

Pennsylvania Juvenile Justice Disproportionate Minority Contact (DMC) Monitoring, Reduction and Prevention Efforts

Submitted to:

The DMC Subcommittee of the Pennsylvania Commission On Crime And Delinquency

Juvenile Court Judges' Commission Center for Juvenile Justice Training and Research

Authors: James D. Griffith, Ph.D.,

Stephanie Jirard, J.D., and Melissa L. Ricketts, Ph.D.



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Table of Contents

Executive Summary	5
Chapter One	10
I. Overview of Disproportionate Minority Contact (DMC)	10
II. Overview of the Research Project: Identification and Assessment are two Phases of DMC	
Monitoring, Reduction, and Prevention Efforts	11
1. Phase I: Identification	11
Table 1. Decision Points and Data Sources	12
A. Data Content	12
B. Data Quality	13
2. Phase II: Assessment	13
Table 2. Intervention Counties	15
Table 3. Phases of Research Study	17
Chapter Two	18
I. Phase I: Identification	18
1. Analysis of Demographics	18
Table 4. 2010 RRIs Across Decision Points for Race/Ethnicity	18
Table 5. 2010 Highest and Lowest RRI for Arrest across Race/Ethnicities	19
Table 6. 2010 Highest and Lowest RRI for Referral across Race/Ethnicities	20
Table 7. 2010 Highest and Lowest RRI for Diversion across Race/Ethnicities	21
Table 8. 2010 Highest and Lowest RRI for Secure Detention across Race/Ethnicities	22
Table 9. 2010 Highest and Lowest RRI for Petition across Race/Ethnicities	23
Table 10. 2010 Highest and Lowest RRI for Delinquent Findings across Race/Ethnicities	es
	24
Table 11. 2010 Highest and Lowest RRI for Probation Findings across	
Race/Ethnicities	25
Table 12. 2010 Highest and Lowest RRI for Residential Placement across	
Race/Ethnicities	26
Table 13. 2010 Counties with RRIs between $.90 - 1.10$ across Decision Points and	
Race/Ethnicities	28
Table 14. Number of RRIs Between $.90 - 1.10$ across Decision Points and	
Race/Ethnicities	30
Table 15. 2010 Counties with RRIs between < .50 or > 2.0 across Decision Points and	
Race/Ethnicities	32

Table 16. Number of RRIs $<$.50 or $>$ 2.0 across Decision Points and Race/Ethnicities . 33
Table 17. Allegheny County RRIs across Decision Points 2000-2009
Table 18. Berks County RRIs across Decision Points 2000-2009
Table 19. Dauphin County RRIs across Decision Points 2000-2009
Table 20. Lancaster County RRIs across Decision Points 2000-2009
Table 21. Philadelphia County RRIs across Decision Points 2000-2009
Chapter Three
I. Covariate Analyses
1. Analysis by County
A. Diversion 42
Table 22. Covariate Analyses across the Five Intervention Counties in 2009 and
2010 for Diversion
B. Petition44
C. Delinquent Findings
D. Probation45
E. Residential Placement
Table 23. Covariate Analyses across the Five Intervention Counties in 2009 and
2010 for Petition
Table 24. Covariate Analyses across the Five Intervention Counties in 2009 and
2010 for Delinquent Findings
Table 25. Covariate Analyses across the Five Intervention Counties in 2009 and
2010 for Probation49
Table 26. Covariate Analyses across the Five Intervention Counties in 2009 and
2010 for Residential Placement
Chapter Four
I. Multilevel Modeling
1. State and Federal Data
A. Summary of Macro-level Findings
i. Year 2007
ii. Year 2008
B. Measures
C. Analysis Plan54
Figure 1. Assumed Relationships for Multivariate Results
D. Results50

i. Phase 1.: Descriptive Statistics	56
Table 27. Descriptive Statistics	56
ii. Phase 2: Bivariate Correlations	57
Table 28. Bivariate Correlations	58
Table 29. Regression Analysis RRI Arrest 2007	59
Table 30. Regression Analysis RRI Referral 2007	60
Table 31. Regression Analysis RRI Diversion 2007	60
Table 32. Regression Analysis RRI Arrest 2008	61
Table 33. Regression Analysis RRI Referral 2008	62
Table 34. Regression Analysis RRI Diversion 2008	62
Chapter Five	63
I. Qualitative Analysis	63
1. Focus Groups	63
A. Background for Qualitative Study	63
B. Methodology for Focus Groups	65
C. Focus Group Findings	68
D. Focus Group Summary	80
Conclusions from this Research Study	81
Recommendations	83
References	85
Appendices	
Appendix A Decision Point: Arrest	88
Appendix B Decision Point: Referral	90
Appendix C Decision Point: Diversion	92
Appendix D Decision Point: Secure Detention	94
Appendix E Decision Point: Petition	96
Appendix F Decision Point: Delinquent Findings	98
Appendix G Decision Point: Probation	100
Appendix H Decision Point: Residential Placement	102
Appendices I-R RRI Rates for All Decision Points	104-113
Appendix S Focus Group Guided Interview Format	114-117
Appendix T Focus Group Responses to Selected Questions	118-125

EXECUTIVE SUMMARY

By: Stephen P. Bishop

This report summarizes the findings from a 12-month comprehensive assessment and analysis of Disproportionate Minority Contact (DMC) within Pennsylvania's Juvenile Justice System. The study was commissioned by PCCD as part of Pennsylvania's compliance with the federal Juvenile Justice and Delinquency Prevention (JJDP) Act of 2002, which identifies the reduction of DMC as a core protection. This project is the first statewide assessment of DMC since the 1992 study by Kempf, *The Role of Race in Juvenile Justice Processing in Pennsylvania*.

It should be noted that this study seeks to examine racial/ethnic **disparity** (a statistical distinction) within the juvenile justice system, not discrimination. The numbers, statistics, and findings are intended to alert practitioners to imbalances in juvenile justice processing, which may be caused by any number of case-specific and societal factors. This study attempts to begin to "peel the onion" on the various layers and complexities associated with DMC, not assign blame or insinuate maltreatment. The conclusions and recommendations should not be interpreted to disparage any professional working in Pennsylvania's juvenile justice system, but rather as an attempt to close the potential gaps in services to improve the overall delivery of juvenile justice in the Commonwealth.

OVERVIEW

This assessment is inclusive of all counties within the Commonwealth that satisfy the statistical criterion (at least 1% of the county population being minority); only the counties of Elk, Jefferson, and Warren have been excluded. Descriptive DMC data are provided on each of the 64 counties that were studied. Some special attention is given to the 14 counties (Allegheny, Beaver, Berks, Chester, Dauphin, Delaware, Erie, Lancaster, Lehigh, Mercer, Montgomery, Northampton, Philadelphia, and York) that were examined in the Kempf study, for the purposes of comparison and measuring progress since that time. Specific analysis was also conducted on the DMC Subcommittee's Reduction Sites. These jurisdictions include Allegheny, Berks, Dauphin, Lancaster, and Philadelphia, and are designated as such based on established efforts to address youth and law enforcement relations through participation in regionally-held Minority Youth/Law Enforcement Forums.

This study was conducted in four phases, with each phase seeking to address some basic questions:

• Phase 1: Is DMC present and, if so, what is the extent of DMC in Pennsylvania at both the state and county levels? At what stages in the juvenile justice process is DMC most evident? What minority groups are most impacted by DMC? How do current DMC rates compare to those reported in the Kempf study?

- Phase 2: Is race/ethnicity a factor in juvenile justice processing and decision-making when controlling for other case-level variables?
- Phase 3: Is race/ethnicity a factor in juvenile justice processing and decision-making when controlling for community-level variables?
- Phase 4: What are the perceived issues related to DMC by juvenile justice stakeholders?

Within this study, **the primary measure of DMC is the Relative Rate Index (RRI)**. This metric calculates, at each of ten federally-defined decision points (Table 1, p. 12), a rate of occurrence for various racial/ethnic groups, and compares the rate of occurrence between racial/ethnic groups. In short, the RRI measures the statistical likelihood of a juvenile justice occurrence for racial/ethnic minorities as compared to White youth. With few exceptions, the racial/ethnic categorizations being compared to White youth, for the purposes of this study, are **African-American/Black, Hispanic/Latino, and All Minorities**.

FINDINGS

Is DMC present and, if so, what is the extent of DMC in Pennsylvania at the state and county levels? At what stages in the juvenile justice process is DMC most evident?

Yes, DMC is present in Pennsylvania. The aggregate statewide data (Table 4, p. 18) shows that DMC is evident at 8 of the 10 decision points for all minorities. The most pronounced effect within these decision points are observed at **arrest**, **secure detention**, **and secure confinement**, with all minority youth being three times, two and one-half times, and twice the rate, respectively, to experience these occurrences. The rate of occurrence for all minority youth at the points of diversion and probation is less than that of White youth. Diversion (as opposed to a formal petition) and probation (as opposed to residential placement or secure confinement) are viewed as positive outcomes; therefore a lesser occurrence at these points by minority youth also indicates DMC.

When examining individual jurisdictions, there is much variance in the extent of DMC and at which decision points DMC is most evident (see Appendices A-H, pp. 88-103); however, DMC is a widespread issue across many counties in Pennsylvania. As with the statewide aggregate data, jurisdictions consistently show DMC at the point of arrest, secure detention, and secure confinement. Table 13 (p. 28) highlights jurisdictions that have what can be considered a balanced RRI at different decision points in 2010. Only three counties have a balanced RRI across all racial/ethnic categorizations at arrest; only five counties at secure detention; and seven counties at residential placement.

Conversely, few jurisdictions showed what can be considered severely imbalanced RRIs (Table 15, p. 32) at the decision points of diversion (0), petition (1), delinquent findings (0), probation (0), and residential placement (2) across all racial/ethnic categorizations. However, DMC is pronounced at the

arrest stage, as more than half (66%) of the jurisdictions have an imbalanced RRI for Black juveniles and 47% of jurisdictions had an imbalanced RRI for all minorities.

What minority groups are most impacted by DMC?

Statewide, African-American and Hispanic/Latino youth are most influenced by DMC issues. These groups showed statistically significant RRIs at 8 and 7 decision points, respectively (Table 4, p. 18). Within the DMC Reduction Sites, both African-American and Hispanic/Latino youth are most impacted, with the exception of Allegheny, in which African-American youth were most impacted. There is much variance amongst individual counties, with no discernible pattern; therefore an examination of county-specific data is recommended.

How do current DMC rates compare to those reported in the Kempf study?

Our conclusions indicate that many of the 14 counties from the Kempf (1992) study showed a decrease in RRI rates from 1989 to 2000, then an increase in 2009 (Appendices I-R, pp. 104-113). However, there is much variance between counties across the eight decision points that were examined, with no discernible patterns. Patterns can be seen at the county level, so an examination of county-specific data is again recommended.

A richer body of data for trend analysis is provided in Tables 17-21 (pp. 35-39). The data presented in these tables show the RRI at various decision points for the five DMC Reduction Sites over a ten year period (2000-2009). As compared to the Kempf comparison which looked at 3 time intervals (1989, 2000, and 2009) and at only all minority youth, the trends shown in Tables 17-21 look at 3 different racial/ethnic categorizations at each of ten years.

Is race/ethnicity a factor in juvenile justice processing and decision-making when controlling for other case-level variables?

Yes. An analysis, which controlled for case-level variables that are collected within the Juvenile Court Judges' Commission's Pennsylvania Juvenile Case Management System (PaJCMS), was conducted for the DMC Reduction Sites for 2009 and 2010 data. These six variables were **gender**, **age**, **school status**, **family status**, **crime type**, **and living arrangement**.

Generally, controlling for these variables did not diminish the presence of DMC; in several instances, RRIs were more pronounced. This was especially evident when examining the analysis for delinquent findings and residential placement. This would indicate that RRIs are more reflective and representative of decisions made by juvenile justice practitioners rather than the individual characteristics of a specific juvenile.

Is race/ethnicity a factor in juvenile justice processing and decision-making when controlling for community-level variables?

This finding is inconclusive. An analysis, which controlled for community-level variables that were gathered from the Commonwealth of Pennsylvania and the 2000 United States Census, was conducted on data for the entire state for 2007 and 2008. These five variables were **residential mobility**, **school performance**, **family status**, **living arrangements**, **and economic inequality**. Please note that the measures in this analysis reflect aggregate county measures for each of the 67 counties in Pennsylvania. Therefore, the findings are indicative of county-level affects.

The most prominent community-level factor influencing DMC is family status. This was evident at the arrest stage for both 2007 and 2008. This would indicate that youth who come from broken homes (parents are separated, divorced or never married) were more likely to be arrested. Interestingly, the analysis also indicates that communities with both higher levels of residential mobility and juveniles who are out of school experienced a decrease in arrests for all minorities. In general, this analysis would indicate that RRIs, with the possible exception of arrest, are more reflective and representative of systemic issues rather than community-level factors.

What are the perceived issues related to DMC by juvenile justice stakeholders?

Two focus groups were convened, and facilitated by an independent moderator, as an exploratory study of the viewpoints of juvenile justice practitioners regarding minority youth and their level of involvement in the juvenile justice system. Representatives of the DMC Reduction Sites comprised one focus group; representatives of Bucks, Delaware, Lehigh, Montgomery, and York counties comprised the comparison group, which was selected based on the demographic similarities to the DMC Reduction Sites.

Some solutions for reducing DMC from the focus groups were:

- Embracing a holistic approach with a unity of vision from the courts, to senior management, to line probation officers, to cooperating families as the best approach for a successful juvenile justice system. (pp. 68-72);
- Adopting evidence-based practices to reduce possible subjective race-based decision making, particularly the adoption of objective risks and needs assessment instruments; and
- Requiring more cultural awareness training, both of police officers and probation officers, and to increase awareness to alternatives to placing juveniles. (pp. 75-80).

Overall, the findings from this study would indicate that DMC in Pennsylvania is more of a function of systemic inequities and biases, as opposed to differential offending patterns among minority youth or individual characteristics and social histories. The overarching implication from this finding to ensure an equitable distribution of services is that Pennsylvania's juvenile justice system itself must focus on, analyze, and review how decisions are made to process juveniles throughout the system.

RECOMMENDATIONS

- Educate public officials about the federal mandate to reduce or eliminate DMC, including expediting the dissemination of data to increase awareness of DMC as a statewide concern;
- Integrate DMC as an education module (at the state and county levels) for cultural competence
 and ethnic awareness for all juvenile justice professionals. This would include an pre/post
 assessment of competencies taught in the training;
- Examine re-arrest data from 2007 onward to determine the factors that impact recidivism across race:
- Adopt evidence-based practices to analyze treatment modalities with the goal of reducing recidivism among juvenile delinquents;
- Development, both statewide and locally, of DMC intervention strategies that focus on specific decision points with the highest RRI;
- Each county should be aware of DMC reduction or prevention strategies based on local datadriven evidence;
- Each county should explore gaps of services related to community-based alternatives to secure detention and secure confinement;
- Continue more extensive macro-level analysis that examines structural factors (e.g., poverty, living arrangements) across all ethnic groups to discern how such factors relate to RRI;
- Examine the methodology in which secure detention and secure confinement decisions are made in Pennsylvania's juvenile justice system;
- Conduct Focus Groups in the best and worst DMC performing counties to include a broad spectrum of the community most affected by DMC to include participants from law enforcement, school personnel, parents, the faith community, and at-risk juveniles to gather diverse perspectives on solutions to reducing DMC.

CHAPTER 1

I. Overview of Disproportionate Minority Contact (DMC)

In 1989, the disproportionate minority confinement mandate was passed as part of the reauthorization of the Juvenile Justice and Delinquency Prevention (JJDP) Act of 1974 (Public Law 93-415, section 223[a][23]). States have been selected to receive funding from the federal government to enable the development of a comprehensive approach to examine the disproportionate minority youth presence in the juvenile justice system. The Juvenile Justice and Delinquency Prevention Act of 2002 requires states participating in the Formula Grants Program to "address juvenile delinquency prevention efforts and system improvement efforts designed to reduce, without establishing or requiring numerical standards or quotas, the disproportionate number of juvenile members of minority groups who come into contact with the juvenile justice system" (section 223 [a][22]). The Office of Juvenile Justice and Delinquency Prevention (OJJDP) requires states to carry out the following five phases or core strategies to satisfy this mandate in a three-year time frame. Due to time constraints, this research was conducted over a 12-month period and focused on Phase I Identification and Phase II Assessment which was tailored to Pennsylvania's needs as detailed below:

- I. Identification to determine the extent to which Disproportionate Minority Contact (DMC) exists at the state and county levels across the multiple contact points in the juvenile justice system;
- II. Assessment to compare DMC across various jurisdictions and to levels found in the 1992 Kempf report, and attempt to identify underlying factors believed to contribute to DMC;
- III. Intervention to develop and implement intervention strategies to address these identified reasons;
- IV. Evaluation to evaluate the effectiveness of the chosen intervention strategies;
- V. Monitoring to note changes in DMC trends and to adjust intervention strategies as needed.

The goals of the original research proposal were twofold. The first goal was to develop a comprehensive approach to identifying the extent and nature of the disproportionate minority presence in the Pennsylvania (PA) juvenile justice system. The second goal was to use those findings to produce initiatives that may reduce instances of disproportionate minority presence. The aforementioned goals were pursued through the following objectives:

1. To provide an overview describing the extent to which minority youth are overrepresented.

¹ In the 2002 DMC mandate, the term "disproportionate minority confinement" was changed to "disproportionate minority contact."

- 2. To begin to describe the nature of that overrepresentation and identify the jurisdictions and the degree of overrepresentation at various decision points within the PA juvenile justice system.
- 3. To create a foundation for ongoing monitoring of disproportionate contact, (preferably annually, but at a minimum at least every 3 years).
- 4. To create the framework and baseline information for a more in-depth evaluation to include qualitative data.

This research project took various steps pertaining to these phases and was conducted during a one-year period, January 1, 2011 – December 31, 2011.

I. Overview of the Research Project: Identification and Assessment are two Phases of DMC Monitoring, Reduction, and Prevention Efforts

To address DMC in Pennsylvania's juvenile justice system, it was first necessary to determine whether and where DMC is apparent. This was accomplished by compiling statistics related to the numbers of white and minority juveniles who come in contact with the juvenile justice system at various points. The measure of DMC is referred to as the Relative Rate Index (RRI). RRI is calculated for each decision point as the rate per youth at risk (ages 10 to 17). The number of cases is used to compute a rate of occurrence, and those rates are compared between racial/ethnic categories. For example, if the rate of arrests is 80 per 1,000 white youth and 320 per 1,000 African-American youth, the RRI (320/80) would be 4.0. In this example, an RRI of 4.0 would suggest that African-American youth are four times more likely to be arrested compared to white youths. This RRI is calculated for each decision point within the juvenile justice system and can be evaluated to determine if it is statistically significant, meaning if it deviates from what is expected by more than chance. An index value of 1.00 would indicate that the rates are the same.

Currently, data collected for DMC identification purposes includes population figures for juveniles by race/ethnicity, and the numbers of juveniles within each group who have come in contact with the juvenile justice system at various points: arrest; referral to juvenile court; diversion; secure detention; delinquency petition; delinquent finding; probation; out of home residential placement; confinement in secure juvenile correctional facility; and transfer to adult court. Racial/ethnic groups included in past identification efforts are: Caucasian/White; Black; Asian; Native American; and Hispanic/Latino. See Table 1 detailing the decision points, the base or population from which the RRIs are calculated for that decision point, and the source of the data. When RRIs are calculated, values greater than 1.0 suggest DMC among ethnic minority youth for arrest, referrals to juvenile court, secure detention, delinquency petition, delinquent finding, out of home residential placement, confinement in secure juvenile correctional facility, and transfer to adult court. In contrast, values less than 1.0 suggest DMC among ethnic minority youth for diversion and probation.

Table 1. Decision Points and Data Sources

OJJDP Defined Decision Point	Base Used for RRI Calculation	Source of Data
Population at risk (age 10 - 17)		U.S. Census
Juvenile Arrests	Per 1,000 youth	PA State Police UCR report arrests
Referral to Juvenile Court	Per 100 arrests	Juvenile Court dispositions, Juvenile Court Judges' Commission disposition database, JCJC
Cases Diverted	Per 100 referrals	Juvenile Court dispositions diverted, JCJC
Cases Involving Secure Detention	Per 100 referrals	Secure detention admissions, PA detention center admission logs
Cases Petitioned (charge filed)	Per 100 referrals	Juvenile Court dispositions formally processed, JCJC
Cases Resulting in Delinquent Findings	Per 100 youth petitioned	Juvenile court dispositions adjudicated delinquent, JCJC
Cases Resulting in Probation	Per 100 youth found delinquent	Juvenile court dispositions resulting in probation, JCJC
Cases Resulting in Out of Home Residential Placement	Per 100 youth found delinquent	Juvenile court dispositions resulting in out of home placement in a residential setting, JCJC
Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	Per 100 youth found delinquent	Juvenile court dispositions resulting in out of home placement in a secure setting, JCJC
Cases Transferred to Adult Court	Per 100 youth petitioned	Juvenile court dispositions resulting in transfer for criminal proceedings, JCJC

A. Data Content

The data for this study comes from two sources. First, data utilized county-wide secondary data on juvenile offenders contained in the Pennsylvania Juvenile Case Management System (PaJCMS). These data contain vital information on juvenile dispositions from all 67 Pennsylvania counties. In PaJCMS, referrals are actual dispositions, not actual referrals to court or other judicial intervention. The researchers defined performance indicators from these data based on recommendations of prior research (Leiber, 2002; 2011) designed to examine DMC. After the content of desired data was determined, appropriate data sources and/or new methods of data collection were identified and modified as necessary. Due to the nature of the data system, it was possible that duplicate cases were included such that youth may have been in the system multiple times due to multiple charges, for example. Second, supplemental data came from the 2000 and 2010 United States census. The criterion was used such that

only counties with at least 1% of the population being of a minority status would be included in the analysis. This procedure eliminated three counties (i.e., Elk, Jefferson, Warren).

The key to the identification phase is data quality and linkage from and between agencies, sources, and research questions. This process to examine these data occurred in the following steps:

Step 1: Reviewed current data collection points to assure that there is no ambiguity in the meaning of these indicators and the extent to which they fit Pennsylvania's juvenile justice system.

Example: Micro-level JCJC variables:

Crime type (i.e., person, property, drug), age, school problems, race, gender, family status, severity of contact (i.e., stages completed in the juvenile justice system), and county code were all examined.

B. Data Quality

The availability and extent of data were examined to ensure all data were available across the counties meeting the 1% minority status criterion in Pennsylvania based on identified indicators.

Step 2: Monitored the quality of juvenile data by evaluating the Pennsylvania Juvenile Case Management System (PaJCMS), and provided feedback concerning the percentage of missing data.

Step 3: Considered additional macro-level indicators that should be added to the DMC identification data collection phase.

Example: Macro-level variables from the 2000 Census:

Residential mobility, percentage of female-headed households, unemployment, poverty, and lack of a high school diploma were all examined.

Step 4: After data content and sources were identified, time was spent combining data from different sources in order to examine data from different sources and time periods in one dataset. This was done at the county level.

2. Phase II: Assessment

According to Leiber (2011), the purpose of assessment is to provide policymakers and system practitioners with precise information upon which interventions can be developed and implemented to reduce DMC. It is a search for the causes or factors that contribute to DMC. The following research questions were addressed:

- 1. To what extent is DMC an issue in Pennsylvania at the state and county levels?
- 2. What stages of the Juvenile Justice System are associated with DMC?
- 3. What minority groups are particularly influenced by DMC issues?
- 4. Is race/ethnicity a correlate for decisions in the Juvenile Justice System, while holding other correlates constant (e.g., crime type (i.e., person, property, drug), age, school

problems, race, gender, family status, indicator of social class (i.e., income), severity of contact (i.e., stages completed in the juvenile justice system), and county?

- 5. What are the community-level correlates of minority and non-minority groups' contact with the juvenile justice system?
- 6. Has current decision making related to DMC changed over time?
- 7. What do Juvenile Court judges believe are issues related to DMC?

Data gathered for DMC identification indicated a need for more in-depth assessments of particular decision points in the juvenile justice system and/or particular counties where DMC is apparent. It should be remembered that although statistically significant results deserve attention, a small number of minority juveniles at the county level often make it impossible for statistical significance to be achieved. Step 5: Given the small minority population in some counties in Pennsylvania, patterns and trends should be considered in determining whether assessments are merited, even when findings do not achieve statistical significance. A more focused approach was taken by examining counties with an adequate sample of minority youth.

The assessment portion of the study included four phases: Demographics, Multivariate Statistics, Multi-level Statistics, and Qualitative Focus Groups. These phases were developed to address the specific objectives of the original research proposal. The first phase addressed four research questions.

- 1. What is the extent of DMC an issue in Pennsylvania?
- 2. What stages of the juvenile justice system are associated with DMC?
- 3. What minority groups are particularly influenced by DMC issues?
- 4. Have RRI rates changed across decision points during the past 20 years?

These questions are descriptive issues of the Pennsylvania juvenile justice data; thus, when we completed this phase, the Pennsylvania juvenile justice system was clearly described. We used RRI as a metric to examine DMC and compared current DMC rates to those reported in 1989 and 2000 as an extension of the *The Role of Race in Juvenile Justice Processing in Pennsylvania* report (commonly known as the "Kempf study"). Currently, there are 5 counties with DMC reduction interventions in place which include Allegheny, Berks, Dauphin, Lancaster, and Philadelphia counties. These interventions were implemented between 2003 and 2008 (see Table 2) and are described below.

Minority Youth-Law Enforcement Forums – PCCD provided funding in each of the DMC Reduction Sites for this intervention. These forums brought together minority youth and members of law enforcement in each site, with the goal of improving relations and communication between the two groups.

Failure to Adjust Study – Funded by the MacArthur Foundation, this study examined trends relative to juveniles in Allegheny County who were released from a residential placement facility for failure to adjust. The goal of this study was to gain a better understanding of which youth fail to adjust in residential settings, the factors associated with failure to adjust, and subsequently reduce the RRI of minority youth at the residential placement stage.

Detention Risk Assessment – Funded by the MacArthur Foundation for Berks County, then replicated by Allegheny and Lancaster Counties. This is a standardized risk and needs assessment instrument that is utilized to determine the need for the secure detention of a youth. This instrument is intended to promote and facilitate balanced detention decisions and reduce the RRI of minority youth at the secure detention stage.

Evening Reporting Center – A community-based program designed to be an alternative to removing a juvenile from their home and placing them in secure detention. Utilization of this intervention is intended to reduce the RRI of minority youth at the secure detention stage.

Middle School DMC Curriculum – Funded by PCCD, this curriculum was developed by the Harrisburg Workgroup of the DMC Subcommittee in partnership with the Harrisburg School District. This eight-session curriculum was designed to increase juveniles' awareness of DMC, and develop competencies relative to positive interactions with law enforcement.

Law Enforcement Curriculum – Funded by PCCD, this curriculum was developed by the Philadelphia Workgroup of the DMC Subcommittee in partnership with the University of Pennsylvania. This curriculum has been presented as part of the required training in the Philadelphia Police Academy, and is designed to increase officers' awareness of DMC, and develop competencies relative to positive interactions with minority youth.

Table 2. Intervention Counties

County	Nature of Intervention					
Allegheny	Minority youth-law enforcement forums					
	 Detention Risk Assessment Instrument 					
Berks	Minority youth-law enforcement forums					
	 Detention Risk Assessment Instrument 					
	 Evening reporting center 					
Dauphin	 Minority youth-law enforcement forums 					
	 Middle school DMC curriculum 					
Lancaster	Minority youth-law enforcement forums					
	 Detention Risk Assessment Instrument 					
	 Evening reporting center 					
Philadelphia	Minority youth-law enforcement forums					
	Law enforcement DMC curriculum					

The second phase of the analysis was inferential. This phase addressed the research question, "is race and ethnicity a correlate for decisions in the juvenile justice system?" We used regression analysis to answer this question. In general, regression analysis is the determination of the independent measures that influence the dependent measure. Typically, this is performed using Ordinary Least Squares regression (OLS), but given that the data are dichotomous, we used logistic regression. Logistic regression is the proper method of analysis for dichotomous dependent measures and will provide odds ratios to show the relationship between various predictors and decisions made in the juvenile justice system. DMC was examined across decision points while controlling for other variables that might be influential in DMC. This was accomplished using covariate logistic regression analyses.

The third phase of the analysis was also inferential, but used two levels of data from the individual and the community. This phase addressed the research question, "what are the community-level correlates that influence minority group contact with the juvenile justice system?" We used a multi-level model. Multi-level modeling properly takes into account the cluster that comes with community-level correlates and the individual level measures. Many pieces of software allow for the performance of multi-level modeling including: HLM, Mplus, MLWin, and SAS. In this research study, multi-level modeling via Mplus was used. Mplus provides a simple interface that allowed post-hoc analysis (i.e., simulation analysis) to determine the sensitivity of our results. The other programs do not offer such post-hoc analysis.

The fourth phase of the analysis collected qualitative data. According to the *Disproportionate Minority Contact Technical Assistance Manual (4th ed.)*, "to understand why DMC exists, both quantitative and qualitative data must be examined" (pp. 2-19). Therefore, both quantitative and qualitative research designs were used. Although quantitative research helps to determine the factors and decision points at which DMC may occur, qualitative research provides a deeper understanding of some of the issues around DMC and the decision-making process (OJJDP, 2009). Thus, the current study employed a qualitative component by convening two Focus Groups in order to address those same questions in a different manner and from a different perspective, discussed in Chapter 5. See Table 3 for a summary of the research phases, the questions that were addressed, and procedures implemented.

