

OHIO DISPROPORTIONATE MINORITY CONTACT ASSESSMENT
FINAL REPORT

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OHIO DISPROPORTIONATE MINORITY CONTACT ASSESSMENT

EXECUTIVE SUMMARY

This report highlights all activities on the Ohio Disproportionate Minority Contact (DMC) Assessment project carried out by the University of Cincinnati Center for Criminal Justice Research (UC-CCJR). Roughly, this covers work that occurred between June 1, 2012, when University of Cincinnati Institutional Review Board approval for the study was secured, and June 30, 2016, when analysis and reporting was completed. These project activities were directed towards meeting the objectives detailed in the proposal submitted by the UC-CCJR in February of 2012 to the Ohio Department of Youth Services (DYS).

As noted in that proposal, the study had two major aims in accordance with the Request for Proposals (RFP). First, data were sought to determine whether there is a problem with disproportionate contact across race/ethnicity groups for various points in police and court decision-making processes. Second, quantitative and qualitative data were collected and analyzed to identify potential explanations for disproportionality. The qualitative data—which draw on the comments and perspectives of those in the field—were utilized to contextualize decision-making in the juvenile justice system and form policy recommendations. This contributed to the second aim of the assessment study. A third study aim, added later, focused on assessment of potential race differences in aspects of the referral and custodial experiences of youth in DYS facilities.

The report is divided into several main sections. Each section includes summary information for the study as a whole, as well as ancillary details on site-level variation or validity checks where relevant. A section containing reports from each of the thirteen counties that were studied is also included. Key “quick reference” page numbers are provided below to ease the location of key information in the report.

1. The background for the Ohio DMC Assessment addresses focal areas as originally stated by the Ohio Department of Youth Services (**pp. 1-11**) and provides an overview of the current state of research on juvenile DMC to offer context for what follows.
2. The description of the study methods (see **pp. 12-37**) provides a sense of the processes undertaken to secure and analyze data to answer important study questions.
3. Summary tables for the analysis of police record data are provided on **pages 40, 43-44**. A discussion of key findings follows on **pages 45 and 46**.

4. An overview of results for the juvenile courts is then presented (**pp. 57, 65, 72-73**).
5. The report then transitions to results of the focus groups with police agencies (n=17), including a broad review of the themes that have come up both within and across sites. Summary information is provided on **pages 91, 112, and 117-120**. This is followed by summary information that emerged from the interviews in juvenile courts (**pp. 123, 132, 135-137**).
6. We then present extensive results for each of the thirteen counties included in the Ohio DMC assessment. This describes individual aspects of the data collection in each site, including the degree of participation among the agencies identified in the original Ohio DYS RFP. This covers a wide range of the report (**pp. 137-592**). Results tables are provided within each County's section. A broad summary table is provided on the last page of each county's report. These sections also include discussions of programs and practices implemented to address DMC from the thirteen counties included in the study.
7. The last results section covers the analysis of data from the DYS facilities. Some of the highlights are provided in tables on **pages 594, 596, 601-602, 611, and 613**). The written summary of results for those analyses is on **pages 614 through 616**.
8. The latter sections of the report provide an overview of some key findings, discussion and reflection, and recommendations for future policy and practice (**pp. 616-649 with a final conclusion on 647-649**). **Pages 634-646** contain recommendations on policy and practice. This includes a Table (**89**) that contains recommendations and program examples from around the U.S. Limitations of the study are discussed on **pages 631-634**.
9. Finally, for interested readers, appendices of data collection tools developed in each area of the research process (starting **on p. 660**).

The rest of this summary presents important highlights from each section of the report.

BACKGROUND FOR THE OHIO DMC ASSESSMENT

- Disproportionate Minority Contact (DMC) with juvenile and criminal justice systems has been an issue of concern for some time, but there is disagreement about the exact degree and nature of the problem as well as how to best address it.

- The Office of Juvenile Justice and Delinquency Prevention (OJJDP) and DYS have funded various DMC-related projects, including data collection and assessment, interventions, and programming.
- This is a sensible time to look at Ohio’s current status with respect to DMC given general concerns about race and the justice system and specific questions from both local and state stakeholders.
- The project had three general aims that were intended to inform recommendations for future policy and practice:
 - Assess disproportionate contact for race/ethnicity groups for various points in police and court processes;
 - Identify potential explanations for DMC when it was identified;
 - Expand DMC-related research into state-level residential facilities.

OVERVIEW OF THE OHIO DMC ASSESSMENT METHODOLOGY

- Focused on 13 of 14 counties that were initially identified in the Ohio DYS RFP.
- Collected or obtained record data for juvenile courts (n=13; 2010 and 2011), selected police departments (n=19 agencies across 10 of the counties) and DYS facilities (n=1,514; 2010 through 2014). Completed interviews (n=131 with court personnel) and focus groups (n=17 with 130 officers) from 2012 to 2015.
- Gathered information on as many relevant fields and themes as possible in each agency—with a particular focus on introducing legally-relevant factors and perspectives of system personnel into the assessment and explanation of DMC.

POLICE RECORD DATA AND MEASURES

- The final police record sample consisted of 20,334 youth arrests from 2010 through 2011.
- In addition to a race/ethnicity indicator, most agencies were able to provide sociodemographic information on youth arrestees and basic information on the offense(s) involved (e.g., type, seriousness). A smaller sample of arrest records included more insight on the offense (e.g., location, arrested with co-offenders).

- Basic descriptive and comparative analysis were conducted on these arrest records to identify similarities and differences in their key characteristics across race.

JUVENILE COURT RECORD DATA AND MEASURES

- The final court sample contained 75,946 cases referred to 13 juvenile courts in 2010 and 2011. The sample included courts of various sizes and caseloads (e.g., Allen, Stark, Cuyahoga, Hamilton, Lucas).
- Based on data availability across sites, measures were constructed for six case outcomes: diversion, detention, dismissal, adjudication, secure placement, and waiver to adult court (bindover).
- In addition to the race/ethnicity indicator (the focal point of study), relevant characteristics of each case (e.g., seriousness, number of charges) and the involved youth (prior offenses, age) were considered to account for plausible influences on decision-making.
- Basic descriptive analysis was conducted to provide context around the key findings related to race and court outcomes.
- Findings relied on evidence from comprehensive statistical models that considered the impact of race alongside generally recognized legally-relevant factors in obtaining estimates of possible DMC. This was followed by supplemental tests to investigate any possible sensitivity in the initial results.
- Patterns of relationships in these multivariate analyses were also used to generate possible explanations for the presence of DMC where it was observed.

OHIO DYS FACILITIES DATA AND MEASURES

- Ohio DYS provided data on a stratified sample of state residential facility data for 2010 to 2014, which included 1,514 youth. The sample was weighted toward the counties for which court data were available.
- Number of disciplinary infractions, time in seclusion, length of stay, school participation, and treatment receipt were measured as “outcomes” in the DYS facilities data.

- In addition to race, influences, such as baseline court record (e.g., type of committing offense, number of offenses) and sociodemographics (e.g. age, sex), were considered. A subsample of cases had Ohio Youth Assessment System (OYAS) data, which was included in some analyses.
- As with the court data, the relationships between race and key outcomes were studied in the context of other influences that would be expected to be related to aspects of their time in custody (e.g., seriousness of the committing offense).
- Special aspects of the data were considered in the statistical modeling approaches that were used and supplementary analyses conducted as checks on the main results.

POLICE FOCUS GROUP DATA AND THEMES

- 17 focus groups and 2 interviews were conducted in law enforcement agencies across 9 counties in Ohio.
- A purposive selection approach, aided by a key contact in each agency, was used to identify and involve officers who had higher rates of contact with youth in their jurisdiction. A total of 130 police officers were included in these sessions.
- To increase participation and engagement, the focus groups and interviews were facilitated by trained police consultants and conducted on-site at each agency.
- Each facilitator used a semi-structured discussion outline with lead questions designed to generate discussion in a particular topic area.
- Recent juvenile crime trends; the strengths and weaknesses of the juvenile justice system; and disproportionate minority contact, including factors that might be linked to DMC, were among the topics of discussion. The protocol also focused on the role of police in the community and identifying departmental policies, procedures, or initiatives relevant to juvenile crime and/or DMC.
- Focus group data were analyzed using a “grounded theory” approach to develop a sense of the themes emerging from the statements of participants. This involved:

Reading transcripts and marking areas where respondents discussed prevalence of and explanations for DMC;

Drawing out and grouping pertinent topics for ease of understanding and summary;

Systematically identifying and reviewing recurring themes;

Finding representative quotes and examples from the transcribed data or interview notes to further illustrate or elaborate on the key themes;

Multiple members of the research team iteratively reviewing the emerging themes to ensure they were supported well, framed as precisely as possible, and appropriately contextualized.

JUVENILE COURT INTERVIEW DATA AND THEMES

- Key informant interviews were conducted with personnel from 13 juvenile courts between February 2013 and July 2014. In total, 131 key informant interviews were conducted.
- With the help of a staff liaison at each court, a purposive selection approach was used to select personnel who worked directly with youth or who had knowledge of local efforts to address disproportionate contact in the juvenile justice system. Interviewees included administrative staff (22); detention center staff (14); intake and assessment staff (10); supervision and programming staff (60); and magistrates and judges (25).
- The interviews, which lasted from 30 to 90 minutes, were conducted using a semi-structured outline protocol that allowed for a lead question from the researcher but also provided room for the interviewee to elaborate if they wished.
- The questions touched on several relevant themes, including: key factors in the decision-making process and policies regarding juvenile delinquency; the role of family in the decision-making process; the effects of neighborhood and community factors on crime and delinquency; and the legal and social services available through the court.

- These data were analyzed with the same approach described for the focus groups.

SUMMARY AND DISCUSSION OF KEY FINDINGS

FINDINGS: STATE-LEVEL ASSESSMENT

Analysis of Police Record Data

- Police record data are inherently “selected” on the outcome as information was not available for contacts that did not lead to arrest. “Contact card” data were requested as part of the study, but the results suggest that agencies generally do not collect or systematically store that type of information. This, in conjunction with the fact that relatively few case details were available in the records, puts some constraints on how much can be learned about DMC based on these analyses.
- The limited nature of the pooled police data demonstrates the utility in a mixed methods approach. However, the qualitative data obtained from police focus groups and interviews provides insight into the numbers, allowing for some exploration of what findings are consistent or inconsistent across the different information sources.
- Non-White youth made up the majority of juvenile arrests, accounting for 71.8 percent compared to 28.2 percent for White youth within the sample of 20,000 records.
- While the comparison of arrests between White and Non-White youth identified several statistically significant differences, they were typically small to moderate in size. The most serious charge and offense level for which the youth was arrested fell into that category.
- The strongest relationships were found for weapon type, offenders’ role in offense, and source of complaint – all of which included much smaller sample sizes than the pooled police data file as a whole – therefore a degree of caution is necessary.
- Information on weapon-involved arrests was available for a small subset of cases (n=6,840). White and Non-White youth were very similar in their prevalence of arrests for weapons offenses (7.4% and 8.0%, respectively). In those cases a weapon was involved, and data were available on weapon-type, Non-White

youth were far more likely to be arrested in an offense involving a firearm than White youth (74% to 38%).

- The role played in offenses differs slightly across White and Non-White arrestees. For example, Non-White youth arrests more often involve arguments/disputes whereas incorrigible/status offenses are relatively more frequent for White youth.
- Inconsistent with focus group findings, White youth are more likely to be arrested due to a complaint from their parent/guardian. Many officers observed that they get more calls for service from the parents in minority communities – suggesting either officers’ contact with youth stemming from calls from minority parents must be informal in nature (i.e. contact but no arrest), or minority parents do not call as often as officers perceive them to.
- Consistent with previous literature and observations from court personnel, school officials (including SROs) were more likely to be the source of complaint resulting in the arrest of minority youth – this finding provides some contention for focus groups’ recommendations to place officers in schools to both reduce juvenile crime and the formal contact of youth with the juvenile justice system.
- Finally, slightly more Non-White youth were found to be arrested due to police associated complaints. Unfortunately it is difficult to determine if these complaints originate from proactive police contacts or reactive contacts (i.e. calls for service).
- Additional relationships, though significant, were comparatively smaller in size – suggesting that, White and Non-White do not vary substantially from one another on many characteristics of their arrests.

Analysis of Juvenile Court Record Data

- Non-White youth accounted for 60 percent of cases in this segment of the sample. According to the 2010 Census, this group accounted for 22 percent of the juvenile population in Ohio. On the surface, this indicates disproportionate minority contact in the cases coming into the juvenile courts during the years for which we have records.

- Youth race had a statistically significant relationship with five of the six court outcomes. Relative to White youth, Non-White youth were more likely to be detained prior to adjudication, have their case dismissed, be placed in a secure facility, and be waived to criminal court. Conversely, Non-White youth were significantly less likely to be adjudicated delinquent compared to White youth. Race was not a significant predictor of diversion. The legally-relevant factors (e.g., number of prior petitions, offense seriousness) appeared to be more closely associated with that outcome.
- The statistical analysis of the integrated measure reflecting the degree of penetration into the juvenile justice process suggests that Non-White youth tend to fare worse in terms of the severity of court decisions. There is a distinction with the dismissal outcome that tends to suggest minority youth are more likely to have their cases dismissed than White youth. A matched pairs analysis of the race group differences for this outcome suggested that the case dismissal effect dropped when scrutinized further, making it difficult to come to a firm conclusion about this relationship. The pattern of relationships at the site-level suggests that some counties had proportionately more cases involving Non-Whites dismissed than Whites. That pattern does not hold in all counties, though. Most agencies did not provide information for the underlying reasons for dismissal, which limits the inferences that can be drawn about those cases.
- The effect at the adjudication stage also tends to suggest that Non-White youth are less likely to be adjudicated delinquent than their White peers. Effects of this nature are not unprecedented in previous research and some suggest that there may be a “correction” that enters the process at the point where more formality and facts are introduced.¹ Still, like the anomalous dismissal effect, this relationship seems to diminish when we utilize alternate matching methods that provide a stronger control for alternate influences. This is likely due to cross-site variation in the pattern of relationships (e.g., Non-White youth were comparatively less likely to be adjudicated delinquent in Hamilton County, but comparatively more likely in Cuyahoga County). On balance, this leads to a null or small effect, but it is important to consider the variation across counties.
- In general, once all possible influences were included in the final models, the effect of race decreased in each but was still statistically significant in five of the six case outcome measures. For example, in the initial model for secure confinement, Non-White youth were 82 percent more likely to be placed in a secure facility relative to White youth. This percentage dropped to only 12 percent in the final secure confinement model, a pronounced drop of 70 percentage points. Similarly, in the race-only model, Non-White youth were 24

¹ See, e.g., Kutateladze, B., Tymas, W., & Crowley, M. (2014). *Race and Prosecution in Manhattan*. New York, NY: Vera Institute of Justice.

percent less likely to be diverted compared to White youth, but the effect was reduced and became nonsignificant in the final model that controlled for legally-relevant factors. This suggests that a lot of the variation in outcomes can be explained by characteristics of the referral offense(s) or youth history, but there is a residual race effect in the data.

- Race had a statistically significant and moderate-sized effect on the odds of detention in all three statistical models. This has important implications because studies have found that detention can have a “snowball” effect where decisions made at earlier stages in the process can affect those at later stages.² For this reason, detention was included as an explanatory variable in supplementary analyses for adjudication and secure confinement. In those cases, youth who were detained were 87 percent more likely to be adjudicated delinquent and 93 percent more likely to be placed in secure confinement relative to those not detained.
- The OYAS coverage for the cases collected in the main juvenile court sample was somewhat limited. Analysis was conducted with cases with two counties that had reasonable coverage on OYAS measures. That yielded mixed conclusions as the addition of OYAS data seemed to reduce the effects of race in one site and had very little impact in the other. Given the prominence of risk and needs assessment in contemporary juvenile justice and Ohio courts it is worth considering whether and how OYAS is used in different locales as a factor that could reduce some differentials between groups, exist outside of them without much impact, or extend some disadvantages among youth as they move through the system.
- Given the nature of the data and the sensitivity of the relationships tested here, several checks and ancillary analyses were used to further scrutinize the findings from the pooled data set. These included checks on possible interactions between race and other legal influences and effects due to variation among counties. Aside from the exceptions noted above, these analyses confirmed the main findings included in the summary and larger report.

Analysis of Police Focus Group Data

- Officers who participated in the focus groups overwhelmingly viewed disproportionate minority contact as a product of the differential offending patterns of minority youth. Despite different job responsibilities (e.g., School Resource Officers vs. Patrol Officers), participants across the various agencies

² See Rodriguez, N. (2010). The cumulative effect of race and ethnicity in juvenile outcomes and why preadjudication detention matters. *Journal of Research in Crime & Delinquency*, 47, 391-413.

consistently identified familial, socioeconomic, and geographic factors within minority communities as a driving force in delinquency by youth and subsequent contact with police. Inherent in the officers' discussions was their belief that these factors were connected and that they led to more serious and higher levels of offending and, in turn, disproportionate arrests of minority youth.

- The officers' message could be characterized as follows: the convergence of familial, socioeconomic, and geographic factors within the same neighborhood context places minority youth at a disadvantage that persists from their likelihood of involvement in crime to their introduction to and processing in the juvenile justice system.
- Although only a few officers made comments regarding the influence of "differential treatment" practices on DMC, those who did provided significant insight. Specifically, officers pointed to several community, departmental, and individual factors that can impact outcomes for minority youth, such as public expectations of crime control in minority neighborhoods, the presence of implicit biases held by the community, the direction of law enforcement to "hot spot" locations that have greater minority presence, and the possible inclusion of extra-legal factors in officer decision-making (although they also argued that there were departmental checks on this practice).
- Relatedly, some officers observed that law enforcement agencies tend to patrol more heavily and formally enforce more laws in minority communities. The majority of focus group participants recognized the concentration of law enforcement in minority neighborhoods and subsequent DMC as a product of data driven policing strategies, but viewed it as a matter of going where their supervisors and the community directed them based on the differential offending patterns described above.
- The notion of differential treatment also came up in response to discussion of situational characteristics of the interaction between youth and the police. Officers from the majority of the participating agencies confirmed that, when the characteristics of the incident allows for officer discretion, the attitude and demeanor of youth do impact officers' decisions. In particular, youth that exhibit negative attitudes were identified as more likely to be handled formally. Still, in cases where this came up in the sessions, officers overwhelmingly observed that youth are equally disrespectful to them regardless of race.

- The officers' broad explanations for DMC were mirrored in the range of recommendations to reduce juvenile crime (and, potentially, DMC). Generally, these recommendations fell outside of law enforcement practices, focusing instead on the capabilities of families, communities, schools, and later stages of the juvenile justice system to both prevent youth involvement in crime and effectively manage the behavior of delinquent youth. Ultimately, officers advocated for a holistic approach, targeting multiple areas in the lives of youth and, therefore, increasing the likelihood of making a positive impact.
- Some participants did also argue, however, that juvenile offending problems and DMC would best be addressed by enhanced sanctions in juvenile courts and the expanded use of detention and secure placement for youth who were repeat or serious offenders.

Analysis of Juvenile Court Interview Data

- While some staff reported disproportionate minority contact (DMC) was not a major issue in their courts, the majority of interviewees thought it was a problem—at least to an extent—and suggested that the juvenile justice system, education, family, and neighborhood are contributing factors.
- Court personnel, like police, were reluctant to explicitly discuss the decision-making process and system-related factors as contributors to DMC or saw them as secondary influences. Staff tended to focus more on broader problems that may lead youth to the system, rather court policies and practices. This is consistent with the perception that differential offending is the main cause of DMC, but allows for the possibility that minority youth are more likely to reach the juvenile justice system due to front-end decisions in communities and schools.
- Some interviewees mentioned that they do not have control over the cases referred to them and that lower tolerance for misbehavior in schools and “hot spots” policing in certain targeted areas generally lead to a higher volume of juvenile court referrals, particularly of minority youth from urban areas.
- Respondents in every site mentioned resource constraints and the lack of prevention and intervention programs as contributing to the overrepresentation

of minority youth in the juvenile justice system. Although interviewees did describe some points of the system where disparities might emerge (e.g., detention), responses centered on the need for sustainable programs that address the risks and needs of youth across multiple domains.

- Court staff perceived youth as being more vulnerable for juvenile justice involvement when they came from homes with poor family management, limited supervision, or discord. They also mentioned that this contributed to the overrepresentation of minority youth in the court, but also justified its intervention.
- Some court interviewees did raise the question of differences in perception that might affect the response to minority families and youth. In particular, they mentioned that court decisions are partly predicated on parental involvement, but it can be challenging for some parents—even when well-intentioned—to participate fully due to other competing demands like work, housing, or transportation problems. Some respondents also indicated that minority youth and families may have difficulty fully trusting the system and those working in it, referring to potential “suspicions” about its intentions.
- Court interviewees provided a host of general and specific suggestions on how to reduce juvenile delinquency and deal with DMC issues. Some seemed to have limited direct connection to specific disproportionate minority contact reduction efforts. The recommendations included initiatives of different sizes, scopes and missions; different levels of cost; and varying origins at local, state, federal, or privately-driven levels. Some have ceased to exist while others are ongoing or in planning stages. They also range in terms of levels of past success or basis in evaluation evidence. Summarizing the various programs and initiatives is difficult, but many of them contained notions of collaboration, multi-agency partnerships, evidence-driven decision making and programming, and cultural competence.

FINDINGS: COUNTY-LEVEL ASSESSMENTS

- Variation in degree of participation, data coverage, and level of detail and precision in the measures provided, which could affect some of the results. Specifics of data collection in each county are provided to contextualize the conclusions reached in the assessment for each site.

- Some consistent patterns in findings for key decision point analysis, but also variation in nature and size of disparity. There tended to be disproportionality in Non-White and White youth prevalence in arrest records at nearly all sites for which records were available and the make-up of cases reaching the juvenile justice system seemed to be similarly distributed.
- Four sites did not really show much evidence of DMC once controls for relevant decision-making factors were added: Allen, Butler, Clark, and Trumbull Counties. Others, like Mahoning, Stark, and Summit Counties showed disproportionality at just one decision point in the court process.
- There was some variability in the direction of relationships for between case dismissal and delinquency adjudication across counties. Some places saw greater levels of case dismissal and lesser likelihood of adjudication for Non-White youths. Others had a pattern that continued to be consistent with DMC.
- The most consistent finding involved the detention stage, where the pattern of disproportionality was consistent across the sites—even after controlling for legally-relevant influences on case outcomes. Later stage decisions (secure confinement and bindover) also show patterns of DMC fairly consistently across sites. The size of their relationships with race tended to vary across counties.
- The site-level analysis showed some commonality in focus group and interview responses across the counties and agencies, but there were some important divergences as well. Both groups were similar in pointing out the fact that observed patterns in DMC were attributable to differential offending based on community, family, school, and individual factors. Both groups were less apt to discuss aspects of formal decision-making by police or court actors.
- Both police officers and court officials mentioned factors in police and juvenile justice decision making that might disadvantage minority youth—albeit less frequently than the differential offending explanations. As an example, police officers discussed enforcement patterns in neighborhoods and schools that might lead them into contact with minority youth more frequently. For their part, a number of court actors discussed the effect of perception of family participation and processing decisions and the barriers faced by some minority youth and parents in that regard.

- Police focus groups and, especially, court interviewees offered some potentially useful ideas on how to respond to DMC problems. Those are detailed in summary across all counties and in each county’s individual report but range from general shifts in agency culture to multifaceted partnerships to specific programming or training activities.

FINDINGS: DYS FACILITIES ASSESSMENT

- This part of the assessment project is somewhat novel relative to the DMC research (and intervention) to date. Most efforts have been aimed at earlier stages in the juvenile justice process and generally end with the decision to place or not.
- Statistical models were estimated for four key outcome variables extracted from the data provided by Ohio DYS: seclusion time, length of stay, proportion of time absent from education services, and number of disciplinary infractions. Treatment receipt data were analyzed for a subsample of cases that covered the last two years of the study period.
- 65 percent of the cases in the sample of 1,514 DYS cases records included in this assessment were Non-White. Non-White youth accounted for a higher proportion of the cases that came from the 13 main study sites (83%).
- In the multivariate analysis, which is most conclusive with respect to assessing the relationship between race and the outcomes of interest, the only consistent finding was one for race and disciplinary infractions. This was true whether using the main sample and baseline criminal history measures and also in a subsample of cases that had Ohio Youth Assessment System information. Non-White youth in custody had 50 percent more infractions than White youth—even accounting for several other relevant influences.
- Although there were some small race effects in the models for seclusion time, that seems to be driven almost entirely by its relationship to disciplinary infractions, which was quite strong (a correlation of 0.93 on a scale from 0 to 1.0). Similarly, number of disciplinary infractions also has a significant, moderate relationship with the total length of stay in DYS facilities.
- When analyzed comprehensively, there were no observed differences in race for length of stay in custody, educational outcomes, or treatment receipt variables.

- Race distributions in county referrals to DYS were explored as part of the assessment. Similar patterns are generally evident in the site analysis of secure confinement decisions as well. The vast majority of youth in the sample were Non-White (~83%). Larger counties generally refer more youth (which is expected), but proportionally they tend to have a higher relative prevalence of Non-White youth. The analysis also identified some counties that seem to have a closer split in the prevalence of White and Non-White youth being referred to DYS facilities (e.g., Clark and Butler Counties)

RECOMMENDATIONS

CONTEXT

- As described at points in the report, there are certainly some limitations in the scope and nature of the data and analyses should be considered in assessing the findings and key conclusions. Still, efforts were made to look at the data available in system records and consider the perspectives of those who work in the system and, in cases where there were data limitations, analyses were conducted in order to shore up important conclusions to whatever extent possible. It is also important to note that some agencies have made changes subsequent to the data collection process (particularly the official record portion) and those may not be captured here.
- The content of the report—which considers multiple sources of evidence and decision points—highlights the fact that there are disproportionalities in system outcomes across multiple stages that persist after accounting for alternate influences. There are some differential offending patterns at work in the findings from case records and those are highlighted by police and court personnel. The presence and causes of DMC appear to be quite complex and seemingly difficult to deal with in some senses.
- This likely creates a ceiling on whether the justice system can fully address the underlying problems, but this does *not* mean that shifts in thinking or alternative approaches are destined to fail.
- There was some variability in decision points and study sites that might inform priorities related to DMC efforts. This also suggests the need for focused analysis of the problem that considers local contexts and decision-making factors.

- Although there were exceptions, on balance, the interviews and focus group participants did not point to many specific aspects of the juvenile justice process that drove DMC patterns. They did, however, offer a number of insights that provide a feel for what might be done in future efforts to address these issues.

RECOMMENDATIONS

- With this as background, there are several points that might be considered by Ohio DYS and other state and local stakeholders. This may involve incentivizing or providing support to facilitate initiatives in local agencies, but some may require more direct action. Those recommendations and rationales for them are offered below:
 1. It is important to find ways to engage those in the field in discussions about this topic, however challenging they might be. Clearly, the explanations of DMC based on differential offending have some validity, but they are generally not constructive in developing means of addressing disproportionate minority contact among juveniles. Furthermore, the results suggest that DMC remains after controlling for factors that capture differential offending explanations.
 2. A number of interviewees suggested the need for collaborative efforts among those who work with youth. The evidence about the sources of DMC problems compiled here and elsewhere certainly supports that. The scope and complexity of the problem suggest that constructive dialogue, focused analysis of the problem in local area, prioritization of targets for change, and implementation of strategies will likely fall to multiple agencies or stakeholders simultaneously. Importantly, to facilitate success in implementation and achieve desired outcomes, any initiatives that are taken should be clear about their underlying logic in terms of whether they are generally directed at affecting all justice-involved youth or intended to specifically address DMC. This seems prudent in light of the scope and multifaceted nature of the problem and limited effects of some efforts carried out to date.
 3. Relatedly, this collaborative approach is particularly important in considering DMC and policing where officers are omnipresent in certain communities due to calls for service and/or “hot spots” policing or targeted enforcement

of particular charges that may have legislated-mandates attached to dispositions (e.g., firearm possession). The responses of officers in the focus groups suggest that they perceive distrust on the part of the communities that they police and objective analysis of some content from the focus groups suggest that the residents of those neighborhoods would likely disagree with at least some characterization of the sources of DMC problems. This creates a challenging dynamic for implementing strategies aimed at reducing juvenile delinquency and DMC. Still, the evidence here and elsewhere suggests that it would benefit both police agencies and local communities to do so.

4. Like a lot of other research, a number of aspects of the numbers and the narrative responses from people in the courts in this DMC assessment point to the importance of pre-adjudication detention as an early decision that matters in and of itself but which may also have an impact on later outcomes (e.g., secure confinement). Seriousness of charge and past record considerations must certainly be factored in these decisions, but agencies should look for alternative placements when the home or family environment is the most salient factor in these decisions.
5. There are race differences in the “deeper-end” outcomes (e.g., secure placement, bindover) that hold after alternate influences are incorporated. These outcomes may be more record-driven and hold less possibility of discretion (e.g., gun specs) than other decision points. Also general reform in the use of secure confinement have affected the absolute number of minority youth in custody. Still, these decision points should be given greater consideration at the local and state level to identify and intervene with any factors that may be producing disparities.
6. Ideally, this would be coupled with attempts to try to understand and be responsive to some of the challenges that are faced (often disproportionately) by the parents and families of minority youth. Juvenile court should definitely place a premium on family involvement based on what we know about effective intervention to prevent recidivism and promote positive development. Still, this should be coupled with some flexibility and attempts to break down barriers in cases where they may disadvantage youth in the justice process.

7. As alluded to above, the findings from the analysis of DYS facilities are among the first of their kind and therefore offer less of a “record” to look at in generating ideas for future policy and practice. The differences that were observed are likely driven in part by the pattern of referrals that come into facilities. At the same time, some differences between groups remained when controlling for factors that might predict how a youth would do in the facility. The disciplinary infractions outcome, which also was related to seclusion time and length of stay, was the only outcome that showed a degree of disproportionality. Although it has recently eliminated use of seclusion time for disciplinary reasons, Ohio DYS should examine the specific nature of infractions and related policies and processes to consider whether or how they might affect different groups of youth. This seems to also have implications for youths’ seclusion time, which has become a matter of broad policy interest in recent years due to its possible long-term developmental impacts on youth in custody.

CONCLUSION

Comparative research across the U.S. and internationally indicates that disproportionate contact with juvenile justice among racial and ethnic minorities is not unique. Both this study and that body of research suggest that, however complex the problem, the stakes are equally high for addressing it due to the long-term developmental implications for the youth involved, the perceived legitimacy of police and juvenile justice agencies, and the relationships between communities (often heavily minority) and government. While limited in certain ways, through multifaceted data collection and analysis spanning multiple stages of the juvenile justice system, this study provides an assessment of DMC in Ohio in the first half of this decade. In turn, it offers some information to guide general and specific initiatives that might be taken in order that police and juvenile justice agencies contribute as much as possible to reducing the problem in the future. This final section recounts some of the reports’ major findings before reflecting on their implications and then concluding with summary recommendations.

KEY FINDINGS

- Disproportionate minority contact was identified in the majority of sites at the point of arrest and court petition.
- Police records sometimes showed differences in the nature of arrests by race groups (e.g., seriousness of offenses, firearm involvement), but those findings varied by agency and county.

- There was a consistent, moderate-sized relationship between race and pre-adjudication detention when controlling for legally-relevant decision-making factors. In turn, detention was associated with adjudication and secure confinement outcomes.
- The overall findings for case dismissal and adjudication did not reflect a DMC pattern, but relationships varied across the counties included in the assessment.
- Non-White youth tended to have a greater likelihood of secure confinement and bindover to adult court when controlling for legally-relevant factors. These effects were consistent across the study sites where a relationship was found.
- Police officers overwhelmingly viewed DMC as a product of the differential offending patterns of minority youth based on individual, family, and community factors. Despite different individual job responsibilities (e.g., School Resource Officers vs. Patrol Officers) and variation in the agencies (size, population level and density), responses across the various agencies were fairly consistent.
- Only a few officers made comments regarding possible differential treatment of minority youth. Those who did often mentioned public expectations of crime control, the presence of implicit biases in the community, and the direction of law enforcement to “hot spot” locations that coincidentally have greater minority presence.
- Some interviewees reported DMC was not a major issue in their courts, but the majority thought it was a problem—at least to an extent. Like police, they suggested that it was mostly driven by external factors. Some respondents discussed the idea of cultural competence or mentioned how case outcomes might be affected by differentially by system processes.
- Police focus groups and court interviewees offered potentially useful ideas on how to respond to DMC problems.
- In the DYS facility data, the only consistent relationship was one for race and disciplinary infractions. Non-White youth had significantly more infractions than White youth—even accounting for several other relevant influences. This in turn had some relationship to other experiences like seclusion time.

IMPLICATIONS

- There were some limitations based on the degree of participation among the agencies originally identified in the Ohio DYS RFP. There was also a good deal of variability in the scope and nature of the data that were provided (or available).
- DMC was present in nearly all counties for which data were obtained—at least in terms of the initial race make-up of arrests and court referrals.
- There was some variability in terms of its presence at different points in the process, but there tended to be more consistency in that finding at arrest, detention, secure confinement, and bindover stages.
- Disparities generally shrunk after controlling for legally-relevant factors, but were still present and at-least moderately-sized.
- Some decisions made at earlier stages of the process had an impact on youth experiences in the system later on.
- Reasons for disparities come from several sources—both outside and within the system. System factors include available resources and alternatives as well as managerial and front-line decision making-patterns that can interact with case factors to disadvantage minority youth and families.

RECOMMENDATIONS

- Foster collaborative relationships among communities (including minority youth), police, schools, and juvenile courts.
- Identify the ways in which targeted enforcement strategies and mandated dispositions disproportionately affect minority groups and consider alternatives.
- Consider particular offense types, referral sources, and decision points that drive DMC trends and develop and utilize alternatives to formal processing where possible.
- Increase cultural awareness and consciousness of potential stereotypes in decision-making among police, court, and correctional personnel. Engage in

broad training efforts, but embed those elements in relevant aspects of organizational philosophy and practice as well.

- Seek out and incentivize counties and cities with leaders and line staff that are willing to engage in comprehensive efforts to address DMC patterns as demonstration sites. Engage in focused goal-setting, implementation, and refinement as needed. Maintain standards for effectiveness in identifying alternative programs to address DMC.

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1. BACKGROUND FOR OHIO DMC ASSESSMENT

The differential treatment of juvenile offenders based on their race has been identified as a serious problem by the Office of Juvenile Justice and Delinquency Prevention (OJJDP). The Ohio Department of Youth Services (DYS) has been concerned with this issue for a number of years as well and has implemented and/or funded multiple initiatives to deal with disproportionate minority contact (DMC). Recent research documents that minority youth disproportionately come into contact with the juvenile justice system. In 2005, for example, minority youth accounted for 22 percent of youth ages 10-17 that had the potential to come into contact with the justice system; however, they comprised 32 percent of juvenile arrests and 65 percent of juveniles placed in secure confinement (Bishop & Leiber, 2012). Still, at all levels, the issue of whether minority youth, particularly African Americans, are treated differently based on race remains uncertain (Kempf-Leonard, 2007; Pope et al., 2002).

Several perspectives attempt to explain observed disproportionality in different races' contact with the juvenile justice system (Nellis, 2005). Traditionally, race-related selection bias, suggesting that the disproportionate number of minorities involved in the juvenile justice system is a result of discriminatory decisions or stereotypes by system actors (i.e., differential treatment), has been contrasted with a behavioral-legal perspective asserting that overrepresentation is due to coincidental possession of legally relevant decision-making factors among minority youth (e.g., differential offending levels) (Nellis, 2005; Pope & Snyder, 2003). In recent years, others have noted that DMC may be a by-product of increasingly prevalent targeted police enforcement or

"zero tolerance" policies and expanded police presence in schools (e.g., Kempf-Leonard, 2007; APA Zero Tolerance Task Force, 2008); legislation aimed at curbing violent and drug-related crime (Chin, 2002; Schlesinger, 2011); differential resource availability for alternative programs (Nellis, 2005); or the coupling of the *Parens Patriae* foundations of the juvenile court system with socioeconomic and family disadvantages predominantly experienced by minority youth (Kempf-Leonard, 2007; Kupchik, 2006). The theme of much of this research seems to be that efforts to explain and respond to DMC problems must account for processes both within and outside of the justice system (Bishop & Leiber, 2012). This includes various legally relevant (e.g., prior record and offense severity), extra-legal, and contextual factors (e.g., geographical, community, and court context). It is also important to consider the fact that the explanations may vary depending on the decisions under consideration.

POLICE CONTACT AND ARREST

Police contact is the first stage that Ohio DYS and OJJDP identify as having potential for racial disparity. Minorities, especially African Americans, get arrested at much higher rates than their representation in the general population. Although all subgroups have experienced declines in recent years, in 2009, African-American youth comprised 51 percent of total arrests for violent crimes and 33 percent of those for property crime—despite having a prevalence of 16 percent in the age 10 to 17 population (Puzzanchera & Adams, 2011). This translates to a national Relative Rate Index (RRI) of 2.2 for African Americans and 1.7 for all minority youth (OJJDP, 2011), which is well beyond an even distribution.

Some recent concerns about racial/ethnic disparities have focused specifically on issues surrounding drug use, apprehension, and sentencing. Aggressive targeting of drug offenders and markets at the street level have generally led to increased rates of incarceration and sentence length (Harris, 1999; Scalia, 2001; Tonry, 2011). Targeted enforcement strategies were especially felt by juvenile minority males, who were disproportionately subject to police surveillance and imprisonment for drug offenses (Harris, 1999; 2002; Kennedy, 1997; Tonry, 2011; Walker, 2001). A research summary by the American Sociological Association highlights this disproportionate impact by noting that in 1980, the rates of juvenile drug arrests for Black and White males were similar, but by 1993 they were more than four times higher for Black youth compared to Whites (Rosich, 2007: 6). This disparity remains today and the existence of racial/ethnic differences in contact with police is without debate. Research into its precise causes, however, is complex as it involves resident and community calls for service and individual street-level decisions and resource deployment strategies on the part of the police. What is clear, however, is that higher rates of arrest for minority youth have implications for the social climate between law enforcement and communities (Tyler & Rankin, 2011). For example, individuals that view police decision-making as procedurally unjust has led to an adversarial relationship between legal authorities and members of the communities, creating an environment where the public are less likely and willing to work with the police (Tyler & Huo, 2002; Sunshine & Tyler, 2003; Rankin & Tyler, 2009). This may also affect youths' legal socialization such that they will be less likely to buy in to accepted standards of rule-following in society (Tyler & Rankin, 2011)

and may view the efforts of other agencies in the system less favorably (e.g., juvenile courts).

Police research examining racial/ethnic disparities typically focuses on initial contact (e.g., traffic stops) and the decision to arrest. After reviewing decades of research on the impact of race on the police decision to arrest, the National Research Council (2004) concluded that the findings were mixed once legal factors were considered. Looking at juvenile arrests, for example, Pope and Snyder (2003) found that minority youth were no more likely to be arrested than Whites once offense-related controls like weapon use were analyzed. Recently, however, Kochel and colleagues (2011) challenged the conclusions of previous summaries on the impact of race on police decision-making. Based on findings from a systematic analysis of 40 studies on this topic, they asserted that “race matters” for arrest decisions. What these analyses did not assess, however, is how and why that is the case. While new statistical techniques used in understanding racial disparity are promising (Ridgeway & MacDonald, 2010), significant progress requires that quantitative research be supplemented with properly designed qualitative studies to better understand decision-making processes and contexts.

JUVENILE COURT PROCESSING

Several of the decision points identified by Ohio DYS and OJJDP are prominent in existing research on racial disparity and court decision-making. Traditionally, researchers have stated that there are significant court disparities for minorities, but the influence of race is not universal (Reitler et al., 2013; Spohn, 2000; Tracy, 2005) and its

study requires nuanced theoretical explanations and methodological approaches. Despite finding racial differences, many previous studies have not fully considered relevant legal factors to ensure that comparisons were being made with "similarly situated youth" or utilized jurisdictional and court level data to control for differential access to court options (like diversion, alternative community sentences) (Bilchik, 1999; Wooldredge, 1998). These studies also tend to not adjust for inputs from previous stages of the justice process, which makes it difficult to disentangle the effects of present disparity from earlier decisions, or consider the degree to which legal or contextual factors may interact with race. More recent research accounts for the potential of cumulative effects from disparities in previous stages of the justice system. Bishop and Leiber (2012) found that the overrepresentation of minority youth (particularly African American) is more pronounced at the front-end of the system and less prominent in the back-end of the system (due to carryover of disparities from earlier stages). Overall, explanatory research on the impact of race on the juvenile court process is somewhat equivocal at this point, but does identify enough of an impact that there is cause for concern.

Referrals, Petitions, and Diversion

Comprehensive data on referrals to the juvenile justice system are limited as, unlike in the adult system, juvenile court referrals come from multiple sources (e.g. parents, school, and police). However, a review of national juvenile court statistics for 2008 found that, although there was some variation by offense type, the rate at which

youth were referred to court and formally processed (petitioned) was greater for Black youth than White youth (Knoll & Sickmund, 2011).

Diversion is used by justice decision-makers to remove youth from formal processing in the juvenile justice system, typically providing some alternative like community service, treatment, or educational services. Leiber and Stairs (1999) found that White juvenile offenders were more likely to be diverted from formal processing compared to African-American youth, resulting in an underrepresentation of African Americans in diversion programs. Other recent research has not been as clear with respect to whether minority youth are over or underrepresented in diversion programs (c.f., Sullivan et al., 2007; Sullivan et al., 2010). Given the nature of the diversion process, this decision must be analyzed in light of the characteristics of the individual and case while also considering local resource availability.

Detention

The detention decision occurs relatively early in a youth's contact with juvenile justice, but it has important implications. Youth who are detained also tend to have poorer outcomes at later stages of the process (Leiber & Fox, 2005; Rodriguez, 2010). In general, minority youth tend to be detained more frequently than Whites (Wordes et al., 1994). A recent study by Mallett and Stoddard-Dare (2010) using data from one Midwest County found that this was the case even after controlling for standardized risk scores.

Adjudication

Bishop et al. (2010) point out that it is important to consider the specific nature of the decision-making at each stage of the court process. In particular, they identify the adjudication decision as a point where less disparity is seen based on its clearer legal standards. Bishop and Lieber (2012) point out that African-American youth are still overrepresented at this stage. However, the probability of being formally adjudicated delinquent is lower for African-American youth compared to their White counterparts (RRI value of 0.9). They suggest that this finding is partly attributable to the cumulative effect of overrepresentation at previous stages of the justice process. However, Peck et al. (2015) found that African-American youth have a higher likelihood of being adjudicated compared to White youth, but that these findings varied by offense types.

There is no denying that decisions made by criminal justice actors are interrelated and that there is a cumulative effect on decisions at later stages in the justice process (Bishop & Frazier, 1996; Mallett & Stoddard-Dare, 2010). Minority youth, on average, experience overrepresentation at all decision points in the justice process across various levels (i.e., local, state, and federal). This finding is particularly the case when considering secure confinement – where disproportionality appears to be the greatest (Pope & Leiber, 2005). Two reviews have identified the majority of studies to reveal that minority youth (specifically African Americans) experience more severe outcomes in the justice system even when accounting for legal and extralegal factors (Pope & Feyerherm, 1990; Pope et al., 2002).

Experiences in Custody

Researchers have primarily focused on disproportionality in sentencing severity rather than decisions made by justice officials in secure confinement facilities. This body of research has produced inconsistent findings of the effect of race on sentence length (see, e.g., Spohn, 1994). Steffensmeier, Ulmer, and Kramer (1998) found that race results in harsher sentences for only young males when controlling for a host of demographic and legal factors. In a more recent study examining 185,275 criminal cases in New York County, researchers found that African-American and Latino defendants were more likely to receive punitive sanctions for crimes against persons compared to other race subgroups (Kutateladze et al., 2014).

Given that minority youth are generally overrepresented in out-of-home placement facilities, they disproportionately experience the deleterious consequences associated with confinement (see, e.g., Hagan & Dinovitzer, 1999). These unintended consequences include immediate and long-term strains on prosocial relationships, psychological well-being, and financial burdens on individuals, families, and to the larger society (Davis & Sorensen, 2013; Smith, 2006). Research in this area tends to stop at the decision point of secure confinement (especially for juveniles) and therefore much less is known about whether disproportionality exists within secure facilities (e.g. treatment related activities, length of stay, and seclusion time).

Waiver (Bindover)

Waiving a youth to adult court moves them from the juvenile system, where there is a stronger focus on rehabilitation, to the adult system where that may be a

secondary goal. Consequently, concerns over DMC extend to decisions regarding the movement of cases across juvenile and adult jurisdictions. Given the potential for more severe sanctions and other collateral consequences, waivers, or "bind-overs," have become an important part of recent discussions around juvenile court decision-making and policy (Fagan, 2008). Bortner et al. (2000) suggest that racial disparities at transfer are complex and likely stem from multiple sources. Although data on transfer decisions are severely limited (Griffin, 2008), reporting of judicial transfers provides some insight into basic trends. In 2008, Black youth made up 42 percent of those cases judicially transferred to adult court, nationally; in particular their rates of transfer were higher than Whites for person and drug offenses.

SUMMARY

Although the measurement and analysis of disproportionate minority contact (DMC) within police agencies and juvenile courts has improved, there are a number of shortcomings in prior research that must be overcome to offer clearer conclusions as to *whether* and *where* there may be racial disparities and the *potential processes* underlying those disparities. Pope et al. (2002; see also, Nellis, 2005; Wooldredge, 1998; Tracy, 2005) concluded that fully understanding these questions at particular decision points in the juvenile justice process is a complex task requiring: (a) disaggregated analysis of key decision points, (b) mixed methods of data collection and analysis, (c) inclusion of individual background, attitudes, and other characteristics of the youth and their offense, (d) consideration of available alternatives at key decision points, and (e) examination of differences in jurisdiction characteristics and court-level factors on case

processing. Each of these concerns regarding limitations to previous studies was incorporated into the Ohio DMC Assessment study to whatever extent possible.

Improved understanding of DMC issues in specific state and local contexts is necessary to offer a sense of the state of the problem (where there is one). This in turn can inform initiatives designed to attenuate potential differential offending and differential treatment that results in DMC. Although there have been some recent examples of success in responding to the problem (e.g., Cabaniss et al., 2007), there is still a great deal of conjecture concerning the degree to which the interventions and reforms implemented to deal with this issue have been effective (c.f., Donnelly, 2015; Leiber et al., 2011). We attempt to assess DMC at multiple points in the justice process—from police contact through referral to juvenile corrections and experiences in facilities.

OVERVIEW OF OHIO DMC ASSESSMENT

The previous section offers context about the state of information about disproportionality in minority youth contact with different stages of the juvenile justice process. The Ohio DMC Assessment Study was funded in 2012 and had two major aims. First, data were sought to determine whether there is a problem with disproportionate contact across race/ethnicity groups for various points in police and court decision-making processes. This covered arrest through juvenile court dispositions. Second, quantitative and qualitative data were collected and analyzed to identify some potential explanations for disproportionality where identified. Eventually, the qualitative data—

which draw on the comments and perspectives of those in the field—was also intended to contextualize decision-making in order to make some policy recommendations.

A third aim was added to the DMC assessment in early 2014. In particular, the goal of that aim was to expand DMC-related research into state-level residential facilities and consider three issues: the degree of disproportionate minority referral into Ohio DYS facilities; sources of any disparities in the composition of youth being sent to facilities while adjusting for legally-relevant factors (especially considering the County of referral); and identify any differences in seclusion time, disciplinary infractions, extension of time in institution, and treatment exposure among race subgroups in DYS facilities. As with the broader UC-DYS DMC Study, the intent is to assess the degree to which there are disparities in representation at this point in the juvenile justice process and ascertain their source(s) if they are identified.

2. METHODOLOGY FOR OHIO DMC ASSESSMENT

The UC research team collected and analyzed multiple sources of information from official records and direct data collection with police and juvenile court personnel. This section of the report describes that process and the resulting information beginning with the discussion of data collection procedures and sample and concluding with an overview of the analytic plan used to meet the key objectives of the assessment project. A general summary is provided in Table1.

DATA COLLECTION PROCEDURES AND SAMPLES

Case Records: Police

Police record data were obtained through correspondence between the UC research team and law enforcement agencies throughout Ohio that were identified by Ohio DYS. Beginning in the Fall of 2012, the research team distributed a formal letter requesting participation in this study to key personnel within 40 law enforcement agencies across 14 counties. Following this letter of introduction, emails and phone calls were made periodically to agencies to further outline the aims of the study and provide information regarding the nature of the data requested. In January of 2015, after a significant period of non-response from several agencies, the research team attempted to contact mid-level personnel within departments that had completed data submission for DYS in previous years. This was done in order to determine whether individuals involved in data collection might personally assist in the data collection process or direct research staff to someone in the agency that might provide the data associated with juveniles aged 10 to 17 for 2010 and 2011. In all cases, the UC research team made several contact attempts at multiple levels of these agencies in order to try to secure their participation.

Through the efforts described above, arrest data were obtained from 20 law enforcement agencies across 10 counties for 2010 and 2011. The remaining agencies either formally declined to participate in the study, or declined via no response to several contact attempts over a several month period. The final police record sample consisted of 20,334 arrests of youth ages 10 to 17 for the years 2010 and 2011.

Case Records: Juvenile Courts

Data collection began in 2012 and focused on 2010 and 2011 cases to ensure cases could be followed through disposition. Quantitative data were obtained via electronic files submitted by the agencies or direct retrieval and coding by trained data collectors, followed by entry and cleaning by the primary research team. The process varied by the preferences of the court and the format of their records. It often involved submission of a list of requested fields and subsequent calls, videoconferences, or on-site meetings with administrative and information technology support staff in those courts.

In some cases obtaining the records involved a transmission of a full file of cases from that time period (e.g., Hamilton and Lucas Counties) and in others it required randomly sampling smaller portions of the overall records to facilitate data extraction from paper files (e.g., Mahoning and Clark Counties) or limited access data systems (e.g., Allen County). In one case, we provided a protocol on the stratification across groups and then an information specialist selected cases randomly within that framework (Franklin County). In cases where sampling was required, we used stratification and weighting procedures for case selection and analysis in order to facilitate comparisons across race groups. In cases where extraction and coding was necessary, research staff used a uniform template sheet to record relevant details on each case before that was in turn moved into the data file for analysis and management (see Appendix for data coding sheet). Full details on data collection procedures for each site is provided in their respective section below.

The final court sample contained 75,946 cases referred to 13 of the 14 juvenile courts identified by Ohio DYS. The records cover cases processed between January 1, 2010 and December 31, 2011. One juvenile court declined to participate. The sample comprised Allen, Butler, Clark, Cuyahoga, Franklin, Hamilton, Lorain, Lucas, Mahoning, Montgomery, Stark, Summit, and Trumbull counties.

Case Records: Ohio DYS Facilities

For this portion of the study, UC research staff obtained a stratified, random subsample of 1,514 youth confined in DYS facilities between 2010 and 2014. During the data collection process, we developed the sampling frame from a target population including all youth referred to DYS facilities from February 2010 through April 2014 (N=2,975). Prior to generating the random sample, youth with multiple commitments to DYS facilities were removed in order to avoid duplicate cases, maximizing the variation in the youth included in the analysis. We modified the sampling frame to oversample for youth committed to DYS facilities in 2010 and 2011. The purpose of oversampling was to ensure that we obtained a sizeable number of youth that would be included in both DYS and court records from the 13 counties included in the larger study. Thus, we drew 60 percent of the cases for our sample from 2010 and 2011, and the remaining 40 percent of the cases from 2012, 2013, and 2014 combined.

The final sample contained 452 cases from 2010, 460 cases from 2011, 318 cases from 2012, and 202 cases from 2013 and 82 cases from 2014, for a total of 1,514 cases. An overwhelming majority of DYS commitments in the sample were males (93%; N=1,408) compared to females (7%; N=106). This is consistent with the target

population where 93.2 percent of DYS commitments were males. The breakdown of race in the random sample is also representative of the population data. African-American youth made up 56.2 percent (N=851) of cases included in the random sample compared to 56.4 percent in the population data. Whites accounted for 34.5 percent (N=523) of cases included in the random sample compared to 33.9 percent in the population data. Youth from races other than African American and White made up 8.6 percent (N=130) of the cases in the random sample compared to 9.2 percent in the population data. The percent of cases from each committing county in the random sample was also consistent with the population data (see Table in Appendix).

Seven counties accounted for approximately 60 percent of the DYS commitments in the population data: Cuyahoga (20.0%), Franklin (15.2%), Hamilton (6.4%), Lorain (5.0%), Montgomery (4.7%), Summit (4.3%), and Lucas (4.0%).³ After obtaining the stratified random sample we compared these values to ensure that the sample closely approximates the percentage of commitments within each county. The percentage of commitments in the random sample for the previously mentioned seven counties are as follows Cuyahoga (20.0%), Franklin (13.7%), Hamilton (6.5%), Lorain (5.2%), Montgomery (4.8%), Summit (4.2%), and Lucas (4.0%).

Justice System Personnel Data: Police Focus Groups

Between the months of September 2012 and June 2014, 17 focus groups and 2 interviews were conducted within 17 law enforcement agencies across 9 counties in Ohio. The initial recruitment of participants for focus groups and interviews involved

³ These values reflect the removal of duplicate cases.

mailing formal letters, followed up by detailed emails, outlining the purpose of the study to key personnel within 40 law enforcement agencies across 13 Counties. A purposive selection approach, aided by a key contact in each agency, was used to identify and involve officers who had higher rates of contact with youth in their jurisdiction. To increase participation and engagement, the focus groups and interviews were facilitated by trained police consultants and conducted on-site at the local agencies (Krueger 1988; Morgan 1988). A document explaining the goals of the research project, participants' right of anonymity, and the voluntary nature of participation was distributed and explained to the officers prior to their participation (See Appendix for a copy of the "Information Sheet").

Each focus group was facilitated by a trained moderator (or two) who was also a police officer and graduate student at UC (or former graduate student). This approach was used to generate as much unconstrained discussion among the officers as possible. The number of participants within each focus group session varied between 4 and 14 officers. The sessions lasted between 1.5 and 2.5 hours, depending on the degree of participation on the part of officers within each of them. Collectively, a total of 130 law enforcement officers were involved in these groups and interviews. These officers varied in their years of experience in law enforcement (3 to 34 years) and positions held within their agencies. Specifically, the focus groups and interviews involved school resource officers (46), patrol officers (42), officers within juvenile units (8), detective and investigative bureaus (13), as well as officers and personnel (21) in a number of miscellaneous roles (e.g. administrative, D.A.R.E., field operations).

Justice System Personnel Data: Court Interviews and Observations

We supplemented police, court, and facility data with key informant interviews from 13 juvenile courts between February 2013 and July 2014. The initial recruitment of participants for interviewing and site visits involved mailing formal letters to administrative judges and court administrators in the 14 sites identified in the Ohio DYS RFP (this generally occurred alongside requests for agency records as well). This was followed up with email correspondence, phone calls, video conferences, and in-person meetings—depending on the site—to outline the purpose and procedures of the study and to answer any key questions. At the end of this process, 13 of 14 counties agreed to participate in some capacity.

Then, we selected personnel who worked directly with youth or who had knowledge of local efforts to address disproportionate contact in the juvenile justice system. After general agreement was obtained, information was provided to that contact in order to relay the key themes of the study and related confidentiality procedures to targeted personnel in these counties (see Appendix). In total, 131 key informant interviews, lasting approximately 30 to 90 minutes, were conducted. The interviewees included administrative staff (22), detention center staff (14), intake and assessment staff (10) supervision and programming staff (60); as well as magistrates and judges (25). Efforts were also made to interview community stakeholders with knowledge of efforts to address disproportionate minority contact in the court.

Additionally, 32 days of court observation were conducted between September 2013 and July 2014 in order to supplement the interview data. Data were gathered at

various decision points including, detention, arraignment, disposition, case review, and sentencing hearings held on the day(s) of each site visit. When possible, priority was given to case hearings that occurred later in the decision-making process (i.e., case review hearings) as opposed to earlier decisions, but this could generally be considered to be a “convenience sample” that was tied to the timing of the research team’s visit to each site (see e.g., Berg, 2014).

Table 1. Summary of Ohio DMC Assessment Methods

	Data	Source	Sample(s) Size	Key Measures/Themes	Analysis
“Numbers”	Arrest Records	19 Police Agencies, Electronic or Paper Files	20,344	Race Offense Type Offense Level	Basic description and comparison
	Court Records	13 Juvenile Courts, Electronic or Paper Files, Direct Data Collection	75,946	Race Offense Type Offense Level Number of Charges Six Decision Indicators	Basic description and comparison; Multivariate modeling; Supplementary tests
	DYS Facility Records	Randomly-selected cases provided electronically by Ohio DYS	1,514 (Full) 672 (OYAS Info) 435 (Txt Info)	Race Committing Offense Four “Experiences” or Decisions	Basic description and comparison; Multivariate modeling; Supplementary tests
“Narrative”	Police Focus Groups	17 sessions facilitated by UC personnel	130 Officers of various ranks, roles	Explanations for delinquency, DMC Decision-making factors, Solutions	Grounded theory approach to qualitative analysis
	Court Interviews, Observations	Semi-structured interviews with UC personnel	131 Court personnel with varying roles; 32 Days	Explanations for delinquency, DMC Decision-making factors, Solutions	Grounded theory approach to qualitative analysis

MEASURES AND DISCUSSION THEMES

A number of overlapping, but distinct, record measures and interview themes related to juvenile delinquency, juvenile justice, and DMC were used as the basis for assessing and explaining DMC. Those specific variables and general themes from focus groups and interviews are discussed in this sub-section.

Key Variables: Police

Record data were obtained from 19 law enforcement agencies in 10 counties. The variables included in the analyses differed by county due to variation in the scope of the data available in their record-keeping system and what was provided by individual law enforcement agencies. In addition to these county-specific analyses, a pooled police file was created for the state-level analysis. This file included both youth- and offense-related characteristics on key variables that consistently appeared in the data provided by different law enforcement agencies. A comprehensive summary of the attributes of these variables is presented in the Appendix, but we describe their key features below.

Given the goals of the DMC Assessment, the *race of arrestee* is the focal variable in our analysis. The construction of this variable was influenced greatly by the nature of the data provided by different law enforcement agencies. Specifically, while few agencies provided comprehensive descriptions of the race of arrestees (incorporating multiple categories such as “White”, “Black/AA”, “Asian”, “Biracial”, or “Other”), as a whole, information identifying the race of the arrestee was limited to “White” or “Non-White” descriptions. Due to the inconsistencies in measurement across agencies and the small number of cases falling within the “Asian”, “Biracial”, or “Other” race categories (<

1%), within the pooled police analysis *race of arrestee* is a binary measure (0 = White, 1 = Non-White). In addition to race, other descriptive factors, such as *youths' age at arrest* in years and *sex* (0=Male, 1=Female), are included within the analysis.

We also analyze several characteristics of the arrest. *Number of offenses associated with arrest* is a continuous measure indicating the number of separate offenses alleged to have been committed by the youth within the incident that led to their arrest. If a youth was reported to commit more than one offense within the incident leading to their arrest, *most serious offense category* identifies the most serious crime type among their offenses. However, if a youth was reported to commit only one offense, this variable indicates the category of that offense. Similarly, the measurement of *most serious offense level* identifies the classification of the most serious offense associated with that arrest (e.g. felony, misdemeanor, status). There was also a category that indicated that it could be a felony or misdemeanor—this included cases where the level of the offense was unclear from the record and that offense type (e.g., domestic violence, assault, drug related-offenses) could fall into multiple levels by statute.

When possible, several situational factors related to the youth's arrest were measured. This includes a series of dichotomous (yes/no) measures that indicate whether the arrest involved *alcohol, drug use, weapon use, or co-offenders*. Additionally, select cases allow for the analysis of more extensive categorical measures. In cases that reported the youth's use of a weapon, *weapon type* serves to distinguish the kind of weapon used by the youth. *Offender's role in offense* captures the nature of

a youth's involvement in the crime leading to their arrest (e.g. was it drug-related, gang-related, a result of an argument or dispute?). *Location of offense* identifies the general setting of the youth's offense (e.g. residential, school, retail setting). Finally, *source of complaint* identifies the person(s) that alerted police about the offense.

Youth's age at arrest, race, sex, number of offenses, most serious offense category, and most serious offense level had less than 8 percent missing data. However, the remaining variables (weapon use, weapon type, drug use, alcohol use, location of offense, source of complaint, co-offenders, and youth's role in offense) had more than 50 percent missing data in the pooled file. For this reason, certain analyses were conducted using subsamples in which there were limited missing data.

Key Variables: Juvenile Courts

The specific variables used in the court analyses varied by county depending on the breadth of data received from the individual courts. For the state-level analysis, a pooled data file was created based on case-level information (N=75,946) common to each of the 13 courts. The primary independent variable of interest is race. Others that are included in the analysis are: sex, age, number of charges in the current case, most serious offense category, most serious offense level, counsel, and weapon use. In some agencies, data were provided on age of first referral and number of prior cases. A summary of the attributes for these variables is presented in the Appendix.

Race was originally split up into five categories: White (40.5%), African American (54.4%), "Other" (2.8%), Bi-Racial (2.1%), and Asian (0.1%). Because "Other," Bi-Racial," and Asian only comprise only five percent of the sample, they were combined with the

African American category to create a “Non-White” category in most analyses. Other demographic variables in the analyses include *sex* (0 = Male, 1 = Female) and a continuous measure of *age* (in years).

Other relevant aspects of the delinquency case and the youth were measured where possible. *Number of charges* is a continuous variable indicating the number of separate charges in the current case. *Number of priors* is a continuous measure identifying the number of petitions a youth had prior to the current case. If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. Similarly, the *most serious offense level* variable captures whether the case involved a felony, misdemeanor, probation or court order violation, or status offense. *Counsel* is a binary measure indicating whether the youth was represented by legal counsel during adjudication. *Onset age* is a continuous variable indicating the youth’s age at first petition to the juvenile court. *Weapon use* indicates whether the youth used a weapon during any of the incidents included in the current case.

The varying amounts of missing data for different variables in the pooled court data file required certain analyses to be conducted using subsamples for which there was little or no missing data. Each of the following variables had at least 92 percent coverage (i.e., less than 8% missing data): youths’ age at case initiation, sex, race, number of charges in the current case, most serious charge category, and most serious

charge level. Number of prior cases, counsel, onset age, and weapon use had between 50 and 58 percent missing data in the pooled data file.

The primary outcome variables used in the state-wide analyses are dichotomous (yes/no) measures of case outcomes at six decision points: diversion, dismissal, detention, adjudication, secure confinement, and bindover. *Diversion* indicates whether youth were shifted from formal prosecution at the front end of the court process. *Dismissed* identifies whether youth had their case dismissed for any reason. *Detention* indicates whether a youth was placed in secure detention while awaiting further proceedings. *Adjudicated* indicates whether a youth was formally found delinquent for the current case. *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility. Finally, *bindover* indicates whether a youth was waived to criminal (adult) court for processing and adjudication.

We supplemented the pooled court analysis with some limited analysis of data that is linked to the Ohio Youth Assessment System (OYAS) risk and needs tool. In partnership with DYS, the University of Cincinnati Center for Criminal Justice Research (CCJR) developed the OYAS to measure youths' level of risk, need, and responsivity (Latessa, Lovins, & Ostrowski, 2009; Lovins & Latessa, 2013). The OYAS is completed by conducting a structured interview, reviewing juvenile justice records, and giving youths a self-report questionnaire. In addition to providing an overall risk score, the OYAS provides information on a youth's specific risk/needs. These domains of risk/need are juvenile justice history, family, peers, education/employment, prosocial skills, substance abuse/mental health/personality factors, and antisocial attitudes/values/beliefs. Risk

scores for each domain are summed to create an overall risk score, which is classified as low, moderate, or high (Latessa et al., 2009).⁴ The OYAS is useful for evidence-based decision-making at various points in the juvenile court process, including screening, detention, disposition, and reentry. For the purposes of this assessment, the OYAS data provides additional information on youths' level of risk. Combining these data with the pooled court file allows us to control for level of risk when examining the relationship between race and various outcome measures.

Key Variables: Ohio DYS Facilities

The data obtained at DYS intake (or prior to) included: referral county, disposition judge, race, sex, age, offense seriousness, mental health diagnosis, education level, and OYAS disposition and residential risk score and level. As noted above, the key predictor measure used in our analysis is race. *Race* is coded as several dummy variables for each race subgroup represented in our sample (i.e., White, Black/African-American, Other, Bi-Racial). We also created a binary indicator for *race* given the small number of youth that fall into the other and bi-racial categories (0=White; 1=Non-White), which is included in most analyses presented here. We include several of the following measures as control variables in our analysis: *sex* (0=Male;

⁴ In the original validation study (Latessa et al., 2009), at each of these points, low-risk youths had a recidivism rate ranging from 14 to 20 percent, moderate-risk youths had a recidivism rate ranging from 32 to 44 percent, and high risk youths had a recidivism rate ranging from 44 to 67 percent. Among the domains, the strongest predictors of recidivism included whether the youth had any prior offenses, the type of charge (i.e., status, misdemeanor, or felony), anger management, perceived importance of family, strength of relationship with school personnel or employer, drug and alcohol use, support for gang activity, and pro-criminal sentiments.

1=Female), *age at admission* (year), *any mental health diagnosis* (0=No; 1=Yes), *number of mental health diagnoses*, and *highest level of education* obtained prior to intake.

Several measures capturing the youth's baseline profile were used when examining the relationship between race and the key facility experiences and outcomes. *Most serious offense category* captures the most serious crime type for each youth committed to DYS (Violent/Sex; Property; Drug/Alcohol; Other). The *number of committing offenses* reflects the number of offenses in the charge for which the youth was committed. Finally, where available, *OYAS risk score* (or level), taps into individual levels of risk observed at the time of admission.

Data were provided on youths' experiences and behavior while committed to DYS facilities. These measures serve as the key dependent variables in the analysis of possible race differences. The *number of disciplinary infractions* (while confined) is captured with a count. *Seclusion time* (in days) is the total number of days each youth spent in punitive isolation during their custody in a DYS facility. *Length of stay* (in months) was measured as well. *Time absent from educational services* is a proportion of the total number of days that educational services were available to the number of days each youth was absent from educational services. The *number of treatment contacts* captures the sum of the number of all treatment related activities youth were involved in while confined in DYS (e.g. CBT, ART). Similarly, *time spent in treatment* (in hours) was measured as a count.⁵

⁵ Treatment data were only available for youth in custody during 2013 and 2014. Therefore, the analysis of treatment-related outcomes may not be representative of the full subsample of youth in DYS facilities from 2010 to 2014.

Discussion Topics: Police Focus Groups

Within the focus groups and interviews, a semi-structured discussion outline presented lead questions in areas such as recent juvenile crime trends, the perceived strengths and weaknesses of the juvenile justice system, and disproportionate minority contact, including factors external to the system that might be linked to minority overrepresentation. Discussion questions also focused on examining the role of police within their community and identifying departmental policies, procedures, or community-based initiatives that may have impacted juvenile crime and/or DMC (see Appendix).

These themes were generated based on prior research initially and refined after pilot testing. The flexibility of the discussion outline allowed for its evolution throughout the research process. Specifically, as new themes emerged within focus group sessions across agencies, the research team would revise pieces of the discussion outline to incorporate questions related to those topics. In the end, the discussion outline was based on prior research and study objectives, evolving refinements by the research team, and emergent findings from early focus groups.

Discussion Topics: Court Interviews and Observations

The court personnel interviews were also grounded in a semi-structured discussion outline. The interviews were administered by trained UC research staff who went through training to become familiar with the interview protocol and learn possible follow-up probes. Key questions in the protocol covered minority contact with the juvenile justice system; key factors in the decision-making process and policies regarding

juvenile delinquency; the role of family in the decision-making process; the effects of neighborhood and community factors on crime and delinquency; and the legal and social services available through the court. Discussion questions also focused on identifying community assets and strategies to address disproportionate minority contact. Each participant was given an opportunity to answer a lead question on each theme. This was followed by a general discussion or questions about how they arrived at that response, which offered the flexibility to probe as needed (Patton, 2001).

Turning to the structure of the court observations, during each hearing, legal (e.g., level and type of offense, criminal history, supervision or treatment compliance, legal representation; sanction), administrative (e.g., risk/need assessment recommendations, supervision recommendations and representation) and individual (e.g., family or living environment, school or work involvement, parent/guardian attendance at court) factors were recorded using a structured observation form. Field notes on the nature of the proceeding or exchanges between court actors and youth were also recorded (e.g., value and tone of exchanges between court staff and youth, or expectations for successful termination of court involvement). Importantly, court official and youth names were not associated with the observation documentation.

ANALYTIC PROCESS

Quantitative data (numeric summaries) and qualitative data (narrative accounts) were collected and analyzed in order to address the two aims of this DMC assessment. In general, the objective in this process was to try to precisely and validly estimate the

relationship between race and relevant outcomes in the record data and then contextualize key findings using focus group and interview responses.

Analysis of Case Records

For the quantitative records all analyses were conducted in stages by county using multivariate models aimed at assessing key outcomes at each decision point. Pooled analyses were then performed to consider the key assessment questions for Ohio in its entirety. Due to the number of agencies and decision points involved and the fact that the study relies heavily on data collected by public organizations, close attention was paid to quality and comparability for all data collected for the study (Jacob, 1984). Data management, cleaning, and analyses incorporated best practices for screening and quality control (Osborne, 2012; Schafer & Graham, 2002) and appropriate checks were used to assess the possible limitations of the available data prior to analysis. Several steps were taken to identify potential disparities and to in turn analyze those disparities in greater depth. In all cases, we first looked at descriptive statistics to evaluate the relative proportions of youth in given conditions (e.g., arrested, diverted, detained, adjudicated delinquent). In the police data, we analyzed a series of relational comparisons of arrest characteristics by race at both the county- and state-level. These analyses provided insight into the difference of offense characteristics across racial subgroups. Occasional supplementary analyses were used to illuminate particular characteristics of the arrest patterns. With the juvenile court and DYS intake data, we developed a basic descriptive profile of those youth that were committed to DYS facilities. This allowed us to assess the degree of disproportionate minority referrals into

DYS facilities. Furthermore, we identified sources of any disparities in the composition of youth sent to DYS facilities. Bivariate analysis allowed us to examine whether there were statistically significant differences in the *distributions* of various predictors and potential outcome measures between White and Non-White youth.

