to be detained than similarly situated White youth. In the first assessment study by Leiber, race was not found to be a statistically significant predictor of the detention decision once all legal and extralegal factors were taken into account. In Leiber's second and third assessment studies, Black youth involved in a person offense increased the likelihood of being detained by over two times relative to all other youth net controlling for other factors, including domestic assault cases. In the fourth assessment study, Whites charged with a drug offense were less likely to be detained than comparable Blacks. In the fifth assessment study, being White and charged with drug offending decreased the chances of being detained by 67 percent. In the sixth assessment study, being Black increases the likelihood of being held in secure detention by almost one and a half times to a comparable White. In this assessment study, the likelihood of being detained for a Black is twice that of a comparable White. In short, the evidence from 7 assessment studies overwhelmingly indicate that detention is a problematic stage in terms of DMC.

In each of the assessment studies and Equal Protection Compliance Monitoring Reports written by Leiber, it was pointed that the Detention Assessment Tool, or known as DAT, could be contributing to DMC and the finding of race relationships with detention. The Court did contract with the University of Memphis to validate the DAT; thereafter incorporating some changes to the tool. Even after the validation and revisions, the same issues remained. As discussed in the Tenth Equal Protection Monitor Report, Leiber and Beaudry-Cyr conducted a detailed examination of what is known as DAT3 and its application at detention. Recall that in the assessment studies detention is operationalized as all youth referred to juvenile court (the "no" category) versus those that received detention (the "yes" category). In the Leiber and Beaudry-Cyr study, detention was defined as youth referred to detention via a transport (viewed as no detention) versus youth transported but who were detained (viewed as detention). After the examination of the detention decision-making, Leiber and Beaudry-Cyr reported that 93% of those referred to Juvenile Court via a transport were Black youth; representing a significant overrepresentation relative to the general population. Twenty-one percent or 240 youth scored 19 or higher on the DAT3. A score of 19 is the threshold to allow for a decision to use secure detention. Thirty-one percent of all cases resulted in detention as a result of an override of the total score. That is, 355 youth who scored lower than a 19 were subject to detention as a result of overrides.

Table 3. Logistic Regression Results - Detention (N=3,126)

Variable	Full Model (1)	White (2)	Black (3)
Race	.73 ^a ** (2.08)	-	-
Gender	64**	.61	- .71 **†
Age	(.53) .20**	(1.85) .42**	(.49) .19**
	(1.22)	(1.52)	(1.21)
School status	.42 ** (1.53)	.84 (2.32)	.36* (1.44)
Special education	.10 (1.10)	1.18* (3.26)	01 (1.00)
Own home, one parent	.09	.42	.04
Home of relatives	(1.10) .35 (1.42)	(1.53) .83 (2.28)	(1.04) .27 (1.31)
Prior referrals	.17**	.21*	.17**
Custody	(1.18) _b	(1.23)	(1.18) _b
# Charges	.48**	.61*	.46**
Crime severity	(1.61) 1.78 **	(1.84) 1.52**	(1.58) 1.82**
Property	(5.93) -1.22 **	(4.59) 32	(6.16) -1.29 **
Person	(.30) .44*	(.73) 1.07	(.28) .40*
Domestic	(1.55) 06	(2.92) 26	(1.49) 06
Drugs	(.94) 96 ** (.38)	(.78) -1.29 (.28)	(.94) 87** (.42)
-2 Log Likelihood	2686.37	197.77	2470.82

a: Regression coefficient; Exp(B) is presented in the parenthesis ().

b: Insufficient cases, variable dropped from analysis

[†] p<.05, Coefficient comparisons yield statistical significance.

^{**}p<.01, *p<.05

In February of 2018, Leiber, Beaudry-Cyr and members from the Juvenile Court met to discuss the DAT3 study and what could be done to address among other things, the overrides. The meeting was productive as we discovered that the majority of the overrides involved behaviors on the part of the youth that statutorily mandated a Court decision to detain (e.g., possession of a firearm, open APC/Warrant from the Court). We also discussed and examined the kinds of crimes that led youth to be detained who scored 19 or higher on the DAT3. Most of the 240 youth that scored 19 or higher were charged with crimes and were involved in activities that justified a detention decision. We reached the following conclusions:

- Statutory items denying release or granting detention should be removed as override
 criteria and instead be placed on the top or first page of the DAT3 indicating a non-DAT3
 decision to detain. By doing this, overrides would decline. In addition, the DAT3 would
 more accurately reflect the decision-making process.
- Some of the other criteria for the justification of an override fell into the non-DAT3 decision. That is, detention is required. The Court agreed to look into this. The items of interest were danger to community and threat of bodily harm.
- About 7% of the youth were detained due to either not being able to locate a parent or a
 parent refusal. Discussion centered on some the concerns that arise involving this issue –
 unable to release a youth without a guardian, a youth threaten to harm a parent, etc.
 The Court is going to discuss this justification for an override to assess whether this can
 be addressed.
- The Juvenile Court was asked to further examine the criteria and weights contained within the DAT3. More specific:

Examine for duplication, double counting;

Examine questions to see if can be further defined – severity versus less serious; Examine the weights;

Examine and determine if mitigating factors that are more urban related could be incorporated. I focused on employment, though good, questions emerge how many inner-city youth have a job. Thus, the Court should focus on the attainability of the factors for youth residing in Memphis and Shelby County.

What does this all mean? The Black relationship with detention is tied to the overrepresentation of Black youth transported via the police to detention. The significant presence of Black youth at detention, in turn, appears, in part, to be producing the reported presence of the positive race effect at this stage of the decision-making process. Recall, of the youth referred to detention, 93% are Black. Thus, some of the DMC issue at detention is tied to differential involvement in delinquent behavior, possible overzealous police deployment practices and referrals to detention, and the DAT3 itself. If the recommendations cited above are addressed by the Juvenile Court, this latter aspect could be remedied.

Petition/Judicial. Table 4 (pgs. 18-19) presents the logistic regression results for predicting the decision to first use a non-judicial outcome versus further court processing, followed by models differentiating among non-judicial outcomes (warning, diversion versus release). Race is a positive statistically significant predictor of petition -judicial decision-making (Column 1). Being **Black increased the odds of receiving a recommendation for further court proceedings (by 59%)** once controls were taken into account (Column 1).

If a non-judicial outcome is given, race differences are not evident in the decision to provide youth with a warning (Column 4) or diversion (Column 7). Tests for race interaction relationships with other independent variables failed to produce evidence of significant effects involving decisions represented by the three non-judicial outcomes.

In the DOJ assessment study, Blacks were found to be less likely than similarly situated Whites to receive a warning and a fine, restitution or public service sanction. Or, in other words, Blacks were more likely than Whites to be referred for further juvenile court proceedings once controls were considered. The results from Leiber's first assessment study showed that this effect remained. Blacks were 1 ½ times more likely than Whites to be referred to a court hearing net controls. In the second and third assessment study by Leiber, race was not a statistical significant determinant of the decision to be referred further on at this stage. In the fourth, fifth, and sixth assessment studies, the results paralleled those from the DOJ study and the first assessment study. In this current study, Blacks once again were found to be referred on at intake than similarly situated Whites. **Thus, in 6 of 8 assessment studies, race has had a direct relationship with the petition --judicial decision.**

In the first assessment study by Leiber, differentiating among the non-judicial case options with warning as one variable and diversion as another variable with release as the reference group failed to produce evidence of race main or interaction effects with the dependent variables. Similarly no main or interaction relationships were evident in the second study. But similar to the findings reported by DOJ, results from the third and this fifth assessment study by Leiber showed that Black youth were less likely to participate in diversion than similar White youth. In the sixth and seventh assessment (the current study) no such effect was discovered.

The results from the RRI's, especially since 2013 (see Appendix 2) and the fairly consistent findings involving race and non-judicial decision-making from the assessment studies, including the DOJ study) indicate a DMC concern. Every Equal Protection Monitor Compliance Report has recommended that the Juvenile Court address this issue at this stage in the proceedings. The July 2016 meeting generated the most specific action steps to date. Leiber and the Juvenile Court discussed these issues at detention and the non-judicial stage. The Juvenile Court agreed to assess, evaluate, and revise the structured decision-making tool used at the non-judicial stage (Graduated Sanctions Grid, now referred to as the Graduated Response Grid) as this instrument was believed to be contributing to the overrepresentation of Black youth receiving the judicial outcome at this stage, as well as the presence of the statistically significant race effects reported in the assessment studies. The Juvenile Court formed a committee and contracted with someone to accomplish this task. Overall, the Juvenile Court has contracted with DATA FOR GOOD to study the GRG and some very preliminary information has been produced. But since the DMC issue at the petition stage (non-judicial/judicial decision-making) has been discussed for many