Table 3. Phases of Research Study

Nature of Analysis	Objectives or Research Questions	Procedure
Phase I: Demographics	• To what extent is DMC an issue in Pennsylvania?	Descriptive statistics; this was in the form of RRIs
	• What stages of the Juvenile Justice System are associated with DMC?	
	• What minority groups are particularly influenced by DMC issues?	
	• How do current rates of DMC compare to those found in 1989?	
Phase II: Multivariate Statistics	• Is race/ethnicity a correlate for decisions in the Juvenile Justice System, while holding other correlates constant?	Covariate logistic regression analyses
Phase III: Multi- level Statistics	 What are the community- level correlates of minority and non-minority groups contact with the Juvenile Justice System? 	Multi-level modeling via Mplus 5.2.
Phase IV: Qualitative	 What are the perceived issues related to DMC from the perception of county stakeholders? 	Discovery-oriented qualitative methodology

CHAPTER 2

I. Phase I: Identification

1. Analyses of Demographics

The first research question addressed in Phase I was to examine to what extent DMC is an issue in Pennsylvania. Table 4 provides a summary of the 2010 RRIs across decision points and ethnicity for the state of Pennsylvania.

Table 4. 2010 RRIs Across Decision Points for Race/Ethnicity

Race/Ethnicity Compared to White Youth

Decision Point	African- American	Hispanic/ Latino	Asian/ Pacific Islander	American Indian/ Alaska Native	Other/ Mixed	All Minorities
Arrests	3.99*	1.78*	0.35*	0.54*		2.92*
Referrals	1.20*	1.33*	0.78*	1.09		1.32*
Diversion	0.77*	0.99	0.92	X	1.43*	0.86*
Secure Detention	2.74*	1.96*	1.87*	X	0.39*	2.44*
Petition	1.21*	1.07*	1.07	X	0.60*	1.14*
Delinquent Findings	0.90*	1.03	0.99	X	0.92*	0.92*
Probation	0.72*	0.84*	0.61*	X	0.89*	0.75*
Residential Placement	1.03	1.21*	1.13	X	1.32*	1.07
Secure Confinement	2.03*	2.52*	X	X	2.04*	2.14*
Transfer to Adult Court	1.15	1.09	X	X	X	1.12

^{*=}statistically significant

X=insufficient number of cases for analysis

As can be seen in Table 4, DMC in Pennsylvania is an issue. Most notable decision points are arrests, secure detention, and secure confinement among African-Americans; arrests, secure detention, and secure confinement among Hispanic/Latinos; secure detention among Asian/Pacific Islanders; secure confinement among Other/Mixed; and arrests, secure detention, and secure confinement among all minorities. Although the overall Pennsylvania numbers are important, a closer look at each decision point across counties may also offer insight as to which counties have the highest and lowest RRIs across decision points. Specifically, the Pennsylvania average along with the counties with the five highest and

five lowest RRIs for each decision point will be provided in the Tables below. In addition, an RRI rate of 1.0 is considered ideal so those counties with a rate between .90 and 1.10 will also be identified.

The first decision point, which is also called contact point, is for juvenile arrest. The 2010 arrest RRIs for all counties are provided in Appendix A. Table 5 provides the Pennsylvania average (i.e., all counties) along with the counties with the highest and lowest RRI for arrest rates. All of these values were retrieved from the summary tables for each county in the 2010 DMC workbook. There are 6 counties in which African-American youth are arrested more than 5 times the rate compared to white youth. The top 5 counties can be seen in Table 5; Allegheny (not shown) has an RRI of 5.14 for African American youth. Of note is that one of the intervention counties (i.e., Lancaster) had high RRIs among Hispanic youth and another intervention county (i.e., Allegheny) had high RRIs for all minority youth. Four counties were identified as high among more than one race category: Washington (Black and all minority), Westmoreland (Black and all minority), Cambria (Black and all minority), and Lawrence (Black and all minority). Carbon county was identified as low across all three race categorizations (Black, Hispanic, and all minority), whereas Wayne, Perry and Monroe were low across two categorizations (Black and all minority).

Table 5. 2010 Highest and Lowest RRI for Arrest across Race/Ethnicities

Decision Point: Arrest							
Black Hispanic All Minority							
Washington	6.54*	Union	3.46*	Washington	4.71*		
Montgomery	6.17*	Lancaster	2.43*	Lawrence	4.46*		
Westmoreland	6.06*	Chester	2.31*	Cambria	4.37*		
Cambria	5.77*	Lebanon	2.11*	Westmoreland	4.28*		
Lawrence	5.25*	Lackawanna	1.85	Allegheny	4.23*		
Pennsylvania Average	3.99*	Pennsylvania Average	1.78*	Pennsylvania Average	2.92*		
Pike	.75	Lycoming	.54	Centre	.70		
Wayne	1.36	Carbon	.62	Wayne	.70		
Perry	1.37	Cumberland	.71	Carbon	.88		
Carbon	1.39	Delaware	1.01	Monroe	1.00		
Monroe	1.43*	Westmoreland	1.11	Perry	1.05		

^{*=}statistically significant

The second contact point is referral to juvenile court. The 2010 referral RRIs for all counties are provided in Appendix B. Table 6 provides the Pennsylvania average along with the counties with the highest and lowest RRI for referral rates. Two counties were identified as high among all race categories (Lehigh and Philadelphia). It should also be noted that the intervention county of Dauphin was high among Hispanic youth. For counties low on RRI, Franklin was low Hispanic and all minority youth whereas Adams, Westmoreland and Crawford counties were low among Black and all minority youth.

Table 6. 2010 Highest and Lowest RRI for Referral across Race/Ethnicities

Decision Point: Referral							
Black Hispanic All Minority							
Philadelphia	2.68*	Philadelphia	3.53*	Luzerne	2.85		
Lehigh	2.14	Lehigh	3.09	Lehigh	2.85		
Berks	2.11*	Dauphin	2.70*	Philadelphia	2.82		
Montgomery	2.07*	Berks	2.66*	Venango	2.78*		
Lackawanna	1.95	Lackawanna	2.43*	Carbon	2.75*		
Pennsylvania Average	1.20*	Pennsylvania Average	1.33*	Pennsylvania Average	1.30*		
Blair	.68*	Franklin	.63*	Franklin	.89		
Adams	.75*	Delaware	.93	Crawford	1.02		
Lawrence	.76	Northampton	1.32*	Cambria	1.09		
Westmoreland	.85*	Chester	1.33*	Westmoreland	1.09*		
Crawford	.88	Monroe	1.35*	Adams	1.18*		

^{*=}statistically significant

The third contact point is diversion. For this decision point, an RRI less than 1.0 suggests DMC. As an example, an RRI for Black youth of .50 would indicate that black youth had half the rate to get diverted compared to white youth. The lower the value, the worse the DMC problem is for diversion. Thus, those counties with the lowest RRIs demonstrated the most DMC at this decision point meaning the ethnic minority youth in that county were less likely to get diverted. The 2010 diversion RRIs for all counties are provided in Appendix C. Table 7 provides the Pennsylvania average along with the counties with the highest and lowest RRI for referral rates. Two counties were low across all three race categories which included Philadelphia and Monroe counties whereas Lackawanna was low for Hispanic and all minority youth. The intervention county of Berks was low among Black youth. Montgomery was identified as high among all race categories.

Table 7. 2010 Highest and Lowest RRI for Diversion across Race/Ethnicities

Decision Point: Diversion						
Black Hispanic All Minority						
Northumberland	.60*	Delaware	.65*	Philadelphia	.78*	
Philadelphia	.72*	Lackawanna	.77	Monroe	.80	
Berks	.81*	Monroe	.80	Westmoreland	.83	
Monroe	.83	Philadelphia	.82	Lackawanna	.86	
Lawrence	.84	York	.96	Blair	.88	
Pennsylvania Average	.77*	Pennsylvania Average	.99	Pennsylvania Average	.86*	
Montgomery	1.29*	Montgomery	1.81*	Crawford	1.79*	
Mercer	1.22	Erie	1.36*	Venango	1.77*	
Lycoming	1.16	Lebanon	1.32	Butler	1.61*	
Cumberland	1.05	Bucks	1.30*	Adams	1.43*	
Franklin	1.03	Lancaster	1.13	Montgomery	1.33*	

^{*=}statistically significant

The fourth contact point is secure detention. The 2010 secure detention RRIs for all counties are provided in Appendix D. Table 8 provides the Pennsylvania average along with the counties with the highest and lowest RRI for secure detention. Three counties were identified as high among more than one race category: Berks (Black, Hispanic, and all minority), Fayette and Dauphin (Black and all minority). In addition, the intervention county of Lancaster was high among Hispanic youth. Four counties were identified as low among more than one race category: Lackawanna (Black, Hispanic, and all minority), Bucks (Black, Hispanic, and all minority), Montgomery (Black and all minority), and Cumberland (Black and all minority).

Table 8. 2010 Highest and Lowest RRI for Secure Detention across Race/Ethnicities

Decision Point: Secure Detention						
Black Hispanic All Minority						
Fayette	5.24*	Delaware	4.26*	Fayette	5.23*	
Blair	3.15*	Berks	2.01*	Dauphin	2.73*	
Dauphin	3.14*	York	1.93	Allegheny	2.46*	
Berks	3.04*	Lancaster	1.84	Berks	2.13	
Westmoreland	2.54*	Northampton	1.81	Beaver	2.05	
Pennsylvania Average	2.74*	Pennsylvania Average	1.96*	Pennsylvania Average	2.44*	
Lackawanna	.66*	Erie	.77	Cumberland	.65	
Montgomery	.70*	Lackawanna	.83*	Lackawanna	.72*	
Bucks	.76*	Bucks	.86	Bucks	.75*	
Cumberland	.85	Lehigh	.96	Montgomery	.79*	
Philadelphia	1.30	Monroe	1.07	Lehigh	1.06	

^{*=}statistically significant

The fifth contact point is petition. The 2010 petition RRIs for all counties are provided in Appendix E. Table 9 provides the Pennsylvania average along with the counties with the highest and lowest RRI for petition. Three counties were identified as high among more than one race category: York (Black and Hispanic), Delaware (Black, Hispanic, and all minority), and Beaver (Black and all minority). Lancaster and Berks were in the low group among Hispanic youth.

Table 9. 2010 Highest and Lowest RRI for Petition across Race/Ethnicities

Decision Point: Petition						
Black Hispanic All Minority						
Northumberland	2.42*	Delaware	1.79*	Fayette	1.29	
Fayette	1.37	Lackawanna	1.18	Beaver	1.28	
Beaver	1.28	York	1.13	Blair	1.26	
Delaware	1.27*	Erie	1.13	Delaware	1.19	
York	1.25*	Monroe	1.07	Westmoreland	1.16*	
Pennsylvania Average	1.21*	Pennsylvania Average	1.07*	Pennsylvania Average	1.14*	
Montgomery	.78*	Lancaster	.89	Lawrence	.57*	
Cumberland	.84	Bucks	.91	Adams	.72	
Mercer	.90	Chester	.92	Venango	.72*	
Lycoming	.93	Berks	.94	Crawford	.75*	
Chester	.97	Lebanon	.94	Montgomery	.79	

^{*=}statistically significant

The sixth contact point is delinquent findings. The 2010 delinquent findings RRIs for all counties are provided in Appendix F. Table 10 provides the Pennsylvania average along with the counties with the highest and lowest RRI for delinquent findings. The intervention county of Dauphin was high among all three race categories. In addition, four other counties were high in at least two categories which included Lycoming (Black and all minority), Lebanon (Hispanic and all minority), as well as the intervention counties of Allegheny (Black and all minority), and Berks (Black, Hispanic, and all minority). The low RRI counties were very consistent with Bucks, Lehigh, and Montgomery being in all three categorizations (Black and Hispanic and all minority), whereas Cambria County was low among Black and all minority youth and Lackawanna was low among Hispanic and all minority youth.

Table 10. 2010 Highest and Lowest RRI for Delinquent Findings across Race/Ethnicities

Decision Point: Delinquent Findings							
В	Black Hispanic All Minority						
Lycoming	1.78*	Lebanon	1.48*	Lycoming	1.69*		
Allegheny	1.61*	Berks	1.39*	Allegheny	1.60*		
Dauphin	1.48*	Dauphin	1.30*	Dauphin	1.43*		
Berks	1.33	Chester	1.27*	Berks	1.35*		
Washington	1.26*	York	1.19*	Lebanon	1.30*		
Pennsylvania Average	.90*	Pennsylvania Average	1.03	Pennsylvania Average	.92*		
Cambria	.78	Bucks	.81	Cambria	.80		
Montgomery	.86*	Lackawanna	.88	Bucks	.86*		
Bucks	.87	Montgomery	.92	Montgomery	.86*		
Lehigh	.94	Lehigh	.95	Lehigh	.95		
Monroe	.98	Luzerne	.99	Lackawanna	.99		

^{*=}statistically significant

The seventh contact point is probation. For this decision point, an RRI less than 1.0 suggests DMC. As an example, an RRI of Black youth of .50 would indicate that Black youth had half the rate to get probation compared to white youth. The lower the value, the worse the DMC problem is for probation. Thus, those counties with the lowest RRIs demonstrated the most DMC at this decision point meaning ethnic minority youth in that county are less likely to get probation. The 2010 probation RRIs for all counties are provided in Appendix G. Table 11 provides the Pennsylvania average along with the counties with the highest and lowest RRI for probation. Five counties were identified as low among more than one race category: Franklin (Black and all minority), Lehigh, (Black and Hispanic), Mercer (Black and all minority), Montgomery (Black and all minority), and Washington (Black and all minority). The intervention county of Berks along with Northampton and Monroe were identified as high across all three race categories whereas Westmoreland was high among Black and all minority youths.

Table 11. 2010 Highest and Lowest RRI for Probation Findings across Race/Ethnicities

Decision Point: Probation							
Bl	Black Hispanic All Minority						
Washington	.67*	Lebanon	.72	Lawrence	.66*		
Montgomery	.73	Bucks	.76	Washington	.69*		
Mercer	.74	York	.76*	Mercer	.73*		
Franklin	.75	Erie	.79	Montgomery	.75*		
Lehigh	.76	Lehigh	.87	Franklin	.79		
Pennsylvania Average	.72*	Pennsylvania Average	.84	Pennsylvania Average	.89		
Berks	1.30	Berks	1.34	Berks	1.30		
Monroe	1.03	Monroe	1.06	Monroe	1.03		
Westmoreland	1.02	Northampton	1.05	Northampton	1.02		
Northampton	.99	Chester	.98	Westmoreland	.95		
Erie	.95	Philadelphia	.96	Delaware	.94		

^{*=}statistically significant

The eighth contact point is residential placement. The 2010 residential placement RRIs for all counties are provided in Appendix H. Table 12 provides the Pennsylvania average along with the counties with the highest and lowest RRI for residential placement. Pennsylvania decided to add residential placement as a contact point for a complete DMC snapshot; the placement contact point is not now required by OJJDP. Three counties were identified as high across all race categories which included Lehigh and the intervention counties of Lancaster and Dauphin. Washington County was high among Black and all minority youth whereas Philadelphia was high among Black youth. The intervention county of Berks along with Montgomery and Northampton were low across all race categorizations whereas Lebanon County was low among Hispanic and all minority youth.

Table 12. 2010 Highest and Lowest RRI for Residential Placement across Race/Ethnicities

Decision Point: Residential Placement							
В	Black Hispanic All Minority						
Washington	3.62*	Lehigh	1.78*	Washington	3.49*		
Dauphin	2.02*	Dauphin	1.75	Dauphin	1.93*		
Lehigh	1.77*	Lancaster	1.62	Lehigh	1.76*		
Lancaster	1.63	Erie	1.37	Franklin	1.74*		
Philadelphia	1.61	York	1.34	Lancaster	1.73*		
Pennsylvania Average	1.03	Pennsylvania Average	1.21*	Pennsylvania Average	1.32		
Berks	.64	Northampton	.69	Northampton	.73		
Northampton	.73	Berks	.83	Berks	.80		
Montgomery	.80*	Monroe	.88	Montgomery	.83		
Westmoreland	.93	Lebanon	.95	Lebanon	.90		
Erie	1.00	Montgomery	.98	Delaware	1.04		

^{*=}statistically significant

The ninth contact point is secure confinement and the tenth is transfer to adult court. These two decision points are not provided because only two counties (York and Erie) had RRIs calculated for secure confinement and none were calculated for transfer to adult court because of the limited sample size across counties. For secure confinement, Erie County had RRIs of 1.39 for Black and 1.39 for all minority youth, respectively. York County RRIs were 1.98, 2.41, and 2.07 for Black, Hispanic, and all minority youth, respectively. There were no county level RRIs calculated for transfer to adult court. Although these last two decision/contact points are important to consider, it may be better to assess them using state-level data because of the few cases at the county level. The state level data for secure confinement and transfer to adult court were provided earlier in Table 4. As can be seen, secure confinement has RRIs of 2.05 for Black, 2.58 for Hispanic, and 2.10 for all minority youth. These values suggest ethnic minority youth had approximately twice the rate of secure confinement compared to white youth in the state indicating a high level of DMC.

The first set of reports across counties provided the five highest and lowest RRIs among counties across the ethnic groups of African-American, Hispanic, and all minority youths. Furthermore, appendices A – H (pp. 88-103) provide the RRIs for each county and indicate if it is statistically significant. Statistical significance is related to several factors, one of which is sample size. So, a particular RRI in one county with a large sample may be statistically significant, whereas that same RRI in a smaller county with the same RRI may be non-significant. As an example, Appendix E shows the RRIs for petition. The RRI for all minority youth for Philadelphia County is 1.08 and statistically significant, whereas Lackawanna County has the same RRI of 1.09 which is not significant; this is because of the differing sample sizes from the respective counties. Counties with a larger sample size, require smaller differences to be found statistically significant in most cases. Thus, it may be somewhat deceiving because a high or low value may be in a good range. In other words, that proposed ideal value for an RRI should be close to 1.0. For this project, a range of .90 - 1.10 was defined as a balanced RRI. Table 13 provides a listing of counties that were in that range for a given minority group comparison across decision points. It is suggested that an RRI between .90 and 1.10 may represent a balanced measure in that youths, regardless of ethnicity, are not receiving disproportionate contact at any point within the juvenile justice system.

Table 13. 2010 Counties with RRIs between .90 - 1.10 across Decision Points and Race/Ethnicities

Decision Point: Arrest					
Black	Hispanic	All Minority			
	Delaware	Monroe, Perry			
	Davisian Paint, Pafamal				
Black	Decision Point: Referral Hispanic	All Minority			
Cambria, Venango	Delaware	Cambria, Crawford, Westmoreland			
	Decision Point: Diversion				
Black	Hispanic	All Minority			
Allegheny, Blair, Bucks, Cambria, Chester, Cumberland, Dauphin, Erie, Fayette, Franklin, Lackawanna, Lehigh, Luzerne, Northampton, Schuylkill, Washington, York	Berks, Chester, Lehigh, Luzerne, Northampton, York	Allegheny, Berks, Bucks, Cambria, Chester, Cumberland, Dauphin, Delaware, Erie, Fayette, Franklin, Lancaster, Lehigh, Luzerne, Northampton, Northumberland, Schuylkill, Washington, York			
	Decision Point: Secure Detention				
Black	Hispanic	All Minority			
	Chester, Lebanon, Lehigh, Monroe	Lehigh			
Decision Point: Petition					
Black	Hispanic	All Minority			
Allegheny, Blair, Bucks, Cambria, Chester, Dauphin, Erie, Franklin, Lackawanna, Lehigh, Lycoming, Mercer, Monroe, Northampton, Philadelphia, Schuylkill, Washington, Westmoreland	Berks, Bucks, Chester, Dauphin, Lebanon, Lehigh, Luzerne, Monroe, Montgomery, Northampton, Philadelphia	Allegheny, Berks, Bucks, Cambria, Chester, Dauphin, Erie, Franklin, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, Mercer, Monroe, Northampton, Northumberland, Philadelphia, Schuylkill, Washington			
	Decision Point: Delinquent Findings				
Black	Hispanic	All Minority			
Beaver, Chester, Erie, Franklin, Lancaster, Lehigh, Mercer, Monroe, Westmoreland, York	Erie, , Lehigh, Luzerne, Monroe, Montgomery	Beaver, Cumberland, Erie, Franklin, Lackawanna, Lancaster, Lehigh, Mercer, Monroe, Westmoreland, York			
Decision Point: Probation					
Black	Hispanic	All Minority			
Chester, Delaware, Erie, Lancaster, Lycoming, Monroe, Northampton, Philadelphia, Westmoreland	Chester, Lancaster, Monroe, Montgomery, Northampton, Philadelphia	Chester, Delaware, Luzerne, Lycoming, Monroe, Northampton, Philadelphia, Westmoreland			
	Decision Point: Residential Placement				
Black	Hispanic	All Minority			
Delaware, Erie, Westmoreland	Lebanon, Montgomery	Delaware, Lebanon			

As can be seen in Table 13, there is a wide range of performances or measures of RRI across counties, ethnicities, and decision points and this table clearly illustrates that DMC is a widespread issue

across many counties in Pennsylvania. Ideally, a large number of counties would have RRIs in the balanced range across decision points. As an example, there is not a single county that has an RRI between .90 and 1.10 for arrests and secure detention among black youth. In an attempt to display these data in a different manner, Table 14 provides a summary table such that counties were examined in terms of how many RRIs they had between .90 – 1.10 for the first eight decision points (recall that the last two points of contact of secure confinement and transfer to adult court did not have adequate sample sizes to calculate RRIs on all but 2 counties for secure confinement and zero for transfer to adult court). It should be noted that counties have different number of decision points that were examined which again, is based off of an adequate number of cases per decision point by county, thus blank spaces indicate not enough cases for the analysis. The last column in table 14 identifies the total number of decision points in the balanced range out of the total possible for that county. One can get an overall view of counties that tend to have balanced RRIs. There are several views to take into consideration of this table.

First, it is important to examine the table by ethnicity. Among Black youth, Erie had 5 decision points in the ideal range whereas Chester and Westmoreland each had 4. Among Hispanic youth, the best performing counties were Chester, Monroe, and Montgomery each with 4 in the ideal range whereas Lebanon, Lehigh, Luzerne, and Northampton each had 3. Among all minority youth, Lehigh led all counties with 4 in the ideal range whereas Cambria, Chester, Delaware, Erie, Franklin, Lancaster, Luzerne, Monroe, Northampton, and Westmoreland each had 3. A second way to view the data is to look at county performance across all ethnic categories. Examination of the total column shows that when considering the three different categorizations of ethnicities, Chester and Monroe have 11 total decision points with RRIs within .90 and 1.10. Erie had 10, Northampton had 9, and the intervention county of Lancaster had 8 which represented the overall best performing counties with regards to DMC. Of course, another way to examine the table would be to base the total column of off a percentage which was not done for this analysis. A third way to examine the data is to consider the intervention counties; Allegheny, Berks, Dauphin, Lancaster, and Philadelphia. It seems as though all of the intervention counties do have some areas in which they are maintaining balanced RRIs with the best performing ones (based on RRIs in the ideal range) in descending order including Lancaster, Philadelphia, Dauphin, Allegheny, and Berks. Of all the intervention counties, using this approach showed that Lancaster was most balanced across all race categories.

Table 14. Number of RRIs Between .90-1.10 across Decision Points and Race/Ethnicities

County	Number Decision Points .90 – 1.10 for Black Youth	Number Decision Points .90 – 1.10 for Hispanic Youth	Number Decision Points .90 – 1.10 for All Minority Youth	Total Decision Points .90 – 1.10
Adams	0/2	0/1	0/4	0/7
Allegheny	2/8	0/1	2/8	4/17
Armstrong	0/1		0/1	0/2
Beaver	1/6	0/1	1/6	2/13
Bedford	0/1		0/1	0/2
Berks	0/8	2/8	2/8	4/24
Blair	2/5	0/1	0/6	2/12
Bucks	2/8	1/8	2/8	5/24
Butler	0/2	0/1	0/4	0/7
Cambria	3/6	0/1	3/6	6/13
Carbon	0/1	0/1	0/2	0/4
Centre	0/1		0/1	0/2
Chester	4/8	4/7	3/8	11/23
Columbia	0/1		0/1	0/2
Crawford	0/2	0/1	1/4	1/7
Cumberland	1/5	0/1	2/6	3/12
Dauphin	2/8	1/8	2/8	5/24
Delaware	2/8	2/5	3/8	7/21
Erie	5/9	1/8	4/9	10/26
Fayette	1/6		1/6	2/12
Franklin	3/8	0/2	3/8	6/18
Fulton	0/1		0/1	0/2
Huntingdon	0/1		0/1	0/2
Indiana	0/1		0/1	0/2
Juniata			0/1	0/1
Lackawanna	2/6	0/6	2/8	4/20
Lancaster	2/8	1/8	3/8	6/24
Lawrence	0/5	2,0	0/6	0/11
Lebanon	0/4	3/8	2/8	5/20
Lehigh	3/8	4/8	3/8	10/24
Luzerne	1/8	3/6	3/8	7/22
Lycoming	2/7	0/1	2/7	4/15
McKean			0/1	0/1
Mercer	2/7		2/7	4/14
Mifflin	0/1		0/1	0/2
Monroe	3/8	4/8	3/8	10/24
Montgomery	0/8	4/8	0/8	4/24
Northampton	3/8	3/8	3/8	9/24
Northumberland	0/4	0/2	2/4	2/10
Perry	0/1		1/1	1/2
Philadelphia	2/8	2/8	2/8	6/24
Pike	0/1	0/1	0/2	0/4
Schuylkill	2/4	0/2	2/4	4/10
Snyder	0/1	0/1	0/1	0/3
Somerset	0/1	U, 1	0/1	0/2
Union	0/1	0/1	0/1	0/3
Venango	1/2	U, 1	0/4	1/6
Washington	2/8		2/8	4/16
Wayne	0/1		0/1	0/2
Westmoreland	4/8	0/1	3/8	7/17
Wyoming	→ / O	U/ 1	0/1	0/1
vv yoming -			0/1	0/1

York 2/9 1/9 2/9 5/27

Just as counties performing in an ideal range were reported, there are instances in which counties are in need of significant improvement. This study used certain values to establish benchmarks which may offer support for a very high presence of DMC. These values are .50 and less, or 2.0 and greater and represent an imbalanced RRI. In each case, it represents the same odds; meaning twice as likely or half as likely represent the same odds. The same format as the prior section was used to identify those counties with RRIs less than .50 or greater than 2.0 across decision points and ethnic categorizations and represent those counties with the most severely imbalanced RRIs and can be seen in Tables 15 and 16. The tables are presented in the same format as the prior two tables.

Table 15 provides a listing of counties that were in that range for a given minority group comparison across decision points and Table 16 provides a count for each county. One immediate point that is evident is that arrest is the decision point that yields the most cases of RRIs which are quite far from a desired RRI of 1.0. In fact, 42 (66%; not including Elk, Jefferson, and Warren counties because they did not meet the 1% criteria) counties have RRIs larger than 2.0 among Black youth and 30 (47%) among all minority youth. The data clearly show that arrest is an area that will require future work across the majority of counties within Pennsylvania. Table 16 provides a summary of counties indicating how many decision points have RRIs less than .50 or greater than 2.0 across the three ethnicity categorizations.

To put Tables 15 and 16 in context, for example, among Black youth, Berks, Dauphin, and Lehigh each had 3 decision points in the extreme range. Among Hispanic youth, the counties with the highest number of extreme RRIs across decision points were Berks, Delaware, and Lehigh with 2 each. Among all minority youth, extremes were limited to two decision points for several counties. A second way to view the data is to look at county performance across all ethnic categories. Examination of the total column shows that when considering the three different categorizations of ethnicities, Berks and Lehigh rank as the top counties with 7 out of 24 total decision points with RRIs in the extreme range. A third way to examine the data is to consider the intervention counties; Allegheny, Berks, Dauphin, Lancaster, and Philadelphia. It seems as though all of the intervention counties do have some areas in which there is room for improvement in working toward more balanced RRIs. It appears that Berks and Dauphin have the most decision points in the extreme range with 7 and 6, respectively. Allegheny County has 5 decision points in the extreme range whereas Lancaster and Philadelphia have 3 each. Taken together with ideal and extreme RRIs, it appears that Monroe is the most balanced county with Chester, Erie, and Northampton also performing very well.