We then conducted multivariate analysis in the court and DYS facility data to effectively control for factors that may influence the relevant decisions and which are potentially correlated with race. For both the court-level and the state-level analyses, we estimated three logistic regression models for each of the decision points (diversion, dismissal, detention, adjudication, secure confinement, and waiver). To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for African American and Other youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and any available extralegal factors (e.g., sex, age). The final model included the above variables, as well as legally-relevant variables (e.g., prior record, offense seriousness). Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables.

As an extension of this, for each model we calculate initial and conditional probabilities for each of the outcomes by youth race (White/Non-White) and present those in figures. The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any of the other factors mentioned previously. These estimates are similar in intent to the Relative Rate

Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities reflect the likelihood that White and Non-White youth will experience a particular case outcome given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case. We also consider whether any differences between White and Non-White youth observed for the base analysis shift when accounting for other relevant factors attached to the case.

The degree of missing data found among the variables in both the county- and state-level analyses varied across analyses. To retain as many cases for analysis as possible, we used multiple imputation (MI)—a simulation-based technique for handling missing data—to insert values for any missing data (StataCorp, 2013). MI replaces missing observations with predicted values based on other variables in the data (accounting for expected variation in the process). MI first generates a specified number of datasets (e.g., multiple sets of plausible values for the missing data) and then a variable is imputed based on all relevant predictor variables. Because the amount of missing data was relatively low in this dataset, we used 20 imputations in order to reduce the sampling error inherent in MI (StataCorp, 2013; for a detailed discussion of the appropriate number of imputations needed, see Royston, 2004; White et al., 2011). Next, MI performs the statistical analysis (i.e., logistic regression) separately on each imputation/dataset and then the results from those twenty analyses are averaged together into a single estimate. This ensures that the results appropriately account for the variation in the imputed values. In other words, averaging together the multiple

plausible values for the missing data—each with its own varying level of potential error—reduces the potential bias often present with single imputation methods.

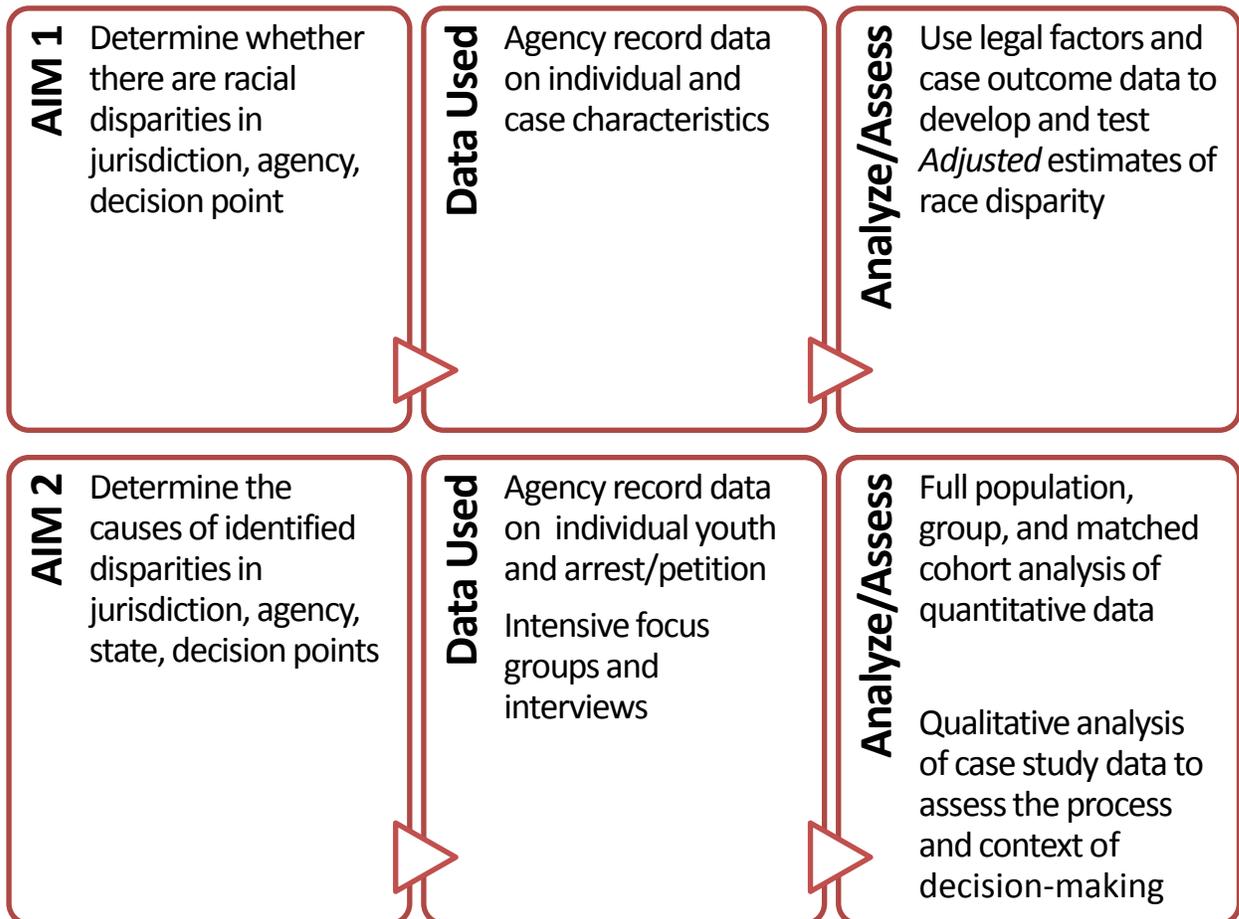
A supplementary matching analysis was conducted with the variables described above in order to create pairs of cases that are similar except for their race. This was an effective supplement to the model-based adjustments described above in reaching the most appropriate estimates (Rubin, 2006) and also explaining possible disparities by creating a sample of cases that, theoretically, should reach similar ends in the justice system (Kempf-Leonard, 2007; Shadish et al., 2002). As it is difficult to create an effective one-to-one match on numerous variables, the focus was on those characteristics (youth or case) that may have a bearing on the justice process. Additional multi-level analysis considers whether race/ethnicity may have differential effects on outcomes depending on the jurisdiction examined, and depending on organizational and population differences between jurisdictions (e.g., differences in available diversion programs). Multi-level modeling was used to examine potential differences in outcomes and race effects across sites (Raudenbush & Bryk, 2002; Wooldredge, 2010).

Due to differences in data coverage, some cases or sites could not be included in every analysis. In cases where there were relevant, but incomplete, data for the pooled sample, we conducted supplementary analysis in order to better understand particular issues that are pertinent to DMC and/or that helped to illuminate other findings from the study. For example, a supplementary analysis focused on whether there were racial disparities in the degree of penetration into the system (e.g., diversion, adjudication,

confinement) and whether these disparities could be accounted for by relevant legal factors. A grouped analysis was conducted to determine whether the effects of other decision-making factors varied by race (Reitler et al., 2012). For example, it is possible that in situations where racial disparity was identified, it might be attributable to legally relevant variables or minority youth (e.g., criminal history, current offense severity). These “interaction effects” are tested by considering whether the impact of legally-relevant factors varies by race. Similarly, an analysis considered the degree to which the early decision point of detention might play a role in the relationship between race and later outcomes (e.g., secure confinement)—after accounting for other relevant factors. This type of cumulative or cascade effect has been identified in recent studies (Leiber & Fox, 2005; Rodriguez, 2010).

With the DYS data, we examined any differences in length of stay, seclusion time, treatment exposure, and disciplinary infractions among race subgroups in DYS facilities when accounting for legally-relevant factors (e.g., offense seriousness and OYAS scores). Similarly, we estimated three statistical models for each outcome using the DYS data. The first set of models included all variables capturing sociodemographic characteristics (except race). Race is then inserted into the second set of models. Lastly, we account for legally-relevant factors in the third set of models to determine whether there are any changes in the race effect on these various outcomes. We also conduct a series of additional models where we insert OYAS risk score (excluding the criminal history subdomain).

Figure 1. Overview of data inputs and analytic plan in relation to study aims.



Analysis of Focus Group and Interview Data

The qualitative analysis of focus group and interview data was used to develop a better understanding of how agency actors make decisions about delinquency cases and how this might affect disparities. This was consistent with the second Aim of the study. Specifically, focus group and interview data were analyzed using a grounded theory approach to develop a sense of the themes emerging from the statements of participants (for a more detailed explanation of this method see Corbin & Strauss, 1990, 2008, and Strauss & Corbin, 1998). This approach involved several steps. It is

summarized in Table 2 below. First, research staff read transcripts and marked areas where interview and focus group respondents discussed both the prevalence of and explanations for DMC.

Table 2. Overview of Analytic Approach to System Personnel Data.

Phase	Analytic Strategy	Process
1	Compile Data and Materials	Organize all relevant information and transcribe focus group or interview data.
2	Initial Review of DMC Data	Summarize transcriptions into thematic categories.
3	Revisit DMC Data	Review summaries and begin to conceptualize how themes/responses might contribute to disparity.
4	Systematic Review of DMC Data: Phase 1	Additional staff review narratives, transcriptions, and summaries independently to identify patterned regularities and information relevant to key questions.
5	Systematic Review of DMC Data: Phase II	Discuss salient themes and supportive quotes and rating scales.
6	Relate the categories to the analytic framework	Discuss the findings in a meaningful way, and use verbatim quotes to provide support for explanations.

Once this first stage was completed, comments on these particular topics were then drawn out and grouped together for ease of understanding and to allow for some quantification (e.g., a certain percentage of the participants made a statement on the role of “department or court policy” or “available resources” in their decision-making) (Braun & Clarke, 2006). The recurring themes were systematically reviewed by research staff. Specifically, these themes were independently assessed by at least two research staff to ensure the accuracy and enhance the reliability of key findings. From there,

representative quotes and examples from the interview guides were identified to further contextualize the findings. Data from observations were analyzed in a similar manner in order to provide context for the quantitative results and interview responses.

SUMMARY OF OHIO DMC ASSESSMENT METHODS

These analyses support a series of county-level reports that touch on key decision points as well as pooled state-level findings. In addition to providing answers to the questions included in the main aims of the study, the breadth and depth of information collected and analyzed here offers a thorough picture of the factors that guide decision-making at particular decision points and locales. This approach is necessary in developing evidence-based ideas around systems change, community intervention, or reduction strategies that might be targeted toward DMC issues. The key findings and recommendations provided were based on a thorough analysis of available data on the problem and intensive discussion with individual actors in agencies that make decisions about delinquent youths. All of the information is couched in relevant policies and procedures in order to fully unpack the legal (and possibly extra-legal) factors that affect key decisions.

The multiple methods used here (e.g., archival records, key informant interviews) allowed for some validation of evidence that emerged across separate portions of the study to provide a sound answer on the scope of the problem and test plausible explanations while logically and analytically ruling out others. In general, the emphasis on securing different types of data (narrative, quantitative) and a rich array of measures that may be relevant in justice contact and the use of different levels of

analysis (individual, agency, jurisdiction) and methods offered reasonably valid, generalizable conclusions based on appropriate adjustments in line with **Aim 1** of the study as well as the depth of information necessary to address **Aim 2**. They also address the DYS facilities portion of the study added in 2014.

3. STATE LEVEL RESULTS: ASSESSMENT OF DMC

As described above, the general assessment of DMC was based on official record data provided to UC by police, juvenile courts, and Ohio DYS. In each section, we start by describing the data source generally to provide context for later results before moving to basic descriptive analysis and statistical modeling to identify the possible presence of DMC. Where possible, we also present results for supplementary analyses in order to examine the validity of the main results or related questions pertaining to the presence of or explanations for DMC.

ANALYSIS OF POOLED ARREST RECORD DATA

The analyses below involve data collected from 19 law enforcement agencies in ten counties across Ohio (see Table 3). Collectively these agencies reported a total of 20,334 juvenile arrests between the years of 2010 and 2011. The largest number of cases in the pooled police data was provided by Hamilton County (6,758 or 33.2%), which contributed one-third of the cases to the final sample. Montgomery County (3,554 or 17.5%) provides the second largest number of cases, closely followed by Summit and Franklin Counties, which account for 15.3 percent and 15.1 percent of the cases respectively. After these counties, the number of cases included is as follows:

Butler County (5.6%), Allen County (4.7%), Clark County (2.7%), Lucas County (2.7%), Stark County (1.8%), and finally Cuyahoga County (1.6%).

Table 3. Breakdown of County Contributions to Pooled Police Data File

	Number of Cases	Percent
Allen	950	4.7
Butler	1,129	5.6
Clark	539	2.7
Cuyahoga	329	1.6
Franklin	3,070	15.1
Hamilton	6,758	33.2
Lucas	540	2.7
Montgomery	3,554	17.5
Stark	357	1.8
Summit	3,108	15.3
Total	20,334	100.0

Basic characteristics of individual youth and offense-related information were retrieved for the cases included in the present analysis. Though the availability of measures varied across the agencies included in the study (see below), at least some information was provided on each of the following fields:

- Date of Birth/Age
- Age at Arrest
- Race
- Sex
- Number of Offenses
- Most Serious Charge Category
- Most Serious Offense Level
- Alcohol Involvement (Y/N)
- Drug Use (Y/N)
- Alcohol or Drug Use (Y/N)
- Weapon Use (Y/N)
- Weapon Type
- Offender’s Role in Offense
- Location of Offense
- Source of Complaint
- Presence of Co-offenders (Y/N)

Youth were identified as either African American or White in the vast majority of arrests within the pooled police data, with comparatively fewer cases (< 1%) being identified as Asian or Other. This suggests that the comparison of Non-White youth and

White youth is the most productive for the analysis outlined below.⁶ Non-White youth made up the majority of juvenile arrests, accounting for 71.8 percent compared to 28.2 percent for White youth. Additionally, more than twice as many males (67.9%) were involved in these arrests than females (32.1%). The average age of youth arrested by these law enforcement agencies was 15.07 years of age (SD = 1.5). However, there appears to be a moderate amount of variation in the average age of juveniles arrested by these agencies within the 10 to 17 age range.

Analysis of Key Case Characteristics by Race

The comparative analysis of the arrest characteristics by race revealed several statistically significant findings. Due to the substantial power of the sample size in the detection of significant effects, we present both the statistically significant relationships and the effect sizes of those relationships to provide a better representation of their strength (Hedges' *g*, Cramer's *V*, *Phi*) (Cohen, 1992). As shown in Tables 4 and 5, eight of the characteristics examined produced significant test statistic values, indicating statistically reliable differences in these offense characteristics across race subgroups.

First, a statistically significant difference was found in the number of offenses committed in an arrest case of a youth according to their race. Notably, however, the mean number of offenses within an arrest case for White youth (1.27) and Non-White youth (1.29) appear to be very similar. Furthermore, the effect size for the relationship

⁶ Consolidating the "Asian" and "Other" categories into "Non-White" changed the significance of only one of the explanatory variables: the presence of co-offenders. While this variable is non-significant in the White/Non-White coding, it is significant in the analysis with all four racial groups. However, only eighteen cases are in the "Asian" and "Other" groups. Therefore, the result for this variable is somewhat unreliable due to the small number of cases in these two categories. This coding convention is used throughout the assessment and owes mainly to the patterns of prevalence of minority groups in these sites, which heavily trended toward African-American youth.

between youths' race and number of offenses ($g=-0.03$) is small, suggesting there is little variation in the average number of offenses committed by youth from these different race subgroups.

Table 4. Comparison of Key Arrest Record Characteristics across Race Subgroups

	White	Non-White	t/Hedges' g
<i>Age at Arrest</i>			
N	5,698	14,530	.607
Mean	15.08	15.07	0.01
Standard Deviation	1.47	1.50	
<i>Number of Offenses</i>			
N	5,626	14,318	2.02*
Mean	1.27	1.29	-0.03
Standard Deviation	0.60	0.65	

* $p<0.05$

The analysis of most serious charge category by race showed that Non-White youth were arrested significantly more often for property offenses (27.8% of arrests) than White youth (25.1%). Conversely, a greater percentage of White youth were arrested for violent and sex offenses, as well as for offenses involving drugs and/or alcohol than Non-White youth (26.4% vs. 24.2% and 6.4% vs. 3.7%, respectively). Relatedly, a greater percentage of arrests of White youth involved drug use or possession (7.6% of White arrests) compared to Non-White youth (5.6% of Non-White arrests), which produces a significant, but weak relationship ($\chi^2=10.1$; $\phi = 0.04$).

Non-White youth were more likely to be involved in felony arrest cases (17.5%) than White youth (13.7%) ($\chi^2=170.52$; $V=0.094$). Additionally, a greater percentage of Non-White youth were arrested for misdemeanor offenses (42.8%) than their White counterparts (37.5%). In contrast, a higher percentage of White youth (21.0%) were arrested for offenses that could be categorized as either a felony or misdemeanor

compared to only 14.7 percent of Non-White youth. Furthermore, arrests for status or disorderly conduct offenses were slightly more likely to involve White youth (27.4%, compared to 24.7% for Non-White youth).

In addition to those presented above, some relevant fields were available for certain segments of the data. These fields were analyzed to provide some insight about particular aspects of juvenile arrests that may differ by race/ethnicity. Weapon involvement was available for 6,840 total cases. Although the relative prevalence of a weapon was quite similar for arrests involving Non-White and White youth (and was very small at approximately 6% of total cases), further examination of arrest characteristics with available weapon-involvement indicators revealed a moderate association between the type of weapon used and race ($\chi^2=40.0$; $\phi=0.312$). Specifically, when a weapon was involved, a higher percentage of Non-White arrests involved possession or use of a handgun or firearm (73.6% of arrests) as opposed to White youths (38.3%). This was in contrast to arrests involving other types of weapons.

Significant race differences were also found in the analysis of the arrestee's role or involvement in their offense ($\chi^2=61.02$), which included 1,157 cases. Specifically, the findings indicate a weak-to- moderate association ($V=0.231$) between youth race and their role in the arrest offense. Non-White youth (26.7%) were more likely to become involved in an offense due to an argument or dispute (compared to 11.7% of White youth). Additionally, the offending of Non-White youth appears to be slightly more opportunistic in nature. In 30.8 percent of Non-White juvenile arrests, the presentation of the opportunity to offend was cited to motivate the youth's involvement (compared

to 26.9% for White youth). White youth, however, were more likely to be “unruly” or “incorrigible” during their offense (in 22.8% of arrests of White youth) than their counterparts (in 16.8% of offenses by Non-White youth). Furthermore, White youth were more likely to have drug-related roles (15.8%) in their offending than Non-White youth (12.3%).

An examination of the nature of juvenile arrests revealed two final significant differences by race: source of complaint ($\chi^2=15.28$; $V=0.113$) and location of offense ($\chi^2=28.31$; $V=0.07$). Source of complaint, which was available for 1,193 cases, is a five category measure identifying the origin of the complaint from which the arrest of the juvenile was initiated. The categories include “Parent/Guardian”, “Private Citizen/Neighbor”, “School Related Official” – including school officials, teachers, and school resource officers (SROs), “Police Associated” – including police response while in progress and calls for service, and “Other” – including complaints from significant others, summons or warrants, and complaints originating from other social service agencies. The analysis reveals a fairly weak, but nontrivial association ($V=0.113$) between the source of complaint and race. Specifically, the arrests of White youth are more likely to be the result of complaints from their parents or guardians (28.1%) compared to 21.6 percent for Non-White youth. Conversely, a larger percentage of Non-White youth arrests arise from referrals by school officials (14.4% compared to 9.0% for White youth). Furthermore, while the majority of arrests for both White and Non-White youth stem from police associated complaints, a slightly larger percentage of Non-White youth (48.4%) arrests originate from this source compared to their White peers (44.7%).

Location of offense identifies the setting in which the youth where the arresting offense(s) was committed (n=5,762). Though this measure originally comprised fifteen categories, in the present analysis it has been collapsed into six location types (“Residential”, “School”, “Street/Public Sidewalk”, “Parking Areas/Public Access Spaces”, “Commercial/Retail Settings”, and “Other”) based upon the significant overlap among certain categories and the limited number of cases within others. The analysis of location of offense revealed that 55.0 percent of offenses for White youth occurred in residential settings, such as their family home, compared to 51.8 percent of Non-White youth arrests. Additionally, White youth were more likely to be arrested for offenses in commercial or retail settings (8.8%) than were Non-White youth (5.9%). In contrast, a larger percentage of arrests of Non-White offenses occurred on streets or public sidewalks (16.9%) than for White youth (14.0%), suggesting that the former group was somewhat more likely to be arrested for offenses in public spaces.

Table 5. Comparison of Key Arrest Record Characteristics across Race/Ethnicity (cont.)

	White % (N)	Non-White % (N)	χ^2 V/Phi
<i>Most Serious Charge Category</i>			
Violent/Sex	26.4 (1,487)	24.2 (3,468)	95.86*
Property	25.1 (1,412)	27.8 (3,986)	.069
Drug/Alcohol	6.4 (359)	3.7 (533)	
Other	12.1 (678)	14.1 (2,023)	
Status/DC	30.0 (1,688)	30.1 (4,303)	
<i>Most Serious Offense Level</i>			
Felony	13.7 (743)	17.5 (2,408)	170.52*
Misdemeanor	37.5 (2,040)	42.8 (5,893)	.094
Status/Unruly	27.4 (1,491)	24.7 (3,403)	
FTA/Probation Violation/VCO	0.4 (24)	0.2 (34)	
Can be Felony or Misdemeanor	21.0 (1,141)	14.7 (2,024)	
<i>Alcohol Involvement</i>			
No	94.2 (1,251)	94.2 (4,757)	0.001
Yes	5.8 (77)	5.8 (138)	.001

	White % (N)	Non-White % (N)	χ^2 V/Phi
<i>Drug Use?</i>			
No	92.4 (1,761)	94.5 (3,874)	10.1*
Yes	7.6 (145)	5.5 (225)	.04
<i>Alcohol or Drug Use?</i>			
No	96.8 (1,967)	97.2 (4,757)	0.56
Yes	3.2 (64)	2.8 (138)	.01
<i>Weapon Involved?</i>			
No	92.6 (1,702)	92.0 (4,599)	0.64
Yes	7.4 (137)	8.0 (402)	0.01
<i>Weapon Type</i>			
Handgun/Firearm	38.3 (36)	73.6 (234)	40.0*
Other	61.7 (58)	26.4 (84)	.312
<i>Offender's Role in Offense</i>			
Approached/Provoked	1.6 (9)	1.2 (7)	61.02*
Argument/Dispute	11.7 (66)	26.7 (156)	.231
Drug-Related	15.8 (89)	12.3 (72)	
Gang-Related	3.2 (18)	1.2 (7)	
Organized	3.4 (19)	3.6 (31)	
Opportunistic	26.9 (151)	30.8 (180)	
Unruly/Incorrigible	22.8 (128)	16.8 (98)	
Other	14.6 (82)	7.5 (44)	
<i>Source of Complaint</i>			
Parent/Guardian	28.1 (162)	21.6 (133)	15.28*
Private Citizen/Neighbor	7.3 (42)	7.1 (44)	.113
School Related Official	9.0 (52)	14.4 (89)	
Police Associated	44.7 (258)	48.4 (298)	
Other	10.9 (63)	8.4 (52)	
<i>Location of Offense</i>			
Residential	55.0 (908)	51.8 (2,128)	28.31*
School	10.1 (167)	11.3 (466)	0.07
Street/Public Sidewalk	14.0 (232)	16.9 (696)	
Parking Areas/Public Access Spaces	4.7 (78)	5.2 (212)	
Commercial/Retail Settings	8.8 (145)	5.9 (242)	
Other	7.4 (122)	8.9 (366)	
<i>Presence of Co-Offenders</i>			
No	87.9 (1,194)	89.2 (2,627)	1.45
Yes	12.1 (164)	10.8 (319)	.018

* $p < 0.05$

Missing Data

There is some degree of missing data for the variables included in the analysis above. While ideally the amount of missing data for each category would be consistent for both White youth and Non-White youth, five of the eight variables that were statistically significant in the analysis above showed differences in missing data across race. The largest differences in missing data were for role in the offense ($\chi^2=260.71$; $\phi = 0.11$) and the source of the complaint ($\chi^2=255.57$; $\phi = 0.11$). Other variables with significant differences in missing data across race include drug use ($\chi^2=53.83$; $\phi = 0.05$), weapon use ($\chi^2=8.41$; $\phi = 0.02$), and most serious level ($\chi^2=4.65$; $\phi = 0.02$). While most of the effect sizes for these differences are weak, it is important to acknowledge that some of the identified differences may impact these findings.

Summary of Analysis of Pooled Police Record Results

The analysis of police record data is somewhat limited by the fact that there is variation in the availability of relevant measures and also that we do not have information on cases that did not result in arrest. Still, the analysis of approximately 20,000 records from 19 police agencies in 10 counties provided some insightful results. More than 70 percent of arrests in this sample involved Non-White youth, which is disproportionate to the prevalence of minority youth in Ohio's population (22% of youth ages 10-17 in 2010 Census).

The comparisons of arrests for White and Non-White youth identified several statistically significant differences, but most were fairly small in size. This includes the number of offenses for which youth was charged, most serious category of offense, and

arrest for drug use or possession/not. Non-Whites tended to be arrested slightly more often for felony and misdemeanor offenses. Whites were more frequently arrested for offenses that could be categorized as either of those as well as status or unruly offenses.

Information on weapon-involved arrests was available for 6,840 arrest records. A relatively small percentage of the arrest records in this sample involved weapons. White and Non-White youth are very similar in their prevalence of arrests for weapons offenses (7.4% and 8.0%, respectively). In those cases where there was a weapon involved, and data were available on the type, Non-White youth were far more likely to be arrested in an offense involving a firearm than White youth (74% to 38%).

The role played in offenses differs slightly across White and Non-White arrestees. For example, Non-White youth arrests more often involve arguments/disputes whereas incorrigible/status offenses are relatively more frequent for White youth. Similarly, arrests of White youth tend to more often result from parent or family member complaints, but those for Non-White youth more often come from referrals by school officials or school resource officers (SROs).

ANALYSIS OF POOLED COURT DATA

Description of Data

The 13 counties involved in the study provided a total of roughly 75,000 records spanning 2010 and 2011. The county with the largest number of cases in the pooled court data is Cuyahoga (16,431 or 21.6%), followed closely by Hamilton (16,107 or 21.2%). The third largest sample of cases in the pooled court data comes from Montgomery County (14.9%). After that, the largest samples come from Summit (11%),

Lucas (9.4%), Butler (6.8%), Stark (6.4%), and Lorain. Allen, Franklin, Clark, Trumbull, and Mahoning each make up less than two percent of the cases in the data.

Table 6. Contribution of Each County to the Overall Sample

	Number of Cases	Percent
Allen	1,109	1.5
Butler	5,142	6.8
Clark	525	0.7
Cuyahoga	16,431	21.6
Franklin	884	1.2
Hamilton	16,107	21.2
Lorain	3,184	4.2
Lucas	7,143	9.4
Mahoning	330	0.4
Montgomery	11,305	14.9
Stark	4,894	6.4
Summit	8,385	11.0
Trumbull	507	0.7
Total	75,946	100

Race is a key field in the DMC assessment: 54.4 percent of the sample is African American, 2.8 percent of the sample is classified as “other,” 2.1 percent is classified as bi-racial, and 0.1 percent is Asian. Because they make up such a small percentage of the sample, bi-racial youth, Asian youth, and youth classified as “other” were combined with African American youth to create a “Non-White” category. In 2010-2011, Non-White youth comprised 59 percent of the petitions to the 13 juvenile courts and White youth accounted for the remaining 41 percent. According to the 2010 U.S. Census for the state of Ohio, these groups accounted for 22 percent and 78 percent of the juvenile population ages 10-17, respectively. Taken at face value, these figures indicate disproportionality in terms of the profile of court cases in this sample.

Table 7. Demographic Characteristics of Pooled Court Sample

	Number of Cases	Percent
<i>Race</i>		
White	30,652	40.5
Non-White	44,884	59.5
<i>Sex</i>		
Male	51,227	67.5
Female	24,682	32.5

Descriptive aspects of the court case are presented in Tables 8 and 9.

Approximately 28 percent of the sample's most serious offense category is either a status, unruly, or disorderly offense. The second most common category is property (25.6%), followed by violent or sex (23.2%). The rest of the sample's most serious category is classified as "other" (10.1%), drug or alcohol (6.7%), and violations of court orders or probation (6.5%). In terms of offense level, misdemeanor is the most common (55.5%), followed by status (20.3%), felony (17.9%), and violations of court orders or probation (6.3%). In addition, 7.8 percent of the sample used any kind of weapon during the commission of their offense and 51.7 percent of the sample was represented by counsel during court proceedings. However, it is important to note that both of these variables are missing on nearly 50 percent of the cases. The mean number of charges for the sample is 1.9 with a standard deviation of 2.05, indicating that this measure had a high level of variability. The youth in the sample averaged 3.03 prior offenses with a standard deviation of 5.46, indicating that there was a lot of variability on this measure. Finally, the respondents' mean age at their first petition is 14.35 (S.D. = 2.11).

Table 8. Offense-Related Mean and Standard Deviation Values in Pooled Court Sample

	Mean	Standard Deviation	N
Number of Charges	1.9	2.05	75,881
Number of Priors	3.03	5.46	40,939
Age at First Petition	14.35	2.11	32,324

Table 9. Breakdown of Offense Related Measures in Pooled Court Sample

	Number of Cases	Percent
<i>Most Serious Category</i>		
Violent/Sex	16,459	23.2
Property	18,154	25.6
Drug/Alcohol	4,766	6.7
Other	7,152	10.1
Status/Unruly/Disorderly	19,765	27.9
Probation Violation or Court Order Violation	4,590	6.5
<i>Most Serious Level</i>		
Felony	13,326	17.9
Misdemeanor	41,361	55.5
Status/Unruly	15,124	20.3
Probation Violation or Court Order Violation	4,715	6.3
<i>Weapon Use</i>		
No	35,379	92.2
Yes	2,995	7.8
<i>Counsel</i>		
No	18,655	48.3
Yes	19,990	51.7

Only 3.7 percent of the sample was diverted by the juvenile court, but it is important to note that this measure is missing on 22.1 percent of the cases. Some counties in the sample only provided information on non-diverted cases and/or those that were available contained records that were sealed and therefore unavailable.⁷ In addition, 22.2 percent of the youth had their cases dismissed, 17.6 percent were detained before adjudication, 69.4 percent were adjudicated, and 4.2 percent were

⁷ Allen, Butler, Lucas, Hamilton, Summit and Stark Counties had no cases that indicated “diversion” as the primary outcome.

placed in secure confinement. In addition, less than one percent of the sample was bound over to the adult court. These descriptive statistics are important in contextualizing the findings below as they provide a sense of the relative prevalence of each decision in this sample of courts and also provides some sense of the degree to which the records might be representative/not of the population of cases. Additionally, they provide descriptive insight on the initial differences/similarities between Non-White and White youth on these case outcomes.

Table 10. Overview of Court Outcomes Across Sample and Race Groups

	% Non-White (N)	% White (N)	χ^2 (df) (phi)
<i>Diversion</i>			
No	96.7 (33,673)	95.7 (22,967)	45.0 (1)
Yes	3.26 (1,136)	4.33 (1,039)	.03
<i>Dismissal</i>			
No	76.7 (33,229)	79.7 (22,996)	90.8 (1)
Yes	23.3 (10,144)	20.3 (5,868)	0.04
<i>Detention</i>			
No	79.2 (31,737)	87.3 (22,356)	699.8 (1)
Yes	20.8 (8,336)	12.7 (3,262)	0.10
<i>Adjudication</i>			
No	32.0 (12,240)	28.3 (7,666)	101.9 (1)
Yes	68.0 (26,039)	71.7 (19,434)	0.04
<i>Secure Confinement</i>			
No	95.0 (39,053)	97.0 (26,083)	161.4 (1)
Yes	5.0 (2,070)	3.0 (814)	0.05
<i>Bindover</i>			
No	99.2 (42,982)	99.8 (28,817)	134.7 (1)
Yes	0.85 (369)	0.18 (52)	0.04

Note: Bolded statistic signifies statistical significance at a $p < .05$

Table 11 provides an overview of the key “control” variables in the statistical models. These are generally used to adjust for alternative, often legally-relevant, influences on case outcomes. In order to consider potentially important differences across race groups, we conducted bivariate comparisons between each of the key court

variables and youth race. Due to the large sample size, we present both the test statistic (chi-square or *t*) and a measure of the strength of the relationship (*V*/*Phi*/Hedges' *g*). As shown in the table, the relationship between youth's race and each of the nine variables was statistically significant. The strength of the relationships, however, varied considerably. We describe those results here in order to provide some insight as to why many of them should be included as control variables in later modeling and also to offer a foundational discussion of the baseline differences between the two race groups.

Table 11. Overview of Other Model Variables Across Race Groups

	White % (N)	Non-White % (N)	χ^2 V/Phi
Most Serious Offense Category			
Violent/Sex	19.1 (5,171)	25.9 (11,212)	2229.57*
Property	24.1 (6,536)	26.5 (11,508)	0.18
Drug/Alcohol	9.9 (2,681)	4.8 (2,060)	
Other	8.0 (2,170)	11.4 (4,961)	
Status/DC	34.5 (9,342)	23.6 (10,216)	
PV / VCO	4.4 (1,196)	7.8 (3,390)	
Most Serious Offense Level			
Felony	12.3 (3,657)	21.7 (9,630)	1064.75*
Misdemeanor	59.2 (17,572)	53.0 (23,531)	0.12
Other	28.5 (8,464)	25.3 (11,215)	
Sex			
Male	66.7 (20,391)	68.1 (30,557)	15.44*
Female	33.3 (10,167)	31.9 (14,318)	0.01
Counsel			
No	57.4 (7,317)	43.5 (11,202)	658.83*
Yes	42.6 (5,422)	56.5 (14,524)	0.13
Weapon Use			
No	94.8 (17,308)	89.8 (17,744)	334.36*
Yes	5.2 (948)	10.2 (2,022)	0.09

	White	Non-White	t Hedges' g
Age			
N	30,373	44,813	9.328*
Mean	15.932	15.821	0.07
Standard Deviation	1.595	1.612	
Number of Prior Charges			
N	17,870	22,804	-27.550*
Mean	2.21	3.70	-0.28
Standard Deviation	.630	5.962	
Number of Charges			
N	30,535	44,865	15.260*
Mean	2.04	1.81	0.11
Standard Deviation	2.478	1.695	
Age of Onset			
N	13,769	18,392	31.220*
Mean	14.761	14.031	0.35
Standard Deviation	2.091	2.061	

* $p < 0.05$

The analysis of most serious charge category by youth's race showed that, on average, Non-White youth were charged with significantly more serious offenses than their White peers ($\chi^2=2229.57$). For example, 19.1 percent of White youth were charged with a violent or sex offense, while 25.9 percent of Non-White youth were charged these offenses. Similarly, 34.5 percent of White youth and only 23.6 percent of Non-White youth were charged with a status offense or disorderly conduct. Of the five categorical variables (see the top half of Table 11), the relationship between offense type and race was the strongest ($V=0.18$). The results for most serious offense level produced a similar picture. Specifically, Non-White youth were significantly more likely to be charged with a felony than White youth, although this was a relatively weak relationship ($V=0.12$).

Although the relationship between youth's sex and race was statistically significant ($\chi^2=15.44$), there was little substantive difference in the percentage of petitioned White youth (66.7%) and Non-White youth (68.1%) who were male, as indicated by the small phi value (-0.01). There was a statistically significant difference in the percentage of White (5.2%) and Non-White youth (10.2) who used a weapon during the commission of their offense(s) ($\chi^2=334.36$), although this relationship was fairly weak (phi=.094). Surprisingly, White youth (42.6%) were significantly less likely to be represented by counsel compared to Non-White youth (56.5%) ($\chi^2=658.83$; phi=0.13).

Although the *t* statistic for offenders' age at case initiation was statistically significant, a comparison of the means for White (15.93) and Non-White youth (15.82), as well as the low Hedges' *g* value (0.07), indicated that there was little substantive difference in youth age across race. Non-White youth had a significantly higher number of prior charges (3.70) compared to their White peers (2.21), and this was a small-to-moderate strength relationship. Similarly, although White youth had a greater average number of charges in the current case (2.04) compared to Non-White youth (1.81), the relationship between these two variables was relatively weak and the difference was pretty small (Hedges' *g*=0.11). Finally, the strongest bivariate relationship with youth race was age of onset (*g*=.352); the average onset age for White youth (14.8) was significantly higher than that for Non-White youth (14.0).

Data Completeness

As is evident in the sample sizes in different comparisons in Table 11, there is variation in terms of the degree of coverage for certain variables. The completeness of

sample data affects the various analyses carried out here (See Table in Appendix for Overview). The demographic predictors, race and sex, are for the most part, complete across all counties. Sex is valid for at least 99 percent of cases for every county. Race is covered across all counties fairly well, with the exception of Clark County, which is missing on race for 10 percent of its cases. As for the offense-related predictors, number of charges and most serious level are valid for at least 98 percent of their cases. However, 12 percent of the cases in Clark County are missing data for these variables. In addition to Clark County, most serious offense level is missing for approximately 20 percent of the cases in Stark County. Most serious category, like most serious level and number of charges, is missing on 12 percent of the cases in Clark County. In addition, it is missing entirely among the cases in Stark County.

The rest of the key model variables are missing on at least 46 percent of the pooled data. Number of prior charges is missing entirely in Allen, Clark, Cuyahoga, Franklin, Loran, Lucas, Mahoning, and Stark (46.1% missing overall). Similarly, whether or not the youth had counsel is missing entirely in Franklin, Lorain, Lucas, Mahoning, Stark, and Trumbull. It is also missing on over 80 percent of cases in Clark and 38.8 percent of cases in Allen. Weapon use is missing entirely on cases in Cuyahoga, Hamilton, and Stark and on 12 percent of cases in Clark. Age at first petition has the highest percentage of missing cases (57.4%) among the explanatory variables. It is missing entirely on cases in Allen, Clark, Cuyahoga, Lorain, Lucas, Mahoning, Stark, Summit, and Trumbull, but has good coverage across the other counties.

Court Outcomes

Diversion. In the initial model that included only race (N=69,626), Non-White youth were 30 percent less likely to be diverted from official processing relative to their White peers (OR=0.70). In the second model that included extralegal factors (N=69,531), the effect of race remained almost identical to that in the first model (OR=0.75). In addition, a one-year increase in youths' age predicted a significant 15 percent decrease in the odds of diversion (OR=0.85), and females were almost twice as likely to be diverted compared to males (OR=1.86).

When the legally-relevant factors were added in the final model (N=58,075), the effect of race was no longer significant.⁸ This is shown in Table 12. A one-unit increase in the number of prior petitions decreased the odds of diversion by 20 percent (OR=0.80). Youth charged with a property offense (OR=1.71) or drug/alcohol offense (OR=1.56) were significantly more likely to be diverted than those charged with a violent or sex offense, while those charged with other offenses were significantly less likely to be diverted (OR=0.73). The odds of diversion for cases involving a status offense or disorderly conduct were not significantly different from those involving a violent or sex offense.⁹ Youth charged with a misdemeanor (OR=4.43) or other (e.g., status offenses, PV, FTA; OR=31.35) were significantly more likely to have their case diverted from the juvenile court relative to those charged with a felony. Overall, the effect of race was mixed among the three models. In the first two models, Non-White youth were

⁸ Number of charges and the extralegal factors age and sex were not included in the final model for diversion because it would not converge when these imputed variables were included.

⁹ PV / VCO was not included in the final diversion model because no youth charged with a probation violation or violation of court order was diverted.

significantly less likely to be diverted relative to White youth. However, the effect of race was not significant in the final model. Instead, results indicated that the legally-relevant factors—number of prior petitions, offense category, and offense seriousness—were more closely associated with the diversion decision. As mentioned above, we use an imputation procedure to alleviate these problems and analyze subsamples where necessary, but there likely is still some impact on our ability to fully investigate the impact of some factors.

Detention. In the race-only model (N=72,005), Non-White youth were 79 percent more likely to be detained prior to adjudication relative to their White peers (OR=1.79). The significant effect of race was almost identical to that in the initial model after adding the extralegal variables in the second model (OR=1.77). A one-year increase in youths' age at case initiation predicted a significant 3 percent increase in the odds of detention (OR=1.03). Females were 39 percent less likely to be detained relative to males (OR=0.61).

As shown in Table 12, when the legally-relevant variables were added in the final model (N=62,422), the effect of race on the detention decision remained significant, yet the magnitude of the effect decreased substantially from what was identified in the previous two models. Specifically, Non-White youth were 31 percent more likely to be detained relative to White youth (OR=1.31). The significant effect for youths' age found in the second model was no longer present in the final one, although the significant effect for sex remained (OR=0.88). A one-unit increase in the number of prior cases filed predicted a significant 8 percent increase in the odds of detention (OR=1.08), while a

one-unit increase in the number of charges in the current case increased the odds of detention by 14 percent (OR=1.14). Youth charged with a property offense (OR=0.46), drug/alcohol offense (OR=0.33), status offense/disorderly conduct (OR=0.30), or other offense (OR=0.53) were significantly less likely to be detained relative to those charged with a violent or sex offense, while those charged with a probation violation or violation of a court order were 30 percent more likely to be detained (OR=1.30). Finally, youth charged with a misdemeanor (OR=0.35) or other offense (OR=0.13) were significantly less likely to be detained compared to those charged with a felony. Overall, race had a significant effect on the odds of detention in each of the three statistical models.

Table 12. Multivariate Analysis of Diversion, Detention, Dismissal Decision Points

	Diversion			Detention			Dismissed		
	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	-0.06	0.95	0.05	0.27	1.31	0.03	0.15	1.16	0.02
Age	----	----	----	-0.00	1.00	0.01	0.00	1.00	0.01
Sex	----	----	----	-0.13	0.88	0.03	0.13	1.14	0.02
Num. of Priors	-0.23	0.80	0.01	0.08	1.08	0.00	-0.01	0.99	0.00
Num. of Charges	----	----	----	0.13	1.14	0.01	-0.46	0.63	0.01
<i>Offense Category</i> ¹									
Property	0.54	1.71	0.09	-0.78	0.46	0.03	-0.37	0.69	0.03
Drug/Alcohol	0.45	1.56	0.12	-1.11	0.33	0.05	-0.31	0.73	0.05
Status/DC	0.00	1.00	0.13	-1.20	0.30	0.06	-0.57	0.57	0.05
PV/VCO	----	----	----	0.26	1.30	0.09	-0.29	0.75	0.06
Other	-0.31	0.73	0.14	-0.64	0.53	0.04	-0.17	0.84	0.04
<i>Offense Seriousness</i> ²									
Misdemeanor	1.49	4.43	0.12	-1.04	0.35	0.03	-0.18	0.84	0.03
Other	3.45	31.35	0.16	-2.04	0.13	0.08	0.29	1.33	0.06
Constant	-4.79		0.14	-0.46		0.12	-0.60		0.12

Notes: Bolded entries represent statistically significant estimates at p<0.05; B = logit coefficient; OR = odds ratio; SE = standard error

¹ Reference is Violent/Sex Offense, ² Reference is Felony

Dismissed. In the initial model (N=74,970), the effect of youths' race was significant, although Non-White youth were 19 percent more likely to have their case

dismissed relative to White youth (OR=1.19). After adding extralegal variables in the second model (N=74,724), Non-White youth were 21 percent more likely to have their case dismissed compared to White youth (OR=1.21). A one-year increase in youths' age at case initiation predicted a significant 2 percent decrease in the odds of case dismissal, and females were 22 percent more likely to have their case dismissed compared to males (OR=1.22).

In the final model, which included legally-relevant factors (N=62,422), the effect of race remained significant, although the effect size decreased slightly. Specifically, Non-White youth were 16 percent more likely to have their case dismissed relative to White youth (OR=1.16). Females were 14 percent more likely to have their case dismissed compared to males (OR=1.14). A one-unit increase in the number of prior petitions filed predicted a significant 1 percent decrease in the odds of case dismissal, and a one-unit increase in the number of charges in the current case predicted a 37 percent decrease in the odds of dismissal (OR=0.63). Youth charged with a property offense (OR=0.69), drug/alcohol offense (OR=0.73), status offense/disorderly conduct (OR=0.57), probation violation/violation of court order (OR=0.75), or other offense (OR=0.84) were significantly less likely to have their case dismissed relative to those charged with a violent or sex offense.¹⁰ Youth charged with a misdemeanor were 16 percent less likely to have their case dismissed relative to those charged with a felony

¹⁰ To investigate this further, we created an offense type by offense seriousness interaction variable. This indicated that 66% of the violent offenses were misdemeanors and 34% were felonies. A relatively high rate of violent offenses (mostly misdemeanors) were dismissed, this is likely why we observed these relative effects for the other categories. This explanation applies to the offense type results in the analysis of adjudication below as well.

(OR=0.84), while youth charged with “other” offenses (OR=1.33) were 33 percent more likely to have their case dismissed compared to those charged with a felony. Overall, the effect of youths’ race was a significant predictor of case dismissal in each of the three models and favored Non-White youth, although the strength of the effect decreased slightly when the legally-relevant factors were added.

As discussed below and demonstrated later in the report, the relationship between race and case dismissal varied across the thirteen sites meaning that this “average effect” did not necessarily hold across courts. Although all sites provided the requested information on whether or not a case was dismissed, the measurement of case dismissal and the reasons for it seemed to vary a fair amount. This made it difficult to know whether this was an effect of differential measurement or one that reflects real differences in the relationship between race and case dismissal across sites. Only a few of the counties provided details on the reasons for dismissal and/or the nature of dismissal (i.e., with or without prejudice), but there were definitely different degrees of dismissal in those five sites, ranging from 13 to 48 percent.

The balance of cases dismissed with and without prejudice, which may provide some insight into whether there were relevant conditions accompanying that disposition, differed substantially across sites. For example, the distribution was roughly 60-40 percent in favor of dismissal with prejudice in Summit County, but 55 percent of the sampled cases dismissed in Franklin county were done so without prejudice. Among the reasons provided across the different sites were “request of prosecution/complainant,” “rule 29” (motion for dismissal), “on merits,” and “heard

unofficially.” The nature of the circumstances that might drive each of those types of case dismissal may differ considerably and may also hold different implications for understanding patterns of DMC. All of this suggests that there are probably multiple factors at work in the overall results for case dismissal and that they are likely driven in part by local decision-making protocols.

Adjudication. The results for the analysis of Delinquency Adjudication are shown in Table 13. In the race-only model (N=74,870), Non-White youth were significantly less likely to be adjudicated delinquent relative to their White counterparts (OR=0.84). The significant effect of youths’ race (OR=0.83) remained almost identical in the second model that included extralegal factors (N=74,624). In this model, a one-year increase in youths’ age at case initiation predicted a significant 2 percent increase in the odds of adjudication (OR=1.02), and females were 21 percent less likely to be adjudicated relative to males (OR=0.79).

When the legally-relevant factors were added in the final model (N=62,422), Non-White youth were 18 percent less likely to be adjudicated delinquent compared to White youth (OR=0.82), a slight increase from the first two models. A one-year increase in age at case initiation predicted a significant 2 percent decrease in the odds of adjudication (OR=0.98). A one-unit increase in the number of prior petitions filed predicted a 4 percent increase in the odds of adjudication, while a one-unit increase in the number of charges in the current case increased the odds of adjudication by 66 percent (OR=1.66). Youth charged with a property offense (OR=1.30), drug/alcohol offense (OR=1.22), status offense/disorderly conduct (OR=1.90), probation violation or

violation of court order (OR=3.56), or other offense (OR=1.18) were significantly more likely to be adjudicated delinquent compared to those charged with a violent or sex offense.

Offense seriousness had a significant effect on adjudication in that youth charged with misdemeanors were 27 percent more likely to be adjudicated delinquent relative to those charged with a felony (OR=1.27), while those charged with other offenses were 54 percent less likely to be adjudicated delinquent (OR=0.46). Given the significant race effects for detention discussed above, we re-estimated the final adjudication model and included detention as a possible explanatory variable. This analysis revealed that youth who were detained were 87 percent more likely to be adjudicated relative to those youth not detained (OR=1.87)—controlling for the other factors described to this point. There was no change in the significance level of any of the other variables in the model after detention was included. Overall, the effect of youths' race was a significant predictor of adjudication in each of the three models. Specifically, Non-White youth were less likely to be adjudicated delinquent relative to White youth—even after controlling for extralegal and legally-relevant factors.

Secure Confinement. The secure confinement analysis used the subsample of cases for youth who were adjudicated delinquent. In the initial model (N=51,197), Non-White youth were 82 percent more likely to be removed from their home and placed in a secure facility relative to their White counterparts (OR=1.82). After adding extralegal factors in the second model (N=51,112), the effect of race on secure placement remained almost identical to that in the initial model (OR=1.84). A one-year increase in

youth age predicted significantly greater odds of secure confinement (OR=1.15), and females were 66 percent less likely to be placed in a secure facility relative to males (OR=0.34).

When the legally-relevant variables were added in the final model (N=44,916), the effect of race on secure confinement decreased markedly but remained statistically significant (see Table 13). Specifically, adjudicated Non-White youth were 12 percent more likely to be placed in a secure facility compared to adjudicated White youth (OR=1.12). The effects for age (OR=1.07) and sex (OR=0.61) remained significant in the final model, although both decreased a fair amount from the second model. One-unit increases in the number of prior petitions filed (OR=1.12) and number of charges in the current case (OR=1.06) predicted significant increases of 12 percent and 6 percent in the odds of secure confinement, respectively. Youth charged with a property offense (OR=0.82), drug/alcohol offense (OR=0.53), status offense/disorderly conduct (OR=0.58), or other offense (OR=0.59) were significantly less likely to be placed in a secure facility relative to those charged with a violent or sex offense. The effect for those charged with a probation violation or violation of a court order was not significantly different than those charged with a violent or sex offense. Finally, youth charged with a misdemeanor (OR=0.12) or “other” offense (OR=0.01) were significantly less likely to be placed in secure confinement compared to those charged with a felony.

Building on the analysis of adjudication above, because of the significant race effects for detention, we re-estimated the final secure confinement model including detention as an explanatory variable. In this model, race was no longer a significant

predictor of secure confinement. Preadjudication detention, however, was statistically significant. Specifically, youth who were detained prior to adjudication were 93 percent more likely to be placed in secure confinement compared to those who were not detained (OR=1.93). Thus, although race no longer had a direct effect on the odds of secure confinement it likely has an indirect effect on secure confinement via detention: Non-White youth were more likely to be detained than their White counterparts, and detained youth were more likely to be placed in secure confinement following adjudication. The effect of race was also statistically significant in each of the three models predicting placement in a secure facility. Adjudicated, Non-White youth were more likely to be placed in secure confinement than their adjudicated White peers, although this effect decreased substantially when relevant controls were added to the analysis and was no longer statistically significant when detention was introduced into the analysis. We also checked for an “interaction” between race and detention; the results suggested that there was no difference in the size or direction of the effect for detention across the two race subgroups.

Bindover. The final decision point examined was waiver to criminal court (bindover). Since no youth charged with a misdemeanor or status offense were waived to criminal court, this analysis used the subsample of youth charged with a felony offense (N=13,287). A very small proportion of youth were waived to criminal court (416 youth, or 3.2% of the sample), which means that a relatively small numerical difference in its prevalence in each racial group could affect the estimates and odds ratios substantially.

In the race-only model (N=13,233), Non-White youth were almost three times more likely to be waived to criminal court compared to White youth (OR=2.77). After adding extralegal factors in the second model (N=13,225), Non-White youth remained over 2.5 times more likely to be bound over relative to White youth (OR=2.66). A one-year increase in youths' age at case initiation predicted a 164 percent increase in the odds of bindover (OR=2.64), and females were 94 percent less likely to be waived compared to males (OR=0.06).

The results for the model including legally-relevant factors are shown in Table 13 (N=11,672). Non-White youth were still twice as likely as White youth to be waived to criminal court (OR=2.12). The effects for age and sex remained significant. A one-unit increase in the number of prior petitions filed significantly increased the odds of waiver by 8 percent (OR=1.08). The effect for number of charges in the current case was not significant. Finally, youth charged with a property offense (OR=0.15), drug/alcohol offense (OR=0.09), or other offense (OR=0.28) were significantly less likely to be waived relative to those charged with a violent or sex offense.¹¹ Overall, the effect of race was a significant predictor of waiver to criminal court in each of the three models. Specifically, Non-White youth were over twice as likely to be bound over to the adult system.¹²

¹¹ Status/DC and PV / VCO were removed from the analysis because no youths charged with these offenses were waived to criminal court.

¹² Given the focus on multiple years within courts, there are some cases that involve youth who are repeat offenders (44%). This may affect the independence of cases that is assumed in most of the analyses. We used clustered standard error procedures to adjust for this and investigate the potential that this affected the findings. That process identified no more than trivial differences for each of the juvenile court decisions analyzed here suggesting that this clustering does not alter the key findings or conclusions. The sole exception across dozens of estimates was the prior offenses variable, which has more missing data than the others included in the model is no longer statistically significant in these alternate analyses.

Table 13. Multivariate Analysis for Adjudication, Confinement, and Bindover Decision Points

	Adjudicated			Secure Confinement ³			Bindover ⁴		
	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	-0.20	0.82	0.03	0.11	1.12	0.05	0.75	2.12	0.17
Age	-0.02	0.98	0.01	0.07	1.07	0.02	0.97	2.64	0.07
Sex	-0.12	0.89	0.02	-0.49	0.61	0.07	-3.12	0.04	0.51
Num. of Priors	0.04	1.04	0.00	0.11	1.12	0.01	0.08	1.08	0.01
Num. of Charges	0.50	1.66	0.01	0.06	1.06	0.01	0.02	1.02	0.02
<i>Offense Category</i> ¹									
Property	0.26	1.30	0.03	-0.20	0.82	0.05	-1.91	0.15	0.15
Drug/Alcohol	0.20	1.22	0.05	-0.63	0.53	0.10	-2.43	0.09	0.37
Status/DC	0.64	1.90	0.05	-0.54	0.58	0.14	---	---	---
PV / VCO	1.27	3.56	0.06	-0.61	0.54	0.46	---	---	---
Other	0.17	1.18	0.04	-0.52	0.59	0.09	-1.26	0.28	0.22
<i>Offense Seriousness</i> ²									
Misdemeanor	0.24	1.27	0.03	-2.16	0.12	0.05	---	---	---
Other	-0.78	0.46	0.05	-4.32	0.01	0.30	---	---	---
Constant	0.24		0.11	-2.61		0.25	-19.69		1.18

Notes: Bolded entries represent statistically significant estimates at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error; ¹ Reference is Violent/Sex Offense; ² Reference is Felony; ³ This analysis used the subsample of youth who were adjudicated delinquent; ⁴ This analysis used the subsample of youth who were charged with a felony

Initial and Conditional Probabilities of Case Outcomes

The conditional probabilities indicate the likelihood that White and Non-White youth will experience a particular case outcome—given fixed, average values on the set of measures included in each statistical model.¹³ This gives us the ability to examine the likelihood of an outcome for a “typical” case and also to consider whether any differences between White and Non-White youth observed in the initial analysis shift when accounting for other relevant factors. Overall, the results followed those discussed above (see Figures 2 and 3). Cases involving Non-White youth had higher

¹³ The mean values for age (15.87), prior petitions filed (2.09), and number of charges in the current case (1.91) were used to calculate predicted probabilities for diversion, detention, dismissal, and adjudication. The remaining variables were set to their most frequently appearing categories: most serious offense category – property; offense seriousness – misdemeanor; and sex – male. Because secure confinement and bindover are typically reserved for the most serious offenses/offenders, the values for offense type and offense seriousness were changed to violent/sex offense and felony, respectively, in the calculation of the conditional probabilities for these two decision points. The values for the other variables remained the same.

initial and conditional probabilities of detention, dismissal, secure confinement, and bindover. Conversely, Non-White youth had lower probabilities of delinquency adjudication. Generally, the gaps between White and Non-White youth tended to be larger in the initial probabilities and narrowed somewhat when other legally-relevant and extralegal variables were considered in the conditional probabilities, but they did not diminish fully. For example, the unconditional probability of pre-adjudication detention was 0.130 for White youth and 0.210 for Non-White youth—a difference of 0.08 points on a proportion scale. Once the other variables were included, the conditional probability of detention was 0.132 for White youth and 0.166 for Non-White youth, a difference of 0.032.

Figure 2. Summary of Initial and Conditional Probabilities for Juvenile Court Outcomes

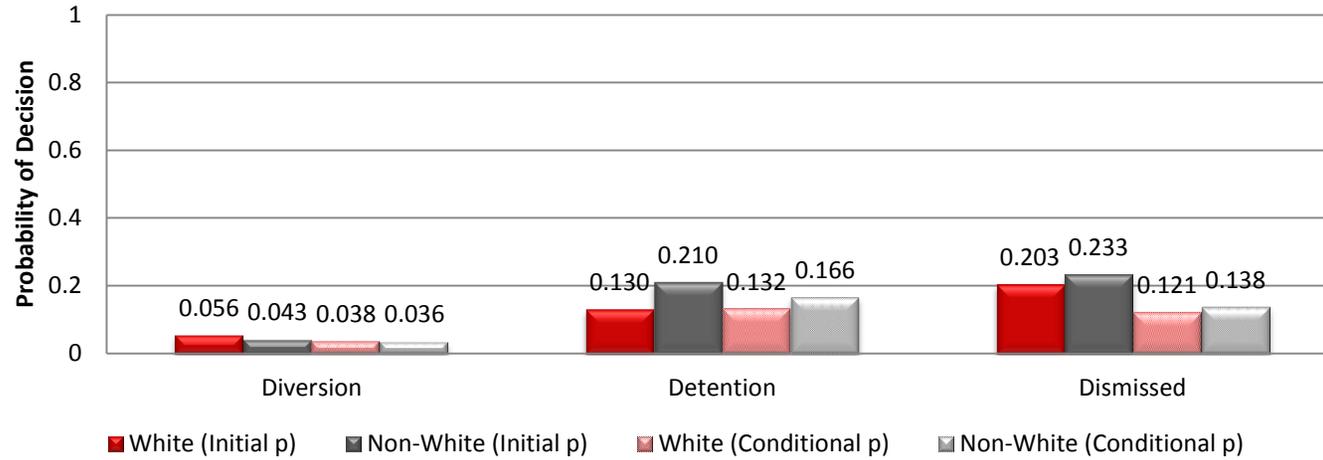
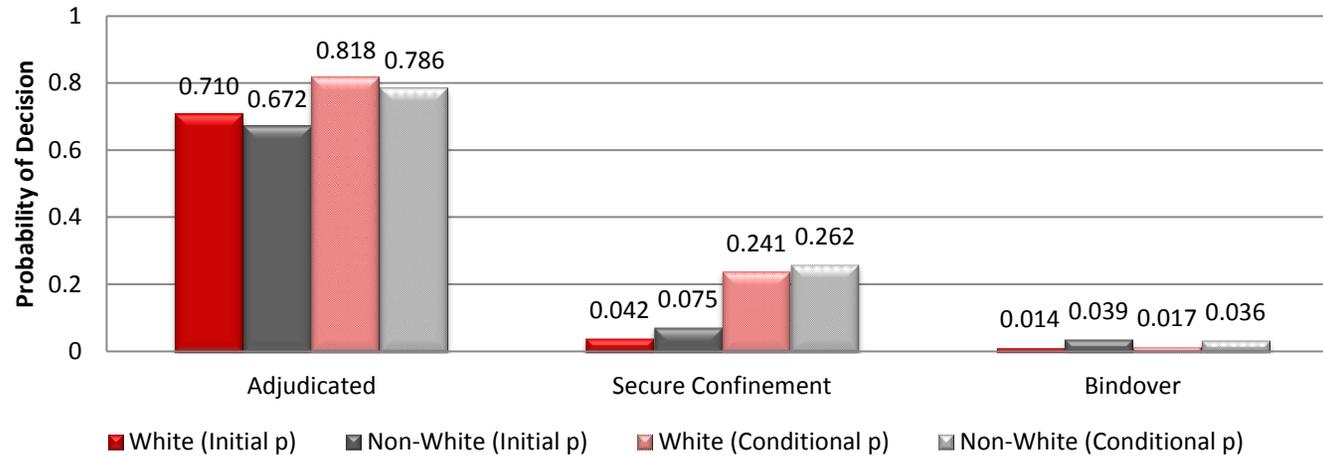


Figure 3. Summary of Initial and Conditional Probabilities for Juvenile Court Outcomes (contd.)

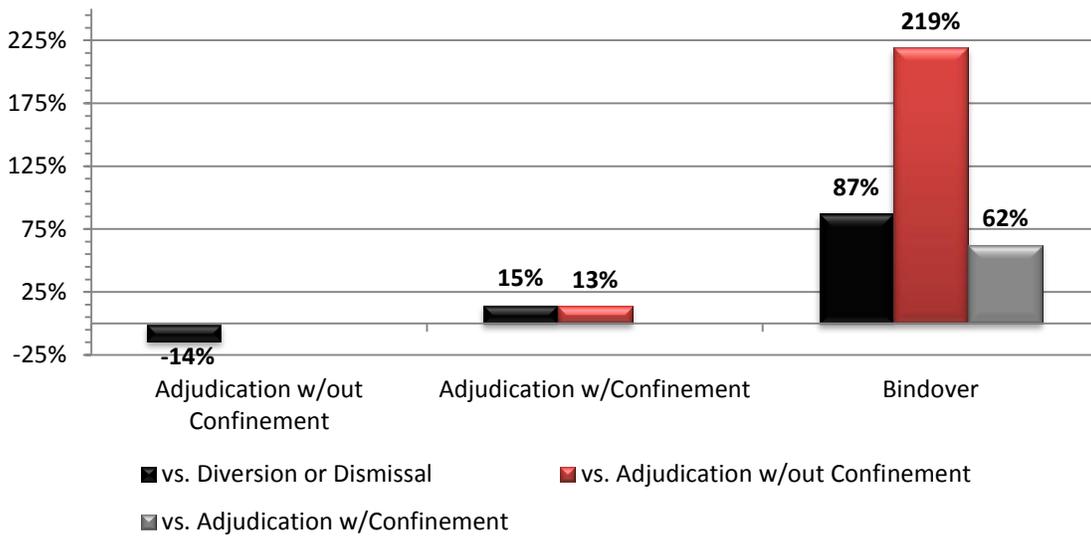


Although it is useful to assess each of these decision points in a distinct fashion, potential disproportionality in court outcomes was also considered in terms of the degree of penetration into the system (see MacDonald, 2001). This analysis considers the effect of the youth's race on whether s/he ends up at one point in the system as opposed to an "earlier" one. We constructed an ordinal court disposition measure comprised of four different decision points based on the best possible configurations of the various outcome measures: diversion or dismissal, adjudication without secure confinement, adjudication with secure confinement, and bindover. The degree of penetration is captured by the indication of where the case fell in one of these four categories. This analysis uses only a subsample of the pooled court data (N = 23,883), but includes the same explanatory variables as in the main analysis.

Because the dependent variable for this analysis is ranked in terms of the severity of outcomes in the juvenile court, ordinal regression is the ideal method of analysis for this data (Long, 1997). After controlling for other legal and extralegal factors, the ordinal logistic regression model indicates that race is a significant predictor of degree of penetration into the system. However, the direction of the relationship runs contrary to expectations. Still, this statistical model carries an assumption that the explanatory factors have the same effect at each point on the outcome scale. This, however, was not the case here as a test indicates that the effect of race does not progress in a linear fashion across different decision points (see Brant, 1990). In other words, as described above, race was positively related to some dispositions but negatively related to others and the effects were significantly different in size.

Given this, we conducted an alternate, more conservative model to consider the relative effect of race on the likelihood of a youth winding up further in the system as opposed to at a lower point. Figure 4 presents Odds Ratios (OR) reflecting these relationships. When controlling for extralegal and legal factors, race was a significant predictor of each possible outcome. These results suggest a greater degree of contact with the system in all cases except for one: Adjudication without Confinement vs. Dismissal or Diversion. This follows the results above in that Non-White youth have about 14 percent lower odds of adjudication (without confinement) than being dismissed or diverted. Still, for both Adjudication w/ Secure Confinement (+15 percent) and Bindover (+87 percent),¹⁴ cases involving Non-White youth were significantly more likely to result in those outcomes as opposed to Diversion or Dismissal.

Figure 4. Percent Difference in Odds of Given Case Outcome: Non-White vs. White



¹⁴ As noted elsewhere, there are very few bindover cases in the overall sample, which means that these estimates may be affected by small differences in the number of cases falling into each group.

Adjudication with Confinement and Bindover can also be compared with cases where youth were adjudicated delinquent, but placed in the community, in order to assess the degree of contact with the juvenile justice system. Relative to their White peers, minority youth were significantly more likely to be adjudicated and committed to DYS (+13 percent) or bound over to the adult system (+219 percent) than be adjudicated without a commitment. Finally, Non-White youth were also more likely to be transferred to adult court as opposed to adjudicated and placed in a secure facility (+62 percent). Overall, this analysis suggests that—with the exception of case dismissal versus adjudication—Non-White youth tend to go further into the system than White youth, even after controlling for relevant legal factors and other factors like age and sex.

Matched Comparison of Court Outcomes Across Race

We created a matched cohort sample from the larger population where youth were matched as closely as possible on all independent variables, with the only difference being race, in order to provide a further check on the regression results above. We used “nearest neighbor” matching (NNM) to better compare “similarly-situated” youth of different races with respect to whether they experienced each of the six court outcomes. In most applications, NNM calculates an average treatment effect for a sample of treated and control cases. NNM randomly orders the treatment cases and matches each treatment case to the “nearest” control case based on a series of matching variables (Adabie, Drukker, Herr, & Imbens, 2004; Morgan & Harding, 2006). The “treatment” examined here is juveniles’ race so NNM compares White and Non-White youth based on a series of matching covariates in order to estimate the average

treatment effect (ATE) by within-match differences in the outcome variables between the two sets of cases (Abadie & Imbens, 2006; Morgan & Harding, 2006).¹⁵ This also moves beyond the previous modeling in its ability to compare “like” cases.

The matching variables included in the analysis were the same legally-relevant and extralegal variables included in the regression analyses above—except that county was added to the analysis to ensure that cases were matched to others in the same site. To ensure matches that were as close as possible, exact matching was used for the following variables: county, sex, most serious level, and most serious category. The remaining variables—age, number of priors referrals, and number of charges—were matched as closely as possible. Because they are continuous variables, an exact match was not feasible.

The results of the NNM analysis are presented in Table 14. The coefficients presented in the second column indicate the average treatment effect (ATE), or the average difference between the matched pairs in the proportions of youth who experienced each outcome. The relatively small ATEs—not just for case dismissal and adjudication, but for all of the outcomes—were expected because the matching process created a sample of youth who were as close to identical as possible except for race. The results for four of the six court outcomes—diversion, detention, secure confinement, and bindover—mirrored those found in the final regression models

¹⁵ Because the scales of the matching covariates were different, the inverse variance weighting matrix was used in the matching process to account for these differences (Abadie et al., 2004). In addition, we used matching with replacement, which allows each observation to be used as a match multiple times and lowers the bias associated with the matching process (Abadie et al., 2004). Matching with replacement is preferred over matching without replacement because in the latter the matching estimator that is produced is dependent on the initial ordering of the treatment cases (Todd, 2008).

presented above. After youth were matched, there was no significant difference in the proportion of White and Non-White youth who were diverted from formal prosecution. The difference in the proportions of youth who were detained (0.05), placed in secure confinement (0.03), and bound over to criminal court (0.02) between White and Non-White youth indicated that Non-White youth were significantly more likely to experience each of those outcomes compared to similarly-situated White youth, even after matching on the legally-relevant and extralegal indicators.

Table 14. Matched Comparison of White/Non-White Youth on Court Outcomes

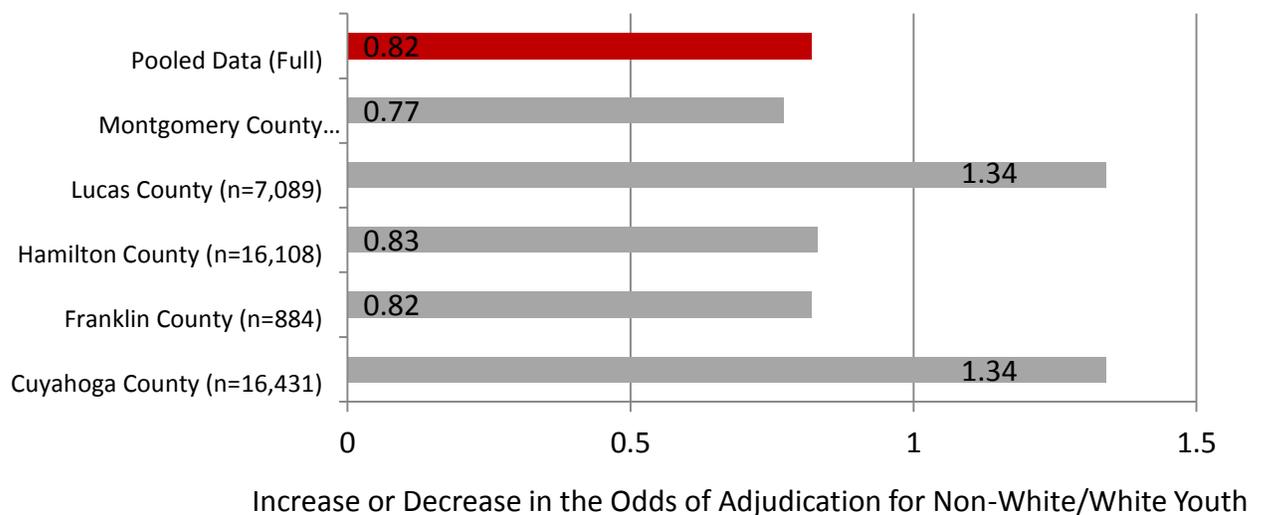
	Coef.	S.E.	Z	95% CI	
Diversion	-0.0008	0.0036	-0.22	-0.0077	0.0062
Detention	0.0549	0.0059	9.20	0.0429	0.0661
Dismissed	0.0029	0.0056	0.51	-0.0082	0.0139
Adjudicated	-0.0074	0.0070	-1.05	-0.0211	0.0063
Secure Confinement	0.0347	0.0067	5.15	0.0215	0.0479
Bindover	0.0224	0.0044	5.03	0.0137	0.0311

Bolded entries indicate statistically significant estimates at $p < 0.05$; S.E. = Standard Error of Estimates; CI = 95% Confidence Interval

Conversely, the results for case dismissal and adjudication indicated no statistically significant difference in the proportions of White and Non-White youth experiencing each outcome after the matching process. These results were contrary to those found in the regression analyses. However, the direction of the relationship between these two variables and race was the same as that found in the regression analysis. This finding is likely due to the fact that we can account for site more precisely in this analysis by forcing youth to be matched within the same court. As is shown in the discussion of county-level results, there was some variation in the pattern of findings for the dismissal and adjudications outcomes. We demonstrate this variation using the adjudication outcome and results of the statistical models described above

and in each site's section in Figure 5 below. As noted above, the overall effect 0.82, this suggests that Non-Whites have 18 percent lower odds of adjudication compared to their white peers. Still, the bars for each site show that there is variation in the nature of this effect across the different courts that showed a statistically significant relationship between race and adjudication. Some were indicative of DMC at this decision point and others were not.