 Table 4. Logistic Regression Results - Non-Judicial

	N	Ion-Judicia	1	Warn			Diversion		
	Full	White	Black	Full	White	Black	Full	White	Black
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Race	.46 ^a ** (1.59)	-	-	04 (.96)	-	-	29 (.75)	-	-
Gender	-1.01** (.37)	83 (.44)	-1.03** (.36)	.05 (1.05)	.35 (1.42)	.03 (1.03)	.23 (1.26)	- .59 (.56)	.34 (1.40)
Age	.13 ** (1.13)	.21 (1.24)	.12** (1.13)	.03 (1.04)	.20* (1.22)	.02 (1.02)	.05 (1.05)	24 (.79)	.09 [†] (1.09)
School status	.24 (1.27)	.46 (1.59)	.21 (1.23)	67 ** (.51)	68 (.51)	70 ** (.50)	25 (.78)	.46 (1.59)	46 (.63)
Special education	22 (.80)	73 (.48)	15 (.86)	.25 (1.29)	1.04 (2.84)	.11 (1.12)	25 (.78)	88 (.42)	16 (.85)
Own home, one parent	.35* (1.41)	20 (.82)	.43* (1.54)	04 (.97)	55 (.58)	.05 (1.05)	.36 (1.43)	1.97 ** (7.19)	.11 (1.11)
Home of relatives	.26 (1.29)	.21 (1.23)	.29 (1.34)	15 (.86)	.40 (1.48)	21 (.81)	.11 (1.11)	_ b -	.06 (1.07)
Prior referrals	.29** (1.34)	.26** (1.29)	.30** (1.35)	.01 (1.00)	.11 (1.12)	01 (.99)	21 ** (.81)	-2.62** (.07)	17 ** (.85)
Custody	1.22 ** (3.39)	1.00** (2.72)	1.23 ** (3.42)	- .92 ** (.40)	- 1.15 ** (.32)	- .92 ** (.40)	82 ** (.44)	_ b -	76** (.47)
# Charges	.29 ** (1.34)	.44 (1.55)	.29 ** (1.33)	.02 (1.02)	28 (.76)	.06 (1.06)	04 (.96)	.70 (2.01)	20 (.82)
Crime severity	1.53 ** (4.63)	1.69** (5.42)	1.58** (4.86)	.23 (1.26)	.44 (1.55)	.16 (1.17)	.20 (1.22)	- .95 (.39)	.52* (1.68)

Table 4. continued

White (8) * 2.37* (10.65)	Black (9) .94*
* 2.37*	.94*
(10.65)	(2.50)
	(2.56)
* .19	1.06*
(1.21)	(2.88)
_b	83
-	(.44)
.78	.83
(2.19)	(2.28)
152.81	887.74
)	.78 (2.19)

a: Regression coefficient; Exp(B) is presented in the parenthesis ()

b: Insufficient cases, variables dropped from analysis

^{**} p<.01, *p<.05

[†]p<.05, Coefficient comparisons yield statistical significance.

years and especially in July of 2016 as a key point of inquiry, given that almost two years has past, little has been accomplished by the Juvenile Court in addressing this concern at this stage in the proceedings. On the basis of the results reported here the **DMC issue has not changed and continues to exist at the petition-judicial stage.**

Adjudication. Table 5 (pg. 21) provides the logistic regression results for understanding adjudication decision-making. In the present assessment study, race once again does not have a statistical direct effect on adjudication outcomes (Column 1). Further, tests involving coefficient comparisons also failed to produce evidence of race differences in the relative effects of the independent variables with adjudication.

It is important to note that detention has a strong impact on the adjudication decision once all factors are taken into account. Being detained decreases the likelihood of an adjudication of delinquency (Column 1). For Whites, the effect of detention is inverse but not statistically significant (Column 2). For Blacks, subjected to detention decreases (inverse) the odds of being adjudicated by .46 (Column 3). Recall that earlier it was reported that being Black was a determinant of detention. Thus, an indirect relationship exists between being Black, being detained, and a decreased likelihood of being adjudicated a delinquent.

Recall that the DOJ study did not report adjudication decision-making as a problem area. In the first assessment study by Leiber, race by itself was not a significant predictor once controls were considered. Comparisons of coefficients revealed the existence of a race interaction relationship with the number of charges and the odds of being adjudicated. For Whites, the number of charges had an inverse or negative relationship with the dependent variable and was not statistically significant. For Blacks, the relationship was positive and statistically significant. Black youth with a greater number of charges increased the likelihood of adjudication by 2.15 relative to other youth net considerations of legal severity and other variables. In the second assessment study, race once again did not have a direct effect on the dependent variable. But, two race interaction relationships were found. Black females and White youth charged with a person offense were found to have an increased likelihood of adjudication. In the fourth, fifth, and sixth assessment study, no direct race effects of statistical significance were discovered. This pattern of non-race effects is also once again present in the current study. But, a positive indirect effect with race and detention exists with the adjudication decision (increased the chances of being adjudicated) and has been reported in the previous assessment studies. That is, Black youth subject to detention decreases the odds of being adjudicated delinquent. This finding has been reported in the past.