Table 15. 2010 Counties with RRIs between < .50 or > 2.0 across Decision Points and Race/Ethnicities

DI I	Decision Point: Arrest	A 11 3 6'
Black Adams, Allegheny, Armstrong, Beaver, Bedford, Berks, Blair, Bucks, Butler, Cambria, Chester, Columbia, Crawford, Cumberland, Dauphin, Delaware, Erie, Fayette, Franklin, Fulton, Huntingdon, Indiana, Lackawanna, Lancaster, Lawrence, Lebanon, Lehigh, Luzerne, Lycoming, Mercer, Mifflin, Montgomery, Northampton, Northumberland, Schuylkill, Snyder, Somerset, Union, Venango, Washington, Westmoreland, York	Hispanic Allegheny, Chester, Lancaster, Lebanon, Snyder, Union	All Minority Allegheny, Beaver, Bedford, Blair, Cambria, Chester, Crawford, Dauphin, Delaware, Erie, Fayette, Franklin, Fulton, Indiana, Lancaster, Lawrence, Lebanon, Lycoming, Mercer, Mifflin, Montgomery, Schuylkill, Snyder, Somerset, Union, Venango, Washington, Westmoreland, Wyoming, York
	Decision Point: Referral	
Black	Hispanic	All Minority
Berks, Lehigh, Montgomery, Philadelphia	Berks, Dauphin, Lackawanna, Lehigh, Philadelphia	Berks, Carbon, Cumberland, Lackawanna, Lehigh, Luzerne, Montgomery, Northumberland, Philadelphia, Pike, Venango
	Decision Point: Diversion	
Black	Hispanic	All Minority
None	None	None
D1 1	Decision Point: Secure Detention	A 11 3 6'
Black Allegheny, Beaver, Berks, Blair,	Hispanic Berks, Delaware, Lehigh	All Minority Allegheny, Beaver, Berks, Dauphin,
Dauphin, Fayette, Lehigh, Luzerne, Westmoreland, York		Fayette, Lehigh
,		
DI I	Decision Point: Petition	A 11 3 6'
Black	Hispanic	All Minority
Northumberland	None	None
Decisio	on Point: Delinquent Findings and Prob	bation
Black	Hispanic	All Minority
None	None	None
	Decision Point: Residential Placement	
Black	Hispanic	All Minority
Dauphin, Washington	None	Washington
	Decision Point: Secure Confinement	
Black	Decision Point: Secure Confinement Hispanic York	All Minority York

	Number Decision	Number Decision	Number Decision	
County	Points	Points	Points	Total Decision Points
	< .50 or > 2.0 for	< .50 or > 2.0 for	< .50 or > 2.0 for All	.90 - 1.10
Adams	Black Youth	Hispanic Youth 0/1	Minority Youth 0/4	0/4
	2/8	1/1	2/8	5/17
Allegheny	1/1	1/1	0/1	1/2
Armstrong Beaver	2/6	0/1	2/6	4/13
Bedford	1/1	0/1	1/1	2/2
Berks	3/8	2/8	2/8	7/24
Blair	2/5	0/1	1/6	3/12
Bucks	1/8	0/8	0/8	1/24
Butler	1/8	0/8	0/4	1/7
Cambria	1/6	0/1	1/6	2/13
Carbon	0/1	0/1	1/0	1/4
Centre	0/1	0/1	0/1	0/2
Chester	1/8	1/7	1/8	3/23
Columbia	1/8	1//	0/1	1/2
Crawford	1/1	0/1	1/4	2/6
Cumberland	1/5	0/1	1/6	2/12
Dauphin	3/8	1/8	2/8	6/24
Delaware	1/8	2/5	1/8	4/21
Erie	1/8	0/8	1/9	2/26
Fayette	2/6	0/8	2/6	4/12
Franklin	1/8	0/2	1/8	2/18
Fulton	1/1	0/2	1/0	2/2
Huntingdon	1/1		0/1	1/2
Indiana	1/1		1/1	2/2
Juniata	1/1		0/1	0/1
Lackawanna	1/6	1/6	1/8	3/20
Lancaster	1/8	1/8	1/8	3/24
Lawrence	1/5	1/0	1/6	2/11
Lebanon	1/4	1/8	1/8	3/20
Lehigh	3/8	2/8	2/8	7/24
Luzerne	2/8	0/6	1/8	3/22
Lycoming	1/7	0/1	1/7	2/15
McKean			0/1	0/1
Mercer	1/7		1/7	2/14
Mifflin	1/1		1/1	2/2
Monroe	0/8	0/8	0/8	0/24
Montgomery	2/8	0/8	2/8	4/24
Northampton	1/8	0/8	0/8	1/24
Northumberland	2/4	0/2	1/4	3/10
Perry	0/1		0/1	0/2
Philadelphia	1/8	1/8	1/8	3/24
Pike	0/1	0/1	1/2	1/4
Schuylkill	1/4	0/2	1/4	2/10
Snyder	1/1	1/1	1/1	3/3
Somerset	1/1		1/1	2/2
Union	1/1	1/1	1/1	3/3
Venango	1/2		2/4	3/6
Washington	2/8		2/8	4/16
Wayne	0/1		0/1	0/2
Westmoreland	2/8	0/1	1/8	3/17

Wyoming			1/1	1/1
York	2/9	1/9	2/9	5/27

Table 16. Number of RRIs < .50 or > 2.0 across Decision Points and Race/Ethnicities

This phase of the analysis also sought to compare current DMC rates to those reported by Kempf (1992) which were conducted on 1989 data. RRIs were computed for the original 14 counties in the Kempf study which included Allegheny, Beaver, Berks, Chester, Dauphin, Delaware, Erie, Lancaster, Lehigh, Mercer, Montgomery, Northampton, Philadelphia, and York. This phase of the analysis is also descriptive so one is looking at trends over time. Because this is descriptive and statistical significance was not tested, trends are examined and if there is a change of .50 or greater it is viewed as noteworthy. In addition, only RRIs of all minority were available for 1989 so that is what is discussed. Specifically, RRIs are provided for each decision point across the 14 counties for 1989, 2000, and 2009. In addition, RRIs were calculated differently in 1989 than the present. In order to look at comparable RRIs across the Kempf values, 2000 and 2009 RRIs used the 1989 formula. The 2009 RRIs in this section do not correspond to the 2009 RRIs in the following section and the 2009 DMC workbook because of the formula required to adjust to 1989 values. Appendix I provides the RRIs for arrest over the time interval. At arrest, for all minority youth, there was an RRI increase of at least .50 between 1989 and 2000 for Lancaster County and an increase between 2000 and 2009 for York County. Between 1989 and 2000, there were decreases of at least .50 for the counties of Erie, Lehigh, Mercer, Northampton, Philadelphia, and York. Between 2000 and 2009, there were decreases for Beaver and Chester counties. The second and third decision points are referral and diversion, neither of which were assessed in 1989 thus were not examined in this context.

The fourth decision point is secure detention. Appendix L provides the RRIs for secure detention across time for all minority youth. There were marked increases between 2000 and 2009 for Allegheny, Beaver, Chester, Dauphin, Delaware, Erie, and Montgomery. There were marked decreases from 1989 to 2000 for each county that was measured; only Mercer and Philadelphia counties did not have data for 1989. The general pattern among most counties was a dramatic decrease in RRI between 1989 and 2000 for 12 of the counties, then increases between 2000 and 2009 for about half of those counties.

The fifth decision point is petition which is found in Appendix M. There were increases from 2000 to 2009 for every county except Philadelphia County. In contrast, there were decreases from 1989 to 2000 for all 14 counties. For petition, the general pattern was that RRI rates appeared to peak in 1989, drop dramatically in 2000, and then in 2009 have an increase between 1989 and 2000 levels.

The sixth decision point is delinquent findings found in Appendix N, probation is the seventh decision point found in Appendix O, and the eight decision point, residential placement, is found in Appendix P. The same pattern emerged with delinquent findings, probation, and residential placement as was for petition. That is, RRIs were highest in 1989, lowest in 2000, and rose again in 2009, but not to 1989 levels for the vast majority of counties. There were a substantial number of missing cases or not

enough data to perform analyses for secure placement and transfer to adult court as can be seen in Appendices Q and R, thus few trends could be determined.

It was of further interest to examine the intervention counties across the past 10 years across all decision points and again, look for trends. The tables are structured such that if more than half of the years do not have RRIs due to inadequate sample sizes, that decision point was omitted. The first county examined was Allegheny which can be seen in Table 17.

Table 17. Allegheny County RRIs across Decision Points 2000-2009

	Allegheny Ethnic Youth: Black											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Arrest	2.21*	2.50*	3.36*	3.64*	3.50*	4.11*	4.16*	4.40*	4.10*	4.81*		
Referral	2.36*	2.13*	1.45*	1.53*	1.80*	1.59*	1.62*	1.71*	1.90*	1.79*		
Diversion	.81*	.82*	.75*	0.78*	0.77*	0.73*	0.79*	0.80*	0.65*	0.80*		
Secure Detention	2.10*	2.07*	2.53*	2.41*	2.20*	2.33*	2.30*	2.28*	2.47*	2.37*		
Petition	1.07*	1.06*	1.16*	1.10*	1.10*	1.12*	1.10*	1.08*	1.17*	1.08*		
Delinquent Findings	1.03	1.18*	1.35*	1.42*	1.47*	1.26*	1.52*	1.56*	1.37*	1.35*		
Probation	1.01	.93	.96	0.83*	0.89	0.96	0.91	0.88*	0.91	0.85*		
Residential Placement	1.10	1.21	1.18	1.24	1.28*	1.24	1.25	1.96*	1.23	1.54*		
Secure Confinement	.69	2.14	1.38	2.34*	2.71*	2.28*	1.93*	1.54	2.27*	1.11		

				A	llegheny					
				Ethnic Y	outh: Hisp	oanic				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Arrest	.32*	.41*	.39*	0.53*	.36*	.29*	.52*	.39*	.47*	0.46*

	Allegheny Ethnic Youth: All Minority											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Arrest	1.95*	2.20*	2.95*	3.20*	3.03*	3.52*	3.55*	3.69*	3.40*	3.98*		
Referral	2.33*	2.12*	1.44*	1.51*	1.79*	1.59*	1.62*	1.74*	1.94*	1.83*		
Diversion	.82*	.83*	.75*	0.78*	0.77*	0.73*	0.79*	0.81*	0.66*	0.81*		
Secure Detention	2.16*	2.07*	2.57*	2.46*	2.22*	2.36*	2.31*	2.26*	2.43*	2.33*		
Petition	1.06*	1.05*	1.16*	1.10*	1.10*	1.12*	1.10*	1.08*	1.16*	1.07*		
Delinquent Findings	1.03	1.17*	1.35*	1.42*	1.47*	1.27*	1.51*	1.56*	1.36*	1.35*		
Probation	1.01	.93	.96	0.83*	0.88*	0.96	0.91	0.89	0.91	0.86*		
Residential Placement	1.10	1.21	1.18	1.24	1.28*	1.24	1.25	1.94*	1.25	1.58*		
Secure Confinement	.68	2.13	1.37	2.33*	2.69*	2.25*	1.91*	1.49	2.21*	1.07		

^{*=}statistically significant

For Allegheny County, a general trend among Black and all minority youth can be seen with the steady increase in RRI on arrest and decrease in RRI on referral. The other decision points tend to be fairly stable although some spikes do occur. For example, secure confinement was lowest in 2000 among

Black and all minority youth then stayed fairly high for the next 8 years and seemed to decrease most recently.

The second intervention county is Berks. Table 18 provides data for Berks County during the past 10 years. There was a trend for an increase in residential placement among Black youths over time. In addition, 2009 seemed like an irregular year for Berks County as there were large decreases in delinquent findings and increases on probation among Black youth. Among Hispanic and all minority youth, there were marked increases in referrals and probation whereas decreases in secure detention and delinquent findings.

Table 18. Berks County RRIs across Decision Points 2000-2009

					Berks					
					Youth: Bla	ıck				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Arrest	2.33*	2.76*	2.63*	2.17*	2.21*	2.43*	1.88*	2.21*	2.04*	2.03*
Referral	1.95*	1.41*	1.63*	2.01*	1.46*	1.58*	2.20*	1.91*	2.32*	2.37*
Diversion	1.02	0.57*	0.66*	1.15	0.84*	0.82*	0.86*	0.81*	1.00	0.93
Secure Detention	1.32*	1.62*	1.35*	1.48*	2.08*	1.78*	1.64*	1.96*	1.46*	1.50*
Petition	0.99	1.14*	1.11*	0.96	1.19*	1.23*	1.18*	1.21*	1.00	1.09
Delinquent Findings	1.56*	1.13	1.33*	1.39*	1.28*	1.47*	1.06	1.34*	1.59*	0.87
Probation	0.84	0.83	0.93	0.75*	0.57*	0.75*	0.61*	0.90	0.71*	1.40
Residential Placement	1.12	1.24	1.32	1.60*	2.31*	1.29	2.35*	1.42	1.38	1.43
					Berks					
					outh: Hisp		1	1	1	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Arrest	1.88*	1.89*	2.29*	2.20*	2.17*	2.12*	1.90*	1.74*	1.88*	1.65*
Referral	1.46*	1.49*	1.45*	1.58*	1.24*	1.67*	1.77*	1.81*	1.98*	2.64*
Diversion	0.81	0.95	0.82	0.72*	0.92	0.90*	0.89*	0.95	0.97	1.03
Secure Detention	2.12*	1.86*	1.80*	1.91*	2.06*	1.94*	2.26*	2.63*	2.19*	1.54*
Petition	1.07	1.02	1.06	1.07*	1.10	1.13*	1.15*	1.06	1.03	0.96
Delinquent Findings	1.67*	1.26*	1.36*	1.42*	1.40*	1.43*	1.30*	1.51*	1.70*	0.99
Probation	0.85	0.79*	0.87	0.69*	0.84*	0.86	0.65*	0.97	0.81	1.61*
Residential Placement	1.28	1.38*	1.10	1.96*	1.69*	1.35	2.31*	1.12	1.24	1.24
					Berks					
				Ethnic You	ıth: All Mi	nority				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Arrest	1.87*	1.98*	2.24*	2.08*	2.06*	2.09*	1.81*	1.77*	1.83*	1.65*
Referral	1.59*	1.46*	1.50*	1.68*	1.30*	1.64*	1.86*	1.85*	2.12*	2.66*
Diversion	0.89	0.83	0.77*	0.85	0.90*	0.88*	0.88*	0.91*	0.99	1.01
Secure Detention	1.95*	1.82*	1.68*	1.79*	2.06*	1.93*	2.14*	2.42*	1.94*	1.50*
Petition	1.05	1.05	1.07*	1.04	1.12*	1.15*	1.16*	1.10*	1.01	0.98
Delinquent Findings	1.63*	1.21*	1.35*	1.41*	1.36*	1.44*	1.23*	1.45*	1.64*	0.97
Probation	0.84	0.80*	0.90	0.70*	0.77*	0.83*	0.64*	0.95	0.78*	1.52*
Residential Placement	1.23	1.34*	1.16	1.87*	1.86*	1.33	2.34*	1.20	1.29	1.28

^{*=}statistically significant

The third intervention county examined was Dauphin. Table 19 provides data for Dauphin County during the past 10 years. Among Black and all minority youths, there were marked increases of RRI on secure detention and residential placement; there was also a trend for an increase in residential placement among Hispanic youths.

Table 19. Dauphin County RRIs across Decision Points 2000-2009

Dauphin Ethnic Youth: Black												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Arrest	2.61*	2.44*	2.51*	2.43*	2.46*	2.62*	2.58*	2.72*	2.73*	2.66*		
Referral	1.85*	2.11*	2.18*	1.91*	1.97*	1.76*	1.95*	1.66*	1.35*	1.91*		
Diversion	1.02	1.07	1.13	0.83	1.06	1.26*	0.79	1.34*	1.08	1.00		
Secure Detention	1.78*	1.80*	1.69*	1.81*	1.85*	1.64*	1.93*	3.30*	3.30*	3.58*		
Petition	0.99	0.98	0.97	1.07	0.98	0.92*	1.05	0.96*	0.98	1.00		
Delinquent Findings	1.17*	1.34*	1.26*	1.38*	1.46*	1.52*	1.67*	1.40*	2.00*	1.47*		
Probation	0.96	1.01	0.87	1.05	0.80*	0.97	0.92	0.88	0.74*	0.75*		
Residential Placement	1.23	1.11	1.73*	0.77	1.40*	1.04	1.05	1.56*	1.90*	1.84*		

					auphin					
				Ethnic Y	outh: Hisp	anic				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Arrest	1.07	1.26*	1.29*	1.03	0.99	1.11	0.90	1.05	0.98	0.81*
Referral	2.24*	2.39*	2.27*	2.70*	2.94*	2.31*	1.66*	1.82*	2.36*	3.29*
Diversion	1.12	1.21	1.10	0.73	1.36*	1.16	0.76	0.65	0.96	1.05
Secure Detention	1.98*	2.02*	1.52*	1.69*	1.69*	1.82*	2.71*	4.36*	1.93*	1.39
Petition	0.97	0.94	0.97	1.11	0.86*	0.95	1.06	1.05	1.01	0.98
Delinquent Findings	1.33*	1.53*	1.18	1.46*	1.28	1.64*	1.79*	1.31*	1.69*	1.07
Probation	0.91	0.99	0.87	1.03	0.71*	1.04	0.78	0.69*	0.83	0.96
Residential Placement	1.47	1.06	1.67	1.00	1.34	1.00	1.37	2.33*	2.11*	NA

Dauphin Ethnic Youth: All Minority											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
Arrest	2.12*	2.06*	2.11*	2.00*	2.02*	2.15*	2.05*	2.16*	2.13*	2.00*	
Referral	1.90*	2.14*	2.18*	2.00*	2.05*	1.82*	1.92*	1.69*	1.51*	2.14*	
Diversion	1.04	1.08	1.14	0.82*	1.10	1.25*	0.79*	1.24	1.06	0.98	
Secure Detention	1.79*	1.82*	1.66*	1.79*	1.82*	1.66*	2.03*	3.42*	3.01*	3.12*	
Petition	0.99	0.98	0.96	1.07*	0.96	0.93*	1.06*	0.97	0.99	1.01	
Delinquent Findings	1.19*	1.36*	1.25*	1.39*	1.43*	1.53*	1.68*	1.37*	1.95*	1.40*	
Probation	0.96	1.01	0.87	1.04	0.80*	0.97	0.91	0.85*	0.75*	0.78*	
Residential Placement	1.24	1.10	1.72*	0.81	1.39*	1.05	1.07	1.65*	1.90*	1.74	

^{*=}statistically significant

Intervention county Lancaster's data during the past ten years is in Table 20. Among Hispanic and all minority youths, there was a trend of decreasing RRI for arrests and secure detention, but an increase for referrals, and a marked decrease for all three ethnic categorizations for secure confinement.

Table 20. Lancaster County RRIs across Decision Points 2000-2009

Lancaster Ethnic Youth: Black												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Arrest	4.30*	4.01*	4.27*	4.19*	4.18*	4.27*	4.45*	4.71*	3.80*	4.40*		
Referral	1.39*	1.77*	1.45*	1.93*	1.58*	1.78*	1.83*	1.72*	1.59*	1.67*		
Diversion	1.00	1.02	1.29*	0.85	0.90	0.94	0.92	1.37*	0.89	0.76*		
Secure Detention	1.92*	1.28*	1.20*	1.68*	1.34*	1.36*	1.52*	1.40*	1.52*	1.76*		
Petition	1.00	0.98	0.79*	1.12	1.08	1.06	1.10	0.89*	1.10	1.19*		
Delinquent Findings	1.01	1.05	1.03	0.95	0.95	0.97	0.97	1.08	1.04	1.03		
Probation	0.77*	0.94	0.80*	0.97	0.88*	0.74*	0.85*	0.86*	0.98	0.86*		
Residential Placement	1.23	0.71	1.69*	1.59*	1.27	1.79*	1.33	1.26	0.98	1.28		
Secure Confinement	2.04	1.90	2.92*	3.11*	2.54*	3.07*	1.44	1.77	NA	NA		

Lancaster Ethnic Youth: Hispanic											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
Arrest	2.81*	2.75*	2.83*	2.38*	2.38*	2.59*	2.53*	2.36*	2.19*	2.07*	
Referral	1.38*	1.70*	1.49*	1.68*	1.62*	1.62*	1.94*	1.93*	1.88*	1.96*	
Diversion	0.95	1.07	1.21*	0.93	0.93	1.11	1.06	1.38*	1.07	1.07	
Secure Detention	2.45*	1.91*	1.91*	2.23*	1.77*	1.50*	1.59*	1.47*	1.59*	1.56*	
Petition	1.04	0.94	0.85*	1.06	1.06	0.87	0.93	0.88*	0.94	0.94	
Delinquent Findings	0.98	1.06	1.08*	1.00	0.99	1.02	1.01	1.10	1.12*	1.06	
Probation	0.91	0.81*	0.85*	0.98	0.90	0.88*	1.09	0.87*	1.01	0.97	
Residential Placement	1.37	1.30	1.42	2.08*	1.29	1.87*	0.69	1.75*	0.91	1.24	
Secure Confinement	1.77	3.40*	2.08*	2.71*	2.10*	1.19	1.26	1.72	NA	NA	

^{*=}statistically significant

Lancaster Ethnic Youth: All Minority												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Arrest	2.87*	2.78*	2.90*	2.63*	2.66*	2.80*	2.80*	2.79*	2.40*	2.48*		
Referral	1.43*	1.74*	1.46*	1.79*	1.56*	1.68*	1.90*	1.82*	1.83*	1.90*		
Diversion	0.99	1.05	1.24*	0.89	0.92	1.04	1.00	1.36*	1.01	0.97		
Secure Detention	2.14*	1.68*	1.73*	2.03*	1.65*	1.50*	1.57*	1.44*	1.50*	1.56*		
Petition	1.01	0.96	0.83*	1.08	1.07	0.96	1.00	0.89*	0.99	1.02		
Delinquent Findings	0.98	1.06*	1.06*	0.97	0.98	1.00	0.98	1.08	1.09*	1.05		
Probation	0.85*	0.87*	0.83*	0.97	0.89*	0.82*	0.98	0.87*	1.00	0.92*		
Residential Placement	1.29	1.01	1.53*	1.84*	1.29	1.79*	0.98	1.50	0.95	1.25		
Secure Confinement	1.83	2.75*	2.34*	2.84*	2.34*	2.07*	1.31	1.71	NA	NA		

The fifth intervention county examined was Philadelphia. Table 21 provides data for Philadelphia County during the past 10 years. Among Black and all minority youth, the trends were that arrest RRIs increased whereas diversions decreased. Secure detention RRIs decreased for Hispanic youth.

Table 21. Philadelphia County RRIs across Decision Points 2000-2009

	Philadelphia Ethnic Youth: Black												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009			
Arrest	0.92*	0.92*	0.95*	1.05*	1.13*	1.32*	1.47*	1.40*	1.51*	1.55*			
Referral	2.69*	2.85*	2.85*	2.95*	3.21*	3.28*	2.50*	3.10*	2.99*	3.11*			
Diversion	NA	1.23*	1.07	0.75	0.67*	0.88*	0.83*	0.77*	0.73*	0.79*			
Secure Detention	1.50*	1.27*	1.16*	1.20*	1.13*	1.11*	1.64*	1.67*	1.31*	1.24*			
Petition	1.00	0.96*	0.99	1.00	1.10*	1.05*	1.09*	1.13*	1.13*	1.08*			
Delinquent Findings	1.14*	1.05	1.12*	0.94*	1.08	1.03	0.92	1.11	1.25*	1.11			
Probation	0.95	0.94	0.90*	1.15*	0.85	0.86	0.94	1.03	0.82	0.90			
Residential Placement	1.03	1.42*	1.28*	0.93	1.01	1.78*	1.27	0.76	NA	1.10			

	Philadelphia												
	Ethnic Youth: Hispanic												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009			
Arrest	NA	0.55*	0.58*	0.67*	0.77*	0.72*	0.70*	0.76*	0.72*	0.65*			
Referral	NA	3.69*	3.45*	2.46*	2.71*	3.63*	2.34*	2.88*	3.12*	3.68*			
Diversion	NA	1.30*	1.14	0.54	0.46*	0.99	0.91	0.85*	0.74*	0.83*			
Secure Detention	1.95*	1.58*	1.41*	1.87*	1.36*	1.26*	2.32*	1.91*	1.28*	1.26*			
Petition	NA	0.94*	0.97	1.01	1.16*	1.00	1.05	1.08*	1.13*	1.06*			
Delinquent Findings	1.32*	1.26*	1.38*	0.94	1.11	1.00	0.80*	1.00	1.11	1.02			
Probation	0.79*	0.94	0.90	1.29*	0.83	0.80	1.14	0.90	0.93	0.92			
Residential Placement	1.12	1.23	1.10	0.85*	1.04	1.37	1.07	1.16	NA	0.93			

			j	Phi Ethnic You	ladelphia ıth: All Mi	nority				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Arrest	0.72*	0.81*	0.84*	0.93*	1.00	1.13*	1.24*	1.19*	1.25*	1.25*
Referral	3.20*	2.92*	2.90*	2.88*	3.16*	3.32*	2.47*	3.07*	3.01*	3.20*
Diversion	NA	1.24*	1.07	0.71	0.65*	0.90	0.84*	0.78*	0.73*	0.80*
Secure Detention	1.56*	1.31*	1.20*	1.27*	1.15*	1.12*	1.71*	1.69*	1.30*	1.24*
Petition	1.00	0.95*	0.99	1.00	1.10*	1.04	1.09*	1.12*	1.13*	1.07*
Delinquent Findings	1.17*	1.08*	1.16*	0.94*	1.08	1.03	0.91	1.10	1.23*	1.09
Probation	0.92	0.94	0.90*	1.16*	0.84*	0.85	0.95	1.02	0.84	0.90
Residential Placement	1.05	1.38*	1.25*	0.92	1.02	1.74*	1.26	0.81	NA	1.08

^{*=}statistically significant

However, it should be noted that a review of the RRIs of the DMC Reduction Sites over a ten year period does provide some insight regarding the impact of the specific DMC interventions that were

implemented (see Table 2). For example, the common intervention amongst all of the DMC Reduction Sites was the Minority Youth-Law enforcement Forums. While these forums were specifically designed to improve relations and communication between minority youth and law enforcement, by extension, one might expect to see a reduction in the RRI at arrest. However, this effect was only present in Berks, as the other Reduction Sites continued to show stagnant or increased RRIs up through 2009. A review of the other interventions and the associated RRI at the targeted decision point reveals the same null effect. This would indicate that a detailed analysis of the effectiveness of current DMC interventions, as well the development of more-specific and focused DMC reduction strategies, should be initiated.

CHAPTER 3

I. Covariate Analyses

The second phase of the analysis was inferential and sought to examine if race was related to decisions in the juvenile justice system when controlling for other variables. Covariate logistic regression analyses were used to answer this question. In general, regression analysis is the determination of the independent measures that influence the dependent measure. Typically, this is performed using Ordinary Least Squares regression (OLS), but given that the data are dichotomous, logistic regression was used. Logistic regression is the proper regression form for a dichotomous dependent measure and will provide odds ratios to show the relationship between various predictors and decisions made in the juvenile justice system. Odds ratios are interpreted similarly to RRI as it provides the rate of an occurrence of an event. A covariate analysis is a statistical procedure that takes into account a "third" or other variable that may be related to DMC which may be hiding true Race/Ethnicity differences. A covariate analysis will consider the third variable and control for its effects so that a more pure measure of Race/Ethnicity effects may be observed. As an example, the RRI in 2009 for petition in Allegheny County among Black youth was 1.07 as can be seen in Table 23. When a covariate analysis is performed and crime type is controlled for, the odds increase to 1.49. The interpretation is that when crime type is balanced between Black and White youth, the rate of being petitioned increases for Black youth. In other words, crime type was "hiding" the effects of race on RRI when taking into account crime type, in that example. These analyses were conducted on only the decision points in which data was available for each decision; arrest was not examined, for example, because the data for those not arrested is not available. For this set of analyses, the decision points that were appropriate included diversion, petition, delinquent findings, probation, residential placement, and secure placement. The analyses focused on the five intervention counties across 2009 and 2010, the two most recent years available.

Initially, the analytic plan was to include a larger number of covariates or factors that were controlled, but due to the availability of sound data, it was limited to six factors, all of which have been shown to be related to outcomes in prior literature. Those factors included age of the juvenile, school status (whether they were attending school or not), gender of the juvenile, family status (how many parents and if divorced or not), crime type, and living arrangement (who they were living with). DMC was examined for each of the six decision points across the five counties for 2009 and 2010, while the factors were controlled for using covariate logistic regression analyses. It should be noted the analyses were only conducted when an appropriate sample size was available, thus there are some empty cells.

1. Analysis by County

A. Diversion

The first point of contact/decision point examined was diversion and the analyses are provided in Table 22. Recall that an RRI value less than 1.0 indicates DMC for minority youth. As an example, an RRI for Black youth of .50 would have half the rate of getting diverted compared to white youth. The lower the value, the worse the DMC problem is for diversion. Thus, as values get smaller than 1.0 that is reflective of more DMC and as they approach 1.0 it is indicative of more balanced decision making with regards to diversion. For Allegheny County, the consistent finding is that there are significant increases in RRI among Hispanic youth for all covariates suggesting that when controlling for those covariates, Hispanic youth have higher rates of diversion compared to their white counterparts. For Berks County, when controlling for age, school status, gender, crime type, and living arrangement, the odds ratio decreased indicating that Hispanic youth had lower rates of diversion compared to white youth in 2010. For Dauphin County in 2010 among Black and all minority youth, controlling for age was associated with an increase in rates whereas controlling for crime type decreased the rates of being diverted. For Black youths in Lancaster County, controlling for age, the factors of school status, gender, crime type, and living arrangement were associated with a decrease of the rate of being diverted- whereas school status and crime type were significant covariates in 2010. For Hispanic and all minority youth across both years, the covariate family status was associated with a significant increase in the rates of being diverted. In Philadelphia County across both years and for all ethnic categorizations, the covariate family status was significantly associated with marked increases in the rates of being diverted.