Figure 5. Overview of Pooled and Site-Level Analysis for Adjudication



Analysis of Limited-Availability Influences

Small subsamples of cases had valid data for measures of onset age (43 percent valid data), weapon use (50 percent) and counsel (50 percent). Given the possibility that these variables could potentially affect the observed relationship between race and court decisions, we estimated the final models for each of the six court outcomes inserting them one at a time. As such, the subsamples used in each analysis varied in size depending on which of the three variables was included: onset age (N=30,993),

weapon use (N=29,965), and counsel (N=32,840). *Onset age* is a continuous measure indicating youths' age at their first official case filing. *Weapon use* is a binary indicator of whether a weapon (e.g., firearm, knife, blunt instrument) was involved in any offense in the current case. *Counsel* is a binary measure of whether the youth was represented by legal counsel during the court process.

In the diversion model, a one-year increase in onset age predicted a significant 10 percent decrease in the likelihood of diversion (OR=0.90). An increase in onset age also predicted a significant decrease in the odds of detention (OR=0.85), case dismissal (OR=0.97), secure confinement (OR=0.82), and bindover (OR=0.91). Conversely, a one-year increase in the first officially recorded offense predicted a significant 3 percent increase in the odds of being adjudicated delinquent (OR=1.03). When onset age was included in the secure confinement model, the effect of race was no longer significant. The significant effect of race remained unchanged from the models for the remaining case outcomes, however.

Cases involving a weapon were 87 percent less likely to be diverted relative to those not involving weapons (OR=0.13). When weapon use was included in the diversion model, the effect of race was significant in that Non-White youth were now 26 percent more likely to be diverted relative to Non-White youth (OR=1.26). Youth who had a weapon during their offense were 51 percent less likely to be detained relative to those who did not use a weapon (OR=0.49). Similarly, youth whose case involved a weapon were 90 percent less likely to have their case dismissed (OR=0.10) and almost five times more likely to be adjudicated delinquent (OR=4.86) compared to those not

involving a weapon. Youth who were adjudicated of an offense involving weapon use or possession were 26 percent more likely to be placed in secure confinement than those cases where a weapon was not involved (OR=1.26). Finally, youth who used a weapon were over two and a half times more likely to be bound over to criminal court relative to those who did not use a weapon (OR=2.57). In addition, when weapon use was added to the bindover model, the effect of race was no longer significant. The effect of race did not change for any of the other models when the weapon use indicator was added.

Youth who were represented by legal counsel during the court process were roughly 50 percent more likely to have their case diverted relative to those without counsel (OR=1.49). Similarly, youth who had counsel were 54 percent more likely to have their cases dismissed (OR=1.54). The presence of counsel significantly decreased the odds of adjudication by 31 percent (OR=0.69) over cases with no legal counsel. Youth represented by counsel were over six times more likely to be detained prior to adjudication (OR=6.66), over twice as likely to be placed in secure confinement (OR=2.24), and over 17 times more likely to be waived to criminal court (OR=17.87) relative to youth who did not have legal representation. Each of these findings may be explained, in part, by the fact that most youth represented by counsel were charged with more serious offenses and therefore the use of counsel was in fact affected by the seriousness of the case. For example, 95 percent of those charged with a felony were represented by counsel, while only 54 percent of those charged with a misdemeanor and 16 percent of status offenders had counsel. It follows that youth charged with a felony—and thus those most likely to have representation—would be more likely to be

detained, placed in secure confinement, and waived to criminal court compared to those charged with less serious offenses. Looking back at the main objective of the analysis, the significant race effects for detention, adjudication, secure confinement, and bindover—as well as the nonsignificant effect for diversion—found in the final models discussed previously remained unchanged when counsel was included. The effect for case dismissal was no longer statistically significant when counsel was added to the analysis.

Similarly, we obtained OYAS information for a small portion of the total sample of juvenile court records. Given that it is a tool for identifying potential decision-making factors other than youth race, it was a useful supplemental analysis. Merging cases from the OYAS data with those from the pooled court data allows us to control for a youth's level of risk in addition to offense-related variables when estimating the effect of race on juvenile court outcomes. Unfortunately, OYAS information was not available for an extensive portion of our overall sample of about 75,000 court records. Because OYAS risk scores were not available for all cases, we focused our supplementary analysis on two counties with relatively good coverage: Hamilton (12,606 or 78.3%) and Lucas (n=3,134 or 43.4%). This represents roughly 20 percent of the full sample.

Race was statistically associated with risk level in both counties—although the effect was somewhat stronger in Lucas County (Cramer's V of 0.06 in Hamilton and 0.15 in Lucas). In Hamilton County, White youth were mostly low (45.2%) or moderate (43.8%) risk on the OYAS. This meant that roughly 11 percent were high risk. In contrast, 37 percent of Black youth fell into the low risk category with nearly 50 percent

in the moderate category and the other 13.5 percent in the high risk category. The “other” race group had comparatively more low risk youth than the other two groups (51.6%), but fewer moderate risk youth (36.0%). They fell in between the other two groups in terms of their proportion of high risk cases (12.4%). In Lucas County, the pattern is a bit clearer in the sense that Non-White youth have proportionally fewer low risk cases (25.8% and 38.2% for Black/African-American and Other races, respectively) than White youth (49.0%). They also have proportionally more high risk cases (24.2% and 26.2%, respectively) than the group of White youth (14.4%). This suggests that it is worth taking a look at the OYAS measure in potentially understanding DMC (to the extent that we can).

Hamilton County had the most comprehensive data in this regard so we include that analysis in the site-level analysis below. That analysis included a sample of over 12,606 cases. The relationship between race and the outcome variable held for all five decision points (detention, dismissal, adjudicated, secure confinement, bindover) analyzed in Hamilton County when including the OYAS risk level measure. This suggests that the race effect observed here would be present even after factoring in the youth’s risk level. We did consider whether the OYAS risk level might interact with race to further enhance (or diminish) the overall DMC effects, but found that was not the case in this analysis.

As noted, Lucas County had more coverage than other study sites, but it was far from complete. For that reason, we simply conducted a supplemental analysis to explore the potential impact of OYAS information on the relationship between race and

the four common court outcomes: detention, dismissal, adjudication, and secure confinement. As will be discussed in greater detail in the site report section below, analysis of each of the four decision points did show some evidence of DMC in that race did have a statistically significant and small-to-moderate relationship with these decision points. When the OYAS risk level was added to the statistical models it generally led to a scenario where race was no longer a significant predictor of the outcome of interest. For instance, Black youth were 68 percent more likely to be placed in detention relative to Whites in the main Lucas County model. Inclusion of the OYAS renders that relationship non-statistically significant, though. In that case, high risk youth were 55 percent more likely to be placed in detention than low risk youth and there was no difference between moderate and low risk youth as far as that outcome. This pattern of results repeated itself across the four outcomes—although the OYAS information was not always statistically significant in predicting outcomes.¹⁶ As was the case in Hamilton County, there were no significant interaction effects between race and OYAS risk level, suggesting that while youth in this small subsample seem to have somewhat different categorizations across race the information is impacting outcomes in the same way across groups.

This supplemental analysis suggests the relative importance of considering how relationships between race and risk assessment might affect court outcomes (or not). This gives us another point to “control” for alternative influences on cases as they move through the juvenile court. This led to mixed conclusions and indicates that the effects

¹⁶ Some outcomes, like dismissal or adjudication, should probably not be expected to be affected by the OYAS information as readily as others.

may vary across counties. Still, the data coverage is arguably better in Hamilton County and those findings seem to hold to a pretty similar pattern compared to what was found in the main site-level analysis discussed below.

Integrated Analysis of Pooled County Court Data

The site-level analyses included in this report highlight the similarities and differences among the 13 counties included in the study. Given this apparent variation, we sought to formally test the degree to which there were differences in the court outcomes and their relationship to race across the counties using multilevel statistical modeling (Raudenbush & Bryk, 2002). This provides a more formal test for site-level variation—albeit one that is somewhat constrained by the fact that we have only 13 counties (Bingenheimer & Raudenbush, 2004; Maas & Hox, 2005). It also allows us to reassess the results presented earlier while controlling for possible variation between sites on characteristics like use of particular dispositional options, race composition of sample, or the number of cases contributed to the pooled analysis. Consequently, this analysis can potentially add new information to the assessment while also checking on results that were presented above.

Table 15 provides a summary of court outcomes across the 13 counties included in the study. It demonstrates that there are differences in the degree to which certain decisions occurred across counties. At the same time, it highlights variability in data availability. This is especially true with respect to earlier decisions in the court process where some counties did not provide data on diverted or dismissed cases and those

outcomes had to be inferred from the fact that cases were or were not present at later stages of analysis.

Table 15. Site-Level Description of Key Court Outcomes

	Diverted Percent	Detained Percent	Dismissed Percent	Adjudicated Percent	Committed Percent	Bound Over Percent
Allen	0.0	15.8	7.5	91.6	7.8	0.28
Butler	0.0	21.1	15.8	81.0	4.9	0.57
Clark	2.1	41.7	15.3	73.5	7.1	4.9
Cuyahoga	1.7	22.4	23.4	57.1	15.9	1.0
Franklin	2.8	12.8	37.7	58.6	8.5	0.73
Hamilton	0.0	16.2	25.5	72.1	0.72	0.58
Lorain	3.1	0.0	13.0	79.2	8.2	0.39
Lucas	0.0	9.3	44.6	52.2	15.8	0.40
Mahoning	4.6	28.6	3.1	82.6	7.4	2.1
Montgomery	17.4	17.7	14.5	67.7	11.0	0.40
Stark	0.0	1.0	12.6	76.3	1.3	0.08
Summit	0.0	41.8	18.2	81.3	1.5	0.27
Trumbull	32.8	47.9	6.5	59.7	2.8	0.41
Est. Variance in Outcome (std. error)	25.3 (15.2)	1.31 (0.54)	0.65 (0.27)	0.38 (0.15)	0.97 (0.39)	0.54 (0.26)
Similar Result for Race Effect?	N/A	X	X	X	X	X
Est. Variance in Race Effect (std. error)	N/A	0.07 (0.05)	0.09 (0.05)	0.08 (0.04)	0.34 (0.25)	0.35 (0.25)

Note: Bolded cells represent estimates that are statistically significant at $p < 0.05$

The bottom panel of Table 15 summarizes the key results of the formal modeling of potential differences across sites. There are three results in each column. The first of those rows summarizes the degree of variation in a given outcome between sites. Five of the six entries are bolded, representing the fact that there were statistically significant differences across sites in the prevalence of each given case decision. This is evident by looking at each column as well where there is clearly a good deal of variation in terms of the frequency with which each of these decisions occurs. The one exception is the “diverted” decision point where there was not enough information for several

sites (e.g., six courts with zero cases diverted), which precluded any further formal modeling of that particular decision point in this multi-level context.

The second row, which is labeled “Similar Result for Race Effect?,” considers whether each of the key estimates reflects what we found in the full statistical model of the pooled data—in terms of its statistical significance, direction of the relationship, and strength. In each case, the results for the relationship between race and the outcome were the same as those for the final models presented above. This means that accounting for the variation across sites does not alter the conclusions about race and detention, dismissal, adjudication, commitment, and bindover covered earlier.

The final row of this table summarizes the results for a different question: was there significant variation in the impact of race across sites? Clearly, the site-level reports do suggest that there are some differences that are worth considering (e.g., Hamilton County effect for dismissal and adjudicated delinquent). This modeling approach provides a formal statistical test that could serve as a gateway to more explicitly analyzing factors that could weaken, strengthen or affect the “direction” of an identified relationship between race and a given decision. Formally, we allow the effect of race to vary across sites and then test whether it varies across the thirteen sites.¹⁷ Each of the five results presented in the table indicates that there is no significant difference between sites in the relationship between race and the case outcome—controlling for the other possible influences. So, while there are some differences when comparing and contrasting the results of site-level analyses, they cannot be formally

¹⁷ This part of the modeling process may be particularly dependent on a relatively large number of “level 2” units (i.e., counties in this study).

modeled beyond confirming/refuting the findings of the pooled assessment described above. In this case, the results of the multilevel modeling suggest that the core conclusions of the study hold when accounting for the potential effects of each site on the estimates for the pooled sample.

Interaction Analysis: Race and Legally-Relevant Factors

In addition to the primary analyses reported above, we considered whether the effects of the legally-relevant variables on each court outcome varied by youths' race. This provides some insight as to whether those factors may have relatively stronger influences for one subgroup versus another—even in some cases where the main effect of race seems to have little impact on an outcome after adding other influences (Leiber & Fox, 2005). To carry out this analysis, we estimated the logistic regression models for each outcome separately for White and Non-White youth. Next, we determined the significance (or lack thereof) of the difference between the two regression coefficients (for White and Non-White youth). We used the method and formula first suggested by Clogg, Petkova, and Haritou (1995) to create a test statistic to determine whether the effect for each legally-relevant factor was conditioned by race.¹⁸ This method involves using the two regression coefficients and the estimated standard error of the difference to calculate a “z score” statistic. An absolute value of the z-score greater than 1.96 indicates a significant difference in the regression coefficients for White and Non-White youth (see Tables 16 and 17).

¹⁸For a summary of this method, also see Paternoster et al. (1998).

Number of prior petitions was a significant predictor of each case outcome except for dismissal for both White and Non-White youth. The difference between the strength of this variable for White and Non-White youth, however, was significant only for pre-adjudication detention. While number of priors significantly increased the odds of being detained for both White (1.08) and Non-White (1.06) youth, the effect was slightly stronger among White youth. Number of charges in the current case had a significant negative effect on case dismissal and a significant positive effect on detention, adjudicated, and secure confinement for both White and Non-White youth. Although number of charges was a significant predictor of detention for both groups, the effect for Non-Whites (1.24) was significantly stronger than that for Whites (1.15). Similarly, the number of charges had the effect of increasing the likelihood of bindover for Non-White youth (+3%), but reduced the odds of transfer for White youth (-8%).

In general, this analysis suggests that the effects of legally-relevant factors were similar in both the White and Non-White groups. Still, there were some instances where the effects number of prior offenses or number of charges for the current offense were more pronounced for one group versus the other. For example, the effect of number of charges in a given case on detention and bindover was a fair bit stronger for minority youth as opposed to Whites.

Table 16. Test of Differences in Estimated Effects between White and Non-White Youth

	Diversion			Detention			Dismissed		
	White B	Non-White B	z	White B	Non-White B	z	White B	Non-White B	z
Num. of Priors	-0.31	-0.27	-1.31	0.09	0.06	3.02*	0.01	-0.00	1.50
Num. of Charges	----	----	----	0.14	0.22	-6.48*	-0.50	-0.49	-0.21
<i>Offense Category</i> ¹									
Property	0.24	0.59	-2.04*	-1.04	-0.75	-4.44*	-0.26	-0.37	1.54
Drug/Alcohol	0.08	0.69	-2.53*	-1.45	-1.01	-3.97*	-0.18	-0.41	2.10*
Status/DC	-0.39	0.09	-1.92	-1.38	-1.21	-1.43	-0.53	-0.52	-0.10
PV / VCO	----	----	----	0.60	0.28	2.67*	-0.39	-0.35	-0.27
Other	-0.17	-0.22	0.16	-0.83	-0.51	-3.52*	-0.03	-0.28	2.77*
<i>Offense Seriousness</i> ²									
Misdemeanor	0.96	1.44	-1.94	-0.94	-1.18	3.80*	-0.15	-0.15	0.02
Other	2.85	3.54	-2.13*	-2.24	-2.00	-1.56	0.25	0.37	-0.98

Note: Bolded entries represent statistically significant estimates at $p < 0.05$

* Statistically significant difference at $p < 0.05$, ¹ Reference is Violent/Sex Offense, ² Reference is Felony

Table 17. Test of Differences in Estimated Effects between White and Non-White Youth (contd.)

	Adjudicated			Secure Confinement			Bindover		
	White B	Non-White B	z	White B	Non-White B	Z	White B	Non-White B	Z
Num. of Priors	0.03	0.02	1.76	0.12	0.09	1.81	0.11	0.09	0.63
Num. of Charges	0.57	0.52	1.83	0.08	0.09	-1.13	-0.08	0.03	-2.01*
<i>Offense Category</i> ¹									
Property	0.09	0.27	-2.78*	-0.25	-0.21	-0.32	----	----	----
Drug/Alcohol	0.06	0.27	-2.21*	-0.57	-0.76	0.99	----	----	----
Status/DC	0.52	0.61	-0.89	-0.41	-0.76	1.26	----	----	----
PV / VCO	1.24	1.41	-1.31	----	----	----	----	----	----
Other	-0.02	0.30	-3.62*	-0.18	-0.61	2.22*	----	----	----
<i>Offense Seriousness</i> ²									
Misdemeanor	0.13	0.21	-1.22	-1.91	-2.36	3.95*	----	----	----
Other	-0.75	-0.92	1.50	-4.78	-3.95	-1.23	----	----	----

Note: Bolded entries represent statistically significant estimates at $p < 0.05$

* Statistically significant difference at $p < 0.05$

¹ Reference is Violent/Sex Offense

² Reference is Felony

Summary of Pooled Juvenile Court Record Analysis

White youth comprised 40 percent of the referrals in the 13 juvenile courts we examined and Non-White youth accounted for 60 percent. According to the 2010 Census, however, these groups accounted for 78 percent and 22 percent of the juvenile population in Ohio, respectively. These figures indicate that, on the surface, there is a substantial degree of disproportionate minority contact in the cases coming into the juvenile courts during the years for which we have records. In the bivariate statistical models, youth race was a significant predictor—to varying degrees—in each of the six outcomes. Specifically, Non-White youth were significantly more likely to be detained, have their case dismissed, be placed in a secure confinement facility, and be waived to criminal court relative to their White counterparts. Conversely, Non-White youth were less likely to be diverted from official court processing and to be adjudicated delinquent.

To better understand how race might affect juvenile court decision-making relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal factors. For detention, case dismissal, adjudication, secure confinement, and bindover, the results of the full models mirrored those of the bivariate models and indicated that race still played a significant role in each of these five decision points. Race was not a significant predictor of diversion, however. Instead, the results indicated that the legally-relevant factors (number of prior petitions filed, offense category, and offense seriousness) appeared to be more closely associated with the diversion decision. The statistical analysis of the integrated measure reflecting the degree of penetration into the juvenile justice process

suggests that Non-White youth tend to fare worse in terms of the severity of court decisions, however.

In general, once all possible influences were included in the final models, the effect of race decreased in each model but was still statistically significant in five of the six case outcome measures. For example, in the initial model for secure confinement, Non-White youth were 82 percent more likely to be placed in a secure facility relative to White youth. This percentage dropped to only 12 percent in the final secure confinement model, a pronounced drop of 70 percentage points. Similarly, in the race-only model, Non-White youth were 24 percent less likely to be diverted compared to White youth, but the effect of race became nonsignificant in the final model that controlled for legally-relevant and extralegal factors.

For case dismissal, youth charged with a property offense, drug/alcohol offense, status offense/disorderly conduct, or other offense were all significantly less likely to have their case dismissed relative to those charged with a violent or sex offense. On the surface, this finding may seem counterintuitive. However, 66 percent of the violent offenses in the sample were misdemeanors (e.g., minor assaults, school fights) and only 34 percent were felonies. As such, because a high rate of violent misdemeanors were dismissed, the relative effects for the other offense categories are not surprising.

Race had a significant effect on the odds of detention in all three statistical models. This has important implications because multiple studies have concluded that detention can have a cascade effect in which decisions made at earlier stages in the process can affect (and lead to greater overrepresentation in) decisions made at later stages (Davis & Sorensen, 2013; Engen, Steen, & Bridges, 2002; Sickmund & Puzanchera, 2014). Indeed, when detention was included

as an explanatory variable in the adjudication and secure confinement models, youth who were detained were 87 percent more likely to be adjudicated delinquent and 93 percent more likely to be placed in secure confinement relative to those not detained.

Overall, youths' race had a statistically significant effect on five of the six court outcomes. Relative to White youth, Non-White youth were more likely to be detained prior to adjudication, have their case dismissed, be placed in a secure confinement facility, and be waived to criminal court. Conversely, Non-White youth were significantly less likely to be adjudicated delinquent compared to White youth. The results for adjudication and case dismissal are particularly noteworthy because the direction of the relationships between race and these two outcomes are opposite of what would be expected based on most prior research (Rodriguez, 2010); they are not unprecedented, however (Kutateladze, Tymas, & Crowley, 2014). One possible explanation for the significant race effect favoring Non-White youth in adjudication and dismissal is that these effects were also statistically significant in the Hamilton County analysis. Because cases originating in Hamilton County accounted for 21.6 percent of the sample analyzed here, the results from this single county could have a significant impact on the pooled results.

The statistical analysis of the integrated measure reflecting the degree of penetration into the juvenile justice process suggests that Non-White youth tend to fare worse in terms of the severity of court decisions, however. As with the analysis just summarized, there is a distinction with the dismissal outcome that tends to suggest more minority youth have their cases dismissed. A matched pairs analysis of the race group differences for this outcome suggested that the case dismissal effect dissipated when scrutinized further, making it difficult

to come to a firm conclusion about this relationship. In addition, most agencies did not provide information for the underlying reasons for dismissal so it is as likely that this captured some cases that were informally handled and dismissed as it is that it comprised cases that were not prosecuted from factual reasons. This means it is somewhat difficult to know precisely the type of decisions that go into a “yes” on this dismissal outcome.

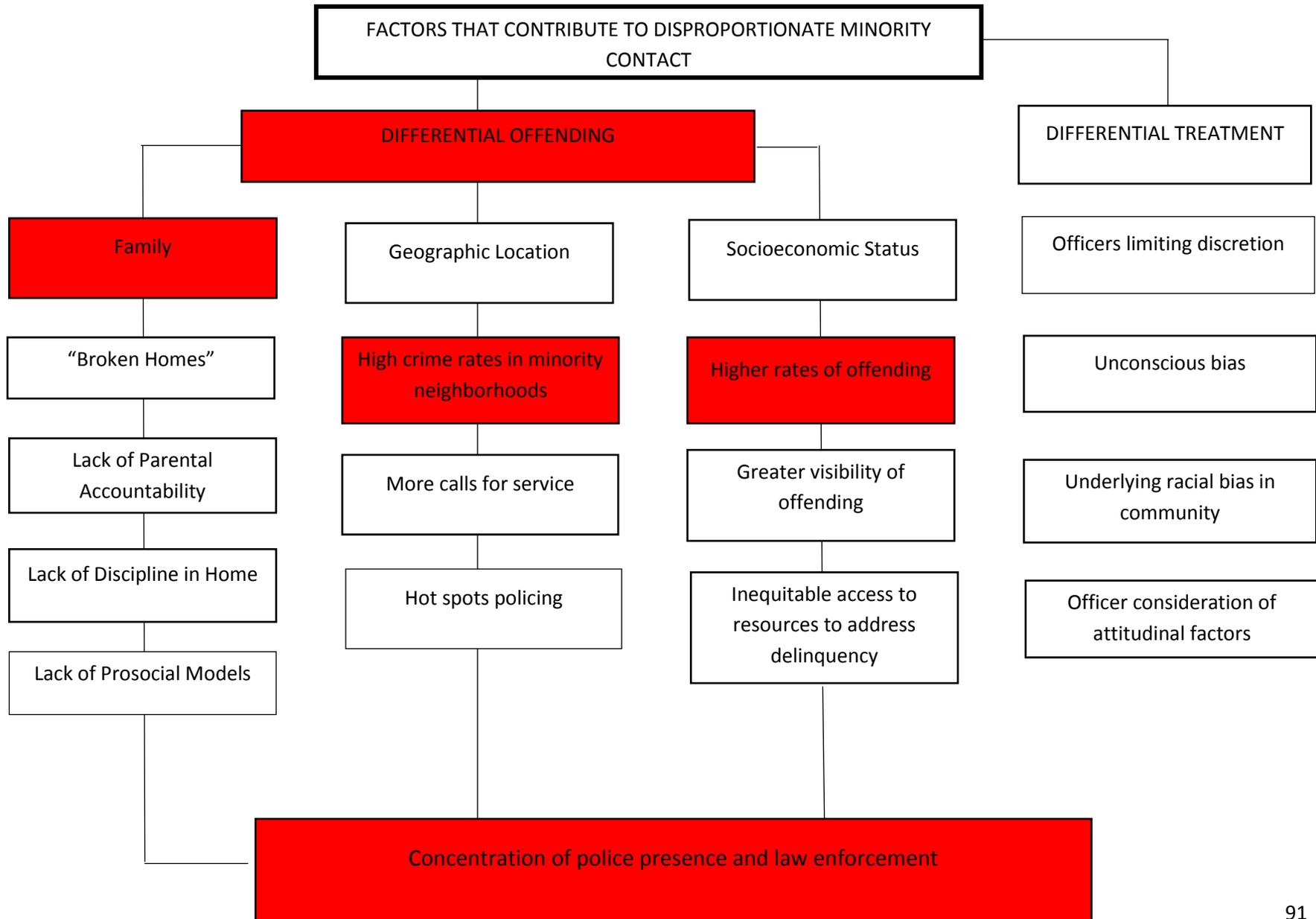
POOLED FOCUS GROUP DATA ANALYSIS

Between the months of September 2012 and June 2015, the UC research team conducted 16 focus groups and 1 interview across 16 law enforcement agencies in nine counties of Ohio. Collectively these focus groups and interviews involved 130 law enforcement personnel. The majority of these officers held positions within the school resource (46) and patrol (41) units. However, several officers represented other diverse specialties such as the adult and juvenile investigative units (14), detective units (6), field operations (3), administrative (3), and other (15). Given the variability in the number of law enforcement personnel and the willingness of those personnel to actively participate within the sessions, the focus groups and interview lasted between approximately one and a half to two and a half hours.

Overall, the officers participating in the focus groups and interview identified several explanations for disproportionate minority contact (DMC) with law enforcement and the juvenile justice system within their respective jurisdictions. Notably, though the participating agencies varied considerably in history, size and location, officer explanations for DMC were generally consistent. Specifically, it was found that officers largely favored differential offending explanations that outlined the influence of external factors on the criminal involvement of

minority youth. Despite this emphasis, however, officers within several agencies also suggested that DMC could be a product of law enforcement's practice of differential treatment toward minority youth. Figure 6 presents the findings from the pooled focus group analysis, outlining the factors that were consistently described to contribute to disproportionate minority contact with police. Falling within the two main categories of differential offending and differential treatment, these factors are organized left to right, depicting the most common consistent responses (left) to the least common but consistent responses (right). A full description of these findings is presented below.

Figure 6. Summary of Key Themes in Pooled Police Focus Groups: Reasons for DMC



Differential Offending

Officers in the various focus groups consistently identified the differential offending patterns of minority youth as the primary explanation for this population's higher rate of contact with police. These differential offending explanations typically emerged with the presentation of arrest statistics for the respective law enforcement agencies, which generally showed (with one exception – see Montgomery County) that minority youth are overrepresented in overall juvenile arrests. These differential offending explanations were further supported by officers' perceptions of recent trends in juvenile crime and through their discussions concerning factors they believe to contribute to youths' involvement in criminal offending.

Overall, a review of the officers' statements within the focus groups reveals that participants typically outlined two primary mechanisms of differential offending that were viewed to increase the likelihood of minority youth coming into contact with law enforcement. These mechanisms were (1) the higher rate of offending and prevalence of repeat offenders among minority juveniles and (2) minority youth's greater involvement in more serious types of crime.

Prevalence of Offending and Repeat Offenders. In their discussions regarding the differential offending patterns of minority youth, officers across the participating agencies consistently identified a higher prevalence of offending among minority youth. Specifically, officers argued that minority youth participate in crime and general delinquency at a much higher rate than White youth in their respective jurisdictions. One officer succinctly summarized this observation, saying,

“But percentage-wise those [minority youth] are the ones that are getting in trouble, those are the ones that are robbing, those are the ones that are fighting, those are the ones that are stealing.”

This perception transcended officer type as both patrol and school resource officers alike noted the greater number of repeat offenders among the minority juvenile population. This small percentage of problem youth were thought to be responsible for the majority of juvenile crime in these jurisdictions. Importantly, several officers observed that delinquency becomes expected from these repeat offenders, which ultimately facilitates the identification of youth that are more criminally inclined as officers become more familiar with the residents in the communities they serve. In one exemplary discussion, an officer outlined how officer knowledge and targeting of repeat offenders might contribute to DMC:

“...We have a core group of juveniles in each part of our city that are routine offenders. They are routine offenders. If a crime happens in a certain neighborhood we know which juveniles to target. If a burglary or something happens in a certain part of a neighborhood we know which juveniles to target. We know which juveniles are involved in certain types of crimes. We know which juveniles to target. So, we have our patterns, and we know what groups, and unfortunately that’s (sic) the majority of them are Black, but we see their continued patterns over the last four or five years of who is doing all the work.”

Types of Offending. Unlike officers’ discussion regarding the prevalence of offending among minority youth, there was some variation in observations regarding differences in the types of offenses committed by minority youth. Specifically, few officers observed similarities in the offending of youth regardless of their race, while others reported the types of offenses committed by youth to vary by the neighborhood they are located in rather than by any individual trait. Overall, however, minority youth were identified by the majority of focus group participants to participate in more violent offenses as well as other more serious criminal activities compared to their White counterparts. Officers consistently suggested that this type

of offending often results in higher levels of confrontation with law enforcement that involve little officer discretion. Therefore, in many cases, it was observed that minority youth are more likely to come into formal contact with police due to situational and legal constraints on police decision-making. Furthermore, it was suggested that, the prevalence of violent offenses committed by minority youth impacts their likelihood of being processed further into the juvenile justice system. In sum, it was viewed that minority youth's greater involvement in more serious, violent offending increases DMC throughout multiple stages of the juvenile justice system.

Across the participating agencies, officers provided several explanations for these higher rates of offending and greater involvement in more serious, typically violent crimes. While there were few explanations that were unique to specific agencies (see county level focus group analyses), as a whole, there was substantial consistency in officers' assessment regarding the factors that create differential offending patterns among minority youth. Overall, these differential offending explanations generally involved factors associated with three main categories: family, geographic location, and socioeconomic status.

Family Factors. Family factors were typically the first mentioned and most cited explanation for the differential offending and subsequent contact of minority youth with police and the juvenile justice system. As one officer stated, "I think if you broke it down by: who or what's the family structure? What is the family unit? That's going to be the biggest key in this whole study..." Officers pointed to several factors that they believed to characterize the home environment in lower income, minority communities. In turn, these factors were viewed to influence the general behaviors of minority youth. Specifically, officers pointed to the

breakdown in the family structure in minority communities as creating a lack of parental accountability, a lack of discipline, and a lack of prosocial models within minority homes. Collectively, these factors were thought to increase the likelihood of minority youth becoming involved in crime, coming into contact with police, and receiving more punitive outcomes from the juvenile court.

Lack of parental accountability. When asked to outline explanations for their higher rates of contact with minority youth, officers from each of the participating law enforcement agencies emphasized the influence of family and the home environment on the overall behavior and offending patterns of minority youth. As a whole, this family-based explanation mirrored the officers' observations regarding factors that contribute to the criminal offending of youth in their respective jurisdictions. Within these discussions, it was consistently observed that inner-city, lower income, minority neighborhoods have an overwhelming number of households characterized by the breakdown of the traditional two-parent family structure. Viewed to be the product of younger people having children (i.e. "babies having babies"), the prevalence of these "broken homes" was argued to exacerbate the pervasiveness of absentee parents and the lack of parental accountability in minority communities. It was observed that minority youth coming from this type of home environment have more freedom, less structure, and, therefore, more opportunity to become involved in delinquency. Several officers across the participating agencies spoke on this matter:

"That is another issue [Participant 3] touched on is the parents. Where are the parents? You go to these houses at four in the morning, I worked nights for 22 years and I would go to these houses at four in the morning and 3, 4, 5, 6, 7, 8-

year-old kids are up. They're not going to get up and go to school the next day. What do you do about this? These kids are just turned loose."

Another officer spoke out concerning the impact of these familial factors, saying,

"Not to beat a dead horse, but I think almost everybody in here at one point has went back to the family. They have mentioned that in their answers. I agree with that wholeheartedly and I have heard this alot. There is nothing for these kids to do, there is nothing for them to do...I get that they are in a poor economic situation, I get all that, and that can be very unfortunate, but a lot of the stuff they have to do is the same stuff I had when I was a kid, you know? They have school and homework and chores, cleaning the house, cleaning their room, extracurricular activities at school. Now, most of them don't do that stuff. Why not? No parent. No father in the home, mother's always getting evicted, moving. You know, you guys have all said it. And ultimately it just seems like what it's all going back to...."

In addition to enhancing the likelihood of delinquency and criminal involvement, several officers across the focus groups suggested that the prevalence of absentee parents in minority households increases law enforcement's formal contact with minority youth by constraining police discretion in police-youth interactions. Specifically, officers commented that officer discretion in the management of incidents involving youth is significantly impacted by the availability of parents to whom the youth might be released. Some officers suggested that when parents are available and willing to take responsibility for their child's actions, officers are more inclined to informally handle incidents involving youth. In fact, officers consistently suggested that keeping their interactions with youth informal was generally preferred. However, if the youth has a history of offending and the parents are absent or appear not to care about their child's behavior—which suggests that the youth's transgressions will not be addressed in the home—officers described that they are forced to take more formal actions. It was observed that this reliance on parent accountability for their children often results in

minority youth being held by law enforcement for longer periods of time compared to White youth whose parents were perceived as generally more available. In one example, a patrol officer explained their department's higher rate of contact with minority youth, saying,

"I think it breaks down to the breakdown of the family. I think most officers would give a kid a break if they felt the parents or parent is a parent. But if they feel there are no other options but to charge this kid, or hammer this kid, then that's where they're going to go. And unfortunately the minority kids are coming from the broken homes. I think that might be a reason why the numbers are high."

Furthermore, officers within several focus groups suggested that lack of involvement and accountability of parents in minority communities greatly influences the outcomes of individual cases being processed through the juvenile justice system. Officers asserted that the juvenile justice system is generally more willing to commit time and resources to youth that have a stronger support system within their home environment. Additionally, it was consistently suggested that, when parents are unable or unwilling to be involved in the justice process, the discretion of juvenile court actors is constrained, often resulting in the exclusion of minority youth from beneficial diversion programs that might effectively address the source of their criminal involvement. In one example of this issue, an officer commented,

"...You also gotta remember our policy is the parents have to agree to cooperate with the juvenile diversion program also (sic). Sometimes, with the same kind of problems we had in the Black community, is sometimes a parent, single mom, is working twelve hours a day, who is not at home anyway to raise her kid. [She] certainly isn't going to take the time out to come in here once a week, or twice a month, or whatever to drop their kid off for juvenile diversion."

Other officers highlighted the importance of family in assisting the juvenile justice system in the rehabilitation of delinquent youth. In particular, it was observed that the counseling-based methods of the juvenile justice system are most effective for youth that come from a strong family dynamic (generally described as a two-parent household) that can reinforce the influence and teachings of counseling within the home. In contrast, when youth come from broken homes characterized by little discipline or guidance, rehabilitation and diversion programs were thought to be ineffective in stemming future offending. Therefore, officers across several of the participating agencies observed the presence of significant barriers to the successful application of counseling and rehabilitative based services to inner-city, lower income, minority youth. In sum, the lack of support from the families of minority youth was viewed to exacerbate the criminal proclivities of youth, enhancing their likelihood of coming into contact with police in the future.

Lack of discipline. Officers within the majority of focus groups argued that the differential offending of minority youth is a product of lack of discipline in homes. This lack of discipline was viewed to provide little structure, as well as little threat of authority in the lives of youth, allowing their delinquency to escalate to more serious types of behaviors that warrant police contact. Furthermore, it was observed that, because minority parents are not disciplining their children for their misbehaviors, they rely on police to handle even the most minor of behavioral problems (e.g. child refusing to get out of bed, child refusing to take a bath, child refusing to go to school). Overall, focus groups across the participating agencies argued that a significant amount of patrol

officers' time is spent in the homes of minority youth. Officers often vented their frustrations, commenting that, as time progresses, parents continue to abdicate more of their responsibilities to law enforcement and the juvenile justice system. Therefore, officers suggested that disproportionate minority contact is directly related to this perceived shift in child rearing responsibilities, such as the administration of discipline, away from parents to the juvenile justice system. In one example, an officer outlined this shift, saying,

“More and more responsibility is being placed on our department, on probation, at juvenile court and more and more younger arrests are being made where especially when I got started and certainly when we were all kids our parents simply handled that kind of stuff.”

Another officer observed:

“I'll be frank in that a lot of parents expect the juvenile justice system to parent their child. You know, what would have been handled by mom and dad years ago is being handled by the juvenile court system now and that increases the burden [on the juvenile court system]...the parents aren't parenting their children. ...When they get in trouble instead of mommy and daddy taking care of it and handling it, and there are so many broken homes, that now it's 'call the police' and 'I can't deal with Johnny anymore', and 'you need to take Johnny and put him someplace.’”

Lack of prosocial models. The lack of prosocial models in minority homes was often identified as a source for the differential offending of youth. Officers observed that parents within lower income, minority households fail to set a positive model for behavior within their home. Viewed as the product of absentee parents (particularly father figures) in minority homes, youth were observed to be deprived of basic guidance in their formative years. Officers across the focus groups suggested that, as a result,

many minority youth fail to be taught essential lessons such as distinguishing between 'right' and 'wrong' or that crime is an unnecessary way of life. One officer commented:

"The one thing they [minority youth] didn't have unfortunately is the knowledge of knowing someone around saying this isn't how this is supposed to be done. But probably if these kids had some guidance when they were young then maybe...maybe he or she may have turned themselves around if they had had some type of guides of knowledge."

It was also suggested by many focus group participants that, when not provided in the home, minority youth find role models elsewhere in their community often spending time with their peers or with older individuals who affiliate with gangs and live following "hood-life expectations" rather than expectations that promote more prosocial lifestyles. Therefore, the lack of supervision and prosocial role models was thought to make youth more susceptible to negative peer and media influences, increasing their likelihood of becoming involved in crime and subsequently coming into contact with police.

In contrast to the observations that minority homes lack role models due to absentee parents, several officers suggested that in many cases parents are present, but that they instill antisocial or criminal values in their children. Stated differently, it was often observed that minority youth learn their antisocial and criminal behaviors from their parents. In their discussions of juvenile offending, the more veteran officers consistently observed generations of offending in many of the minority families within their jurisdiction. One officer captured these views by referring to minority youth in present-day communities as "a generation lost," because, in his opinion, these youth

lack the positive guidance that traditionally youth would obtain from their parents. This officer went on to say,

“The other thing, having been here for so long, what I am seeing is the old saying the apple doesn’t fall far from the tree. Unfortunately, that is almost what you are starting to see. Those same kids that I dealt with when I first started my career are now adults, they now have kids and I am dealing with their kids and they are even worse than their parents were.”

Geographic Location. The influence of geographic location was the second most cited explanation for DMC provided by officers across the participating law enforcement agencies. It was often suggested that minority youth are more likely to come into contact with police due to the concentration of police time and law enforcement efforts in neighborhoods characterized by higher rates of crime and higher calls for service. Importantly, it was consistently observed that these high-crime areas typically coincide with inner-city, lower income, minority communities. Therefore, police focus on these high-crime areas for patrol and enforcement was thought to increase the likelihood of officers coming into contact with minority youth both through proactive (hot spots policing) and reactive (responding to calls for service) policing strategies.

Hot spots policing. Officers within several of the participating agencies identified their departments’ use of proactive policing methods as contributing to DMC. Notably, officers that made this observation typically worked in larger departments that had the resources to collect data to assist in the direction of the agencies’ officers to the high-crime areas (i.e. crime hot spots) determined to be in greatest need of police presence and support. Officers explained that the identification of crime hot spots in their respective jurisdictions accounts for the concentration of law enforcement in patrol

beats located in lower income, minority communities. Furthermore, officers indicated that when not responding to calls for service, patrol officers are typically directed by their superiors to monitor crime hot spots. Similarly, several SROs commented that they are often instructed to focus on their “problem schools” (i.e. schools with more incidents of crime). Ultimately, this data driven policing strategy was thought to contribute to DMC (both at the adult and juvenile level) because lower income, minority neighborhoods are more likely to be labeled as hot spots, based on crime mapping, the examination of general crime statistics, and records of calls for service.

Importantly, a few patrol officers commented that, though they are assigned specific beats within their jurisdiction, and thus directed to specific areas, they are also allowed a certain amount of freedom of patrol within these beats (when not responding to a call for service). It was observed that, when given this freedom, patrol officers align with the hot spots policing strategies of their department, choosing to spend more time in lower income, minority dominated areas known to have significant crime problems. In sum, it was suggested that law enforcement’s consistent presence in these high-crime, problem areas, either by means of hot spots policing or individual officer discretion, enhances the likelihood of officers coming into contact with minority youth in their jurisdiction.

Calls for service. Though many officers from the participating law enforcement agencies identified their use of proactive policing methods, officers even more consistently described the dominant strategy used by their respective departments in the policing of juveniles as reactive in nature. Officers emphasized that, given the high level of juvenile crime (officers consistently observed an increase in the prevalence of

juvenile offending) and the limited resources of their agencies, reactive policing strategies were generally all their departments can manage. As such, DMC was viewed to be a product of the high number of calls for service generated by residents within inner-city, lower income, minority communities. Patrol officers, in particular, observed that, overall, more calls for service come from minority areas in their jurisdiction. However, several SROs responded similarly, observing that they are most often called to manage incidents that have occurred in inner-city schools that are attended primarily by minority youth. Collectively, the focus groups provided several points exemplifying this process:

“...If you are bound to the radio you must serve that caller regardless of what race comes across as your suspect or suspects...I think some of it can just be simply if you get called to a place, you can’t dictate the race of the people you are being sent to, you either speak with, or interact with whether as complainants, or victims, or suspects.”

“We get called more to handle situations for minorities than we do White people. That is why minorities get arrested more. You know if I went on 100 calls a day, and 50 of them involve White people and 50 involved Black people, they would be equal. If I go on 100 calls a day, and 90 of them are Black people and ten of them White people, I am going to end up arresting more minorities.”

“We are responding to calls, we are dealing with a situation that we were called to. How can they compare the statistics when we are responding to the calls they tell us to go to and taking action? Who cares about the statistics, we take care of the problem and obviously these are where the problems are coming from.”

Socioeconomic Status. In addition to factors related to the family and geographic location of youth, it was regularly observed that the SES of individual youth greatly affects the likelihood of their initial involvement in crime, their contact with law enforcement, and their progression into the juvenile justice system. While the majority of officers observed that

socioeconomic status seemed to explain higher rates of offending among all youth in their respective jurisdictions regardless of race (e.g. “If you overlaid poverty on our city you would see the two poorest areas are where we make the most arrests or where the kids that we arrest are at. That is the thing, not race, it is poverty because I would bet that most whites we arrest are from those two areas too”), it was consistently highlighted that a disproportionate number of minority youth appear to come from these lower SES neighborhoods compared to White youth.

The socioeconomic status of minority youth was observed to greatly influence DMC across various jurisdictions in Ohio by limiting the availability of opportunities for successful, prosocial life outcomes. Several examples were provided across focus groups regarding the influence of SES on individual opportunity, ranging from differences in the quality of education across socioeconomic status, inequality in access to prosocial activities, variation in the structure and stability of the home environment according to income, as well as differences in the ability to curb delinquent behaviors without invocation of the juvenile justice system.

Involvement in crime. Officers often suggested that socioeconomic status influences both youth’s involvement in crime and the types of crimes youth commit. Specifically, officers observed that, due to their lower socioeconomic backgrounds, minority youth typically have fewer financial advantages than their White counterparts, drawing them to commit crimes, particularly more serious types of offenses (e.g. robberies; drug crimes), that involve greater monetary gains.

In addition to influencing their types of offending, low SES, minority youth were observed to have less parental supervision or options for prosocial activities than

affluent (typically White) youth, motivating them to spend more time on the streets of their communities, enhancing the visibility of this population to community members and police on patrol. As one example, an officer summarized the impact of SES on the visibility of youth and their subsequent contact with police:

“I think [DMC], I don’t know that it necessarily has a lot to do with race, but socioeconomic status... It’s not just a White or a Black problem. It’s the lower socioeconomic lifestyles, White or Black. You know, single parent home, which is going to lead to less supervision and less disposable income that these kids can find themselves, so they are stuck walking around an apartment complex with their friends with nothing to do. So what do you think is going to happen? And those are the types of kids we are going to get calls on... [It’s] not necessarily racially disproportionate, I know the numbers say it’s racially disproportionate but that’s probably because African Americans, Hispanics are probably disproportionately on the lower socioeconomic strata.”

Ultimately, the visibility of offending combined with the prevalence of more serious offending among minority youth was viewed to impact both the likelihood of minority youth coming into contact with police and the extent of their processing through the juvenile justice system.

Introduction into juvenile justice system. Officers most often argued that in affluent, White neighborhoods the delinquent behaviors of youth are often managed by informal means, such as therapy, counseling, or medication, because, within these neighborhoods, families have access to greater financial resources to afford such informal measures. Importantly, the availability of these measures was argued to assist in the prevention of youth involvement in delinquency and contact with law enforcement in the long-run. In contrast, the focus group participants perceived that minority youth, who overwhelmingly come from poverty-ridden areas, do not have the

same resources, forcing families to rely on formal measures (such as the police) to handle the behavioral problems of youth.

“What’s interesting is when you talked about the total number of arrests. We have to talk about opportunities and I think that for the most part, like anywhere else, opportunities are afforded to stop and delay the behavior much quicker in an affluent family, whether it be for drug treatment, or whether it be opportunities for family members to get involved in their life, better school system and mentoring programs and things of that nature; versus allowing the person that does not have that - he is basically kicked to the curb. So, therefore, his chances of getting involved in another crime is high.”

Furthermore, it was observed that crimes committed by White youth from affluent families often go unreported or are not formally processed to the same extent because parents have the money and connections are better equipped to prevent the involvement of the justice system, instead handling problems with their children in their home. Minority families, in contrast, were observed to lack such resources, resulting in a greater likelihood of cases involving minority youth being processed to the full extent of the law. One officer highlighted this point saying, “I am just saying unfortunately the neighborhoods we police, our children don’t have the ability or their parents don’t have the ability or the resources.”

Differential Treatment

Comparatively fewer officers from the participating law enforcement agencies identified the differential treatment of minority youth as an explanation for the high rates of police contact with this population. In many of the focus groups, the possibility of differential treatment was not even considered (i.e. officers made no reference to this practice). In some, officers recognized that it might exist, but could not think of examples within their own experience or in their own department more generally. In several others, officers outright

rejected the idea of the differential treatment of minority youth by law enforcement. In these instances, participants emphasized the importance of legal factors, arguing that similarly-situated juvenile offenders receive the same treatment and response from law enforcement in their respective jurisdictions regardless of race. Furthermore, it was often suggested by participants that law enforcement agencies have safeguards within their departments to prevent any undue influence. As one example, officers described that when making out reports, giving tickets, or issuing citations, law enforcement personnel are required to fill out information cards on the person they have come into contact with (including race). This allows the department to generate statistics on who is being arrested by whom, effectively monitoring officer conduct.

Despite these suggestions, there were a few officers that expressed thoughts about the existence of the differential treatment of minority youth by law enforcement. In these instances, officers observed that law enforcement agencies tend to patrol heavier and enforce more laws in minority communities. The majority of focus group participants recognized the concentration of law enforcement in minority neighborhoods and subsequent DMC as a product of data driven policing strategies, but viewed it as a matter of going where there supervisors and the community directed them. One officer, however, highlighted the possibility of racially-based motivations for such strategies, as well as the differential outcomes for minority youth that arise from consistently directing police focus on minority areas. When asked if the treatment of youth by the juvenile justice system is the same, regardless of their race, this officer spoke from their personal experience, saying,

“We patrol heavier and enforce more laws in the Black community. We exercise less discretion in the Black community than in the White community...[Because of]

expectations, how the system is, the racism in the community, what is expected basically. We do what is expected and the enforcement is disproportionately done in Black communities. Would I say the homes are better, would I say there is more parental supervision? Not necessarily. I think that, you know, I may arrest one person and talk to them and then another person may do the same thing and due to color, race, or gender they may be going to [juvenile detention].”

Notably, this was the only officer among the 130 participating law enforcement personnel that directly observed the influence of race on their own decision-making. More specifically, this officer highlighted the impact of departmental strategies, community expectations, and racial bias on the concentration of police resources in minority communities and the enhanced likelihood of minority residents experiencing differential treatment by individual officers. Another officer made similar comments concerning officers’ general use of discretion in their decision to make arrests, commenting that it is not uncommon for officers to limit their discretion in situations involving minority youth. This officer pointed to the fact that historically, minorities have been less likely to get the benefit of the doubt commenting that, “the reality is that every officer who has discretion, the Black kid is less likely to get the discretion even when you get the good kid caught up in the foolishness.” Though this officer also observed that DMC is strongly connected to minority youths’ differential involvement in delinquency, s/he suggested that the tendency for law enforcement to treat minority youth differently persists today.

The remaining officers were less direct in their commentary regarding the presence of differential treatment practices in law enforcement. Specifically, these officers pointed to the influence of larger communities and cities that law enforcement agencies are placed within, observing that these outside entities can greatly influence law enforcement practices. As one

example, an officer emphasized how the community can influence the use of different tactics by law enforcement according to the areas they are working within:

“It’s a terrible thing to be a police officer and think that Black people hate you because you are White, but there’s also kind of a thought that White police officers want to take more Black people to jail than White people. In my thirty-one years I couldn’t count on one hand knowing a guy that preferred to take to jail a Black guy than a White guy, but there is a perception of that, I think. Some in the community think that White cops like to take Black people to jail and I think this town, some of the people in this town have encouraged that which makes it even that much harder...”

Similarly, another officer mentioned the impact of city initiatives on law enforcement’s contact with minority youth. Specifically, the officer commented that city officials will often direct police attention to the management of events and locations that attract large groups of minority youth. In one particular example, an officer discussed their city’s practice of hiring local police to patrol events expected to have a higher attendance of minority youth, when similar events, expected to have greater White youth in attendance typically do not have comparable police presence.

Finally, a more mixed view regarding the presence of differential treatment practices in law enforcement was presented by a few of the participating officers. In these instances, participants pointed to the variation in officer characteristics and certain extralegal factors that might produce differential treatment practices by police. For example, in one particular focus group, it was suggested that the inclusion of race as a factor in police decision-making may vary depending on the number of years an officer has served on the police force. Specifically, it was suggested that while older officers will remember when race had greater influence in the decision-making of law enforcement, newer officers have less exposure to this history and more access to training and education that prioritizes unbiased decision-making in police-

citizen interactions. Therefore, this officer argued that it is less likely for younger officers to use race as a factor in their decision-making, while older officers may subconsciously consider race in the back of their minds.

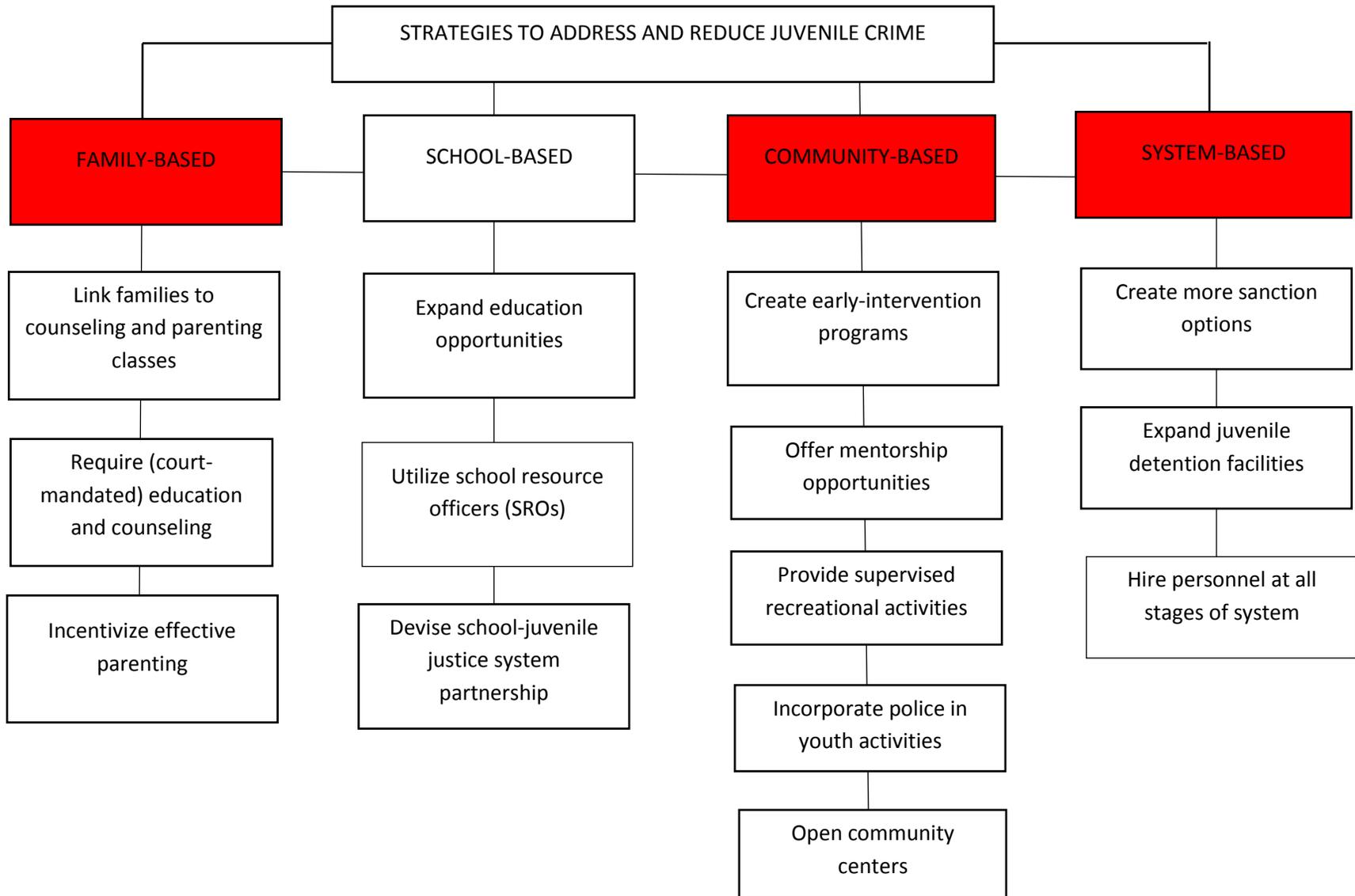
The notion of differential treatment may also come up in response to situational characteristics of the interaction between youth and the police. Officers from the majority of the participating agencies confirmed that, when the legal factors of the incident allow for officer discretion, the attitude and demeanor of youth greatly impact officers' decision to arrest. In particular, youth that exhibit negative attitudes were identified as more likely to receive formal outcomes from police. Officers overwhelmingly observed that the attitudes of youth in their interactions with police are similar across race, with the overall juvenile population being viewed as very disrespectful to law enforcement. In the few instances where variation in attitudes and demeanor were noted, officers highlighted the impact of the youths' socioeconomic status (low SES youth observed to be more disrespectful), youths' family and home environment (i.e. youth learning disrespect from parents), as well as the impact of the officers' characteristics (e.g. race, demeanor, position within agency). Overall, while officers from only a few agencies observed a greater lack of respect among minority youth, it was suggested that officer perceptions of these attitudes were influenced by the concentration of police time in minority communities and, as such, their greater experience with disrespectful minority youth compared to disrespectful White youth.

Recommendations to Reduce Juvenile Crime

Collectively, officers across the 16 focus groups and 1 interview provided a wide range of suggestions to reduce juvenile crime in their respective jurisdictions. Though not explicitly asked for recommendations of effective ways to decrease disproportionate minority contact, it is apparent that, in addition to addressing juvenile crime overall, the suggestions outlined below could impact the minority population's rate of contact with the police and the juvenile justice system. Generally, participants did not point out ways in which police agencies or officers might be involved in responding to DMC as they saw the problem emerging from factors that were largely out of their control, but some recommendations do suggest strategies for system improvements or collaborative efforts that may impact juvenile crime and disproportionate contact.

Figure 7 presents the various recommendations highlighted by focus group participants in their discussions regarding ways to reduce juvenile offending. For the most part, officers from each of the participating agencies emphasized the importance of a holistic approach in addressing the juvenile crime problem within their respective jurisdictions. Within this approach, officers outlined specific strategies that incorporate early intervention programs, schools, families, the various communities, and the juvenile justice system as a whole. These recommendations are outlined in detail below.

Figure 7. Summary of Key Themes in Pooled Police Focus Groups: Officer Recommendations to Reduce Juvenile Crime (DMC)



Family. Given the emphasis on the influence of family factors in the offending of minority youth, the majority of officer recommendations to reduce juvenile crime focused upon linking families of delinquent youth to agencies and programs before a youth becomes involved in delinquency (or early on). Officers discussed the role of the juvenile justice system in this endeavor, greatly advocating for the use of referrals to provide individual and family counseling and classes to improve the home environment of youth within their respective communities. Officers specifically mentioned the utility of programs such as FamiliesFORWARD® that assist families in gaining skills and tools to establish and maintain self-sufficiency, ultimately providing a more stable environment for their children. This type of program was viewed to address the root of many juvenile problems and overall have a very positive effect on the home life of youth and subsequently their behavior outside of the home.

In the absence of such programs and services, officers emphasized the need to enhance the accountability of parents within the juvenile justice system. Specifically, it was suggested that courts must place more pressure on parents to be involved in the counseling, rehabilitation, and ultimately the lives of their children. To accomplish this, officers proposed that the juvenile justice system should incorporate court-mandated education and counseling courses for parents. Furthermore, it was suggested that the court might provide monetary compensation, or similar rewards, for effective parenting in certain communities – incentivizing the development of those skills.

School. Across the focus groups, officers often highlighted the potential impact of schools and the school system on the control and prevention of juvenile delinquency. School resource officers, in particular, discussed the need to improve the scope of education provided

by schools in low SES communities so that youth might be provided legitimate opportunities to avoid criminal lifestyles. Specifically, several school resource officers suggested incorporating trade schools for youth in high school so they may learn marketable skills. Providing such classes was argued to have the potential to motivate learning among students because the course material is more applicable to the real-life situations of the students. Additionally, officers emphasized the potential efficacy of a school/juvenile justice partnership involving open communication between the two systems regarding the history of youth's offending, behavioral profiles, and education status to make sure that delinquency is being addressed properly.

In addition to the school-related suggestions above, the focus groups conducted at departments with school resource officers consistently emphasized the importance and utility of programs that place officers within schools. Many of these officers suggested that incorporating officers into schools can be an effective way to reduce the number of juvenile arrests in any jurisdiction. Specifically, these officers argued that their increased knowledge of particular youth assists them in handling juvenile delinquency through more informal measures. As a whole, however, these focus group participants suggested that SROs are an asset both in creating contacts with youth in schools and in providing patrol officers/other units information regarding specific youth that can help inform the decision-making of officers in specific encounters with youth. As one of the detectives commented, "the intelligence they have on the kids is phenomenal and that's hard to measure." Furthermore, SROs were identified to build rapport with youth in schools, providing a positive image of law enforcement and an overall positive influence in the lives of youth. Ultimately, their daily interactions were

argued to create a more positive relationship with the majority of youth within school by filling the role of a mentor that emphasizes trust and accountability between youth and police.

Community. Officers consistently suggested the importance of early intervention and education programs for youth, arguing that community-based counseling, education, and mentor-type programs should be provided to youth at younger ages (i.e. elementary school ages) to increase their likelihood of positive life outcomes. These types of programs were argued to have the potential to increase youth's association with prosocial models and provide structured time outside of school. Furthermore, these mentorship programs were viewed as a step toward decreasing youth's involvement in crime through the provision of the supervision and support that is often lacking within their homes.

Additionally, participants from each of the participating agencies consistently emphasized the need for community initiatives that invest in the creation of juvenile activities, such as athletic leagues and other recreational programs, providing prosocial, structured activities for youth within the community. The implementation of these types of programs were thought to emphasize team building, demonstrate the importance of long-term goals, and ultimately work towards crime prevention. Furthermore, officers argued that these type of programs, in collaboration with community initiatives can provide prosocial alternatives to crime that work to keep youth busy, supervised, and out of trouble.

To some extent, officers identified the ability of local law enforcement to be active participants in these types of programs. Specifically, few officers suggested the efficacy of police departments participating in programs such as Boy/Girl Scouts or Boys & Girls Clubs. Department involvement in these types of programs was argued to be beneficial by exposing

officers to youth within their community in a positive, less formal light. One officer commented on this fact, saying, “When they see us in that light it’s totally different than the light of arresting their brother, their uncle, their dad, their mom.”

System Changes. Invariably, officers from each of the agencies pointed to changes that must be made within the juvenile justice system to effectively reduce juvenile crime in their respective jurisdictions. Officers consistently commented that youth are rarely provided substantive punishments and, therefore, are not being held accountable for their criminal behaviors. Ultimately, officers believed that the lack of repercussions allows for the escalation in the amount and seriousness of offending among youth. In one of the many discussions exemplifying this problem an officer stated,

“...That deterrent is not there to the same extent that it was when I came on to the department [25 years ago] and, as a result, since there is no deterrent, I feel the...the level of their criminal activity, not across the board, but for some kids increases because nothing...they do something and they get away with it. So, their behaviors will increase and I see more of that as time goes on, and I believe we have gotten away from holding people responsible for their actions too and given counseling instead.”

For this reason, officers across the focus groups agencies highlighted the need to expand the range of responses to juvenile crime to hold youth accountable for their actions. Though they did not provide specific examples of the responses that they believed would be most effective, officers consistently emphasized that, due to the sheer number of juvenile cases, alternatives beyond the release or detention of youth must be incorporated in the juvenile justice system.

Furthermore, though the focus group participants recognized the efficacy of counseling and rehabilitation services for less serious youth offenders, they emphasized the importance of expanding juvenile detention facilities to separate the more serious, dangerous, habitual juvenile offenders from society. It was believed by officers that providing more punitive

responses to juvenile crime, rather than just a 'slap on the wrist', would enhance the accountability among these youth while serving as a deterrent for others. One officer discussed this approach, saying,

“Again we want to try to the soft approach for the kids that it’s appropriate for. For the ones it’s just not working for know when to hold ‘em and when to fold ‘em and put them into a facility where they can’t hurt the rest of society. So we need a multi-pronged approach not just a counseling aspect.”

Finally, the focus group participants argued for the hiring of additional personnel within the across all stages of the juvenile justice system. They argued that the system is typically overwhelmed so the addition of personnel would increase the ability of law enforcement, courts and probation offices to manage the ever growing population of juvenile offenders in both an efficient and more effective manner.

Summary and Discussion

The analysis of the police focus groups and interview reveals that the participating officers overwhelmingly viewed disproportionate minority contact as a product of the differential offending patterns of minority youth. Officers across the agencies consistently identified familial, socioeconomic, and geographic factors within minority communities as a driving force in delinquency by minority youth and their subsequent contact with police. Inherent in the officers’ discussions was their belief that these factors were connected. Specifically, while a breakdown of family structure and associated factors (i.e. lack of parental accountability, discipline, and prosocial models) were the most common explanations for the differential offending of minority youth, it was typically noted that this family dynamic was more common in lower income, minority neighborhoods characterized by more calls for service and higher police presence. Overall, the officers’ message regarding the effects of differential

offending on minority youths' disproportionate contact with police and the juvenile justice system was clear: the convergence of familial, socioeconomic, and geographic factors within the same neighborhood context places minority youth at a disadvantage that persists from their likelihood of involvement in crime to their introduction and processing into the juvenile justice system.

The officers' broad explanations for the differential offending of minority youth and their disproportionate contact with police was mirrored in their expansive range of recommendations to reduce juvenile crime (and, potentially, DMC). As a whole, these recommendations fell outside of law enforcement, focusing instead on the capabilities of families, communities, schools, and later stages of the juvenile justice system to both prevent youth involvement in crime and effectively manage the behavior of delinquent youth. Ultimately, officers advocated for a holistic approach, targeting multiple areas in the lives of youth and, therefore, increasing the likelihood of making a positive impact.

Although only a few officers made comments regarding the influence of differential treatment practices on DMC, those who did provided significant insight. Specifically, officers pointed to several community, departmental, and individual factors that can impact outcomes for minority youth, such as public expectations of crime control in minority neighborhoods, the presence of underlying racial biases held by the community, the direction of law enforcement to city events and locations that have greater minority presence, and the inclusion of extra-legal factors in officer decision-making. Fundamental to these discussions was the fact that police departments and their officers are not impervious to the historical inequalities and social problems that face the communities they serve. As such, their conversations suggest the

importance of improving race relations and understanding both within communities and between police and community members. Furthermore, while several participants highlighted efforts, such as departmental checks, training, and emphasis on egalitarian values, to reduce differential treatment practices by officers, the rigor of these checks and consistency in training appears to be dependent on the size of the law enforcement agency and the financial resources available to the agency. In sum, the explanations provided by these few officers suggest that the differential treatment of minority youth persists in law enforcement, necessitating greater efforts to prevent such practices.

As a whole, the examination of these differential offending and differential treatment explanations demonstrate the importance of moving discussions regarding DMC away from accusations of outright racism or racial animus among law enforcement to the understanding of practices that might influence unconscious biases and DMC within the policing profession. As stated above, officers were generally adamant that their high rates of contact with minority youth is a function of the structural inequalities and overall disadvantages (i.e. family dynamic, SES) within minority communities which, in turn, are observed to produce minority youths' disproportionate involvement in crime and delinquency. However, it stands to reason, that certain policing strategies may influence officers' perceptions of the criminality of minority youth, affecting their extent of contact with this population (Smith & Alpert, 2007). For example, the concentration of police time and resources in lower income, minority communities (i.e. hot spots policing) was identified to increase officers' day to day experiences within minority neighborhoods, enhancing their exposure to minority youths' offending. Though not immune to the reality that crime is unevenly distributed within their respective

jurisdictions, officers' consistent experiences within disadvantaged, minority communities appeared to influence their development of stereotypes, and thus their perceptions of juvenile crime trends as well as officer discretion in their patrol. Specifically, several officers commented that their observations of heightened crime in minority communities motivates many patrol officers to spend time in these areas even when not explicitly directed by their superiors. Furthermore, conversations regarding the prevalence of repeat offending among minority youth highlighted that officers "know which juveniles to target" and that this knowledge typically directs them to the minority communities within their respective jurisdictions.

Given the impact of these deployment strategies on DMC, it is important to consider approaches that might prevent the introduction of racial biases in both departmentally-directed and individually initiated police contacts. In particular, it appears advantageous to monitor proactive policing approaches, such as hot spots policing, for unusual DMC activity. Furthermore, it is imperative to garner community support for these types of initiatives to maintain positive police-community relationships and to reduce perceptions of police use of racial profiling. As an added preventive measure, law enforcement agencies must incorporate training and other education concerning the effective management of youth and juvenile crime, the realities of DMC, and the influence of implicit biases. Notably, this education and training must be administered to all officers on a regular basis (i.e. beyond police academy education). Collectively, these suggestions, in combination with the recommendations outlined by officers above, can function together to address factors associated with both the differential offending and differential treatment explanations for DMC.

POOLED COURT INTERVIEW DATA ANALYSIS

We supplemented police, court, and facility data with 131 key informant interviews across thirteen counties in Ohio between February 2013 and July 2014. The majority of interviews were conducted with supervision and programming staff (60), but personnel from administrative (22), detention (14), and intake (10) departments were also included in the study. Additionally, efforts were made to interview community stakeholders and judicial actors with knowledge of efforts to address disproportionate minority contact in the court.