Table 5. Logistic Regression Results - Adjudication, Judicial Disposition

		Adjudicatio	n	Judicial Disposition
	Full	White	Black	Full
ariable	(1)	(2)	(3)	(4)
Race	.24ª	-	-	19
	(1.28)			(.83)
Gender	.19	1.68	.07	-2.00**
	(1.21)	(5.36)	(1.07)	(.14)
Age	11**	01	11*	.40**
6-	(.89)	(.99)	(.89)	(1.49)
School status	44**	98	45**	1.77**
School status			(.64)	
G : 1 1 .:	(.64)	(.38)		(5.89)
Special education	.45*	2.25	.41*	37
	(1.56)	(9.44)	(1.50)	(.69)
Own home, one parent	15	-1.18	- .06	04
-	(.86)	(.31)	(.94)	(.96)
Home of relatives	58*	-2.27*	43	.38
	(.56)	(.10)	(.65)	(1.46)
Prior referrals	.10**	.14	.10**	.22**
1101101101	(1.11)	(1.15)	(1.11)	(1.25)
Custody	10	-1.36	03	05
Custouy	(.91)	(.26)	(.97)	(.95)
# Charges	07	.43	09	.18
" Charges	(.94)	(1.53)	(.91)	(1.19)
Crime severity	.03	11	.04	.42
Crime severity			(1.04)	
	(1.03)	(.89)	(1.04)	(1.53)
Property	.37	65	.40	-1.16*
	(1.45)	(.52)	(1.48)	(.31)
Person	11	93	10	39
	(.90)	(.40)	(.91)	(.68)
Domestic	.20	_ b	.23	65
	(1.22)	-	(1.26)	(.52)
Drugs	.15	.10	.05	96
	(1.16)	(1.11)	(1.05)	(.38)
Detention	43**	01	45**	1.88**
	(.65)	(1.00)	(.64)	(6.56)
	(.03)	(1.00)	(.04)	(0.30)
Hazard Rate	-	-	-	-3.67
	-	-	-	(.03)
Log Likelihood	1564.48	70.22	1471 55	617.08

a: Regression coefficient; Exp(B) is presented in the parenthesis (). b: Insufficient cases, variable dropped from analysis **p<.01, *p<.05

Judicial Disposition. In Column 4 of Table 5, the logistic regression results for predicting judicial disposition outcomes are presented. In the present assessment study, and consistent with the previous six assessment studies, race is not a statistically significant determinant of judicial decision-making. Tests for the presence of race combination relationships with independent variables also failed to show the existence of such effects with the dependent variable. Detention, however, has an effect on disposition outcomes. This relationship is positive suggesting that Blacks who were detained are likely to receive an out-of-home placement.

In the first assessment study by Leiber, race had no main relationship with the dependent variable. However, two race interaction relationships were reported. Older Whites had a reduced probability of a receiving an out-of-home placement than older Blacks who had an increased odds of such an outcome. Being detained had also significant positive relationship with the dependent variable (increased odds of being taken out of the home). This effect was conditioned by race. Blacks held in detention had an increased likelihood of receiving the more severe judicial outcomes than similarly situated White youth once controls were taken into account. In the second assessment study, once again race was not a statistically significant determinant of judicial disposition decision making. Differentiating the results by race, tests comparing coefficients produced two statistically significant interaction relationships. As in the first assessment study, older Whites had decreased odds of receiving an out-of-home placement than other youth, including Blacks. White youth from a single-parent home were found to be less likely to receive the more severe judicial disposition outcome than similarly situated Black youth. These relationships were not found in neither of the last five assessment studies. In the current research, an indirect inverse relationship appears to exist between being Black, being detained and receiving the harsher outcome of out-of-home placement at judicial disposition.

Note: As pointed out earlier, logistic regression was not used to predict decision making at the transfer hearing to decide whether to waive a youth to adult court. Recall that there was a lack of variability in that there were too few Whites to conduct the analysis over the last six years. That is, almost all youth receiving notice of transfer and actually waived are Black.