Table 22. Covariate Analyses across the Five Intervention Counties in 2009 and 2010 for Diversion

							2009								
	1	Alleghen	y		Berks			Dauphi	n	I	Lancaste	er	Ph	iladelph	ia
Covariate	В	Н	All	В	Н	All	В	Н	All	В	Н	All	В	Н	All
RRI	.80*	1.73*	.81*	.93	1.03	1.01	1.00	1.05	.98	.76*	1.07	.97	.79*	.83*	.80*
Age	.73*	2.51*	.75*	.83	1.01	.99	.98	1.07	.96	.66*	1.14	.97	.71*	.76*	.73*
School Status	.75*	2.56*	.77*	.82	1.07	1.03	.99	1.07	.98	.61*	1.14	.93	.79*	.96	.82*
Gender	.73*	2.46*	.75*	.84	1.03	1.00	.94	1.04	.92	.61*	1.12	.92	.69*	.77*	.72*
Family Status	.72*	2.53*	.75*	.92	1.16	1.14	.97	.98	.93	.85	1.46*	1.23	1.21	1.31	1.21
Crime Type	.67*	2.44*	.69*	.87	.99	.99	.90	1.00	.89	.55*	.94	.79	.74*	.76*	.76*
Living Arrangement	.74*	2.47*	.76*	.86	1.05	1.03	.98	1.04	.96	.65*	1.15	.97	.85	.86	.85

							2010								
	1	Alleghen	y		Berks			Dauphi	n	I	∠ancaste	r	Ph	iladelph	iia
Covariate	В	Н	All	В	Н	All	В	Н	All	В	Н	All	В	Н	All
RRI	.92	NA	.93	.81*	1.05	.99	1.02	1.12	1.04	.85	1.13	1.00	.72*	.82	.78*
Age	.89	2.35*	.90	.66*	1.11	.97	.97	1.01	.95	.73	1.25	.99	.64*	.76	.70*
School Status	.89	2.33*	.91	.65*	1.12	.98	.95	.98	.94	.66*	1.33	.98	.68*	.86	.72*
Gender	.86*	2.29*	.87	.63*	1.07	.93	.91	.99	.90	.73	1.28	1.01	.63*	.79	.70*
Family Status	.89	2.34*	.91	.73	1.22	1.03	1.15	1.13	1.12	.87	1.41*	1.18	1.17	1.18	1.27*
Crime Type	.80*	1.38	.81*	.67*	.96	.89	.82	.86	.83	.63*	1.26	.93	.72*	.81	.78*
Living Arrangement	.89	2.24*	.88	.66*	1.12	.98	.96	.99	.95	.73	1.27	1.00	.76*	.92	.85

^{*=}statistically significant

B. Petition

The second point of contact examined was petition and analyses are provided in Table 23. For Allegheny County, the consistent finding is that all of the covariates were associated with an increase in the rates of being petitioned in 2009 among Black youth and all minorities, whereas in 2010 gender and crime type were significant among Black youth and crime type was significant among all minority youth. In 2009, there were significant decreases in the rate of being petitioned among Hispanic youth controlling for all covariates. Berks County showed a different pattern such that all covariates except for family status were associated with increasing rate of being petitioned among Black youth in 2010. For Black youths in Lancaster County, controlling for age, the covariates school status, gender, crime type and living arrangement were associated with an increase of the rate of being petitioned in 2009 whereas only school status and crime type affected the rate of being petitioned. For Hispanic youth across both years, the covariate family status was associated with a significant decrease in the rate of being petitioned. In Philadelphia County in 2009, the covariates age, school status, gender, and crime type were associated with increased rates of being petitioned among Black youth, whereas the same pattern was present in 2010 with the addition of the covariate living arrangement also affecting the rate of being petitioned. Among Hispanic youth, the covariates age, gender, and crime type were associated with increased rates of being petitioned in 2009, whereas only the covariate age was associated with an increase in 2010. For all minority youth, age, school status, gender, and crime type covariates were associated with increased rates of being petitioned in 2009 and 2010, whereas the covariate family status was associated with a significant decrease in rates of being petitioned in 2010.

C. Delinquent Findings

The third point of contact examined was delinquent findings. Analyses are provided in Table 24. For Allegheny County, the consistent finding is that all of the covariates were associated with an increase in the rates of delinquent findings in 2009 and 2010 among Black youth and all minorities with the exception that living arrangements was not significant in 2010. Berks County showed a fairly consistent pattern such that all covariates were associated with increased rates of delinquent findings among Black and all minority youth for both 2009 and 2010. Among Hispanic youth, the same pattern was seen in 2009, although in 2010 only age and crime type were significant covariates. In Dauphin County, there was a consistent pattern among Black and all minority youth such that all covariates were associated with an increase in rates of delinquent findings for both 2009 and 2010. In 2010, age was a significant covariate associated with an increase in rates for Hispanic youth. In Lancaster County, the covariates age, school status, gender, crime type, and living arrangement were associated with increases in the rates of delinquent findings in both 2009 and 2010. Family status was a significant covariate associated with decreases in the rates of delinquent findings among Hispanic youth in 2009 and 2010 and among all

minority youth in 2009. In Philadelphia County in 2009, the covariates age, school status, gender, crime type, and living arrangement were associated with increased rates of delinquent findings among Black youth in 2009 and 2010 and among all minority youth in 2010, whereas family status was associated with a significant decrease in the rate of delinquent findings in 2009.

D. Probation

The fourth point of contact examined was probation. Analyses are provided in Table 25. Recall that an RRI value less than 1.0 indicates DMC for minority youth. As an example, an RRI for Black youth of .50 would indicate that black youth have half the rate to get probation compared to white youth. The lower the value, the worse the DMC problem is for probation. Thus, as values get smaller than 1.0 that is reflective of more DMC and as they approach 1.0 it is indicative of more balanced decision making with regards to probation. For Allegheny County, the consistent finding is that all of the covariates were associated with an increase in the rates of probation in 2009 and 2010 among Black youth and all minorities. Berks County showed a fairly consistent pattern, but in 2010 all covariates were associated with an increased rate of probation among all three ethnic categorizations; this was particularly strong for Black youth. In Dauphin County, there was a consistent pattern among Black and all minority youth in 2009 and 2010 such that all covariates were associated with an increase in rates of probation. In 2010, all covariates except for family status were associated with increased rate of probation for Hispanic youth. In Lancaster County, all covariates except for family status are associated with an increase in the rates of probation among Black youth in 2009 and 2010. Family status was related to a significant decrease in the rates of probation among Hispanic and all minority youth in 2009. In Philadelphia County, age, school status, gender, crime type, and living arrangement were associated with increased rates of probation among Black youth in 2009 and 2010 and among Hispanic and all minority youth in 2010, whereas all of the covariates were associated with an increased rate of probation in 2010 for all minority youth.

E. Residential Placement

The fifth point of contact examined was residential placement. Analyses are provided in Table 26. For Allegheny County, the consistent finding is that all of the covariates were associated with an increase in the rates of residential placement in 2009 and 2010 among Black youth and all minorities. Berks County in 2009 showed the covariate age was associated with increased rates of residential placement across all ethnic categorizations. In 2010, all covariates except for family status were related to increases in the rates of residential placement for all ethnic categories. Dauphin County provided a consistent pattern among Black and all minority youth in 2009 such that all covariates were associated with an increase in the rates of residential placement. In 2010 for Black youth, the same pattern was observed except for the covariate family status which was not significant. In addition, family status was associated with a decrease in the rate of residential placement among all minority youth in 2010. Among

Hispanic youth in 2009, family status and crime type were associated with decreased rate of residential placement. In Lancaster County, all covariates except are associated with an increase in the rate of residential placement among Black youth in 2009. In 2010 among Black youth and in 2009 among all minority youth, all covariates except for family status were associated with an increase in the rates although family status was related to a significant decrease in the rates among all minority youth in 2010 and Hispanic youth in 2009 and 2010. In Philadelphia County, all of the covariates are associated with an increase in the rates of residential placement among Black, Hispanic, and all minority youths in 2009, whereas those same covariates were associated with a decrease in rates in 2010 among Black and all minority youths.

Table 23. Covariate Analyses across the Five Intervention Counties in 2009 and 2010 for Petition

							2009								
	A	Alleghen	y		Berks			Dauphir	1	I	_ancaste	r	Ph	iladelph	ia
Covariate	В	Н	All	В	Н	All	В	Н	All	В	Н	All	В	Н	All
RRI	1.08*	.73*	1.07*	1.09	.96	.98	1.00	.98	1.01	1.19*	.94	1.02	1.08*	1.06*	1.07*
Age	1.37*	.40*	1.34*	1.21	.99	1.01	1.02	.93	1.04	1.52*	.88	1.03	1.40*	1.31*	1.37*
School Status	1.34*	.39*	1.31*	1.23	.94	.97	1.01	.93	1.02	1.65*	.88	1.08	1.27*	1.04	1.22*
Gender	1.37*	.41*	1.34*	1.19	.98	1.00	1.07	.96	1.09	1.63*	.90	1.08	1.44*	1.30*	1.39*
Family	1.38*	.40*	1.34*	1.08	.86	.88	1.04	1.02	1.08	1.18	.69*	.82	.83	.76	.83
Status															
Crime Type	1.49*	.41*	1.46*	1.15	1.02	1.01	1.11	1.00	1.13	1.96*	1.06	1.27	1.35*	1.32*	1.33*
Living	1.36*	.41*	1.32*	1.16	.96	.98	1.02	.96	1.04	1.54*	.87	1.03	1.18	1.16	1.17
Arrangement															

							2010								
	I	Alleghen	y		Berks			Dauphii	n	I	Lancaste	r	Ph	iladelph	iia
Covariate	В	H	All	В	H	All	В	H	All	В	Н	All	В	H	All
RRI	1.03	NA	1.11*	1.24*	.94	1.02	1.00	.98	.91	1.14	.91	1.00	1.10*	1.06	1.40*
Age	1.13	NA	1.11	1.52*	.90	1.03	1.04	.99	1.05	1.36	.80	1.02	1.56*	1.32*	1.42*
School Status	1.12	NA	1.10	1.54*	.89	1.02	1.06	1.02	1.07	1.51*	.76	1.02	1.48*	1.17	1.38*
Gender	1.17*	NA	1.15	1.58*	.94	1.07	1.20	1.01	1.12	1.37	.78	.99	1.58*	1.27	1.42*
Family	1.12	NA	1.10	1.38	.82	.98	.87	.89	.90	1.15	.71*	.85	.86	.85	.79*
Status															
Crime Type	1.26*	NA	1.24*	1.50*	1.05	1.13	1.22	1.16	1.21	1.59*	.80	1.08	1.40*	1.23	1.29*
Living	1.15	NA	1.13	1.52*	.90	1.02	1.04	1.01	1.05	1.37	.79	1.00	1.31*	1.09	1.18
Arrangement															

^{*=}statistically significant

Table 24. Covariate Analyses across the Five Intervention Counties in 2009 and 2010 for Delinquent Findings

							2009								
	1	Alleghen	ıy		Berks			Dauphi	n]	Lancaste	r	Pł	iladelph	nia
Covariate	В	Н	All	В	Н	All	В	Н	All	В	Н	All	В	Н	All
RRI	1.35*	NA	1.35*	.87	.99	.97	1.47	1.07	1.40*	1.03	1.06	1.05	1.11	1.02	1.09
Age	1.80*	NA	1.79*	1.73*	1.79*	1.73*	1.79	1.06	1.69*	1.42	.99	1.11	1.32*	1.10	1.28
School Status	1.69*	NA	1.67*	1.59*	1.46*	1.46*	1.76	1.07	1.64*	1.54	1.00	1.16	1.28*	1.01	1.23
Gender	1.75*	NA	1.73*	1.56*	1.56*	1.54*	1.90	1.19	1.78*	1.52	1.01	1.16	1.32*	1.07	1.28
Family Status	1.66*	NA	1.64*	1.47	1.32	1.32	1.52	.96	1.43*	1.05	.72*	.82	1.06	.94	1.04
Crime Type	1.73*	NA	1.73*	1.45	1.57*	1.50*	1.80	1.10	1.67*	1.56	1.12	1.24	1.26*	1.07	1.23
Living Arrangement	1.65*	NA	1.64*	1.52	1.48*	1.46*	1.72	1.07	1.62*	1.43	.99	1.11	1.23*	1.04	1.20

							2010								
		Alleghen	y		Berks			Dauphi	n]	Lancaste	r	Ph	iladelph	iia
Covariate	В	Н	All	В	H	All	В	H	All	В	H	All	В	Н	All
RRI	1.61*	NA	1.84*	1.33	1.39*	1.37*	1.48	1.30*	1.37*	1.00	1.10	1.05	1.22*	1.11	1.67 *
Age	2.01*	NA	2.06*	2.02*	1.56*	1.62*	1.95	1.50*	1.83*	1.27	.99	1.11	1.61*	1.29	1.54
School Status	1.95*	NA	1.93*	1.88*	1.36	1.45*	1.82	1.40	1.71*	1.39	.96	1.13	1.54*	1.21	1.48
Gender	2.11*	NA	2.09*	1.87*	1.44*	1.53*	1.92	1.42	1.80*	1.29	.98	1.11	1.55*	1.23	1.48
Family Status	1.99*	NA	1.96*	1.78*	1.27	1.41*	1.57	1.15	1.46*	1.11	.90	.97	1.23	1.08	1.18
Crime Type	2.18*	NA	2.17*	1.75*	1.59*	1.60*	1.91	1.39	1.81*	1.42	1.02	1.20	1.48*	1.21	1.41

Living	1.88*	NA	1.86*	1.82*	1.37	1.45*	1.79	1.36	1.68*	1.29	.99	1.11	1.44*	1.20	1.38
Arrangement							*								*

^{*=}statistically significant

Table 25. Covariate Analyses across the Five Intervention Counties in 2009 and 2010 for Probation

							2009								
	A	Alleghen	y		Berks			Dauphir	1	Ι	Lancaste	r	Ph	iladelph	ia
Covariate	В	Н	All	В	Н	All	В	Н	All	В	Н	All	В	Н	All
RRI	.85*	NA	.86*	1.4	1.61*	1.52*	.75*	.96	.78*	.86*	.97	.92*	.90	.92	.90
Age	1.30*	NA	1.31*	1.46	1.69*	1.59*	1.14	.97	1.13	1.04	.94	.94	1.10	1.02	1.08
School Status	1.27*	NA	1.27*	1.35	1.49	1.44	1.13	1.01	1.12	1.11	.95	.99	1.08	.97	1.05
Gender	1.30*	NA	1.30*	1.38	1.56	1.50	1.19	1.12	1.18	1.10	.97	.99	1.20	1.00	1.07
Family Status	1.30*	NA	1.31*	1.30	1.43	1.41	1.06	.95	1.03	.83	.72*	.75*	.97	.92	.95
Crime Type	1.29*	NA	1.30*	1.31	1.57*	1.46	1.14	1.03	1.12	1.06	1.04	1.02	1.08	.99	1.06
Living	1.29*	NA	1.29*	1.36	1.51	1.44	1.12	1.03	1.11	1.06	.94	.96	1.07	.98	1.05
Arrangement															

							2010								
	A	Alleghen	y		Berks			Dauphii	1	I	Lancaste	r	Ph	iladelph	ia
Covariate	В	Н	All	В	Н	All	В	Н	All	В	Н	All	В	Н	All
RRI	.82*	.82* NA .80*			1.34	1.30	.78*	.89	.82*	.90	.94	.89*	.92	.96	.93
Age	1.50*	NA	1.50*	2.48*	1.97*	1.99*	1.23	1.22	1.24	1.04	.91	.93	1.34*	1.18	1.30
School Status	1.43*	1.43* NA 1.43*		2.35*	1.77*	1.83*	1.18	1.12	1.19	1.12	.88	.93	1.29	1.12	1.26
Gender	1.49*	NA	1.49*	2.31*	1.84*	1.91*	1.21	1.14	1.23	1.05	.90	.92	1.30	1.14	1.26
Family Status	1.45*	NA	1.45*	2.69*	1.95*	2.06*	1.11	.97	1.13	.95	.88	.85	1.16	1.04	1.11
Crime Type	1.54*	NA	1.55*	2.25*	1.98*	1.97*	1.25	1.16	1.27	1.15	.92	.97	1.30	1.16	1.26
Living	1.41*	NA	1.41*	2.27*	1.78*	1.85*	1.17	1.10	1.18	1.06	.91	.93	1.25	1.10	1.21
Arrangement															

^{*=}statistically significant

Table 26. Covariate Analyses across the Five Intervention Counties in 2009 and 2010 for Residential Placement

							2009								
		Alleghen	y		Berks			Dauphir	n]	Lancaste	r	Pł	iladelph	nia
Covariate	В	Н	All	В	Н	All	В	Н	All	В	Н	All	В	Н	All
RRI	1.54*	NA	1.58*	1.43	1.24	1.28	1.84	NA	1.74	1.28	1.24	1.25	1.10	.93	1.08
Age	2.44*	NA	2.46*	1.65	1.61	1.62*	3.24	NA	2.92*	2.37	1.33	1.71	1.65	1.23	1.60
School Status	2.24*	NA	2.26*	1.60	1.25	1.32	3.19	NA	2.84*	2.34	1.28	1.66	1.68	1.10	1.62
Gender	2.25*	NA	2.27*	1.47	1.34	1.37	3.30	NA	2.98*	2.37	1.31	1.70	1.72	1.19	1.66
Family Status	2.22*	NA	2.22*	1.45	1.16	1.15	2.32	NA	2.01*	1.73	1.08	1.32	1.35	1.05	1.34
Crime Type	2.18*	NA	2.21*	1.32	1.34	1.32	3.18	NA	2.85*	2.21	1.33	1.65	1.62	1.18	1.58
Living Arrangement	2.13*	NA	2.14*	1.45	1.28	1.31	3.10	NA	2.78*	2.21	1.28	1.62	1.60	1.15	1.55

							2010								
		Alleghen	y		Berks			Dauphi	n]	Lancaste	r	Ph	iladelph	ia
Covariate	В	Н	All	В	Н	All	В	Н	All	В	Н	All	В	Н	All
RRI	1.23	NA	1.48*	.64	.83	NA	2.02	1.75	2.35*	1.63	1.62	1.94	1.61	1.33	1.70
Age	2.52*	NA	2.49*	1.14	1.18	1.17	2.88	1.67	2.57*	2.06	1.58	1.99 *	1.18*	1.35*	1.18
School Status	2.35*	NA	2.32*	1.10	1.06	1.06	2.81	1.68	2.49*	2.10	1.52	1.96 *	1.21*	1.32*	1.20
Gender	2.51*	NA	2.48*	1.20	1.12	1.12	2.92	1.72	2.58*	2.07	1.55	1.96 *	1.20*	1.36*	1.20
Family Status	2.46*	NA	2.46*	.79	.80	.84	2.08	1.23	1.75*	1.74	1.17	1.63	1.03	1.24*	1.04
Crime Type	2.38*	NA	2.36*	.97	1.18	1.14	2.76	1.35	2.38*	1.99 *	1.66	1.99	1.19*	1.36*	1.20

Living	2.24*	NA	2.22*	1.08	1.06	1.06	2.72	1.60	2.42*	2.04	1.55	1.95	1.18*	1.36*	1.18
Arrangement							*			*		*			*

^{*=}statistically significant

CHAPTER 4

I. Multilevel Modeling

1. State and Federal Data

A. Summary of Macro-level findings

Prior analyses have examined the link between individual factors (e.g., age, school problems, race, gender, family status, severity of contact and county code were all examined), and the level of DMC occurring at various decision points across Pennsylvania's juvenile justice system between 2009 and 2010. The purpose of this section is to utilize multivariate analysis to preliminarily examine the impact of community-level factors on DMC. The simplest argument for multilevel modeling techniques is this:

Because so much of what we study is multilevel in nature, we should use theories and analytic techniques that are also multilevel. Thus, the impact of community-level factors (e.g., residential mobility, percentage of single female headed households, unemployment, poverty, and lack of a high school diploma) are examined across three stages (e.g., arrest, referral, and diversion) of juvenile case processing for all minorities from in 2007 and 2008. Because extensive data were not available from 2009 and 2010, they were not included in the analysis.

Most often, DMC results from many factors and is present at more than one contact/decision point. Although a majority of states implemented strategies to assess and address DMC, many states have yet to identify the factors contributing to DMC in their communities. This is primarily because they have been unable to complete quality assessment research, a task that requires not only high levels of data collection and analytical skills, but also an in-depth conceptual understanding of complex DMC issues. The main concern of this analysis is to take an initial step to determine the county-level factors that may help provide some understanding as to why DMC is occurring. The analysis examined several key factors taken from the U.S. Census and PaJCMS and includes: residential mobility, school status, family status, living arrangements, inequality index in 2007 and 2008.

i. Year 2007

In 2007 the community-level factors that contribute to DMC for all minorities is residential mobility, school issues, and family status. The findings indicate that communities that experienced higher levels of residential mobility experienced a decrease in arrest for all minorities. This finding may suggest that within police districts with higher rates of crime, a low level of deviance or less serious crimes may be met by informal police responses. As stated by Klinger (1997), crimes occurring in high-crime-rate or disorganized areas would evoke a more lenient response. In communities where there are high levels of crime, officers may be less likely to initiate an arrest for relatively minor crime because the action may not have violated a threshold for conduct in that community. Thus, we can conclude that officers may be

less likely to arrest a juvenile in this community and more likely to issue a warning, command the juvenile to cease the behavior, or use some other type of order-maintenance technique.

In regards to school issues, our findings show that the more juveniles who are out of school, the less likely they are to be arrested. This may be due to the fact that juveniles who are out of school are working in order to financially provide for their family. This finding is counter-intuitive to the literature and we speculate that it may be attributed to how school status was measured. The measure of school status is a dichotomous variable that asks whether or not a juvenile is "in" or "out" of school. This does not even begin to address the multitude of problems that juveniles may face in a school setting. Issues such as suspensions, expulsions, getting into a fight, etc., are better indicators of school problems. Thus, further analysis is warranted to better capture school issues.

In 2007, family status was found to have a significant relationship with the RRI for arrest of all minorities. This finding suggests that juveniles that come from broken homes (i.e., divorced or separated parents), are more likely to be arrested. Based on the criminological literature, the family status in which a juvenile is raised can make a substantial difference in how parents supervise them. Juveniles that come from a broken home arguably have less parental supervision or monitoring which can allow for more opportunities to engage in delinquent behaviors. Parental monitoring becomes increasingly important as children move into adolescence and spend less time under the direct supervision of parents or other adults and more time with peers. According to Wright and Wright (1994) children who are inadequately supervised are at the greatest risk of becoming delinquent which is based primarily on their increased opportunity to associate with deviant peers. Immarigeon (1996) says it best when he states that justice can be better served and young people steered on the right path by involving families in juvenile crime cases. Thus, understanding how the family and how the juvenile within the family works gets to the core of delinquency.

Our findings from the 2007 analysis sheds light on community-level factors that are associated with the arrest of all minorities. Specifically, how mobile a community may be, whether or not the juvenile is attending school, and whether they come from a single-parent home effects RRI at arrest. These factors however, were not found to play a significant role at the referral or diversion stages.

ii. Year 2008

The community-level factors that influenced arrest in 2008 were exactly the same as in 2007. Thus, residential mobility, school status, and family status were significant predictors of arrest for all minorities. In addition to arrest, many of these factors played a role at the referral and diversion stages. Specifically, residential mobility and living arrangements were found to impact RRI at referral.

Residential mobility, a commonly used indicator of family and community stability,

measures the percentage of residents who moved within the past year. Residential mobility was found to have a positive relationship with referral that is, the more transient or mobile the community; the more referrals were given to the juvenile justice system. Referrals to the juvenile system may be more likely as changes can present extra challenges for juveniles to form bonds with pro-social organizations and individuals within their schools, neighborhoods and community. Consequently, decision-makers may believe that juveniles are less likely to become attached to their schools and neighborhoods, and may not develop the bonds that protect them from involvement in problem behaviors. Thus for the decision-maker, any community-based option to handle delinquent behavior is not an option and referral to the juvenile justice system is perceived as a viable option.

In 2008, living arrangements were also found to impact DMC for all minorities at the referral stage of the juvenile justice process. That is, minority youth who lived with their mother or father were less likely to be referred to the juvenile justice system than youth who resided with both parents. This could be due to the fact that juveniles who are delinquent in a two-parent household command the resources and attention of the juvenile justice system. That is, the discipline and parental supervision within the home are not aggressive enough to inflict change, and thus a more formal response is warranted for these youth.

We find the opposite effect of living arrangements when it comes to the diversion stage of the juvenile justice process. That is, minority youth who have been referred to the juvenile justice system and reside with one parent are more likely to be diverted to a different part of the system.

B. Measures

The measures for this study come from two places, the Commonwealth of Pennsylvania and the 2000 United States census. The Relative Rate Index for three parts (i.e., arrest, referral, and diversion), of the juvenile justice system were provided from the Commonwealth of Pennsylvania. The RRI used for this report is the total for all minorities. In addition, the Commonwealth of Pennsylvania provided information about school performance, family status, and living arrangements. To determine family status, the following categories were defined as: married, divorced, separated and deceased. Similarly, for living arrangements, the categories defined were: unknown, living with both parents, living with mother only, living with father only and "other." For school status, the three categories used were: unknown, in school (attending school) and out-of-school (not attending school). From the 2000 United States census, the percentage of individuals that moved within the past 5 years was used as a measure of residential mobility. Finally, an index was created that contained measures of percentage of single female headed households, unemployment, poverty, and lack of a high school diploma. This index was designed to capture economic inequality, and will be known as inequality throughout this report. It is important to

note that the measures reflect aggregate county measures for each of the 67 counties in the Pennsylvania, and should be interpreted in this way.

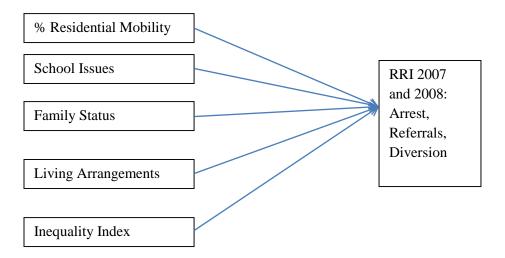
C. Analysis Plan

The analysis took place in a series of phases. The first phase step is a presentation of the descriptive statistics. This provided information about the distribution of the measures that were used in this study. The second phase is a presentation of the bivariate correlations. This provided some indication of how well the measures associate (i.e., share variance), with one another. In addition, the RRI measures were inspected for test-retest reliability. Test-retest reliability is simple when the same measure at one time is correlated with the same measure at a different time—the stronger the correlation, the better the test-retest reliability.

The third phase is a presentation of the multivariate statistics. The multivariate statistics is a regression analysis. Regression analysis is a statistical technique that is used to determine the independent measures that are a correlate with the dependent measure while holding other independent measures constant (Freund & Wilson, 1998). In this analysis, Ordinary Least Squares regression (OLS) was used.² Two measures are used to interpret these results: slope and the Beta. The slope indicates the amount of change that would occur in the dependent measure contingent on a unit change in the independent measure. Because the independent measures are captured using different metrics (i.e., some are percentages and others are scores), the Beta is used to determine which of the measures has the strongest impact. In addition, in OLS, a major concern is multicollinearity. Multicollinearity occurs when one independent measure is capturing information about the same concept as another independent measure. Freund and Wilson argued that tolerance measures reaching 0.20 or below indicate multicollinearity. Figure 1 indicates how the independent measures are assumed to be related to the different RRIs for each stage of the juvenile justice process.

² The original research proposal suggested using logistic regression analysis. This was proposed under the suspicion that there would distributional problems using the RRI measures. Once the data were obtained, a close inspection showed no distributional problems with the data that were severe enough to warrant transforming the data to perform logistic regression, except for one measure discussed herein. In addition, the proposal indicated we would perform a multi-level analysis. After a test of the intra-class correlation, it was determined that a multi-level analysis was not warranted for these data.

Figure 1. Assumed Relationships for Multivariate Results



D. Results

i. Phase 1: Descriptive Statistics

Table 27 presents the first phase of the results is a presentation of the descriptive statistics. The RRI for Arrest in 2007 has a mean of 2.25. This indicates that there is a substantial amount of disproportionate minority contact (DMC) in arrest for all minorities. In 2007, the mean RRI for referral is 1.88 indicating a substantial amount of DMC, but the mean diversion RRI was 0.96 suggesting not a lot of DMC is occurring. In 2008, the patterns from the RRI are the same as 2007, but the mean levels are different: RRI for arrest (2.35), RRI for referral (1.59), and RRI for diversion (0.94). Overall, these results suggest that DMC is occurring in different parts of the juvenile justice system in the counties of the Commonwealth of Pennsylvania. Table 27 also shows that 34.80 percent of the counties had individuals that moved within the last 5 years. The school measure had a mean of 1.04, family status had a mean of 3.12, and living arrangements had a mean of 2.82. These suggest that there was variation in how the schools reported problems, family status, and the types of homes that juveniles lived in inside the county. The inequality index had a mean of 28.55 suggesting that economic inequality was occurring in Pennsylvania.

Table 27. Descriptive Statistics

2.25		
2 2 5		
2.25	1.08	0.79
1.88	1.79	5.14
0.96	0.18	0.21
2.35	1.04	0.71
1.59	0.51	0.83
0.94	0.25	-0.13
34.80	4.73	0.92
1.04	0.14	-0.66
3.12	0.88	1.43
2.82	0.85	3.57
28.55	5.57	0.48
	0.96 2.35 1.59 0.94 34.80 1.04 3.12 2.82	0.96 0.18 2.35 1.04 1.59 0.51 0.94 0.25 34.80 4.73 1.04 0.14 3.12 0.88 2.82 0.85

ii. Phase 2: Bivariate Correlations

Table 28 presents the bivariate correlations of the measures of this study. The RRI measures share substantial variance. For instance, locations that indicate DMC issues through the RRI arrest measure in 2007 is highly correlated with the RRI arrest measure in 2008. This indicates that there is some stability in the DMC over these two years. The same pattern exists for referral suggesting stability in DMC over the two-year period. In addition to being an indication of stability of DMC, these correlations are an indication of test-retest reliability. The diversion measure in 2007 and 2008 have a positive correlation indicating stability between the measures, but this should not be interpreted as stability in DMC. Recall, the mean levels of diversion did not indicate problems in diversion in 2007 and 2008. This correlation simply means that there is reasonable reliability between these measures. Table 28 also shows the correlations between the independent measures. The primary purpose of the correlations between the independent measures is to provide preliminary multicollinearity information. The strongest correlation among the independent measures is (r=0.44) suggesting that multicollinearity is not a problem.

A secondary purpose of this analysis is to gain a preliminary indication of the independent measures that share variance with the dependent measures. This is only preliminary because the correlations do not hold the other independent measures constant. Residential mobility has a positive correlation with RRI diversion 2007 (r=0.38), and a negative correlation with RRI arrest 2008 (r=-0.31). Family status has a positive correlation with RRI arrest 2008 (r=0.46). Living arrangements has a positive correlation with RRI diversion 2008 (r=0.38). While these correlations show themselves here, the Ordinary Least Squares regression provides more information.