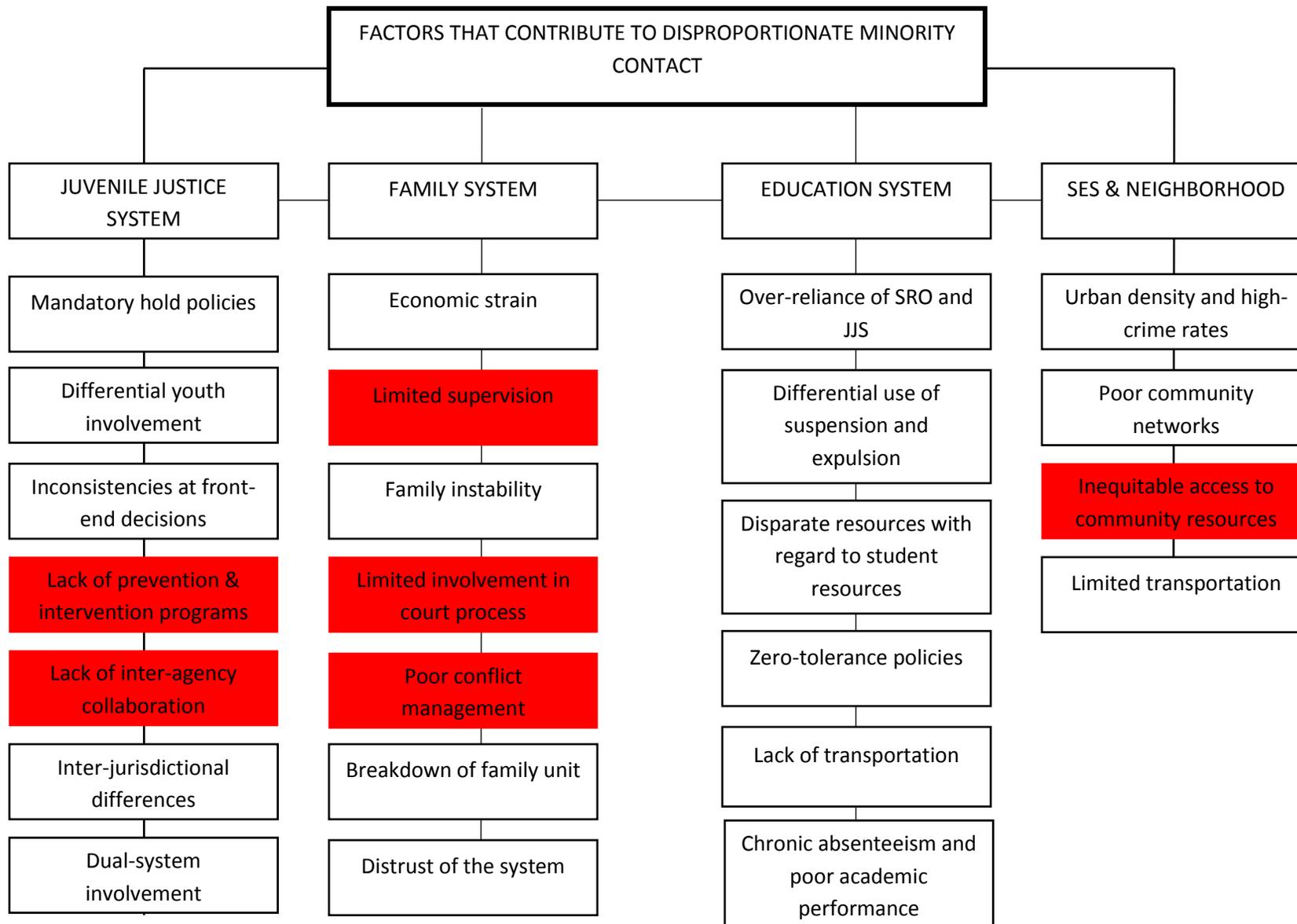
Factors that Contribute to DMC

While some staff reported disproportionate minority contact (DMC) was not a major issue in their courts (see Clark county, for example), respondent discussions overall suggested that system, education, family, and neighborhood factors contributed, at least in part, to DMC issues in Ohio. A summary of these factors is presented in Figure 8. Frequently recurring themes related to system, education, family, and neighborhood factors are highlighted and discussed comparatively in the summary below. Illustrative quotes and examples from individual county reports were also included to provide context and support key findings. Overall, responses tended to focus on how family-related and community risk factors contributed to disproportionate minority involvement across multiple contexts. The lack of inter-agency collaboration and the need for programming, particularly community-based programming, was also cited by staff as a strong contributing factor to DMC.

The System. Although opinions on how system-level factors contributed to DMC varied, respondents in every site mentioned resource constraints and the lack of prevention and intervention programs as contributing to the overrepresentation of minority youth in the

juvenile justice system. In particular, staff stressed the need for mental health, substance abuse, after-care, and re-entry programs to better meet the risks and needs of the youth that come into contact with the court. Although interviewees did describe some points of the system where disparities might emerge (e.g., detention), responses overall centered on the need for sustainable programs that address the risks and needs of youth across multiple domains, rather than on court-related decisions or policies aimed specifically at DMC. Similarly, there were relatively few comments or suggestions around custodial placement and bind-over decisions. However, at least some staff discussed the importance of “deep-end” practices/policies to address these issues (e.g., re-entry).

Figure 8. Factors that Contribute to Disproportionate Minority Contact in Pooled Court Interviews



Participants from eight of the participating counties attributed DMC in part to police decisions, and discussed calls for service and targeted enforcement areas as being important influences on where officers patrol and, by extension, encounter and/or apprehend delinquent youth. Others noted that the type and context of police-juvenile interactions were important considerations in arrest and processing decisions. Making this point directly, one staff member commented that the “attitude of the person making the arrest [and] the attitudes of the juvenile are related to disparities in the system.”

Some interviewees suggested that minority youth are more likely to be involved in serious, violent, and/or weapons-related offenses, and that the [differential] involvement of young, Black males in serious/violent crime is what contributes to DMC as opposed to the differential treatment of youth. Accordingly, staff from a number of court agencies regarded weapons and criminal history factors as important considerations in the decision-making process, particularly at the front-end of the system with referral and detention decisions. For example, when asked what contributes to DMC in the area one staff member explained that, “About half admitted on probable cause, most are male [and] African American, all are gun related...filed on concealed carry weapon.” Another interviewee stated that in their jurisdiction, “typically, youth are detained for armed robbery (weapons), domestic violence, and violations charges and are African American.” This is in large part because these youth commit “most of the charges” and are “repeat offenders.”

Respondents recognized the importance of inter-agency collaboration with law enforcement and treatment agencies to address these issues, and suggested the need for holistic, integrated approaches. One staff member noted that “[Criminal Justice] agencies are

not pro-active” and “not much has changed with regard to system-reform.” A second interviewee from that agency mentioned that “constituents need to be open, honest, and more willing to engage in change efforts.” As noted below, explanations of how education, family, and community factors contribute to disproportionality also offered further insight on the need for various stakeholders to work together to reduce delinquency and DMC.

The Educational System. System actors varied in their responses to key questions, but generally recognized the significant role that schools play in the prevention and, in some cases, escalation of juvenile offending. Opinions focused on the failure of schools to adequately serve and educate minority youth (e.g., differential use of suspension and expulsion, zero-tolerance policies) or the failure of minority youth to fully participate (or engage) in the education system (e.g., chronic absenteeism and truancy). One interviewee mentioned that, in some instances, behavioral problems are unnoticed until something occurs in school and that officials “may file a case,” which leads the youth to contact with the juvenile justice system.

Butler, Clark, and Trumbull counties rated the education system as not contributing or only slightly contributing to school disengagement and DMC, however. Conversations with these staff identified potentially promising approaches like Truancy Intervention and diversion programs (e.g., Butler and Trumbull county) to address school misconduct.

The Family. Staff identified familial issues as contributing to DMC, but also noted how perceptions (or misperceptions) of family might interact with the court’s operations and recommendations for intervention. This incorporates elements of differential treatment in explanations of disproportionate minority contact. Making this point directly, one interviewee mentioned that court actors “rely on perceptions to make decisions, particularly regarding

family dynamics/structure, dress, and demeanor...single mother families [may be] perceived to less capable in providing supervision.” Another staff member in a later interview commented that these issues can be a “challenge to this court as we label/stereotype of (sic) race as soon as they walk through [the] door.” This respondent went on to mention that s/he does not even refer to certain programs/caseloads “because they are racially unaware and culturally ignorant.”

Like police officers, court staff perceived youth as being more vulnerable to or at greater risk for juvenile justice involvement when they came from unstable homes with poor family management, limited supervision, and discord. Staff also discussed how the breakdown or weakening of the family unit contributed to the overrepresentation of minority youth and justified court intervention. Respondents across various counties echoed this point. When asked a question about the role that family plays in decision making, one stated that they have a “direct impact” as their “dynamics should be taken into account at disposition.” S/he went on to mention that some families lack the skills to handle their children and therefore shift them to the court. In other cases, the respondent suggested that families indirectly or directly supported their child’s behavior and attitudes, using an example of a parent who supported the youth’s theft of an Ipad from another child.

Another interviewee stated that,

“Family participation is key to success, [but] one of our biggest obstacles is engaging them. If nothing changes within environment, how successful can a youth with new skills be? In general this is something the system struggles with.”

This interviewee then mentioned situations where the youth would come back to

court and treatment staff and identify a conflict between the skills they had recently worked on and the fact that they did not receive much support or reinforcement from their family. In turn, that led them to return to their previous way of doing things. This was succinctly described by another respondent who said, “a lot of times youth behavior is a reflection of parents’ behaviors and experiences at home” and “the support system will always contribute to [the] success of the youth.” S/he then went on to tie that to youths’ experiences in the court by noting their belief that some parents “push for formal prosecution because [it is] easier to just get through court than diversion.”

These comments seemingly reinforce the notion that youth and their families are uncooperative or resistant. Other interviewees in several counties, however, identified economic strain and distrust of the juvenile justice system as contributing to family risk and potential pathway into the juvenile justice system. They reasoned that “families, particularly minority families living in disadvantaged areas, lack the resources to fully engage,” or they experience multiple problems related to financial stressors, experiences of violence, or substance abuse that affect their ability to engage in the court process. One mentioned that the families on their docket “struggle in every element.” “Suspicious about the intentions of the court” were also thought to further discourage families of system-involved youth from participating in the court and treatment process. Specifically, staff in two counties discussed how families’ mistrust of the system impacted the court’s recommendations and level of involvement stating,

“Though resources are limited, this is not the county’s biggest issue or barrier. Instead our biggest issue is families’ lack of trust in the court and its services,

and reluctance to engage with the court and its staff. Consequently, our approach is not working. We must implement more intensive, home-based services like ‘wraparound.’ We need to have the resources to go to them and work around their schedules, rather than ask that they come to us.”

“Cultural differences are an important factor. Families, particularly minority families, have difficulty relating to staff. It’s important they feel comfortable, and that staff are empathetic to their needs. That’s part of our job.”

Despite the challenges of working with families of youth involved in the system, staff encouraged parental involvement based on the perception that youth would be more compliant/successful under court supervision, and that actively engaged parents are more likely to prevent (or at least disapprove of) antisocial, deviant behavior. Discussing intensity of supervision or treatment, one respondent stated that their court “gauge[s] family involvement/role at day one and adjust[s] the levels accordingly.” Another court staff member commented,

“If parents/guardians are willing to cooperate and are able to provide adequate living conditions then the magistrate is more likely to release the juvenile to the community [under] intensive [supervision] (unless the charge is too severe or violent in nature).”

Finally, after indicating that family plays a “very important” role in decision-making, another interviewee stated that,

“Kids won’t be successful without a support system. If they cannot understand their systems, risks, or needs, they can’t assist in their own treatment. Without parental support, we just waste money and disservice the youth.”

Socioeconomic Status and Community Disadvantage. Staff linked high resident turnover (or transiency), an increase in single-parent, disrupted households, higher rates of unemployment, higher likelihood of crime in densely populated neighborhoods, and exposure

to antisocial peers, gangs, and weapons to disparate levels of juvenile justice involvement between Non-White and White youth. Differential access to community resources, (e.g., transportation, healthcare resources, poor housing) and the lack of social opportunities (e.g., lack of pro-social networks or organizations) in urban neighborhoods were also linked to poor adolescent development and disproportionate minority contact by the majority of staff who were interviewed. Although explanations varied by site, system actors in all thirteen counties agreed that poverty, and the poverty-related circumstances described above, contributed to the overrepresentation of minority youth in the juvenile justice system. Connecting the lack of public and private resources to delinquency and DMC directly, one staff member explained that many of the youth and their families have struggled with the recent downturn in the economy that has brought job losses for adults and elimination or cut-backs in public programming and job opportunities for teenagers. After judging the impact of SES on DMC to be “tremendous,” another staff member note that “when people struggle they make poor choices.”

Respondents in other counties stated explicitly that poverty contributes to DMC, especially through activity patterns and public behavior that may precipitate crackdowns on crime in particular areas. These themes echo the comments made by focus group and court participants about the potential trade-off between public safety concerns and DMC that emerge from area-based enforcement strategies. They also reflect perceptions of “root causes” of differential offending that, in turn, factor into explanations of DMC.

Strategies to Address and Reduce DMC

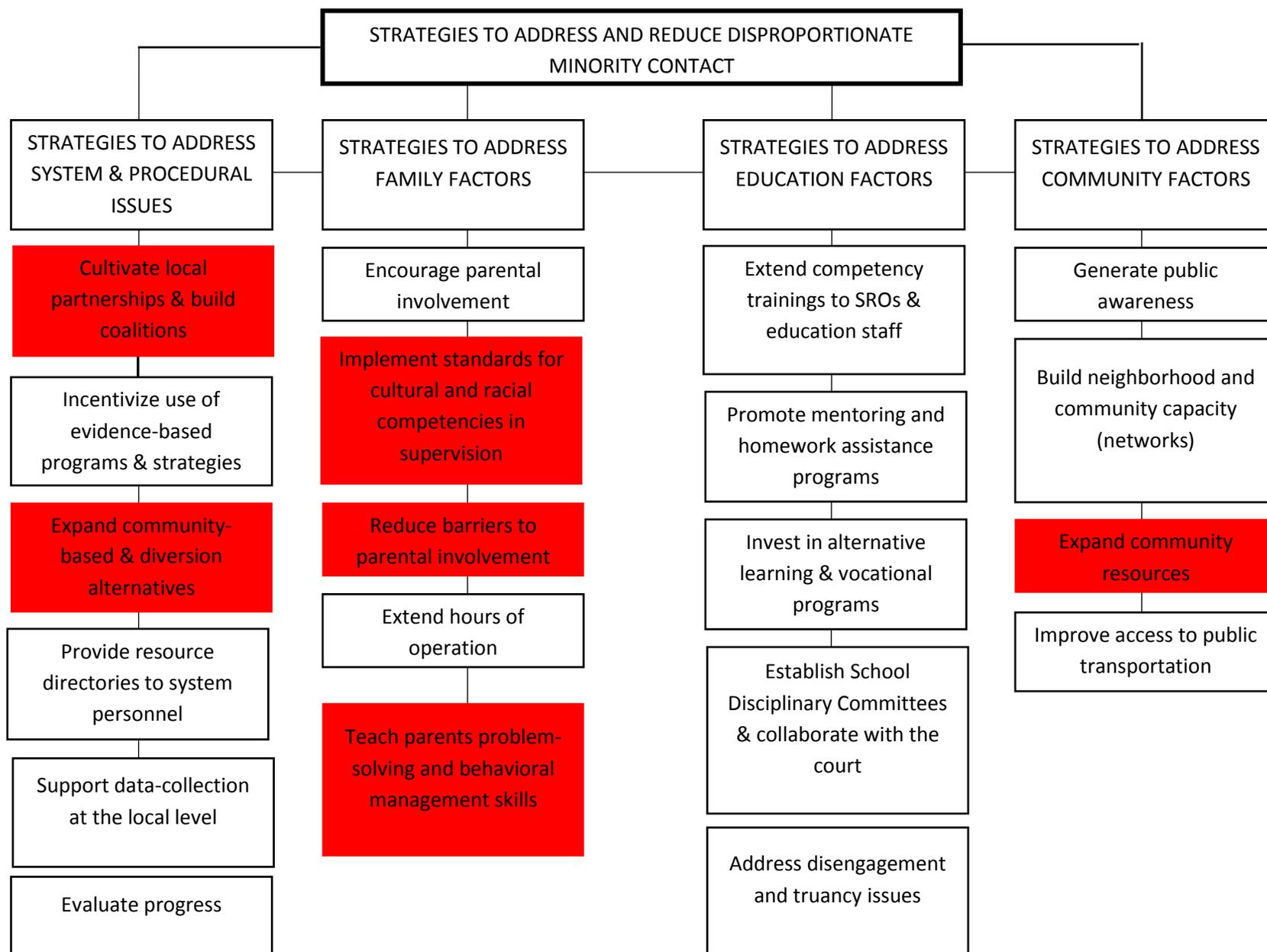
Interview participants identified modifications that would both improve the system and deal with DMC issues in Ohio. In particular, they highlighted the need to foster multi-faceted

and collaborative strategies with community and justice agencies. Responses also focused on strategies aimed at reducing court referrals and family-focused interventions as promising approaches to reduce DMC. A list of potential strategies in each of these domains—system, family, education, and neighborhood—are presented in Figure 2. These strategies were grouped to correspond to the different dimensions of explanation that were highlighted in Figure 1 and the overview of results. Frequently recurring themes are highlighted and discussed comparatively in greater detail below.

Strategies to Address System and Procedural Issues. As noted above, most court officials attributed DMC to the limited number of community-based intervention and prevention programs, and stressed the need (or, the expanding need) for mental health, substance abuse, and re-entry services to meet the risks and needs of youth involved in juvenile justice system. Others at Butler, Franklin, Mahoning, and Trumbull identified the need for gender-responsive programs such as Girls Circle by One Circle Foundation to meet the risks and needs of at-risk females. Interviewees also mentioned broader reform efforts, including the development of alternatives to arrest, the consistent use of structured decision-making tools such as the Ohio Youth Risk Assessment System (OYAS), and cross-agency cultural diversity and communication training as important future steps to address and reduce disproportionate minority contact in Ohio. In particular, staff discussed how cultural competency trainings, the implementation of evidence-based community services, the re-allocation of funding, and hiring of culturally diverse staff alleviated some DMC issues in Stark County. Participants in Lucas County emphasized the benefit (and continued need) for the Intake Assessment Center and the use of “pocket cards” to help officers identify detention guidelines and possible alternatives in the

jurisdiction. Similarly, Hamilton County suggested having “a call system” to remind parents of their child’s court date and the expansion of local placement alternatives as a useful strategy. One interviewee suggested that this relatively simple program, staffed by college interns, was useful in reassuring magistrates that youth and their families would appear before the court as required, which, in turn, freed them to leave more youth in the community, opposed to detention. Trumbull County discussed an Intensive Community Probation program as a way to reduce violations.

Figure 9. Strategies to Address and Reduce Disproportionate Minority Contact in Pooled Court Interview



Respondents also recognized the need to work collaboratively to enhance the quality of interventions, build capacity for reform, leverage resources, and forge partnerships with mental health, academic, and child-welfare agencies to temper existing DMC problems. In Cuyahoga County, for example, staff identified partnerships with school (e.g., early intervention strategies to identify behavioral issues and at-risk youth), police (e.g., Project STANCE and arrest reduction strategies for unruly youth), and social service agencies (e.g., de-escalation housing and the Tapestry Care pilot project) to address these issues. Staff members in Allen and Summit County also recognized that inter-agency collaboration is key and referenced the importance of the Court Assessment Service Team (CAST) and Family Resource Center (FRC) in their jurisdictions. Others identified the potential of partnerships with large-scale philanthropic organizations like the Annie E. Casey Juvenile Detention Alternatives Initiative (JDAI), Catherine MacArthur Foundation's Model for Change, and W. Haywood Burns Institute (BI).

Some respondents suggested that data review and decision-point mapping were important factors in their response to DMC problems. For example, data were gathered on a quarterly basis by Montgomery County to assess the extent of DMC at arrest and processing decisions. In response to this, the court implemented the Disproportionate Minority Contact Diversion Program (DMC/DP). Similarly, the Hamilton County Juvenile Court developed a structured protocol to guide detention decisions after a review of discretionary, pre-adjudication detention and detention override decisions. Assessment and automatic hold policies were also highlighted as areas that need to be continually examined and reviewed.

Strategies to Address Educational Issues. Respondents listed several initiatives to address DMC and improve youth outcomes. At least some of these were meant to occur in

conjunction with the court and/or as part of broader collaboration with the community at-large. Examples provided by staff included, tracking and reviewing school truancy and misconduct data as an early indication of risk; providing mentoring and homework assistance programs; and extending cultural competency and classroom management trainings to education staff and School Resource Officers (SROs). Further, respondents noted disparities with regard to school resources and teacher qualifications in urban school districts, and encouraged the expansion/allocation of resources to disadvantaged schools—particularly in areas (or districts) that are predominately minority.

Strategies to Address Family Issues. Suggestions on how to address family factors and reduce DMC focused on teaching parents/guardians problem-solving skills and strategies to reduce barriers to parental involvement. Suggestions included having flexible or evening hours of operation, waiving excessive court and service fees, surveying parents on areas of strength and areas for recommendation in court practices, as well as developing culturally competent programs to increase family participation and engagement. Specifically, staff focused on the need to implement cultural and racial competencies into existing court and supervision protocols. It was also recommended that agencies work to reduce long wait-lists, and that staff increase their use of verbal praise and positive reinforcement (e.g., bus tokens or gas cards) to increase motivation and engagement among family members.

Staff in Montgomery County, for example, “encourage families to be as involved as possible by explaining the visitation process and extending their service hours so that parents don’t have to take off work.” Respondents in Clark, Lorain,

Mahoning, and Summit County highlighted the benefit of family-focused interventions like Strengthening Families Program (SFP), Family Therapy Intervention Pilot (FTIP), Project JERICHO, and wraparound to prevent delinquency and address DMC issues. Discussing the potential benefit of culturally-responsive family services in the court, a provider in one county explained that “[Minority] families begin to see their case manager as a trusted advocate” and this helps drive other improvements in behavior, attitudes, and linkages to additional services and community organizations.

Strategies to Address Community Factors. Respondents described educational, familial, and behavioral factors as subsumed by the broader implications of low socioeconomic status. In particular, staff discussed the economic strain of families living in poor, urban areas, and pointed to the potential impact of such constraints on youth’s progress and/or compliance within the court. For example, interviewees in Hamilton County suggested fiscal constraints impact parents’ ability to take off work and be “fully engaged” in the process, which, in turn, may have an impact on decision-making and perpetuate DMC issues. Similarly, respondents discussed how differential access to community and government resources impacted DMC, and recognized the need for programs (or centers) that engage community organizations and faith-based networks. Recommendations also centered on the need for community mentors (or, volunteers) and recreational activities such as sports leagues to engage and motivate youth. They argued that these types of programs can provide prosocial alternatives to crime that work to keep youth busy, supervised, and out of trouble.

Summary of Key Findings

While some staff reported disproportionate minority contact (DMC) was not a major

issue in their courts, the majority of interviewees thought it was a problem—at least to an extent and suggested that system, education, family, and neighborhood are contributing factors. Some respondents did discuss the idea of cultural competence or consider how a youth’s trajectory through the system can be affected by factors out of their control (e.g., perceptions of their parents). Court personnel, like police, were reluctant to explicitly discuss the decision-making process and factors related to the system as contributing to DMC. Staff tended to focus more on broader issues or “other factors” that may lead youth to the system, rather court-related policies and practices. This is consistent with the perception that differential offending is the main cause of DMC, but allows for the possibility that minority youth are more likely to reach the juvenile justice system due to front-end decisions in communities and schools. Still, they did note that some aspects of court processing—such as perceptions and relationships of families—can affect case outcomes in a way that disadvantages minority youth.

Responses to the question(s) about what could be done about DMC appear to focus on two key areas of emphasis. First, many interviewees discussed the need for collaborative response to the juvenile delinquency and the problems that come with it (like DMC). These collaborations were thought to require courts, police, social service agencies, schools, families, and community members. This is consistent with the idea that this is a multifaceted problem that cannot solely be dealt with by the juvenile justice system. Second, court staff in these 13 agencies identified the need for increased resources to develop or expand programming that may be effective in dealing with this problem. This included public-private partnerships like JDAI and also localized efforts to expand the options available to court decision-makers or

break down barriers to effectively engage families in the juvenile court process to the benefit of youth.

4. COUNTY-LEVEL ASSESSMENT RESULTS

We first present results for each of the thirteen counties involved in the Ohio DMC Assessment project. In general, we followed the procedures highlighted in the previous section of the report, but mention specific aspects of the data collected at each site in their respective reports. We also describe any important barriers to full data coverage in those sites. We provide a summary and discussion at the end of each sub-section and for the sites themselves. We also provide a table at the end of each county section that summarizes its relevant findings, observations, and implications for further policy and practice. The counties are presented in alphabetical order; appropriate page locations can be identified in the report's Table of Contents.

ALLEN COUNTY, OH

Allen County Police Agency Data

Description of Allen County arrest data. In September of 2012, the UC research team contacted the Allen County Sheriff's Department (ACSO) and the Lima Police Department of Clark County. These agencies were identified by Ohio DYS as part of the DMC Assessment RFP. A formal letter outlining the purpose of the study and the data requests were sent to the head of each agency in September of 2012. Multiple attempts to engage these sites were made by project staff following our initial contact. In April of 2013, the ACSO and the Lima Police Department agreed to participate in the study and submitted arrest data. The findings from the

analysis of arrest records from these two agencies are discussed below. Table 18 below displays the basic arrest characteristics for juvenile arrests from these two Allen County locales.

Table 18. Basic Characteristics of Arrested Juveniles in Locations with Available Data

	Allen Co. Sheriff (N=513) Valid % (N)	Lima PD (N=812) Valid % (N)
Race		
White	73.5 (377)	35.3 (285)
Black, AA	26.3 (135)	64.7 (523)
Multi-Race	0.0 (0)	0.0 (0)
Other	0.2 (1)	0.0 (0)
Sex		
Male	59.3 (304)	74.1 (601)
Female	40.7 (209)	25.9 (210)
Age		
Mean	15.61	15.78
Median	15.98	16.17
Standard Deviation	1.80	1.69

Table 19 below displays the 2010-2011 Relative Risk Index (RRI) values for Lima PD.

Overall, the findings suggest that disproportionality in arrests of minority youth may be an issue in the Allen County locale of Lima.¹⁹

Table 19. Preliminary Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority/ White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Lima PD	0.14	0.39	0.30	2.88*	2.14*	4.07* (3.45–4.81)	2.61* (2.22–3.06)

Note: Cannot calculate probability of arrest or RRIs for Allen County Sheriff.

pArrest stands for the proportion of arrests in that group relative to population numbers derived from 2010 US Census. **RRI** stands for “Relative Risk Index” computed based on the proportion of youth in the Minority group arrested compared to the proportion of White. **OR** stands for “Odds Ratio” which

¹⁹ The nature of Census data does not allow us to create accurate estimates of RRI values or probabilities of arrest for ACSO.

captures the likelihood of arrest/not arrest for youth in the Minority group compared to that of White race/ethnicity. This value allows for significance testing and construction of confidence intervals (*CI*).

**RRI* greater than 1.20 Threshold or *OR* that is statistically significant at $p < 0.05$

Allen County Sheriff's Office. Allen County Sheriff's Office houses files on juvenile arrests made by agency deputies. ACSO delivered the requested data files to the UC research team in 2013. The files contained youth arrest records for 2010 and 2011, but with limited offender and offense-level data fields. The UC research team entered the data files into a data management software program for storage and analysis. Basic offender characteristic and offense-level information were provided for all juvenile arrests in the aforementioned timeframe. Listed below are the available predictors:

- Race
- Sex
- Age
- Most Serious Offense Category
- Most Serious Offense Level
- Number of Offenses

Basic description of cases. There were 513 juvenile arrests made in the jurisdiction patrolled by ACSO between 2010 and 2011. White youth accounted for nearly three-fourths of all juvenile arrests made by ACSO ($N=377$; 73.5%). ACSO arrested a smaller percentage of Non-White youth during the same timeframe ($N=135$; 26.3%). ACSO made one arrest involving a youth whose race is classified as 'other' between 2010 and 2011 (i.e., 0.2% of all arrests). Males accounted for the majority of juvenile arrests made by ACSO ($N=304$; 59.3% of total arrests). The average age of youth arrested by ACSO was 15.6 ($SD=1.8$).

Report on *RRI* and odds ratios. As previously noted, we were unable to create estimates of the Relative Risk Index or probabilities of arrest for ACSO due to the nature of Census data. However, the population figures for Allen County were noted and compared to

the prevalence of minority youth represented in the arrest data for ACSO.²⁰ In 2010, there were 11,601 youth ages 10-17 years old in Allen County, Ohio. Of those, 78.4 percent (N=9,091) were White compared to 14.2 percent (N=1,652) African-American. In Allen County, 73.5 percent of juvenile arrests involved a White youth compared to 26.3 percent of arrests that involved an African-American youth.

Analysis of key case characteristics by race/ethnicity. Table 20a below contains the analysis of explanatory variables by race for the two agencies in Allen County. Most serious offense category is the only statistically significant explanatory variable when examined by race ($\chi^2=13.67$; Cramer's V=0.16). A greater percentage of arrests for violent/sex offenses involved White youth compared to Non-White youth (27.3% and 19.1%, respectively). Conversely, arrests for property offenses were significantly more likely to involve a Non-White youth (N=58; 42.6% of Non-White arrests) compared to White youth (N=99; 26.3% of White arrests). The strength of this relationship indicates that there is a somewhat weak association between race subgroups and most serious offense category, suggesting that is not all that predictive of the difference. Although not statistically significant, arrests for misdemeanor and status/unruly offenses were more likely to involve Non-White youth (30.0% and 61.4%, respectively) compared to White youth (27.9% and 56.7%, respectively). Additionally, arrests for a single offense were slightly more likely to involve Non-White youth (94.1%) in comparison to their White counterparts (89.1%).

²⁰ The census population data for Allen County are inclusive of all locales located within the county, but there are also local police departments within the county. Therefore, these figures should be examined with caution when compared to the prevalence of minority juvenile arrests in the data set.

Table 20a. Arrest Characteristics by Race Subgroups – Allen County Sheriff’s Office

	White % (N)	Non-White % (N)	χ^2 V	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	27.3 (103)	19.1 (26)	13.67*	0.0
Property	26.3 (99)	42.6 (58)	0.16	
Drug/Alcohol	4.2 (16)	2.2 (3)		
Other	4.2 (16)	4.4 (6)		
Status/DC	37.9 (143)	31.6 (43)		
<i>Most Serious Offense Level</i>				
Felony	15.4 (38)	8.6 (6)	2.12	38.2
Misdemeanor	27.9 (69)	30.0 (21)	.08	
Status/Unruly	56.7 (140)	61.4 (43)		
<i>Number of Offenses</i>				
1	89.1 (336)	94.1 (128)	4.39	0.0
2	8.2 (31)	2.9 (4)	0.09	
3+	2.7 (10)	2.9 (4)		

* statistically significant at $p < 0.05$

Lima Police Department. Lima Police Department stored electronic file records on juvenile arrests. The UC research team was provided with basic offender and offense-level information on juvenile arrests between 2010 and 2011. After the data were delivered to UC staff, they were transferred to a data management and analysis program. Basic offender and offense-related characteristics were collected for all juvenile arrests between 2010 and 2011.

The list below contains the key indicators used in the analysis:

- Race
- Sex
- Age
- Most Serious Offense Category
- Most Serious Offense Level
- Number of Offenses

Basic description of cases. There were 812 juvenile arrests in Lima between 2010 and 2011. Of those, the majority of arrests involved African-American youth (N=523; 64.7%) in

comparison to White youth (N=285; 35.3%). Males accounted for the vast majority of juvenile arrests (N=601; 74.1%). The mean age of youth arrested in Lima is 15.78 (SD=1.69).

Report on RRI and odds ratios. Based on the 2010 U.S. Census, there were 3,919 youth ages 10-17 in Lima. Of those, 53.9 percent of youth ages 10-17 are White compared to 46.1 percent Non-White. African-American youth account for 34.3 percent of the total youth (i.e., ages 10-17) population in Lima. When comparing the arrest records and the population figures, African-American youth and all minority youth (including African-American youth) have a greater proportion of arrests (0.39 and 0.30, respectively) compared to White youth (0.14). Further examination of these proportions revealed that the Black/White RRI and Minority/White RRI values exceed the threshold established by Ohio DYS and OJJDP. These findings indicate that there is an appreciable difference between the proportions of minority youth (and more specifically, African-American youth) arrested compared to the proportion of White youth. Lastly, both the Black/White and Minority/White odds ratios are statistically significant at $p < 0.05$. This suggests that there is a low likelihood that these differences would emerge if the groups' relative risk of arrest were actually the same. The odds of an arrest record involving an African-American youth were 4.07 times greater than the odds of White youth. Furthermore, arrest records were 2.61 times more likely to involve a minority than a White youth.

Analysis of key case characteristics by race/ethnicity. Analysis of case characteristics revealed one statistically significant finding (see Table 20b below). Most serious offense category differed by race subgroup ($\chi^2=20.63$). A greater percentage of arrests for violent/sex crimes involved White youth (31.2% of White youth arrests) compared to Non-Whites (18.6% of

Non-White arrests). Conversely, a greater percentage of arrests for status/unruly offenses involved Non-White youth (41.8%) compared to their White counterparts (31.6%). The measure of association indicates that there is a weak-to-moderate relationship between race subgroups and most serious offense category (Cramer's V=0.16). Most serious offense level by race level was not statistically significant. Although not statistically significant, there were subtle differences in the number of offenses by race subgroup. For example, arrests involving 2 or 3+ offenses were more likely to involve Non-White youth (18.4% and 9.6%, respectively) compared to White youth (13.3% and 7.4%, respectively).

Table 20b. Arrest Characteristics by Race Subgroups – Lima PD

	White % (N)	Non-White % (N)	χ^2 V	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	31.2 (88)	18.6 (97)	20.63*	1.0
Property	13.8 (39)	16.3 (85)	0.16	
Drug/Alcohol	9.2 (26)	6.7 (35)		
Other	14.2 (40)	16.7 (87)		
Status/DC	31.6 (89)	41.8 (218)		
<i>Most Serious Offense Level</i>				
Felony	9.0 (17)	9.0 (41)	0.12	20.6
Misdemeanor	43.6 (82)	45.1 (206)	0.01	
Status/Unruly	47.3 (89)	46.0 (210)		
<i>Number of Offenses</i>				
1	79.3 (226)	72.1 (377)	5.10	0.5
2	13.3 (38)	18.4 (96)	0.08	
3+	7.4 (21)	9.6 (50)		

* statistically significant at p<0.05

Summary of police agency records in Allen County. African-American youth account for the majority of juvenile arrests in Lima (64.7% of arrests). This, however, is not the case for the ACSO arrests (African-American youth account for 26.3% of arrests). When considering the

RRI and odds ratio values, it appears that disproportionality of minority arrests may be an issue in Allen County. This is especially true for African-American youth in Lima. Although we could not compute these values for ACSO due to data limitations, a simple comparison of the population data and the arrest records suggest that African-American youth are overrepresented in the arrest records. It appears that in both jurisdictions patrolled by Lima PD and ACSO, arrests of minority youth were more likely to involve property and status/unruly offenses in Lima, and property offenses in Allen County. While these data are somewhat limited, this analysis provides several interesting findings that warrant further examination at later stages in the justice process. In particular, the differential in status offense arrests in Lima is fairly pronounced.

Allen County Focus Group Analysis

Overview. UC Researchers conducted one focus group session in Allen County in March of 2013. The department was described as small in size and served fewer than 50,000 residents. Eight law enforcement personnel, ranging between 3 and 28 years of experience, participated in the focus group session. Participants included officers from the Juvenile and Detective Bureaus, as well as officers from all three shifts of patrol. The focus group session lasted approximately 80 minutes.

Findings. Focus group participants identified several potential causes of disproportionate minority contact (DMC) in the jurisdiction. Responses focused on differential offending patterns as contributing to DMC rather than differential treatment in the juvenile justice system. In fact, participants offered no explanations that suggested the differential treatment of minority youth by officers within the department.

Differential offending. Focus group participants consistently identified differential offending patterns among minority youth as the primary explanation for DMC in the area. These explanations emerged from officers' discussions following the presentation of DYS arrest statistics that indicated the overrepresentation of minority youth. However, officers provided further support for these explanations through their commentary on juvenile crime trends in their jurisdiction, as well as through their observations regarding factors that contribute to juvenile crime.

Overall, officers argued that they come into contact with minority youth at a higher rate than White youth because minority youth commit the majority of crime in the jurisdiction including, minor and serious offenses. Specifically, officers attributed an increase in police contact with minority youth to chronic (or repeat) status offenses in the area (i.e., minor offenses) and suggested that the prevalence of repeat offenders among minority youth contributes to DMC at the front-end of the system. Additionally, participants indicated that minority youth commit more violent and firearms-related offenses. Officers suggested that, in addition to increasing their likelihood of coming into contact with police, the prevalence of violent offenses among minority youth impacts their processing within the juvenile justice system, often increasing DMC at later stages of the system. Ultimately, officers within this focus group attributed the differential offending patterns of minority youth and their subsequent contact with police to both geographic and family related factors. Their perceptions about the influence of these factors on DMC are presented below.

Geographic location. This concentration of policing in minority neighborhoods was identified as a response to the prevalence of offending among minority youth and the calls for

service generated from these high crime areas. Specifically, officers observed that more calls for service come from minority dominated neighborhoods, where residents appear to rely on police more heavily than residents living in primarily White neighborhoods. The higher number of calls for service from minority residents was observed to directly impact police contact with the juvenile population. Explaining the influence of calls for service on arrests, one officer stated that they “get called more to handle situations for minorities than we do White people. That is why minorities get arrested more” He went on to say that if calls were split 50-50 then the arrest levels would be equal.

Officers also described proactive policing strategies, especially “hot-spot policing”, as contributing to DMC. The officers explained that, on a daily basis, their supervisors direct the majority of patrol officers on shift to higher crime areas that are predominately minority. According to participants, these areas were identified using crime statistics, calls for service, and crime mapping techniques. Throughout the focus group session, it was suggested that this proactive policing style increases the likelihood of patrol officers coming into contact with minority youth, ultimately contributing to DMC in the local area.

Family factors. In addition to the geographic factors, officers pointed to family-related factors as contributing to DMC, and linked home environment and familial influence to differential outcomes. In particular, officers identified a lack of prosocial models in the lives of minority youth, the lack of accountability among parents in their jurisdiction, and the lack of discipline in many minority households as factors that increase the likelihood of minority youth coming into contact with police. Furthermore, officers pointed to the influence of the foster

care system on the traditional family structure in minority communities, indicating that high levels of police contact with foster youth and DMC are directly related.

Lack of prosocial models. Officers also observed the prevalence of absentee parents, younger people having children, and the subsequent breakdown of the traditional family structure in minority neighborhoods as contributing to DMC issues. Personnel suggested that the absence of positive male role models in the lives of minority youth deprived youth of important types of guidance and support in their formative years. Consequently, staff believed that youth learn that crime is a necessary and/or advantageous way of life. One officer commented that minority youth often don't have family structure to "teach them right from wrong," and then noted that police sometimes deal with their parents "since they were juveniles." Other officers echoed this theme, and suggested that youth learn (or imitate) antisocial or violent behavior from their parents. Officers observed intergenerational offending patterns with most families in the area, and commented that it was not surprising "so many minority youth turned to crime." While discussing reports of violence and aggression among minority youth in schools, one officer commented that it was difficult to handle parents in some cases and that those kids are "taught from day one to hate police and don't take shit from nobody."

This seemingly reinforces the notion that families contribute to DMC, and are a potential pathway into the juvenile justice system. Alternatively, officers considered the lack of prosocial role models in decision-making. Several patrol officers mentioned that they often feel obligated to fill the role of a mentor and/or 'father figure' to minority youth in the jurisdiction. However, this type of informal interaction with youth is typically unappreciated by the minority

community and reprimanded by their department. Officers discussed how the repercussions of their informal interactions with youth make them less inclined to give youth a break. When asked if officers in their department are willing to act as mentors to youth in their jurisdiction, one officer responded, “not anymore.” This officer then stated that it was difficult to give kids a break now and easier to handle things formally.

Lack of accountability among parents. Disproportionate minority contact with police was also argued to be a product of the lack of accountability among the parents of minority youth. Several officers identified that many youth in minority communities come from households where parents are unavailable or uninterested in being actively involved in the lives of their children. Specifically, participants discussed how the lack of parental involvement in the lives of minority youth often constrains the decision-making of key actors across the justice system. For example, patrol officers within the focus group described that, when a youth is formally encountered, the officer involved is forced to stay with them until a responsible adult is found to release the youth to. The group explained that this often results in officers ‘babysitting’ minority youth over several hours because there is no adult available to claim the youth in custody. Therefore, these youth are typically formally held for longer periods of time compared to White youth whose parents are typically readily available.

Officers also pointed to effects of parenting and family structure on later points in the juvenile justice system. In one instance, while commenting on the importance of parental involvement in the outcome of juvenile court decisions, one officer recounted, “I had a detention hearing yesterday and the parents didn’t even show up for it, so we had no choice

we had to keep the kid. I think he should be kept anyways, but his parents didn't even show up.”

Furthermore, officers observed that, following their initial introduction to the juvenile justice system, minority youth often miss out on beneficial program and service opportunities because they require the participation of their parents. While many youth within such programs are assigned to counseling, treatment, and are often permitted early release, youth excluded from these services due to lack of parental involvement typically experience more formal means of contact with the juvenile justice system (e.g. detention, house arrest). Officers consistently commented that the instability in many minority households and the related lack of accountability among parents within these homes results in the overwhelming representation of minority youth receiving these more formal outcomes.

Lack of discipline. Officers further explained disproportionate minority contact as a result of the lack of discipline provided within minority households. Participants frequently mentioned their belief that minority parents over rely on police to handle both the minor and more serious problems concerning their children's misbehavior, thus increasing police contact with these youth. In contrast, parents within White households were described as more willing to provide punishments for their children's delinquency, handling issues with misbehavior in a more informal manner. One officer highlighted his/her experiences within these different households, exclaiming, “How many times do you go out to an unruly, and it's the minorities compared to the Whites, and it's not anything serious?” The officer went on to describe situations where youths would engage in minor behavioral issues not cleaning their room and

the fact that the “police department caters to them [those parents].” Another argued that these residents have a lot of distrust for the police, but still “call more.”

Foster care. Finally, in their discussion of DMC, officers pointed to the high number of youth within minority households. Specifically, officers identified that within minority communities there are typically more youth per home than in White communities. These officers suggested that the larger number of children per household reflects the minority population’s use of children as a source of income. This mentality among residents in minority communities was also thought to drive the high number of families taking in foster youth. Ultimately, the officers suggested that the number of youth within minority household combined with the ineffective parenting skills (see familial factors above) increases the likelihood of police coming into contact with youth from these communities.

Officers also discussed that many of the repeat minority offenders they come into contact with are foster children relocated from other, larger cities across Ohio. It was commented that, after committing several more serious crimes, these youth are moved to households within their jurisdiction in hopes that being placed in a new environment will stem their offending. Instead, it was observed that these youth begin networking and become a significant problem for police, ultimately increasing DMC within their jurisdiction. Overall, participants suggested that the number of delinquent youth within the home combined with the familial factors observed in minority households perpetuates the overreliance on police to handle problems with youth, increasing officer contact with this population.

Recommendations to reduce juvenile offending and DMC. Given the emphasis on family factors throughout the focus group discussion, officers’ suggestions regarding ways to

reduce juvenile crime and DMC largely focused upon getting parents more involved in the lives of youth. Specifically, officers suggested the efficacy of family counseling in alleviating some of the problems occurring within the home environment of youth. The group believed that addressing these issues was the first step to modifying the differential offending patterns among minority juveniles. In addition to counseling, several officers suggested the need for communities to offer classes in effective parenting. It was proposed that these types of classes would be particularly helpful for the increasing number of teenage parents within their jurisdiction.

In response to the lack of parental involvement typically observed in minority communities, officers suggested incentivizing participation in programs and counseling (e.g. denying financial assistance to parents who refuse to participate without cause). Furthermore, officers emphasized the need for follow up on all counseling and services to increase the likelihood that these types of programs will have an enduring effect.

Beyond addressing the family factors outlined above, officers within the focus group consistently identified the need for reform in the juvenile justice system's response to juvenile crime. Officers were firm in their belief that the juvenile justice system does not offer any real form of repercussions for the criminal actions of youth. This leniency within the juvenile justice system was argued to allow for both the escalation in the prevalence and seriousness of offending among individual youth. Therefore, officers highlighted the need to update and expand the juvenile detention center, suggesting that if there was a place to send the more serious youth offenders, sentencing would not be so lenient within their jurisdiction. It was believed that, by creating a real threat of punishment rather than just a "slap on the wrist", the

expansion of the detention center would reduce police contact with repeat youth offenders and possibly deter other juveniles from offending.

Summary. Overall, officers within Allen County described disproportionate minority contact in their jurisdiction to be a product of differential offending patterns. Specifically, the prevalence and seriousness of offending among minority youth were consistently linked to a myriad of familial factors that officers observed to characterize minority households. Officers emphasized the substantial impact of the breakdown of the traditional family structure, observing that minority youth are more likely to come from disrupted homes where parents do not take responsibility for their children, consequently making the availability of prosocial models and the presence of in-home discipline scarce.

Additionally, officers within Allen County provided a unique point regarding the impact of the foster care system on the family dynamic in minority neighborhoods. Focus group participants suggested that reliance on financial assistance from the government motivates many residents within minority communities to take on the responsibility of having more children as part of their household (indicating the influence of economic factors). However, officers observed that few parents accepting such assistance actually fulfill their role in effective child-rearing, and, thus, contribute to rates of juvenile offending within their community. Ultimately, the officers consistently stated that familial factors (particularly ineffective/non-existent child-rearing) increase community reliance on police intervention, producing higher calls for service and higher rates of contact with law enforcement.

Officers' in-depth discussions regarding the nature of the family and home environments in minority communities suggests that minority youth are at a greater

disadvantage both in and out of the juvenile justice system compared to their White counterparts. Specifically, officers observed family to contribute to the offending of minority youth, to impact the decision-making of juvenile justice actors regarding outcomes related to these youth, and, in many cases, to act as a barrier to effectively address the DMC problem. Therefore, officer recommendations for ways to reduce juvenile offending and DMC largely look outside the role of law enforcement and instead suggest various forms of family counseling, services, and aid that could be provided by the juvenile justice system and the community. However, it is important to note that officers also emphasized the need for stronger sanctions to limit perceived leniency in sentencing afforded to even the most serious of juvenile offenders.

Allen County Juvenile Court

Data collection. Allen County Juvenile Court provided the research team with remote access to the CourtView system for data collection. As part of this process, trained UC personnel reviewed youth files (approximately 1,100) in CourtView and recorded the relevant information on hard-copy forms. The values for each relevant field included on these forms were then entered into the county's database for later analysis.

Measures included in the analysis. The primary independent variable of interest was race, but we also included indicators for sex, age, number of charges in the current case, most serious offense category, and most serious offense level. Because there are very few minority youth in the sample who are not African-American, *race* is recorded as White/Non-White. *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of charges* is a continuous

variable indicating the number of separate charges in the current case. If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property, drug/alcohol, and “other.”²¹ Similarly, the *most serious offense level* variable (labeled “MisdStatus”) captures whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables were dichotomous measures of whether youth experienced particular outcomes at four decision points: detention, dismissal, adjudication, and secure confinement.²² Each of these variables is coded as yes/no. *Detention* indicates whether a youth was placed in secure detention while awaiting further proceedings. *Dismissed* identifies whether youths had their case dismissed for any reason (e.g., requested by prosecutor). *Adjudicated* indicates whether a youth was formally found delinquent for the current case. *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility.

Data coverage and preparation. Overall, there were 1,109 cases referred to Allen County Juvenile Court between January 1, 2010 and December 31, 2011. Twenty-two cases were excluded from the analysis because the youth’s race was not identified, leaving a final sample of 1,087 cases. There was relatively little missing information in the sample. There was

²¹ The “Other” category includes all status offenses, among others.

²² Diversion was not included in the analysis because the Allen County Juvenile Court did not provide data on diverted cases. In addition, bindover was not included in the analysis due to only 3 cases being waived to criminal court.

complete coverage (i.e., no missing data) for race, sex, age, number of charges, most serious offense category, most serious offense level, dismissed and adjudicated. There was 14.3 percent missing data for detention and 9.5 percent missing for secure confinement. To retain all cases for analysis, we used multiple imputation (MI) to insert values for these two variables. MI replaces missing observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, age, sex, number of charges, most serious offense category, and most serious offense level. MI first generates a specified number of datasets—in this case, ten—in which missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from those ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Descriptive statistics. In 2010-2011, White youth comprised 55.0 percent of the petitions to Allen County Juvenile Court, while Non-White youth accounted for the remaining 45.0 percent. According to the 2010 Census for Allen County, these groups accounted for 78.4 percent and 21.6 percent of the juvenile population ages 10-17, respectively. Taken at face value, these figures indicate a moderate level of disproportionality in terms of the cases coming into the juvenile justice system. Males accounted for 74.5 percent of the petitions. The average age at filing was 15.92 years old (SD=1.76). The mean number of charges in the current case was 1.35 (SD=0.63). Over three quarters (78.9%) of the youth were charged with a misdemeanor or status offense; the remaining 21.1 percent were charged with a felony. The

most frequent offense type was “other” (40.4%), followed by property offenses (27.0%), violent/sex offenses (24.7%), and drug/alcohol offenses (7.9%).

The race group distributions for each of the four decision points indicated relatively little difference between White and Non-White youth. White youth were detained in 16.0 percent of cases, while Non-White youth were detained in 15.5 percent of cases. A relatively small number of both White youth (7.2%) and Non-White youth (8.0%) had their case dismissed. Conversely, 92.6 percent of White youth and 90.4 of Non-White youth were adjudicated delinquent. Finally, 7.0 percent of adjudicated White youth and 8.8 percent of adjudicated Non-White youth were placed in a secure confinement facility.

Initial and conditional probabilities of case outcomes. Figure 10 displays the initial and conditional probabilities for each of the four outcomes by youth’s race (White/Non-White). The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any other factors/variables. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and Non-White youth will experience a particular case outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case.²³ This also allows us to consider whether any differences between White and Non-White youth observed for the base analysis shift when accounting for other relevant case factors.

²³ The mean values for number of charges in the current case (1.35) and age at case initiation (15.92) were used to calculate predicted probabilities for each of the four outcomes. The remaining variables were set to their most frequently appearing categories: offense type – “other” offense; offense seriousness – misdemeanor/status offense; and sex – male.

Court outcomes. We estimated three statistical models for each of the four decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for Non-White youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and other legally relevant factors (number of offenses, most serious offense category, and most serious offense level). The final statistical model (see Table 21) included the above variables, as well as the extralegal factors sex and age. Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Detention. In the initial model that included only race, race was not a significant predictor of pre-adjudication detention. The initial probability of detention for White youth (0.16) was almost identical to that for Non-White youth (0.15; see Figure 10). This suggests that there was no statistically significant evidence of initial disproportionality in the decision to detain youth. When the legally-relevant variables were added in the second model, the race effect remained nonsignificant. A one-unit increase in the number of charges in the current case significantly increased the odds of detention by 39 percent (OR=1.39). Youth charged with an “other” offense were 44 percent less likely to be detained relative to those charged with a violent or sex offense (OR=0.56). Similarly, youth charged with a misdemeanor or status offense were significantly less likely to be detained compared to youth charged with a felony (OR=0.64).

In the final model that included extralegal variables, the effect of race was not statistically significant. The predicted probabilities of detention for White and Non-White youth were identical (0.09), indicating equal likelihood of detention when using fixed values for the

other variables. Each of the legally-relevant variables from the second model maintained its significance in the final model with negligible changes in the odds ratios. Only one of the two extralegal variables was significant. Specifically, a one-year increase in youths' age increased the odds of detention 18 percent (OR=1.18). Overall, the effect of race on detention was not significant in any of the analyses, which suggests that there was no statistically detectable presence of DMC at this decision point. Instead, results indicated that the decision to detain youth was predicted by number of charges, offense type, offense seriousness, and age.

Dismissed. Race had no statistically significant effect on case dismissal when it was included in the model alone. The initial probability of diversion for White youth (0.07) was almost identical to that for Non-White youth (0.08), which suggested that there was no initial disproportionality in these data. After adding the legally-relevant variables in the second model, the effect of race remained nonsignificant. None of the legally-relevant variables was significant either.

In the final model that included extralegal variables, the effect of race on case dismissal was nonsignificant. The conditional probabilities for case dismissal were identical (0.09) for White and Non-White youth. Similar to the second model, none of the legally-relevant or extralegal factors were significant predictors of dismissal. Overall, as shown in Table 21, none of the measures available in the data obtained from Allen County, including race, were statistically significant predictors of case dismissal.

Adjudication. In the initial model, race was not a significant predictor of the decision to adjudicate. The initial probability of being adjudicated delinquent for White youth (0.93) was slightly higher than that for Non-White youth (0.90), but this difference was not statistically

significant. After adding legally-relevant variables in the second model, the effect of race remained nonsignificant. The only significant factor was number of charges in the current case. Specifically, a one-unit increase in number of charges predicted a significant 64 percent increase in the odds of adjudication.

In the final model, which included all legal and extralegal variables, the effect of race was not significant. Like the initial probabilities, the conditional probability of adjudication for White youth (0.92) was slightly higher than the probability for Non-White youth (0.89), but this difference was not significant. Similar to the second model, a one-unit increase in number of charges in the current case predicted a 64 percent increase in the odds of adjudication (OR=1.64). None of the remaining legally-relevant or extralegal variables was a significant predictor of adjudication. Overall, race was not a significant predictor of adjudication in any of the analyses. Instead, the results indicated that, in these data, the decision to adjudicate was primarily predicted by the number of charges.

Secure confinement. The secure confinement analysis used the subsample of cases involving youth who were adjudicated delinquent (N=996). In the initial model, race was not a significant predictor of secure confinement. The initial probability of secure confinement for White youth (0.07) was slightly lower than for Non-White youth (0.09). However, this difference was not statistically significant, indicating no initial disparity in these data. After adding legally-relevant factors in the second model, youths' race remained nonsignificant. Youth charged with an "other" offense were 55 percent less likely to be placed in secure confinement relative to those charged with a violent or sex offense (OR=0.45). Similarly, youth charged with a misdemeanor or status offense were 84 percent less likely to be placed in a secure facility

compared to those charged with a felony (OR=0.16). The effect for number of charges was not significant.

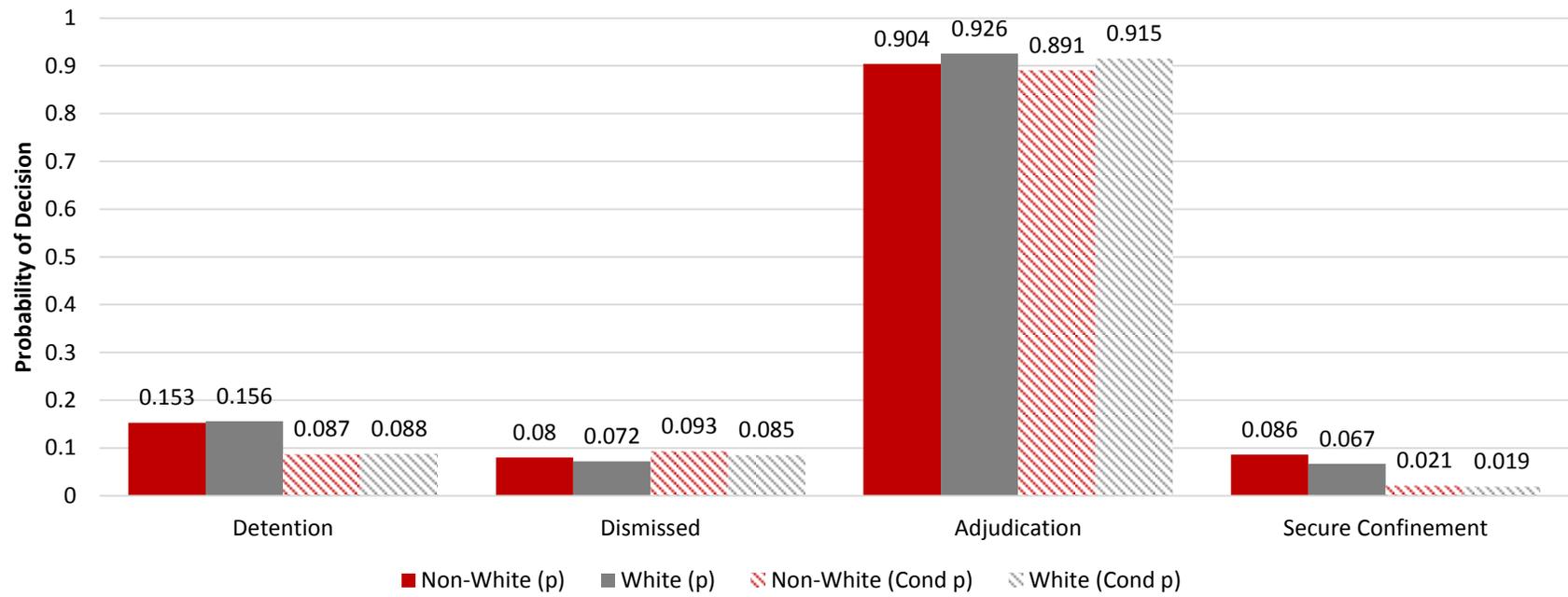
When the extralegal factors were added in the final model, the effect of race remained nonsignificant. The conditional probabilities for White youth and Non-White youth (0.02) were identical, indicating no difference in the likelihood of secure confinement when conditioning on the other independent variables. The two significant variables from the second model maintained their effect in the final model, with minute differences in the size of their effects. Neither of the extralegal variables—age and sex—were statistically significant. Overall, the effect of race on secure confinement was not statistically significant in any of the three models. Results indicated that the decision to place youth in secure facilities was more often related to offense type and offense seriousness.

Table 21. Binary Logistic Regression – Outcomes for Allen County Juvenile Court (Full Models)

	Detention			Dismissed			Adjudication			Secure Confinement		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	-0.02	0.98	0.19	0.10	1.10	0.23	-0.27	0.76	0.22	0.08	1.08	0.26
Num. of Charges	0.30	1.36	0.13	-0.42	0.65	0.25	0.49	1.64	0.24	0.17	1.19	0.18
<i>Offense Type</i>												
Property	0.17	1.18	0.23	-0.29	0.75	0.34	0.46	1.58	0.33	-0.15	0.86	0.31
Drug/Alcohol	-0.24	0.79	0.35	-0.72	0.49	0.64	0.92	2.51	0.64	-0.43	0.65	0.53
Other	-0.73	0.48	0.27	0.02	1.02	0.30	0.10	1.10	0.28	-0.89	0.41	0.41
Misd/Status	-0.45	0.64	0.22	0.58	1.78	0.36	-0.41	0.66	0.33	-1.88	0.15	0.29
Sex	-0.10	0.90	0.23	0.04	1.04	0.26	0.05	1.05	0.25	0.22	1.25	0.33
Age at Filing	0.17	1.18	0.06	-0.07	0.93	0.07	0.03	1.03	0.06	0.10	1.10	0.08
Constant	-4.22		0.92	-1.28		1.10	1.58		1.06	-2.93		1.26

Notes: Bolded entries represent statistically significant estimates at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error

Figure 10. Summary of Initial Probabilities and Conditional Probabilities for Allen County Juvenile Court



Summary of juvenile court record analysis. Descriptive analysis of approximately 1,100 court cases suggested some degree of disproportionality in the relative prevalence of court petitions for White/Non-White youth compared to their respective shares of the population, but this does not necessarily flow into later case decisions. In looking at other court outcomes, the data analyzed for Allen County Juvenile Court provide little evidence of disproportionate minority contact. Even when analyzed alone, race was not a significant predictor of any of the four outcomes, as evidenced by the negligible differences between the initial probabilities of each outcome for White and Non-White youth. To better understand how race might affect juvenile court decisions relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal variables. Like the bivariate models, race was not a significant predictor in any of the analyses. In fact, for three of the four outcomes, the conditional probabilities for White youth and Non-White youth were identical. Instead, it appears that the most consistent predictors of the four outcomes were number of charges, offense type, and offense seriousness.

Allen County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Allen County court staff in January and February of 2013. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of

disproportionality in court involvement and outcomes. Sixteen interviews were conducted with administrative (programming directors and department supervisors), supervision, intervention, and judicial staff. UC research staff interviewed an external treatment provider as well. The interviews lasted between 30 and 90 minutes, depending on the interviewees roles in the court and their level of disclosure. It is important to note that three staff interviews were removed from the Allen County Juvenile Court analysis and site review due to suspicious responses. Specifically, research staff were alerted to issues regarding the completeness and accuracy of the information that was recorded on-site. Examples of this included patterned responses throughout the interview with limited (if any follow up), or one word responses recorded by staff. However, data were also gathered on a small number of initial review and disposition hearings (3) in February of 2013.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in juvenile justice. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. Respondents were asked to rate the degree to which disproportionate minority contact was a problem in the court and, if so, identify what factors contributed to the overrepresentation of youth in the jurisdiction. Court personnel were divided in their opinion of how justice-system factors contributed to DMC, as well as the extent of DMC in the jurisdiction. A majority of staff (56%) pointed to the need for mental health, substance abuse, and gender-responsive programs to meet the risks and needs of the youth entering the court. Others (19%)

attributed patterns of disproportionate contact to police practices, rather than court policies and procedures. Interviewees noted “obvious differences” and “disparities” in “cases coming through the front door,” and suggested that inter-jurisdictional differences between rural and urban ordinances in the county contributed to disparities at arrest and at intake. Staff (38%) also identified youth’s gang involvement, history of compliance under court supervision, and/or cultural bias (e.g., lack of cultural sensitivity among staff) as potential explanations for the differential treatment of minority youth in the decision-making process.

Noting the counties’ limited resources and lack of local programming, nearly every staff member expressed the need for additional treatment alternatives like the Allen County Juvenile Treatment Center to divert youth who may be at a greater risk for Department of Youth Services (DYS) placement.

Recognizing the importance of family in the treatment process, intervention teams “encourage parents to participate,” and cited “family as key” to this process. Likewise, staff members referenced the importance of education with youth re-entry. “Youth fall behind in their coursework and become [disconnected] from [pro-social] peers... and that may be the final push for youth to disengage and drop out of school,” cautioned one staff member. With these risks in mind, staff encourage youth to earn day passes away from the community corrections facility used by the county. Passes, described staff, are awarded to youth who demonstrate “progress in treatment” and to complete restorative justice activities, community service, and/or attend classes.

The education system. A majority of respondents (60%) rated the education system as contributing to disproportionate minority contact, but did not elaborate on how educational

factors affect these patterns of system involvement. However, as noted below, respondents did identify some connections between at-risk, minority youth and school disengagement that may be a gateway into the system.

The family system. A majority of respondents (88%) cited families' willingness to participate in programming as an important consideration in the decision-making process, and (69%) linked families' lack of involvement (or perceived lack of involvement) to disproportionate minority contact. The importance of family was also evidenced by the number of interventions that emphasized and/or strengthened parental involvement in Allen County (see e.g., discussion of Allen County Juvenile Treatment Center). However, a number of staff (2 of 16) explained that retaining family participation is (and continues to be) a challenging process. Recognizing these challenges, one respondent suggested that, "the court offer non-traditional service hours to better meet the needs of justice-involved families." Another staff member commented that,

"Family is key... single parents are more likely to [opt] for supervision rather than treatment [because its] too much. [Caseworkers/specialists set up] guidelines for families, but there [can be] multiple treatment meetings per week....We need to put more emphasis on the parent's need."

Discussions also focused on how home environments lead to patterns of delinquent behavior and bring youth, particularly higher-risk youth, into greater contact with the juvenile justice system. Interviewees noted that referral decisions do not hinge solely on youth's risk to the safety of the community (i.e., severity of the intake offense or prior history), but also on the quality of the parent-child relationship and the families' ability to manage conflict. Notably, staff discussed a recent increase in the number of domestic violence cases referred to the juvenile court.

Socioeconomic conditions and neighborhood context. The majority of respondents (81%) identified poverty, and poverty-related circumstances, as contributing to the overrepresentation of minority youth in the juvenile justice system. Specifically, respondents linked high rates of unemployment, transiency, urban density, and community disadvantage (e.g., differential access to transportation, poor quality of housing) to disparate outcomes. Participants also described the community as lacking in social support for youth and their families. Of specific concern was the decrease in the number of support services that were once available and are no longer funded such as transportation services and the Neighborhood Safe Coordinator's position within city schools. The Allen County DMC Committee supported the Safe Neighborhood Coordinator's position within the city schools to provide technical assistance to a Bullying Prevention program (also referred to as the 2nd Chance Intervention). The goal of the program was to reduce the number of referrals to juvenile court by reducing incidents of bullying and unruly behaviors in the schools.

Summary. A majority of staff who were interviewed in Allen County believed that system, education, family, and neighborhood factors contributed, at least in part, to disproportionate contact. However, explanations of how and the degree to which these factors contributed to the overrepresentation of minority youth differed. Interviewees tended to focus on the pathways that youth take to the system through police contact or familial systems as opposed to court-related factors. Similarly, suggestions on how to address these issues varied. For example, a number of staff identified the need for greater access to juvenile justice and treatment resources, while others mentioned the benefit of (and continued need for) local efforts such as the Community/Faith Based Summit. The Summit invites community members

to work together to “build partnerships” and provide an “opportunity for [system-involved] youth to look forward,” explained staff members. Respondents also felt it was important that the court consider the ability of the family to participate in the court process—even suggesting the use of more flexible hours to ensure parental involvement.

The tracking of Disturbances Relative to School charges (and 2nd Chance intervention) as well as the Allen County Big Brothers Big Sisters (BBBS) school-mentoring program were touted as factors contributing to the court’s success addressing DMC. Staff members also recognized that inter-agency collaboration is essential and referenced the importance of the Court Assessment Service Team (CAST) in improving youth outcomes. CAST is a collaborative program with the Allen County Family Resource Center and Children Services to support justice-involved youth and families. Overall, the staff in Allen County identified several important reasons for disproportionate minority contact and also presented some ideas that might inform future directions in policy and practice.

Summary of Findings and Implications: Allen County

Two Allen County police agencies provided limited data for the DMC Assessment: Lima Police and the Allen County Sheriff Office (ASCO). African-American youth account for the majority of juvenile arrests in Lima (64.7% of 812), but not for the ASCO arrests (African-American youth account for 26.3% of 513). Although we could not compute RRI values for ASCO due to data limitations, a simple comparison of the population data and the arrest records suggest that African-American youth are overrepresented in the arrest records. Arrests of minority youth were more likely to involve property and status/unruly offenses in Lima, and

property offenses in Allen County. The differential in status offense arrests in Lima is fairly pronounced.

The focus group conducted in Allen county included eight officers from one agency. The officers clearly asserted that disproportionate minority contact in their jurisdiction was a result of differential offending patterns. Almost universally they pointed to family and parental factors as the primary driver of elevated offending levels among youth in their jurisdiction. Officers argued that parents of minority youth that they encounter were unlikely to serve as positive role models or directly discipline youths. Instead, it is perceived that they rely heavily on local police to help in controlling their children. Policy recommendations offered by these officers tended to focus less on what police could do and instead focused on initiatives targeted to families as well as the need for stronger sanctions for juvenile offenders to serve as a deterrent.

Initial analysis of juvenile court cases from Allen County (N=1,109) suggested some disproportionality in the relative prevalence of court petitions for White/Non-White youth compared to their respective shares of the population. Still, even when analyzed alone, race was not a significant predictor of any of the four court outcomes. Instead, the most common predictors of the outcomes at those decision points were number of charges, offense type, and offense seriousness.

The sixteen Allen County court staff interviewed during the assessment varied in their responses to key questions but generally believed that system, education, family, and neighborhood factors contributed, at least in part, to any DMC issues that come up in the court. Responses tended to focus on the pathways that youth take to the system through police

contact or familial systems as opposed to court-related decisions. This seems to be generally supported by the record data analyzed above. Suggestions on how to address DMC problems varied as well. Some staff identified the need for more juvenile justice and treatment resources while others mentioned the importance of community-based efforts.

Table 22. Summary of Key Findings from DMC Assessment: Allen County

Available Data	Key Findings	Implications
Record data from two PDs (1,325 cases)	Initial RRI (2.1), Odds Ratio (2.6) values suggest DMC; arrests of minority youth more likely property, status/unruly offenses	Look at specific offense types in arrests as possible ways to address DMC
Police focus group with eight participants	No significant relationships between race and four court outcomes in full analysis	In light of record results, appears court has some programs and collaboratives worth looking at further (e.g., program for school charges, family services center)
1,087 court case records	Family factors weighed heavily in focus group discussion and interviews	
13 interviews with court personnel	Court respondents provided varied suggestions on programming related to DMC	

BUTLER COUNTY, OH

Butler County Police Agency Data

Description of Butler County arrest data. The UC research team reached out to four police agencies within Butler County, Ohio beginning in January of 2012. The research staff sent a formal letter outlining the Ohio DMC Assessment data requests to the head of each department. One agency declined to participate in the study. We followed up with one unresponsive agency with several emails and phone calls encouraging them to participate in the study. A final attempt to gain participation was made in April 2013. The agency that offered no response was identified to “decline participation via no response.” Two agencies from Butler County agreed to provide the research staff with the requested data (Fairfield Police Department and Middletown Police Department). The findings from the analysis of arrest records from these two agencies are described below. Table 23 contains basic arrest characteristics for juvenile arrests from the two Butler County locales.

Table 23. Basic Characteristics of Arrested Juveniles in Locations with Available Data

	Fairfield PD (N=476) Valid % (N)	Middletown PD (N=1,058) Valid % (N)
<i>Race</i>		
White	62.7 (298)	63.8 (674)
Black, AA	36.0 (171)	33.4 (353)
Multi-Race	0.2 (1)	0.0 (0)
Other	1.1 (5)	2.8 (30)
<i>Sex</i>		
Male	65.8 (313)	69.7 (735)
Female	34.2 (163)	30.3 (320)
<i>Age</i>		
Mean	15.91	15.56
Median	16.24	15.85
Standard Deviation	1.57	1.73

As outlined in the Ohio DYS RFP, the first main component of this study is to assess whether DMC may be an issue at each stage in the justice process. Table 24 below displays the 2010-2011 Relative Risk Index (RRI) values for both Butler County locales. Overall, the findings indicate that disproportionality in arrests of minority youth may be an issue in both Fairfield and Middletown.

Table 24. Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority / White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Fairfield PD	0.09	0.26	0.16	2.88*	1.73*	3.54* (2.87–4.36)	1.86* (1.52–2.27)
Middletown PD	0.19	0.41	0.29	2.22*	1.56*	3.08* (2.62–3.61)	1.78* (1.54–2.06)

*RRI greater than 1.20 Threshold or OR that is statistically significant at p<0.05

Fairfield Police Department. Fairfield Police Department houses individual arrest record files of juvenile arrests. These files were delivered to the UC research staff in 2013. The records included individual and detailed offense-related information. The research team cleaned and transferred the arrest records to a data management software program for analysis.

Basic demographic characteristics of the individual and offense were obtained for juvenile arrests between 2010 and 2011. The available explanatory variables from Fairfield Police Department are listed below:

- Age
- Sex
- Race
- Formal Outcome²⁴

²⁴ Formal outcome indicates whether arrested youth were placed in a pretrial detention facility or released to the custody of his/her parent(s) or legal guardian(s).