Summary and Conclusions

Using data from the state of Tennessee for the years 2005 through 2009, and to some extent 2010, the DOJ study found and reported the presence of DMC at almost every stage. In subsequent analysis using data from Shelby County, the DOJ findings letter reported that the presence of DMC was not accounted for solely by legal and extralegal considerations, especially at detention, the use of non-judicial outcomes in the form of warning and diversion and at the transfer to adult court hearing.

Since the DOJ study, Leiber has conducted seven assessment studies, including the current research. For the most part, Leiber has reported similar findings as those detailed in the DOJ study. In his first assessment study, Leiber used data given by the Memphis/Shelby County Juvenile Court and cleaned by Leiber for the time-frame ranging from July 1, 2012 through June 30th 2013 and reported somewhat similar results to DOJ. In the second assessment study covering court decision making for the entire year 2013 by Leiber, several themes continued to exist. In a 3rd assessment study using data from July 1st 2013 through June 30th 2014 similar patterns from the previous two assessments and the DOJ study were evident. The fourth, fifth

and sixth assessment studies by Leiber examined data for delinquent referrals for the year 2014, 2015 and the year 2016, respectively.

The current study covered cases for the year 2017. A continuation of Black overrepresentation and Black effects with decision-making outcomes at secure detention and intake/petition or the non-judicial stage in terms of overrepresentation and equity. In addition, as in all previous studies either by DOJ or as part of the assessment series, there is substantial overrepresentation of Black youth at referral into the juvenile court system

Recall that a summary of these studies and conclusions are presented on pages 1-5 and discussed throughout this report. Additional information concerning recommendations and specifically what the Shelby Court has/has not undertaken can be found in the 10th Equal Protection Compliance Report.

Below are the main findings/themes from all seven assessment studies and recommendations:

• **Referrals** by the police/schools to the juvenile court have declined but Black youth continue to be overrepresented.

Strategies such as SHAPE, the expanded use of Porter Leath, the use of beds at Youth Villages, discussions/training of the Memphis Police Department, including those in higher administration, greater use of summons as a means to avoid juvenile court contact (LEAP), the development and use of the Summons Review Team (SRT), and the Precinct Liaison program all have been utilized by the Court. These are good initiatives. But, each needs to be continuously evaluated to assess if they are producing the intended results and whether these should be used in greater frequency to reduce the number of youth, especially Black youth, referred to juvenile court.

• Efforts of reform at **detention** appear to be taking place, to some degree, but the findings from the multivariate analyses continue to show no change in the overrepresentation of Blacks relative to Whites, AND being Black continues to predict the use of secure detention. The relationship of race with detention is sometimes evident in the form of a direct effect and at other times in the form of indirect relationships with adjudication and judicial disposition decision-making where the effects sometime yield more severe and/or lenient outcomes at adjudication and at judicial disposition.

The Juvenile Court has attempted several times to revise the DAT. The revised DAT 3 was implemented February 1, 2017. As stated earlier in this study, Leiber and Beaudry-Cyr examined - detention was defined as youth referred to detention via a transport (no detention) versus youth transported but who were detained (detention). After the examination of the detention decision-making, Leiber and Beaudry-Cyr reported that 93% of those referred to Juvenile Court via a transport were Black youth; representing a significant overrepresentation relative to the general population. Twenty-one percent or 240 youth scored a 19 or higher on the DAT3. A score of 19 is the threshold to allow for a decision to use secure detention. Thirty-one percent of all cases resulted in detention as

a result of an override of the total score. That is, 355 youth who scored lower than a 19 were detained.

In February of 2018, Leiber and Beaudry-Cyr and members from the Juvenile Court met to discuss the DAT3 study and what could be done to address among other things, the overrides. The meeting was productive as we discovered that the majority of the overrides involved behaviors on the part of the youth that statutorily mandated a Court decision to detain (e.g., possession of a firearm, open APC/Warrant from the Court). We also discussed and examined the kinds of crimes that led youth to be detained who scored 19 or higher on the DAT3. Most of the 240 youth that scored 19 or higher were charged with crimes and involved in activities that justified a detention decision. We came to the conclusion that:

- Statutory items denying release or granting detention should be removed as override criteria and instead be placed on the top or first page of the DAT3 indicating a non-DAT3 decision. By doing this, overrides would decline. In addition, the DAT3 would more accurately reflect the decision-making process.
- Some of the other criteria for the justification of an override fell into the non-DAT3 decision. That is, detention is required. The Court is going to look into this.
 The items of interest were danger to community and threat of bodily harm.
- O About 7% of the youth were detained due to either not being able to locate a parent or a parent refusal. Discussion centered on some the concerns that arise involving this issue – unable to release a youth without a guardian, a youth threaten to harm a parent, etc. The Court is discussing this justification for an override to assess if anything can be done.
- The Juvenile Court was asked to further examine the criteria and weights contained within the DAT3. More specific:

Examine for duplication, double counting;

Examine questions to see if can be further defined – severity versus less serious, etc.;

Examine the weights;

Examine and determine if mitigating factors that are more urban related could be incorporated. I focused on employment, though good, questions emerge how many inner-city youth have a job. Thus, the Court should focus on the attainability of the factors for youth residing in Memphis and Shelby County. Factors could be considered that focus on positive activity, such as being in school, GED prep, family care, significant service activity, etc.

Overall, the Black relationship with detention is tied to the overrepresentation of Black youth transported via the police to detention. The significant presence of Black youth at detention, in turn, appears, in part, to be producing the reported presence of the positive race effect at this stage in the decision-making process.

Recall, of the youth referred to detention, 93% are Black. Thus, some of the DMC issue at detention is tied to differential involvement in delinquent behavior, possible overzealous police deployment practices and referrals to detention, and the DAT3 itself. If the recommendations cited above concerning the DAT3 are addressed by the Juvenile Court, this latter aspect could be remedied. The Juvenile Court still needs to monitor, evaluate and revise the DAT3 as needed.

The Juvenile Court should continue to use the Expedite review, the Cease-Fire program and electronic monitoring as means to reduce the number of Black youth placed in secure detention as well as the length of time in detention.

Race relationships continue to exist at petition-judicial decision-making. Over time, this
relationship has almost been as evident as at referral and detention. There needs to be an
inquiry as to why these race effects are continuing.

As stated on numerous occasions and in the assessment study from 2017, the Court needs to address the following questions: (1) is the structured decision-making tool being administrated properly? And (2) is the tool and the criteria comprising the tool used to structure decision-making reducing DMC and ensuring decision-making that results in equal protection? Or, is the tool contributing to DMC and the presence of race effects at the non-judicial stage? The findings from the seven assessment studies, for the most part, reveal that the tool being used is bringing about the needed change in decision-making and in fact, appears to be producing the race disparity.

More specific, the Juvenile Court seems to be reviewing the Graduated Response Grid. There has been a particular focus on: (1) if the decision-making process by each PO reaches the same or similar conclusion and (2) whether or not the supervisor and/or DA moves cases from non-judicial to petition (court). A revised Response Grid was implemented in November of 2016. An RFP was issued and posted by Shelby County Purchasing in April of 2017, to help in further evaluating the Revised Graduated Response Grid. While this is good, too much time elapsed from the meeting in July 2016 where the Graduated Response Grid was discussed as a contributing factor to DMC to the posting of the RFP in April of 2017. As stated earlier in this report, an independent contractor, Data for Good, partnered with the Juvenile Court to evaluate the Graduated Response Grid (GRG). On the basis of the results reported here the **DMC issue has not changed and continues to exist at the petition-judicial stage. The Juvenile Court needs to focus on the GRG or the implementation of an alternative structured decision-making tool at this stage in the proceedings.**

The Juvenile Court is implementing a parent orientation to discuss the importance of not rejecting an offer to participate in diversion at the non-judicial stage as well as possible greater use of the By-Pass program. Still, until the GRG is examined, revised or abandoned in favor of another structured decision-making tool, on the basis of the findings from this study and the past studies, equal protection for all youth is not expecting to occur at the petition -judicial stage.

 Although the overall number of youth reaching the waiver stage via notice, for the most part, have declined, most youth that receive a notice and waived are Black. While much of this relationship rests with the prosecutor, continued dialogue must occur between the interested parties to address this issue.

Overall, the Juvenile Court, for the most part, has shown awareness and leadership concerning the DMC issue it is facing. The Juvenile Court needs to continue to address the overrepresentation of Black youth at referrals and make some changes to the DAT3. Evaluations of the revisions to the DAT3 must also occur. The glaring area in need of reform at this time is at the petition-judicial decision-making stage. Unfortunately, little has changed in reducing DMC and ensuring greater equality for Black youth at this stage in the proceedings in Shelby County/Memphis Juvenile Court. Central to change is the need to discuss, revise, evaluate, and revise again the Graduated Response Grid. Until this occurs, the DMC issue will continue at this stage in the proceedings.