Table 28. Bivariate Correlations

Measure	1	2	3	4	5	6	7	8	9	10	11
1. RRI Arrest 2007	1.00										
2. RRI Referral 2007	-0.27	1.00									
3. RRI Diversion 2007	0.06	-0.30	1.00								
4. RRI Arrest 2008	0.80**	-0.17	-0.20	1.00							
5. RRI Referral 2008	-0.41*	*0.51**	-0.11	-0.56*	*1.00						
6. RRI Diversion 2008	-0.07	0.15	0.38*	0.03	-0.14	1.00					
7. % Residential Mobility	-0.23	-0.08	0.38*	-0.31*	0.26	0.29	1.00				
8. School	-0.24	0.04	-0.09	-0.27	0.07	0.03	0.01	1.00			
9. Family	0.26	-0.05	-0.24	0.46*	0.03	0.17	0.13	0.23	1.00		
10. Living Arrangements	0.13	-0.05	-0.19	0.21	-0.18	0.38*	-0.07	0.44*	0.38*	1.00	
11. Inequality Index	-0.09	0.20	-0.26	-0.06	0.19	-0.05	-0.28*	0.13	-0.03	0.20	1.00

^{*}p>0.05, **p>0.01

Table 29 presents the Ordinary Least Squares regression analysis for RRI arrest 2007. The results indicate that three measures were important in understanding the DMC captured in this measure. For instance, % residential mobility had a negative effect on this form of DMC (b=-0.07). That is, for every one unit increase in the percentage of residential mobility there is a 0.07 decrease in the RRI for arrest in 2007. The number of school issues had a negative effect on the RRI for arrest in 2007. As the number of school issues increased by 1, the RRI for arrest was decreased by 2.76. Family status had a positive effect on the RRI arrest for 2007. A one unit increase in family status resulted in a 0.52 increase in RRI arrest in 2007. Table 29 shows that the greatest impact on the RRI arrest in 2007 is coming from family status. The tolerance levels do not suggest that multicollinearity is a problem.

Table 29. Regression Analysis RRI Arrest 2007

Measure	В	Stand Error	Beta	Tolerance
1. % Residential Mobility	-0.07*	0.03	-0.29	0.85
2. School	-2.76*	1.06	-0.36	0.84
3. Family	0.52*	0.19	0.44	0.60
4. Living Arrangements	-0.02	0.20	-0.02	0.63
5. Inequality Index	-0.04	0.02	-0.19	0.87
F	3.67*			
R-Square	0.29			

^{*}p>0.05, **p>0.01

Tables 30 and 31 present the Ordinary Least Squares regression analysis for the RRI referrals and diversion in 2007. The table indicates that none of the measures used in this study are relevant for understanding the DMC that is present in referrals. Further, Table 31 presents similar results for diversion in 2007.³

Table 30. Regression Analysis RRI Referral 2007

Measure	В	Stand Error	Beta	Tolerance
1. % Residential Mobility	-0.01	0.09	-0.02	0.78
2. School	2.03	2.73	0.17	0.59
3. Family	-0.37	0.56	-0.21	0.32
4. Living Arrangements	0.04	0.49	0.02	0.46
5. Inequality Index	0.07	0.06	0.24	0.79
F	0.41			
R-Square	0.07			

^{*}p>0.05, **p>0.01

Table 31. Regression Analysis RRI Diversion 2007

Measure	В	Stand Error	Beta	Tolerance
1. % Residential Mobility	0.02	0.01	0.39	0.72
2. School	-0.07	0.34	-0.06	0.32
3. Family	-0.05	0.06	-0.25	0.45
4. Living Arrangements	0.01	0.13	0.03	0.45
5. Inequality Index	-0.00	0.01	-0.09	0.81
F	1.52			
R-Square	0.23			

^{*}p>0.05, **p>0.01

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³ Recognizing that the RRI referral 2007 measure had a large amount of skew, an alternative model was performed using the natural log of the RRI. The results remained substantively the same.

Table 32 presents the Ordinary Least Squares results for the RRI for arrest in 2008. The results shows that three measures help understand the DMC that is captured in the RRI for arrest in 2008. For instance, for every one unit increase in residential mobility, there is a 0.07 decrease in the RRI arrest 2008 score. For every one unit increase in school issues (e.g., the number of students not attending school), there is a 2.99 decrease in the RRI arrest 2008 score. For every one unit increase in family status, there is a 0.60 increase in the RRI arrest 2008 score. Similar to 2007, the greatest impact on the RRI arrest in 2008 is coming from family status. The tolerance levels show that multicollinearity is not a problem in these results.

Table 32. Regression Analysis RRI Arrest 2008

Measure	В	Stand Error	Beta	Tolerance
1. % Residential Mobility	-0.07*	0.02	-0.33	0.89
2. School	-2.99**	0.80	-0.44	0.79
3. Family	0.60**	0.13	0.54	0.77
4. Living Arrangements	0.78	0.15	0.16	0.67
5. Inequality Index	-0.03	0.02	-0.15	0.89
F	9.48*			
R-Square	0.51			

^{*}p>0.05, **p>0.01

Table 33 shows the Ordinary Least Squares results for the 2008 RRI for referrals. The results indicate for every one unit increase in residential mobility, there is a 0.04 increase in the RRI referral score. For every one unit change in living arrangements reduces the RRI referral score by -0.22. The Betas indicate that the greatest effect is coming from living arrangements. The tolerance levels do not show that multicollinearity is a problem in these data. Thus we can conclude that residential mobility and living arrangements have statistically significant impact on juvenile referrals.

Table 33. Regression Analysis RRI Referral 2008

Measure	В	Stand Error	Beta	Tolerance
1. % Residential Mobility	0.04*	0.02	0.37	0.83
2. School	-0.20	0.61	-0.06	0.68
3. Family	0.16	0.12	0.30	0.43
4. Living Arrangements	-0.22*	0.11	-0.41	0.54
5. Inequality Index	0.02	0.01	0.30	0.89
F	2.03			
R-Square	0.23			

^{*}p>0.05, **p>0.01

Table 34 shows the Ordinary Least Squares results for the 2008 RRI Diversion. The results show that as living arrangements increase, there is a 0.14 increase in the RRI diversion 2008. The results indicate that the greatest effect is coming from living arrangements. The tolerance levels show that multicollinearity is not a problem in these data. Thus we can conclude that the living arrangements of juveniles have the greatest impact on diversion decisions.

Table 34. Regression Analysis RRI Diversion 2008

Measure	В	Stand Error	Beta	Tolerance
1. % Residential Mobility	0.02	0.01	0.34	0.78
2. School	-0.14	0.36	-0.08	0.54
3. Family	-0.06	0.07	-0.24	0.30
4. Living Arrangements	0.14*	0.06	0.56	0.44
5. Inequality Index	0.00	0.01	0.02	0.83
F	1.99			
R-Square	0.27			

^{*}p>0.05, **p>0.01

CHAPTER 5

I. Qualitative Analysis

1. Focus Groups

A. Background for Qualitative Study

Studies examining remedies for disproportionate minority contact suggest conducting interviews of professionals, community members, and juveniles within the relevant community to provide context to the quantitative analysis and connect real-life experiences to the DMC numbers (Aubel, 1994; Morgan, 1998; Kakar 2006). The *Disproportionate Minority Contact Technical Assistance Manual* specifically encourages a multi-layered approach to obtaining data about the causes of DMC and Focus Groups were also used successfully by the Public Health Management Corporation in its *Assessment of the Needs of Latino Youth Involved in the Juvenile Justice System* complied in 2009 for the Pennsylvania Commission on Crime and Delinquency's Disproportionate Minority Contact Subcommittee. In this study, Focus Groups were convened to hear from juvenile justice professionals their perceptions of both the causes of, and cure for, DMC in Pennsylvania. Research indicates, though, that it is virtually impossible to separate America's ugly history of racism from the administration of criminal justice in general and juvenile justice in particular.

Qualitative interviews are a necessary component of any DMC study to determine the existence of the "chicken or egg" effect in juvenile justice: are justice professionals influenced more by society's inherent race bias and belief that juveniles of color are more likely to commit crimes that warrant severe punishment? Or do juveniles of color commit more crimes that warrant severe punishment because of the systemic bias in society that not only disrupts their family's ability to handle a kid in need, but also limits the juvenile's social, economic, and education opportunities which makes them susceptible to delinquency? In the context of race relations and justice, according to author Michelle Alexander who studies the "mass incarceration" of people of color says that dark people, particularly African Americans, were an "undercaste -a lower caste of individuals . . . permanently barred by law and custom from mainstream society" (2010, p. 13), a characterization that still applies today ("And justice for some," 2007).

Historically, the disparate treatment of black delinquents was attributed, much as it is today, to a lack of resources within the black community to effectively control and rehabilitate juveniles. In the cradle of juvenile justice, Chicago's Cook County in the 1830s, most institutions for juvenile rehabilitation were reserved exclusively for whites. Studies conducted in the 1920s found that because the black delinquent had no suitable community or family resources, Illinois authorities had no alternative than to commit colored boys to the "state run St. Charles School for boys sooner than it would have in the

cases of Jewish, Italian, or Polish children" and other white immigrant children who received support from Chicago slum communities. An example of prison as a substitute for black juveniles in need was recognized by Shepherd who acknowledged that "Children, mostly boys and overwhelmingly African American, continued to be incarcerated in the Virginia State Penitentiary well into the 20th Century" (1999, p. 8). It was noted that probation officers who had the authority to recommend lenient or punitive punishment for their delinquent charges often depicted the crimes committed by African American youth as being "caused by deficiencies in their internal attributes and character, such as disrespect for authority or the condoning of criminal behavior. White youth, on the other hand, were portrayed as victims of negative environmental factors, such as internal family conflict or association with delinquent peers" (Glennon, 2002, p. 39). Fast forward to the 1990s where an examination of the reports written by juvenile probation officers also linked race to the causes of crime, the risk of the juvenile re-offending, and the justification for recommending stiff sanctions (Bridges & Steen, 1998). Associating a juvenile's color and ethnic background to a belief of bad character traits as opposed to a white juvenile's descent into delinquency as a result of external factors beyond their control (i.e., negative peer influence) has resulted in longer terms of incarceration at state facilities and higher recidivism rates which lead to, inevitably, longer terms of incarceration.

In Pennsylvania, surprisingly, given the state's leading historic role in slavery abolition, the Underground Railroad, and challenging compliance with the federal Fugitive Slave Law returning free blacks to the status of chattel, Pennsylvania's criminal justice system often mirrored the racial caste of the South. The Pennsylvania Abolition Act of 1780 provided for the Gradual Abolition of Slavery but did not elevate the Commonwealth's black citizens to equality. For Pennsylvania's public schools, the 1854 School Act required "school directors in districts with twenty or more black students to maintain segregated schools" (Price 1976, p. 124) and when the United States Supreme Court desegregated schools in 1954, many states responded by enacting stricter laws dealing with juvenile delinquents (Klarman, 1994). "Vagrancy laws and other laws defining activities such as 'mischief' and 'insulting gestures' as crimes were enforced vigorously against blacks . . .proponents of racial hierarchy found they could install a new racial caste system without violating the law or the new limits of acceptable political discourse, by demanding "law and order" rather than "segregation forever" (Alexander, 2010). Schools remained mostly segregated in Pennsylvania well into the 1960s but largely as a function of residential segregation.

As researcher Massey (1995) discovered in making connections between residential segregation, the isolation of African American communities, and the rise of violence and crime "[u]sing an index of segregation that varies from 0 to 100 (the index of dissimilarity), we found that the level of black-white segregation increased from 35 to 49 from 1950 to 1980, an upward shift of 40%. The degree of black isolation within municipalities increased correspondingly" (p. 1228; see also Massey, Condran & Denton,

1987). As noted by the quantitative portion of this study, the racial imbalance of juvenile justice many times as a result of intensive supervision crime control policies designed for the urban poor means they are "more likely than their white counterparts to be arrested, referred to juvenile court rather than to diversion programs, charged, waived to adult court, detained pre-trial, and locked up at disposition" (Leiber, 2002, pp. 71-72; Sellers-Diamond, 1994). Thus, the Focus Groups were designed to ask questions of practitioners to differentiate between our collective history of a racist norm in criminal and juvenile justice from the societal consequences when communities of color (black and Latino) are segregated, isolated, and not "culturally competent" to immunize their children from the lure of crime or, once involved, to help juveniles of color get out of the system.

B. Methodology for the Focus Groups

Based on the RRIs from the quantitative analysis in Chapters 2 and 3, minority youth formally penetrate the juvenile system earlier in the process and with more severe interventions and further along the spectrum of services than white youth, thus, Shippensburg researchers spent considerable time prior to convening the Focus Groups designing interview questions within five domains that may influence Pennsylvania DMC rates:

- 1. The strengths of Pennsylvania's juvenile justice system
- 2. County-specific dynamics that may influence the processing of a juvenile offender through intake to detention
- 3. The extra-judicial factors affecting juvenile crime, such as social, economic, education, family, and community influences
- 4. The systemic factors that may contribute to DMC and any county-wide efforts to ameliorate its effects, and
- 5. The racial and gender composition of the professional staff tasked with processing a juvenile offender from court to probation and whether or not gender and racial workplace diversity had an effect, if any, on the DMC rates in Pennsylvania.

This qualitative piece of the study used a discovery-oriented qualitative methodology consisting of two parts. A combination of grounded theory (Strauss & Corbin, 1998), and consensual qualitative research (Hill, Thompson, & Williams, 1997), was used to form an integrative approach designed to address the questions asked in this study. The first step was to develop categories that emerged from participant responses. The second step involved an analysis of the frequency of responses across those categories across each question. The development team consisted of four judges, two auditors, and a research consultant. All four judges were advanced psychology students; there were two females and two males. The auditors consisted of psychology graduate students; one female and one male. The research

consultant was a female psychology faculty member. No members of the development team were involved in the data collection or the study in any other way.

The first step was the development of a coding scheme. For each question, 50 responses were randomly selected and given to each judge. The judges independently coded the written responses to each of the questions (i.e., identified concepts). Each of the judges began reviewing the data by engaging in a line-by-line analysis (Straus & Corbin, 1998). There were cases were individual responses were commonly assigned to multiple codes as some responses contained multiple concepts. Each judge then met with another judge, forming a dyad to compare, contrast, and refine the codes. Then, both dyads of judges met with the research consultant to generate an initial coding system which consisted of a list of all codes that emerged from the randomly selected responses. The judges discussed the codes and arrived at consensual agreement about the most appropriate codes that captured the essences of the data. Thus, the coding scheme served as a conceptual framework to organize the data (Miles & Huberman, 1994). After the coding scheme was developed, analysis of all of the data was initiated. Each judge was given all of the responses to each of the questions. Each judge coded each response assigning codes to individual responses, then met with the other judge in their dyad to reach consensus about the coding. Judges coded the data using the existing coding scheme while expanding the coding scheme to incorporate the additional voices of the participants from the entire sample. All four judges met with the research consultant to discuss and reach consensus about the coding. The judges collapsed, revised, or discarded their codes into overarching categories using the constant comparative method (Strauss & Corbin, 1998), and a consensual decision-making process (Hill, Thompson, & Williams, 1997). The categories represented superordinate themes that cut across the codes developed. These findings were then presented to the auditors. The auditors noted inconsistencies (e.g., same response being assigned different codes) and aspects of the coding system that lacked clarity (e.g., meaning of a particular code).

The four judges then began another iteration of refining the categories, making consensual decisions in response to the auditor's feedback, and making revisions to the codes assigned and coding scheme. The auditors served as valuable means of triangulating the data analytic procedure of the four judges throughout the research process (Hill, Thompson, & Williams, 1997; Patton 1990) and were used to increase the validity of the study results (Guba & Lincoln, 1989). The auditors also assisted in reaching consensus with the judges that data saturation had been achieved (Morrow & Smith, 2000; Patton, 1990) after all the responses were analyzed. Through the process of developing the categories, the development team was able to ensure that no new themes emerged from the data and that the categories were representative of the experiences of all the participants in the study. Thus, the discovery-oriented data analysis approach yielded a final conceptual network of responses summarizing issues related to DMC among participants.

Researchers from Shippensburg University conducted two Focus Groups as an exploratory study on the viewpoints of front-line juvenile professionals to learn their perceptions of the relationship between a juvenile of color and their penetration in the juvenile justice system. One goal of the Focus Groups was to identify the strengths of the juvenile justice system and locate potential gaps in services that may or may not contribute to DMC. Another goal was to identify the intersection between the juvenile justice system, the offender, the hierarchy within a juvenile probation office and its relationship with juvenile judges, the minority communities and constituents they serve, and their combined effect on Pennsylvania's juveniles of color.

Two Focus Groups were convened on one day and were divided into two groups: the intervention counties of Philadelphia, Allegheny, Berks, Dauphin and Lancaster were designated the "PM Group" and comparison counties that do not have DMC-related interventions in place but were matched to intervention counties based on their demographics, Lehigh, York, Delaware, Montgomery and Bucks and they were designated the "AM" group. The separation of the intervention from comparison counties was achieved by calibrating each county's z-score (e.g., percent of ethnic minority population, percent of poverty), calculated based on their RRIs. One limitation of the Focus Group data is the limited sample size of the two Focus Groups. Given the limited scope of this preliminary investigation, researchers wanted to start the exploratory process with a small number of Focus Group participants for manageability of content to make data management more feasible (Tang & Davis, 1995). As working juvenile justice professionals, the sample had a limited perspective. Researchers were aware at the beginning of the qualitative study that the sample size would be small and provide only a limited perspective of DMC in Pennsylvania, but given this study was exploratory in nature, the sample represented one important voice in the DMC dialogue.

After obtaining the informed consent from each participant, participants were assigned a number to ensure anonymity in the tape recording of their responses, and their numbers were placed in front of them. One white female moderator interviewed the participants from a semi-structured discussion format attached hereto as Appendix S. Although the proposed interview guide covered five domains of inquiry from which many questions could be asked, based on responses generated from participants, only 8 questions were asked of both groups as examined here. While the information sought was based on each respondent's affiliation with a particular county, the moderator's questions allowed for wide-ranging responses about the general health and effort of the entire state system in addressing disproportionate minority contact. Each member of the Focus Group was invited to answer each question followed by a general discussion of the topic. Both Focus Groups contained similar representational categories of judges, line probation officers, supervisory probation officers, men, women and the intervention county

Focus Group had minority representation. The median demographic of both Focus Groups was a middle-aged white male with at least 15 or more years of experience in the juvenile justice field.

Attached, as Appendix T, is a small sampling of responses generated by a selected series of questions. Given that the sample size is so small, no statistical significance can be drawn from the number of responses attached to each Focus Group's responses. Some notable responses from both Focus Groups to selected questions are provided below highlighted in yellow. To preserve research anonymity, any information from given responses that may have identified participants, other than one response highlighted below that identifies whether the participant was in the AM or PM Focus Group, was removed.

C. Focus Group Findings

1. The participants questioned about the strengths of Pennsylvania's juvenile justice system were asked specifically, "How in their respective counties [did] the juvenile justice system both serve juveniles and protect their communities?" The pattern of responses contained in Appendix T showed that juvenile justice system success was dependent upon a vision of equality under the law from the top, from the supervisors and judges communicated directly and often to the line probation officers, school personnel, district attorneys, public defenders, and then to all professionals who, optimally, work in concert to achieve the common goal of serving kids in need. In both the AM and PM Focus Groups, the responses were consistent that Pennsylvania juvenile justice strives for a holistic approach to community protection, risk assessment of the juvenile to protect the public, and in providing appropriate services for the juvenile. Participants commented:

"I think the fundamental foundation of what our system is based on is balance in the court of justice and we're mandated to focus on community protection, accountability, and competency development. So I think we look at all the factors, we look at the charge, we look at all the other risk factors and needs that are identified in that youth's life, we develop a treatment plan keeping in mind that community protection has to be first. I think we focus our goals based on hoping to make that youth more competent and holding them accountable while keeping protection first and foremost. I think there is an attempt to collaborate with other partners and state workers in other disciplines in order to effectuate the best case plan that we can."

"I have found over the years that the vast majority of kids that come into our system, the thing that makes them a community protection risk is a symptom of what their real needs are. So we identify their needs and target an intervention for their needs and by assisting with that need we protect the community because, the vast majority are really just needy

kids and they're not a threat to the community when they're provided social services that would assist them to have productive and successful lives".

The notable difference in responses between the AM comparison county Focus Group and the PM intervention county Focus Group as evidenced in Appendix T was the frequency with which key concepts were volunteered from participants. For example, the categories of responses detailing the specifics of juvenile justice operation in the participants' respective county, led the intervention county Group to highlight eight relevant categories that contributed to system functionality: availability of diversion programs, availability of services targeting interventions, staff competency development, nontraditional work hours required of probation officers, identification of client needs, the dedication of the probation office work force, availability of training in alternative placements, and implementation of family programs. Not one of the comparison county Group members mentioned said factors. Out of the eight categories, the intervention Group had 14 responses and the comparison county Group had zero responses. The results indicate that the DMC intervention counties are much more aware of the need for training in juvenile placement options, cognizant that staff has to work harder and be more creative in devising mechanisms to assist juveniles, and more resources are needed from the community to help juvenile professionals achieve their goals of alternative placements while in the comparison counties, such factors are not paramount. On the other hand, the comparison county participants did mention that money, distribution of resources, and the equal treatment of offenders contributed to optimal functionality of the juvenile justice system, while none of the intervention county Group mentioned such factors. Meaning the trend between the two groups' responses may indicate that DMC is an abstract concept for comparison counties while the intervention counties are more focused on the nuts and bolts of service delivery.

2. To address the domain of the county-specific dynamics that may influence the processing of a juvenile offender through intake to detention, participants were asked, "Who or what do you think is responsible for the success in your county's juvenile justice system?" and, again, there was little variance in the AM and PM Focus Groups' responses that the judge and court set the tone for joint cooperation to meet the "common goal" of reaching the best outcome for each kid in need. Participants generally agreed by their comments that the recipe for a juvenile's successful outcome, regardless of race, was an environment of communication, a willingness to take certain risks at the rehabilitative potential for particular juveniles including getting the juvenile's family members to "buy into" the proposed solutions. Participants said:

"Can I just start by saying that I think judges play the most vital role in any service plan. I've been around long enough to see really good judges who really want to be there and

work very hard at learning what we do and how we do it and all that sort of stuff and we've unfortunately had some judges that really didn't want to be there and, uh, just trying to go through the motions or try to do things with shortcuts and that doesn't work. I think your system is going to be as successful as your judge is dedicated to what he's doing".

"I support that wholeheartedly, I cannot emphasize that enough. You try to get all the stakeholders, it's important to have everyone on the same page as much as possible and there are many different stakeholders. But if the court is not committed you're going to hit roadblocks and people are very in tune with lip service quite frankly and those that are just going through the motions and it can really be the downfall in the department."

"The court obviously has to drive what we are doing, if we can't convince the court that this is a good idea and if the court doesn't convince everybody else and also think the same way, nothing really good is going to happen. I think we're also blessed with a great staff and great community resources that are available for us to use and we're bringing in a component that I think is critical and I think that is the parent/family group conferencing. What is being selected more than a weekend program, were evidence based models, family group conferencing, multi-systemic therapy, things that are affecting the parents and their ability to be in charge, because none of the probation officers want to be the parents. So the court, the staff, the resources, the evidence based programming and models to help families."

As indicated in Appendix T, the categories of responses in the second domain parallels the trend noted in response to question 1 above. That is, in talking about the basis for success in the participants' respective counties, the comparison counties noted the abstract concepts embodied in the categories of money, prevention services, treatment services, consistency in a youth's life, and the length of service by a particular district attorney, where not one intervention county participant mentioned said categories; out of these five categories, comparison county participants made 6 references and the intervention county participants made no references. On the other hand, the intervention county participants noted that probation officer and probation staff "buy in" to a new way of thinking and performing, competency development, evidence-based programming and community group involvement were central to their systems' success,

where those themes were not mentioned once by comparison county participants. For example, one intervention county participant said:

"I think a lot goes into the buy in of probation officers. We have focused on the competency development process, trying to change the attitudes of P.O.s to try to be more proactive with competency development. We are going to try and sit down with the family for 3, 4, 5, 6 hours and map out a plan as opposed to the past when it was knocking on the door, [asking] "how ya doing?," drug tests, and "are you doing alright in school?" That was a real big struggle for us and we've made a lot of strides, but I think buy in with the way you want to go and the direction you want to go as an office, getting your staff on board with that before we can successfully implement anything and part of that is getting your judges on board, too. They need to support what you're doing, we have a really good relationship with our juvenile justice judges, which really helps."

What the response rate indicates is that DMC intervention counties are best served by training and development in how to respond to a particular juvenile with knowledge of all alternatives to placement, where said issues did not necessarily need to be considered in the comparison counties.

To address whether or not juvenile justice professionals' discretion was influencing decisions about the appropriate disposition of a juvenile's case, participants were asked, "How are the decisions made at each step in the process," covering the areas of intake, diversion, dispositional recommendations, placement and detention. Responses across both the comparison and intervention counties indicated that there was a multi-level approach to properly classify the juvenile. Many responses indicated that probation officers sought from many sources input and information to help make the right choice about how a specific juvenile should be processed. While Focus Group participants described the decision-making processes and steps, it was noted by researchers - but not necessarily the participants - that there were decision points in which the professionals' assessment may be subjective, but there would be no evidence whether race bias played a role at each decision point. For example, participants said:

"We have a few diversion programs, obviously informal, but a few that allow us to . . . if we have a case where it could be a referral from a police officer who believes that the youth aid panel would work. We have over [hundreds of] kids in the youth aid panel program and that's a huge chunk of kids we are able to help without the need of being put formally into the system. We also have a fast track drug program which if a kid has a drug problem and they go through the program, it's a rather intensive program, they

complete that, obviously their charge is dismissed. That's helped, they usually have 15-20 in that program at any given time."

"We have an intake unit that makes the intake decisions and also makes the decision at that point whether the allegation will be petitioned to court or handled informally or some other way. So we really don't have a lot of diversion right out of the system yet. Our diversion is more informal adjustment, consent decree. Those diversion decisions right now are made at intake. The only charge that perhaps we can pack up the horse and send them another way is certifications from a magisterial district judge. We don't accept all of them. We work with the kids and sometimes work with the magisterial district judge to take it back. The dispositional recommendations are done by committee with some outside resources, psychological evaluation, if there's a mental health worker that can provide some input, a detention that can provide input. Juvenile placement decisions are made by the court and the judge. Our recommendation goes up to the court. In detention decisions we are also using a detention risk assessment instrument and we have an on-call worker in the evening. Probation officers with their supervisor make those decisions. The district attorneys not involved in that, except maybe before it gets to our office."

As noted in Appendix T, there was a stark comparison between comparison counties and intervention counties in terms of decision-making protocol specifically in the comparison counties' use of Youth Aid and Community Justice Panels, while only one intervention county participant made such reference. The intervention county participants often mentioned decision-making authority at intake assessments and interviews, the use of a detention risk assessment tool to determine detention, dispositional recommendation plans by the probation officer and supervisor, the judge having the final say in all recommendations for placement, and said placement decisions being based on a recommendation from the system director. As many participants mentioned, risk assessment instruments are being used while, in some counties, the tool has yet to arrive. The trend to note from participants' responses is comparison counties rely heavily on a community-based intake process by which probation officers may not even see summary offenders, but in the intervention counties there is lots of personal contact and levels of decision-making with respect to placement and detaining a juvenile where such decision points may be affected by racial bias, but only the quantitative part of this study may support that conclusion, not the qualitative responses from the Focus Groups. That is, not one respondent

indicated that race played a role in their decision-making process on determining the appropriate disposition of a juvenile.

3. For the domain questions about the extra-judicial factors affecting juvenile crime, such as social, economic, education, family and community influences, Focus Group participants were asked, "What role do social, family/parental, education, individual, and economic factors play in minority overrepresentation in the juvenile justice system?" and both Groups' responses generally highlighted the lack of a stable family-life for many juveniles of color and agreed that family interaction, participation, and support for the juvenile once the juvenile was in the system played a role in DMC. Participants said:

"I think the number one thing I see is the family/parental values."

"I think we [probation officers] are always the worst case scenario. "

"Just on placement decisions, we can't complain about families not being involved with their kids and send them five hours away. To not assist the family in meeting or visiting the kid."

"I just think with the parental factors, when you grow up in a house where the structures not there, dad is not there, mom has a different boyfriend every month and mom/or dad isn't working and looking for it. All these factors come into play. Kids are sponges they take in everything they see and hear. So I mean it's no surprise that the kids are not growing up and being go getters. If school isn't working for them to intervene effectively, it is just a vicious cycle of life. What the answer is to break that cycle I don't know."

The intervention county responses generally repeated the theme that courts and probation officers had to change the "way they had done business" to attack their DMC problem. Participants noted some probation officers' reluctance to change the way they interacted with a juvenile's family. The intervention Groups' responses deviated most sharply from the comparison county Groups in mentioning the specific family circumstances (i.e., functionality, "cultural competency"), and the willingness to attend family-group counseling as compelling measures that contributed to minority over-representation, where no one in the comparison counties mentioned said specific categories. The intervention counties noted a shift in probation officer responsibilities from simply filling out paperwork and making routine decisions that might lead to court sanction to actually spending the time and working with families in the context of making family-counseling efforts successful. There was also an acknowledgment from the intervention counties that how the probation office was structured was very important to building and maintaining

trust within the community, for example using Spanish-speaking signs, receptionists, and voicemail messages to be warm and welcoming to Spanish-speaking clients and their families.

One participant in an intervention county noted the additional obstacle facing probation officers was the lack of trust of law enforcement in general and the juvenile justice system in particular. Noted was the sometimes Herculean task of educating the minority community to get its members to trust the probation officers, to understand the larger picture of what it means for their lives when they stand in front of a judge. Because many juveniles of color come from limited communities, their narrow perspective "impacts how they understand services, [and] how they accept services" which, in turn, limits the probation officer's measure of success. In large urban areas, the consensus was that probation officers have the additional hurdle to "make our impact [on their juvenile client] far greater than that one time in front of the judge." Many probation officers spoke about the issue of "mutual respect" between probation officers, the juveniles, and their families and highlighted that once trust was earned, the gap in services in helping the juvenile was more easily closed.