- Most Serious Offense Category
- Most Serious Offense Level
- Number of Offenses
- Source of Complaint
- Any Co-Offenders
- Use of a Weapon
- Drug Use/Possession

Basic description of cases. Table 23 above provides an overview of the basic characteristics of arrested youth in Fairfield between 2010 and 2011. Fairfield Police Department provided data on 476 arrests of youth ages 10-17 during the aforementioned timeframe. White youth accounted for nearly 63 percent of all juvenile arrests made by Fairfield PD (N=298; 62.7%). Non-White youth accounted for a much lesser percentage of juvenile arrests during the same timeframe (N=177; 37.3% of total arrests). African-American youth accounted for the majority of arrests of Non-White youth (N=171; 36.0% of all arrests). Males made up approximately two-thirds of juvenile arrests in Fairfield (N=313; 65.8% of total arrests). The average age of arrested youth was 15.91 years old with a standard deviation value of 1.57 suggesting that there is a moderate amount of variation in youths' age around the mean age of arrested youth.

Report on RRI and odds ratios. Table 24 above provides the 2010-2011 Relative Risk Index (RRI) values associated with juvenile arrests in the Butler County locale of Fairfield. These values are comprised of a comparison between the juvenile arrest records and 2010 United States Census data. Based on the US Census, there were a total of 4,459 youth ages 10-17 in Fairfield. Of those, 3,318 youth were identified as White (74.4% of the total youth population) compared to 1,141 minority youth (25.6%). More specifically, African-American youth accounted for 15.2 percent of the total population in Fairfield (N=676). When considering

these population values, approximately nine percent of arrests involved a White youth. A higher percentage of arrests involved minority youth (16%) and to a much greater extent African-American youth (26%). These proportions translate to a Black/White RRI value of 2.88 and a Minority/White value of 1.73. Both RRI values are above the threshold set forth by OJJDP and Ohio DYS (RRI>1.2). This suggests that there is a marked difference between the relative risk of arrests for White and minority youth (especially African-American youth). Additional analysis reveals that both the Black/White Odds Ratio (OR=3.54) and the Minority/White Odds Ratio (OR=1.86) are statistically significant at $p<0.05$. This indicates that there is a relatively low likelihood that differences of this magnitude would appear if the relative risk of arrest for Whites and Non-Whites were in fact the same.

Analysis of key case characteristics by race/ethnicity. Table 25a below displays the findings from analysis of the relationship between potential explanatory variables and race subgroups (i.e., White vs. Non-White youth) in the Fairfield arrest data. Several statistically significant and interesting findings emerged from this analysis. First, there is a statistically significant difference in the formal outcome received between Non-White youth and White youth ($\chi^2=4.12$; Phi=0.09). A greater percentage of arrests resulted in pre-trial detainment for Non-White youth (N=37; 21% of arrests involving Non-White youth) compared to White youth (N=41; 13.9% of arrests involving white youth). There is a relatively weak association between race subgroups and formal outcome, however. Second, there are noticeable differences in the sources of complaints between race subgroups ($\chi^2=12.71$; Cramer's V=0.17). A higher percentage of arrests resulting from a parent/neighbor complaint involved Non-White youth (N=86; 50.0%) compared to arrests of White youth (N=120; 41.1%). Conversely, a greater

percentage of arrests resulting from an in-progress police response were of White youth (N=49; 16.8%) in comparison to Non-White youth (N=10; 5.8%). The measure of association indicates that there is a weak, moderate relationship between source of complaint and race subgroups for juvenile arrests. Lastly, there were differences in drug use/possession that resulted in arrests between race subgroups ($\chi^2=6.00$; Phi=-0.11). Specifically, a higher percentage of arrests involving White youth were for a drug use or possession offense (N=42; 14.1% of arrests involving white youth) compared to Non-White youth (N=12; 6.7% of arrests involving Non-White youth). The strength of the relationship indicates that there is a relatively weak relationship between drug use/possession and race.

Although not statistically significant, there were several other interesting findings that emerged from this analysis. A slightly higher percentage of arrests for drug/alcohol offenses involved White youth (N=38; 12.8% of arrests involving White youth) compared to arrests of Non-White youth (N=11; 6.2% of arrests of Non-White youth). Conversely, a greater percentage of arrests involving Non-White youth were for status/disorderly conduct offenses (N=72; 40.4%) compared to White youth (N=108; 36.2%). The related measure of association is somewhat sizeable suggesting that there is a relatively weak relationship between race and most serious offense categories. Second, there were subtle differences in arrests when considering offense level by race subgroups. A greater percentage of arrests for misdemeanor offenses were of White youth (N=80; 42.6%) in comparison to Non-White youth (N=47; 39.5%). Third, there was a slight difference in arrests between White and Non-White youth where a co-offender was present. Specifically, a slightly larger percentage of arrests that involved a co-

offender were of Non-White youth (N=69; 39.2%) compared to their White counterparts (N=107; 35.9%).

Table 25a. Arrest Characteristics by Race Subgroups – Fairfield PD

	White % (N)	Non-White % (N)	χ² V/Phi	Percent Missing
<i>Formal Outcome</i>				
Released	86.1 (255)	79.0 (139)	4.12*	0.8
Detained	13.9 (41)	21.0 (37)	0.09	
<i>Most Serious Offense Category</i>				
Violent/Sex	13.8 (41)	14.6 (26)	5.34	0.0
Property	28.9 (86)	30.3 (54)	0.11	
Drug/Alcohol	12.8 (38)	6.2 (11)		
Other	8.4 (25)	8.4 (15)		
Status/DC	36.2 (108)	40.4 (72)		
<i>Most Serious Offense Level</i>				
Felony	6.9 (13)	7.6 (9)	0.29	35.5
Misdemeanor	42.6 (80)	39.5 (47)	0.03	
Status/Unruly	50.5 (95)	52.9 (63)		
<i>Number of Offenses</i>				
1	89.3 (266)	88.8 (158)	3.19	0.0
2	7.4 (22)	10.1 (18)	0.08	
3	3.4 (10)	1.1 (2)		
<i>Source of Complaint</i>				
Parent/Neighbor	41.1 (120)	50.0 (86)	12.71*	2.5
School Official/SRO	7.9 (23)	9.9 (17)	0.17	
Police Response in Progress	16.8 (49)	5.8 (10)		
Police Call for Service	21.6 (63)	22.1 (38)		
Other	12.7 (37)	12.2 (21)		
<i>Any Co-Offenders?</i>				
No	64.1 (191)	60.8 (107)	0.52	0.4
Yes	35.9 (107)	39.2 (69)	0.03	
<i>Weapon Use?</i>				
No	96.3 (287)	97.8 (174)	0.76	0.0
Yes	3.7 (11)	2.2 (4)	-0.04	
<i>Drug Use/Possession?</i>				
No	85.9 (256)	93.3 (166)	5.99*	0.0
Yes	14.1 (42)	6.7 (12)	-0.11	

* statistically significant at p<0.05

Middletown Police Department. Middletown Police Department maintained individual records of youth arrested between 2010 and 2011. The files were sent to the UC research staff

in January 2013. The records included individual youth and offense-related information. The research team cleaned and transferred the arrest records to a data management and analysis program. Basic demographic characteristics of the youth and offense were obtained for juvenile arrests during the previously mentioned timeframe. The available explanatory variables are listed below:

- Age
- Sex
- Race
- Most Serious Offense Category
- Most Serious Level
- Number of Offenses

Basic description of cases. Table 23 above provides an overview of the characteristics of arrested youth in Middletown, Ohio between 2010 and 2011. Middletown PD made a total of 1,058 arrests of youth ages 10-17 during the aforementioned timeframe. White youth accounted for nearly two-thirds of all arrests made in Middletown (N=353; 63.8%). African-American youth made up the second largest group of juvenile arrests in terms of their prevalence (N=353; 33.4%). A much smaller percentage of arrested youth were classified as the racial subgroup of 'other' (N=30; 2.8%). The vast majority of youth arrests involved males (N=735; 69.7%) compared to females (N=320; 30.3%). The average age of arrested youth is 15.56 with a standard deviation value of 1.73 indicating that the majority of youth fell between 13 and 17 years old.

Report on RRI and odds ratios. Table 24 above presents the 2010-2011 Relative Risk Index (RRI) values associated with juvenile arrests in Middletown. These values are based on a comparison of 2010 US Census data and Middletown PD arrest records. According to the 2010 Census, there were a total of 4,954 youth ages 10-17 years old in Middletown. Of those youth,

the overwhelming majority were White (N=3,629; 73.3%) compared to Non-Whites (N=1,325; 26.7%). More specifically, African-American youth accounted for 17.3 percent of the total youth population ages 10-17 years old (N=856). When considering these population values in Middletown, approximately 19 percent of arrests involved White youth and a greater percentage of arrests involved Non-White youth (29%). This is particularly the case when considering the percentage of arrests that involved African-American youth (41 percent of arrests involved African-American youth). These values translate to a Black/White RRI value of 2.22 and Minority/White RRI value of 1.56. Both RRI values are above the threshold established by OJJDP and Ohio DYS (RRI>1.2) indicating that there is a reasonably large difference between the relative risk of arrests for White and minority youth (especially African-American youth). Additional analyses reveal that both the Black/White Odds Ratio (OR=3.08) and the Minority/White Odds Ratio (OR=1.78) are statistically significant at $p<0.05$. This suggests that there is a relatively low probability that differences of this magnitude would be present if the relative likelihood of arrests were in fact the same across race subgroups.

Analysis of key case characteristics by race/ethnicity. Table 25b below presents the findings from the analysis of potential explanatory variables by race subgroups (i.e., White vs. Non-White). A couple of interesting and statistically significant findings emerged from this analysis. First, Non-White youth were more likely to be arrested for more serious offense categories than their White counterparts ($\chi^2=18.15$; Cramer's $V=0.13$). A slightly greater percentage of arrests for violent/sex offenses, property offenses, drug/alcohol offenses, and 'other' offenses involved Non-White youth when compared to White youth. For example, a slightly greater percentage of arrests for violent/sex offenses involved Non-White youth (N=84;

21.9%) compared to arrests of White youth (N=129; 19.1). Conversely, a much larger percentage of arrests for status/disorderly conduct offenses were of White youth (N=291; 43.2%) compared to Non-White youth (N=119; 31.1%). The strength of this relationship, however, is relatively weak indicating that offense category does not fully capture differences in arrests between race subgroups. Lastly, arrests for more serious offense level categories were more likely to involve Non-White youth compared to their White counterparts although the strength of the relationship is again somewhat weak ($\chi^2=15.12$; Cramer's V=0.13). A greater percentage of arrests for felony (N=59; 17.7%) and misdemeanor offenses (N=190; 56.9%) involved Non-White youth compared to White youth (N=69; 11.5% and N=313; 52.0%, respectively). Conversely, a much larger percentage of arrests for status offenses involved White youth (N=220; 36.5%) rather than Non-White youth (N=85; 25.4%).

Table 25b. Arrest Characteristics by Race Subgroups – Middletown PD

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Number of Offenses</i>				
1	77.3 (521)	77.0 (295)	0.22	0.1
2	16.6 (112)	16.2 (62)	0.01	
3+	6.1 (41)	6.8 (26)		
<i>Most Serious Charge Category</i>				
Violent/Sex	19.1 (129)	21.9 (84)	18.15*	0.1
Property	25.7 (173)	29.2 (112)	0.13	
Drug/Alcohol	5.0 (34)	6.0 (23)		
Other	7.0 (47)	11.7 (45)		
Status/DC	43.2 (291)	31.1 (119)		
<i>Most Serious Offense Level</i>				
Felony	11.5 (69)	17.7 (59)	15.12*	11.5
Misdemeanor	52.0 (313)	56.9 (190)	0.13	
Status	36.5 (220)	25.4 (85)		

* statistically significant at $p < 0.05$

Summary of police agency record analysis. Overall, the arrest records appear to suggest that White youth account for the majority of juvenile arrests in Fairfield (62.7%) and in Middletown (63.8%). Upon further examination of the RRI and odds ratio values, the findings indicate that disproportionality of minority arrests may be an issue in these two Butler County locales, however. This is especially true for African-American youth. The findings from the analysis of the potential explanatory variables by race subgroups seem to suggest that disproportionality in arrests of minority youth may partly be attributed to the source of the complaint filed with the police (especially if the complainant is a parent/neighbor or a school official/School Resource Officer) whereas drug use/possession had the opposite effect for Non-White youth in Fairfield. Also, the findings appear to indicate that status/disorderly conduct offenses and having an accomplice contribute to a greater likelihood of arrest for Non-White youth in Fairfield (although these findings are not statistically significant). Arrests involving Non-White youth were more likely to result in pretrial detainment compared to arrests involving White youth. This finding is somewhat unexpected given the analysis of most serious offense category and most serious offense level by race subgroups (arrests for less serious crime types were more likely to involve non-white youth).

The findings from the analysis of Middletown arrest records are somewhat different in their implications. Arrests of Non-White youth were more likely to be for more serious charge categories and more serious offense levels compared to White youth. While these data are somewhat limited, several interesting findings (e.g. the differential in offense seriousness, source of complaint, drug use/possession) warrant further examination at later stages in the juvenile justice process where we can account for additional legally-relevant factors.

Butler County Focus Group Analysis

In January of 2013, the UC research team conducted a focus group with one agency in Butler County. Located near the borders of two separate counties, this law enforcement agency was reported to serve a population of approximately 42,500 residents. The focus group involved four participants. These officers held positions within the patrol and investigative units. The session lasted approximately 90 minutes.

Findings. The officers participating in this focus group identified several explanations for disproportionate minority contact within their jurisdiction. As a whole, these explanations emphasized the significant influence of the differential offending patterns of minority youth on their higher rate of contact with police. In general, these officers did not identify disproportionate minority contact as a product of the differential treatment of minority youth by personnel from their department. The main themes of the officers' discussions are outlined below.

Differential offending. Within their discussion regarding disproportionate minority contact with law enforcement in their jurisdiction, the participating officers from Butler County highlighted the impact of the differential offending patterns of minority youth on their contacts with police. However, while the officers largely agreed upon their observations regarding the higher prevalence of offending among minority youth compared to their White counterparts, there was some disagreement concerning differences in the nature of offending (i.e. offense type, offense seriousness) between these two populations. In particular, two officers stated their observations that the minority youth within the areas they patrol commit more violent offenses, aggravated robberies, gun offenses, and other serious assaults. In contrast, another

officer strongly suggested equality in these types of offending across racial lines. Despite this disagreement on variation in the types of offending, officers were consistent in their observation that the high prevalence of offending among minority youth increases their contact with police. Furthermore, officers agreed that these offending patterns were the product of several factors found to characterize minority communities. While officers generally identified these factors in their discussion of explanations for DMC, their ideas were supported by further conversations regarding factors that contribute to juvenile offending in their jurisdiction. Overall, officers identified the differential offending patterns of youth to be greatly influenced by specific familial, socioeconomic, and geographic factors that are typically observed within minority communities.

Familial factors. When explaining their disproportionate contact with minority youth, officers consistently identified familial factors that affect both the rate of offending among this population and their subsequent contact with police. In particular, officers observed cultural differences between White and minority households regarding the traditional family structure and the responsibility associated with being a parent. Officers suggested that, in White households, parents are typically willing to take responsibility for raising their children, providing the supervision, guidance, and discipline necessitated for effective child-rearing. In contrast, many minority households were described as broken, single-parent homes, where parents are often absent from the lives of their children.

Though the officers posited that this absence can be caused by a number of different factors (e.g. parent out working to ‘make ends meet’; parent out committing their own crimes), ultimately the lack of supervision and care within these households was viewed to increase the

likelihood of youth developing antisocial behaviors, including involvement in crime. Officers observed this prevalence of absentee parents within minority homes to enhance the likelihood of youth coming into contact with police by (1) police encountering youth on the street and/or (2) parents calling police to their homes to manage their children. Therefore, officers suggested that DMC is directly related to the shift of child rearing responsibilities from the parents within minority households to the juvenile justice system. Speaking on this topic, one officer stated, "I'll be frank in that a lot of parents expect the juvenile justice system to parent their child. You know, what would have been handled by mom and dad years ago is being handled by the juvenile court system now and that increases the burden [on the juvenile court system]."

As the quote above suggests, officers within the focus group argued that the lack of accountability among parents of minority youth increases the responsibility on justice system actors (particularly within law enforcement and juvenile court) to fill the role as guardian. However, these officers observed that the police and juvenile justice system are not properly equipped with the time and resources to properly parent the high numbers of troubled youth from this population. Collectively, the lack of parenting in minority households and the inability of the juvenile justice to adequately fulfill the parental role were viewed to increase the prevalence of youth offending and subsequent contact with the juvenile justice system.

In addition to increasing the likelihood of differential offending and initial contact with the police, the lack of accountability among parents in minority households was observed to influence outcomes for youth as they are processed through the juvenile justice system. Officers suggested that, when parents are unable or unwilling to be involved in the juvenile justice process, the discretion of juvenile justice system actors is constrained, often resulting in

more punitive outcomes for minority youth and DMC later in the system. For example, when discussing the factors involved in the decision to place youth in diversion programs, one officer commented that parental participation is important in their diversion program and some of the challenges faced by families in their community limit that participation.

Furthermore, officers suggested that the effectiveness of rehabilitation and diversion programs (through the police department, juvenile court, or DYS) is dependent on the family and home environment of youth. Specifically, when parents are involved in the lives of their children and share similar opinions of the disciplinary methods needed to handle the behavioral problems of the child, participation within these types of programs goes more smoothly and is often a one-time occurrence. In contrast, when youth come from broken homes, have a history of offending, and a parent or parents that disagree regarding the proper response to the youth's antisocial behavior, rehabilitation and diversion programs were not observed to be effective in stemming future offending. Based upon these factors, minority youth, were viewed to benefit less from rehabilitation and diversion services. Specifically, officers suggested that the overreliance on these services allows youth to continue their offending, which ultimately generates repeated contact with the juvenile justice system.

Socioeconomic status. In addition to the importance of familial factors, officers consistently identified socioeconomic status (SES) as a significant factor increasing minority youth's involvement in delinquency and their likelihood of coming into contact with police. Specifically, officers suggested that socioeconomic status influences the visibility of offending, the types of crimes youth commit, as well as the high presence of minority youth in specific neighborhoods.

One officer observed that minority youth overwhelmingly come from lower SES neighborhoods within their jurisdiction. It was suggested that these low SES, minority youth have less parental supervision or options for prosocial activities than their more affluent (typically White) counterparts. Therefore, minority youth coming from these lower income areas were observed to spend more time out on the streets of the community, enhancing the visibility of this population both to other community members and police on patrol. When providing explanations for DMC, this officer outlined the impact of SES on the visibility of youth and their subsequent contact with police saying,

“I think [DMC], I don’t know that it necessarily has a lot to do with race, but socioeconomic status... It’s not just a White or a Black problem. It’s the lower socioeconomic lifestyles, White or Black. You know, single parent home, which is going to lead to less supervision and less disposable income that these kids can find themselves, so they are stuck walking around an apartment complex with their friends with nothing to do. So what do you think is going to happen? And those are the types of kids we are going to get calls on...”

In addition to increasing the visibility of youth to the police, officers suggested that socioeconomic status influences the types of crimes youth commit. Specifically, officers observed that, due to their lower socioeconomic backgrounds, minority youth typically have fewer financial advantages than their White counterparts, drawing them to more serious types of offenses (e.g. robberies; drug crimes) that involve a greater monetary gain. Ultimately, the visibility of offending combined with the prevalence of more serious offending among minority youth was viewed to impact both the likelihood of minority youth coming into contact with police and the extent of their processing through the juvenile justice system.

Throughout the focus group session, officers consistently mentioned the influx of minority youth in the lower income neighborhoods within their jurisdiction. This influx was

largely attributed to the demolition of Section 8 housing in surrounding cities that caused a significant number of low SES, single-parent, minority families to relocate. Officers suggested that many of the relocated youth that come with these families have criminal histories and, thus, bring their delinquent tendencies to their new neighborhoods. Officers expressed their frustration, discussing that these youth are often difficult to manage given their sheer numbers and the unfamiliarity of law enforcement personnel with this transient population. Ultimately, these youth were believed to contribute to the prevalence of offending in the low SES communities within their jurisdiction, enhancing police time spent in these neighborhoods and the likelihood of officers coming into contact with minority youth.

Geographic location. Finally, when explaining their disproportionate contact with minority youth, officers argued that DMC is a product of higher rates of patrol in communities with larger minority populations. Though officers stated their uncertainty of how ‘data driven’ their department was, they did discuss that directed patrol was typically based upon public outcry for help, with officers sent to specific communities based on the number of calls for service and the visibility of crime within those communities. One officer discussed the rationale behind the department’s directed patrol, saying,

“I think [patrol is] there for a reason. They don’t just willy-nilly say ‘go patrol this place all this week between the hours of twelve and two’. Obviously they are responding to some type of outcry from the community. Typically, in my experience, it takes three to four repeated calls for them to direct a patrol like that or a neighborhood patrol to somewhere specifically for a purpose.”

In this way, officers defined their department’s patrol strategies as largely reactive in nature. Notably, officers observed that calls for service disproportionately come from lower income,

minority communities, explaining the concentration of patrol and law enforcement efforts within these neighborhoods.

Differential treatment. When asked if minority youth were more likely to be arrested than White youth, officers consistently stated that the race of an individual youth was not a factor in their decision to arrest. Instead, officers pointed to a number of legal (e.g. seriousness of offense) and social (e.g. parental involvement) factors that, in their experience, influence the outcome of any police-youth interaction. One officer stated,

“I think it depends on the offense. I think, I can’t speak for every officer, but I try to keep a level playing field no matter what race. It depends on the offense, the circumstances surrounding it, and I always, dependent on status offenses, unruliness or even low level delinquency crimes I would take the opinion of the parents into account especially on unruly charges. But I think it depends more on your, if somebody has a gun then they are obviously going to get arrested quicker than somebody just out past curfew.”

Another participant supported this assessment,

“There are so many different factors that go into arresting anybody that it’s hard to say, you know, if you would arrest one or the other, but I don’t think race plays a factor in it, in that at all. In my experience with any officer that I have dealt with, I think it’s more just what type of crime, like he said, parental involvement, you know history of someone it just depends.”

Overall, the emphasis concerning the impact of legal and social factors on the outcome of a police-youth encounter highlights officers’ belief that the differential treatment of minority youth by personnel within their department is not an explanation for the disproportionate contact between police and minority youth within their jurisdiction.

Recommendation to reduce juvenile offending. In their discussion of ways to reduce juvenile crime and DMC within their jurisdiction, officers provided several suggestions that focused upon the need for community initiatives that provide after-school/summer programs

for both prosocial and at-risk youth. For example, officers discussed the efficacy of sports programs in providing youth prosocial activities with peers that can act as a positive influence. Additionally, officers argued for the investment in community centers that could provide a safe space and overall positive environment for youth who may not have a prosocial environment to go home to. Finally, officers suggested the importance of locally-based mentorship programs to expose youth to prosocial models that can provide guidance regarding a myriad of social and life concerns (e.g. career counseling). Officers argued that, collectively, these community initiatives could work to provide the support and guidance that is often found to be lacking in the homes of delinquency-prone youth within their community.

Summary. Focus group participants in Butler County consistently attributed DMC within their jurisdiction to the differential offending patterns of minority youth. As a whole, these officers did not view the differential treatment of minority youth by personnel within their department as a plausible explanation for their high rates of contact with this population. Instead, officers suggested that factors related to family, socioeconomic status, and the geography of their community (regarding its influence on calls for service) contribute greatly to the higher rate of offending among minority youth. Specifically, officers observed that minority communities within their jurisdiction are characterized by a cross-section of familial and socioeconomic factors that increase the likelihood of youth involvement in crime and contact with law enforcement.

A major theme that surfaced through the officers' discussion concerning their differential offending explanations of DMC was the apparent persistent disadvantage of minority youth both in and out of the juvenile justice system compared to White youth. In

particular, officers observed the prevalence of broken homes and absentee parents within low income, minority communities to affect a youth's trajectory of criminal involvement and, ultimately, their degree of contact with law enforcement and the juvenile justice system. Importantly, their discussion regarding the influence of these factors on the prevalence and nature of juvenile offending emphasized that minority youth involvement in higher rates of offending and more serious types of crime is not a product of race, but of income, geography, and the routine activities that increase the visibility of crime in particular communities. This cross-section of familial and socioeconomic factors believed to characterize minority communities were observed to perpetuate the prevalence of juvenile offending among minority youth by (1) causing delinquency among minority youth, (2) constraining the decision-making of juvenile justice personnel regarding the processing of youth, and (3) impeding effective interventions designed to stem juvenile offending.

In addition to their discussion regarding the persistent disadvantage of minority youth within their jurisdiction, officers emphasized the influence of the expanding role of law enforcement and the juvenile justice system on DMC. Thought to coincide with the continual breakdown of the traditional family structure in minority households, officers observed that police interactions with youth are often generated by high calls for service requesting officer presence in minority homes. However, officers also recognized the increase in the "burden" on the juvenile justice system as the juvenile court continues to become more involved in youth-related issues ranging from behavioral problems in the home to serious criminal offending. Based on this discussion, it appears that, parents within minority communities and the juvenile justice system combined, inadvertently increase disproportionate minority contact with police

and juvenile justice system by (1) many parents within minority households forfeiting their parental responsibilities to law enforcement and other juvenile justice personnel and (2) the juvenile justice system removing the responsibility of child-rearing, discipline, and guidance from parents within these communities.

In the conclusion to their discussion, officers provided recommendations to reduce juvenile crime and disproportionate minority contact. Given the influence of the factors outlined above, it appears that reducing juvenile offending and DMC is largely out of the hands of law enforcement. Instead, officers highlighted recommendations that focus on investing in the community to provide centers, programs, and services designed to target youth. This approach seeks to reduce juvenile crime and DMC by altering the routine activities of youth in those lower-income, minority communities through the provision of both prosocial models and prosocial activities outside of their home. Though potentially efficacious, the officers' emphasis on the role of family on juvenile offending also identifies a need for more services directed at families and children before they come into contact with the police. Specifically, the officers' discussions regarding the role of family suggests that the improvement of this environment could serve to stem initial involvement in offending as well as improve the outcomes of youth already involved in the juvenile justice system.

Butler County Juvenile Court Record Analysis

Data collection. The research team provided the Butler County Juvenile Court with a list of fields for the study. Members of the research team then met with representatives of the court to discuss the data collection process and extraction of key measures. Subsequently, the

court provided UC with a database file containing case-level information on court records for cases petitioned to the court between January 1, 2010 and December 31, 2011.

Measures included in the analysis. The primary variable of interest was race, but we also include indicators for sex, age, number of charges in the current case, number of prior charges, living arrangement, previous probation, previous diversion, most serious offense category, and most serious offense level. *Race* was recorded as White, African American, and Other, and was recoded as a set of three variables capturing membership in each of these categories (or not). *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of charges* is a continuous variable identifying the number of separate charges in the current case. *Number of priors* is a continuous measure that captures the number of offenses a youth had been charged with prior to the current case. *Living arrangement* is a dichotomous variable indicating whether youth lived with a parent at the time of arrest (0 = lived with one or both parents, 1 = did not live with a parent). *Previous probation* is a binary variable indicating whether the youth had previously been on probation or was on probation at the time of the instant offense. Similarly, *previous diversion* is a dichotomous variable indicating whether the youth had previously been placed in a diversion program or was in a diversion program at the time of the current offense. If a youth was charged with more than one offense in the case, *most serious offense category* identifies the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property, drug/alcohol, status offense/disorderly conduct (DC), and "other." Similarly, the *most serious offense level* variable

(labeled “Fel/Misd”) captures whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables were dichotomous measures of case outcomes at five decision points: detention, dismissal, adjudication, secure confinement, and bindover.²⁵ *Detention* indicates whether a youth was placed in secure detention while awaiting further proceedings. *Dismissed* identifies whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent, diversion). *Adjudicated* reflects whether a youth was formally found delinquent for the current case. *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility as a disposition. *Bindover* indicates whether a case was waived to criminal court.

Data coverage and preparation. Overall, there were 5,142 cases referred to Butler County Juvenile Court between January 1, 2010 and December 31, 2011. Sixty-seven cases were excluded from the analysis because the youths’ race was not identified, leaving a final sample of 5,075 cases. Among the variables used in the analyses, there was relatively little missing information regarding the case or youths. There was complete coverage (i.e., no missing data) for race, sex, age, number of charges, most serious offense category, most serious offense level, previous probation, previous diversion, number of priors, detention, and secure confinement. There was 3.1 percent missing data for living arrangement and 4.0 percent missing data for dismissal, adjudicated, and bindover. We used multiple imputation (MI) to insert values for these four variables to retain these cases for analysis. MI replaces missing

²⁵ Diversion was not included in the analysis because we did not have data on diverted cases for this court.

observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, age, number of charges, most serious offense category, most serious offense level, previous probation, previous diversion, and number of priors. MI first generates a specified number of datasets—in this case, ten—in which the missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from those ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Initial and conditional probabilities of case outcomes. Figures 11a and 11b display the initial and conditional probabilities for each of the outcomes by youths’ race (White/Non-White). The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any of the other factors mentioned above. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities reflect the likelihood that White and Non-White youth will experience a particular case outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case.²⁶ This also allows us to consider whether any differences between White and Non-White youth

²⁶ The mean values for number of charges in the current case (5.75), number of prior charges (3.44), and age at case initiation (15.88) were used to calculate predicted probabilities for detention, dismissal, and adjudication. The remaining variables were set to their most frequently appearing categories: offense type – status/DC; offense seriousness – misdemeanor/status offense; sex – male; living arrangement – one or both parents; previous probation – no; and previous diversion – no. Because secure confinement and bindover are typically reserved for the most serious offenses/offenders, the values for offense type and offense seriousness were changed to violent/sex and felony, respectively, in the calculation of the conditional probabilities for these decision points. The values for the other variables remained the same.

observed for the base analysis shift when accounting for other relevant youth and case characteristics.

Descriptive statistics. In 2010-2011, White youth comprised 66.7 percent of the referrals to Butler County Juvenile Court, African-American youth accounted for 22.6 percent, and Other youth accounted for the remaining 10.6 percent. According to the 2010 Census for Butler County, these groups accounted for 82.1 percent, 9.5 percent, and 8.4 percent of the juvenile population ages 10-17, respectively. Taken at face value, these figures indicate a relatively substantial level of disproportionality in terms of the profile of cases coming into the juvenile justice system. Males accounted for 63.9 percent of the petitions, and the average age at case initiation was 15.88 years old (SD=1.71). The mean number of offenses in the current offense was 5.75 (SD=5.00), while the mean number of prior charges was 3.44 (SD=4.94). Both of these factors vary considerably across the cases included in the record data analyzed here. Only 11.3 percent of the cases involved a youth who was previously or currently on probation, and 28.7 percent involved a youth previously or currently in a diversion program. Over three-fourths (78.3%) of cases involved youths who lived with one or both parents. The most frequent offense type was status/DC (46.6%), followed by property (21.5%), violent/sex offense (21.2%), drug/alcohol (6.0%), and "other" (4.8%). Most youth were charged with a misdemeanor or status offense (88.0%), with the remaining 12 percent charged with a felony.

Court outcomes. We estimated three statistical models for each of the five decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for African American and Other youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model

included race and other legally-relevant factors (e.g., number of offenses, most serious offense category, most serious offense level, previous probation, number of priors). The final model included the variables above, as well as the extralegal factors sex, age, and living arrangement (see Tables 26a and 26b). Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Detention. In the initial model, the effect of race was mixed. African-American youth were 26 percent more likely to be detained than their White counterparts (OR=1.24), while the effect for Other youth was not significant. After adding legally-relevant variables in the second model, the race effect was reversed. Specifically, the effect for African-American youth was no longer significant, while Other youth were 36 percent more likely to be detained relative to White youth (OR=1.36). A one-unit increase in the number of charges in the current offense predicted a significant 8 percent increase in the odds of detention (OR=1.08), while a one-unit increase in the number of prior charges increased the odds of detention by 4 percent (OR=1.04). Youth charged with a property offense (OR=0.18), drug/alcohol offense (OR=0.12), status offense/disorderly conduct (OR=0.04), or other offense (OR=0.29) were significantly less likely to be detained relative to those charged with a violent or sex offense. Cases involving a misdemeanor or status offense were 78 percent less likely to be detained compared to those involving a felony. Previous probation and previous diversion were not significant.

When the extralegal variables were added in the final model, the effect of race was not significant for African-American or Other youth. The predicted conditional probabilities of detention for White and Non-White youth were identical (0.04), indicating equal likelihood of

detention when using fixed values for the other variables. Each of the statistically significant legal variables from the second model maintained its significance in the final model with only negligible changes in the odds ratio. Youths' living arrangement was the only significant extralegal variable. Specifically, youth who did not live with either parent were 49 percent more likely to be detained relative to those who lived with at least one parent (OR=1.49). Overall, the effect of race varied among the models. The effect for African-American youth was significant in the first model, the effect for Other youth was significant in the second model, and the effect for neither group was significant in the final model when the test was the most stringent. Instead, results indicated that the decision to detain youth was predicted by legal variables and youths' living arrangement.

Dismissed. Race was not a significant predictor of case dismissal when included in the statistical model by itself. The initial probability of case dismissal for White youth (0.17) was slightly lower than that for Non-White youth (0.19), but this non-significant difference suggested that there was no initial disproportionality in these data. Not surprisingly, after adding the legally-relevant variables in the second model, the effect of race remained non-significant. A one unit increase in the number of charges in the current case predicted a 77 percent decrease in the odds of dismissal. Youth charged with a property offense (OR=0.36), drug/alcohol offense (OR=0.11), status offense/disorderly conduct (OR=0.30), or other offense (OR=0.17) were significantly less likely to have their case dismissed relative to those charged with a violent or sex offense. Similarly, youth charged with a misdemeanor or status offense were 45 percent less likely to have their case dismissed than those charged with a felony

(OR=0.55). Previous probation, previous diversion, and number of prior charges were not significant predictors of the case dismissal outcome.

In the final model that included extralegal variables, the effect of race remained non-significant. The predicted probabilities of case dismissal for White and Non-White youth were identical (0.002), indicating equal likelihood of dismissal when using fixed values for the other variables. Each of the statistically significant legal variables from the second model maintained its significance with little (if any) change in the odds ratio. Two of the extralegal variables—age and living arrangement—were significant. A one year increase in youths' age at case initiation predicted a 13 percent decrease in the odds of dismissal (OR=0.87), while youth who did not live with either parent were 46 percent less likely to have their case dismissed compared to those who lived with at least one parent (OR=0.54). Overall, the effect of race was not significant in any of the three statistical models. Instead, results indicated that case dismissal was more strongly associated with number of charges, offense type, offense seriousness, youths' age, and living arrangement.

Adjudication. In the initial model, African-American youth were significantly less likely to be adjudicated delinquent relative to their White counterparts (OR=0.69). The effect for Other youth was not significant. After controlling for legally-relevant variables in the second model, the effect of race was no longer significant. A one-unit increase in the number of charges in the current case predicted an over 400 percent increase in the odds of adjudication (OR=5.60). Youth charged with a property offense (OR=2.57), drug/alcohol offense (OR=3.29), status offense/disorderly conduct (OR=5.14), or other offense (OR=4.10) were significantly more likely to be adjudicated relative to those charged with a violent or sex offense. Similarly,

youth charged with a misdemeanor or status offense were over six times more likely to be adjudicated than those charged with a felony (OR=6.06). Youth who had previously received a probation disposition or who were on probation at the time of the current offense were almost twice as likely to be adjudicated compared to those with no history of probation (OR=1.90).

When the extralegal factors were added in the final model, the effect of race remained non-significant. The predicted probabilities of adjudication for White and Non-White youth were identical (0.99), indicating equal likelihood of adjudication when using fixed values for the other variables. Each of the statistically significant legal variables from the second model maintained its significance in the final model with only minor (if any) changes in the odds ratio. Of the extralegal factors included in the final model, only youths' sex was significant. Specifically, females were 32 percent less likely to be adjudicated than males (OR=0.68). Overall, the effect of race was not a significant predictor of case adjudication in any of the models except the first. Although the effect for African-American youth was significant in the initial model, this effect actually favored African-American youth relative to White youth in terms of the nature of the outcome. Once legally-relevant and extralegal variables were added to the model, the adjudication decision appeared to be more closely associated with number of charges in the current case, offense type, offense seriousness, previous probation, and the youth's sex. This process is illustrated in the fact that the gap between closes in the conditional probabilities, which suggest that the typical case—according to the sample descriptives—is likely to be adjudicated delinquent (both minority and white youth).²⁷

²⁷ The very high probabilities in this analysis are likely driven by “outliers” in the sample that drive up the averages for certain variables (e.g., priors, number of current charges) and also have very high likelihoods of being adjudicated delinquent.

Secure confinement. The analysis of secure confinement used the subsample of cases for youth who were adjudicated delinquent in Butler County Juvenile Court (N=3,938). In the initial model, the effect of race was not statistically significant. The initial probability of secure confinement for White youth (0.05) was slightly lower than for Non-White youth (0.06). This difference was not statistically significant, however, indicating no reliable initial disparity in secure confinement in these data. After adding legally-relevant factors in the second model, the effect of race remained non-significant. A one-unit increase in the number of offenses predicted a significant 20 percent increase in the odds of secure confinement (OR=1.20). Similarly, a one-unit increase in the number of prior charges predicted a 13 percent increase in the odds of secure confinement (OR=1.13). Youth charged with a property offense (OR=0.44), status offense/disorderly conduct (OR=0.04), or drug/alcohol offense (OR=0.40) were significantly less likely to be placed in secure confinement relative to those charged with a violent or sex offense. Cases involving a misdemeanor or status offense were significantly less likely to result in secure confinement than those involving a felony (OR=0.07). Previous probation and previous diversion were not significant.

When the extralegal factors were added in the final model, the effect of race remained non-significant. The predicted conditional probability of secure confinement for White youth (0.19) was slightly higher than that for Non-White youth (0.14). Each of the significant legally-relevant variables from the second model maintained its significance in the final model. The only significant extralegal factor was youths' sex. Specifically, females were 53% less likely to be placed in secure confinement compared to males (OR=0.47). Overall, the effect of race was not significant in any of the three models. Instead, results indicated that the decision to place youth

in secure confinement was driven to a far greater extent by number of charges in the current case, number of prior charges, offense type, and offense seriousness.

Bindover. The final decision point examined was waiver to criminal court (bindover). Since no youth charged with a misdemeanor or status offense was waived to criminal court, this analysis used the subsample of youths charged with a felony offense (N=601). In addition, there is a very small base rate of youth who were bound over in Butler County, which means that a relatively small numerical difference in its prevalence in each group could affect the estimates and odds ratios (only 28 youth, or 0.55% of all cases, were waived). In the initial model, the effect of race was mixed. African-American youth were over 2.5 times more likely to be waived to criminal court compared to their White counterparts (OR=2.55), while the effect for Other youth was not significant. After adding legally-relevant factors in the second model, the effect of race was not significant. The only significant legally-relevant variable was number of charges. Specifically, a one-unit increase in number of offenses in the current case predicted a 27 percent decrease in the odds of waiver (OR=0.73).

When the extralegal factors were added in the final model, the effect of race remained non-significant.²⁸ The conditional probability of bindover for White youth (0.001) was lower than that for Non-White youth (0.011), but this difference was not statistically significant. Number of charges in the current case remained the only significant legally-relevant factor (OR=0.70). The only significant extralegal factor was youths' age. Specifically, a one year increase in age at case initiation predicted an over 400 percent increase in the odds of bindover (OR=5.21). Overall, although African-American youth were significantly more likely to be waived

²⁸ Youth's sex and most serious offense category were removed from the final bindover analysis because they were perfect predictors of waiver.

in the race-only model, the effect of race was not significant once legally-relevant and extralegal factors were added to the models. Instead, the decision to waive youth to criminal court appeared to be affected more by number of charges and youths' age.

Table 26a. Binary Logistic Regression – Outcomes for Butler County Juvenile Court (Full Models)

	Detention			Dismissed			Adjudicated		
	B	OR	SE	B	OR	SE	B	OR	SE
Black/AA	0.05	1.05	0.10	-0.11	0.90	0.14	-0.26	0.77	0.15
Other Race	0.26	1.30	0.14	0.03	1.03	0.20	-0.06	0.94	0.21
Num. of Charges	0.08	1.08	0.01	-1.49	0.23	0.06	1.73	5.63	0.07
<i>Offense Type</i>									
Property	-1.71	0.18	0.11	-0.96	0.38	0.21	0.92	2.51	0.23
Drug/Alcohol	-2.11	0.12	0.19	-2.06	0.13	0.38	1.15	3.15	0.37
Other	-1.22	0.29	0.17	-1.70	0.18	0.34	1.42	4.13	0.33
Status/DC	-3.18	0.04	0.13	-1.17	0.31	0.15	1.69	5.40	0.17
Fel/Misd	-1.47	0.23	0.12	-0.63	0.54	0.27	1.87	6.48	0.30
Prev. Probation	-0.03	0.97	0.15	-0.15	0.86	0.22	0.62	1.86	0.22
Prev. Diversion	0.03	1.03	0.10	0.14	1.15	0.14	0.03	1.03	0.15
Num. of Priors	0.03	1.03	0.01	0.01	1.01	0.01	-0.03	0.98	0.01
Age	0.00	1.00	0.03	-0.14	0.87	0.03	0.01	1.01	0.03
Sex	-0.15	0.86	0.10	0.18	1.20	0.13	-0.38	0.68	0.13
Living Arrangement	0.40	1.49	0.10	-0.61	0.54	0.15	0.11	1.12	0.16
Constant	0.77		0.41	6.30		0.61	-6.43		0.63

Notes: Bolded entries represent statistically significant estimates at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error

Table 26b. Binary Logistic Regression – Outcomes for Butler County Juvenile Court (Full Models)

	Secure Confinement ¹			Bindover ²		
	B	OR	SE	B	OR	SE
Black/AA	-0.34	1.41	0.26	0.29	1.34	0.52
Other Race	0.39	1.48	0.33	0.02	1.02	1.04
Num. of Charges	0.19	1.21	0.02	-0.35	0.70	0.08
<i>Offense Type</i>						
Property	-0.92	0.40	0.24	----	----	----
Drug/Alcohol	-0.97	0.38	0.41	----	----	----
Other	-0.10	0.91	0.38	----	----	----
Status/DC	-3.06	0.05	0.75	----	----	----
Fel/Misd	-2.55	0.08	0.25	----	----	----
Prev. Probation	-0.13	0.88	0.33	-0.06	0.94	0.68
Prev. Diversion	-0.22	0.80	0.24	0.34	1.40	0.58
Num. of Priors	0.12	1.13	0.02	0.06	1.06	0.03
Age	-0.09	0.91	0.07	1.65	5.21	0.41
Sex	-0.76	0.47	0.31	----	----	----
Living Arrangement	0.45	1.57	0.24	-1.49	0.23	0.77
Constant	-1.49		1.10	-29.20		7.14

Notes: Bolded entries represent statistically significant estimates at $p < .05$; B = logit coefficient; OR = odds ratio; SE = standard error

¹ This analysis used the subsample of youth who were adjudicated delinquent; N = 3,938

² This analysis used the subsample of youth who were charged with a felony; N = 601

Figure 11a. Summary of Initial Probabilities and Conditional Probabilities for Butler County Juvenile Court

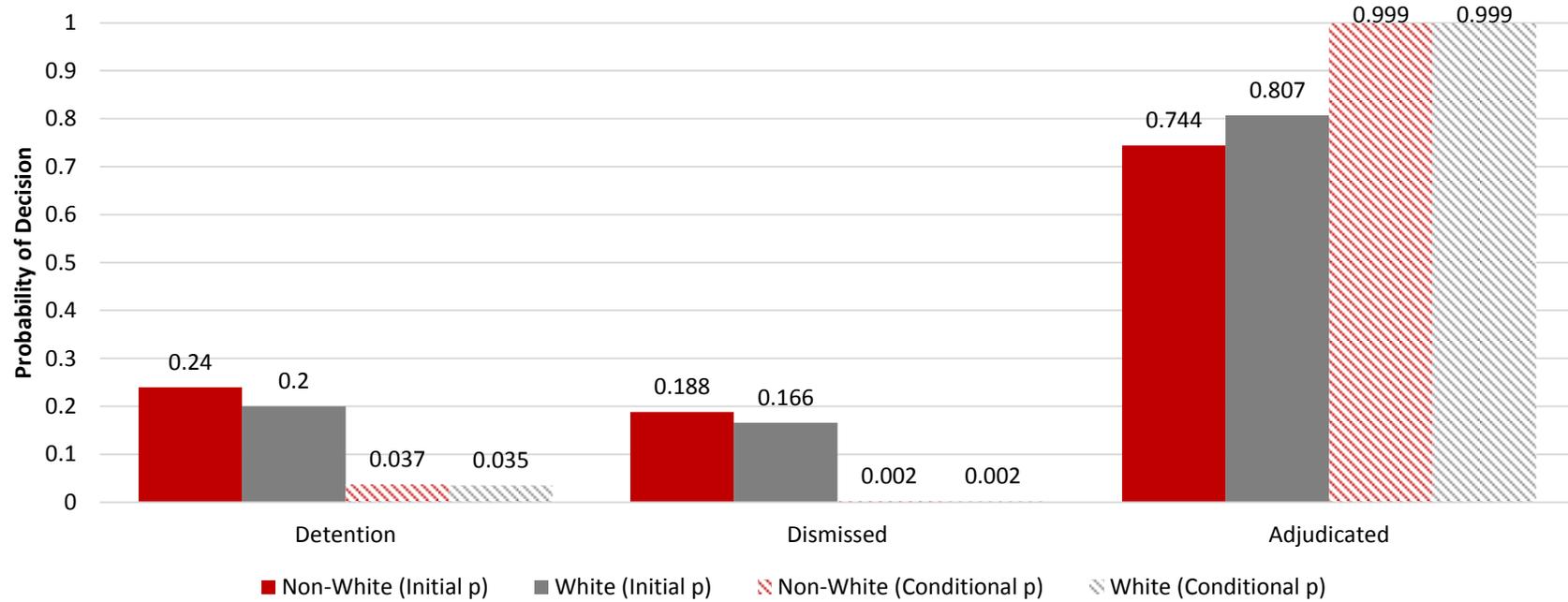
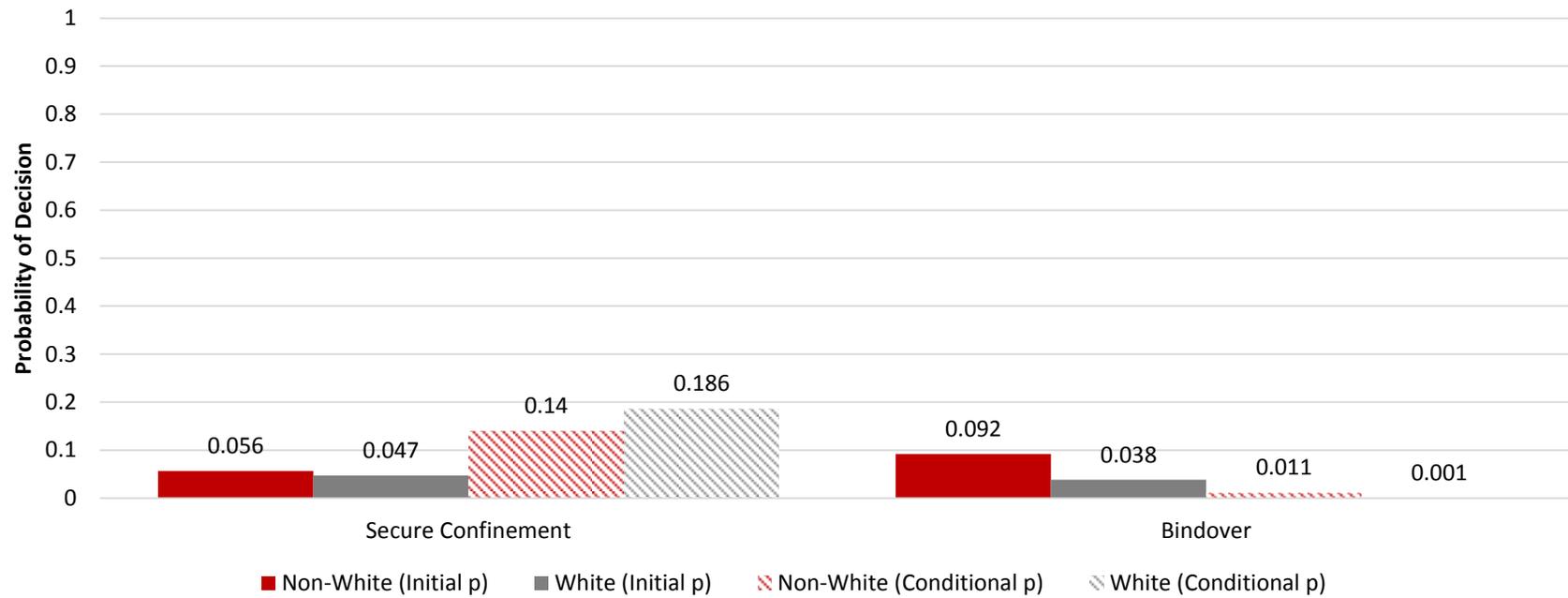


Figure 11b. Summary of Initial Probabilities and Conditional Probabilities for Butler County Juvenile Court



Summary of juvenile court record analysis. White youth comprised 66.7 percent of the referrals to Butler County Juvenile Court, African-American youth accounted for 22.6 percent, and Other youth accounted for the remaining 10.6 percent. According to the 2010 Census for Butler County, however, these groups accounted for 82.1 percent, 9.5 percent, and 8.4 percent of the juvenile population, respectively. These figures indicated that, on the surface, there was a degree of disproportionate minority contact in the cases coming into the Butler County Juvenile Court during the years for which we have records.

In the bivariate models, the effect of youths' race varied among the five outcomes. African-American youth were significantly more likely to be detained and waived to criminal court and less likely to be adjudicated delinquent compared to White youth. Youth in the Other category did not have significantly different odds than those of White youth for any of the five outcomes.

To better understand how race might affect juvenile court decision-making relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal factors. Race was not a significant predictor in the full model for any of the five outcomes. Instead, results indicated that the most consistent predictors of juvenile court outcomes in Butler County were offense type, offense seriousness, and number of charges in the current case. On balance, this suggests that the race differences observed initially in the groups' respective prevalence of juvenile justice petitions are explained to a degree by those legally-relevant influences.

Butler County Juvenile Court was the only court that provided detailed information on youths' living arrangement. Results indicated that youths who did not live with either parent

were significantly more likely to be detained and significantly less likely to have their case dismissed relative to youth who resided with at least one parent. These results provide empirical support for some of our qualitative analysis of court actor interviews.

Butler County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Butler County court staff in April of 2013. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court involvement and outcomes. Five interviews were conducted with administrative (programming directors and department supervisors), supervision, intervention, and judicial staff. The interviews lasted between 30 and 90 minutes, depending on interviewees' roles in the court and their level of disclosure. Data were then gathered on initial review (12), case review (9), and truancy hearings (3) observed in April and June of 2013.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were utilized to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. A majority of staff members attributed the overrepresentation of minority youth to the limited number of community-based prevention and intervention programs and

stressed the need for sustainable, cost-effective interventions that serve multi-need, multi-system youth. Specifically, staff pointed to the need for mental health, substance abuse, and re-entry services in the local jurisdiction. Respondents also discussed how budget cuts limited the provision of services and impacted the court's operational capacity overall. Staff described budget cuts as "more than just a focus on the numbers, but the crunching of needed services," and noted that, "resources are declining, yet needs are growing." These concerns were discussed in concert with the loss of wraparound and family-based services in the community, as noted below. Connecting the lack of resources to DMC directly, one staff member commented,

"It's [DMC] an important issue to address. Budget cuts make it hard to address... [Financial] cuts make it hard to address any issue, in any capacity, but particularly something as [challenging] as DMC."

Others (60%) attributed DMC problems to police practices, rather than court policies or procedures, and identified the need for cultural competency and data training (e.g., how to collect and accurately report arrest-level data) to educate officers of the issues contributing to racial disparities and to promote information sharing across agencies in forums like Juvenile Court Law Enforcement Group (JCLEG). While most participants endorsed the JCLEG initiative, some cautioned the forum impeded system responses and presented additional barriers to DMC-reduction efforts. "[Someone] will always be disgruntled, but system and community [constituents] see our effort," explained one staff member. Others perceived more 'pushback' from community stakeholders, referencing the time reductions in felony-level referrals was perceived as a "soft response to the rise in juvenile crime." This seemingly reinforces the notion that public perceptions are shaped by media coverage of race and crime (in general or related

to a particular publicized event) and influence the context within which the court (and its actors) respond to these issues (see also Soler & Garry, 2009).

The education system. A majority of respondents (4 of 5) rated the education system as not contributing or only slightly contributing to DMC. Only one participant pointed to the inadequacy of the education system as contributing to school disengagement and disproportionate minority contact. However, as noted below, respondents did identify some connections between at-risk, minority youth and truancy problems that can become a gateway into the system.

The family system. Staff members agreed (5 of 5) that families' willingness to participate in programming is an important consideration in the decision-making process, and linked families' lack of involvement and support to disproportionate minority contact. Interviewees cited public safety concerns (i.e., severity of the referral offense or prior criminal history), as well as the quality of the parent-child relationship and the families' willingness to participate in the court process as key factors in the decision making process. Case observations were consistent with this finding. For example, in Case #2-7 the parent/guardian *demand*ed that the youth be held in detention, despite the court's recommendation to release them on intensive supervision. Briefly, system actors explained that the family has an extensive history with the court and refuses to participate in the court process.

Discussions also focused on how dysfunctional family dynamics—including domestic violence and parental substance abuse—led to patterns of delinquent behavior and brought youth, particularly minority youth, into greater contact with the juvenile justice system. With these risks/needs in mind, one respondent commented,

“I consider whether parents [support the effort of the court] and try to leverage their strengths throughout that [process]. Often times the court has to assume the role of the parent. Parents refuse to attend court hearings, participate in treatment, and enable delinquent behavior.”

Socioeconomic status and neighborhood context. The majority of respondents (80%) identified poverty, and poverty-related circumstances as contributing to the overrepresentation of minority youth in the juvenile justice system. Specifically, staff linked high rates of unemployment, inter-generational poverty, limited access to transportation, and single-parent households to disparate outcomes. Participants explained that these conditions not only limit the social and economic opportunities of minority youth and their families, but also have strained the system’s capacity to effectively serve youth—especially higher risk youth—in the community. Of specific concern was the loss of the Girls Circle Program, Multi-systemic Therapy (MST), and Family Functional Therapy (FFT) interventions that are no longer funded through the court. Making this point directly, one staff member stated that,

“We have limited resources. The Girls’ Circle was an outstanding program that [targeted] youth [delinquency] and [addressed] DMC, but we lost funding. We’ve tried to fill the gap with mentoring programs but Girls Circle would help.”

Summary. Although staff member’s responses were limited and tended to focus on factors that contribute to delinquency generally, a majority of respondents believed that social and economic conditions external to the decision-making process contributed, at least in part, to overrepresentation (and disadvantage) of minority youth in the jurisdiction. Staff interviewees also identified the family as contributing to disproportionate minority contact, and stressed the need for sustainable programs that serve multi-risk and need youth. In particular, initiatives like Family EPICS and RECLAIM to expand the court’s capacity and improve youth

outcomes. This technical assistance and support, according to staff, has been especially critical given the county's reductions in staff and limited financial resources. However, these alternatives have not yet been assessed for their impact on disproportionate minority contact. Other programs like a court-led truancy program and Butler County Big Brothers Big Sisters mentoring program were cited as contributing to the court's success addressing youth delinquency, and disproportionate minority contact specifically.

Summary of Findings and Implications: Butler County

Fairfield PD provided data on 476 juvenile arrests made between 2010 and 2011. Records were provided for 1,058 arrests made by Middletown PD during the same time period. White youth accounted for the majority of juvenile arrests in Fairfield (N=298; 62.7% of total arrests). Similarly, White youth made up the majority of arrests in Middletown (N=674; 63.8%). Upon further examination of the RRI and odds ratio values, the findings indicate that disproportionality of minority arrests may be an issue in these two Butler County locales, however. This is especially true for African-American youth. The findings from the analysis of the potential explanatory variables by race subgroups seem to suggest that disproportionality in arrests of minority youth may partly be attributed to the source of the complaint filed with the police (especially if the complainant is a parent/neighbor or a school official/School Resource Officer) whereas drug use/possession showed the opposite trend for non-white youth in Fairfield. Arrests involving Non-White youth were more likely to result in pretrial detainment compared to arrests involving White youth. The findings from the analysis of Middletown arrest records are somewhat different in their implications. Arrests of Non-White youth were

more likely to be for more serious charge categories and more serious offense levels compared to White youth.

The UC research team was able to conduct one focus group with a police agency in Butler County. That focus group involved four participants. Focus group participants in Butler County consistently attributed DMC within their jurisdiction to the differential offending patterns of minority youth. In particular, officers suggested that factors related to family, socioeconomic status, and the geography of their community (regarding its influence on calls for service) contribute greatly to the higher rate of offending (and police contact) among minority youth. Importantly, their discussion regarding the influence of these factors on the prevalence and nature of juvenile offending emphasized that minority youth involvement in higher rates of offending and more serious types of crime is not a product of race, but of income, geography, and the routine activities that increase the visibility of crime in particular communities. In addition to their discussion regarding the persistent disadvantage of minority youth within their jurisdiction, officers emphasized the influence of the expanding role of law enforcement and the juvenile justice system on DMC. Given the influence of the factors outlined above, these officers thought that reducing juvenile offending and DMC is largely out of the hands of law enforcement. Instead, officers highlighted recommendations that focus on investing in the community to provide centers, programs, and services designed to target youth.

We analyzed approximately 5,000 case records provided by Butler County Juvenile Court. White youth comprised 67 percent of the referrals to Butler County Juvenile Court, African-American youth accounted for 23 percent, and Other youth accounted for the

remaining 11 percent. A comparison to 2010 census numbers in Butler County suggests that, on the surface, there was a degree of disproportionate minority contact in the cases coming into the Butler County Juvenile Court during the years for which we have records. In the bivariate models, the effect of youths' race varied among the five outcomes. African-American youth were significantly more likely to be detained and waived to criminal court and less likely to be adjudicated delinquent compared to White youth. We then analyzed statistical models that controlled for other factors. Race was not a significant predictor for any of the five outcomes. This suggests that the race differences observed initially are explained to a large degree by those legally-relevant influences. Butler County Juvenile Court was the only site in the DMC Assessment that provided detailed information on youths' living arrangement. Results indicated that youth who did not live with either parent were significantly more likely to be detained and significantly less likely to have their case dismissed relative to youth who resided with at least one parent. These results provide empirical support for some of our qualitative analysis of court actor interviews and police focus groups suggesting that family living situation might play a role in justice decision-making.

We conducted five interviews with juvenile court personnel in Butler County. The majority of the responses tended to focus on factors that contribute to delinquency generally as opposed to the DMC problem specifically. In general, the interviewees felt that social and economic conditions external to the juvenile court process contributed to any overrepresentation of minority youth in the court. Staff also identified the family as contributing to disproportionate minority contact, and stressed the need for sustainable programs that address the risks and needs of youth across multiple domains.

Table 27. Summary of Key Findings from Ohio DMC Assessment: Butler County.

Available Data	Key Findings	Implications
<p>Record data from two PDs (n=1,534)</p> <p>One focus group with four participants</p>	<p>Some disproportionality in arrest numbers in the two PDs after accounting for population breakdown</p> <p>Source of complaint, seriousness of offense, and detention/not following arrest show some race distinctions</p>	<p>Consider particular types of offenses/interactions that might be driving DMC</p> <p>Implications of detention versus release following arrest</p>
<p>Court records for 5,075 cases</p> <p>Five interviews with juvenile court staff and observed 24 hearings</p>	<p>Officers suggested that factors related to family, socioeconomic status, and the geography of their community influence offending and calls for service, which drive police contact among minority youth</p> <p>Race was not a significant predictor in the full statistical models for any outcomes (5)</p> <p>Interviews tended to focus on factors that contribute to delinquency generally as opposed to DMC specifically. Stressed the need for sustainable programs that address the risks needs across multiple domains</p>	<p>Court provided field for living arrangement, which did have an impact on dismissal and detention. Supports some findings with respect to the intertwined factors that may relate race and certain outcomes</p> <p>Court interviewees mentioned pros/cons of a collaborative Juvenile Court Law Enforcement Group (JCLEG) that are worth considering</p>

CLARK COUNTY, OH

Clark County Police Agency Data

Description of Clark County arrest data. The UC research team made contact with Springfield Police Department in Clark County, Ohio in the summer of 2012. The research staff sent a formal letter outlining the study and data requests to the head of this agency.

Springfield Police Department is the sole agency from Clark County that participated in the study. The findings from the analysis of arrest records from Springfield Police Department are discussed below.

Springfield Police Department. The Springfield Police Department maintained individual arrest records for juveniles. These files were sent electronically to the UC research team in August of 2012. The records included limited individual and offense-related information. The research staff cleaned and entered the arrest records in to a data management program. A total of 708 records were included in this analysis.

Basic demographic characteristics of the individual and offense-related information were obtained for all juvenile arrests. Available measures are listed below:

- Age
- Sex
- Race/Ethnicity
- Address
- Offense Category
- Offense Level
- Number of Offenses

Basic Description of Cases. Table 28 below provides an overview of the sociodemographic characteristics of youth arrested between 2010 and 2011 within the Clark County locale of Springfield. There were 708 arrests of youth ages 10-17 within that timeframe.

Of the 708 juvenile arrests, White youth accounted for the majority (57.0%; N=402).

Approximately 40.7% (N=287) of juvenile arrests were of African-American youth compared to 2.3% (N=16) of youth whose race/ethnicity was classified as other. The majority of juvenile arrests involved males in Springfield (67.2%; N=476) whereas females made up 32.8% of arrests (N=232). The average age of arrested juveniles is 15.65 years old (range=10.06-17.98 years old). There is a moderate amount of variation around the average age of arrested youth (SD=1.6).

Table 28. Basic Characteristics of Arrested Juveniles in Springfield

	Springfield PD (N=708) Valid % (N)
<i>Race</i>	
White	57.0 (402)
Black, AA	40.7 (287)
Multi-Race	0.0 (0)
Other	2.3 (16)
<i>Sex</i>	
Male	67.2 (476)
Female	32.8 (232)
<i>Age</i>	
Mean	15.65
Median	15.80
Standard Deviation	1.57

Report on RRI and odds ratios. The first major component of this study is to identify whether DMC may be an issue at various stages in the justice process. Table 29 below displays the 2010-2011 Relative Rate Index (RRI) values associated with juvenile arrests in Springfield. There is a moderate difference in the likelihood of arrest for White youth, African-American youth, and all minority youth in these data. Based on 2010 Census data, there were 6,129 youth ages 10-17 in Springfield. White youth accounted for the largest percentage of the youth

population in Springfield (65.3%; N=4,002). All minority youth made up approximately 34.7 percent (N=2,127) of the juvenile population. More specifically, African-American youth accounted for a large percentage of those minority youth (23.6% of the total juvenile population; N=1,449). When considering these population values in Springfield, approximately 10.0 percent of arrests involved White youth, 19.8 percent involved African-American youth, and 14.2 percent involved a minority youth. These values translate to an African American/White Relative Risk Index (RRI) of 2.0 and a Minority/White RRI of 1.4. Both values are above the RRI threshold (RRI>1.2) set forth by OJJDP and Ohio DYS. This suggests that there is a difference between the relative risk of arrests for White and African-American youth and White and minority youth. Additional analysis reveals that both the African American/White Odds Ratio (OR=2.2) and the Minority/White OR (OR=1.5) are statistically significant at p<0.05, suggesting that there is a low likelihood that differences of this magnitude would be present if the relative risk of arrest across groups were the same. Overall, the findings suggest that disproportionality in arrests of minority youth may be an issue in the Springfield arrests.

Table 29. Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority / White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Springfield PD	0.10	0.20	0.14	1.97*	1.42*	2.21* (1.87–2.61)	1.49* (1.27–1.74)

*RRI greater than 1.20 Threshold or OR that is statistically significant at p<0.05

Analysis of key case characteristics by race/ethnicity. Table 30 below presents the findings from analyzing explanatory variables by race subgroups (i.e., White vs. Non-White youth). Although none of the findings were statistically significant, several differences in arrest patterns by race subgroups did emerge. A slightly larger percentage of arrests for property

offenses involved Non-White youth (22.8%) compared to White youth (19.4%). However, a greater percentage of arrests for status or disorderly conduct offenses were of White youth (24.1%) in comparison to Non-White youth (20.1%). Arrests involving Non-White youth were more likely to be for felony and misdemeanor offenses (27.7% and 35.5%, respectively) compared to White youth (22.9% and 26.8%, respectively). Conversely, a greater percentage of arrests of White youth were for status/unruly offenses or probation violations and failure to appear offenses (40.0% and 10.2%, respectively) than Non-White youth (27.1% and 9.6%, respectively). Lastly, a slightly greater percentage of Non-White youth were arrested for multiple offenses (5.6%) compared to White youth (3.0%).

Table 30. Arrest Characteristics by Race Subgroups – Springfield PD

	White % (N)	Non-White % (N)	χ^2 V	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	36.8 (148)	37.6 (114)	2.28	0.4
Property	19.4 (78)	22.8 (69)	0.06	
Drug/Alcohol	4.7 (19)	4.3 (13)		
Other	14.9 (60)	15.2 (46)		
Status/DC	24.1 (97)	20.1 (61)		
<i>Most Serious Offense Level</i>				
Felony	22.9 (47)	27.7 (46)	7.59	47.6
Misdemeanor	26.8 (55)	35.5 (59)	0.14	
Status/Unruly	40.0 (82)	27.1 (45)		
PV/FTA	10.2 (21)	9.6 (16)		
<i>Number of Offenses</i>				
1	97.0 (390)	94.4 (286)	3.35	0.4
2	2.0 (8)	4.3 (13)	0.07	
3	1.0 (4)	1.3 (4)		

Summary of police agency record analysis. Overall, the arrest data suggests that the majority of arrests within Springfield involved White youth (57.0%). After examining the RRI and OR based on 2010 Census data and arrest records, however, we found that minority youth (particularly African-American youths) were disproportionately arrested compared to White

youths. Although none of the findings were significant from the analysis of explanatory variables by race, several potentially important findings did emerge from the analysis regarding disproportionality of arrests. It appears that the disproportionality of minority arrests were more likely to come from property offenses. In reference to offense level, those differences seem to derive from more serious offenses (i.e., felony and misdemeanor offenses). Lastly, arrests for multiple offenses were more likely to involve Non-White youth compared to White youth.

Clark County Focus Group Analysis

Overview. UC Researchers conducted one focus group session with Clark County officers in October of 2012. Officers described the department as small, serving a town of 50,000 residents, respectively. Located in a suburb of a larger city, 8 to 15 officers typically patrol the area. Nine agency personnel, with 5 to 28 years of experience in law enforcement, participated in the focus group session. These officers held various positions within the school resource, patrol, and juvenile detective units of their department. The focus group session lasted approximately two hours.

Findings. Focus group participants identified several potential causes of disproportionate minority contact (DMC) in the jurisdiction. Overall, responses focused on differential offending patterns rather than police policies and procedures aimed specifically at DMC. However, at least some participants suggested that the differential treatment of minority youth contributes to DMC, particularly at the front-end of the system. System actors' responses and explanations for DMC are outlined below.

Differential offending. Focus group participants largely identified differential offending patterns among minority youth to the primary explanation for DMC in the area. These explanations followed the presentation of DYS arrest statistics that indicated the overrepresentation of minority youth in the arrests in the jurisdiction. Overall, officers observed that minority youth tend to commit more serious crimes and have a higher prevalence of offending in their jurisdiction. However, it was emphasized that these differential offending patterns were not the product of the youth's race alone. Instead, the officers pointed to a number of external factors shared by many minority youth that appear to affect their behavior. Specifically, the differential offending of minority youth and their subsequent disproportionate contact with police were linked to factors such as their geographic location, socioeconomic status, and family.

Geographic location. Officers observed DMC as a result of patrol patterns and increased surveillance in predominately minority communities. This was believed to be in response to the prevalence of offending among youth in these communities and subsequent calls for service to these areas. Officers emphasized the reactive nature of their department in handling incidents involving youth, and explained that in the majority of situations patrolmen are at the mercy of the calls they get, following the description of incidents and individuals that are provided by their dispatchers. Officers argued that, overwhelmingly, these descriptions include incidents involving minority youth, and therefore commit officers to contacts with minority youth that were not been generated proactively. As one participant summarized,

“...If you are bound to the radio you must serve that caller regardless of what race comes across as your suspect or suspects...I think some of it can just be simply if you get called to a place, you can't dictate the race of the people you

are being sent to, you either speak with, or interact with whether as complainants, or victims, or suspects.”

Socioeconomic status. In addition to the importance of geographic location, it was consistently observed that the socioeconomic status (SES) of minority youth greatly affects their likelihood of coming into contact with police. Specifically, socioeconomic status was argued to affect police contact with minority youth through its association with higher calls for service, its influence on the opportunities available to youth, and its promotion of more criminogenic lifestyles.

Calls for service. Officers related calls for service to level of income. Recognizing this connection, one officer stated that it was less about race and more about “economics,” indicating that “as the income drops [in a section of their jurisdiction]...the call loads go up.” Others supported this observation, stating that more calls for service come from areas described as having low SES. Officers stressed the importance of SES in recognizing and understanding causes of DMC, and as noted above, emphasized that low SES communities with high volumes of calls for service contribute to DMC. Similar to their officers’ explanations of geographic location, participants suggested that DMC is a direct result of the department’s reactive policing style. However, the officers also noted that the higher rates of crime and calls for service in these low SES, minority areas have resulted in the concentration of patrol and overall police presence in these communities. Therefore, the patterns may be mutually reinforcing. Specifically, officers noted that targeting these neighborhoods has increased the likelihood of minority youth coming into contact with police.

Despite these observations, the officers did not question the possible DMC effects of the policing strategies implemented by their department, but rather highlighted the issues related to the economic, and largely racial, divide that exists across parts of their jurisdiction. Several participants suggested that, as the police, they often are responding crime and delinquency that are products of individual youth's poor economic standing. An officer underscored this point: "the other question that could be brought up is why is it that predominately the minorities in that poverty type situation were primarily African American and Hispanic. I can't tell you that."

Availability of opportunities. Socioeconomic status was also thought to affect DMC by influencing the youth's opportunity to curb criminal or otherwise risky behavior. For example, several school resource officers highlighted the difficulties experienced by low SES youth in receiving an education that is comparable to that of youth raised in affluent communities. In particular, one officer observed that the education standards vary in different parts of their jurisdiction depending on the resources available to schools within the communities.

Others suggested that given the repercussions of their economic disadvantage, many minority youth are given fewer opportunities for successful outcomes in their future. When discussing crime and delinquency among youth, officers identified that families in the more affluent areas of their jurisdiction are typically able to handle behavioral issues involving youth early on in an informal manner, often through their collaboration with schools, the community, or specific programs targeting youth. In contrast, officers observed that families within poverty-ridden areas, where such

resources are generally unavailable, are more likely to rely on formal measures (such as the police) to handle the behavioral problems of youth. Officers suggest that this heavy reliance on law enforcement in low SES, minority communities greatly increases the rates of DMC.

Criminogenic lifestyle. Finally, several officers suggested that low SES neighborhoods appear to promote lifestyles that increase the likelihood of youth coming into contact with police. Specifically, officers within the focus group observed that individuals in lower income areas are often on specific assistance programs that they described as “easy” and “convenient” to be on, providing no incentive to become employed because both the needs and many wants of the individual are supplied. Officers observed that many residents tied to these programs have significantly more free time than their employed counterparts and spend most of their time on the streets of their communities, increasing their contact with police that are patrolling the area.

Several officers argued that youth growing up in these environments follow the example of their parents – remaining on assistance, living a similar “responsibility-free” lifestyle, and thus increase their contact with police. However, others countered that it is much more difficult to break away from assistance given the lack of opportunities (such as education opportunities mentioned above) and the climate of the job market.

For example, one officer identified those difficulties, noting that,

“I think it’s tough to break out of that cycle and if you look when they show one shining example of someone who gets out of that system but I think it’s rare more than the norm. Now with today, with the unemployment, I don’t think people have so much control about when to get a job. You can get a job for minimum wage and not make it and lose everything you have or you can go on assistance.”

Family Factors. When explaining their disproportionate contact with minority youth, officers identified several family factors that they believe to increase their rates of interaction with this population. Specifically, officers suggested that the lack of parental involvement in the lives of minority youth and the lack of discipline provided within many minority households contributes greatly to the patterns of delinquency among individual youth, their rates of contact with police, and their overall experience within the juvenile justice system.

Lack of parental involvement. Officers within the focus group consistently observed that they frequently come into contact with minority youth due to the lack of involvement by parents that is commonly found in minority households. Officers observed that the minority youth typically come from broken homes characterized by young or absentee parents that either have little time or make little effort to be an active participant in the lives of their children. Officers suggested that this lack of parental involvement can be incredibly detrimental to the outcomes of minority youth within the juvenile justice system, particularly because many “effective” programs require the participation of the family for youth to be eligible. One officer provided an example saying,

“Juvenile court does base a lot a lot of things, a lot of programs, based on parental participation...drug court being one of the biggest ones...They will go to drug court; however, they will be removed from drug court quickly if they don’t get the participation from the parents.”

Officers in the focus group agreed that the juvenile justice system is generally more willing to commit time and resources to youth that have a stronger support system.

Unfortunately, for many minority youth, their familial status excludes them from

programs and treatment that could work to curb their delinquent behaviors. The officers suggested that this exclusion can often result in the escalation of offending among individual youth, ultimately increasing their contact with police as well as their penetration into the juvenile justice system.

Lack of discipline. Disproportionate minority contact with police was also believed to be a product of the lack of discipline within the minority home environment. Either from fear of repercussions (i.e. calls to child services or law enforcement) or general disinterest in parenting, officers observed that adults within minority households often do not provide punishments for their children's misbehavior, instead relying on police to handle even the most minor of behavioral problems. This lack of discipline is viewed to provide little structure, as well as little threat of authority, in the lives of youth, allowing their delinquency to escalate to more serious types of behaviors that warrant police contact.

Overall, the focus group observed that a significant amount of officer time is spent in the homes of minority youth. Several officers admitted their frustration, arguing that as time progresses parents abdicate an increasing number of their responsibilities onto law enforcement and the juvenile justice system as a whole. One officer shared, "I mean something as simple as 'kids don't want to go to school'...I work a two man car and we invariably, at least once a week, have to go to someone's house, become a parent and take their kids to school." Another participant within the group observed that "more and more responsibility" is being placed on police, probation, and the juvenile court whereas certain disciplinary and behavioral issues used to be

addressed by parents.

Differential treatment. Though the participating officers within the focus group primarily provided explanations for DMC that fell within the category of differential offending, several officers also recognized that the differential treatment of minority youth, though rare, may still exist. Though no specific examples were given, officers within the group admitted to being able to recall scenarios from the past where race appeared to be a defining factor in an officer's decision-making. However, the influence of race in present day policing practices was argued to be significantly less than it once was. A more veteran officer argued that, given the new age of officers and training practices in law enforcement, discrimination based on race is more of an "oddity" now. This officer suggested that while officers may have their individual biases, they typically are not acted upon because such actions would be noticed, called out, and reprimanded. It was observed that if an officer was engaging in this type of behavior, "just picking out the minorities to arrest," it would "come to light very quickly."

The remaining officers within the focus group supported this assessment, arguing that legal factors, such as offense seriousness, have come to the forefront of importance in police decision-making. Therefore, no officer voiced the belief that, in their personal experiences, minority youth are more likely to be arrested than similarly situated White youth. Instead these participants re-emphasized the changes in the processes of policing over time and the targeting and punishment of discriminatory practices by several law enforcement agencies throughout Ohio. Speaking of these changes in policing over time, one officer observed that "you [aren't] going to be employed long if you started acting upon something other than just

the offense. I mean, now, if you can prove that, you can do time rather than just get fired. So I just think it's had to change."

Recommendations to reduce juvenile offending. In responding to questions about ways to reduce juvenile crime and DMC within their jurisdiction, officers provided several suggestions that focus upon the need for parents, schools, and the juvenile justice system to hold youth accountable for their delinquent behaviors. Officers were firm in their belief that youth are being offered too many chances without any real form of repercussions for their criminal actions. This leniency within the juvenile justice system was argued to allow for both the escalation in the prevalence and seriousness of offending among individual youth. Therefore, officers argued that to effectively reduce rates of youth contact with law enforcement, the juvenile justice system must replace their lenient practices with a more serious, consistent approach when responding to juvenile offending. One officer outlined this need, observing that there is a lack of basic enforcement or carrying through with the penalties through the court because you have such a high rate of repeat offenders." S/he went on to say that then the police become a "catchall" in dealing with those youth.

Officers suggested that, to improve the consistency of processes and enhance accountability among youth, the various agencies associated with the juvenile justice system must collaborate more effectively when responding to juvenile offending. Officers specifically noted the lack of communication between probation and police personnel, observing that many youth "slip through the cracks" due to the failure of agencies to consult and share information. To address this shortcoming, officers proposed the utility of monthly (or more frequent) meetings among agencies, allowing for an open discussion of specific cases and

patterns in juvenile offending. Overall, the group supported this suggestion, finding that such collaborations have been successful in addressing juvenile crime problems in the past (e.g. youth gang initiatives).

Outside of the juvenile justice system, officers identified the need to empower parents and school staff/administrations to act as disciplinarians when warranted, taking charge of the youth in their care. These officers believed this could provide more structure in the lives of youth, prevent youth involvement in crime, reduce the burden on law enforcement to become involved in the lives of youth for only minor problems, and ultimately minimize youth's formal contact with law enforcement. As one officer observed, it is important to "re-empower" school staff and parents that not all juveniles should be introduced to the juvenile justice system (especially for minor infractions) and that they are not "bouncers" or the "last buck" in terms of responsibility for youth. Officers suggested that empowering both parents and school staff should involve the education of adults on how to handle specific problems with youth and the creation of programs to provide resources and help to parents and schools facing significant issues with juveniles.

Finally, officers within the focus group suggested that incorporating school resource officers into schools can provide discipline and structure for youth, while reducing youth's formal contact with law enforcement. Specifically, the school resource officers believed that having officers in schools is an effective way to reduce the number of juvenile arrests in any jurisdiction. These officers argued that their increased knowledge of particular youth assists them in handling juvenile delinquency through more informal measures. Additionally, officers from other units within the department emphasized that school resource officers provide

valuable information on the juvenile population to their department. As one participant commented, “the intelligence they have on the kids is phenomenal and that’s hard to measure.” Furthermore, SROs were believed to be a way to build rapport with youth in schools, providing a positive image of law enforcement and an overall positive influence in the lives of youth. Ultimately, their daily interactions were argued to create a more positive relationship with the majority of youth within school by filling the role of a mentor that emphasizes trust and accountability between youth and police.

Summary. While officers within this Clark County agency identified both explanations of differential offending and differential treatment as contributing to the disproportionate contact of minority youth with police, differential offending patterns among minority juveniles in their jurisdiction were consistently described as having the greatest impact on racial disparities in arrests. Specifically, officers suggested that minority youth are more likely to experience multiple socioeconomic and familial factors that create an environment conducive to delinquency, thus increasing their likelihood of coming into contact with police. Through their discussion of these factors, officers highlighted several major themes that provide significant insight concerning the policing of juveniles and DMC.

First, officers often noted the persistent disadvantage of minority youth compared to their White counterparts both in and out of the juvenile justice system. Officers described this disadvantage as coming in many forms, such as the lack of opportunities to forge a legitimate way of life by means of a good education, the lack of resources (e.g., money, programs) within minority communities to prevent the escalation of behavioral problems to crime, and the lack of a support system (i.e. family, school) that is often necessitated by programs in the juvenile

justice system. Officers described these disadvantages as both a cause of much of the delinquency among minority youth as well as a barrier to effectively addressing problems in this population. In either case, these disadvantages appear to produce a greater likelihood of police contact, resulting in higher rates of minority youth arrests within their jurisdiction.

Second, officers consistently expressed their belief that increasingly more responsibility concerning the management and handling of youth is being placed on the police. Specifically, officers observed that law enforcement is often pressured to fill the gap in the discipline and mentorship of minority youth when, due to constraints on resources, time, or interest, such things are not provided by parents, schools, or the juvenile justice system. In addition to creating a strain on an already limited police force, officers described that being viewed by the community and juvenile justice system as a “catchall” for youth typically results in a much higher number of contacts with minority juveniles. Ultimately, this commentary regarding the increased responsibility of police for youth in their community suggests the difficulty of reducing DMC without the help of outside agencies. For this reason, many officers expressed the need for programs and services that might empower parents and schools to take back control of the youth population, so that behavioral issues and other more minor problems may be handled promptly and informally, thus reducing the need for police involvement.

Finally, though officers within the focus group acknowledged that differential treatment has, and could possibly, still exist within their agency, their discussion of officer decision-making and agency response to unjust practices provided a positive outlook concerning the state of policing both in their specific jurisdiction, as well as the state of Ohio as a whole. Specifically, by emphasizing the importance of legal factors in officer decisions and observing law

enforcement agencies' attempts to curb differential treatment through more rigorous hiring processes and quick responses to discriminatory practices, the officers' comments suggest that law enforcement agencies are taking steps to safeguard against and address differential treatment practices within their respective jurisdictions.

Clark County Juvenile Court

Data collection. The research team collected a random sample (N=525) of records from the physical case files from the Clark County Juvenile Court for 2010 and 2011. A research team visited Clark County in September 2012 and examined the records and extracted relevant data using a form with a number of fields relevant to the study. As noted in Table 31, a stratified sampling procedure was used to select records so that comparisons could be made across race subgroups. Although the original proportions led to a roughly 70 to 30 percent split between White and Non-White, we oversampled records by groups to move that closer to 60 to 40 percent.

Measures included in the analysis. The primary independent variables of interest include race, sex, age, number of prior arrests, number of offenses in the current case, most serious offense category, and most serious offense level. Because there are very few non-African-American minority youth in the sample, *race* is recorded as White/Non-White. *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of prior arrests* is a continuous measure indicating the number of arrests a youth had prior to the current case. *Number of charges* is a continuous variable indicating the number of separate charges in the current case. If a youth was charged with more than one offense in the current case, *most*

serious offense category indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property, drug/alcohol, and “other.”²⁹ Similarly, the *most serious offense level* variable captures whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables include dichotomous measures of whether youth experienced particular outcomes at five decision points: detention, dismissal, adjudication, secure confinement, and bindover.³⁰ Each of these variables is coded as yes/no. *Detention* indicates whether a youth was placed in secure detention while awaiting further proceedings. *Dismissed* identifies whether youth had their case dismissed for any reason (e.g., requested by prosecutor). *Adjudicated* indicates whether a youth was formally found delinquent for the current case. *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility. *Bindover* indicates whether a youth was waived to criminal (adult) court.

Data coverage and preparation. The research team collected a random sample (N=525) from the population of juveniles petitioned to the Clark County Juvenile Court in 2010 and 2011. Sixty-five cases were excluded from the analysis because the files were sealed and no offense or dispositional information was available. An additional 22 cases were excluded because the youth’s race was not identified, leaving a final sample of 438 cases. This sampling

²⁹ The “Other” category includes status offenses.

³⁰ Diversion was not included in the analysis due to only 10 cases in the sample being diverted from official processing.

procedure required us to weight the sample based on race prior to conducting analyses. The weights were computed based on the 2010 referral numbers provided to DYS by the Clark County Juvenile Court. Table 31 provides the data used to calculate these weights.

There was relatively little missing data in the sample. There was complete coverage (i.e., no missing data) for race, sex, age, number of offenses, most serious offense category, most serious offense level, dismissed, adjudication, secure confinement, and bindover. There was 1.6 percent missing data for the number of prior offenses and 23.1 percent missing for detention. To retain all cases for analysis, we used multiple imputation (MI) to insert values for these two variables. MI replaces missing observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, age, sex, number of offenses, most serious offense category, and most serious offense level. MI first generates a specified number of datasets—in this case, ten—a variable is imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from those ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Descriptive statistics. In 2010-2011, males accounted for 73.1 percent of the petitions in the sample and White youth represented 60.7 percent. The average age at filing was 15.7 years old (SD=1.54). The mean number of offenses in the current case was 1.32 (SD=0.62) and the mean number of prior arrests was 0.25 (SD=1.29). Almost three quarters (72.1%) of the youth were charged with a misdemeanor or status offense; the remaining 27.9 percent were charged with a felony. The most frequent offense type in the sample was other offenses

(39.5%), followed by violent/sex offenses (28.8%), property offenses (26.5%), and drug/alcohol offenses (5.3%).

The race group distributions for each of the four decision points revealed relatively small differences between White and Non-White youth. White youth were detained in 43.8 percent of cases, while Non-White youth were detained in 37.0 percent of cases. Only 16.5 percent of White youth and 13.4 percent of Non-White youth had their cases dismissed. Approximately 71 percent of White youth and 76 percent of Non-White youth were adjudicated delinquent. Five percent of White youth and 5.8 percent of Non-White youth were placed in a secure confinement facility following adjudication. Finally, the prevalence of White youth (4.9%) and Non-White youth (5.2%) waived to criminal court was fairly similar.

Initial and conditional probabilities of case outcomes. Figures 12a and 12b display the initial and conditional probabilities for each of the five outcomes by youth's race (White/Non-White). The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any other factors/variables. These are similar to the intent of the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and Non-White youth will have a particular case outcome—given fixed, average values on the set of measures included in each statistical model, allowing us to examine the likelihood of an outcome for a “typical” case.³¹ This also allows us to consider

³¹ The mean values for number of offenses in the current case (1.32), number of prior arrests (0.25), and age at case initiation (15.66) were used to calculate predicted probabilities for each of the four outcomes. The remaining variables were set to their most frequently appearing categories: offense type – violent/sex offense; offense seriousness – misdemeanor/status offense; and sex – male.

whether any differences between White and Non-White youth observed for the base analysis shift when accounting for other relevant case factors.

Court outcomes. We estimated three statistical models for each of the five decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for Non-White youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and other legally relevant factors (number of prior arrests, number of offenses, most serious offense category, and most serious offense level). The final model (see Tables 32a and 32b) included the above variables, as well as the extralegal factors sex and age. Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Detention. In the initial model that included only race, race was not a significant predictor of pre-adjudication detention. The initial probability of detention for White youth (0.45) was slightly higher than that for Non-White youth (0.37), but this difference was not statistically significant (see Figure 12a). This suggests that there was no statistically significant evidence of initial disproportionality in these data. When the legally-relevant variables were added in the second model, the race effect remained nonsignificant. The effect of number of prior arrests was not a significant predictor of detention; however, a one-unit increase in the number of offenses in the current case significantly increased the odds of detention by 98 percent (OR=1.98). Interestingly, youth charged with a misdemeanor or status offense were significantly *more* likely to be detained (OR=1.93) relative to those charged with a felony

offense. Regarding offense type, only youth charged with an Other offense (OR=0.53) were significantly less likely to be detained compared to those charged with a violent or sex offense.

In the final model that included extralegal variables, the effect of race was not statistically significant. A one-unit increase in the number of offenses in the current case increased the odds of detention by 101 percent (OR=2.01). Unlike in the second model, the effect for offense seriousness was not statistically significant. None of the remaining variables—number of prior arrests, offense category, sex, and age—was a significant predictor of detention. The gap between the predicted probabilities of detention for White (0.50) and Non-White (0.39) youth increased slightly from the initial probabilities, indicating that White youth had a slightly higher likelihood of detention relative to Non-White youth when using fixed values for the other variables. Overall, the effect of race on detention was not significant in any of the analyses, which suggests that there was no statistically detectable presence of DMC in these data. Instead, results indicated that the decision to detain youth was predicted by number of offenses in the current case.

Dismissed. In the race-only model, race was not a significant predictor of case dismissal. The initial probabilities for White (0.17) and Non-White youth (0.13) were fairly similar, indicating no significant initial disproportionate contact in the data. In the second model that included legally-relevant factors, the effect of race on case dismissal remained nonsignificant. A one unit increase in number of offenses predicted a 63 percent decrease in the odds of dismissal (OR=0.37). Youth charged with an Other offense were over twice as likely to have their case dismissed (OR=2.32) relative to those charged with a violent or sex offense. Number of prior arrests and offense seriousness were not significant predictors of case dismissal.

In the final model that included extralegal variables, the effect of race was nonsignificant. Similar to the second model, the only significant legally-relevant variables were number of offenses (OR=0.37) and Other offenses (2.71). Age was the only significant extralegal predictor of case dismissal. Specifically, a one unit increase in youths' age predicted a 19 percent decrease in the odds of dismissal (OR=0.81). The conditional probabilities for White (0.09) and Non-White (0.07) youth, while slightly lower than their respective initial probabilities, were very close in size. Overall, the effect of race was not a significant predictor of case dismissal in any of the models. Results indicated that dismissal is instead associated with number of offenses, age, and offense type.

Adjudication. In the initial model, race was not a significant predictor of the decision to adjudicate. The initial probability of adjudication for White youth (0.71) was slightly lower than that for Non-White youth (0.76), but this difference was not statistically significant. After adding legally-relevant variables in the second model, the effect of race remained nonsignificant. Interestingly, prior record and offense seriousness were not significant predictors of adjudication. A one-unit increase in number of offenses in the current case significantly increased the odds of adjudication by 69 percent (OR=1.69). Youth charged with a property offense (OR=2.27) were significantly more likely to be adjudicated relative to those charged with a violent or sex offense.

In the final model that included extralegal variables, the effect of race remained nonsignificant. Similar to the second model, a one-unit increase in number of offenses in the current case predicted a 70 percent increase in the odds of adjudication (OR=1.70). Youth charged with a property offense (OR=2.24) were significantly more likely to be adjudicated

delinquent compared to those charged with a violent or sex offense. Youth charged with a misdemeanor or status offense (OR=1.81) were significantly more likely to be adjudicated delinquent relative to those charged with a felony. None of the remaining legal or extralegal factors were statistically significant. The conditional probabilities for both White youth (0.78) and Non-White youth (0.81) increased slightly from the initial probabilities, but the difference between the two decreased slightly. Overall, race was not a significant predictor of adjudication in any of the three models. Instead, the results indicated that the adjudication outcome was associated with offense type and offense seriousness.

Secure confinement. The secure confinement analysis used the subsample of youth who were adjudicated delinquent (N=321). In the initial model, race was not a significant predictor of secure confinement. As shown in Figure 12b, the initial probabilities for White youth (0.07) and Non-White youth (0.08) were almost identical, indicating no initial disparity in this data. After adding legally-relevant factors in the second model, youths' race remained nonsignificant.³² Youth charged with a misdemeanor or status offense were 67 percent less likely to be placed in secure confinement (OR=0.33) relative to those charged with a felony. Only youth charged with a property offense (OR=4.14) were significantly more likely to be placed in secure confinement compared to those charged with a violent or sex offense.

When the extralegal factors were added in the final model (see Table 32b), the effect of race remained nonsignificant. None of the legally-relevant variables were significant predictors of secure confinement. The only significant extralegal variable was youth age. Specifically, a one unit increase in age predicted a 72 percent increase in the odds of secure confinement. The

³² Drug/Alcohol offenses and number of priors were removed from this analysis because they were perfect predictors of secure confinement.

conditional probability for White youth (0.05) was slightly lower than that for Non-White youth (0.08), but this difference was not statistically significant. Results indicated the decision to place youth in secure confinement was more affected by offense seriousness and age.

Bindover. The final decision point examined was waiver to criminal court (bindover). Since no youth charged with a misdemeanor or status offense was waived to criminal court, this analysis used the subsample of youth charged with a felony offense (N=122). In the initial model, race was not a significant predictor of bindover. The initial probability of bindover for White youth (0.17) was slightly lower than that for Non-White youth (0.20), although due to the relatively small number of waived cases (N=22), this difference was not statistically significant. After adding legally-relevant factors in the second model, race remained nonsignificant.³³ The number of offenses in the current case was not a significant predictor of bindover either. Youth charged with a property offense were significantly less likely to be waived relative to those charged with a violent or sex offense (OR=0.20). None of the remaining variables was statistically significant.

When the extralegal factors were added in the final model, the effect of race remained nonsignificant. The significant effect of those charged with a property offense (OR=0.16) increased slightly from the second model. Additionally, a one unit increase in youth's age predicted an almost four-fold increase in the odds of bindover to adult court (OR=3.86). The conditional probabilities for White (0.12) and Non-White (0.11) youth were almost identical and slightly lower than the initial probabilities. Overall, the effect of race on bindover was not significant in any of the three models, which suggests that there was no presence of

³³ Number of prior arrests and sex were perfect predictors of bindover so they were removed from the analysis.

disproportionality in these data. Analyses indicated that the decision to waive youth was affected by offense type and age.

Table 31. Stratification Sample Weights for Clark County Juvenile Court

Race	“Referral Population” N (2010)	Proportion of Population	Sample N	Proportion of Sample	Weight
White	686	0.7168	266	0.6073	1.1803
Non-White	271	0.2832	172	0.3927	0.7211
Total	957	1	438	1	

Table 32a. Binary Logistic Regression – Outcomes for Clark County Juvenile Court (Full Models)

	Detention			Dismissed			Adjudication		
	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	-0.43	0.65	0.27	-0.25	0.78	0.30	0.23	1.26	0.24
Num. of Priors	-0.20	0.82	0.16	0.06	1.07	0.12	0.05	1.05	0.11
Num. of Offenses	0.70	2.01	0.21	-1.00	0.37	0.43	0.53	1.70	0.23
Misd/Status	0.58	1.78	0.32	0.39	1.48	0.44	0.59	1.81	0.29
<i>Offense Type</i>									
Property	0.63	1.87	0.33	-0.03	0.97	0.49	0.81	2.24	0.36
Drug/Alcohol	-0.10	0.90	0.56	0.88	2.42	0.66	-0.44	0.64	0.54
Other	-0.60	0.55	0.31	1.00	2.71	0.36	-0.48	0.62	0.29
Sex	0.25	1.28	0.28	0.16	1.18	0.32	0.03	1.04	0.27
Age at Filing	-0.08	0.92	0.09	-0.21	0.81	0.10	0.08	1.08	0.08
Constant	-0.26		1.54	1.89		1.74	-1.37		1.32

Notes: Bolded entries represent statistically significant estimates at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error

Table 32b. Binary Logistic Regression – Outcomes for Clark County Juvenile Court (Full Models)

	Secure Confinement*			Bindover**		
	B	OR	SE	B	OR	SE
Race (1=Non-White)	0.60	1.82	0.47	-0.12	0.88	0.58
Num. of Priors	----	----	----	----	----	----
Num. of Offenses	0.12	1.13	0.34	0.33	1.39	0.33
Misd/Status	-1.02	0.36	0.53	----	----	----
<i>Offense Type</i>						
Property	1.16	3.18	0.62	-1.85	0.16	0.66
Drug/Alcohol	----	----	----	-0.38	0.69	0.93
Other	0.87	2.38	0.68	-0.41	0.66	0.88
Sex	-1.19	0.30	0.83	----	----	----
Age at Filing	0.54	1.72	0.18	1.35	3.86	0.40
Constant	-11.69		3.10	-23.61		6.85

Notes: Bolded estimates represent estimates that are statistically significant at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error

* This analysis was conducted using the subsample of youth who were adjudicated delinquent (N = 321).

** This analysis was conducted using the subsample of youth charged with a felony offense (N = 122).

Figure 12a. Summary of Initial Probabilities and Conditional Probabilities for Clark County Juvenile Court

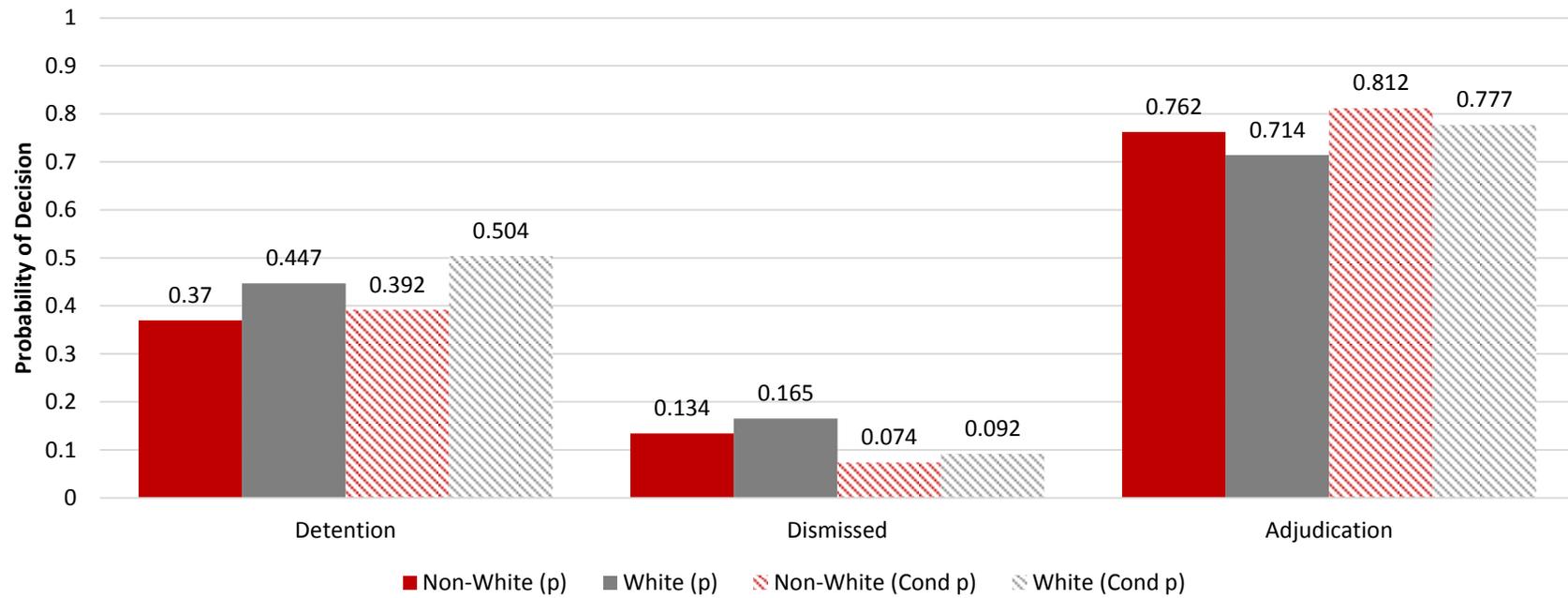
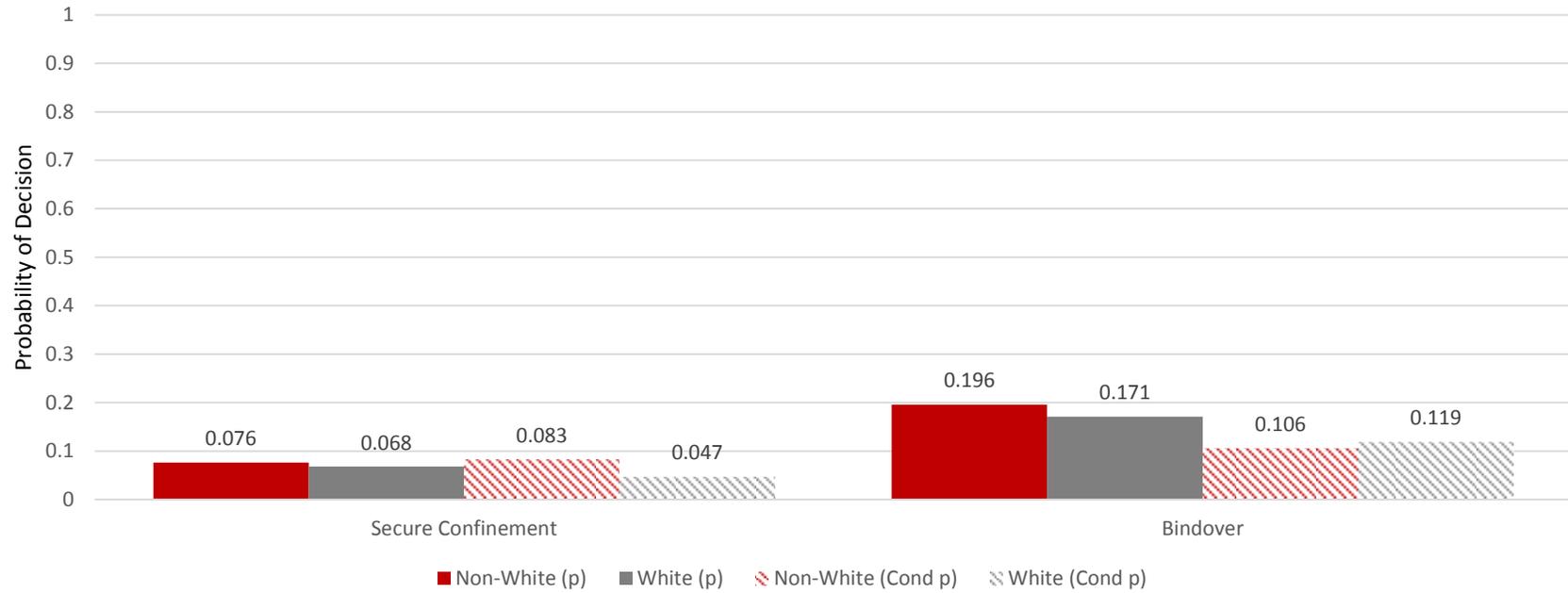


Figure 12b. Summary of Initial Probabilities and Conditional Probabilities for Clark County Juvenile Court



Summary of juvenile court record analysis. Overall, the case record data analyzed for Clark County Juvenile Court provide relatively little evidence of disproportionate minority contact. Even when analyzed alone, race was not a significant predictor of any of the five outcomes. This can be observed in the slight differences between White and Non-White youth probabilities of outcomes at the five decision points that were analyzed. To better understand how race might affect juvenile court decisions relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal variables. Like the bivariate models, race was not a significant predictor in any of those analyses. Instead, it appears that the most consistent predictors of the outcomes were age, number of offenses in the current case, and offense type and seriousness.

Clark County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Clark County court staff in February of 2013. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community was used. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court involvement and outcomes. Four staff interviews were conducted with administrative (programming directors and department supervisors) and supervision staff (probation and programming staff). The interviews lasted between 30 and 90 minutes, depending on the interviewees' role in the court and their level of disclosure. Data were also gathered on case review, disposition, and arraignment hearings (n=15) in September of 2013.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to exemplify explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. Staff (4 of 4) indicated that DMC is “not an issue”, and asserted that “there has always been a balance” with regard to juvenile court decisions in Clark County. Respondents identified legal (e.g., offense type, criminal history, prior compliance), administrative (e.g., OYAS risk/need assessment recommendations, structured case reviews processes for all placement decisions) and individual (e.g., treatment targets for behavior change such as mental health and substance abuse, as well as family dynamics) criteria as key factors in the decision-making process rather than race, and linked these policies/procedures to favorable outcomes in the area. In particular, youth who were thought to be using alcohol, drugs (controlled substances in particular), or as having untreated mental health issues were considered to be at an increased risk court involvement, regardless of race. Court observations were consistent these findings. A majority (71%) of case observations focused on family environment and functioning factors, as well as potential treatment considerations in the decision-making process.

The family system. Respondents indicated that family structure and style of supervision, including parents’ use of disapproval and monitoring strategies within the home, were important considerations in the decision making process. Discussions also focused on how dysfunctional family dynamics (or, a lack of stability) led to patterns of delinquent behavior and

brought youth, particularly higher-risk and female youth, into greater contact with the juvenile justice system. “Families present challenges. [Particularly in situations] where youth are [exposed] to substance abuse, violence, neglect, and [problems] in the home,” explained one staff member. Others added that these behaviors (or, challenges) are more prevalent among high-risk and multi-need families overall, and are not restricted to minority youth and their families.

Socioeconomic conditions and neighborhood context. Although high levels of poverty and disadvantage were recognized as potential contributing factors to DMC, responses overall focused on how low-income, disadvantaged, youth “move through the system” regardless of their race. Making that point directly, one staff member stated that, “DMC is a poverty issue, not a race issue.”

Summary. Relatively few interviews were conducted in Clark County and therefore the available information is somewhat limited in providing insight about system decision-making and/or responses to DMC. The interview findings were consistent with case record findings from the standpoint of respondents’ indicating that DMC “was not an issue,” however. Rather, staff focused on how family, school, and socioeconomic conditions contributed to justice system involvement for all youth.

Though concern for DMC was low overall, a number of staff stressed the need for mentoring and recreational programs to engage youth in pro-social activities, enhance self-esteem, and encourage responsibility. Others stressed the need for “family-centric programs” such as Project JERICHO. Project JERICHO is a collaborative program with Job and Family Services of Clark County (JFSCC) and Clark State Community College Performing Arts Center that

enables at-risk students to tap into their own creativity, and lead a productive and positive life. The program reaches underserved youth in a variety of settings, including Springfield Ohio middle schools and the Juvenile Detention Center. Using several art forms (e.g., painting, drawing, photography, music, dance) the “program [fosters positive] social interactions” through expression. Recognizing the role of healthy family dynamics, Project JERICHO also sponsors the Family Connections Program for JFSCC clients. One staff member described the program as an opportunity for “parents to strengthen their bond” and improve communication with youth in lasting ways. Participants also pointed to the importance of (and continued need for) drug court, intermediate sanctions such as electronic monitoring, detention, intensive supervision, and family counseling/mediation to better meet the risks and needs of the youth that come intact contact with the court.

Summary of Findings and Implications: Clark County

One police agency was included in the Clark County analysis (n=708). RRI values and Odds Ratios for Non-White and White youth arrests did reveal some pattern of front-end disproportionality across groups. Examination of characteristics of those cases identified no significant differences in other characteristics, however. There was a tendency toward more property/violent offense arrests for Non-White youth while Whites were proportionally more likely to be involved in status offenses.

A focus group was conducted in Clark County as well (n=9 participants). Officers identified persistent disadvantages facing minority youth as the main contributor to DMC in arrests. They describe these disadvantages as both a cause of much of the delinquency among minority youth as well as a barrier to effectively addressing criminogenic risks in this

population. They also argued that there has been a shift in responsibility from more traditional social institutions, like families and schools, to police agencies and argued for programs and services that would help swing this pendulum back to parental, school, and community control. Finally, the officers in this focus group mentioned that they believe there has been progress in recruiting and training processes that has had an impact on improving police relationships with minority youth and citizens.

The 438 case records analyzed for Clark County Juvenile Court identified relatively little evidence of disproportionate involvement for Non-White youth. Even when analyzed alone, race was not a significant predictor of case outcomes for diversion, pre-adjudication detention, dismissal, delinquency adjudication, secure confinement, or bindover. This can be observed most simply by looking at the fairly slight differences between Non-White and White youth probabilities of given outcomes shown in Figures 12a and 12b. None of these was statistically significant. Certain legally-relevant factors such as the number of offenses, offense type, and offense level did predict some of these outcomes—albeit sometimes in ways that were not anticipated (e.g., greater likelihood of detention for misdemeanor/status offenses than felonies).

Four interviews were conducted with Clark County Juvenile Court staff. These staff members rated disproportionate contact as a relatively limited problem in their court, which seems to line up with the quantitative record data analyzed here. Interviewees instead focused on how family, school, and socioeconomic conditions contributed to justice system involvement generally and how programs aimed at dealing with risks that might come from those domains would be beneficial in preventing delinquency and reducing DMC.

Table 33. Summary of Key Points from DMC Assessment: Clark County

Available Data	Key Findings	Implications
708 police arrest records from one PD	RRI values and Odds Ratios revealed some DMC, but case information did not identify patterns—only seriousness of offense and number of offenses were available	Limited coverage in potential arrest characteristics
One focus group with nine participants	Officers describe disadvantages as cause of delinquency among minority youth and as barrier to addressing criminogenic risks.	This was among the smaller samples of court records so that may have played some role
438 Juvenile court records	Shift in responsibility from more traditional social institutions to police	Police mentioned that they perceived progress in recruiting and training that has improved relationships with minority youth and communities
Four interviews with court staff; 15 hearing observations	Court record data provided relatively little evidence of disproportionate minority contact Few interviews conducted but were consistent with case record findings from the standpoint of respondents' indicating that DMC "was not an issue." Focused more on other factors that contributed to justice involvement more generally	Also noted the need for programs that swing the pendulum back to parents, school, and community control Court actors mentioned programs aimed at family needs and risks as possible avenues for preventing delinquency/DMC

CUYAHOGA COUNTY, OH

Cuyahoga County Police Agency Data

Description of Cuyahoga County arrest data. In August of 2013, the UC research team started several attempts to contact the 11 police agencies in Cuyahoga County identified in the DMC Assessment RFP by Ohio DYS. The research team began by sending a formal letter outlining the study and data requests to the head of each agency. Agencies that did not respond were then sent follow-up emails and periodic phone calls encouraging their participation. A final attempt to contact these agencies was made in December of 2014. The research team sent emails to mid-level personnel in the agencies of interest. These emails outlined the purpose of the study and data requests. After several months, those agencies that offered no response were identified to "decline participation via no response." Two agencies, the Lakewood Police Department and University Heights Police Department submitted data at that point in the process (see below).

Table 34 displays a breakdown of the sociodemographic characteristics (i.e., Race, Sex, and Age) for arrested youth in two Cuyahoga County locales. The total number of youth arrests during the study time frame varies from 134 (Lakewood PD) to 260 (University Heights PD). Some youth may be arrested multiple times during the time frame. The majority of youth arrested were either African American or White, suggesting this is the most relevant comparison for examining the issue of DMC in Cuyahoga County. African-American youth account for the majority of juvenile arrests in both of these locales.³⁴ Male juveniles accounted for a greater percentage of youth arrests than females (54.9% and 86.6% in University Heights

³⁴ Where there were "Other" race/ethnicities noted, youth were Hispanic.

and Lakewood, respectively). The average ages of youth arrested in these locales were 15.5 and 15.9 years old, respectively. The ages of youth arrested ranged from 10 years old to 17.9 years old. The standard deviation values associated with average age indicate that there is relatively little variation in the age of youth arrested in these two areas.

Table 34. Basic Characteristics of Arrested Juveniles in Locations with Available Data

	University Heights PD (N=260) % (N)	Lakewood PD (N=134) % (N)
<i>Race</i>		
White	13.8 (36)	41.8 (56)
Black, AA	86.2 (224)	55.2 (74)
Other	0.0 (0)	3.0 (4)
<i>Sex</i>		
Male	54.9 (106)	86.6 (116)
Female	45.1 (87)	13.4 (18)
<i>Age</i>		
Mean	15.50	15.92
Standard Deviation	1.662	1.355

As outlined in the Ohio DYS RFP, the first step in the study is to determine whether DMC might be an issue at each stage in the justice process. Table 35 below presents the 2010-2011 Relative Rate Index (RRI) values for two police agencies in Cuyahoga County. Overall, the findings, which consider the distribution of arrests across the two groups relative to their representation in the population, suggest that disproportionality in arrests of minority youth may be an issue in these two Cuyahoga County locales.

Table 35. Preliminary Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black	pArrest Minority Youth	RRI Black/ White	RRI Minority/ White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
University Heights PD	0.05	0.48	0.44	8.94*	8.09*	16.32* (11.14–23.91)	13.56* (9.29–19.80)
Lakewood PD	0.02	0.17	0.09	11.11*	5.62*	13.18* (9.17–18.97)	6.06* (4.26–8.61)

**RRI* greater than 1.20 Threshold or *OR* that is statistically significant at $p < 0.05$

University Heights Police Department. The University Heights Police Department stored physical file records on juvenile arrests. Multiple data requests were made to the agency in order to get additional information. The UC research team received somewhat limited youth arrest records for 2010 and 2011. After retrieval, UC researchers manually entered the files in a data management and analysis program. Basic characteristics of the individual and offense-related information were collected for all juvenile arrests. Available measures are listed below:

- Name
- Date of Birth/Age
- Sex
- Race
- Offense Category
- Offense Level
- Number of Offenses

Basic description of cases. Of the 260 youth arrest records obtained from University Heights (for 2010 and 2011), 86.2 percent were African American (N=224) and 13.8 percent were White (N=36). Males accounted for 54.9 percent of juvenile arrest compared to 45.1 percent females. The average age of juveniles arrested was 15.5 years old (SD=1.66).

Report on RRI and odds ratios. As presented in Table 35, there is a substantial difference in the likelihood of arrest for White youth and minority youth in these data. In 2010,

youth ages 10-17 accounted for approximately 9 percent (N=1,182) of the total population in University Heights. White youth made up the majority of the youth population ages 10-17 in University Heights (N=668; 56.5% of youth) relative to African-American youth (N=465; 39.3%). Considered against the population of youth ages 10-17 in that city, five percent of the arrest records involved White youth and 48 percent involved African-American youth. These values produce an African-American/White RRI of 8.94 and a Minority/White RRI of 8.09. Both the African-American/White and the Minority/White RRI values exceed the threshold of 1.20 established by OJJDP and Ohio DYS, indicating that there is a large difference between the relative risk of arrests for White and African-American youth and White and minority youth—based on their relative population coverage. Furthermore, the African-American/White OR (16.32) and the Minority/White OR (13.56) are statistically significant at $p < 0.05$, meaning that there is relatively low likelihood that a difference of this size would be found if the groups' relative risk of arrest were actually the same.

Analysis of key case characteristics by race/ethnicity. Table 36a below displays the possible explanatory variables by race for arrest records from University Heights, including most serious offense category, most serious level, and number of offenses. Most serious offense category by race subgroup is the only statistically significant finding in this analysis ($\chi^2=21.96$; Cramer's $V=0.29$). A greater percentage of arrests for a violent/sex offense involved White youth (52.8%) compared to their Non-White counterparts (20.1%). Arrests for offenses classified as "other" also differed by race with a greater percentage of arrests for this offense category involving White youth (13.9%) than Non-White youth (7.6%). Conversely, a larger percentage of arrests for property-related offenses were of Non-White youth (72.3%)

compared to White youth (33.3%). The measure of association value indicates that most serious offense category accounts for a relatively moderate amount of the variation in arrests between race subgroups. Although not statistically significant, there were subtle differences between race subgroups and most serious offense level. For example, arrests for felony level offenses were more likely to involve White youth (16.1%) compared to Non-White youth (9.3%).

Table 36a. Arrest Characteristics by Race Subgroups – University Heights PD

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	52.8 (19)	20.1 (45)	21.96*	0.0
Property	33.3 (12)	72.3 (162)	0.29	
Other	13.9 (5)	7.6 (17)		
<i>Most Serious Offense Level</i>				
Felony	16.1 (5)	9.3 (18)	1.34	13.8
Misdemeanor	83.9 (26)	90.7 (175)	0.08	
<i>Number of Offenses</i>				
1	72.2 (26)	77.7 (174)	0.54	0.0
2	22.2 (8)	17.4 (39)	0.05	
3+	5.6 (2)	4.9 (11)		

* statistically significant at $p < 0.05$

Lakewood Police Department. Lakewood Police Department's files on juvenile arrests were physically stored within the department. After several requests, data were compiled by Lakewood PD staff and mailed to the UC research team. The data files contained youth arrest records for 2010 and 2011 in addition to key offender and offense-level characteristics. UC researchers manually entered the data into a database for data management and analysis.

Basic offender characteristic and offense-level information were provided for all juvenile arrests. Listed below are the available key predictors.

- Race
- Sex

- Age
- Most Serious Offense Category
- Most Serious Offense Level
- Number of Offenses
- Weapon Involved Offense (Y/N)
- Drug or Alcohol Involved Offense (Y/N)

Basic description of cases. A majority of the 134 juvenile arrests made in Lakewood between 2010 and 2011 were of African-American youth (N=74; 55.2%). White youth accounted for 41.8 percent of juvenile arrests (N=56) and 3.0 percent of arrests involved youth classified as “other” racial categories (N=4). Of the 134 juvenile arrests, 86.6 percent are males (N=116) compared to 13.4 percent female (N=18). The average age of juvenile arrestees in Lakewood is 15.92 years old (SD=1.36), indicating that the majority of youth arrested fall between approximately 14 and 17 years old.

Report on RRI and odds ratios. In 2010, there were 4,552 persons ages 10-17 in the city of Lakewood (8.7% of the total population). White youth accounted for 80.1 percent of youth ages 10-17 in Lakewood (N=3,648) compared to 9.5 percent of African-American youth (N=434). All minority youth racial groups comprise approximately one-fifth of the youth population in Lakewood (N=904; 19.9%). White youth in Lakewood have a lower proportion of arrests ($p_{\text{Arrest}}=0.02$) relative to their population numbers compared to African-American youth ($p_{\text{Arrest}}=0.17$) and all minority youth ($p_{\text{Arrest}}=0.09$). Both the African-American/White and Minority/White RRI values suggest a large relative difference in the likelihood of arrest between White youth and African-American youth when compared to their representation in the population. The African-American/White (OR=13.18) and Minority/White (OR=6.06) odds ratios are statistically significant, indicating that there is a relatively low likelihood that

differences of this magnitude would exist if the relative risks of arrests were in fact the same. The odds of an arrest involving an African-American youth are 13.18 times more likely than a White youth. Furthermore, arrests were 6.06 times more likely to involve a minority youth as opposed to White youth.

Analysis of key case characteristics by race/ethnicity. The analysis of case characteristics by race/ethnicity for Lakewood is shown in Table 36b below. The analysis did not reveal any statistically significant differences between the race subgroups and case characteristics.³⁵ However, the findings did reveal some patterns that are worth a brief mention. Arrests for a violent or sex offense were more likely to involve Non-White youth (N=36; 46.2% of Non-White arrests) compared to White youth (N=22; 39.3%). Conversely, a greater percentage of arrests for offenses classified as “other” were of White youth (N=16; 28.6%) than Non-White youth (N=15; 19.2%). Arrests for more serious offense levels were more likely to involve White youth compared to Non-White youth. Specifically, arrests for felony level offenses were more likely to involve White youth (N=24; 63.2%) compared to Non-White youth (N=38; 55.1%). Conversely, a larger percentage of arrests for status offenses involved Non-White youth (N=6; 8.7%) than White youth (N=1; 2.6%). Lastly, arrests for a drug- or alcohol-related offense were more likely to involve White youth (N=17; 30.4%) compared to Non-Whites (16; 20.8%). The measure of association values related to these differences indicate that they are relatively weak in terms of accounting for these differences between race subgroups.

³⁵ This should be tempered slightly by the fact that there were relatively few cases in the Lakewood PD data and even fewer in some offense groups (e.g., status offenses, weapon-involved offenses).

Table 36b. Arrest Characteristics by Race Subgroups – Lakewood PD

	White % (N)	Non-White % (N)	χ² V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	39.3 (22)	46.2 (36)	1.64	0.0
Property	32.1 (18)	34.6 (27)	0.11	
Other	28.6 (16)	19.2 (15)		
<i>Most Serious Offense Level</i>				
Felony	63.2 (24)	55.1 (38)	1.68	20.1
Misdemeanor	34.2 (13)	36.2 (25)	0.13	
Status	2.6 (1)	8.7 (6)		
<i>Number of Offenses</i>				
1	67.9 (38)	62.8 (49)	0.86	0.0
2	14.3 (8)	20.5 (16)	0.08	
3+	17.9 (10)	16.7 (13)		
<i>Weapon Involved?</i>				
No	87.5 (49)	85.7 (66)	0.09	0.7
Yes	12.5 (7)	14.3 (11)	0.03	
<i>Drugs or Alcohol Involved?</i>				
No	69.6 (39)	79.2 (61)	1.59	0.7
Yes	30.4 (17)	20.8 (16)	0.11	

* statistically significant at p<0.05

Summary of police agency records analysis. The majority of Cuyahoga County arrest records obtained here involved African-American youth (86.2% in University Heights and 55.2% in Lakewood). We examined the Relative Risk Index (RRI) and the Odds Ratios (OR) for University Heights and Lakewood based on 2010 U.S. Census data. The findings from this analysis suggest that minority youth (particularly African Americans) were disproportionately arrested compared to White youth. In University Heights, those arrests were more likely to come from less serious crimes in terms offense level and type. Although the data for arrests in Cuyahoga County were somewhat limited due to nonparticipation of most police agencies, and smaller numbers of cases where there was participation, these analyses provide some important points for discussion around the relative characteristics of arrests for Whites and Non-Whites. They also provide some points to look at more closely in the juvenile court data—

where there is a greater ability to control for legally-relevant factors in analyzing case outcomes.

Cuyahoga County Police Focus Group Analysis

Overview. UC Researchers conducted one focus group in Cuyahoga County in June of 2015. The participating agency, though relatively small in geographic size, has a high population density. The agency has roughly 100 sworn officers, the majority of whom were identified to have ten years of experience or more on the force. Eight law enforcement personnel participated within the focus group. These participants varied widely in their positions, working across the Administrative, Investigative, School Resource, and Patrol units within their department. The focus group lasted approximately two hours and forty-five minutes.

Findings. Focus group participants identified several potential causes of disproportionate minority contact (DMC) within their jurisdiction. Responses focused on differential offending patterns rather than differential treatment. In fact, the group offered no explanations that suggested the deliberate differential treatment of minority youth by law enforcement personnel within their agency.

Differential offending. Focus group participants consistently identified differential offending patterns among minority youth as the primary explanation for DMC in the area. These explanations emerged in officers' discussion of juvenile crime trends and in the discussion following the presentation of DYS arrest statistics identifying the extent of DMC in the local area. Overall, officers argued that they come into contact with minority youth at a higher rate than their White counterparts because minority youth commit the majority of crime

within their jurisdiction. Officers observed that minority youth tend to act more violently, disrespectfully, and disorderly towards police, causing interactions to escalate to more formal contact. Furthermore, officers perceived more minority youth to be chronic, repeat offenders. Officers linked the differential offending patterns of minority youth to factors such as the geographic location and family environment of youth.

Geographic location. As mentioned previously, the jurisdiction of this particular agency borders a larger city and is greatly influenced by the crime rates of that urban area. Arguing that their department does not advocate proactive policing strategies, officers described police focus on areas with greater minority presence as a function of higher calls for service coming from lower income, minority neighborhoods predominately located on one side of their jurisdiction. However, at least some officers mentioned that higher call volumes resulted in the assignment of smaller patrol beats to these neighborhoods, which increased police presence and subsequently created a greater likelihood of police-juvenile encounters.

Officers also argued that inner-city youth are more likely to enter their jurisdiction, commit crime, and attempt to retreat back to the city. An increase in the transient “delinquent” population was thought to be due to bus stations that provide a direct line from the areas they patrol to the larger city. Officers emphasized that, in their experience, youth traveling across the city-border are predominately minority, and were believed to influence both the amount of juvenile crime and number of arrests in the local jurisdiction. One officer argued, “It’s transient. In [City], they’re coming in and we catch them. They’re not even residents but they result in an African-American arrest [in terms of statistics].”

Officers mentioned their belief that these inner-city minority youth are not more likely to be arrested based on the factor of race. However, the likelihood of formal contact with this population was thought to be greater because officer discretion is constrained when coming into contact with youth that are not residents of the city they police. Specifically, officers commented that when coming into contact with youth from the city, their inability to obtain the youth's information efficiently or to follow up on these cases limits their capacity to handle the situation in a more informal manner. As one officer explained, "Say this kid lives in [our city], you know who he is. You know where he lives. You know you can actually go talk to his parents and actually do some sort of counseling. Another officer went on to say,

"If they live in [our city] and it's something minor, if I can drop them off at their parents and say you start talking to the parents and you're like 'wow the parents don't care', then here's your curfew ticket. Obviously you guys aren't going to do any parenting, so we're going to have to step in and act on this stuff."

Family factors. Family factors were identified as strongly contributing to DMC at arrest. Specifically, officers stated that minority youth typically come from single parent homes or homes with limited parental supervision. Police argued that these environments lack prosocial models to "tell them what needs to be done" and "teach them right from wrong." The absence of parental supervision and these prosocial models in the home was also thought to make youth more susceptible to negative peer and media influences, increasing their likelihood of becoming involved in crime and subsequently coming into contact with police. Making this point directly, one officer explained that some youth have "no check and balance" from their parents or other adults and therefore get involved in criminogenic lifestyles that lead to further delinquent behavior. Others argued that minority youth are not taught to respect authority

figures. Officers observed the normalization of negative attitudes toward police within many minority homes to significantly impact the behavior of minority youth in their interactions with police officers. One officer passionately asserted that kids “aren’t taught to respect,” especially when it comes to the police and their parents say “F the police.” As a result, “they watch their parents do it, so they think it’s okay.”

A lack of respect and antisocial demeanor was identified as a significant factor in police decision-making. Several officers commented that the attitude of youth influences their discretion (with negative attitudes resulting in formal measures). In contrast, other officers suggested that disrespect has become so commonplace among the juvenile population that it is no longer a factor in their decision-making. Instead, these officers rely on parental availability and attitudes to determine the best action to be taken. As one officer explained, “But I mean the attitude, I’ve almost gotten over that. I expect [youth] just to have a piss poor attitude when I deal with them. It’s just one of those things.” S/he mentioned that they then do to call their parents to “see what the parents’ attitude is” and that has a greater impact on how the youth is handled.

Reliance on parent attitude and availability, however, was also identified to influence disproportionate minority contact with police. Officers consistently observed that minority youth are more likely to come from broken homes where the guardians that are available are likely to exhibit more anti-social attitudes. Therefore, officers argued that their decision-making is constrained because (1) it is apparent that parents will not handle situations of delinquency or other misbehavior informally within the home, and (2) the parents themselves are

disrespectful, motivating formal action by police officers. In each case, officers suggested that the likelihood of minority youth coming into contact with police officers would increase.

Youth reentry program. As noted above, officers consistently identified the geographic location of a residential program in their jurisdiction as strongly contributing to DMC. The program, implemented as a resource for older youth, relocates delinquent youth to the city and works to meet their basic needs (i.e., housing, food, and clothing) in addition to providing counseling and job placement opportunities. Officers observed that the majority of individuals placed in this program are minority youth, who were causing trouble in the area, effectively increasing police contact. One officer explained the effects of this program saying, “the counselors down there do the best they can,” but the kids engage in a lot of delinquent acts that they are called for. In addition to noting the deleterious effects of this program on crime rates and the community, officers questioned the program’s efficacy in reintroducing youth to a more prosocial lifestyle. Specifically, officers observed that many of the minority youth within this program have established a gang-type culture, pressuring individuals to be part of the larger group by offending or participating in other delinquent activities. Officers commented that youth who choose not to be part of this culture risk becoming a victim. One officer observed that the need to fill beds resulted in the lower classification of more serious juvenile offenders, allowing for their placement into a program that was originally created for youth identified to be less likely to recidivate. Officers said that they were very frustrated with the program and the fact that they must deal repeatedly with youth from that program.

Officer suggestions for reducing DMC. Officers within this focus group consistently pointed out that there is no immediate punishment provided to youth following the

commission of even the most serious of crimes. Officers argued that this trend escalates offending among problem youth as they realize there are no repercussions to their actions. Furthermore, this lack of consequences is viewed to perpetuate the lack of accountability and the “no care” attitude among juveniles. Several officers expressed their frustration, with one stating, “It seems like the group we deal with consistently, the same kids over and over, they just have like no concept of responsibility...There’s no direct deterrent.” Another officer commented,

“They have no respect and they know that there’s not going to be any consequences for their actions. So even if they get in trouble, they’re just gonna (sic) do it again because they haven’t got punished the first time.”

Therefore, officers argued that to effectively reduce juvenile offending and disproportionate minority contact with police, more space is needed within the detention hall built for the County. Officers believed this additional space could be used to provide a prompt response to juvenile offending, providing the immediate punishment that currently does not exist. Additionally, officers believed the use of this space would be the first step in removing youth from the negative influences of their environment, be it from their home life or peers, to reduce the escalation of disorderly and criminal behavior. As one officer argued, “You’ve got to take them out of where they’re at, put them some place where they can get good influences, and hopefully that will change them.”

In addition to the expansion of the County’s detention hall, participating officers recognized the potential efficacy of early intervention programs. Though no specific programs were outlined, officers spoke highly of initiatives such as D.A.R.E., arguing for its effectiveness in

educating youth to make prosocial decisions, creating positive police interactions with youth, and bridging the gap between police and the community.

Summary. Officers within this Cuyahoga County law enforcement agency very consistently reported that disproportionate minority contact is a product of the differential offending patterns of minority youth within their jurisdiction. The prevalence of offending among minority youth was believed to be influenced by the community sharing a border with a larger, more crime-ridden city. Officers regularly observed that the lower income, minority neighborhoods closest to this larger city have higher rates of criminal offending and higher calls for service as the crime and general disorder from the greater metropolitan area spills over into these neighborhoods. The significance of location accompanied by the lack of family structure observed in minority homes was thought to increase rates of offending among minority juveniles, encouraging higher police presence in these communities.

Though increased contact with minority youth could be viewed solely as a function of higher calls for service from residents of these minority neighborhoods, it is important to note that the concentration of crime and subsequent calls for service in specific areas has motivated supervisors within this law enforcement agency to assign smaller patrol beats to these minority neighborhoods. This suggests that these communities are patrolled somewhat more heavily. Specifically, the smaller geographic area comprising these beats facilitates a higher concentration of police presence within minority communities, increasing the likelihood of contact with minority youth.

Officers highlighted constraints on police decision-making in encounters with juveniles and how these might result in higher incidents of formal contact between police and minority

juveniles. The inclination to handle interactions with youth in a more informal manner is identified to have two driving factors. First, officers admitted that the administration of their department openly encourages the use of informal methods to handle youth, due to (a) the long duration of the process, (b) the smaller size of the agency, and (c) the liability associated with holding youth in their department. Second, officers expressed their own preference to handle interactions with youth more informally due to their frustration with the juvenile justice system. Specifically, patrol officers within the focus group described formal contact with youth as a “waste of time”, explaining that after obtaining several years of experience, patrol officers begin to understand that, in the majority of cases, youth will not be processed or provided punishment by the juvenile justice system.

Despite this preference of informal methods, officers regularly mentioned that they are more likely to handle things more formally with minority youth due to the constraints on their discretion within those incidents. Specifically, officers indicated that in interactions with minority youth, they are less likely to be able to take youth home (due to lack of information or the fact that youth are not residents in their jurisdiction) or able to let parents informally handle incidents of delinquency (due to parents being unavailable or uncooperative). Officers consistently argued that when these constraints are in place, they feel pressured to take more formal action within the given encounter.

Concluding their discussion, officers emphasized the importance of the celerity of punishment to reduce both crime and potentially DMC within their jurisdiction, identifying the expansion of the County’s detention hall as the best way to achieve this goal. Using the youth reentry program discussed above as an example, the negative influence of the program both on

individual youth and the community in general, suggests that the housing of problem youth with other delinquents can actually exacerbate youth offending (Dodge et al., 2007). For this reason, several officers emphasized the need to separate youth and place them into *positive* environments with more *prosocial* peers to curb delinquent behavior.

In addition to the importance assigned to swiftness of punishment, officer commentary on the influence of family on juvenile offending suggests the potential efficacy of family counseling and classes to improve the home environment of youth. Furthermore, officer focus on early intervention programs identifies police perceptions that creating positive interactions with youth at earlier stages in their lives with continued follow up into adolescence might help in improving relationships (IACP, 2014). At this point, both groups seem to perceive a mutual lack of respect and understanding, so this may help in reducing the volume of negative interactions mentioned by officers in this focus group.

Cuyahoga County Juvenile Court Data

Data collection. The research team provided the Cuyahoga County Juvenile Court with a list of fields that we requested for the study (see Appendix for a list of the measures requested from the juvenile courts). Members of the research team then corresponded and held conference calls with representatives of the court to discuss the data collection process and extraction of key measures. Subsequently, the court provided us with a Microsoft Excel database containing 12 files with case-level information on all youth, age 10-17, petitioned to the court in 2010 and 2011. These data were then processed and cleaned to develop needed measures and prepare for the analysis below.

Measures included in the analysis. The primary independent variable of interest was race, but we also include measures of sex, age at filing, number of charges, number of priors, most serious offense level, and most serious offense category. *Race* was recorded as White, African American, Other, and was recoded as a set of three variables capturing membership in each of these categories (or not). *Age* is a continuous measure that indicates the youth's age at case initiation. *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Number of charges* is a continuous variable indicating the count of separate charges included in the current case. *Number of priors* is a continuous measure that indicates the total number of petitions the youth had prior to the current case. *Legal representation* is a yes/no measure based on a field provided by the court that indicated the type of representation (private attorney, public defender, guardian ad litem, none) that the youth had during court proceedings (0 = no representation, 1 = representation). If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex, property, drug/alcohol, status offense, and other. Similarly, the *most serious offense level* variable indicates whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly in juvenile courts, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables included dichotomous measures of case outcomes at six decision points: diversion, detention, dismissal, adjudication, secure confinement, and bindover. Each of these variables was coded as yes/no. *Diversion* indicates whether youth were

diverted from formal prosecution at the front end of the court process. *Dismissed* indicates whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent). This could connote that a case was informally or formally diverted as well. *Detention* indicates whether youth were placed in secure detention while awaiting further proceedings. *Adjudicated* indicates whether a youth was adjudicated delinquent for the current case (e.g., “found guilty” on the current charges). *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility. *Bindover* indicates whether a youth was waived to criminal (adult) court. Finally, for youth that were adjudicated delinquent, *probation* indicates whether a youth received a probation disposition. This variable was coded as 0 = secure confinement, 1 = probation, in order to compare the seriousness of dispositions.

Data coverage and preparation. Overall, there were 16,492 cases referred to Cuyahoga County Juvenile Court between January 1, 2010 and December 31, 2011. Among the variables used in the analyses, there was relatively little missing information in this data. For five of the seven outcomes (detention, dismissed, secure confinement, bindover, and probation), there was complete coverage (i.e., no missing data). Similarly, there was complete coverage for youth’s sex, age, legal representation, number of charges, number of priors, most serious offense level, and most serious offense category. Sixty-four cases (0.4% of all cases) did not indicate the youth’s race and thus were excluded from analyses. The only variables with a relatively large amount of missing data were *diversion* and *adjudication* (40.9% missing on each). To retain all cases for analysis, we used multiple imputation (MI) to impute the missing values for each of these variables. MI replaces missing observations with predicted values

based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, age, number of charges, number of priors, most serious offense category, and most serious offense level. MI first generates a specified number of datasets—in this case, 10—in which the missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from each of the ten analyses are pooled into a single result. This ensures that the analyses appropriately account for the variation in the imputed values.

Descriptive Statistics. In 2010 to 2011, African-American youth comprised 71.5 percent of the referrals to Cuyahoga County Juvenile Court, while White youth accounted for 24.3 percent and youth of other races, 3.8 percent. According to the 2010 Census for Cuyahoga County, these groups accounted for 37.0 percent, 54.4 percent, and 8.6 percent of the juvenile population ages 10-17, respectively. Taken at face value, these figures indicate a relatively substantial level of disproportionality in terms of the profile of cases coming into the juvenile justice system, especially for African Americans. Males accounted for 72.4 percent of the petitions filed, and the mean age at referral was 15.97 (SD=1.49). The average number of prior petitions was 1.27 (SD=2.21) and the mean number of charges in the current case was 1.88 (SD=1.69). The most common offense type included in the referrals was violent/sex offenses (32.4%), followed by property offenses (29.8%), other offenses (16.6%), status offenses and disorderly conduct (14.6%), and drug/alcohol offenses (6.7%). Regarding offense seriousness, 51.1 percent of the petitions were for misdemeanors, 33.8 percent for felonies, and 15.1 percent for status offenses.

Court outcomes. We estimated three statistical models for each of the seven decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for African-American and Other youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and other legally relevant factors (legal representation, number of charges, number of priors, most serious offense category, and most serious offense level). The final model (see Tables 37a and 37b) included the above variables, as well as the extralegal factors sex and age. Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Diversion. In the race-only model, African-American youth were 78 percent less likely to be diverted (OR=0.22) and Other youth were 64 percent less likely to be diverted (OR=0.36) relative to their White counterparts. This suggests that there is a relatively low likelihood of observing this difference between minority and White youth if there is no difference between them on the diversion measure. When legally-relevant factors were added in the second model, the effects of race were more mixed.³⁶ Specifically, African-American youth were still significantly less likely to be diverted (OR=0.35) than White youth, but the effect diminished slightly. Conversely, the effect for Other youth was no longer statistically significant. A one-unit increase in the number of prior petitions had a significant effect and decreased the odds of diversion by 24 percent (OR=0.76). Number of charges in the current case did not have a significant effect on diversion. Interestingly, offense seriousness was not a significant predictor

³⁶ Legal representation was dropped from the model because it is perfectly associated with “diversion.”

of diversion. Regarding offense type, property offenders were almost two times more likely (OR=1.95) and drug/alcohol offenders over 15 times more likely (OR=15.35) to be diverted compared to youth charged with a violent or sex offense. There was no significant effect on diversion for youth charged with status or other offenses.

In the final model that included sex and age, race maintained its mixed effect on diversion. In this model, African-American youth were 65 percent less likely to be diverted, an identical effect to the previous model. The effect for Other youth remained nonsignificant. Neither age nor sex was a significant predictor of diversion, controlling for all other variables in the statistical model. A one-unit increase in the number of prior petitions decreased the odds of diversion by 24 percent. The effect of being charged with a property offense (OR=1.94) or a drug/alcohol offense (OR=15.11) remained significant compared to those charged with a violent or sex offense. The effects of status and other offenses remained nonsignificant, as did the effect of offense seriousness. Overall, results indicated that race had varying effects on the decision to divert youth from official court processing. In all three models, African-American youth were significantly less likely to be diverted compared to their White counterparts, while the effect for Other youth was not statistically significant.

Detention. In the race-only model, the odds of being detained prior to adjudication were significantly higher for both African-American youth and Other youth compared to White youth. Specifically, African-American youth were 130 percent more likely to be detained compared to White youth (OR=2.30), while Other youth were 79 percent more likely to be detained (OR=1.79). After adding legally relevant factors in the second model, both African-American youth (OR=1.54) and Other youth (OR=1.52) remained significantly more likely to be

detained, although both effects decreased slightly from the race-only model. A one-unit increase in the number of charges in the current case had a significant effect and increased the odds of detention by 13 percent (OR=1.13). Number of prior petitions was not significant. Youth who had legal representation present during court proceedings were over nine times more likely to be detained (OR=9.17) than those without counsel. Regarding offense seriousness, youth charged with a misdemeanor or status offense were 55 percent less likely to be detained (OR=0.45) than those charged with a felony. Finally, youth charged with a property offense (OR=0.36), drug/alcohol offense (OR=0.31), status offense (OR=0.43), or other offense (OR=0.45) were significantly less likely to be detained compared to youth charged with a violent or sex offense.

When the extralegal variables were added in the final model, race remained a significant predictor of detention, and the odds ratios were identical to those in the second model (African-American OR=1.54; Other OR=1.52). Neither of the two extralegal variables (age and sex) had significant effects on the odds of detention. Number of prior petitions was no longer significant. The significant effect of number of charges in the current case (OR=1.13) was identical to that in the second model. Youth represented by counsel were again over nine times more likely to be detained (OR=9.16) than those without counsel. Youth charged with a property offense (-64%), drug/alcohol offense (-68%), status offense (-57%), or other offense (-54%) were significantly less likely to be detained than those charged with a violent or sex offense. Misdemeanor and status offenders were significantly less likely (OR=0.44) to be detained than those charged with a felony. Overall, race had a significant effect on the odds of

being detained, although the effect did decrease substantially when other legal and extralegal variables were included in the models.

Dismissed. When examining whether a case is dismissed, we found a significant race effect. In the race-only model, African-American youth were 18 percent less likely to have their case dismissed (OR=0.82) than their White counterparts, while Other youth were 34 percent less likely (OR=0.66). When the legally relevant variables were included in the second model, the significant race effects remained (African-American OR=0.80; Other OR=0.68). One-unit increases in number of charges in the current case (OR=0.70) and number of priors (OR=0.87) decreased the odds of case dismissal by 30 percent and 13 percent, respectively. Youth with legal representation were 68 percent more likely to have their case dismissed than those without. Offense seriousness was not a significant predictor of case dismissal. Finally, compared to youth charged with a violent or sex offense, youth charged with a drug/alcohol offense (OR=0.83) or status offense (OR=0.43) were significantly less likely to have their case dismissed, while youth charged with other offenses (OR=1.17) were more likely to be dismissed. Property offenses were not significant predictors of dismissal.