4. For the domain about the systemic factors that may contribute to DMC and any county-wide efforts to ameliorate its effects participants were asked, "What factors are in your control in the Juvenile Justice system? What do you think would make the biggest difference or biggest dent in decreasing the amount of racial disparity in your county?" Both Focus Groups were in agreement that the availability of standardized assessment and placement alternatives may decrease racial disparity. Specifically, the Youth Level of Service/Case Management Inventory risk/needs assessment tool (YLS), could be used to reduce subjective determinations about which juvenile was referred to a detention facility, while still acknowledging room for discretion (which may or may not reflect bias) in the way the YLS is scored. Again, at least one participant noted that even with the YLS that has been mandated in all Commonwealth counties, some probation officers are reluctant to change the ways they "do business." Participants said:

"The fact that we are looking at it, just trying to be aware of why you're detaining and I think to be fair to everybody, that you detain based on certain criteria, that's where I think the assessments come in. That takes away the discrimination, based on facts and the more we can base the decisions on facts, I think you can reduce any level of discrimination. I don't think it's going to make those numbers change all that dramatically, but I think it may help somewhat. "

"I think it is gonna take a little time . . . probation officers don't trust the tool yet. They don't trust the detention risk assessment instrument, that was evidenced pretty clearly when I looked some of the stats and for those kids that fell into an alternative, only one went to an evening reporting center, which is the highest level of supervision. All of the rest got overridden and ended up in detention, because they hadn't really come to say, "well this kid is gonna commit an ax murder tonight I just know it if he doesn't get into detention."

Within the same domain participants were asked, "Are there programs or services within the juvenile justice system within your counties that specifically address minority overrepresentation?" The intervention counties had specific programs in place to address the DMC problem. In the comparison counties, the responses circled around community programs that may have been unsuccessful due to mismanagement or infighting among program staff or it's Board of Directors. As one comparison county participant said about talking about race "when you start opening up the topic sometimes you can make it worse, that's the risk. It polarizes people."

For the intervention counties, there was more concentrated attention focused on fixing DMC by increased cultural-sensitivity training for the police and the availability of sufficient resources for competent diversion programs. On more than one occasion in both Focus Groups, participants noted that for many juveniles in the justice system their primary problem was lack of parental concern, control, or cultural competency. Participants reflected that:

"I think one of the areas is in the education or truancy area, a lot of these kids in our city, they're on the streets, I ask them, "what they wanna be when you grow up," [and they answer] "well I'm gonna be a doctor, I wanna be this or that," [and I say] "but you never go to school and when you do you don't go to class and so what's the disconnect?" A lot of it is these kids don't have any vision, or any dreams. I think it's important, we're trying to partner with the faith community to provide mentors, there's a lot of really competent Hispanic and African American folks in our community that now see when we start meeting with them that we need more mentors, we need people to show these kids."

While the numbers as indicated in Appendix T indicate no great variance on whether police training or a continuum of community services and programs existed in the relevant community to specifically address DMC, individual comments from both Groups reflected more focus on police and police training to reduce DMC while comparison county comments focused on the lack of minority community leadership and a "self-help" attitude that were larger predictors of success of keeping minority youth out of the

system (by definition, comparison counties do not have a DMC problem). Some intervention county participants said:

"I went to the police last weekend and I said I am suggesting you do some training, the department is just outside the city, and all the officers need this training, and he's saying I could probably get this approved through my mandatory trainings. We have to start there I think, it's something we're not used to doing, I don't know if we have the wherewithal or time to do it."

"In this work we concentrate on urban settings, but for example if a Hispanic kid drives into a small town, what are those police officers going to immediately say? We better keep an eye on him because he's not from this area, he's from the city and there might be an arrest point there when there normally wouldn't be. I think it's not just concentrated on city police, but it's concentrated on all of them."

"I think that arrest points important, I think there are communities, I don't know how strong in some of these communities, the prevention pieces are. We're not funded for prevention really, we don't have the mandate, it's so important and one thing that we can do is make sure we have diversion programs in place, make sure we are fundamentally fair when we make decisions and treat kids and be more respectful for kids and families when they come into our department. I think we're working in that direction, I think there has been some good work done by us."

While comparison county participants noted:

"We do have some measures that show in upper 70 percent success rate of those kids keeping them from recidivating. Their approach though is don't blame the system, don't blame your parents, this is you. Learn how to reach out and how to be a father if you have a kid. They really turn it into a self-esteem and bettering yourself. Don't be expecting a handout. It really got the community kind of upset, but it's a different kind of approach. A lot of times people don't want to be told that you shouldn't blame other people, it's you."

"Is this run by a minority? That's what seems to work. Each culture is effective with its own culture. We go talk to them, but there's still the barrier of [being a different race]. We've often talked about that we need some minority leadership to rise up, because they could probably impact things, but it's the white guys that are trying to tell the minority. If I am a poor minority I don't want you coming in and saying this is what we need to do by an outsider. So I don't know how you do that either, but I think the culture maybe has to change, and its own leadership rise up instead of us plugging the hole."

5. The last domain which the researchers asked about was whether the racial and gender composition of the professional staff tasked with processing a juvenile offender from court to probation and whether or not gender and racial workplace diversity had an effect, if any, on Pennsylvania DMC rates. Both Focus Groups were asked, "Does racial diversity of the Juvenile Justice workforce have an effect on Pennsylvania's DMC rates?" to which the overwhelming reply by both groups was that the racial composition of a probation office had no effect on the quality of the delivery of services. But the probation officers, themselves, had varying perceptions based on the significance of race vis' a vis' the clientele they serve. They said:

"We have . . . black officers and sometimes families don't want that because they get the sense of a black officer is embarrassed that his culture is committing crimes so he's going to be tough on them."

"[Having a diverse workforce] prevents people from criticizing you, but that's all it really does."

"We're back to when a parent and child minority come into our office, they can tell during that intake if the officer, if there is any bias coming from the P.O. Maybe we should look at gender, whether they are male or female. Our staff [has many] female[s] and our clientele is [majority] male, should we match that?"

"We have . . . African-American probation officers that supervise mostly African-American men, their court time for violation is the same as any other relationship in the city." "We have [minority probation officers] and [some] of them want nothing to do with working in a black community. They would rather work with the white families, I mean it's crazy, but that's how it is."

"We have minority officers . . . so you really can't look at the color because you have to look at the individual and how that fits the mark. Half of [the minority officers] do the same thing, they only want to work with white families, why?, because it's a little easier."

There was not a notable difference in the number and type of responses generated by the comparison and intervention counties concerning their views on the significance of workplace diversity. For the comparison counties, the qualities of the probation officer or the specific role a minority staff member played in the justice system (i.e., officer, social worker) were mentioned as categories with those Focus Group members specifically detailing how minority probation officers may have a specific preference to avoid working in communities of color. Whereas, in the intervention counties, participants had similar responses that a probation officer's race mattered less than how he or she treated a client, workplace diversity was important, but not crucial. Similarly the comparison county participants agreed, but talked about the issue differently.

As a corollary to whether or not racial and gender diversity in the juvenile justice workforce had any impact on the Commonwealth's DMC rates, Focus Group participants were asked, "If you were to ask a minority member of your community to describe race relations in your county, what do you think they would say?" and the answers from both the comparison and intervention counties indicated how, from a "bird's eye view," minority members may perceive the juvenile justice system as having a disproportionate impact based on race. Whether it was from initial contact with law enforcement, to the lack of viable minority citizens called for jury service, to criminal justice workers who are "probably 98% white," juveniles of color may not believe the system is fair based on race. More than one participant noted that if asked the same question about the perception of race relations, white community members would have a favorable view and minority members would not.

The most interesting aspect of the Focus Group question dealing with racial and gender diversity was the ensuing discussion about minority communities and the police attention they attract. Participants said it was the police decision-making that delivers the juveniles to the probation officers. That is, the probation officers have no control over police decision-making that delivers the juveniles to their offices.

The intervention county participants lamented:

"We have conducted family forums throughout the state just talking to families and the number one thing that they talk about was just respect, that they are treated with respect and that's an instant buy in. Both the probation officers being treated with respect by the family and the family being treated with respect. It's about cooperation and partnership and being treated respectfully, they don't mention race or gender, just how they are treated."

"It goes back to even before the kid gets into our office. We don't get these juveniles unless they are referred to us, and in a lot of places training, diversion policies, police. I don't know what they need, but it comes back to the kids being referred to us in the first place; we need different ways to deal with it as opposed to offloading them into the juvenile justice system. I see a lot of kids that come through, and wonder why was a police report filed?"

"When the kids enter the system, that is an entry point we don't control. We can address the other decision points, we can make them more fair, but that one we don't control. That also leads into prevention work, community work and opportunities for kids, the afterschool, we don't control any of that and sometimes kids find their way into our system. I think we just have to work at it."

"We can only deal with who comes through the front door and who gets referred to our office, we do a lot of looking at a lot of those decision making points to see how we're treating kids, through the decision making points."

"Our African American population lives predominantly in areas where there is a large police presence and then they bring them to us and that's who we deal with."

"Where we have a large population is where there is going to be the most crime, and who's living in those large populations?"

D. Focus Group Summary

It appeared from a general review of Focus Group responses that a barrier to eliminating possible bias and race-based decision making is the lack of uniformity in the administration of juvenile justice across the state's 67 counties. According to participants, in some counties the prosecutors and public defenders take a larger role in helping fashion a response, in other counties, the lack of manpower may affect diversion or detention decisions. Within the larger context of American criminal justice, Focus Group participants acknowledged that serving minority families poses a different, more complex, and challenging level of difficulty. Factors that contribute to that difficulty for the probation officers range from the lack of a father figure or fractured family status (a finding supported in Chapter 4), the pervasiveness of crimes committed by juveniles from broken families and the perception that minority communities are infested with violence. Also contributing to the lack of workforce diversity was the lack of people of color with four-year degrees who want to go into probation when more lucrative offers beckon. But both Focus Groups remain optimistic that a DMC focus is helping make juvenile justice professionals conduct a "self-check" that when they make certain recommendations regarding a juvenile, especially if the decision involves detention, there is an awareness that race may play a factor. As one participant in a comparison county said about this study:

"One suggestion I would have, is that moving forward with, whatever your conclusions are, if there are particular factors that boil down from this, that some consideration be given to having those tracked by the county case manager system. To somehow be able to look at or evaluate or make sure we have those particular data that's in there to see what the criteria are on the intake decision, what are the particular factors that go into a particular decision, so that we can really take a look at real information on these particular kids and see. We should be looking at facts, what are they really."

One intervention county, Lancaster, was applauded for its efforts to combat DMC in the October 2010 DMC Action Network eNews update. Once Lancaster collected data about the top three offenses for which youth were detained, the county could then direct its resources to combatting those three offenses as a mechanism to reduce the number of minority youth in secure detention. The transition to an evidence-based model upon which to design juvenile justice programs to address the needs of youth in their communities appears to be the wave of the future.

CONCLUSIONS FROM THIS RESEARCH STUDY

Throughout the study, the researchers were impressed with the level of professionalism exhibited by the juvenile justice practitioners throughout Pennsylvania and recognize the many sacrifices practitioners make to improve the lives of children in their care. The numbers, statistics, findings, conclusions, and recommendations should not be interpreted to disparage any professional working in Pennsylvania's juvenile justice system, but rather as a collective attempt to both address the pernicious nature of DMC and close the potential gaps in services to improve the overall delivery of juvenile justice in the Commonwealth.

- Arrest is the most problematic decision-point, although secure detention and secure confinement also have high RRIs among minority youth.
- Patterns of RRIs across decision points among counties vary widely as there is not set pattern suggesting counties need to develop strategies based off of county- rather than state- level data.
- There is ample evidence indicating that the vast majority of counties have many areas to address when considering DMC across decision points.
- Many counties from the Kempf (1992) study showed a decrease in RRI rates from 1989 to 2000, then an increase in 2009.
- The covariate analyses found that age, school status, gender, family status, crime type, and living
 arrangements were important factors to consider across counties and decision points, although the
 patterns varied among counties.
- Based on our preliminary macro-level analyses, we conclude DMC appears to be more of a
 systemic, rather than, a structural issue. This means that in Pennsylvania, the juvenile justice
 system itself must focus on how decisions are made to process juveniles throughout the system.
- It should be noted that our study of differential offending based on crime type (not severity) play a similar role as to age, school status, gender, family status and living arrangements. Thus, we conclude juvenile processing decisions in Pennsylvania are based on race/ethnicities.
- RRI rates are more reflective and representative of decisions made by juvenile justice practitioners rather than individual characteristics about the specific juvenile.
- We can conclude from the 2008 findings that youth who live with one parent are less likely to be arrested, and if arrested, are more likely to be diverted out of the juvenile justice system.
- We can conclude from the 2007 and 2008 findings that a community's mobility, whether or not the juvenile is attending school, and whether they come from a single-parent home had an impact on RRI at arrest.
- Residential mobility and living arrangements were found to impact RRI at referral in 2008 only.

- Our results show that structural community-level factors may not make a big difference in RRI.
 This could suggest that DMC is more of a systemic, rather than, a structural issue.
- From Focus Group responses, comparison counties have an abstract knowledge of DMC, its
 problems and cures and may benefit from specific data, numbers, and trends to be aware of DMC
 issues.
- The Focus Group responses indicate intervention counties would benefit from more training in how to specifically find alternative placements for juveniles, how to work with families to gain trust and build mutual respect, and how to work closely with police to work in concert to eliminate the cultural biases that may lead to the initial DMC contact arrest.
- Focus Group responses suggest that as counties move to an objective form of risk assessment in the YLS, effort must be made to train officers in using the YLS to avoid subjective race or ethnic biases that may influence completing the form.
- From the perspective of the Focus Groups, juvenile justice professionals are motivated and
 willing to tackle the DMC problem, they are surprised by the data and want more data on a
 regular and consistent basis to reform their current practices, and all remain optimistic DMC can
 be reduced, if not eventually eliminated, in the Commonwealth.

RECOMMENDATIONS

Each county in Pennsylvania is unique and has a specific way it responds to the challenges of juvenile justice administration. The findings and conclusions from both the quantitative and qualitative studies above suggest significant directions for new strategies to develop to reduce or eliminate Pennsylvania's DMC. These suggestions are:

- 1. For Statewide Implementation by The Pennsylvania Commission on Crime and Delinquency
 - a. Continuing monitoring of DMC rates across counties and decision points.
 - b. Decisions about fiscal allocations should continue to support DMC-related initiatives in order to reduce DMC in the Commonwealth
 - c. Educate public officials about the federal mandate to reduce or eliminate DMC and to link state efforts to obtaining federal DMC grants/funds
 - d. Expedite the dissemination of data to increase awareness of DMC as a statewide concern
 - e. Integrate DMC as an education module for cultural competence and ethnic awareness of all juvenile justice professionals
 - f. Adopt evidence-based practices to analyze treatment modalities with the goal of reducing recidivism among juvenile delinquents

2. For County-Level Juvenile Justice Management

- a. Formulate race sensitivity training among juvenile justice practitioners separating by rank to foster open dialogue in a secure environment where practitioners can talk freely about race.
- b. Integrate DMC as an education module for cultural competence and ethnic awareness of all juvenile justice professionals
- c. Each county should be aware of DMC reduction or prevention strategies based on local datadriven evidence
- d. Each county should explore gaps of services related to community-based alternatives to secure detention and secure confinement

3. For Future Research

- a. Continue more extensive macro-level analysis examines structural factors (e.g., poverty, living arrangements) across all ethnic groups and how such factors relate to RRI
- b. Examine re-arrest data from 2007 forward to determine the factors that impact recidivism across race.
- c. Assess current intervention strategies to discover the breadth and depth of DMC awareness among juvenile justice practitioners
- d. Examine the methodology in which secure detention, and secure confinement decisions are made in Pennsylvania's juvenile justice system.

- e. Assess awareness and knowledge by conducting an anonymous survey of DMC across the Commonwealth's juvenile justice practitioners.
- f. Conduct Focus Groups in the best and worst DMC performing counties to include a broad spectrum of the community most affected by DMC to include participants from law enforcement, school personnel, parents, the faith community, and at-risk juveniles.

REFERENCES

- Alexander, M. (2010). *The new Jim Crow: Mass incarceration in the age of colorblindness*. New York: The New Press.
- "An Astounding Situation." (1940, January). The Southern Frontier.
- "And justice for some: Differential treatment of youth of color in the justice system." Washington, D.C.: Nat'l Council on Crime and Delinquency.
- Aubel J. (1994). *Guidelines for studies using the group interview technique*. Geneva, Switzerland: International Labour Office.
- Benekos, P. J., & Merlo, A. V. (2008). Juvenile justice: The legacy of punitive policy. *Youth Violence and Juvenile Justice*, 6(1), 28-46.
- Bishop, D. M. (2005). The role of race and ethnicity in juvenile justice processing. In D. F. Hawkins & K. Kempf-Leonard (Eds.), *Our children, their children: Confronting racial and ethnic differences in American juvenile justice* (pp. 23-82). Chicago: University of Chicago Press.
- Bridges, G. S., & Steen, S. (1998). Racial disparities in official assessments of juvenile offenders: Attributional stereotypes as mediating mechanisms. *American Sociological Review*, 63(4), 554-570.
- Brown v. Board of Education of Topeka, 347 U.S. 483 (1954).
- Bumbarger, B. (Ed.) *Disproportionate minority confinement: A special report*. Washington, D.C.: Coalition for Juvenile Justice.
- Feld, B. C. (2007). Unmitigated punishment: Adolescent criminal responsibility and LWOP Sentences. *Journal of Law & Family Studies*, 10, 11-82.
- Glennon, T. (2002). The Stuart Rome lecture knocking against the rocks: Evaluating institutional practices and the African American boy. *Journal of Health Care Law and Policy*, 5, 10-67.
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Thousand Oaks, CA: Sage Publications.
- Hawkins, D. F., Laub, J. H., Lauritsen, J. L., & Cothern, L. (2000). *Race, ethnicity, and serious violent juvenile offending*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention, Juvenile Justice Bulletin.
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist*, 25, 517-572.
- Hsia, H., Bridges, G. S., & McHale, R. (2004). *Disproportionate minority confinement* 2002 update. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- Immarigeon, R. (1996). Families know best. State Government News, 39, 22-24.

- Juvenile Justice and Delinquency Prevention (JJDP) Act of 1974 (Public Law 93-415, section 223[a][23]).
- Kakar, S. (2006). Understanding the causes of disproportionate minority contact: Results of focus group discussions. *Journal of Criminal Justice*, *36*, 369-381.
- Kempf-Leonard, K. (1992). *The role of race in juvenile justice processing in Pennsylvania* (Prepared for the Center for Juvenile Justice Training and Research). Shippensburg, PA: Shippensburg University.
- Kempf-Leonard, K., Pope, C., & Feyerherm, W. (1995). *Minorities in juvenile justice*. Thousand Oaks, CA: Sage.
- Klarman, M. J. (1994). How *Brown* changed race relations: The backlash thesis. *The Journal of American History*, 81(1), 81-118.
- Klinger, D. A. (1997). Negotiating order in patrol work: An ecological theory of police response to deviance. *Criminology*, *35*, 277-306.
- Leiber, M. J. (2002). Disproportionate minority confinement (DMC) of youth: An analysis of state and federal efforts to address the issue. *Crime & Delinquency*, 48(1), 3-45.
- Leiber, M. J. & Rodriguez, N. (2011). The implementation of the disproportionate minority confinement/contact (DMC) mandate: A failure or success? *Journal of Race and Justice*, 1, 103-124.
- Massey, D. S. (1995). Getting away with murder: Segregation and violent crime in urban America. *University of Pennsylvania Law Review, 143*(5), 1203-1232.
- Massey, D. S., Condran, G. A., & Denton, N. A. (1987). The effect of residential segregation on black social and economic well-being. *Social Forces*, 66(1), 29-56.
- Miles, M. B., & Huberman, M. A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Morgan, D. L. (1988). Focus groups as qualitative research. Newbury Park, CA: Sage.
- Morrow, S. L., & Smith, M. L. (2000). Qualitative research for counseling psychology. In *Handbook of Counseling Psychology* (3rd ed.), (Ed.) Steven D. Brown and Robert W. Lent, pp. 199-230. Hoboken, NJ: John Wiley & Sons.
- Office of Juvenile Justice and Delinquency Prevention (2009). *Disproportionate Minority Contact Technical Assistance Manual*. (4th ed.). Washington D.C.: U.S. Department of Justice.
- Oshinsky, D. M. (1996). Worse than slavery: Parchman Farm and the ordeal of Jim Crow justice. New York: The Free Press.
- Pattison, B. (1998). Minority youth in juvenile correctional facilities: Cultural differences and the right to treatment. *Law and Inequity*, *16*, 573-599.

- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Pickett, R. S. (1969). *House of refuge: Origins of juvenile reform in New York state, 1815-1857*. Syracuse: Syracuse University Press.
- Price Jr., E. J. (1976). School segregation in nineteenth-century Pennsylvania. *Pennsylvania History*, 43(2), 120-137.
- Sellers-Diamond, A. A. (1994). Disposable children in black faces: The "Violence Initiative" as inner-city containment policy. *University of Missouri-Kansas City Law Review*, 62, 423-469.
- Shepherd, R. E. (1999). Pursuing a dream: The juvenile court movement in Virginia. *Virginia Lawyer* 47(7), 1-12.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research techniques and procedures for developing grounded theory (2nd ed.). London: Sage Publications.
- Tang, K. C. & Davis, A. (1995). Critical factors in the determination of focus group size. *Family Practice*, 12(4), 474-475.
- Tanenhaus, D. S. (2004). Juvenile justice in the making. New York: Oxford University Press.
- Wright, K. N., & Wright, K. E. (1994). Family life, delinquence, and crime: A policymaker's guide: Research summary.

Appendix A - Decision Point: Arrest PARRI for Arrest: 3.99* PARRI for Arrest: 1.78* PARRI for Arrest: 2.92*						
rakki 101 Ali	est. 5.99 ·	PARKI 101 AI		PARKI 101 A		
County	Black RRI	County	Hispanic RRI	County	All Minority RRI	
Adams	2.95*	Adams	.64*	Adams	1.29	
Allegheny	5.14*	Allegheny	.26*	Allegheny	4.23*	
Armstrong	2.19*	Armstrong	NA	Armstrong	1.40	
Beaver	4.40*	Beaver	1.74*	Beaver	3.83*	
Bedford	3.23*	Bedford	NA	Bedford	2.06*	
Berks	2.13*	Berks	1.75*	Berks	1.75*	
Blair	3.78*	Blair	1.19	Blair	2.74*	
Bradford	NA	Bradford	NA	Bradford	NA	
Bucks	2.63*	Bucks	1.27*	Bucks	1.54*	
Butler	3.25*	Butler	1.12	Butler	1.98*	
Cambria	5.77*	Cambria	1.47	Cambria	4.37*	
Cameron	NA	Cameron	NA	Cameron	NA	
Carbon	1.39	Carbon	.62	Carbon	.88	
Centre	1.90*	Centre	NA	Centre	.70	
Chester	4.13*	Chester	2.31*	Chester	2.70*	
Clarion	NA	Clarion	NA	Clarion	NA	
Clearfield	NA	Clearfield	NA	Clearfield	NA	
Clinton	NA	Clinton	NA	Clinton	NA	
Columbia	2.62*	Columbia	NA	Columbia	1.28	
Crawford	3.69*	Crawford	1.32	Crawford	3.02*	
Cumberland	4.00*	Cumberland	.71	Cumberland	1.88*	
Dauphin	2.94*	Dauphin	1.13	Dauphin	2.28*	
Delaware	2.76*	Delaware	1.01	Delaware	2.21*	
Elk	NA	Elk	NA	Elk	NA	
Erie	3.51*	Erie	1.45*	Erie	2.72*	
Fayette	4.67*	Fayette	NA	Fayette	3.81*	
Forest	NA	Forest	NA	Forest	NA	
Franklin	4.84*	Franklin	1.71*	Franklin	2.99*	
Fulton	3.30*	Fulton	NA	Fulton	2.54*	
Greene	NA	Greene	NA	Greene	NA	
Huntingdon	2.92*	Huntingdon	NA	Huntingdon	1.85*	
Indiana	3.30*	Indiana	NA	Indiana	2.28*	
Jefferson	NA	Jefferson	NA	Jefferson	NA	
Juniata	NA	Juniata	NA	Juniata	1.26	
Lackawanna	2.40*	Lackawanna	1.85*	Lackawanna	1.86*	
Lancaster	4.68*	Lancaster	2.43*	Lancaster	2.78*	
Lawrence	5.25*	Lawrence	NA	Lawrence	4.46*	
Lebanon	2.80*	Lebanon	2.11*	Lebanon	2.14*	
Lehigh	3.04*	Lehigh	1.40*	Lehigh	1.63*	
Luzerne	3.27*	Luzerne	1.37*	Luzerne	1.91*	
Lycoming	3.97*	Lycoming	.54	Lycoming	3.18*	
McKean	NA	McKean	NA	McKean	1.24	
Mercer	3.48*	Mercer	NA	Mercer	2.77*	
Mifflin	4.64*	Mifflin	NA	Mifflin	3.11*	
				. *		

Monroe	1.43*	Monroe	.71*	Monroe	1.00
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Montgomery	6.17*	Montgomery	1.38*	Montgomery	3.57*
Montour	NA	Montour	NA	Montour	NA
Northampton	3.22*	Northampton	1.57*	Northampton	1.92*
Northumberland	2.07*	Northumberland	1.43*	Northumberland	1.71*
Perry	1.37	Perry	NA	Perry	1.05
Philadelphia	1.69*	Philadelphia	.68*	Philadelphia	1.36*
Pike	.75	Pike	.58*	Pike	.61*
Potter	NA	Potter	NA	Potter	NA
Schuylkill	3.13*	Schuylkill	1.63*	Schuylkill	2.14*
Snyder	3.64*	Snyder	2.04	Snyder	2.59*
Somerset	4.71*	Somerset	NA	Somerset	2.35*
Sullivan	NA	Sullivan	NA	Sullivan	NA
Susquehanna	NA	Susquehanna	NA	Susquehanna	NA
Tioga	NA	Tioga	NA	Tioga	NA
Union	3.70*	Union	3.46*	Union	2.90*
Venango	3.42*	Venango	NA	Venango	2.34*
Warren	NA	Warren	NA	Warren	NA
Washington	6.54*	Washington	NA	Washington	4.71*
Wayne	1.36	Wayne	NA	Wayne	.70
Westmoreland	6.06*	Westmoreland	1.11	Westmoreland	4.28*
Wyoming	NA	Wyoming	NA	Wyoming	2.21*
York	3.63*	York	1.60*	York	2.48*

^{*=}statistically significant

Appendix B- Decision Point: Referral								
PARRI for Refe	erral: 1.20*	PARRI for Re	ferral: 1.33*	PARRI for R	Referral: 1.30*			
County	Black RRI	County	Hispanic RRI	County	All Minority RRI			
Adams	.75*	Adams	NA	Adams	1.18*			
Allegheny	1.53*	Allegheny	NA	Allegheny	1.57*			
Armstrong	NA	Armstrong	NA	Armstrong	NA			
Beaver	1.25*	Beaver	NA	Beaver	1.32*			
Bedford	NA	Bedford	NA	Bedford	NA			
Berks	2.11*	Berks	2.66*	Berks	2.63*			
Blair	.68*	Blair	NA	Blair	1.54*			
Bradford	NA	Bradford	NA	Bradford	NA			
Bucks	1.90*	Bucks	1.91*	Bucks	1.93*			
Butler	1.22	Butler	NA	Butler	1.43*			
Cambria	1.10	Cambria	NA	Cambria	1.09			
Cameron	NA	Cameron	NA	Cameron	NA			
Carbon	NA	Carbon	NA	Carbon	2.75*			
Centre	NA	Centre	NA	Centre	NA			
Chester	1.71*	Chester	1.33*	Chester	1.61*			
Clarion	NA	Clarion	NA	Clarion	NA			
Clearfield	NA	Clearfield	NA	Clearfield	NA			
Clinton	NA	Clinton	NA	Clinton	NA			
Columbia	NA	Columbia	NA	Columbia	NA			
Crawford	.88	Crawford	NA	Crawford	1.02			
Cumberland	1.11	Cumberland	NA	Cumberland	2.03*			
Dauphin	1.73*	Dauphin	2.70*	Dauphin	1.96*			
Delaware	1.51*	Delaware	.93	Delaware	1.62*			
Elk	NA	Elk	NA	Elk	NA			
Erie	1.52*	Erie	1.96*	Erie	1.73*			
Fayette	1.14	Fayette	NA	Fayette	1.20			
Forest	NA	Forest	NA	Forest	NA			
Franklin	.88	Franklin	.63*	Franklin	.89			
Fulton	NA	Fulton	NA	Fulton	NA			
Greene	NA	Greene	NA	Greene	NA			
Huntingdon	NA	Huntingdon	NA	Huntingdon	NA			
Indiana	NA	Indiana	NA	Indiana	NA			
Jefferson	NA	Jefferson	NA	Jefferson	NA			
Juniata	NA	Juniata	NA	Juniata	NA			
Lackawanna	1.95*	Lackawanna	2.43*	Lackawanna	2.27*			
Lancaster	1.61*	Lancaster	1.64*	Lancaster	1.70*			
Lawrence	.76*	Lawrence	NA	Lawrence	1.95*			
Lebanon	1.51*	Lebanon	1.79*	Lebanon	1.72*			
Lehigh	2.14*	Lehigh	3.09*	Lehigh	2.85*			
Luzerne	1.14	Luzerne	1.39*	Luzerne	2.85			
Lycoming	1.69*	Lycoming	NA	Lycoming	1.42*			
McKean	NA	McKean	NA	McKean	NA			
Mercer	1.17	Mercer	NA	Mercer	1.25*			
Mifflin	NA	Mifflin	NA	Mifflin	NA			
141111111	1117	141111111	11/1	1411111111	11/1			