In the final model that included age and sex, the effects of race remained almost identical to those from the second model (African-American OR=0.80; Other OR=0.68), controlling for all other variables in the statistical model. Females were 10 percent more likely to have their case dismissed (OR=1.10) compared to males, while age did not have a significant effect on case dismissal. One-unit increases in number of charges in the current case and number of prior petitions decreased the odds of dismissal by 30 percent (OR=0.70) and 13 percent (OR=0.87), respectively. Youth who had legal representation present during court

proceedings were 69 percent more likely (OR=1.69) to have their case dismissed. Regarding offense type, only youth charged with status offenses (OR=0.43) or other offenses (OR=1.18) were more likely to have their case dismissed relative to those charged with violent/sex offenses. Finally, the results indicate that offense seriousness was not a significant predictor of case dismissal. Overall, race had a strong effect on case dismissal, net of legal and extralegal variables. In each model, both African-American youth and Other youth were significantly less likely to have their case dismissed than their White counterparts.

Adjudication. In the race-only model, race had a significant effect on the decision to adjudicate. Specifically, African-American youth were 48 percent more likely to be adjudicated delinquent (OR=1.48) compared to White youth, while Other youth were 52 percent more likely to be adjudicated (OR=1.52). After adding the legally relevant variables in the second model, both African-American youth (OR=1.34) and Other youth (OR=1.42) were still significantly more likely to be adjudicated; the strength of the effect did decrease slightly, however. One-unit increases in number of charges in the current case and number of prior petitions increased the odds of adjudication by 53 percent and 3 percent, respectively. The effect of legal representation was not significant. Youth charged with a misdemeanor or status offense were 17 percent less likely to be adjudicated delinquent (OR=0.83) than youth charged with a felony. Youth charged with a drug/alcohol offense were 18 percent less likely to be adjudicated relative to those charged with a felony, while the other offense types were not statistically significant.

After adding the extralegal variables in the final model, the effect of race remained almost identical to that of the second model. Specifically, both African-American youth (OR=1.33) and Other youth (OR=1.43) were significantly more likely to be adjudicated than

White youth. Each of the statistically significant legal variables from the second model maintained its significance in the third model with negligible changes in the odds ratios. The extralegal variables age and sex were not statistically significant. Overall, there was a strong race effect on the decision to adjudicate. Both African-American and Other youth were significantly more likely to be adjudicated delinquent in each of the three models, although the effect did diminish slightly when legal and extralegal factors were included in the model.

Secure confinement. The next decision point examined in Cuyahoga County was the placement of adjudicated youth in secure confinement facilities. This analysis used the subsample of youth who were adjudicated delinquent (N = 5,542). In the race-only model, African-American youth (OR=2.64) and Other youth (OR=1.48) were both significantly more likely to be placed in secure confinement than adjudicated White youth. In the second model that introduced legal factors, the effect of race was mixed. In this model, African-American youth were 70 percent more likely to be placed in secure confinement (OR=1.70) relative to White youth, a significant decrease from the race-only model. The effect for Other youth, however, was no longer significant. One-unit increases in the number of charges in the current case and the number of prior petitions significantly increased the odds of secure confinement by 5 percent and 23 percent, respectively. Youth with legal representation present were over four times more likely to be placed in secure confinement (OR=4.46) relative to those without counsel.³⁷ When compared to youth charged with a violent/sex offense, those charged with a property offense (OR=0.83), drug/alcohol offense (OR=0.36), status offense (OR=0.14), or other offenses (OR=0.52) were all significantly less likely to be placed in secure confinement.

³⁷ Based on the results for bindover below and the patterns of legal representation in the sample, it is possible that the “counsel” variable is a stand in for seriousness of the case and potential for a serious disposition.

Regarding offense seriousness, youth charged with misdemeanors or status offenses (OR=0.10) were 90 percent less likely to be placed in a secure confinement facility relative to those charged with a felony offense.

The effect of race on secure confinement remained mixed in the final model that included age and sex. The odds ratio for African-American youth (OR=1.74) was almost identical to that in the second model, while the effect for Other youth remained nonsignificant. Secure confinement was the first decision point in which both sex and age were statistically significant predictors. Specifically, a one-year increase in age predicted a 10 percent increase in the odds of secure confinement (OR=1.10). In addition, females were 67 percent less likely to be placed in secure confinement (OR=0.33) relative to males, controlling for all other variables in the model. A one-unit increase in number of charges predicted a significant increase of 4 percent in the odds of secure confinement (OR=1.04), while a one-unit increase in number of priors increased the odds of secure confinement by 21 percent (OR=1.21). Youth charged with a property offense (OR=0.73), drug/alcohol offense (OR=0.28), status offense (OR=0.15), or other offense (OR=0.48) were significantly less likely to be placed in secure confinement relative to those charged with a violent or sex offense. The remaining legal variables—legal representation and offense seriousness—maintained their significance in the final model. Overall, the effect of race on the decision to place youth in secure confinement facilities was mixed. African-American youth were significantly more likely than their White counterparts to be placed in secure confinement in all three models, suggesting that the effect holds when other relevant factors are included in the analysis. The effect for Other youth, however, was significant only in the race-only model.

Bindover. The next decision point examined was waiver to criminal court, or bindover. There was a very small base rate of youth who were bound over in Cuyahoga County, which means that a relatively small numerical difference in its prevalence in each group could affect the estimates and odds ratios (only 160 youth, or 0.97% of all cases, were waived). Of the seven decision points examined here, the effect of race was most pronounced in bindover. In the race-only model, African-American youth were over five times more likely to be waived (OR=5.81) relative to White youth. The effect for Other youth, however, was not significant. When the legally relevant variables were added in the second model, African-American youth were four times more likely (OR=4.02) to be waived, a sizeable decrease from the race-only model,³⁸ while the effect for Other youth remained nonsignificant. Both offense seriousness and offense type were significant predictors of bindover. Youth charged with a property offense (OR=0.19), drug/alcohol offense (OR=0.07), or other offenses (OR=0.08) were significantly less likely to be waived than those charged with a violent or sex offense.

In the final model, which includes both legal and extralegal variables, race again had mixed effects. African-American youth were over four times more likely to be waived relative to White youth (OR=4.37), a slight increase from the second model. The effect for Other youth remained nonsignificant. It is important to note here, however, that there are relatively few youth in the Other category who were waived to criminal court, which could be a contributing factor to the nonsignificant finding for this group. Age and sex were significant predictors of bindover in that older youth (OR=2.21) and males (OR=0.03 for females) were significantly more likely to be waived than younger youth and females, respectively. The significant effects

³⁸ Legal representation was dropped from the model because it perfectly predicts bindover.

of number of charges (OR=1.05) and number of prior petitions (OR=1.21) remained relatively steady from the second model. Similarly, those charged with a misdemeanor or status offense remained significantly less likely to be waived (OR=0.01) relative to felony offenders. Finally, youth charged with a property offense (OR=0.16), drug/alcohol offense (OR=0.04), or other offense (OR=0.07) were all significantly less likely to be waived compared to those charged with a violent or sex offense. Overall, African-American youth were significantly more likely to be waived to criminal court across all three models, while the effect for Other youth was nonsignificant in each model.

Probation. Cuyahoga County Juvenile Court was one of the few juvenile courts that provided precise data on whether a youth was placed on probation following adjudication, allowing the examination of another critical decision point in juvenile court processing. This analysis used a subsample of adjudicated youth who received either a probation or secure confinement disposition (N = 4,014). This allowed for an additional examination of disposition severity by race. This variable is coded as 0 = Secure Confinement, 1 = Probation. In the race-only model, African-American youth (OR=0.40) were significantly less likely than their White counterparts to receive probation instead of secure confinement, while the effect for Other youth was nonsignificant. After adding legally relevant factors in the second model, race retained its mixed effect on probation, although the effect for African-American youth did decrease slightly (OR=0.62). Number of charges in the current case was not a significant predictor of probation. A one-unit increase in the number of prior petitions decreased the odds of probation by 24 percent (OR=0.76). Youth with legal representation were 78 percent less likely to receive probation (OR=0.22) than those without representation. Regarding offense

seriousness, youth charged with a misdemeanor or status offense were over eight times more likely to receive probation instead of secure confinement (OR=8.41) compared to those charged with a felony. Finally, youth charged with a property offense (OR=1.17), drug/alcohol offense (OR=2.83), status offense (OR=8.87), or other offenses (OR=1.88) were significantly more likely to receive probation relative to violent/sex offenders.

The effect of race on the probation decision remained mixed in the final model that included the extralegal variables age and sex. The effect for African-American youth increased slightly (OR=0.61), while the effect for Other youth remained nonsignificant. Females were significantly more likely to receive probation over secure confinement (OR=2.89) compared to males, and a one-year increase in age decreased the odds of probation by 15 percent. Number of charges in the current case was not significant in this model. Offense type, offense seriousness, legal representation, and number of priors maintained their significant effects on probation in the same direction, although the strength of said effects decreased slightly from the second model. Overall, results indicate that race had strong yet mixed effects on the probation outcome across all three models. African-American youth were significantly more likely to receive probation instead of secure confinement when compared to White youth, net of legal and extralegal variables. The effect for Other youth, however, was nonsignificant in each of the models.

Initial and conditional probabilities of case outcomes. Figures 13a and 13b display the initial and conditional probabilities for each of the seven outcomes by youths' race (White/African American). The initial probabilities indicate the probability that White and African-American youth will experience the case outcome without consideration of any other

factors/variables. These figures are similar in intent to the Relative Rate Index (RRI) but allow for conditioning on other relevant factors as we move across statistical models. Conversely, the conditional probabilities indicate the likelihood that White and African-American youth will experience a certain case outcome given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case. This also allows us to consider whether any difference between White and African-American youth that we observe for the base analysis shifts when accounting for other relevant case factors.

For the conditional probabilities for the first four court outcomes (diversion, detention, dismissal, and adjudication) and probation, the mean values for age (15.97), number of charges (1.88), and number of priors (1.27) were used. The remaining variables were set to their modes: sex – male; most serious offense category – property; and most serious offense level – misdemeanor/status. Because secure confinement and bindover are typically reserved for the most serious offenses/offenders, the values for most serious offense category and most serious offense level were changed to violent/sex and felony, respectively, in the calculation of the conditional probabilities for these two decision points. The values for the other variables remained the same.

Overall, the results follow those discussed above. Cases involving African-American youth have higher probabilities of detention, adjudication, secure confinement, bindover, and probation. Similarly, African-American youth have lower odds of being diverted from official processing and case dismissal. Generally, the gaps between White and African-American youth tend to be considerably larger in the unconditional cases and narrow somewhat when other

legally relevant and extralegal variables are considered, but they do not fully diminish. For example, the unconditional probability of pre-adjudication detention is 0.256 for African-American youth and 0.130 for White youth (a difference of 0.126). Once the other variables are included, the conditional probabilities for detention decrease to 0.114 for African-American youth and 0.071 for White youth, a difference of only 0.043.

Table 37a. Binary Logistic Regression – Outcomes for Cuyahoga County Juvenile Court (Full Models)

	Diversion			Detention			Dismissed			Adjudicated		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Age	-0.12	0.89	0.06	-0.01	0.99	0.01	0.01	1.00	0.01	0.01	1.01	0.02
Sex	-0.16	0.85	0.20	-0.01	0.99	0.05	0.10	1.10	0.05	0.09	1.09	0.04
Black/AA	-1.05	0.35	0.19	0.43	1.54	0.09	-0.22	0.80	0.04	0.29	1.34	0.05
Other Race	-0.71	0.49	0.42	0.42	1.52	0.18	-0.39	0.68	0.07	0.35	1.42	0.11
Num. of Charges	-0.01	0.99	0.05	0.12	1.13	0.02	-0.36	0.70	0.02	0.42	1.52	0.02
Num. of Priors	-0.28	0.76	0.09	0.01	1.01	0.01	-0.14	0.87	0.01	0.03	1.03	0.01
Misd/Status	0.34	1.40	0.18	-0.82	0.44	0.02	0.01	1.00	0.05	-0.20	0.82	0.05
<i>Offense Type</i> ¹												
Property	0.66	1.93	0.26	-1.02	0.36	0.02	-0.04	0.96	0.05	0.02	1.02	0.05
Drug/Alcohol	2.71	15.03	0.27	-1.14	0.32	0.03	-0.15	0.86	0.07	-0.18	0.84	0.09
Status	-0.81	0.44	0.59	-0.84	0.43	0.05	-0.84	0.43	0.03	-0.14	0.87	0.09
Other	0.08	1.08	0.36	-0.78	0.46	0.03	0.17	1.18	0.07	-0.09	0.91	0.06
Legal Rep	----	----	----	2.21	9.16	0.99	0.52	1.69	0.09	0.06	1.06	0.06
Constant	-4.09		0.96	-2.58		0.02	-0.47		0.14	-0.83		0.26

Note: Bolded entries represent statistically significant estimates at p<0.05; B = logit coefficient; OR = odds ratio; SE = standard error

¹ Reference is Violent/Sex Offense

Table 37b. Binary Logistic Regression – Outcomes for Cuyahoga County Juvenile Court (continued)

	Secure Confinement			Bindover			Probation		
	B	OR	SE	B	OR	SE	B	OR	SE
Age	0.07	1.07	0.03	0.79	2.21	0.23	-0.16	0.85	0.03
Sex	-0.87	0.42	0.05	-3.51	0.03	0.03	1.06	2.89	0.42
Black/AA	0.60	1.83	0.23	1.47	4.36	2.08	-0.49	0.61	0.08
Other Race	0.31	1.37	0.34	0.56	1.76	1.51	-0.16	0.85	0.23
Num. of Charges	0.11	1.12	0.02	0.05	1.05	0.04	-0.02	0.98	0.01
Num. of Priors	0.07	1.07	0.01	0.19	1.21	0.03	-0.25	0.78	0.02
Misd/Status	-2.41	0.09	0.01	----	----	----	1.95	7.03	0.98
<i>Offense Type</i> ¹									
Property	-0.21	0.81	0.07	-1.83	0.16	0.04	0.30	1.35	0.13
Drug/Alcohol	-1.27	0.28	0.07	-3.22	0.04	0.04	1.34	3.80	1.05
Status	-2.30	0.10	0.10	----	----	----	2.09	8.06	8.19
Other	-0.71	0.49	0.07	-2.66	0.07	0.04	0.73	2.08	0.36
Legal Rep	2.04	7.71	2.98	----	----	----	-1.56	0.21	0.08
Counsel	-5.52		0.00	-7.70		0.01	5.29		4.92

Note: Bolded entries represent statistically significant estimates at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error
 N=5,542 for Secure Confinement, N=5,551 for Bindover and N=4,014 for Probation

¹ Reference is Violent/Sex Offense

Figure 13a. Summary of Initial Probabilities and Conditional Probabilities for Diversion, Detention, Dismissal, and Adjudication

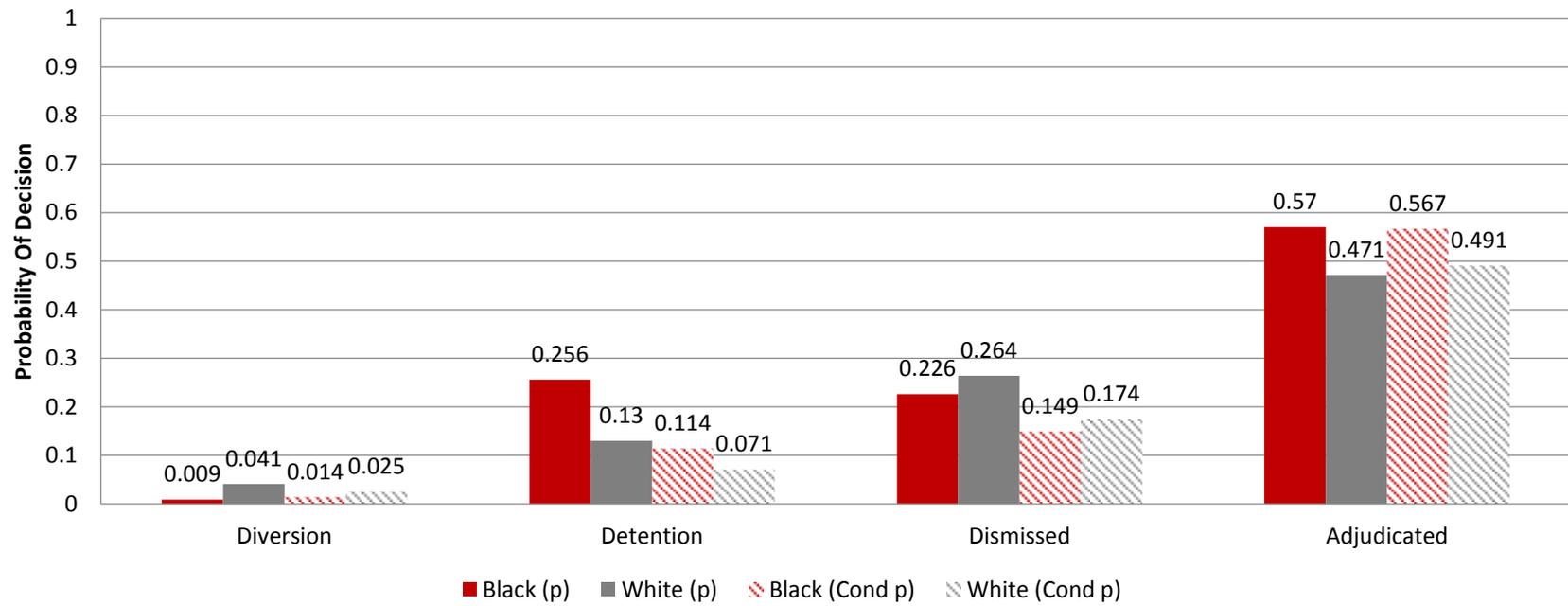
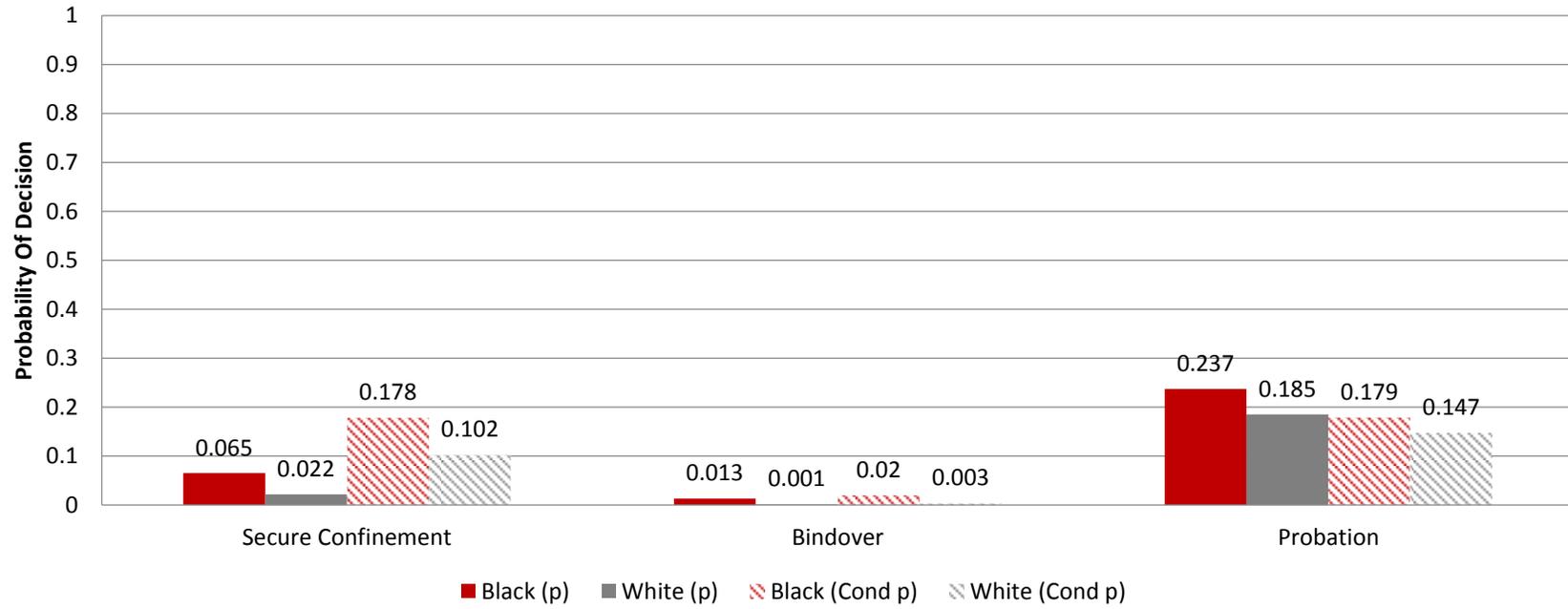


Figure 13b. Summary of Initial Probabilities and Conditional Probabilities for Secure Confinement, Bindover, and Probation



Summary of juvenile court record analysis. African-American youth accounted for 72 percent of referrals to the juvenile court, White youth accounted for 24 percent of referrals, and youth of other races accounted for the remaining 4 percent. According to the 2010 Census, these groups accounted for 37 percent, 54 percent, and 9 percent of the juvenile population of Cuyahoga County, respectively. These numbers indicate that, on the surface, there is a relatively large degree of disproportionate minority contact within the Cuyahoga County juvenile court.

In the initial bivariate statistical models (race and outcome), youths' race was a significant predictor of each of the seven outcomes. Specifically, African-American youth were significantly more likely than their White counterparts to be detained prior to adjudication, be adjudicated delinquent, be placed in secure confinement, and be waived to criminal court, while they were less likely to be diverted, have their case dismissed, and be placed on probation. The effects for Other youth were significant only for five of the seven outcomes. Specifically, these youth were significantly more likely than White youth to be detained, adjudicated, and placed in secure confinement, while less likely to be diverted and to have their case dismissed.

To better understand how race impacts juvenile court outcomes, we estimated statistical models that controlled for legally relevant and extralegal factors. The results of the full models indicated that race still plays a significant role in decision-making. African-American youth maintain their significant relationship (and in the same direction) with each of the seven outcomes. These effects were small to medium in size.

Similarly, the bivariate relationships for Other youth retained their significance and direction in the full model for detention, dismissal, and adjudication. However, the effects for Other youth changed from statistically significant in the bivariate secure confinement and diversion models to nonsignificant in the full models.

Cuyahoga County Juvenile Court Interviews

Procedure. UC researchers interviewed a cross-section of Cuyahoga County court staff in March of 2013. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court involvement and outcomes. Eight staff interviews were conducted with administrative (supervisors, program managers, and strategic planning committee), supervision, intake, and judicial staff. The interviews lasted between 30 and 90 minutes, depending on the interviewees' role and their level of disclosure. Data were also gathered detention (2), case review, and disposition hearings (4). Specialized case reviews (2) were also observed in Cuyahoga County.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

System factors. Staff explained that the organizational norms of the court are, in part, explanations for the differential treatment of minority and White youth in the decision-making process. Ratings on how processing decisions and local policies contribute to DMC in the area were also consistent with this finding. Seventy-one percent of staff suggested these were strong contributing factors to DMC. However, at least some participants cautioned that racial stereotyping and cultural bias contribute to DMC, rather than processing decisions, and that “many times minority youth [are more severely] charged than non-minority youth.” Making this point directly, another court staff member stated that,

“The number of incidents charged is disparate. Black youth are less likely to be diverted, more likely to be formally charged, and are sentenced for higher [more severe] charges than [similar] White youth.

Staff also suggested that there were also noticeable differences (or disparities) regarding program accessibility in these areas, and mentioned that the point of view of the prosecutor’s office and how the cases are framed may affect petition and later dispositional decisions.

During the interviews, respondents identified not only what factors account for disparities in the system (e.g., policies and procedures and organizational norms), but also explained that the ability to obtain legal representation, to know about, and afford treatment services is an important way some youth and their families are advantaged in the system. For example, a staff member explained that city-proper referrals are reviewed and processed by the Prosecutor’s Office in Cuyahoga County, but that intake officers review and process residential, suburban referrals referred to the court. The staff went on to explain that the

suburban/residential areas have more resources. Other interviewees made similar points, commenting that,

“[Disparities in the detention center exist because of] a lack of resources. Wealthy areas are resource [rich] and have places police can send youth. In poorer areas, there are not as many resources [or options], so kids get sent to detention.”

“Eighty-percent of the kids [we process] are from the city. Females especially [are at a disadvantage] because of the too few options – we either [release] or detain them. There is nothing in between.”

“Accessibility [is a strong contributing factor to DMC], especially with family. Families with less means have difficulty accessing [community and court] resources.”

Similarly, staff believed that there was some *misuse* of system resources in trying to reduce the DMC problem. In particular, a number of staff argued that although well-intentioned, detention and/or supervision for the purpose of accessing services is not the intended purpose of the juvenile justice system and may lead to long-lasting collateral consequences for youth (Cahn, 2006; Nellis & Richardson, 2010). Others suggested that the poor implementation of DMC-strategies contributed to further problems and noted that while progress is evident, efforts have been impeded by the lack of quality services. These staff members asserted that DMC service providers did not adhere to best practices and were therefore ineffective from the standpoint of reducing recidivism, which in turn devalues their potential as alternatives to further system involvement. “These programs aren’t strong...and there’s no follow through with the court;” “We send kids to the [DMC] program and nothing would happen, nothing,” commented staff members. Another staff member explained that,

“The bottom line is that the [DMC service] providers are not equipped [to serve youth]. Youth won’t benefit from legal seminars and basketball leagues through

the YWCA. We need [programs] that help youth [with] substance abuse, mental health, and aggression issues to [effectively address DMC].”

The education system. Interviewees suggested that zero-tolerance policies and School Resource Officer (SRO) programs are intended to maintain order and safety by removing (or monitoring) students who break school rules, disrupt the learning environment, and to deter other students from committing rule infractions. However, some (50%) cautioned that these strategies have unintended effects and contribute to the disproportionate suspension and expulsion of minority youth, and are a potential pathway into the juvenile justice system. For example, one staff member commented that, “[minority] students are more likely to be suspended [or expelled]” compared to White students, particularly in some [resource-rich] school districts. Another interviewee explained that differences in school ideologies contribute to the over-selection and over-sanction of certain students commenting that, “suburban [educators] have more hand-holding than city [schools]. School officials know who the trouble-makers are [and] point out misconduct and remove [those students].”

Others (25%) suggested that school climate, financial resources, and staffs’ perception of students are important factors that impact disparities. One participant mentioned that minority students more often attend schools “with lower quality resources and facilities, higher teacher turnover, and a lower percentage of highly qualified teachers” and this impacts their education and their likelihood of involvement in the system. Overall, system actors recognized the significant role that schools play in the prevention, and in some cases, escalation of juvenile offending.

The family system. The family dynamic represented the most cited issue pertaining to the overrepresentation of minority youth in the juvenile court system generally (88%), and the

overrepresentation of minority youth in detention specifically (38%). Specifically, staff discussed the weakening of the family unit, the lack of cooperation and engagement among families, the lack of parental role models, and dysfunctional home environments as contributing to DMC. Court observations were consistent with these findings. For example, system actors noted how a parent's participation in treatment, attendance, and overall effort to structure and supervise their child influenced the court's decision to dismiss the youth's case. In another case, the court deferred disposition based seemingly in part on the parent's presence and reporting improved home and school behavior. This seemingly reinforces the importance of parent and family engagement in the decision making process.

Despite some challenges in working with families of youth involved in the system, staff (6 of 8 discussions) encouraged parental involvement based on the perception that youth would be more compliant/successful under court supervision, and that actively engaged parents are more likely to prevent (or at least disapprove of) delinquent behavior. Staff members mentioned some barriers to family involvement in the case,

"Youth's behavior is often times reflective of the home environment and parent's behaviors or experiences...some parents push for formal processing [or refer youth] because it's easier to get through than diversion. [Diversion encourages] parent participation... [that] support system is [important] for success. [But] we see strong families that struggle too."

"We could better address DMC [by offering] monthly meetings with parents [to discuss] areas for improvement such as more structure. These meetings could also offer families support [and potentially reduce the number of formal charges/violations filed against youth]."

Socioeconomic conditions and community context. Respondents pointed to the disparity of resources between suburban and urban areas throughout the interview process; observing that differences in decision-outcomes are attributable, at least to some degree, to

the varying social and economic resources of communities, courts, and schools. Staff explained that these differences matter because youth, particularly minority youth who reside in economically disadvantaged areas, lack the adequate resources to thrive in their communities. This theme was echoed by respondents throughout the interview process. Similarly, ratings on how socioeconomic conditions contribute to DMC were consistent with this finding.

Summary. Respondents indicated that living in economically-strained communities limited opportunities for youth development. Likewise, when families lack economic resources and live in disadvantaged areas, parents' or guardians' ability to provide independent treatment, meet with probation and treatment staff, or be present during court hearings is severely strained. Communicating with parents was often difficult for court officials, and likely raised concerns for the well-being and supervision of youth.

Consequently, interviewees underscored the importance (and continued need for) "collective action" to address and reduce causes of DMC. Staff stressed the need for agencies to work collaboratively to enhance local prevention and intervention strategies and to expand programming options at the juvenile court as well. To this point, some discussion focused on current efforts with local school (early intervention strategies to identify behaviorally at-risk youth), police (Project STANCE and arrest reduction strategies for truant, unruly offenders), and social service agencies (De-escalation Housing and Tapestry Care pilot projects) to address and reduce DMC in the area. Evening reporting centers, youth warrant-amnesty, mental health services, and community-based programs for moderate-risk and lower-risk youth were also identified potential next steps to address DMC, particularly youth at-risk for detention and/or secure placement. Others suggested staff survey youth and their families about what they need

in order to be successful at the court. Finally, respondents stressed the general need for “effective” interventions that target high risk and need youth as key for change. The need for these programs was discussed generally and within the context of DMC.

Summary of Findings and Implications: Cuyahoga County

The police data for Cuyahoga County are limited and we did not obtain data from Cleveland, the major city in that county. The two agencies that submitted data for the study show disparities in that the arrest records are disproportionately more likely to involve minority youth as opposed to White youth. This was evident from the RRI values and also Odds Ratios for arrest and race groups. In University Heights, arrests for less serious crimes in terms offense level and type were relatively more prevalent for Non-White youth. For arrests, the other offense type and seriousness variables showed relatively few patterns in terms of the race of the youth involved.

A lengthy focus group was completed in one police agency in Cuyahoga County. Officers very consistently reported that they believe that disproportionate minority contact is a product of the differential offending patterns of minority youth within their jurisdiction. In particular, they argued that the disproportionate contact among minority youth in their data was influenced by the community sharing a border with a larger city. They mention that their encounters with minority youth and their parents—which they report as often going poorly—force them to handle cases more formally than they might otherwise. This was particularly true of cases where the youth involved was not from their jurisdiction. As noted above, it is important that efforts are undertaken to identify ways in which police and community residents

engage with one another in mutually respectful ways so that disproportionate formal processing of minority youth is not a byproduct of this larger problem.

The officers also commented at length about one particular locale within their jurisdiction, a residential reentry program that they view as generating a great deal of crime. It is not totally clear that this will generate DMC—in and of itself—but it speaks to the potential that places that are perceived as (or actually are) high in crime may lead to increased encounters between minority youth and police. Given disproportionate secure confinement outlined in the analysis of juvenile court data, it is easy to see that many of the residents will be minority youth. The comments from officers in this focus group suggest that reducing DMC in this community will likely involve some initiative that considers this facility. At the same time, it is important to acknowledge that court officials and community and justice organizations (e.g., Building Blocks for Youth) often advocate for these types of programs (Cabaniss et al., 2007). Concerns appear to be driven in part by the perceived quality and effectiveness of the center in reducing reoffending. Model programs and community-based approaches to preventing offending or recidivism (and reducing DMC) should be put in place, but also must adhere to best practices to ensure that youth receive quality, effective supervision and services.

The analysis of court data indicated that African-American youth were significantly more likely than their White counterparts to be detained prior to adjudication, be adjudicated delinquent, be placed in secure confinement, and be waived to criminal court. Conversely, they were less likely to be diverted, have their case dismissed, or be placed on probation. All of these effects held for African-American youth when we estimated statistical models that controlled for legally relevant and extralegal factors. This indicates that—even with reasonably strong

controls—there was generally a medium-sized relationship between race and juvenile court outcomes. The patterns were less consistent when comparing youth of other races to their White peers.

This leads to the important question of why some of these disparities might persist. Court personnel provided a good deal of information to shed light on this question and also present some ideas about what might be necessary in the future. Like the police officers, they pointed to the importance of family and community in DMC patterns. They tended to provide more context around the possible constraints on these families in terms of available resources, however. They also identified aspects of agency decision-making that may be important in disproportionate involvement of minorities with the juvenile court. For instance, they mention different front-end decision-making frameworks for cases from Cleveland and the rest of the county that may have an important impact on the case record data. Some mentioned that services for youth handled in DMC diversion programming are not of sufficient quality. One possible problem is that those who are especially interested in making an impact on this issue are very well-intentioned, but maybe not as well-equipped to deal with the real risk and needs of the population.

This is an issue that needs to be dealt with in terms of selection and monitoring programs that are counted on to deliver services to court-involved youth and balancing the desire to find and support programs that want to make a difference with those that can do so most effectively. Similarly, the officers involved in focus groups expressed some skepticism about how youth are handled in the court. Some of the structural factors that help contribute to DMC also mean that youth involved in the juvenile justice system will face numerous

challenges in staying out of further system involvement. Thus, the types of basketball leagues and other recreational activities cited by one interviewee are likely not enough to fully deal with DMC or delinquency more generally, which hinders their ability to generate broad consensus as alternatives to system involvement for youth.

Table 38. Summary of Key Findings of DMC Assessment: Cuyahoga County

Available Data and Notes	Key Findings	Implications
<p>394 police records from two agencies (among several that were identified in county)</p> <p>One focus group with eight officers</p> <p>16,492 juvenile court records</p> <p>Interviews with eight court staff members and eight hearing observations</p>	<p>Arrest records are disproportionately more likely to involve minority youth. In one of the departments, arrests for less serious levels and type were more prevalent for Non-White youth (RRIs of 8.0 and 5.6)</p> <p>Officers believed DMC to be the product of differential offending patterns</p> <p>Also spoke about problem encounters with minority youth and families requiring more formality</p> <p>Court data analysis showed moderate –to-large relationships indicative of DMC with all outcomes studied (e.g., +54%, detention and +34%, adjudication)</p> <p>Like police, court personnel mentioned family and community factors in DMC, but tended to provide more context on related resource constraints</p> <p>Also mentioned front-end decision making in court process</p>	<p>The police data for the county are quite limited and we were unable to obtain data from most of the cities identified in RFP</p> <p>Perception of high-crime places or events may affect DMC, so it is important to consider how that interacts with directed enforcement efforts</p> <p>Need to take stock of the different degrees of DMC across decision points and identify some places to begin—detention may be particularly important based on other findings</p> <p>Seems that there are some resource constraints in terms of effective alternatives that may need to be addressed in order to tackle this multifaceted problem</p>

FRANKLIN COUNTY, OH

Franklin County Police Agency Data

Description of Franklin County arrest data. The UC research team attempted to make contact with several agencies within Franklin County, Ohio beginning October 2012. The research staff sent a formal letter outlining the study and data requests to the head of each agency. The research team followed up with the unresponsive agencies with several emails and periodic phone calls encouraging them to participate in the study. A final attempt to gain the participation of one unresponsive agency was made in April 2013. After April 2013, the agency that offered no response was identified to “decline participation via no response.” Two agencies agreed to participate in the study (i.e., Columbus Police Department and Whitehall Police Department). The findings from the analysis of arrest records from the two agencies in Franklin County are discussed below.

Table 39. Basic Characteristics of Arrested Juveniles in Locations with Available Data

	Columbus PD (N=3,667) Valid % (N)	Whitehall PD (N=713) Valid % (N)
<i>Race</i>		
White	24.0 (869)	29.3 (205)
Black, AA	75.6 (2,733)	64.2 (449)
Multi-Race	0.0 (0)	0.0 (0)
Other	0.4 (14)	6.5 (45)
<i>Sex</i>		
Male	77.4 (2,839)	64.0 (456)
Female	22.4 (821)	36.0 (257)
<i>Age</i>		
Mean	15.97	15.69
Median	16.29	15.96
Standard Deviation	1.52	1.60

Table 39 above provides an overview of the sociodemographic characteristics of youth arrested between 2010 and 2011 within these two Franklin County locales. During the aforementioned timeframe there was a total of 4,380 arrests of youth ages 10-17 (N=3,667 in Columbus; N=713 in Whitehall). In both locales, African-American youth accounted for the majority of juvenile arrests (75.6% and 64.2% in Columbus and Whitehall, respectively). The majority of arrests in both locales comprised of males (77.4% in Columbus and 64.0% in Whitehall). The average age of youth arrested is 15.97 years old in Columbus and 15.69 years old in Whitehall. The age of youth arrested ranged from 10.24 to 17.99 years old in Columbus and 10.59 to 17.99 years old in Whitehall.

The first major component of this study is to identify whether DMC may be an issue at various stages in the justice process. Table 40 below displays the 2010-2011 Relative Rate Index (RRI) values for two police agencies in Franklin County. Overall, the findings indicate that disproportionality in arrests of minority youth may be an issue in both of the locales within Franklin County.

Table 40. Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority/ White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Columbus PD	0.03	0.09	0.07	3.69*	2.80*	3.97* (3.67–4.29)	2.94* (2.72–3.18)
Whitehall PD	0.20	0.68	0.51	3.35*	2.49*	8.35* (6.67–10.4)	4.00* (3.28–4.88)

*RRI greater than 1.20 Threshold or OR that is statistically significant at p<.05

Columbus Police Department. The Columbus Police Department maintained electronic records on juvenile arrests. The UC research team received arrest records for juvenile arrests

between 2010 and 2011 in the locale of Columbus. After retrieval, the UC researchers converted the files into a data management and analysis program.

Basic demographic characteristics of the individual and offense-related information were obtained for all juvenile arrests. Available measures are listed below:

- Age
- Race/Ethnicity
- Sex
- Offense Category
- Offense Level
- Number of Offenses
- Presence of Co-Offenders
- Use of a Weapon

Basic description of cases. Of the 3,667 juvenile arrests made by Columbus PD, African-American youth were arrested 2,733 times (75.6% of all arrests between 2010 and 2011). White youth accounted for 24.0 percent of all arrests (N=869 arrests). There are 14 arrests of youth whose race/ethnicity was classified as “other” (0.4% of arrests). Males made up 77.4 percent of youth arrests (N=2,839 arrests) compared to 22.4 percent of females (N=821). The average age of those juveniles arrested between 2010 and 2011 is 15.97 years old (range=10.24 to 17.99 years old). There is a fair amount of variation around the average age of arrested youth (SD=1.52).

Report on RRI and odds ratios. As presented in Table 40, there is a moderate difference in the likelihood of arrest for White youth, African-American youth, and all minority youth in these data. Based on 2010 Census data, there are 72,179 youth ages 10-17 in Columbus. White youth accounted for a large percentage of the youth population in Columbus (N=33,910; 46.9% of youth ages 10-17). African-American youth made-up 40.0 percent of the juvenile

population ages 10-17 (N=28,903). All minority youth (including African-American youth) accounted for the majority of youth in Columbus (N=38,269; 53.0%). When considering these population values in Columbus, approximately 3 percent of arrests involved White youth, 9.5 percent involved African-American youth, and 7.2 percent involved a minority youth. These values produce an African American/White Relative Risk Index (RRI) of 3.7 and a Minority/White RRI of 2.8. Both values are above the RRI threshold (i.e., RRI>1.2) set forth by OJJDP and Ohio DYS, indicating that there is a sizeable difference between the relative risk of arrests for White and African-American youth and White and minority youth. Further analysis reveals that both the African American/White Odds Ratio (3.69) and the Minority/White OR (2.80) are statistically significant at $p < 0.05$, suggesting that there is a low likelihood that differences of this size would be present if the relative risk of arrest across groups were actually the same.

Analysis of key case characteristics by race/ethnicity. Table 41a below displays the findings from analyzing potential explanatory variables by race subgroups (i.e., White vs. Non-White youth) for arrests made by Columbus PD. Several interesting findings that may help to provide explanations for differences in arrests by race subgroups emerge from this analysis. First, there are significant, but somewhat slight, differences in most serious offense category by race subgroup ($\chi^2=12.4$; Cramer's $V=0.06$). Arrests for violent/sex, drug/alcohol offenses, and status/disorderly conduct offenses were more likely to involve White youth (34.2%, 4.7%, and 7.7%, respectively) compared to Non-White youth (33.7%, 2.9%, and 5.9%, respectively). Conversely, a slightly greater percentage of arrests for property offenses and "other" offenses involved Non-White youth (24.5% and 33.0%, respectively) compared to their White

counterparts (21.4% and 32.0%, respectively). Furthermore, Non-White youth were more likely to be arrested for more serious offenses than White youth ($\chi^2=50.7$; Cramer's $V=0.17$). For example, a greater percentage of arrests for felony offenses involved Non-White youth compared to White youth (51.5% and 32.3%, respectively). White youth were more likely to be arrested for misdemeanor and status/unruly offenses (49.8% and 15.1%, respectively) compared to Non-White youth (33.6% and 11.9%, respectively). The measure of association value indicates that there is a weak-to-moderate relationship between offense level and race subgroups.

A greater percentage of arrests where a co-offender was present were of Non-White youth (23.1%) than White youth (18.3%). The strength of this relationship is relatively weak, however. Lastly, a higher percentage of arrests for an offense that involved the use of a weapon were of Non-White youth (3.5%) compared to White youth (1.3%). Again, the strength of this relationship is fairly weak indicating that weapon use does not have that much predictive power in differences in arrest between race subgroups.

Table 41a. Arrest Characteristics by Race Subgroups – Columbus PD

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	34.2 (297)	33.7 (925)	12.42*	1.4
Property	21.4 (186)	24.5 (672)	0.06	
Drug/Alcohol	4.7 (41)	2.9 (81)		
Other	32.0 (278)	33.0 (907)		
Status/DC	7.7 (67)	5.9 (162)		
<i>Most Serious Offense Level</i>				
Felony	32.3 (137)	51.5 (698)	50.70*	51.5
Misdemeanor	49.8 (211)	33.6 (455)	0.17	
Status/Unruly	15.1 (64)	11.9 (161)		
PV/FTA	2.8 (12)	3.1 (42)		

<i>Number of Offenses</i>				
1	74.5 (647)	74.3 (2,040)	5.23	1.4
2	22.4 (195)	20.9 (574)	0.04	
3+	3.1 (27)	4.8 (133)		
<i>Presence of Co-Offenders?</i>				
No	81.7 (710)	76.9 (2,113)	8.82*	1.4
Yes	18.3 (159)	23.1 (634)	0.05	
<i>Weapon Use?</i>				
No	98.7 (858)	96.5 (2,650)	11.69*	1.4
Yes	1.3 (11)	3.5 (97)	0.06	

* statistically significant at $p < 0.05$

Whitehall Police Department. The Whitehall Police Department retrieved electronic records on juvenile arrests between 2010 and 2011 from their data management source. The UC research team received limited arrest records for juvenile arrests between 2010 and 2011 in the locale of Whitehall. Basic individual and offense-related characteristics were obtained for all juvenile arrests between 2010 and 2011. Available measures are listed below:

- Age
- Race/Ethnicity
- Sex
- Offense Category
- Offense Level
- Number of Offenses

Basic description of cases. As presented in Table 39 above, there were 713 arrests of juveniles ages 10-17 in Whitehall. Of those, 449 arrests involved African-American youth (64.2% of all arrests) compared to 205 arrests involving White youth (29.3% of all arrests). A small percentage of arrests involved youth that were classified as ‘other’ race/ethnicity (6.5%; N=45). The majority of ‘other’ youth arrests were Hispanic youth (N=43) in comparison to Asian youth (N=2). Males accounted for the majority of juvenile arrests (64%; N=456). Youth

arrested in Whitehall were between 10.79 and 17.99 years old. The average age of juveniles arrested in Whitehall is 15.69 years old, with a standard deviation of 1.6 years of age.

Report on RRI and odds ratios. Table 40 above displays a comparison between the arrest record data and 2010 U.S. Census data based on race subgroups. Based on the 2010 Census, there were 1,987 youth ages 10-17 in Whitehall. White youth accounted for a slight majority of the juvenile population (N=1,009; 50.8%). African-American youth made-up approximately 33.2 percent of the juvenile population (N=660). When considered against the population data, 20.3 percent of the arrest records involved White youth, 68.0 percent involved African-American youth, and 50.5 percent involved minority youth. These values translate to an African American/White RRI of 3.3 and a Minority/White RRI of 2.5, suggesting that there is a substantial difference between the relative risk of arrests for both comparisons – relative to the population data. The African American/White Odds Ratio and the Minority/White OR are statistically significant at $p < 0.05$, which suggests that there is a low likelihood that these differences would be found if the groups' relative risk of arrest were in fact the same.

Analysis of key case characteristics by race/ethnicity. Table 41b below displays the results of analysis of potential explanatory variables of arrests between race subgroups. Several interesting and statistically significant findings emerged from the analysis of Whitehall arrests characteristics. First, most serious offense category was statistically significant ($\chi^2=53.63$; Cramer's $V=0.20$), indicating that there is a weak to moderate relationship between most serious offense and race subgroups. Arrests for violent/sex offenses and status/disorderly conduct offenses were more likely to involve White youth (22.9% and 31.7%, respectively) compared to African-American youth (14.9% and 20.3%, respectively) and 'other' youth (17.8%

and 20.0%, respectively). A greater percentage of arrests for property offenses and 'other' offenses were of African-American and youth other Races than White youth. Arrests for property offenses were more likely to involve African-American youth (51.2%) compared to 'other' youth (31.1%) and White youth (27.8%). Most serious offense level was also statistically significant ($\chi^2=18.73$; Cramer's $V=0.13$). A greater percentage of arrests for status/unruly offenses were of White youth (35.3%) compared to African-American youth (18.0%) and 'other' youth (25.0%). Arrests for felony level offenses were more likely to involve 'other' youth (16.7%) than White youth and African-American youth (12.9% and 11.9%, respectively). African-American youth were significantly more likely to be arrested for misdemeanor offenses (70.1%) compared to White youth (12.9%) and 'other' youth (58.3%). Lastly, number of offenses by race subgroups was statistically significant ($\chi^2=11.36$; Cramer's $V=0.09$). A greater percentage of arrests for multiple offenses involved White youth (29.8%) compared to African-American youth (19.6%) and 'other' youth (24.4%).

Table 41b. Arrest Characteristics by Race Subgroups – Whitehall PD

	White % (N)	Black/AA % (N)	Other % (N)	χ^2 V	Percent Missing
<i>Most Serious Offense</i>					
<i>Category</i>					
Violent/Sex	22.9 (47)	14.9 (67)	17.8 (8)	53.63*	2.0
Property	27.8 (57)	51.2 (230)	31.1 (14)	0.20	
Drug/Alcohol	7.8 (16)	1.8 (8)	6.7 (3)		
Other	9.8 (20)	11.8 (53)	24.4 (11)		
Status/DC	31.7 (65)	20.3 (91)	20.0 (9)		
<i>Most Serious Offense</i>					
<i>Level</i>					
Felony	12.9 (18)	11.9 (41)	16.7 (6)	18.73*	27.2
Misdemeanor	51.8 (72)	70.1 (241)	58.3 (21)	0.13	
Status/Unruly	35.3 (49)	18.0 (62)	25.0 (9)		
<i>Number of Offenses</i>					
1	70.2 (144)	80.4 (361)	75.6 (34)	11.36*	2.0
2	25.9 (53)	15.1 (68)	22.2 (10)	0.09	
3+	3.9 (8)	4.5 (20)	2.2 (1)		

* statistically significant at $p < 0.05$

Summary of police agency record analysis. Overall, the arrest data indicate that the majority of arrests within these two Franklin County locales involved African-American youth (75.6% in Columbus and 64.2% in Whitehall). After examining the Relative Risk Index (RRI) and the Odds Ratios (OR) based on arrest records and 2010 US Census data, we found that minority youth (particularly African Americans) were disproportionately arrested compared to White youth. In both Columbus and Whitehall, those arrests were more likely to come from property offenses. In terms of offense level, those differences appeared to vary by locale. In Columbus, Non-Whites were more likely to be arrested for felony offenses compared to White youth. In Whitehall, however, Non-Whites were more likely to be arrested for misdemeanor offenses than their white counterparts. Also, in Columbus, the disproportionate arrests of Non-Whites appear to be related to differences in offense characteristics. Specifically, Non-White youth were more likely to be arrested with a co-offender and for the use of a weapon. These findings

provide several interesting points that are worth examining more closely in the juvenile court data – where we can account for legally-relevant factors.

Franklin County Focus Group Analysis

In July 2013 the UC research team conducted two interviews and one focus group across two law enforcement agencies in Franklin County. The focus group involved mainly School Resource Officers (SROs) with varying levels of experience in law enforcement. The interviews involved separate discussions with a patrol officer and an SRO.

The protocol for the interviews conducted within Franklin County differs from the focus group protocol described in previous analyses. For these interviews a semi-structured discussion protocol was used to gain insight into individual officer perceptions of juvenile crime, the juvenile justice system, and disproportionate minority contact within Franklin County. These interviews lasted approximately one hour. Though not audio-recorded or transcribed verbatim, UC staff conducting the discussion documented detailed notes throughout the interview. The detailed notes taken during these interviews were incorporated in the following analysis to supplement the explanations for disproportionate minority contact recorded by the UC research team in the larger focus group. The collective findings are presented below.

Findings. Participating officers from Franklin County observed several possible causes of disproportionate minority contact (DMC) within their respective jurisdictions. Each of these causes was identified as explanations involving the differential offending patterns of minority youth. As a whole, officers made no indication that the DMC observed within their jurisdictions involved the differential treatment of minority youth by law enforcement officers.

Differential offending. Within the focus group and interviews, officers consistently identified the differential offending of minority youth as the primary explanation for disproportionate minority contact with police. Officers provided these explanations when presented with arrest statistics that indicated the existence of DMC in their jurisdictions. Support for these explanations was included in discussions regarding the prevalence and nature of juvenile crime in the communities and school systems that they serve, as well as from officer commentary regarding the factors that, in their opinion, contribute to juvenile offending. The majority of officers within Franklin County argued that they are more likely to come into contact with minority youth because these are the youth that are overwhelmingly involved in crime and other forms of delinquency both in school and out in the community. Furthermore, several officers commented that DMC is driven by the prevalence of repeat offenders among minority youth, identifying that they deal with the same minority juveniles, or the “ten percenters”, on a daily basis. These differential offending patterns among minority youth and their subsequent high contact with police were believed to be related to factors such as geographic location, family, and socioeconomic status.

Geographic location. The participating officers argued that their disproportionate contact with minority youth is a product of responding to calls for service that come primarily from schools with higher populations of minority youth in attendance. Officers that had previous experience in patrol supported this observation, stating that they were most often dispatched to areas characterized by higher populations of minority residents. Furthermore, these participants were adamant that very few officers within their departments make “on-view arrests” (i.e. proactive arrests) that purposefully target youth based on their race or

ethnicity. Instead, they describe the officers within their respective departments as spending much of their time responding to these calls for service and managing problems as efficiently as possible when they arise. Overall, officers describe the policing strategies of their departments as largely reactive in nature, with higher calls for service in specific areas affecting police contact with the minority population in their jurisdictions. One officer commented on his/her past experiences saying, "We are responding to calls, we are dealing with a situation that we were called to. How can they compare the statistics when we are responding to the calls they tell us to go to and taking action?" Both SRO and regular patrol officers seemed to share this view that they are driven to respond to the calls they receive.

Family factors. In addition to the impact of calls for service, officers discussed their belief that much of their contact with minority youth is a result of problems originating in the home. Specifically, officers argued that, due to greater prevalence of family disruption/single parent households in minority communities, minority youth are often not taught respect or the difference between what is "right" and "wrong" because they lack caretakers or prosocial models. Officers consistently observed that youth coming from these home environments are not shown "how to survive" and, as such, resort to raising themselves or being raised by their friends, which is ultimately viewed to increase youth involvement in crime and subsequent contact with police. As one officer explained, "For one thing it's got to start at home when these kids are young."

Officers further argued that society has taken the responsibility of child-rearing away from parents. It was observed that many parents are unwilling to discipline their children because they are afraid of potential repercussions (e.g. calls to child services). As a result, police

officers are called into minority households to handle situations that traditionally have been handled by parents (e.g. “I can’t get my 12 year old to go to school”), increasing their contact with minority youth. This lack of discipline in the home is viewed to have negative consequences in the long run. Specifically, as youth get older, having never received any type of consequences for their actions in the past, they are less willing to listen to adult instruction or respect authority figures in their lives. This is thought to result in more calls for service and subsequent police contact with older minority youth because parents/school figures are unable to handle their delinquent behavior and must rely on police.

Socioeconomic status. Socioeconomic status (SES) was observed to affect DMC through its influence on school funding and the quality of the education systems in low SES communities. Described as a “failing business,” school resource officers from both law enforcement agencies commented that the public schools located in economically disadvantaged, minority neighborhoods lack the funds to provide a positive learning environment for youth. Due to this lack of funding, standards of education are viewed to be minimal and programs that could potentially deter youth from a criminal lifestyle (e.g. after-school recreation and clubs) are non-existent. Officers described that, in an effort to receive more funding, schools attempt to maintain the appearance of attendance by accepting larger populations of students and passing these students through the school system regardless of the individual students’ qualifications. Officers emphasized the detrimental effects of this process on the behavior of minority youth, observing that in many cases this lack of education motivates youth to become involved in crime.

Additionally, officers observed that many schools within low SES, minority communities become breeding grounds for gang activity and violence because they lack the structure and discipline to keep such activity under control. Furthermore, the effort to increase the student populations of schools has resulted in the merging of traditional lines of gang territories and loyalties due to members of different gangs (i.e. from different neighborhoods) being placed within the same school context. This merger was observed to increase gang activity outside of school because youth from different areas are coming together within the school environment and then dispersing across a wider area of neighborhoods to offend. Ultimately, officers argued that the increased involvement of minority youth in gang activity both in school and out in the community increases their likelihood of contact with the police.

Suggestions to reduce juvenile crime. Officers from both the focus group and interviews consistently observed that youth typically face no consequences either formal (via the justice system) or informal (via family/school) for their minor delinquent and more serious criminal actions. It was suggested that this lack of repercussions enables youths' antisocial behaviors, allowing them to escalate in the amount and seriousness of offenses they are involved in. Therefore, officers suggested that the sanctions in place should be enforced to hold youth accountable by providing explicit consequences for their actions. Additionally, officers highlighted the need for an expansion of the juvenile detention center in Franklin County. Once again officers stressed the importance of providing real punishment to youth to facilitate their understanding that crime will not be tolerated and to potentially deter future criminal behaviors. One officer emphasized, "The only way you are going to correct these behavioral

issues and these criminal issues is by punishment. If there is no punishment they are not learning any lesson they are just going to go right back out and do it again.”

Beyond the idea of punishment, officers made several suggestions involving the use of schools to reduce juvenile offending and DMC. These suggestions emphasized the role of school administrators in the control and prevention of juvenile delinquency. For example, officers discussed providing structure and discipline to youth at a younger age by incorporating programs in schools that provide prosocial alternatives to delinquency. Additionally, officers mentioned the past success of honors programs designed to “take back” schools characterized by elevated rates of crime. These programs have been found to decrease delinquency and enhance school order by motivating youth to police themselves and by increasing intolerance for delinquency related disruptions throughout the school day. Furthermore, officers suggested the creation of gang-outreach initiatives within school to provide mentorship to youth that otherwise lack prosocial models in their lives.

Finally, officers stressed the need to improve the education of youth in low SES communities to provide legitimate opportunities to avoid criminal lifestyles. Specifically, several school resource officers suggested incorporating trade schools for youth in high school so they may learn marketable skills. Providing such classes was argued to have the potential to motivate learning among students because the course material is more applicable to many of the students. As one school resource officer explained,

“I think if you talk to a lot of the teachers in the majority of the schools they would say you are more apt to have a kid come to school abide by the rules, follow the rules, if you have a subject pertaining to what he can curtail to his lifestyle. Things such as arts, automotive, electronics, plumbing, something like that.”

Another supported this observation saying,

“If you don’t teach them something other than ‘you should go to college, you should go to college’ and then when they don’t and they don’t have anything...They don’t have trade unions coming in and bringing in apprenticeships anymore...get him certified so that when he comes out not only is he certified the union will give him a job and he will be productive instead of just nothing.”

Summary and discussion. Officers within the participating Franklin County agencies consistently reported that disproportionate minority contact is a product of the differential offending patterns among minority youth within their respective jurisdictions. The prevalence of offending among minority youth is believed to be significantly influenced by the home and school environments these youth are placed within. Specifically, minority youth are observed to come from homes characterized by family disruption where the availability of prosocial models and the presence of discipline is scarce, resulting in youth raising themselves or being raised among their peers. Additionally, the “failing” nature of the school system, particularly schools with a higher population of minority youth in attendance, is observed to deprive youth of proper education and legitimate opportunities that could prevent or altogether replace criminal lifestyles. The prevailing lack of structure in the education system combined with the general lack of consequences provided by the justice system is perceived to have significant negative on youth. As one officer commented that schools and the court system were setting youth up for failure by not doing enough to curtail their problem behavior.

The high participation of SROs in the Franklin County analysis provides unique insight on explanations for disproportionate minority contact with police that emphasizes the significant role of schools in the prevention and, in some cases, escalation of juvenile offending. The officers’ commentary highlights the need to improve the structure and discipline within schools

to provide a prosocial environment for youth that emphasizes the development of skills that are applicable to a wider range of prospective lifestyles. The officers' discussion mentions the need to increase the collaboration between school systems and the juvenile justice system to enhance both the management and rehabilitation of delinquent youth. Importantly, the comments provided by the school resource officers tend to mirror other focus group results in terms of their emphasis on the differential offending explanation, the need for enhanced sanctions for youth delinquency, and the belief that law enforcement officers should not be held responsible for reducing DMC. Therefore, it appears that, while greater (in terms of quality) and more frequent contact with youth in the school setting enhances officer identification of potential opportunities for the control and prevention of juvenile offending in that setting, it does not necessarily affect officer conclusions about factors contributing to juvenile crime and DMC.

Franklin County Juvenile Court Data

Data collection. The research team provided the Franklin County Juvenile Court data officer with a list of requested fields for the study. Members of the research team had email and phone correspondence with the IT department to discuss the availability of those fields and extraction methods for key measures. Subsequently, the court sent an Excel database containing case-level information on youth (age 10-17) petitioned to the court between January 1, 2010 and December 31, 2011. As noted below, the extraction consisted of a random subsample of cases that was distributed evenly across three race groups (White, African American, and Other). These data were then processed and cleaned to develop needed measures for the analysis below.

Measures included in the analysis. The primary independent variable of interest was race, but we also included indicators for sex, age at filing, age at first referral, number of charges, number of prior cases filed, previous diversion, most serious offense category, and most serious offense level. *Race* was recorded as White, African American, Other, and was recoded as a set of three variables capturing membership in each of these categories (or not). *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age at filing* is a continuous measure that indicates the youth's age at case initiation. *Age at first referral (onset age)* is a continuous measure that indicates the youth's age at the time of first court referral. *Number of charges* is a continuous indicator comprising the count of separate charges included in the current case. *Number of priors* is a continuous measure that indicates the total number of referrals the youth had prior to the current case. *Previous diversion* is a dichotomous measure that indicates whether the youth had ever been placed in a diversion program prior to the current case. If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property, drug/alcohol, status offense, and other. Similarly, the *most serious offense level* variable indicates whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly in juvenile courts, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables included dichotomous measures of whether youth experienced certain outcomes at four decision points: detention, dismissal, adjudication, and

secure confinement.³⁹ Each of these variables was coded as yes/no. *Dismissed* indicates whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent). *Detention* indicates whether youth were placed in secure detention while awaiting further proceedings. *Adjudicated* indicates whether a youth was adjudicated delinquent for the current case (e.g., found guilty on the current charges). *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility.

Data coverage and preparation. Franklin County Juvenile Court provided the research team with a random sample of cases (N=884) taken from those that were petitioned to the court in 2010 and 2011. This sample comprised a roughly equal racial distributions among White (N=294), African-American (N=299), and Other youth (N=291). This in turn necessitates a balance between the sample sizes needed for comparing across groups and ensuring that the obtained results were appropriate for the distribution of cases processed by Franklin County in 2010 and 2011. Therefore, the sample was weighted by race prior to conducting the analyses below. The weights were computed based on the 2010 referral numbers provided to DYS by the Franklin County Juvenile Court. Table 42 provides the data used to calculate these weights.

There was a relatively small amount of missing data present in the sample. There was complete coverage (i.e., no missing data) for the detention outcome, as well as for each of the independent variables. There was 22.6 percent missing data for each the remaining case outcomes (dismissed, adjudicated, and secure confinement). To retain all cases for analysis, we used multiple imputation (MI) to impute the missing values for each of these variables. MI replaces missing observations with predicted values based on other variables included in the

³⁹ Diversion and bindover were not included in this analysis due to the low number of diverted (less than 2%) and waived (less than 1%) cases present in the sample.

data—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, age at filing, age at first referral, number of prior cases, number of charges, previous diversion, most serious offense category, and most serious offense level. MI first generates a specified number of datasets—in this case, 10—in which the missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from each of the ten analyses are pooled into a single result. This ensures that the results appropriately account for the variation in the imputed values.

Descriptive statistics. In 2010-2011, males accounted for 64.6 percent of the referrals in the sample. The mean age at filing was 15.7 years old (SD=1.68) and the average onset age was 14.6 years old (SD=1.96). The average number of prior petitions was 1.9 (SD=3.03), although 46.4 percent had no previous contact with the juvenile court. The mean number of charges in the current case was 2.6 (SD=1.33). Almost one quarter (24.7%) of the sample had previously participated in a diversion program. Regarding offense seriousness, 88.9 percent of the youth were charged with a misdemeanor or status offense. The most serious offense type was status/disorderly conduct (43.1%), followed by property offenses (25.3%), violent/sex offenses (21.3%), drug/alcohol offenses (5.9%), and other offenses (4.4%).

Court outcomes. We estimated three statistical models for each of the four decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for African-American and Other youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and other legally relevant factors (number of charges, number of priors, previous

diversion, most serious offense category, and most serious offense level). The final model (see Table 43) included the above variables, as well as the extralegal factors sex, age at filing, and age at first referral. Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Detention. In the race-only model, African-American youth were almost three times more likely to be detained relative to White youth (OR=2.90), while the effect for youth in the Other category was not significant. After adding legally relevant factors in the second model, the effect of race remained mixed. Specifically, African American-youth were over two times more likely to be detained (OR=2.12), a 27 percent decrease from the race-only model. The effect for Other youth remained non-significant. Youths' number of prior cases and number of charges in the current case significantly increased the odds of detention by 9 percent and 31 percent, respectively. Youth who previously participated in a diversion program were over two times more likely to be detained relative to those who had no prior diversion participation (OR=2.03). Youth charged with a property offense (OR=0.50), drug/alcohol offense (OR=0.08), or a status offense/disorderly conduct (OR=0.05) were significantly less likely to be detained compared to those charged with a violent or sex offense. Finally, youth charged with a misdemeanor or status offense were 80 percent less likely to be detained than those charged with a felony (OR=0.20).

When the extralegal variables were added in the final model, the effect of race remained mixed. African-American youth were over twice as likely to be detained relative to White youth (OR=2.04), a slight decrease from the second model. The effect for youth in the

Other category remained non-significant. Each of the statistically significant legal variables from the second model maintained its significance in the final model with only negligible changes in the odds ratios. None of the extralegal variables (sex, age at filing, and age at first referral) were significant predictors of detention. Overall, African-American youth were significantly more likely to be detained across all three models, while the effect for youth in the Other race category was not significant in any model.

Dismissed. In the race-only model, the race effect on case dismissal was not statistically significant when comparing African-American and White youth. However, Other youth were 63 percent more likely to have their case dismissed relative to White youth (OR=1.63). When the legally relevant factors were included in the second model, the effect for African-American youth remained non-significant, while the significant effect for youth in the Other category increased (OR=1.97). In addition, a one-unit increase in the number of charges in the current case significantly decreased the odds of dismissal by 94 percent (OR=0.06). Youth charged with a misdemeanor or status offense were almost seven times more likely to have their case dismissed compared to those charged with a felony (OR=6.94). Interestingly, youth charged with a property offense (OR=0.22) or a drug/alcohol offense (OR=0.16) were significantly *less* likely to have their case dismissed relative to youth charged with a violent or sex offense. This may be explained by the fact that 75 percent of the violent/sex offenses were classified as misdemeanors. As such, because a high rate of violent misdemeanors was dismissed, the relative effects for the other offense categories would be expected. The effect for the remaining offense categories (status offense/disorderly conduct and other offenses) was not

significant. Similarly, the effects for number of prior referrals and previous diversion were not significant.

In the final model that included extralegal variables (see Table 43), youth in the Other category were over two times more likely to have their case dismissed (OR=2.02), a slight increase from the second model, while the effect for African-American youth remained non-significant. Each of the significant legal variables from the second model (property offenders, drug/alcohol offenders, offense level, and number of charges) remained significant in the final model with negligible changes in the odds ratios. The effects for number of prior referrals and previous diversion remained nonsignificant. None of the extralegal factors—sex, age at filing, and age at first referral—were significant predictors of case dismissal. Overall, results indicated that race had varying effects on case dismissal. In all three models, youth in the Other category were significantly more likely to have their case dismissed relative to White youth, while the effect for African-American youth was not statistically significant.

Adjudicated. In the race-only model, race did not have a significant effect on the decision to adjudicate. After adding legally-relevant variables in the second model, the effect for African-American youth remained non-significant, while the effect for Other youth became significant. Specifically, these youth were 42 percent less likely to be adjudicated compared to White youth (OR=0.58).⁴⁰ A one-unit increase in the number of prior referrals significantly increased the odds of adjudication by 7 percent (OR=1.07). Youth charged with a misdemeanor or status offense were 84 percent less likely to be adjudicated relative to those charged with a

⁴⁰ Number of offenses was removed from the Adjudication analysis. All youth with more than three charges in the current case were adjudicated delinquent, leading to an Odds Ratio = 109.80.

felony (OR=0.16). None of the offense type categories had a statistically significant effect on the adjudication decision. Similarly, the effect for previous diversion was not statistically significant.

In the final model that included extralegal variables, which is shown in Table 43, the effect of race on adjudication remained similar to that in the second model. The effect for African-American youth remained non-significant, while the significant effect for Other youth increased slightly to where they were 46 percent less likely to be detained compared to White youth (OR=0.54). Similarly, youth charged with a misdemeanor or status offense were 83 percent less likely to be adjudicated relative to those charged with a felony (OR=0.17). None of the offense categories had a statistically significant effect on the decision to adjudicate relative to those charged with a violent or sex offense. The effect for previous diversion changed from non-significant in the second model to significant in the final model. Specifically, youth who previously took place in a diversion program were 57 percent more likely to be adjudicated than those who had not (OR=1.57). None of the extralegal variables (age at filing, sex, and onset age) were significant predictors of adjudication. Overall, there was a significant race effect for the decision to adjudicate for youth in the Other category (they were less likely to be adjudicated delinquent than White youth); however, the effect for African-American youth was not significant in any of the three models.

Secure confinement. The final decision point examined was the placement of youth in secure confinement. This analysis used the subsample of youth who were adjudicated delinquent (N = 404). In the race-only model, African-American youth were almost four times more likely than adjudicated White youth to be placed in secure confinement (OR=3.90). The effect for Other youth was not significant. In the second model that included legally relevant

models, the effect for African-American youth was no longer statistically significant. The effect for youth in the Other category became significant in that these youth were almost seven times more likely than White youth to be placed in secure confinement (OR=6.95). One-unit increases in the number of prior petitions and the number of charges in the current offense increased the odds of secure confinement by 20 percent (OR=1.20) and 213 percent (OR=3.13), respectively. Only those charged with status offenses (OR=0.04) were significantly less likely to be placed in secure confinement relative to youth charged with a violent or sex offense. Youth charged with a misdemeanor or status offense were 98 percent less likely to be placed in secure confinement compared to those charged with a felony (OR=0.02).

In the final model that included the extralegal variables (see Table 43), the effects of race remained mixed. The effect for African-American youth was non-significant, while the significant effect for youth in the Other category increased slightly (OR=8.81). The effect for number of prior petitions was no longer significant. A one-unit increase in the number of charges in the current case increased the odds of secure confinement by 206 percent (OR=3.06). Similar to the second model, youth charged with a status offense were significantly less likely to be placed in secure confinement relative to those charged with a violent or sex offense (OR=0.06), while the effects for the remaining offense categories were not significant. Youth charged with a misdemeanor or status offense were 99 percent less likely to be confined compared to those charged with a felony (OR=0.01). Regarding the extralegal variables, a one-year increase in the age at filing significantly increased the odds of secure confinement by 119 percent (OR=2.19), while a one-year increase in onset age decreased the odds of confinement by 36 percent (OR=0.64). Overall, the effect of race on the decision to place youth in secure

confinement facilities was mixed. In the race only model, African-American youth were significantly more likely to be placed in secure confinement relative to their White counterparts, while the effect for youth in the Other category was not significant. In the second and third models, however, the effects for African-American youth were no longer significant while youth in the Other category were significantly more likely to be confined relative to White youth.

Initial and conditional probabilities of case outcomes. Figures 14 display the initial and conditional probabilities for each of the four outcomes by youths' race (White/Non-White). The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any of the other factors mentioned above. These are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. Conversely, the conditional probabilities indicate the likelihood that White and Non-White youth will experience a certain outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case. This also allows us to consider whether any difference between White and Non-White youth that we observe for the base analysis shift when accounting for other relevant case factors.

The mean values for number of prior petitions (1.92), number of charges in the current offense (2.56), age at filing (15.70), and onset age (14.57) were used to calculate predicted probabilities for detention, dismissal, and adjudication outcomes. The remaining variables were set to their most frequently appearing categories: previous diversion – no; offense seriousness – misdemeanor/status; sex – male; and offense type – property. Because secure confinement is

typically reserved for the most serious offenses/offenders, the values for offense type and offense seriousness were changed to violent/sex and felony, respectively, in the calculation of the conditional probabilities for this decision point. The values for the other variables remained the same.