Monroe	1.34*	Monroe	1.35*	Monroe	1.36*
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Montgomery	2.07*	Montgomery	1.84*	Montgomery	2.11*
Montour	NA	Montour	NA	Montour	NA
Northampton	1.54*	Northampton	1.32*	Northampton	1.45*
Northumberland	1.54*	Northumberland	1.53*	Northumberland	2.59*
Perry	NA	Perry	NA	Perry	NA
Philadelphia	2.68*	Philadelphia	3.53*	Philadelphia	2.82*
Pike	NA	Pike	NA	Pike	2.04*
Potter	NA	Potter	NA	Potter	NA
Schuylkill	1.32*	Schuylkill	1.36*	Schuylkill	1.63*
Snyder	NA	Snyder	NA	Snyder	NA
Somerset	NA	Somerset	NA	Somerset	NA
Sullivan	NA	Sullivan	NA	Sullivan	NA
Susquehanna	NA	Susquehanna	NA	Susquehanna	NA
Tioga	NA	Tioga	NA	Tioga	NA
Union	NA	Union	NA	Union	NA
Venango	1.03	Venango	NA	Venango	2.78*
Warren	NA	Warren	NA	Warren	NA
Washington	1.19*	Washington	NA	Washington	1.22*
Wayne	NA	Wayne	NA	Wayne	NA
Westmoreland	.85*	Westmoreland	NA	Westmoreland	1.09*
Wyoming	NA	Wyoming	NA	Wyoming	NA
York	1.43*	York	1.42*	York	1.65*

^{*=}statistically significant

Appendix C - Decision Point: Diversion							
PARRI for Diversion: .77* PARRI for Diversion: .99 PARRI for Diversion							
County	Black RRI	County	Hispanic RRI	County	All Minority RRI		
Adams	NA	Adams	NA	Adams	1.33*		
Allegheny	.92	Allegheny	NA	Allegheny	.93		
Armstrong	NA	Armstrong	NA	Armstrong	NA		
Beaver	.89	Beaver	NA	Beaver	.89		
Bedford	NA	Bedford	NA	Bedford	NA		
Berks	.81*	Berks	1.05	Berks	.99		
Blair	.94	Blair	NA	Blair	.88		
Bradford	NA	Bradford	NA	Bradford	NA		
Bucks	.94	Bucks	1.30*	Bucks	1.09		
Butler	NA	Butler	NA	Butler	1.61		
Cambria	.94	Cambria	NA	Cambria	.94		
Cameron	NA	Cameron	NA	Cameron	NA		
Carbon	NA	Carbon	NA	Carbon	NA		
Centre	NA	Centre	NA	Centre	NA		
Chester	1.02	Chester	1.07	Chester	1.05		
Clarion	NA	Clarion	NA	Clarion	NA		
Clearfield	NA	Clearfield	NA	Clearfield	NA		
Clinton	NA	Clinton	NA	Clinton	NA		
Columbia	NA	Columbia	NA	Columbia	NA		
Crawford	NA	Crawford	NA	Crawford	1.79*		
Cumberland	1.05	Cumberland	NA	Cumberland	1.06		
Dauphin	1.02	Dauphin	1.12	Dauphin	1.04		
Delaware	.88*	Delaware	.65*	Delaware	.92*		
Elk	NA	Elk	NA	Elk	NA		
Erie	1.03	Erie	1.36*	Erie	1.06		
Fayette	.91	Fayette	NA	Fayette	.93		
Forest	NA	Forest	NA	Forest	NA		
Franklin	1.03	Franklin	NA	Franklin	1.02		
Fulton	NA	Fulton	NA	Fulton	NA		
Greene	NA	Greene	NA	Greene	NA		
Huntingdon	NA	Huntingdon	NA	Huntingdon	NA		
Indiana	NA	Indiana	NA	Indiana	NA		
Jefferson	NA	Jefferson	NA	Jefferson	NA		
Juniata	NA	Juniata	NA	Juniata	NA		
Lackawanna	.91	Lackawanna	.77	Lackawanna	.86		
Lancaster	.85	Lancaster	1.13	Lancaster	1.00		
Lawrence	.84	Lawrence	NA	Lawrence	1.31*		
Lebanon	NA	Lebanon	1.32	Lebanon	1.12		
Lehigh	.95	Lehigh	.99	Lehigh	.99		
Luzerne	.90	Luzerne	1.08	Luzerne	1.03		
Lycoming	1.16	Lycoming	NA	Lycoming	1.19		
McKean	NA	McKean	NA	McKean	NA		
Mercer	1.22	Mercer	NA	Mercer	1.23		
Mifflin	NA	Mifflin	NA	Mifflin	NA		

Monroe	.83	Monroe	.80	Monroe	.80
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Montgomery	1.29*	Montgomery	1.81*	Montgomery	1.33*
Montour	NA	Montour	NA	Montour	NA
Northampton	.98	Northampton	.98	Northampton	1.00
Northumberland	.60*	Northumberland	NA	Northumberland	1.01
Perry	NA	Perry	NA	Perry	NA
Philadelphia	.72*	Philadelphia	.82	Philadelphia	.78*
Pike	NA	Pike	NA	Pike	NA
Potter	NA	Potter	NA	Potter	NA
Schuylkill	.95	Schuylkill	NA	Schuylkill	1.06
Snyder	NA	Snyder	NA	Snyder	NA
Somerset	NA	Somerset	NA	Somerset	NA
Sullivan	NA	Sullivan	NA	Sullivan	NA
Susquehanna	NA	Susquehanna	NA	Susquehanna	NA
Tioga	NA	Tioga	NA	Tioga	NA
Union	NA	Union	NA	Union	NA
Venango	NA	Venango	NA	Venango	1.77*
Warren	NA	Warren	NA	Warren	NA
Washington	.96	Washington	NA	Washington	.97
Wayne	NA	Wayne	NA	Wayne	NA
Westmoreland	.89	Westmoreland	NA	Westmoreland	.83
Wyoming	NA	Wyoming	NA	Wyoming	NA
York	.92*	York	.96	York	.95

^{*=}statistically significant

Appendix D -Decision Point: Secure Detention							
PARRI for Secure Det.: 2.74* PARRI for Secure Det.: 1.96* PARRI for Secure Det.: 2.4							
County	Black RRI	County	Hispanic RRI	County	All Minority RRI		
Adams	NA	Adams	NA	Adams	1.57		
Allegheny	2.50*	Allegheny	NA	Allegheny	2.46*		
Armstrong	NA	Armstrong	NA	Armstrong	NA		
Beaver	2.23*	Beaver	NA	Beaver	2.05*		
Bedford	NA	Bedford	NA	Bedford	NA		
Berks	3.04*	Berks	2.01*	Berks	2.13*		
Blair	3.15*	Blair	NA	Blair	1.21		
Bradford	NA	Bradford	NA	Bradford	NA		
Bucks	.76*	Bucks	.86	Bucks	.75*		
Butler	NA	Butler	NA	Butler	NA		
Cambria	1.55*	Cambria	NA	Cambria	1.46		
Cameron	NA	Cameron	NA	Cameron	NA		
Carbon	NA	Carbon	NA	Carbon	NA		
Centre	NA	Centre	NA	Centre	NA		
Chester	1.66*	Chester	1.08	Chester	1.50*		
Clarion	NA	Clarion	NA	Clarion	NA		
Clearfield	NA	Clearfield	NA	Clearfield	NA		
Clinton	NA	Clinton	NA	Clinton	NA		
Columbia	NA	Columbia	NA	Columbia	NA		
Crawford	NA	Crawford	NA	Crawford	NA		
Cumberland	.85	Cumberland	NA	Cumberland	.65		
Dauphin	3.14*	Dauphin	1.65*	Dauphin	2.73*		
Delaware	1.80*	Delaware	4.26*	Delaware	1.70*		
Elk	NA	Elk	NA	Elk	NA		
Erie	1.60*	Erie	.77	Erie	1.51*		
Fayette	5.24*	Fayette	NA	Fayette	5.23*		
Forest	NA	Forest	NA	Forest	NA		
Franklin	1.63*	Franklin	NA	Franklin	1.78*		
Fulton	NA	Fulton	NA	Fulton	NA		
Greene	NA	Greene	NA	Greene	NA		
Huntingdon	NA	Huntingdon	NA	Huntingdon	NA		
Indiana	NA	Indiana	NA	Indiana	NA		
Jefferson	NA	Jefferson	NA	Jefferson	NA		
Juniata	NA	Juniata	NA	Juniata	NA		
Lackawanna	.66*	Lackawanna	.83*	Lackawanna	.72*		
Lancaster	1.53*	Lancaster	1.84*	Lancaster	1.66*		
Lawrence	NA	Lawrence	NA	Lawrence	NA		
Lebanon	1.60	Lebanon	1.09	Lebanon	1.19		
Lehigh	1.44*	Lehigh	.96	Lehigh	1.06		
Luzerne	2.46*	Luzerne	1.50	Luzerne	1.79*		
Lycoming	1.58*	Lycoming	NA	Lycoming	1.64*		
McKean	NA	McKean	NA	McKean	NA		
Mercer	NA	Mercer	NA	Mercer	NA		
Mifflin	NA	Mifflin	NA	Mifflin	NA		

Monroe	1.42*	Monroe	1.07	Monroe	1.29
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Montgomery	.70*	Montgomery	1.27	Montgomery	.79*
Montour	NA	Montour	NA	Montour	NA
Northampton	1.68*	Northampton	1.81*	Northampton	1.71*
Northumberland	NA	Northumberland	NA	Northumberland	NA
Perry	NA	Perry	NA	Perry	NA
Philadelphia	1.30*	Philadelphia	1.31*	Philadelphia	1.28*
Pike	NA	Pike	NA	Pike	NA
Potter	NA	Potter	NA	Potter	NA
Schuylkill	NA	Schuylkill	NA	Schuylkill	NA
Snyder	NA	Snyder	NA	Snyder	NA
Somerset	NA	Somerset	NA	Somerset	NA
Sullivan	NA	Sullivan	NA	Sullivan	NA
Susquehanna	NA	Susquehanna	NA	Susquehanna	NA
Tioga	NA	Tioga	NA	Tioga	NA
Union	NA	Union	NA	Union	NA
Venango	NA	Venango	NA	Venango	NA
Warren	NA	Warren	NA	Warren	NA
Washington	1.46*	Washington	NA	Washington	1.41*
Wayne	NA	Wayne	NA	Wayne	NA
Westmoreland	2.54*	Westmoreland	NA	Westmoreland	1.90*
Wyoming	NA	Wyoming	NA	Wyoming	NA
York	2.22*	York	1.93*	York	1.89*

^{*=}statistically significant

Appendix E -Decision Point: Petition							
PARRI for Per	tition: 1.21*	PARRI for Petition: 1.07*		PARRI for Pe			
County	Black RRI	County	Hispanic RRI	County	All Minority RRI		
Adams	NA	Adams	NA	Adams	.72*		
Allegheny	1.03	Allegheny	NA	Allegheny	1.03		
Armstrong	NA	Armstrong	NA	Armstrong	NA		
Beaver	1.28	Beaver	NA	Beaver	1.27		
Bedford	NA	Bedford	NA	Bedford	NA		
Berks	1.24*	Berks	.94	Berks	1.01		
Blair	1.09	Blair	NA	Blair	1.26		
Bradford	NA	Bradford	NA	Bradford	NA		
Bucks	1.02	Bucks	.91	Bucks	.97		
Butler	NA	Butler	NA	Butler	.86		
Cambria	1.04	Cambria	NA	Cambria	1.05		
Cameron	NA	Cameron	NA	Cameron	NA		
Carbon	NA	Carbon	NA	Carbon	NA		
Centre	NA	Centre	NA	Centre	NA		
Chester	.97	Chester	.92	Chester	.95		
Clarion	NA	Clarion	NA	Clarion	NA		
Clearfield	NA	Clearfield	NA	Clearfield	NA		
Clinton	NA	Clinton	NA	Clinton	NA		
Columbia	NA	Columbia	NA	Columbia	NA		
Crawford	NA	Crawford	NA	Crawford	.75*		
Cumberland	.84	Cumberland	NA	Cumberland	.80		
Dauphin	1.00	Dauphin	.98	Dauphin	.99		
Delaware	1.27*	Delaware	1.79*	Delaware	1.19*		
Elk	NA	Elk	NA	Elk	NA		
Erie	.97	Erie	1.13	Erie	1.02		
Fayette	1.37	Fayette	NA	Fayette	1.29		
Forest	NA	Forest	NA	Forest	NA		
Franklin	.97	Franklin	NA	Franklin	.98		
Fulton	NA	Fulton	NA	Fulton	NA		
Greene	NA	Greene	NA	Greene	NA		
Huntingdon	NA	Huntingdon	NA	Huntingdon	NA		
Indiana	NA	Indiana	NA	Indiana	NA		
Jefferson	NA	Jefferson	NA	Jefferson	NA		
Juniata	NA	Juniata	NA	Juniata	NA		
Lackawanna	1.03	Lackawanna	1.18	Lackawanna	1.09		
Lancaster	1.14	Lancaster	.89	Lancaster	1.00		
Lawrence	1.22	Lawrence	NA	Lawrence	.57*		
Lebanon	1.13	Lebanon	.94	Lebanon	.98		
Lehigh	1.07	Lehigh	1.05	Lehigh	1.04		
Luzerne	1.17	Luzerne	1.07	Luzerne	1.03		
Lycoming	.93	Lycoming	NA	Lycoming	.92		
	1						
McKean Mercer Mifflin	NA .90 NA	McKean Mercer Mifflin	NA NA NA	McKean Mercer Mifflin	NA .92 NA		

Monroe	1.05	Monroe	1.07	Monroe	1.07
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Montgomery	.78*	Montgomery	1.03	Montgomery	.79*
Montour	NA	Montour	NA	Montour	NA
Northampton	1.02	Northampton	1.01	Northampton	1.00
Northumberland	2.42*	Northumberland	NA	Northumberland	.95
Perry	NA	Perry	NA	Perry	NA
Philadelphia	1.10*	Philadelphia	1.06	Philadelphia	1.08*
Pike	NA	Pike	NA	Pike	NA
Potter	NA	Potter	NA	Potter	NA
Schuylkill	.97	Schuylkill	NA	Schuylkill	.97
Snyder	NA	Snyder	NA	Snyder	NA
Somerset	NA	Somerset	NA	Somerset	NA
Sullivan	NA	Sullivan	NA	Sullivan	NA
Susquehanna	NA	Susquehanna	NA	Susquehanna	NA
Tioga	NA	Tioga	NA	Tioga	NA
Union	NA	Union	NA	Union	NA
Venango	NA	Venango	NA	Venango	.72*
Warren	NA	Warren	NA	Warren	NA
Washington	1.07	Washington	NA	Washington	1.05
Wayne	NA	Wayne	NA	Wayne	NA
Westmoreland	1.09	Westmoreland	NA	Westmoreland	1.16*
Wyoming	NA	Wyoming	NA	Wyoming	NA
York	1.25*	York	1.13	York	1.15

^{*=}statistically significant

Appendix F - Decision Point: Delinquent Findings								
PARRI for Del. Findings: .90* PARRI for Del. Findings: 1.03 PARRI for Del. Findings: .92*								
County	Black RRI	County	Hispanic RRI	County	All Minority RRI			
Adams	NA	Adams	NA	Adams	NA			
Allegheny	1.61*	Allegheny	NA	Allegheny	1.60*			
Armstrong	NA	Armstrong	NA	Armstrong	NA			
Beaver	1.06	Beaver	NA	Beaver	1.10			
Bedford	NA	Bedford	NA	Bedford	NA			
Berks	1.33	Berks	1.39*	Berks	1.35*			
Blair	NA	Blair	NA	Blair	1.16			
Bradford	NA	Bradford	NA	Bradford	NA			
Bucks	.87	Bucks	.81	Bucks	.86*			
Butler	NA	Butler	NA	Butler	NA			
Cambria	.78	Cambria	NA	Cambria	.80			
Cameron	NA	Cameron	NA	Cameron	NA			
Carbon	NA	Carbon	NA	Carbon	NA			
Centre	NA	Centre	NA	Centre	NA			
Chester	1.06	Chester	1.27*	Chester	1.12*			
Clarion	NA	Clarion	NA	Clarion	NA			
Clearfield	NA	Clearfield	NA	Clearfield	NA			
Clinton	NA	Clinton	NA	Clinton	NA			
Columbia	NA	Columbia	NA	Columbia	NA			
Crawford	NA	Crawford	NA	Crawford	NA			
Cumberland	NA	Cumberland	NA	Cumberland	1.08			
Dauphin	1.48*	Dauphin	1.30*	Dauphin	1.43*			
Delaware	1.19*	Delaware	NA	Delaware	1.19*			
Elk	NA	Elk	NA	Elk	NA			
Erie	1.08	Erie	1.02	Erie	1.07			
Fayette	NA	Fayette	NA	Fayette	NA			
Forest	NA	Forest	NA	Forest	NA			
Franklin	1.07	Franklin	NA	Franklin	1.09			
Fulton	NA	Fulton	NA	Fulton	NA			
Greene	NA	Greene	NA	Greene	NA			
Huntingdon	NA	Huntingdon	NA	Huntingdon	NA			
Indiana	NA	Indiana	NA	Indiana	NA			
Jefferson	NA	Jefferson	NA	Jefferson	NA			
Juniata	NA	Juniata	NA	Juniata	NA			
Lackawanna	1.14	Lackawanna	.88	Lackawanna	.99			
Lancaster	1.00	Lancaster	1.12*	Lancaster	1.06			
Lawrence	1.15	Lawrence	NA	Lawrence	1.15			
Lebanon	NA	Lebanon	1.48*	Lebanon	1.30			
Lehigh	.94	Lehigh	.95	Lehigh	.95			
Luzerne	1.22	Luzerne	.99	Luzerne	1.13			
Lycoming	1.78*	Lycoming	NA	Lycoming	1.69*			
McKean	NA	McKean	NA	McKean	NA			
Mercer	1.07	Mercer	NA	Mercer	1.01			
Mifflin	NA	Mifflin	NA	Mifflin	NA			

Monroe	.98	Monroe	1.06	Monroe	1.02
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Montgomery	.86*	Montgomery	.92	Montgomery	.86*
Montour	NA	Montour	NA	Montour	NA
Northampton	1.19*	Northampton	1.13	Northampton	1.16*
Northumberland	NA	Northumberland	NA	Northumberland	NA
Perry	NA	Perry	NA	Perry	NA
Philadelphia	1.22*	Philadelphia	1.11	Philadelphia	1.21*
Pike	NA	Pike	NA	Pike	NA
Potter	NA	Potter	NA	Potter	NA
Schuylkill	NA	Schuylkill	NA	Schuylkill	NA
Snyder	NA	Snyder	NA	Snyder	NA
Somerset	NA	Somerset	NA	Somerset	NA
Sullivan	NA	Sullivan	NA	Sullivan	NA
Susquehanna	NA	Susquehanna	NA	Susquehanna	NA
Tioga	NA	Tioga	NA	Tioga	NA
Union	NA	Union	NA	Union	NA
Venango	NA	Venango	NA	Venango	NA
Warren	NA	Warren	NA	Warren	NA
Washington	1.26*	Washington	NA	Washington	1.27*
Wayne	NA	Wayne	NA	Wayne	NA
Westmoreland	1.04	Westmoreland	NA	Westmoreland	1.07
Wyoming	NA	Wyoming	NA	Wyoming	NA
York	1.06	York	1.19*	York	1.00

^{*=}statistically significant

Appendix G- Decision Point: Probation					
PARRI for Probation: .72*		PARRI for Probation: .84*		PARRI for Probation: .75*	
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Adams	NA	Adams	NA	Adams	NA
Allegheny	.82*	Allegheny	NA	Allegheny	.83*
Armstrong	NA	Armstrong	NA	Armstrong	NA
Beaver	NA	Beaver	NA	Beaver	NA
Bedford	NA	Bedford	NA	Bedford	NA
Berks	1.30	Berks	1.34	Berks	1.30
Blair	NA	Blair	NA	Blair	NA
Bradford	NA	Bradford	NA	Bradford	NA
Bucks	.79*	Bucks	.76	Bucks	.80*
Butler	NA	Butler	NA	Butler	NA
Cambria	NA	Cambria	NA	Cambria	NA
Cameron	NA	Cameron	NA	Cameron	NA
Carbon	NA	Carbon	NA	Carbon	NA
Centre	NA	Centre	NA	Centre	NA
Chester	.94	Chester	.98	Chester	.94
Clarion	NA	Clarion	NA	Clarion	NA
Clearfield	NA	Clearfield	NA	Clearfield	NA
Clinton	NA	Clinton	NA	Clinton	NA
Columbia	NA	Columbia	NA	Columbia	NA
Crawford	NA	Crawford	NA	Crawford	NA
Cumberland	NA	Cumberland	NA	Cumberland	NA
Dauphin	.78*	Dauphin	.89	Dauphin	.82*
Delaware	.93	Delaware	NA	Delaware	.94
Elk	NA	Elk	NA	Elk	NA
Erie	.95	Erie	.79	Erie	.88
Fayette	NA	Fayette	NA	Fayette	NA
Forest	NA	Forest	NA	Forest	NA
Franklin	.75*	Franklin	NA	Franklin	.79*
Fulton	NA	Fulton	NA	Fulton	NA
Greene	NA	Greene	NA	Greene	NA
Huntingdon	NA	Huntingdon	NA	Huntingdon	NA
Indiana	NA	Indiana	NA	Indiana	NA
Jefferson	NA	Jefferson	NA	Jefferson	NA
Juniata	NA	Juniata	NA	Juniata	NA
Lackawanna	NA	Lackawanna	NA	Lackawanna	.79*
Lancaster	.90	Lancaster	.94	Lancaster	.89*
Lawrence	NA	Lawrence	NA	Lawrence	.66*
Lebanon	NA	Lebanon	.72	Lebanon	.80
Lehigh	.76*	Lehigh	.87	Lehigh	.84*
Luzerne	.86	Luzerne	NA	Luzerne	.90
Lycoming	.93*	Lycoming	NA	Lycoming	.91*
McKean	NA	McKean	NA	McKean	NA
Mercer	.74*	Mercer	NA	Mercer	.73*
Mifflin	NA	Mifflin	NA	Mifflin	NA

Monroe	1.03	Monroe	1.06	Monroe	1.03
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Montgomery	.73*	Montgomery	.93	Montgomery	.75*
Montour	NA	Montour	NA	Montour	NA
Northampton	.99	Northampton	1.05	Northampton	1.02
Northumberland	NA	Northumberland	NA	Northumberland	NA
Perry	NA	Perry	NA	Perry	NA
Philadelphia	.92	Philadelphia	.96	Philadelphia	.93
Pike	NA	Pike	NA	Pike	NA
Potter	NA	Potter	NA	Potter	NA
Schuylkill	NA	Schuylkill	NA	Schuylkill	NA
Snyder	NA	Snyder	NA	Snyder	NA
Somerset	NA	Somerset	NA	Somerset	NA
Sullivan	NA	Sullivan	NA	Sullivan	NA
Susquehanna	NA	Susquehanna	NA	Susquehanna	NA
Tioga	NA	Tioga	NA	Tioga	NA
Union	NA	Union	NA	Union	NA
Venango	NA	Venango	NA	Venango	NA
Warren	NA	Warren	NA	Warren	NA
Washington	.67*	Washington	NA	Washington	.69*
Wayne	NA	Wayne	NA	Wayne	NA
Westmoreland	1.02	Westmoreland	NA	Westmoreland	.95
Wyoming	NA	Wyoming	NA	Wyoming NA	
York	.81*	York	.76*	York	.81*

^{*=}statistically significant

Appendix H - Decision Point: Residential Placement					
PARRI for Res	s. Plct.: 1.03	PARRI for Res	PARRI for Res. Plct.: 1.21* PARRI for Res.		
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Adams	NA	Adams	NA	Adams	NA
Allegheny	1.23	Allegheny	NA	Allegheny	1.23
Armstrong	NA	Armstrong	NA	Armstrong	NA
Beaver	NA	Beaver	NA	Beaver	NA
Bedford	NA	Bedford	NA	Bedford	NA
Berks	.64	Berks	.83	Berks	.80
Blair	NA	Blair	NA	Blair	NA
Bradford	NA	Bradford	NA	Bradford	NA
Bucks	1.19	Bucks	1.27	Bucks	1.16
Butler	NA	Butler	NA	Butler	NA
Cambria	NA	Cambria	NA	Cambria	NA
Cameron	NA	Cameron	NA	Cameron	NA
Carbon	NA	Carbon	NA	Carbon	NA
Centre	NA	Centre	NA	Centre	NA
Chester	1.12	Chester	NA	Chester	1.11
Clarion	NA	Clarion	NA	Clarion	NA
Clearfield	NA	Clearfield	NA	Clearfield	NA
Clinton	NA	Clinton	NA	Clinton	NA
Columbia	NA	Columbia	NA	Columbia	NA
Crawford	NA	Crawford	NA	Crawford	NA
Cumberland	NA	Cumberland	NA	Cumberland	NA
Dauphin	2.02*	Dauphin	1.75	Dauphin	1.93*
Delaware	1.04	Delaware	NA	Delaware	1.04
Elk	NA	Elk	NA	Elk	NA
Erie	1.00	Erie	1.37	Erie	1.12
Fayette	NA	Fayette	NA	Fayette	NA
Forest	NA	Forest	NA	Forest	NA
Franklin	1.52	Franklin	NA	Franklin	1.74*
Fulton	NA	Fulton	NA	Fulton	NA
Greene	NA	Greene	NA	Greene	NA
Huntingdon	NA	Huntingdon	NA	Huntingdon	NA
Indiana	NA	Indiana	NA	Indiana	NA
Jefferson	NA	Jefferson	NA	Jefferson	NA
Juniata	NA	Juniata	NA	Juniata	NA
Lackawanna	NA	Lackawanna	NA	Lackawanna	1.68
Lancaster	1.63	Lancaster	1.62	Lancaster	1.73*
Lawrence	NA	Lawrence	NA	Lawrence	NA
Lebanon	NA	Lebanon	.95	Lebanon	.96
Lehigh	1.77*	Lehigh	1.78*	Lehigh	1.76*
Luzerne	1.37	Luzerne	NA	Luzerne	1.69
Lycoming	NA	Lycoming	NA	Lycoming	NA
McKean	NA	McKean	NA	McKean	NA
Mercer	1.15	Mercer	NA	Mercer	1.19
Mifflin	NA	Mifflin	NA	Mifflin	NA

Monroe	1.23	Monroe	.88	Monroe	1.13
County	Black RRI	County	Hispanic RRI	County	All Minority RRI
Montgomery	.80*	Montgomery	.98	Montgomery	.83
Montour	NA	Montour	NA	Montour	NA
Northampton	.73	Northampton	.69	Northampton	.73
Northumberland	NA	Northumberland	NA	Northumberland	NA
Perry	NA	Perry	NA	Perry	NA
Philadelphia	1.61	Philadelphia	1.33	Philadelphia	1.57
Pike	NA	Pike	NA	Pike	NA
Potter	NA	Potter	NA	Potter	NA
Schuylkill	NA	Schuylkill	NA	Schuylkill	NA
Snyder	NA	Snyder	NA	Snyder	NA
Somerset	NA	Somerset	NA	Somerset	NA
Sullivan	NA	Sullivan	NA	Sullivan	NA
Susquehanna	NA	Susquehanna	NA	Susquehanna	NA
Tioga	NA	Tioga	NA	Tioga	NA
Union	NA	Union	NA	Union	NA
Venango	NA	Venango	NA	Venango	NA
Warren	NA	Warren	NA	Warren	NA
Washington	3.62*	Washington	NA	Washington	3.49*
Wayne	NA	Wayne	NA	Wayne	NA
Westmoreland	.93	Westmoreland	NA	Westmoreland 1.23	
Wyoming	NA	Wyoming	NA	Wyoming NA	
York	1.34	York	1.34	<i>York</i> 1.33	

^{*=}statistically significant

Appendix I: Decision Point: Arrest

		: Decision Poin		
	Race	1989 RRI	2000 RRI	2009 RRI
Alleghen	Black	NA	2.21*	2.8
	Hispanic	NA	.32*	NA
Ψ	All Minority	1.90	1.95*	2.3
Beaver	Black	NA	3.50*	2.9
	Hispanic	NA	.85	NA
	All Minority	2.90	3.08*	2.5
Berks	Black	NA	2.33*	2.4
	Hispanic	NA	1.88*	NA
1	All Minority	2.30	1.87*	2.0
er	Black	NA	3.82*	3.2
Chester	Hispanic	NA	1.55*	NA
Ö	All Minority	2.40	2.59*	1.9
in	Black	NA	2.61*	2.0
Dauphin	Hispanic	NA	1.07	NA
D	All Minority	2.30	2.12	1.5
re	Black	NA	2.29*	2.0
Delaware	Hispanic	NA	.84	NA
De]	All Minority	1.90	1.87*	1.6
	Black	NA	1.86*	2.4
Erie	Hispanic	NA	.40*	NA
1	All Minority	3.10	1.39*	1.7
<u>.</u>	Black	NA	4.30*	4.2
Lancaster	Hispanic	NA	2.81*	NA
Lar	All Minority	1.90	2.87*	2.4
ι	Black	NA	2.85*	2.9
Lehigh	Hispanic	NA	1.95*	NA
Ľ	All Minority	2.90	1.97*	1.7
ı	Black	NA	2.47*	2.8
Mercer	Hispanic	NA	NA	NA
A	All Minority	3.00	2.12*	2.3
ry	Black	NA	3.44*	3.9
Montgomery	Hispanic	NA	.82*	NA
Мо	All Minority	2.40	2.21*	2.3
ton	Black	NA	2.95*	3.1
Northampton	Hispanic	NA	2.19*	NA
	All Minority	2.80	2.19*	1.8
hia	Black	NA	.92*	1.4
Philadelphia	Hispanic	NA	NA	NA
Phi	All Minority	1.30	.72*	1.2
	Black	NA	1.48*	2.8
York	Hispanic	NA	.73*	NA
Yo	All Minority	2.50	1.02	1.8

Appendix J Decision Point: Referral

1		enaix J Decision		
	Race	1989 RRI	2000 RRI	2009 RRI
ue	Black	NA	2.36*	3.4
Alleghen	Hispanic	NA	N/A	NA
Ψ	All Minority	NA	2.33*	2.9
	Black	NA	1.04	3.2
Beaver	Hispanic	NA	NA	NA
	All Minority	NA	1.03	3.0
	Black	NA	1.95*	2.4
Berks	Hispanic	NA	1.46*	NA
I	All Minority	NA	1.59*	2.2
ıe	Black	NA	1.08	4.1
Chester	Hispanic	NA	1.13	NA
Ö	All Minority	NA	1.08	2.5
·ii	Black	NA	1.85*	2.3
Dauphin	Hispanic	NA	2.24*	NA
Ď	All Minority	NA	1.90*	1.9
e.	Black	NA	1.66*	2.5
Delaware	Hispanic	NA	2.15*	NA
Del	All Minority	NA	1.72*	2.0
	Black	NA	1.95*	3.5
Erie	Hispanic	NA	3.32*	NA
	All Minority	NA	2.03*	3.0
:c	Black	NA	1.39*	4.4
Lancaster	Hispanic	NA	1.38*	NA
Laı	All Minority	NA	1.43*	2.9
ι	Black	NA	2.01*	2.7
Lehigh	Hispanic	NA	1.75*	NA
Ľ	All Minority	NA	1.83*	1.9
r	Black	NA	1.57*	3.7
Mercer	Hispanic	NA	NA	NA
N	All Minority	NA	1.53*	3.1
È	Black	NA	2.24*	5.2
Montgomery	Hispanic	NA	1.83*	NA
Mor	All Minority	NA	2.15*	3.1
oton	Black	NA	1.59*	2.9
Northampton	Hispanic	NA	.66*	NA
No	All Minority	NA	1.00	1.8
phia	Black	NA	2.69*	1.5
Philadelphia	Hispanic	NA	NA	NA
PŁ	All Minority	NA	3.20*	1.3
	Black	NA	2.98*	3.5
York	Hispanic	NA	1.09	NA
Ϋ́	All Minority	NA	2.43*	2.7

Appendix K Decision Point: Diversion

		1000 PPV		
	Race	1989 RRI	2000 RRI	2009 RRI
en	Black	NA	.81*	3.1
Alleghen	Hispanic	NA	NA	NA
Al	All Minority	NA	.82*	2.7
r	Black	NA	.84	2.9
Beaver	Hispanic	NA	NA	NA
	All Minority	NA	.85	2.6
Berks	Black	NA	1.02	2.2
	Hispanic	NA	.81	NA
	All Minority	NA	.89	2.2
Chester	Black	NA	.96	4.0
	Hispanic	NA	.86	NA
S	All Minority	NA	.95	2.6
in	Black	NA	1.02	2.3
Dauphin	Hispanic	NA	1.12	NA
Ď	All Minority	NA	1.04	1.9
re	Black	NA	NA	2.3
Delaware	Hispanic	NA	NA	NA
De	All Minority	NA	NA	2.1
	Black	NA	1.06	3.1
Erie	Hispanic	NA	.91	NA
П	All Minority	NA	1.04	2.7
ı	Black	NA	1.00	3.4
Lancaster	Hispanic	NA	.95	NA
Lar	All Minority	NA	.99	2.8
_	Black	NA	.62	2.7
Lehigh	Hispanic	NA	.38*	NA
Ľ	All Minority	NA	.48*	2.0
r	Black	NA	.80	3.8
Mercer	Hispanic	NA	NA	NA
Z	All Minority	NA	.80	3.3
Ŋ	Black	NA	1.13*	5.8
Montgomery	Hispanic	NA	1.18	NA
Mor	All Minority	NA	1.13*	3.5
ton	Black	NA	.88	2.8
Northampton	Hispanic	NA	.96	NA
Nor	All Minority	NA	.89	1.8
hia	Black	NA	NA	1.5
Philadelphia	Hispanic	NA	NA	NA
Ph	All Minority	NA	NA	1.2
	Black	NA	.89*	3.3
York	Hispanic	NA	1.02	NA
Ϋ́	All Minority	NA	.91*	2.6

Appendix L Decision Point: Secure Detention

		L Decision Foli		
	Race	1989 RRI	2000 RRI	2009 RRI
ien	Black	NA	2.10*	4.2
Alleghen	Hispanic	NA	NA	NA
A	All Minority	4.00	2.63*	3.5
Beaver	Black	NA	2.16*	5.0
	Hispanic	NA	NA	NA
	All Minority	5.60	2.21*	4.0
s	Black	NA	1.32*	2.7
Berks	Hispanic	NA	2.12*	NA
	All Minority	8.40	1.95*	2.4
er	Black	NA	2.37*	5.6
Chester	Hispanic	NA	2.72*	NA
	All Minority	5.80	2.44*	3.1
ii	Black	NA	1.78*	3.3
Dauphin	Hispanic	NA	1.98*	NA
Dau	All Minority	3.50	1.79*	2.4
ıre	Black	NA	1.50*	2.8
Delaware	Hispanic	NA	2.16*	NA
De	All Minority	4.80	1.49*	2.2
	Black	NA	1.42*	3.7
Erie	Hispanic	NA	1.89*	NA
	All Minority	5.60	1.50*	3.1
er.	Black	NA	1.92*	6.1
Lancaster	Hispanic	NA	2.45*	NA
Lai	All Minority	8.60	2.14*	3.5
ų	Black	NA	1.79*	3.2
Lehigh	Hispanic	NA	1.54*	NA
J	All Minority	9.80	1.62*	1.9
7.	Black	NA	NA	NA
Mercer	Hispanic	NA	NA	NA
~	All Minority	NA	NA	NA
ıry	Black	NA	1.15*	4.6
Montgomery	Hispanic	NA	1.91*	NA
Mo	All Minority	3.90	1.22*	3.1
ton	Black	NA	1.94*	3.7
Northampton	Hispanic	NA	3.51*	NA
Nort	All Minority	8.20	2.55*	2.5
hia	Black	NA	1.50*	1.5
Philadelphia	Hispanic	NA	1.95*	NA
Phi	All Minority	NA	1.56*	1.3
	Black	NA	3.36*	5.8
York	Hispanic	NA	6.73*	NA
Y	All Minority	8.10	4.13*	3.7

Appendix M Decision Point: Petition

	App	endix M Decision		
	Race	1989 RRI	2000 RRI	2009 RRI
Sn.	Black	NA	1.07*	3.5
Alleghen	Hispanic	NA	NA	NA
Ψ	All Minority	3.50	1.30*	2.9
H	Black	NA	1.14	3.9
Beaver	Hispanic	NA	NA	NA
	All Minority	4.30	1.13	3.8
Berks	Black	NA	.99	2.6
	Hispanic	NA	1.07	NA
	All Minority	6.00	1.05	2.1
Chester	Black	NA	1.04	4.2
	Hispanic	NA	1.15	NA
0	All Minority	3.50	1.06	2.5
ij	Black	NA	.99	2.3
Dauphin	Hispanic	NA	.97	NA
Д	All Minority	2.80	.99	1.9
ıre	Black	NA	1.00	2.5
Delaware	Hispanic	NA	1.01	NA
Ď	All Minority	3.80	1.00	2.0
	Black	NA	.97	3.7
Erie	Hispanic	NA	1.04	NA
	All Minority	5.10	.98	3.2
er	Black	NA	1.00	5.3
Lancaster	Hispanic	NA	1.04	NA
La	All Minority	7.10	1.01	2.9
h	Black	NA	1.02	2.7
Lehigh	Hispanic	NA	1.04*	NA
	All Minority	8.40	1.03*	1.9
ä	Black	NA	1.21	3.6
Mercer	Hispanic	NA	NA	NA
	All Minority	4.10	1.21	3.1
iry.	Black	NA	.90*	4.5
Montgomery	Hispanic	NA	.86	NA
Mo	All Minority	5.70	.90*	2.7
ton	Black	NA	1.09	2.9
Northampton	Hispanic	NA	1.03	NA
Nor	All Minority	7.70	1.08	1.8
hia	Black	NA	1.00	1.5
Philadelphia	Hispanic	NA	NA	NA
Phi	All Minority	1.70	1.00	1.3
	Black	NA	1.22*	4.1
York	Hispanic	NA	.96	NA
Ϋ́	All Minority	4.90	1.18*	3.0

Appendix N Decision Point: Delinquent Findings

		pendix N Decision Point: Delinquent Findings				
	Race	1989 RRI	2000 RRI	2009 RRI		
n:	Black	NA	1.03	3.8		
Alleghen	Hispanic	NA	NA	NA		
All	All Minority	3.50	1.34*	3.2		
	Black	NA	1.34	3.6		
Beaver	Hispanic	NA	NA	NA		
	All Minority	5.10	1.36*	3.7		
	Black	NA	1.56*	2.3		
Berks	Hispanic	NA	1.67*	NA		
В	All Minority	6.70	1.63*	2.1		
H	Black	NA	1.26*	4.3		
Chester	Hispanic	NA	1.27	NA		
	All Minority	3.90	1.25*	2.5		
.Е	Black	NA	1.17*	2.6		
Dauphin	Hispanic	NA	1.33*	NA		
Da	All Minority	2.90	1.19*	2.1		
e e	Black	NA	.96	2.7		
Delaware	Hispanic	NA	.86	NA		
Del	All Minority	4.10	.94	2.1		
	Black	NA	1.15	3.7		
Erie	Hispanic	NA	NA	NA		
Щ	All Minority	5.30	1.18*	3.1		
<u>.</u>	Black	NA	1.01	5.3		
Lancaster	Hispanic	NA	.98	NA		
Lan	All Minority	7.40	.98	2.9		
	Black	NA	1.31*	2.7		
Lehigh	Hispanic	NA	1.16*	NA		
Le	All Minority	9.00	1.21*	1.8		
	Black	NA	.90	3.6		
Mercer	Hispanic	NA	NA	NA		
M	All Minority	3.70	.90	3.1		
y	Black	NA	.90	4.2		
Montgomery	Hispanic	NA	NA	NA		
Mon	All Minority	3.80	.92	2.5		
uo	Black	NA	1.26*	3.2		
Northampton	Hispanic	NA	1.24*	NA		
Nor	All Minority	6.40	1.25*	1.9		
hia	Black	NA	1.14*	1.6		
Philadelphia	Hispanic	NA	1.32*	NA		
Phi	All Minority	1.70	1.17*	1.3		
	Black	NA	1.13	4.3		
York	Hispanic	NA	NA	NA		
λ	All Minority	4.70	1.13	2.8		

Appendix O Decision Point: Probation

		naix O Decision i		
	Race	1989 RRI	2000 RRI	2009 RRI
ıen	Black	NA	1.01	3.6
Alleghen	Hispanic	NA	NA	NA
A	All Minority	3.40	1.01	3.0
Beaver	Black	NA	.83	3.3
	Hispanic	NA	NA	NA
	All Minority	5.00	.85	3.3
s	Black	NA	.84	2.4
Berks	Hispanic	NA	.85	NA
	All Minority	7.10	.84	2.4
Chester	Black	NA	.83	3.9
	Hispanic	NA	NA	NA
0	All Minority	3.70	.82	2.3
·ii	Black	NA	.96	2.4
Dauphin	Hispanic	NA	.91	NA
D	All Minority	2.70	.96	2.0
ıre	Black	NA	.95	2.6
Delaware	Hispanic	NA	NA	NA
Ď	All Minority	3.70	.96	2.1
	Black	NA	.98	3.7
Erie	Hispanic	NA	NA	NA
	All Minority	5.60	.99	3.1
ie	Black	NA	.77*	4.7
Lancaster	Hispanic	NA	.91	NA
Laı	All Minority	6.80	.85*	2.8
-	Black	NA	.85*	2.6
Lehigh	Hispanic	NA	.94	NA
ĭ	All Minority	8.60	.91	1.7
1	Black	NA	NA	3.8
Mercer	Hispanic	NA	NA	NA
2	All Minority	1.90	NA	3.3
ry	Black	NA	.69*	3.3
Montgomery	Hispanic	NA	NA	NA
Mor	All Minority	3.10	.70*	2.1
ton	Black	NA	1.11	2.7
Northampton	Hispanic	NA	.91	NA
Noi	All Minority	6.00	.99	1.8
phia	Black	NA	.95	1.5
Philadelphia	Hispanic	NA	.79*	NA
Ph	All Minority	1.70	.92	1.3
	Black	NA	.76*	3.5
York	Hispanic	NA	NA	NA
Ϋ́	All Minority	4.00	.76*	2.5

Appendix P Decision Point: Residential Placement

	Appendix P Decision Point: Residential Placement				
	Race	1989 RRI	2000 RRI	2009 RRI	
'n	Black	NA	1.10	4.0	
Alleghen	Hispanic	NA	NA	NA	
All	All Minority	3.70	1.09	3.4	
	Black	NA	1.24	4.2	
Beaver	Hispanic	NA	NA	NA	
	All Minority	5.10	1.21	4.4	
	Black	NA	1.12	2.8	
Berks	Hispanic	NA	1.28	NA	
Т .	All Minority	7.50	1.23	2.3	
Chester	Black	NA	1.23	5.3	
	Hispanic	NA	NA	NA	
O	All Minority	4.70	1.36	2.9	
in	Black	NA	1.23	3.0	
Dauphin	Hispanic	NA	1.47	NA	
D	All Minority	3.30	1.24	2.3	
re	Black	NA	1.17	2.9	
Delaware	Hispanic	NA	NA	NA	
De	All Minority	4.70	1.14	2.3	
	Black	NA	1.01	3.4	
Erie	Hispanic	NA	NA	NA	
	All Minority	5.70	.99	3.1	
Lancaster	Black	NA	1.23	5.9	
	Hispanic	NA	1.37	NA	
Laı	All Minority	8.80	1.29	3.3	
Ч	Black	NA	1.71	3.1	
Lehigh	Hispanic	NA	1.66	NA	
Т	All Minority	10.10	1.64*	2.3	
74	Black	NA	NA	3.9	
Mercer	Hispanic	NA	NA	NA	
2	All Minority	5.30	NA	3.2	
Ľ	Black	NA	.92	4.5	
Montgomery	Hispanic	NA	NA	NA	
Mo	All Minority	3.50	.93	2.7	
ton	Black	NA	NA	3.2	
Northampton	Hispanic	NA	1.95	NA	
No	All Minority	7.00	1.35	1.8	
phia	Black	NA	1.03	1.6	
Philadelphia	Hispanic	NA	1.12	NA	
Ph	All Minority	1.80	1.05	1.3	
	Black	NA	1.47*	4.9	
York	Hispanic	NA	NA	NA	
Ϋ́	All Minority	5.30	1.45*	3.0	

Appendix Q Decision Point: Secure Placement

		1000 DDI		
	Race	1989 RRI	2000 RRI	2009 RRI
nen	Black	NA	.69	3.9
Alleghen	Hispanic	NA	NA	NA
∢	All Minority	4.80	2.89*	3.2
Beaver	Black	NA	NA	3.5
	Hispanic	NA	NA	NA
	All Minority	NA	NA	2.8
Berks	Black	NA	1.56	2.1
	Hispanic	NA	1.73	NA
	All Minority	4.40	1.67	3.3
Chester	Black	NA	NA	4.5
	Hispanic	NA	NA	NA
	All Minority	NA	NA	2.0
hin	Black	NA	1.86	3.1
Dauphin	Hispanic	NA	NA	NA
Ц	All Minority	NA	1.74	2.4
are	Black	NA	NA	2.8
Delaware	Hispanic	NA	NA	NA
Ď	All Minority	3.50	NA	2.6
	Black	NA	NA	5.4
Erie	Hispanic	NA	NA	NA
	All Minority	7.10	NA	4.0
er	Black	NA	2.04	12.5
Lancaster	Hispanic	NA	1.77	NA
Lai	All Minority	6.80	1.83	4.4
-c	Black	NA	1.98*	4.0
Lehigh	Hispanic	NA	2.04*	NA
Ä	All Minority	6.10	2.06*	2.3
'n	Black	NA	NA	10.2
Mercer	Hispanic	NA	NA	NA
4	All Minority	NA	NA	8.0
ary	Black	NA	1.43	6.7
Montgomery	Hispanic	NA	NA	NA
Mo	All Minority	NA	1.30	3.5
ton	Black	NA	NA	NA
Northampton	Hispanic	NA	NA	NA
Nor	All Minority	NA	NA	4.1
hia	Black	NA	1.68	1.6
Philadelphia	Hispanic	NA	2.33*	NA
Phi	All Minority	1.80	1.78	1.3
	Black	NA	3.00*	6.9
York	Hispanic	NA	NA	NA
χ	All Minority	11.90	2.68	4.4
	·		1	i

Appendix R Decision Point: Transfer to Adult Court

		1000 DDI		
	Race	1989 RRI	2000 RRI	2009 RRI
nen	Black	NA	NA	4.0
Alleghen	Hispanic	NA	NA	NA
∢	All Minority	6.00	NA	3.3
Beaver	Black	NA	NA	NA
	Hispanic	NA	NA	NA
	All Minority	13.00	NA	NA
Berks	Black	NA	NA	5.0
	Hispanic	NA	NA	NA
	All Minority	6.70	NA	2.2
Chester	Black	NA	NA	9.3
	Hispanic	NA	NA	NA
	All Minority	NA	NA	5.6
hin	Black	NA	NA	4.0
Dauphin	Hispanic	NA	NA	NA
	All Minority	3.10	NA	2.7
are	Black	NA	NA	3.5
Delaware	Hispanic	NA	NA	NA
Ā	All Minority	6.20	NA	3.0
	Black	NA	NA	NA
Erie	Hispanic	NA	NA	NA
	All Minority	NA	NA	NA
Lancaster	Black	NA	NA	7.1
	Hispanic	NA	NA	NA
Гa	All Minority	9.40	NA	5.7
h	Black	NA	NA	NA
Lehigh	Hispanic	NA	NA	NA
J	All Minority	NA	NA	2.8
'n	Black	NA	NA	10.2
Mercer	Hispanic	NA	NA	NA
_	All Minority	17.20	NA	8.0
ery	Black	NA	NA	4.7
Montgomery	Hispanic	NA	NA	NA
Mo	All Minority	NA	NA	2.4
ton	Black	NA	NA	9.2
Northampton	Hispanic	NA	NA	NA
Non	All Minority	13.00	NA	4.1
hia	Black	NA	.43	1.7
Philadelphia	Hispanic	NA	NA	NA
Phi	All Minority	1.80	.45	1.3
	Black	NA	NA	11.8
York	Hispanic	NA	NA	NA
Ϋ́	All Minority	NA	NA	5.9

Appendix S: Focus Group Guided Interview Format

INTRODUCTION

Welcome- Thank you - We appreciate your willingness to participate.

WHY ARE WE HERE?

What we are doing here today is gathering information from you, people who work on the front lines of juvenile justice in Pennsylvania, to get your perspective on Disproportionate Minority Contact (DMC). Current DMC data suggests that minority youth formally penetrate the juvenile justice system earlier in the process, with more severe interventions, and further along the spectrum of services, than white youth. Minority youth is defined as African American, Black and Hispanic/Latino. We would like to explore what policies, procedures and practices that may impact over-representation. We need your input and want you to share your honest and open thoughts with us.

GROUND RULES

- 1. We want you to do the talking. We would like everyone to participate. I may call on you if I haven't heard from you in a while.
- 2. <u>There are no right or wrong answers</u>. Everyone's experiences and opinions are important. Speak up whether you agree or disagree. We want to hear a wide range of opinions.
- 3. What is said in this room stays here. We want folks to feel comfortable sharing when sensitive issues come up.
- 4. We will be tape recording the group. We don't identify anyone by name in our report. You will remain anonymous. We ask that you keep each other's confidences outside this room as well. We have graduate students Rachel and Mike who are using the recorder to take notes to make sure we heard everything correctly.

LOGISTICS

Breakfast/Lunch provided. The session last for 3 hours and we'll take a break after 90 minutes. Restrooms located on the first floor and I ask that you turn off all pagers and cell phones.

ANY QUESTIONS BEFORE WE BEGIN?

LET'S TALK ABOUT THE STRENGTHS OF PENNSYLVANIA'S JUVENILE JUSTICE SYSTEM

How does the Juvenile Justice System in your county both serve kids in need and protect the community?

Who is responsible for the successes in your county's Juvenile Justice system?

What programs, policies, or initiatives work to contribute to the success of Juvenile Justice in your county?

HOW YOUR COUNTY PROCESSES JUVENILES

When juveniles come into your office, how are decisions made about case disposition concerning a particular juvenile?

Specifically at:

INTAKE

DIVERSION

DISPOSITIONAL RECOMMENDATIONS

PLACEMENT

DETENTION

Do you believe race plays any role in the case disposition concerning a particular juvenile?

What is your perception of the racial disparity in the Juvenile Justice System in your county?

If you do believe there is a racial disparity and that minorities are overrepresented in the juvenile justice system in your county, what factors do you believe contribute to that disparity?

What information do you have about the socio-economic demographics in the communities represented in your county's Juvenile Justice System?

From whom do you receive "on the ground" information about what is happening in your county, specifically with respect to matters pertaining to race?

Do you believe there is a difference between the reality and the perception of race relations in Juvenile Justice your county?

If you were to ask a minority member of your community to describe race relations in your county, what do you think they would say? What factors contribute to your response?

If you do not believe there is a racial disparity and that minorities are not overrepresented in the juvenile justice system in your county, what factors, if any, contribute to racial equality

Who would you identify as Community Stakeholders in addressing the issue of racial inequality in your county's Juvenile Justice System?

THE FACTORS AFFECTING JUVENILE CRIME

What role do the following factors play in minority overrepresentation in the Juvenile Justice System?

Social factors: distressed neighborhoods, lack of role models, lack of family stability

<u>Family/Parental factors</u>: lack of discipline, lack of attentiveness and concern

<u>Education factors</u>: poor academic performance, inadequate curriculum, truancy, discipline problems

<u>Individual factors</u>: mental, physical and emotional development, lack of buy in to the larger society

<u>Economic factors</u>: extreme poverty, lack of employment opportunities, lack of community resources

Any other factors?

SYSTEMIC FACTORS CONTRIBUTING TO DMC

If you have been in your county's juvenile justice system for the past ten (10) years, what changes, if any, have you witnessed to the racial composition of juveniles who travel through your office?

What improvements can be made to decrease or eliminate minority overrepresentation of juveniles processed through your county's Juvenile Justice System?

What strategies could be implemented to address minority overrepresentation in your county's Juvenile Justice System?

If you believe your county does NOT have a problem with overrepresentation, what strategies do you believe work to keep racial equality within the Juvenile Justice System?

How is your county assessing any programs or policies implemented to reduce or eliminate minority overrepresentation?

THE RACIAL/GENDER MAKEUP OF THE JUVENILE JUSTICE WORKFORCE

Does racial diversity of the Juvenile Justice work force have an effect on Pennsylvania's DMC rates? Why or why not?

Please let me know if you think if any of the following factors have an impact on the state's DMC rates

- the racial composition of the Juvenile Justice work force? Why or why not?
- the racial composition of the Executive Leadership of the Juvenile Justice work force? Why or why not?
- the gender composition of the Juvenile Justice work force? Why or why not?

Thank you so much for your time and effort. Your contributions have been invaluable in keeping Pennsylvania's Juvenile Justice strong.

Appendix T Focus Group Responses to Selected Questions

Question 1: How does the juvenile justice system in your county both serve kids in need and protect the community?

Categories	AM group	PM group	Total
Risk factors	2	1	3
Competency of youth	1	0	1
Accountability	1	0	1
Attitude of probation officers	3	3	6
Experience of probation officers	4	0	4
Collaboration between departments/interdepartmental cooperation	3	0	3
Probation officer versus children youth worker recommendation	1	0	1
YLS program implementation	2	1	3
Money	2	0	2
Equal Treatment of Offenders	1	0	1
Availability/Distribution of Resources	2	0	2
Importance of Competency/Experience Development in Departmental Workers	2	1	3
Importance of having a standardized risk/need assessment (YLS)	2	0	2
Providing treatment programs that are focused on specific needs	4	2	6
Availability of diversion programs	0	4	4
Availability of services targeting interventions	0	2	2
Staff competency development	0	1	1
Non-traditional hours required of P.O.	0	1	1
Identification of client needs	0	2	2
Dedication of workforce	0	1	1
Alternative placement training	0	1	1
Implementation of family programs	0	2	2
Totals	30	22	52

Question 2: Who or what do you think is responsible for the successes in your county's Juvenile Justice System?

	AM group	PM group	Total
Judges' role	2	3	5
Money	2	0	2
Prevention services	1	0	1
Treatment services	1	0	1
Consistency in youths' life	1	0	1
DA's length of term	1	0	1
Common goals	2	4	6
Other key players	3	0	3
Judge tenure, attitude/dedication	3	4	7
Interdepartmental commitment/cooperation	2	3	5
Distribution and allowance of distribution of resources	1	2	3
Parental involvement	2	3	5
DA commitment and involvement in the court system	1	0	1
Consistency/reliability of judges to stand by rulings	2	0	2
Juvenile court system is not as important or serious as	2	0	2
adult court system			
High turnover of juvenile prosecutors in the court	4	0	4
system			
Placement of low caliber/inexperienced court officials	3	1	4
in the juvenile court system			
Buy in of P.O.s	0	1	1
Competency development	0	1	1
Staff "buy in"	0	2	2
Evidence-based programing	0	1	1
Community groups	0	2	2
Totals	33	27	60

Question 3: How are the decisions made at each step in the process of the system?

	AM group	PM group	Total
Categories			
Youth Aid Panel/Community Justice Panel	5	2	7
Probation officers	1	1	2
Police officers	4	1	5
Matching services	2	1	3
Summary offenses	1	2	3
No contact with summary offenders	3	0	3
Judge driven disposition recommendations	0	2	2
Need for probation department driven decision making	0	1	1
Dispositional guidelines for placement	0	1	1
Detention decision determined by population density	0	1	1
Lack of formal diversion process	0	1	1
Dispositional recommendation done by committee	0	2	2
Placement decision by court/judge	0	3	3
Detention decision by detention risk assessment	0	3	3
Intake assessment and interview	0	4	4
Diversion decision by community aid panel	0	1	1
Dispositional recommendation plan by P.O. and	0	4	4
supervisor			
Referral recommendation by nature of offense	0	1	1
Progression into system based on detention risk	0	1	1
assessment			
Diversion recommendation by P.O. and supervisor	0	1	1
Judge has final say in all recommendations up to	0	2	2
placement			
Placement decision based on system director	0	2	2
recommendation			
YLS	0	1	1
Totals	16	38	54

Question 4: Are there any other factors that contribute to racial disparity?

	AM group	PM group	Total
Categories			
Transient crime	2	0	2
County-specific policy	3	1	4
Police presence/resources	0	1	1
Minority population density	0	2	2
Gang presence	0	1	1
No control over arrest point	0	1	1
Family resources/support	0	2	2
Cultural incompetence	0	1	1
Stability of living arrangements/home life	0	1	1
Concentration of crime in city	0	2	2
School truancy	0	4	4
Totals	5	16	21

Question 5: If you were to ask a minority member of your community to describe race relations in your county, what do you think they would say?

Categories	AM group	PM group	Total
Disfavorable view of roline	2	2	4
Disfavorable view of police	-	2	4
Disfavorable view of probation office	0	1	1
Disfavorable view of courts	1	1	2
Unfair treatment of minorities	2	2	4
Current minority generation less vocal about race	2	0	2
difference			
Probation officer community rapport	2	1	3
Kids picked on by police	0	1	1
No improvement since Civil Rights Era	0	1	1
Racism is still a problem	0	2	2
Perception of unfairness/bias	0	1	1
Police are all racists	0	1	1
No community involvement by officials	0	1	1
Police taking "us against them/ the world stance"	0	3	3
Preconceived ideas about clients	0	3	3
Heavy handedness of police/sheriffs	0	2	2
Totals	9	22	31

Question 6: What role do social, family/parental, education, individual and economic factors play in minority overrepresentation in the juvenile justice system?

Categories	AM group	PM group	Total
Family interaction/participation/support	4	6	10
Presence of father	2	0	2
Lack of stable family status/structure	4	2	6
Negative social influence	2	1	3
Generational/learned delinquency	2	1	3
School truancy	1	0	1
Suburban vs. Urban resource availability	1	0	1
Type of offence committed by juvenile	1	1	2
Poverty/socio-economic status	2	0	2
Disproportionate amount of crime committed by	2	1	3
minorities			
Transient crime	1	0	1
Family/parental values	0	1	1
Family/parent circumstances	0	4	4
Family responsibility/self-sufficiency	0	1	1
Family-group counseling	0	5	5
Subjectivity of assessment	0	1	1
Cultural incompetence	0	0	0
Recommendation disagreement between departments	0	1	1
Language barrier	0	0	0
Totals	22	25	47

Question 7: Are there programs or services within the juvenile justice system within your counties that specifically address minority overrepresentation?

	AM group	PM group	Total
Categories			
Police training	0	2	2
Continuum of services/programs	2	1	3
Police contact/initial contact	0	1	1
Fairness of decision making	0	2	2
Availability of diversion programs	0	1	1
School truancy	1	1	2
Minority mentors	1	2	3
"Buy in" from family	0	1	1
Parental support	0	1	1
Addressing the disconnect between actions and	1	1	2
consequences			
Totals	5	13	18

Question 8: Does racial diversity of the Juvenile Justice work force have an effect on Pennsylvania's DMC rates?

	AM group	PM group	Total
Categories			
P.O.'s character	2	0	2
Work force in itself not the issue	2	1	3
Family perception of treatment by minority P.O.	1	1	2
Purpose of minority representation in the work force	3	2	5
Gender diversity in the workforce	1	1	2
P.O. preference toward population	4	0	4
Demand for minorities in better paying fields	3	2	5
Language barrier	2	2	4
Work force diversity important, but not crucial	0	2	2
Work force must reflect community it serves	0	1	1
Race of P.O. doesn't matter	0	2	2
Not much diversity of work force/officials	0	2	2
Treatment of client by staff, more important than race	0	2	2
Totals	18	18	36