Overall, the results tend to follow those discussed above. Non-White youth had higher probabilities of detention, adjudication, and secure confinement and a lower probability of dismissal relative to their White counterparts. Generally, the gaps between White and Non-White youth tend to be considerably larger in the unconditional probabilities and narrowed somewhat when other legally relevant and extralegal variables were considered. Still, they did not diminish fully when those factors were considered. For example, the unconditional probability of detention was 0.197 for Non-White youth and 0.078 for White youth (a difference of 0.119). When the other variables were included, the conditional probabilities for detention decreased to 0.130 for Non-White youth and 0.068 for White youth, a difference of only 0.062.

Table 42. Stratification Sample Weights for Franklin County Juvenile Court

Race	“Referral Population” N (2010)	Proportion of Population	Sample N	Proportion of Sample	Weight
White	4,497	0.39	294	0.33	1.179
African American	6,821	0.59	299	0.33	1.759
Other	149	0.019	291	0.33	0.039
Total	11,467	1.0	884	1.0	

Table 43. Binary Logistic Regression – Outcomes for Franklin County Juvenile Court (Full Models)

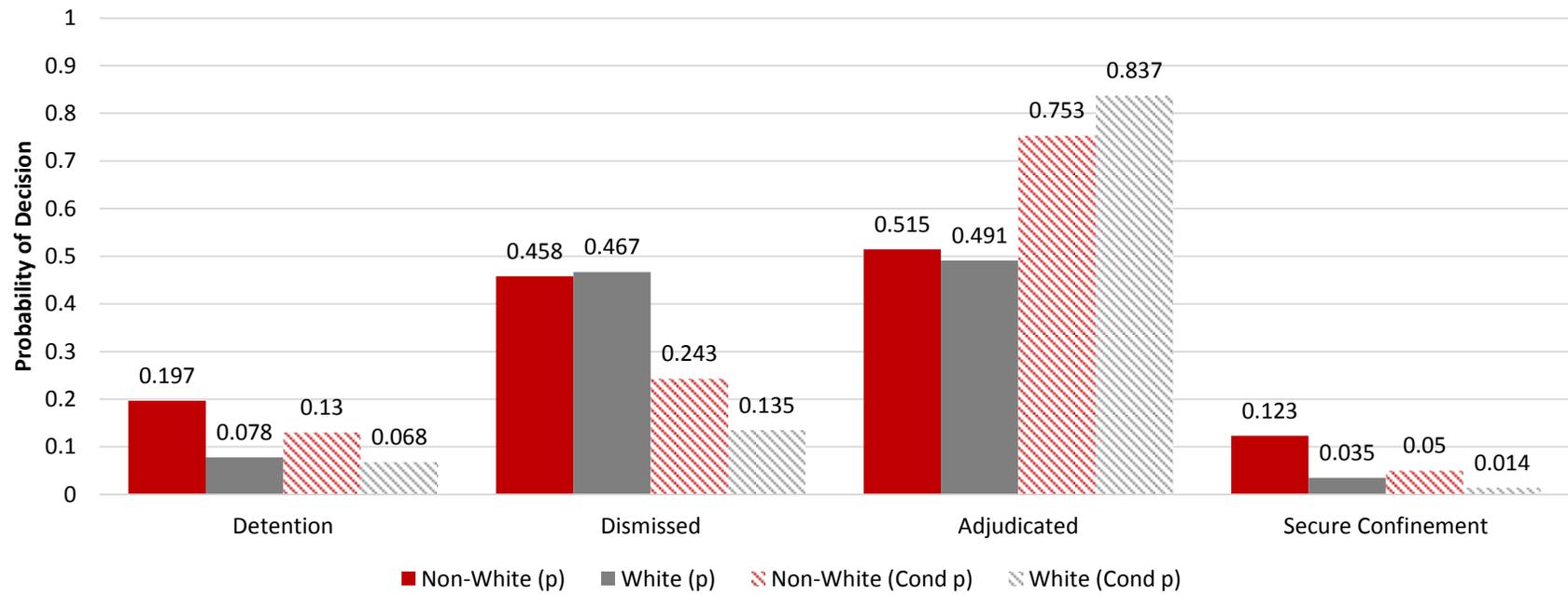
	Detention			Dismissed			Adjudicated			Secure Confinement*		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Black/AA	0.72	2.04	0.32	0.37	1.45	0.32	-0.20	0.82	0.19	1.28	3.60	0.81
Other Race	0.30	1.35	0.36	0.70	2.02	0.33	-0.62	0.54	0.19	2.18	8.85	1.06
Num. of Priors	0.09	1.09	0.04	0.06	1.06	0.04	0.05	1.06	0.04	0.07	1.07	0.06
Num. of Charges	0.27	1.31	0.11	-2.88	0.06	0.31	----	----	----	1.12	3.06	0.30
Previous Diversion	0.76	2.13	0.34	0.16	1.17	0.31	0.45	1.57	0.22	0.86	2.36	0.65
<i>Offense Type</i> ¹												
Property	-0.67	0.51	0.34	-1.52	0.22	0.51	-0.03	0.97	0.27	-0.02	0.98	0.74
Drug/Alcohol	-2.47	0.08	0.93	-1.82	0.16	0.77	0.79	2.19	0.42	----	----	----
Status	-2.89	0.06	0.57	0.10	1.11	0.33	-0.29	0.75	0.24	-2.83	0.06	1.10
Other	-0.27	0.76	0.52	-1.24	0.29	0.73	0.40	1.50	0.52	1.49	4.44	0.91
Misd/Status	-1.55	0.21	0.34	1.94	6.96	0.80	-1.76	0.17	0.38	-4.36	0.01	1.17
Sex	-0.15	0.86	0.34	0.01	1.01	0.34	-0.26	0.77	0.19	-0.77	0.46	1.20
Age at Filing	-0.04	0.96	0.10	-0.03	0.97	0.10	-0.09	0.91	0.09	0.79	2.20	0.27
Onset Age	-0.01	0.99	0.06	0.00	1.00	0.00	-0.09	0.91	0.08	-0.44	0.64	0.20
Constant	-0.49		1.49	5.44		1.81	-8.61		0.99	-13.22		4.63

Notes: Bolded entries represent statistically significant estimates at p<0.05; B = logit coefficient; OR = odds ratio; SE = standard error

* This analysis used the subsample of youth who were adjudicated delinquent (N = 404).

¹ Reference category is Violent/Sex Offenses

Figure 14. Summary of Initial Probabilities and Conditional Probabilities



Summary of juvenile court record analysis. As described above, the initial effect of race varies across the different decision points. For detention and secure confinement, African-American youth were significantly more likely to be detained pre-adjudication and placed in secure confinement post-adjudication relative to their White counterparts, while the effects for Other youth were not significant. Conversely, Other youth were significantly more likely to have their case dismissed and be adjudicated delinquent compared to White youth, while the effects for African-American youth were not significant.

To better understand how race impacts decision-making in the juvenile court, we estimated statistical models that controlled for legally-relevant and extralegal factors. Like the bivariate detention model, African-American youth were significantly more likely to be detained in the final model relative to their White counterparts, while the effect for those in the Other category remained non-significant. The significant effects for Other youth and the non-significant effects for African American youth found in the bivariate models for case dismissal and adjudication were maintained in the final models. Finally, the effects of race on secure confinement changed in the final analysis. Specifically, once the legal and extralegal variables were included, the effect for African-American youth became non-significant, while Other youth became significantly more likely to be placed in secure confinement relative to White youth. Overall, the results suggest that detention is a decision point where some disparities persist for African-American youth even after relevant adjustments are made for legally-relevant factors. Youth in the Other race group tended to have a greater likelihood of case dismissal and a lesser likelihood of adjudication than White youth. They do have significantly greater odds of out-of-community placement compared with Whites, however.

Franklin County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Franklin County court staff in January and August of 2013. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court involvement and outcomes. Nine interviews were conducted with judicial and program staff. Child welfare advocates were also interviewed. The interviews lasted between 30 and 90 minutes, depending on the interviewees' roles in the court and their level of disclosure. Data were then gathered on a number of detention and adjudication hearings.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

System factors. Several interviewees suggested minority youth are more likely to be involved in serious, violent, and/or weapons-related offenses, and that the [differential] involvement of young, Black males in serious/violent crime is what contributes to DMC in the juvenile justice system opposed to the differential treatment of youth. Making this point directly, one staff member mentioned that, "Almost half of referrals are young, Black males

charged with weapons offenses such as the use, possession, and/or CCW [Carrying of a Concealed Weapon] of a firearm.” Echoing this comment, another interviewee stated that, “[Minority] youth are typically detained for serious, violent offenses that involve the use of a firearm.” Accordingly, staff regarded the severity of the offense and the use of a firearm as important factors in the decision making process. However, other interviewees mentioned that system bias and inconsistencies at the front-end of the system were the primary reasons for disproportionality in the juvenile justice and child welfare system rather than offending patterns. Staff noted that, “it’s a front-door problem,” “[the court] doesn’t divert as [often] as it should,” and that “White youth are [more] likely to be diverted than Black youth;” Another staff member explained that,

“Diversion decisions are reviewed [and processed] by the Prosecutor’s Office. Areas with more programs and resources [use] diversion. These aren’t the areas with DMC issues. It’s an issue. [In the city] it’s just another arrest.”

The majority of respondents (67%) agreed that the court would benefit from additional programs and services, and 88 percent of staff rated a lack of alternatives to incarceration and detention as a strong contributing factor to DMC. In particular, staff stressed the need for additional mental health and substance abuse programs to better meet the risks and needs of youth that come into contact with the court. It was also recommended that agencies develop more alternatives to detention, and increase the number of vocational and occupational programs in the area. With regard to external providers, staff noted that although there are a number of services available, “most of the programs have long waitlists.” Another interviewee explained that despite resources, “the court relies on external providers to [deliver] intervention, treatment, and [case management] services at the court.” Ratings on court’s

ability to meet the needs and risks of the youth under their care were consistent with these findings.

The education system. Respondents were divided in their opinion of how educational factors contributed to disproportionate minority contact. Explanations ranged from the inadequacy of the education system to meet the academic needs of students, particularly minority students, to the differential use of suspension and expulsion strategies used by officials. In particular, one interviewee commented that,

“Youths come to the attention of the court with Individualized Education Plans. [Rather than preventing court involvement], schools are failing to follow through and neglecting education needs.”

Staff also believed that law enforcement’s responses were sometimes disproportionate to the incident reported and that alternatives to arresting youth were not always considered. They explain that this is because “Law enforcement and SROs didn’t hesitate [to haul] youth off to court.” To better address school misconduct, trainings were arranged with representatives from police, school, and court agencies. At least three staff linked these efforts to a recent decrease in the number of academic disciplinary referrals, supporting what one respondent described as “a need for change” on the part of school and law enforcement agencies from referring too many youth to the court for behavior problems.

The family system. Respondents explained that pre-adjudication detention plays an important role in understanding DMC in the court, particularly regarding the context and importance of family risk in the decision making process. Nearly all respondents (7 of 9) observed that parents’ willingness to pick up youth as well as their willingness to be involved in the court process influenced intake and detention decisions. As one staff member described it,

“family [functioning] and supervision are good [indicators] of whether a parent can handle [a] youth.” Other staff interpreted families’ lack of participation or involvement as a disinterest in intervention alternatives or the wellbeing of their child. Elaborating on this point, respondents explained that, “[a big challenge is managing] unruly case filings, cases where the parent doesn’t follow through.” Similarly, one interviewee commented that, “parents’ lack of cooperation and involvement impact [eligibility] for programs,” particularly diversion programs. Behavior management skills were also cited as an important factor in the decision-making process.

Discussions also focused on how family instability contributes to the differential treatment of crossover youth. Interviewees mentioned that youth involved in the juvenile justice and child welfare systems have higher detention rates, more frequent placement changes, and experience greater behavioral health issues compared to non-dependent youth. They explained that these cases present enormous challenges, particularly given the unique set of “individual and family risks” experienced by youth. Given the challenges of working with families of youth involved in the system, respondents also recognized the importance of cultural and racial competency in supervision and treatment. One staff member identified a need to “[bring] cultural competency and [sensitivity] into approaches to help the families they work with.”

Socioeconomic conditions and community context. The majority of staff members (89%) cited poverty, and poverty-related circumstances, as primary reasons for the overrepresentation of minority youth in the juvenile justice and child welfare system. Interviewees indicated that despite the need for services, disadvantaged families are more

likely to live in resource poor communities, have limited accessibility to support services, and be more vulnerable to social problems. “The [juvenile justice] system is a reaction to community issues...poverty, drugs, and no role models in the home,” explained one staff member. Others suggested that poverty exposes families, particularly minority families living in disadvantaged areas, to multiple “life struggles” that compromise their “ability to handle [day-to-day problems], follow through, or understand consequences.” For example, one staff member mentioned that, “Many youth involved come from [troubled] homes with domestic violence and chronic substance abuse.”

Summary. Staff responses focused on three key themes in particular: (1) The differential treatment of minority and crossover youth in the juvenile justice system; (2) parent and family-related risk factors and child-welfare involvement; and (3) community factors related to poverty and social class. Participants also discussed how zero-tolerance policies and inadequate curriculum resources contribute to disproportionality and disparity in the juvenile justice system.

Suggestions for DMC reduction included the implementation of Risk Assessment Initiative (RAI) to make more objective decisions at detention and the Franklin County Directions for Youth program. Franklin County also participates in the Annie E. Casey Foundation’s Juvenile Detention Alternatives Initiative (JDAI), the DYS Targeted RECLAIM program, and cultural competence and case planning training. Participants also pointed to the importance of (and continued need for) the Family Functional Therapy (FFT), Multi-systemic Family Therapy (MST) and Multidimensional Family Therapy (MDFT) interventions. When asked about possible solutions to DMC, one staff member suggested that there is a strong need for

evidence-based family interventions like FFT and MST. System reform efforts, including the development of alternatives to arrest and alternatives to the justice system such as de-escalation housing or evening reporting centers; and training on the availability of these alternatives to reduce inconsistencies in front-end decisions, were also identified as important next steps to address disproportionate contact among minority youth.

Summary of Findings and Implications: Franklin County

The police data for Franklin County included just Columbus and Whitehall police departments. These data suggest that the majority of arrests involved African-American youth (about 75% in Columbus and 64% in Whitehall). Both were disproportionate to the number of youth identified in the 2010 census. In Columbus, Non-Whites were more likely to be arrested for felony offenses compared to White youth, but in Whitehall this trended toward misdemeanor offenses. In Columbus, the disproportionate arrests of Non-Whites appear to be related to differences in offense characteristics, such as presence of co-offender(s) and use of weapons.

The UC research team conducted two interviews and one focus group across two law enforcement agencies in Franklin County. The focus group was conducted within a large agency and involved 13 School Resource Officers (SROs) with varying levels of experience in law enforcement. This concentration of SROs was unusual compared to other sites in the study, but provided some opportunity to consider interesting similarities and differences in focus group responses. Officers within the participating Franklin County agencies consistently reported that disproportionate minority contact is a product of the differential offending patterns among

minority youth within their respective jurisdictions. The prevalence of offending among minority youth is believed to be significantly influenced by the home and school environments.

The high participation of School Resource Officers in the Franklin County data collection allows for some unique insight on explanations for disproportionate minority contact that emphasizes the significant role of schools in the prevention and, in some cases, escalation of juvenile offending. It also connects schools that serve predominantly minority youth to disproportionate involvement in the juvenile justice system. At the same time, the comments provided by the SROs tended to mirror other officers' perceptions in their emphasis on the differential offending explanation, the need for enhanced sanctions for youth delinquency, and the belief that law enforcement officers should not be responsible for reducing minority youths' disproportionate contact with the justice system.

The presence of disparities in outcomes by race varies across the different juvenile court decision points. African-American youth were significantly more likely to be detained pre-adjudication and placed in secure confinement post-adjudication relative to White youth, while the effects for youth in the Other category were not significant. Conversely, youth in the Other category were significantly more likely to have their case dismissed and be adjudicated delinquent compared to White youth, while the effects for African-American youth were not significant. After adding controls for legally-relevant factors, age, and gender, the effects persisted for detention of African-American youth. On the other hand, the disparity did not persist for secure confinement once legally-relevant factors were included in the analysis. Overall, the results suggest mixed evidence for disparities at key court decision points. Detention is a decision point where some disparities persist for African-American youth even

after relevant adjustments are made for legally-relevant factors. Race in the “Other” race group had significantly greater odds of out-of-community placement compared with Whites as well. Consequently, the pre-adjudication detention and secure placement decisions are places where further attention should be given to disparities.

This leads to the important question of why certain disparities might persist. Court personnel provided some information relevant this question and also present some ideas about what might be done. Like the police officers, court interviewees mentioned parent and family-related risk factors (also mentioning child-welfare involvement) and community factors related to poverty and social class. Participants also discussed how zero-tolerance policies and inadequate school resources contribute to youth involvement and race-based disparity in the juvenile justice system.

Suggestions for addressing DMC included the implementation of Risk Assessment Initiative (RAI) to make more objective decisions at detention. Franklin County also participates in the Annie E. Casey Foundation’s Juvenile Detention Alternatives Initiative (JDAI). In general, respondents pointed to the need to expand available programming in order to deal with disparities. The interviewees also mentioned broader reform efforts, including the development of alternatives to arrest, as important future steps to address disproportionate contact among minority youth. As noted above, the data analysis suggests that arrest, detention, and placement decisions are places in most need of attention. The focus group and interview data also suggest that it will be important to involve schools in the process of addressing DMC issues at the front end of the justice system.

Table 44. Summary of Key Findings from DMC Assessment: Franklin County

Available Data w/Notes	Key Findings	Implications
Police arrest records for two agencies (N=4,380)	Arrests of African-American Youth were disproportionate to population numbers (RRIs of 3.7 and 3.4) Specific trends in arrest characteristics and race differed across agencies	Co-offenders and weapons involvement showed up in the larger agency, so those patterns are worth considering in terms of what they mean for DMC
A focus group (13 officers) and two interviews in smaller agencies	Focus group comprised of multiple SROs who mentioned key role of schools in prevention (or escalation) Also connected schools that serve predominantly minority youth to DMC	Similarity of SRO and patrol officers on explanations is notable in terms of programming and training
Random sample of 884 juvenile case records	Explanations tended to be similar to other officers Fairly strong DMC relationships for detention (1.4x) and secure confinement (3.6x)—even with controls. Dismissal (1.5X) and adjudication (-18%) effects trended in other direction	Identify factors at work in dismissal and adjudication outcomes that might be beneficial in considering how to respond to DMC in detention and secure placement
Nine interviews with court officials	Interviewees mentioned parent and family-related risk factors (also mentioning child-welfare involvement) as factors in DMC Also discussed zero-tolerance policies and school resources contribute to youth involvement in system	Mentioned Risk Assessment Initiative (RAI) for more objective detention decisions and JDAI. In general, pointed to the need to expand available programming to deal with DMC

HAMILTON COUNTY, OH

Hamilton County Police Agency Data

Description of Hamilton County arrest data. The UC research team identified six potential police agencies within Hamilton County, Ohio to participate in the Ohio DMC study. The research staff reached out to the head of each agency by sending a formal letter that details the purpose of the Ohio DMC Assessment study and data requests. We followed up with three unresponsive agencies with several emails and phone calls encouraging them to participate in the study. Those agencies that offered no response were identified to “decline participation via no response.” Three agencies from Hamilton County agreed to provide the research staff with the requested data (Cincinnati PD, Colerain PD, and Forest Park PD). The findings from the analysis of arrest records from these three agencies are discussed below.

Table 45. Basic Characteristics of Arrested Juveniles in Locations with Available Data

	Cincinnati PD (N=7,994) % (N)	Colerain PD (N=461) % (N)	Forest Park PD (N=309) % (N)
<i>Race</i>			
White	16.0 (1,274)	53.7 (247)	12.3 (37)
Black, AA	83.8 (6,661)	45.7 (210)	87.7 (264)
Other	0.1 (9)	0.7 (3)	0.0 (0)
<i>Sex</i>			
Male	65.7 (5,250)	63.3 (292)	73.8 (228)
Female	34.3 (2,744)	36.7 (169)	26.2 (81)
<i>Age</i>			
Mean	15.5	15.9	16.0
Standard Deviation	1.72	1.54	1.71

Table 45 above presents the basic composition of the cases in the sample across three agencies in Hamilton County on three key sociodemographic characteristics (Race, Sex, and Age). The final sample size for each agency is listed in the header. The three agencies vary in

the number of cases included in the analysis from 309 (Forest Park) to 7,994 (Cincinnati). The majority of the cases in these locations are either African American or White, suggesting this is the most relevant comparison for the purpose of examining the issue of DMC in Hamilton County. African Americans account for the majority of juvenile arrests in the locales of Cincinnati and Forest Park – with the exception of Colerain where the slight majority of arrests are White. Males made up the vast majority of juvenile arrests in the available data from 63.3 percent (Colerain) to 73.8 percent (Forest Park). On average the cases ranged between 15.5 and 16 years old across these three agencies in Hamilton County. The standard deviation (SD) values associated with age suggest that there is moderate amount of variation in the average age of juveniles arrested in these locales.

Table 46 below summarizes the 2010-2011 Relative Rate Index (RRI) values for three police agencies in Hamilton County with complete data. Overall, the findings suggest marked differences in the disproportionality of minority youth arrests between the agencies with available data.

Table 46. Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority/ White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Cincinnati	0.16	0.42	0.38	2.63*	2.40*	3.77* (3.53–4.04)	3.24* (3.03–3.46)
Colerain	0.05	0.13	0.10	2.73*	2.13*	3.00* (2.48-3.65)	2.26* (1.87-2.74)
Forest Park	0.13	0.15	0.13	1.16	0.98	1.19 (0.82–1.72)	0.98 (0.68–1.42)

*RRI greater than 1.20 Threshold or OR that is statistically significant at p<0.05

Cincinnati Police Department. The University of Cincinnati's Institute of Crime Science (ICS) has a longstanding relationship with the Cincinnati Police Department. As such, Cincinnati arrest data were already in possession of UC in Microsoft Access format prior to this project. The data included information on every arrest made by Cincinnati officers between 1997 and 2011. Arrest data for juvenile offenders arrested in 2010 and 2011 were extracted from the larger data set and converted to a file format for analysis.

Basic characteristics of the individual and offense-related information were available for all juvenile arrests, both delinquent and status offenses, between 2010 and 2011. Data points include the following:

- Age
- Race
- Sex
- Number of Offenses
- Arrest Date
- Address of Offense
- Offense Type
- Offense Seriousness

Basic description of cases. Table 45 contains the basic characteristics of juveniles arrested by Cincinnati Police Department between 2010 and 2011. Overall, there were 7,994 juvenile arrests in Cincinnati between 2010 and 2011. Of those arrests, the overwhelming majority involved African-American youth (N=6,661; 83.8%) compared to White (N=1,274; 16.0%), and youth from another race (N=9; 0.1%). Males accounted for 65.7 percent (N=5,250) of juvenile arrestees compared to 34.3 percent (N=2,744) female arrestees. The average age of arrested youth in Cincinnati was 15.5 years of age (SD=1.72), indicating that there is a fair amount of variation around the average age of arrested youth.

Report on RRI and odds ratios. Table 46 above provides the 2010-2011 Relative Risk Index (RRI) values associated with youth arrests in Cincinnati. These values are based on a comparison between Cincinnati PD arrest records and the 2010 U.S. Census data. Based on the 2010 Census, there were 25,822 youth ages 10-17 in Cincinnati. Of those, approximately 31.2 percent of the youth population is White (N=8,048) compared to 68.8 percent minority youth (N=17,774). More specifically, African-American youth account for 62.2 percent of the total youth population in Cincinnati (N=16,050). African-American youth have the highest proportion of arrests (0.42) relative to population numbers derived from the U.S. Census. When African-American youth are combined with other minority groups, the probability of arrest reduces to 0.38. White youth have the lowest probability of arrest (0.16) in Cincinnati. These arrest probabilities equate to a Black/White Relative Risk Index (RRI) of 2.63, which indicates a fairly large difference between African-American and White youth. In addition, the Minority/White RRI (2.40) exceeds the threshold of 1.20 identified by DYS and OJJDP. Lastly, both the Black/White OR (3.77) and the Minority/White OR (3.24) are significant at $p < 0.05$. These findings suggest that the odds that an arrest involved African-American youth are 3.77 times higher than for White youth and the odds of arrest for minority youth are 3.24 times higher than are their White counterparts.

Analysis of key case characteristics by race/ethnicity. Arrest data are somewhat limited for the purposes of understanding decisions, as they inherently comprise only arrests. As displayed in Table 47a, the possible explanatory variables available in the Cincinnati Police data are most serious offense category, most serious offense level, and number of offenses. First, there is a statistically significant difference in the most serious offense category between

White and Non-White youth ($\chi^2=31.08$; Cramer's $V=0.06$). A slightly higher percentage of arrests for a violent/sex offense involved Non-White youth (17.6%; $N=1,174$) than White youth (12.4%; $N=158$). Conversely, arrests for a status or disorderly conduct offense were more likely to involve White youth (42.9%; $N=546$) compared to their Non-White counterparts (40.2%; $N=2,682$). The related measure of association indicates that the relationship between race subgroups and most serious offense category is weak, suggesting that most serious offense category does not fully capture differences in arrest between race subgroups. Second, there is a statistically significant difference between race subgroups and most serious offense level ($\chi^2=29.56$; Cramer's $V=0.06$), although the relationship is relatively weak. Arrests for more serious offense levels (i.e., felony and misdemeanor) were more likely to involve Non-White youth (11.1% and 58.0%, respectively) compared to White youth (8.1% and 54.2%, respectively). Conversely, a greater percentage of arrests for status/unruly offenses were of White youth (37.7%) compared to Non-White youth (30.5%). Lastly, there is a statistically significant difference, albeit a rather weak relationship, between number of offenses and race subgroups ($\chi^2=9.41$; Cramer's $V=0.03$). A slightly larger percentage of White youth committed only a single offense (82.3%) compared to Non-White youth (79.2%). Conversely, a greater percentage of arrests for three or more offenses involved Non-White youth (6.7%) compared to their White counterparts. In summary, the arrest data for Cincinnati suggest that minority youth are more likely than White youth to be arrested for more serious crimes (both offense type and level) and to have multiple charges within the same arrest incident.

Table 47a. Arrest Characteristics by Race Subgroups – Cincinnati PD

	White % (N)	Non-White % (N)	χ^2 V	Percent Missing
<i>Most Serious Offense</i>				
Violent/Sex	12.4 (158)	17.6 (1,174)	31.08*	0.6
Property	19.0 (242)	19.9 (1,328)	0.06	
Drug/Alcohol	6.1 (77)	4.0 (265)		
Other	19.6 (249)	18.3 (1,223)		
Status/DC	42.9 (546)	40.2 (2,682)		
<i>Most Serious Level</i>				
Felony	8.1 (103)	11.1 (739)	29.56*	0.6
Misdemeanor	54.2 (690)	58.0 (3,899)	0.06	
Status/Unruly	37.7 (479)	30.5 (2,034)		
<i>Number of Offenses</i>				
1	82.3 (1,047)	79.2 (5,284)	9.41*	0.6
2	13.1 (166)	14.1 (939)	0.03	
3+	4.6 (59)	6.7 (449)		

* statistically significant at $p < 0.05$

Colerain Police Department. Colerain Police Department's files are stored electronically and maintained through a record management system (CrimeStar). Data requests were extracted based on the format in which they were stored in CrimeStar. The files included (1) police reports and youth arrests for 2010, and (2) police reports and youth arrests for 2011. After retrieval, UC researchers converted the files into a data management program (SPSS).

Basic characteristics of the individual and offense-related information were retrieved for all delinquency cases between 2010 and 2011. Listed below are the available measures:

- Age
- Sex
- Race
- Number of Offenses
- Offense Category
- Offense Level

Basic description of cases. In 2010-2011, there were 461 juvenile arrests in Colerain Township. Of those, a slight majority were of White youth (N=247; 53.7%) compared to African-American youth (N=210; 45.7%). The remaining 0.7 percent of arrests involved youth classified as “other” (N=3). Males accounted for the majority of juvenile arrests made by Colerain PD (N=292; 63.3%) compared to females (N=169; 36.7%). Lastly, the mean age of juveniles arrested was 15.9.

Report on RRI and odds ratios. Table 46 above presents the 2010-2011 RRI values associated with youth arrests in Colerain Township. According to the 2010 U.S. Census, there are a total of 7,042 youth between ages 10 and 17 in Colerain. The majority of these youth are White (N=5,011; 71.2%) compared to minority youth (N=2,031; 28.8%). African-American youth account for approximately 22 percent of the total population in Colerain (N=1,558). Based on a comparison between the arrest records and the U.S. Census data, approximately 5 percent of arrests involved a White youth. A greater percentage of arrests involve minority youth (10%) and to an even greater extent African-American youth (13%). These values translate to a Black/White RRI value of 2.73 and a Minority/White RRI value of 2.13. Both of these RRI values are statistically significant suggesting that there is a large difference between the relative risk of arrest for White youth compared to Non-White youth (in particular African-American youth). Furthermore, both the Black/White Odds Ratio (OR=3.00) and the Minority/White Odds Ratio (OR=2.26) are statistically significant indicating that there is a low likelihood that differences of this magnitude would appear if the relative risk of arrest were in fact the same.

Analysis of key case characteristics by race/ethnicity. Table 47b below contains the analysis of case characteristics by race/ethnicity for Colerain PD arrest data. The analysis revealed that the difference between race subgroups (i.e., White vs. Non-White) and most serious offense category is statistically significant ($\chi^2=23.30$; Cramer's $V=0.23$). A much greater percentage of arrests for property related offenses involved Non-White youth (44.1%) in comparison to White youth (25.5%). Conversely, a larger percentage of arrests for drug/alcohol offenses and status/disorderly conduct offenses involved White youth (17.0% and 15.8%, respectively) compared to Non-White youth (7.0% and 12.2% respectively). The relative prevalence of violent or sex offenses is roughly similar across the groups. The measure of association indicates that this relationship is somewhat weak suggesting that most serious offense does not fully capture differences in arrest between race subgroups. Although not statistically significant, there are subtle differences across offense level between White and Non-White youth. For example, a much higher percentage of arrests for misdemeanor offenses were of Non-White youth (69.0%) compared to White youth (55.3%); whereas a greater percentage of arrests for status/unruly offenses involved White youth (29.5%) compared to their Non-White counterparts (15.5%).

Table 47b. Arrest Characteristics by Race Subgroups – Colerain PD

	White % (N)	Non-White % (N)	χ^2 V	Percent Missing
<i>Most Serious Offense</i>				
Violent/Sex	16.6 (41)	16.9 (36)	23.30*	0.2
Property	25.5 (63)	44.1 (94)	0.23*	
Drug/Alcohol	17.0 (42)	7.0 (15)		
Other	25.1 (62)	19.7 (42)		
Status/DC	15.8 (39)	12.2 (26)		
<i>Most Serious Level</i>				
Felony	15.2 (20)	15.5 (13)	5.82	53.1
Misdemeanor	55.3 (73)	69.0 (58)	0.16	
Status/Unruly	29.5 (39)	15.5 (13)		
<i>Number of Offenses</i>				
1	78.1 (193)	81.2 (173)	0.81	0.2
2	16.2 (40)	14.6 (31)	0.04	
3+	5.7 (14)	4.2 (9)		

* statistically significant at $p < 0.05$

Forest Park Police Department. Forest Park Police Department's files are stored both physically and electronically (maintained through a statewide Record Management System); however data requests were compiled in PDF-format. The department provided a CD-ROM with four files (1) police reports and youth arrests for 2010, (2) police reports and youth arrests for 2011, and (3) supplementary forms including narratives and detailed information regarding the case. Once retrieved, research associates matched and printed all youth arrest records and supplemental forms (i.e. corresponding narratives) using the incident number. Data collection tools were then developed to guide research assistants in data collection. All hardcopy forms were then entered into an SPSS database.

Basic characteristics of the individual and offense-related information were retrieved for all delinquency cases. In addition to arrest records, other indicators were available:

- Weapon Use
- Presence of Co-offenders

- General Offense Location (e.g. school or park)
- Offense Address
- Offense City
- Offense Zip Code
- Number of Victims
- Victim Relationship to the Offender (general)
- Victim's Race/Ethnicity
- Victim's Age
- Victim's Sex

As mentioned above, report narratives were also available for review. In many cases, these provided information such as:

- Sources of the Complaint
- Offender Role
- Victim Involvement (e.g. contributing to the involvement, random)

Basic description of cases. In 2010-2011, the records indicate that Forest Park Police Department made 309 juvenile arrests (see Table 45 above). Of those, 87.7 percent were African American (N=264) and 12.3 percent were White (N=37). Males accounted for the majority of juvenile arrests (N=228; 73.8%) compared to females (N=81; 26.2%) in Forest Park. The average age of juvenile arrestees was 16.0 (SD=1.71). This indicates that the majority of arrested youth fell between 14 and 18 years old.

Report on RRI and odds ratios. Based on the 2010 U.S. Census, there are 2,291 youth ages 10 to 17 residing in Forest Park. Of those, White youth account for 12.1 percent of the total population. African-American youth make up approximately 74.5 percent of the total population. In Forest Park, there is little variation between the probabilities of arrest for minority and White juveniles. White youth have a 0.13 probability of arrest, while African-American youth have a 0.15 probability and all minority youth have a 0.13 probability. These values equate to a Black/White RRI of 1.16 and a Minority/White RRI of 0.98. Neither of these

values exceeds the 1.20 cutoff established by DYS and OJJDP. The odds ratio values were not statistically significant either. These findings suggest that there is no significant racial disproportionality in arrests in Forest Park (see Table 46 for further detail).

Analysis of key case characteristics by race/ethnicity. Although this agency does not show signs of disproportionality in the overall analysis of juvenile arrests, as in the other agencies, we did examine the nature of the arrests by race to explore any possible differences (see Table 47c below). The results indicate three statistically significant differences between race subgroups.⁴¹ First, place that the offense occurred differed significantly between race subgroups ($\chi^2=16.4$; Cramer's $V=0.24$). Most notably, a much greater percentage of arrests for offenses occurring on school grounds were of Non-White youth (30.3%) compared to White youth (5.6%). Conversely, offenses occurring at a field, park, or street were more likely to involve White youth (36.1%) in comparison to African-American youth (14.2%). The related measure of association suggests that the strength of this relationship is weak to moderate. Lastly, drug use/possession offenses also differed between race subgroups ($\chi^2=5.7$; $\Phi=-0.14$). Arrests for drug use/possession were more likely to involve White youth (25.0%) compared to Non-White youth (10.5%).

Although not statistically significant, several additional findings are worth mentioning in more detail. First, arrests for violent/sex offenses and status offenses were more likely to involve Non-White youth (19.3% and 23.1%, respectively) than White youth (10.8% and 10.8%, respectively). Arrests for property and drug/alcohol offenses, however, were more likely to involve White youth (51.4% and 18.9%, respectively) compared to Non-White youth (36.4% and

⁴¹ Note that there were relatively few arrests of White youth in Forest Park. This has the potential to bias the estimates.

9.8%, respectively). Additionally, there were some notable differences between race subgroups and the offender's role. Arrests for an offense where the offender's role stemmed from engaging in an argument were more likely to involve Non-White youth (46.7%) compared to White youth (22.9%). A greater percentage of arrests for offenses that were drug-related or opportunistic involved White youth (20.0% and 48.6%, respectively) compared to Non-White youth (11.4% and 35.8%, respectively).

Table 47c. Arrest Characteristics by Race Subgroups – Forest Park

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Number of Offenses</i>				
1	89.2 (33)	92.8 (245)	0.60	2.6
2	10.8 (4)	7.2 (19)	-0.05	
<i>Most Serious Charge</i>				
Violent/Sex	10.8 (4)	19.3 (51)	8.21	2.6
Property	51.4 (19)	36.4 (96)	0.17	
Drug/Alcohol	18.9 (7)	9.8 (26)		
Other	8.1 (3)	11.4 (30)		
Status/DC	10.8 (4)	23.1 (61)		
<i>Most Serious Level</i>				
Felony	11.1 (2)	15.7 (22)	0.41	48.9
Misdemeanor	88.9 (16)	83.6 (117)	0.05	
Status	0.0 (0)	0.7 (1)		
<i>Offense Location</i>				
Residence	33.3 (12)	28.7 (75)	16.39*	3.9
School	5.6 (2)	30.3 (79)	0.24	
Field/Park/Street	36.1 (12)	14.2 (37)		
Other Public Place	25.0 (9)	26.8 (70)		
<i>Offender's Role</i>				
Argument	22.9 (8)	46.7 (115)	7.97	9.1
Drug-Related	20.0 (7)	11.4 (28)	0.17	
Planned/Organized	5.7 (2)	2.8 (7)		
Opportunistic	48.6 (17)	35.8 (88)		
Other	2.9 (1)	3.3 (8)		
<i>Number of Co-Offenders</i>				
0	56.8 (21)	56.8 (150)	14.74*	2.6
1	13.5 (5)	31.4 (83)	0.22	
2	10.8 (4)	7.2 (19)		
3+	18.9 (7)	4.5 (12)		

<i>Weapon Use</i>				
No	96.9 (31)	93.5 (243)	0.57	5.5
Yes	3.1 (1)	6.5 (17)	0.04	
<i>Drug Use/Possession</i>				
No	75.0 (24)	89.5 (231)	5.67*	6.1
Yes	25.0 (8)	10.5 (27)	-0.14	

* statistically significant at $p < 0.05$

Summary of police agency records analysis. African-American youth account for the majority of juvenile arrests in two of the three agencies in Hamilton County (83.8% in Cincinnati and 87.7% in Forest Park). In Colerain, however, 53.7% of youth arrested are White. We were able to examine the Relative Risk Index (RRI) and the Odds Ratios (OR) for Cincinnati, Colerain, and Forest Park. The findings from this analysis suggest that the disproportionality of minority arrests may be an issue in both Cincinnati and Colerain. The RRI and OR values show that minority youth are relatively more likely to be arrested than White youth. Both of these values represent moderate to large raw differences. Those arrests are likely to come for more serious crimes (both offense type and offense level in Cincinnati; offense type in Colerain) relative to White youth. Minority youth arrestees also tend to more often have multiple charges within the same arrest incident and have had some prior arrests in Cincinnati. Several other findings emerged when examining explanatory variables by race. Across all three agencies, minority youth were more likely to be arrested for violent and sex offenses compared to White youth. In addition, the data reveal that White youth were more likely to be arrested for drug and alcohol related offenses compared to their minority counterparts in all three locales. In Forest Park, White youth are likely to be arrested at their residence or at a field, park, or street than minority youth. There was a bit more information in the record data obtained from Forest Park

PD that allowed for further analysis of the characteristics of arrests. For example, the only offense location where minority youth were disproportionately represented—relative to Whites—was school. Finally, minority youth account for a lower percentage of arrests for drug use or possession than White youth. They were, however, more likely than Whites to be arrested for a role in an argument.

Hamilton County Police Focus Group Analysis

Overview. Between the months of September 2012 and May 2013, four focus group sessions were conducted across three sites in Hamilton County. These groups consisted of a total of 29 law enforcement personnel holding positions within several different units (e.g., administrative, investigative, school resource officer, patrol). Each session lasted approximately two hours.

Findings. Officers involved in the focus groups identified several potential causes of disproportionate minority contact (DMC) within Hamilton County. These causes were largely identified as explanations involving differential offending among minority youth. However, few participating officers did note the possibility of differential treatment of minority youth by law enforcement.

Differential offending. Officers consistently identified differential offending among minority juveniles as the primary explanation for disproportionate minority contact with police. These types of explanations largely emerged in response to the presentation of arrest statistics showing the overrepresentation of minority youth within the officers' respective jurisdictions. However, officer observations concerning differential offending were further introduced in the discussion of juvenile crime trends and conversations concerning factors contributing to

juvenile crime. Many officers argued that they are more likely to come into contact with minority youth because those are the youth committing much of the crime within the areas they police. Additionally, several officers observed that DMC may be due to the prevalence of repeat offenders among minority youth, commenting that there is a small subset of problem youth that commit the majority of the crime within their jurisdictions. These differential offending patterns among minority youth are believed to be associated with factors such as the geographic location, socioeconomic status (SES), and family. In turn, each of these factors is observed to contribute to DMC.

Geographic location. Officers argued that the disproportionate contact of minority youth is a product of policing neighborhoods that have higher minority populations. The concentration of enforcement and patrol in minority neighborhoods is observed to be a function of the high calls for service and the presence of crime hotspots within minority communities as well as other locations with high minority presence.

Calls for service. Describing their primary strategy for the policing of juveniles as reactive in nature, officers reported that DMC is a product of high levels of calls for service coming from residents within minority neighborhoods and from areas characterized by a high concentration of minority juveniles typically found within the inner-city. Patrol officers consistently observed that they receive more calls for service from areas in their jurisdiction that are home to larger populations of minority juveniles. Commenting on how responding to calls for service might increase DMC, one officer explained, “The squeaky wheel gets the oil...we are going where the calls are at. It’s that simple.” When responding to these calls police officers are much more likely to encounter minority

juveniles. SROs within the focus groups supported this observation, explaining that they most often receive calls for service from inner-city schools attended primarily by minority youth, resulting in increased contact with these youth.

Hotspot policing. Additionally, officers identified proactive policing methods such as hotspot policing as contributing to DMC. Officers explained that when not on a “radio run” they are typically directed by their superiors to patrol crime hotspots and that often these hotspots are located within minority neighborhoods as well as other minority dominated locations (e.g. shopping centers, city events) that have established crime problems. Similarly, SROs commented that they are instructed to focus on their “problem schools” when not responding to calls for service. SROs within these focus groups observed that these institutions are typically inner-city schools with a greater population of minority youths in attendance, increasing officer interaction with this demographic group.

Socioeconomic status. Officers observed that they receive more calls for service from lower income neighborhoods. This was argued to be true regardless of the predominate race within the low SES community. However, officers also commented that within their jurisdictions these lower income neighborhoods typically have a higher proportion of minority youth, increasing their likelihood of coming into contact with this population. Socioeconomic status was identified to impact DMC by influencing the financial resources available to both parents and youth. Specifically, officers argued that in affluent, White neighborhoods, crimes committed by juveniles may go unreported, or never make it to prosecution, because the parents have the financial resources and connections to prevent such action and instead handle

problems within the home. Additionally, within these same communities, officers observed that problem youth are often handled through medication and therapy that their parents are able to pay for, rather than by invoking the justice system. One officer stated that, “unfortunately, in the neighborhoods we police, our children don’t have the ability or their parents don’t have the ability or the resources.” Respondents clarified that by ‘ability’ they were referring to the parents’ capacity to avoid formal contact with the system through the use of financial resources to address their child’s risks/needs in more informal ways. Overall, this was viewed as part of what increases minority juveniles’ likelihood of coming into formal contact with law enforcement.

Family factors. In explaining disproportionate contact with minority youth, officers pointed to several family factors that they believe characterize the home environment in minority neighborhoods. Generally, the lack of parental supervision, the lack of discipline in the home, and the lack of prosocial role models were identified as adding to minority youth’s likelihood of coming into formal contact with law enforcement. In contrast, it was mentioned that crimes committed by juveniles in affluent, white neighborhoods often are not officially handled by police because parents are more involved in children’s lives, available to their children, and more willing and able to hold their children accountable for their actions by providing punishment for their wrongdoing.

Lack of supervision. Officers noted that they come into contact with many more minority youth because these youth lack supervision in their home environment. Several officers identified that many minority youth have parents that are not involved in their lives. Particularly in lower income neighborhoods, minority youth were

observed to come from homes with absentee parents, or households where parents do not watch over or take responsibility for their children's actions.

Additionally, the prevalence of absentee parents in minority homes was viewed to increase contact with minority youth by influencing police discretion. Officers commented that their discretion is constrained when parents are unavailable to informally handle incidents with youth. If unable to get into contact with parents, officers are often forced to take more official measures – something that they would otherwise choose to avoid, either due to the less serious nature of the juvenile's offense or due to the time consuming nature of juvenile processing.

Lack of discipline in home. Disproportionate minority contact with police was also argued to be a product of a lack of discipline within the minority home environment. It was observed that parents are not disciplining their children in the home. Either from fear of repercussions (calls to law enforcement) or general disinterest in what they perceive as positive child-rearing, parents are not providing punishments for children's misbehavior, instead relying on police to handle problems, both minor and serious, with their children and thus, increasing minority youth's contact with police. As one officer argued, "...We are selling that [the police] are responsible but we are not...And the parents are buying into it...we are actually, I think, aiding and abetting that."

Lack of prosocial role models. Furthermore, officers explained disproportionate contact with minority youth as a result of parents within minority homes failing to set a positive model of behavior and consequently depriving their children guidance in their formative years. This lack of prosocial models was suggested to come in two main forms. First,

officers observed that minority youth often learn their criminal behaviors from their parents. One officer noted that “the apple doesn’t fall far from the tree” due to observations of intergenerational antisocial behavior and delinquency. Officers reported that, when they meet the parents of problem youth, they are often better able to understand the cause of the youth’s delinquency. It was also argued that parents within minority homes fail as prosocial models for their children because they are generally absent from their children’s lives. Officers observed that many minority youth come from single parent homes or home environments where they are raised by grandparents and, in some cases, great grandparents that are unable to manage the youth’s behaviors. One officer summarized this explanation, saying that, generally within the homes of the minority youth s/he encounters, juveniles “are not taught accountability.”

Differential treatment by justice system. Few officers within Hamilton County observed that differential treatment of the minority juvenile population by law enforcement contributes to disproportionate minority contact with police. These officers suggested that law enforcement agencies tend to increase patrol and enforce more laws in communities with larger minority populations, though some observed that these higher levels of enforcement are a product of the expectations of police in their community.

Regarding police discretion, officers mentioned that it is not uncommon for them to limit their use of discretion in situations involving minority juveniles. One officer pointed out that, historically, minorities have been less likely to get the benefit of the doubt, commenting that where discretion might be used, minority youth may not receive it, “even when you get the good kid caught up in the foolishness.” Though this officer observed that DMC is mostly

connected to other factors of differential offending, s/he suggested that a tendency to treat minority juveniles differently is probably still somewhat present today.

It was also suggested by one officer that the inclusion of race as a factor in police decision-making may vary depending on the number of years an officer has served on the force. This officer commented that in present-day law enforcement agencies, there is a new generation of police officers that do not see race as relevant in their decision-making. However, older officers that have remained in police agencies over time, and worked when race issues were more front line, may continue to consider race as a factor in their decision to arrest. This officer observed that as civil and human rights have progressed and the generation of police officers has changed, so too have the priorities of police and the factors that influence police decision-making. Furthermore, while older officers will remember when race had greater influence in decision-making, newer officers do not have as much exposure to this history. Therefore, this officer argued that it is less likely for younger officers to use race as a factor in their decision-making, while older officers may subconsciously consider race in the back of their minds (The older officers within the specific focus group did not fully agree with this assessment, however).

Officer suggestions for reducing DMC. Within the police focus groups, officers overwhelmingly expressed their belief that reducing DMC with the juvenile justice system was not their responsibility. However, they also provided several suggestions to reduce juvenile crime overall (which would potentially reduce DMC in their view), highlighting ways to create more positive interactions between police officers and youth within the communities that they patrol. Specifically, officers mentioned the utility of police departments participating in

programs such as Boy/Girl Scouts or Boys & Girls Clubs. They argued that department involvement in these types of programs would expose officers to youth within their community in a positive, less formal light. As one officer mentioned, “when they see us in that light, it’s totally different than the light of arresting their brother, their uncle, their dad, [or] their mom.”

Overall, the focus group participants within Hamilton County recognized that no single program is going to have 100 percent success rate. Therefore, they argued that it is necessary to create multiple ways in which law enforcement can have positive contact with youth. Officers suggested focusing on the prevention and proactive programs (such as those placing officers in schools with youth) which can bolster rapport between officers and youth within the community, expose youth to positive role models at a young age, and work to provide youth with skills and tools to make prosocial decisions. Officers argued that these type of programs, in collaboration with community initiatives that invest in the creation of juvenile activities, can provide prosocial alternatives to crime that work to keep youth busy, supervised, and out of trouble.

Outside of law enforcement response, officers identified the need to expand sentencing options for juvenile cases, greatly advocating the use of referrals to provide individual and family counseling and classes to improve the home environment of youth within their community. Officers specifically mentioned the utility of programs such as “Families Forward” that assist families in gaining skills and tools to establish and maintain self-sufficiency so as to provide a more stable environment for their children. This type of program was viewed to address the root of many juvenile problems and overall have a very positive effect on the home life of youth and subsequently their behavior outside of the home.

It should be noted that while officers outlined the potential benefits of programming and counseling in reducing juvenile offending, they consistently argued for the need for more space within juvenile detention facilities. Officers commented that the inability to provide immediate punishment (in the form of juvenile detention) for more serious crimes causes many juveniles to fail to see the repercussions of their actions and to not take the justice system seriously. Overall the lack of a prompt response to juvenile offending was viewed to contribute to the overall juvenile crime rate as well as the escalation of minor to more serious offending among individual juveniles.

Summary of focus group analysis results. Officers in these agencies within Hamilton County largely identified disproportionate minority contact as a product of the differential offending patterns of minority youth within their jurisdictions. The substantial degree to which minority youth were observed to offend was believed to be greatly influenced by neighborhood context, particularly the socioeconomic environment in which they live. These disadvantaged neighborhoods were viewed to be characterized by the limited availability of resources to reduce involvement in delinquency and overall exposure to the system, as well as by the breakdown of the traditional family structure. The absence of parents as positive role models, providers of structure, and distributors of discipline within the home did leave at least some officers feeling as though they are surrogate parents to the youth in the communities that they police. Officers referring to these youth as “our children” emphasized this feeling of responsibility that may result in greater contact with youth, both formal and informal.

Collectively the factors characterizing disadvantaged, minority neighborhoods (low SES and the breakdown of the family structure) were viewed to increase offending among juveniles

and raise the prevalence of repeat offenders within this population, resulting in higher calls for service and the labeling of minority communities as hotspots for crime. For this reason, many officers expressed their reluctance to assume the responsibility of reducing DMC with their agency, commenting that to do so would require them to actively ignore the criminal activity committed by youth in these areas. Overall, officer emphasis on the influence of neighborhood context, particularly persistent social disadvantage, suggests that attempts to reduce DMC must move beyond the police and incorporate community initiatives and family programs for it to fully resonate with officers.

Though comparatively fewer officers were willing to discuss differential treatment explanations for DMC in Hamilton County, those that were forthcoming provided valuable insight on how variation in the policing of minority juveniles may result in more contact with the juvenile justice system. Officers clearly identified that the differential use of discretion and the inclusion of race as a factor in decision-making may still be present in current police practices as a continuation of the historically poor relations between minority populations and law enforcement. One officer, however, did highlight the potential to reduce the differential treatment of minority youth by law enforcement as a new generation of officers enter the force and the priorities of police organizations continue to change. This stresses the importance of the proper training in matters such as juvenile crime, juvenile processing, and juvenile interrogation for new officers entering the field and leveraging this to consider alternative approaches. With a thorough education of the history of policing, proper policing strategies, and greater connection to the communities they serve, law enforcement agencies may continue to move forward and significantly reduce differential treatment practices.

Hamilton County Juvenile Court Data

Data collection. The research team provided the Hamilton County Juvenile Court with a list of fields that we requested for the study (see Appendix for a list of the measures requested from the juvenile courts). Members of the research team then met with representatives of the court to discuss the data collection process and extraction of key measures. Subsequently, the court provided us with a Microsoft Access database containing case-level information on all youth, age 10-17, petitioned to the court between January 1, 2010 and December 31, 2011.

Measures included in the analysis. The primary variable of interest was race, but we also included indicators for age, sex, number of prior charges, most serious offense category, most serious offense level, and OYAS risk level. *Race* was recorded as White, African American, and Other, and was recoded as a set of three dummy variables capturing membership each of these categories. *Age* is a continuous measure that indicates the youth's age at case initiation. *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Number of prior charges* is a continuous measure that indicates the total number of charges filed against the youth prior to the current case. If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex, property, drug/alcohol, status offense, Probation Violation/Violation of Court Order, and other. Similarly, *most serious offense level* captures whether the case involved a felony, misdemeanor, status offense, or PV/FTA. . Finally, *OYAS risk level* indicates a youth's risk level (low, moderate, and high) based on an OYAS risk assessment instrument. *Weapons-related offenses* were considered in a supplementary

analysis and are discussed where applicable. This analysis is considered to be tentative as there was no clear designation of whether the weapon was a firearm, knife, or something else in the records.

The primary outcome variables included dichotomous measures of whether youth experienced particular outcomes at five decision points: detention, dismissal, adjudication, secure confinement, and bindover. Each of these variables was coded as yes/no. *Dismissed* indicates whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent). This could connote that a case was informally or formally diverted as well. *Detention* indicates whether a youth was placed in secure detention while awaiting further proceedings. *Adjudicated* indicates whether a youth was formally found delinquent for the current case (e.g., found guilty on the current charges). *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility. Finally, *bindover* indicates whether a youth's case was waived to criminal (adult) court.

Data coverage and preparation. Overall, there were 16,108 cases referred to Hamilton County Juvenile Court between January 1, 2010 and December 31, 2011. Among the variables used in the analyses, there was relatively little missing data regarding the case or youth. For each of the five court outcome variables (detention, dismissal, adjudication, secure confinement, and bindover), there was complete coverage (i.e., no missing data). Similarly, there was complete coverage for youth's age, number of prior charges, and the most serious offense category and most serious offense level variables. Ninety-four cases (0.58% of all cases) did not indicate the youth's race and one case had a missing value for sex. The only variable with a relatively large amount of missing data was OYAS risk level; 21.6 percent of cases had

missing values on this measure. To retain all cases for analysis, we used multiple imputation (MI) to impute the missing values for OYAS risk level. MI replaces missing observations with predicted values based on other variables included in the analysis—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, age, number of prior charges, most serious offense category, and most serious offense level. MI first generates a specified number of datasets—in this case, 10—in which missing values for risk level are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from those ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Descriptive statistics. In 2010 to 2011, African-American youth comprised 66 percent of the referrals to Hamilton County Juvenile Court, while White youth accounted for 30 percent and Other youth, 4 percent. According to the 2010 Census for Hamilton County, these groups accounted for 31.3 percent, 61.8 percent, and 6.9 percent of the juvenile population ages 10-17, respectively. These figures indicate a degree of disproportionality in terms of the profile of cases coming into the juvenile justice system. Males accounted for 66 percent of the petitions filed. The mean age at referral was 15.8 (SD=1.56) and the average number of prior charges was 4.37 (SD=6.10). The most common offense types included in the referrals were probation/parole violations (27.2%), status offenses/disorderly conduct (23.8%), and property offenses (20.5%). Regarding offense seriousness, 48.9 percent of the petitions were for misdemeanors, 12.8 percent for status offenses, and 10.7 percent for felonies. The remaining 28 percent was comprised of probation/parole violations and failure to appear. The overall

prevalence of weapons-related offenses in these cases was relatively low for the sample of records analyzed here (1.7%). Those charges were significantly more prevalent among Non-White (2.1%) as opposed to White youth (0.8%), however.

Court outcomes. We estimated three statistical models for each of the five decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for African American and Other youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and other legally relevant factors (number of priors, most serious offense category, most serious offense level, and OYAS risk level). The final model (see Table 48) included the above variables, as well as the extralegal factors sex and age at filing. Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Case dismissal. In the race-only model, African-American youth were significantly *more* likely to have their case dismissed (OR=1.21) compared to White youth, indicating that while there was a race effect on the decision to dismiss, it actually favored African-American youth in the sense that they were moved out of the system at that point. Conversely, the effect for Other youth was not significant. After adding legal factors in the second model, the odds ratio for African-American youth increased slightly to 1.29, indicating African-American youth were 29 percent more likely to have their case dismissed relative to White youth. The odds ratio for Other youth was not statistically significant. A one unit increase in the number of prior charges significantly decreased the odds of dismissal by 4 percent (OR=0.96). Surprisingly, compared to

youth charged with a violent or sex offense, those charged with a property offense (OR=0.49), drug or alcohol offense (OR=0.44), other offense (OR=0.43), or a status offense (OR=0.46) were significantly less likely to have their case dismissed. The final factor included in the full model, OYAS risk level, had no significant effect on the odds of case dismissal.

In the final model that included sex and age, the effect of race remained consistent with the previous models. African-American youth were 1.30 times more likely to have their case dismissed. The effect for Other youth remained nonsignificant. The odds ratios for number of prior charges (OR=0.96), property offense (OR=0.50), drug/alcohol offense (OR=0.45), other offense category (OR=0.43), and status offense (OR=0.45) were significant and almost identical to those from the second model. Similarly, OYAS risk level remained nonsignificant. Finally, females were 33 percent more likely to have their case dismissed compared to males (OR=1.33), and the effect of age was significant in that a one-year increase in age predicted a 4 percent increase in the odds of case dismissal (OR=1.04). Not surprisingly, those cases that involved weapons-related offenses were less likely to be dismissed, but the race effect on case dismissal did remain statistically significant. Overall, results indicated that race had varying effects on the decision to dismiss a case. In all three models, African-American youth were more likely to have their case dismissed relative to their White counterparts. It is important to note that this result differs from some research (Rodriguez, 2010), but it is not unprecedented (Kutateladze et al., 2014).

Detention. In the race-only model, the odds of being detained prior to adjudication were significantly higher for both African-American youth (a 101% increase) and Other youth (71%) compared to their White counterparts. After adding legally-relevant factors in the second

model, race remained a significant predictor of detention, although the effect did diminish slightly. African-American youth were 39 percent more likely to be detained than White youth (OR=1.39; a -31% change in the effect size), while Other youth were 52 percent more likely to be detained (OR=1.52; an 11% decrease in the effect size). Looking at the legally-relevant variables, a one unit increase in the number of prior charges significantly increased the odds of detention by 9 percent (OR=1.09). Youth charged with property offenses (OR=0.68), drug/alcohol offenses (OR=0.52), and status offenses (OR=0.45) were significantly less likely to be detained than youth charged with a violent or sex offense. Similarly, the results regarding offense seriousness indicated that youth charged with misdemeanors (OR=0.12), status offenses (OR=0.06), or probation/parole violations (OR=0.15) had significantly lower odds of being detained relative to youth charged with a felony offense. Finally, compared to youth who were considered low risk according to the OYAS, moderate risk youth were 41 percent more likely to be detained, while high risk youth were 136 percent more likely to be detained.

In the final model that included extralegal variables, race remained a significant predictor of detention, and the odds ratios were almost identical to those in the second model (African American OR=1.38; Other OR=1.55). Each of the significant predictors from the second model (number of priors, offense type, offense seriousness, and risk level) remained significant in the same direction. In addition, offenders' sex had a significant effect on the odds of being detained in that females were 25 percent less likely to be detained than males (OR=0.75). Finally, a one-year increase in age significantly decreased the odds of detention by 7 percent (OR=0.93). Those cases involving weapons-related offenses were more likely to lead to detention, increasing the odds of that outcome significantly. Still, the race effect was

diminished only slightly (-5%) when that variable was accounted for in the analysis. Overall, race had a significant effect on the odds of being detained, although said effect did decrease when other legally-relevant and extralegal factors were included in the model.

Adjudication. In the initial model, African-American youth were 14 percent less likely to be adjudicated delinquent (OR=0.86) compared to White youth, while Other youth were 19 percent less likely to be adjudicated (OR=0.81). After adding the legally relevant variables in the second model, African-American youth continued to be significantly less likely to be adjudicated delinquent; the magnitude of the odds ratio actually increases slightly to 0.84. The effect for Other youth was no longer statistically significant. Youth charged with a property offense (OR=1.99), drug/alcohol offense (OR=2.21), status offense/disorderly conduct (OR=2.19), or other offense (OR=2.08) were all significantly more likely to be adjudicated relative to those charged with a violent or sex offense. The results for offense seriousness were significant yet mixed: youth charged with a misdemeanor were 38 percent more likely to be adjudicated delinquent (OR=1.38) than youth charged with a felony, while those charged with a status offense were 60 percent less likely to be adjudicated (OR=0.40). In addition, a one-unit increase in number of prior charges significantly increased the odds of adjudication by 3 percent (OR=1.03). OYAS risk level was not a significant predictor of adjudication in this model.

After adding the extralegal variables in the final model, the effect of race diminished slightly—yet remained significant—in that African-American youth were only 7 percent less likely to be adjudicated than White youth (OR=0.93). The effect for Other youth remained nonsignificant. Each of the significant legally-relevant variables from the second model maintained its significance in the final model with negligible differences in the odds ratios. The

only difference was that OYAS risk level had a significant effect on the odds of adjudication. Similarly, offenders' sex and age were significantly associated with the odds of adjudication: females (OR=0.74) were 16 percent less likely to be adjudicated compared to males, while a one-year increase in age predicted a 7 percent decrease in the odds of adjudication (OR=0.93). Overall, the effect of race on the decision to adjudicate was mixed. African-American youth were significantly less likely to be adjudicated delinquent relative to their White counterparts, although the effect did diminish somewhat when legal and extralegal factors were included in the model. The effect for Other youth was significant only in the initial model.

Secure confinement. The next decision point examined was the decision to place an adjudicated youth in secure confinement. In the race-only model, African-American youth (OR=5.59) and Other youth (OR=6.09) were both over five times more likely to be placed in secure confinement compared to adjudicated White youth. In the second model that included legally-relevant factors, African-American youth were over four times more likely to be placed in secure confinement than White youth (OR=4.09), while Other youth were 4.61 times more likely to be placed in secure confinement.⁴² A one-unit increase in the number of prior charges produced a significant increase in the odds of secure confinement of 9 percent (OR=1.09). When compared to youth charged with a violent or sex offense, only those charged with a probation or parole violation had significantly different odds of being placed in secure confinement; specifically, youth charged with a probation or parole violation were 91 percent less likely to be placed in a secure facility (OR=0.09). Regarding offense seriousness, those charged with a misdemeanor were 96 percent less likely to be placed in secure confinement

⁴² Status offenses were removed from this model due to the fact that no youth charged with status offenses were placed in secure confinement.

relative to youth charged with a felony offense (OR=0.04), while the effect of being charged with a probation or parole violation was not significant. In addition, OYAS risk level was also a significant predictor of secure confinement. Compared to low risk youth, moderate risk youth were 2.34 times more likely to be placed in secure confinement and high risk youth were 3.71 times more likely to be securely confined.

The effect of race on secure confinement remained significant in the final model. The odds ratio for African-American youth (OR=4.01) diminished slightly from the previous two models; however, the odds ratio for Other youth increased to 5.46. A one-unit increase in the number of prior charges increased the odds of secure confinement by 8 percent (OR=1.08). Youth charged with a probation/parole violation were 91 percent less likely to be placed in secure confinement relative to those charged with a felony (OR=0.09), while those charged with a misdemeanor were 96 percent less likely to be confined (OR=0.04). The two extralegal variables—sex and age—were both significantly associated with the odds of secure confinement. Females were 65 percent less likely to be placed in secure confinement compared to males (OR=0.35). In addition, a one-year increase in age produced a 35 percent increase in the odds being confined (OR=1.35). Overall, the effect of race on secure confinement was quite strong in all three models, although its effects did diminish slightly when the legal and extralegal factors were incorporated into the models.

The effect of a weapons-related offense may be particularly salient at this point in the process due to the fact that juveniles convicted of brandishing, displaying, possessing, or using a firearm to facilitate an offense (i.e., Ohio Rev. Code § 2941.145) are required to be committed to Ohio Department of Youth Services for a definite period of not less than one and not more

than three years (see, Ohio Rev. Code § 2152.17). This is important as it removes discretion from decision-making at this stage. The analysis suggests that—after controlling for the various factors described above—cases involving a weapons offense are 3.5 times more likely to be committed to a state facility than those where a weapon was not involved.⁴³ As was the case in other analyses, the effect of race remained statistically significant after accounting for all of these additional factors.

Bindover. The final decision point examined was waiver to criminal (adult) court, or bindover. There was a very small base rate of youth who were bound over in this county, which means that relatively small numerical difference in its prevalence in each group could affect the estimates and odds ratios (only 93 youth, or 0.6% of all cases, were waived). Of the five decision points, the effect of race was most pronounced in bindover. In the race-only model, African-American youth were over 13 times more likely to be waived to criminal court than their White counterparts (OR=13.36). Similarly, Other youth were over nine times more likely to be bound over than White youth (OR=9.12). When the legally-relevant variables were added in the second model, the effect of race on waiver decreased slightly but remained significant.⁴⁴ In this model, the odds ratio for African-American youth was 8.75, while the odds ratio for Other youth decreased to 7.65. Among the legal variables included in this model, only number of priors, misdemeanor charge, and OYAS risk level were significant predictors. A one-unit increase in the number of prior charges increased the odds of bindover by 6 percent (OR=1.06). In addition, youth charged with a misdemeanor were 99 percent less likely to be bound over

⁴³ Again, the weapons offense designation in this analysis may include weapons other than firearms.

⁴⁴ Status offenses and probation violations were removed from this model because no youth charged with these two offenses was waived to criminal court.

than those charged with a felony offense (OR=0.01). Finally, compared to low risk youth, moderate risk youth were over eight times more likely to be waived (OR=8.31) and high risk youth were 31 times more likely to be waived to criminal court (OR=31.79).

In the final model that included both legal and extralegal variables, race remained significant. African-American youth were 8.94 times more likely to be waived than their White counterparts, and Other youth were 10.08 times more likely, a slight increase from the second model. The effect of number of priors remained significant, although the odds ratio decreased slightly to 1.03, indicating a 3 percent increase in the odds of waiver per one-unit increase in number of prior charges. Similarly, the significant effects of OYAS risk level remained present in this model, although the odds ratios for both moderate risk offenders (OR=6.99) and high risk offenders (OR=25.33) decreased slightly, as did the odds ratio for youth charged with a misdemeanor offense relative to those charged with a felony (OR=0.02). The only substantial difference between the second and third models was that in the final model being charged with a property offense significantly reduced the odds of being waived compared to youth charged with a violent or sex offense (OR=0.44). The pattern of findings concerning weapons-related offenses was quite similar to those for secure confinement. Cases involving weapons had a significantly greater likelihood of being bound over to adult court—even after accounting for other legally-relevant indicators like offense seriousness and offense type. Again, race did maintain a statistically significant and sizeable effect on youth transfer to adult court (OR=7.9). Overall, race had a significant and substantively strong effect on the odds of being waived to criminal court.

Initial and conditional probability of case outcomes. Figures 15a and 15b display the initial and conditional probabilities for each of the five outcomes by youth's race (White/African American). The initial probabilities reflect the likelihood that White and African-American youth will experience the case outcome without consideration of any of the other factors discussed above. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and African-American youth will experience a particular case outcome—given fixed, average values on the set of measures included in each statistical model. This allows us to examine the likelihood of an outcome for a “typical” case. This also allows us to consider whether any differences between White and African-American youth observed for the base analysis shift when accounting for other relevant influences attached to the case. For the conditional probabilities for the first three court outcomes (detention, dismissal, and adjudication), age and number of priors were set to their means (15.8 years old and 4.37 priors, respectively). The remaining variables were set to their modes: sex – male; most serious offense category – property; most serious offense level – misdemeanor; and OYAS risk level – moderate (see Figure 15a). The conditional probabilities for secure confinement and bindover are based on only felony cases (N = 1727) since less than 1 percent of the cases involving these outcomes included non-felony cases. As such, the mean age (15.96) and mean number of priors (5.74) are slightly different for the conditional probabilities of these two outcomes, while the values for the remaining variables remain the same (see Figure 15b).

Overall, the results followed those discussed above as those cases involving African-American youth had higher probabilities of detention, secure confinement, and bindover. Generally speaking, these gaps tended to be considerably larger in the unconditional cases and narrow some once legally-relevant and other sociodemographic factors were considered in the conditional probabilities. They do, however, remain. As noted above, African-American youth do have slightly higher probabilities of having their cases dismissed and slightly lower probabilities of being adjudicated delinquent than cases involving White youth.

Table 48. Binary Logistic Regression – Outcomes for Hamilton County Juvenile Court (Full Models)

	Detention			Dismissed			Adjudicated			Secure Confinement			Bindover		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Black/AA	0.32	1.38	0.06	0.26	1.30	0.04	-0.19	0.83	0.04	1.39	4.01	0.43	2.19	8.94	0.59
Other Race	0.44	1.55	0.14	0.12	1.13	0.11	-0.13	0.88	0.10	1.70	5.46	0.67	2.31	10.08	0.84
Num. of Priors	0.09	1.10	0.01	-0.04	0.96	0.01	0.04	1.04	0.01	0.08	1.08	0.01	0.03	1.03	0.01
<i>Offense Type¹</i>															
Property	-0.38	0.68	0.07	-0.70	0.50	0.06	0.69	1.99	0.06	-0.10	0.91	0.29	-0.81	0.44	0.41
Drug/Alcohol	-0.62	0.54	0.12	-0.81	0.45	0.10	0.80	2.23	0.09	-0.35	0.71	0.55	-0.17	0.85	0.55
Status	-0.78	0.46	0.12	-0.80	0.45	0.08	0.81	2.25	0.08	---	---	---	---	---	---
PV / VCO	-0.36	0.70	0.30	-0.01	0.99	0.42	-0.16	0.85	0.42	-2.38	0.09	0.83	---	---	---
Other	0.16	1.17	0.11	-0.84	0.43	0.11	0.76	2.14	0.10	-0.26	0.77	0.55	0.14	1.15	0.40
<i>Offense Level²</i>															
Misdemeanor	-2.09	0.12	0.07	-0.01	0.99	0.07	0.35	1.42	0.06	-3.22	0.04	0.47	-4.12	0.02	1.01
Status	-2.84	0.06	0.20	1.29	3.65	0.11	-0.88	0.41	0.10	---	---	---	---	---	---
PV / FTA	-1.93	0.14	0.30	0.01	1.01	0.42	0.68	1.98	0.42	-0.11	0.90	0.76	---	---	---
<i>Risk Level³</i>															
Moderate	0.27	1.30	0.06	0.03	1.03	0.05	-0.04	0.96	0.05	0.69	1.99	0.36	1.94	6.99	0.59
High	0.76	2.13	0.08	0.11	1.11	0.08	-0.16	0.86	0.07	1.11	3.02	0.40	3.23	25.33	0.59
Age	-0.08	0.93	0.06	0.04	1.04	0.01	-0.07	0.93	0.01	0.30	1.35	0.10	1.02	2.78	0.15
Sex	-0.29	0.75	0.06	0.28	1.33	0.04	-0.30	0.74	0.04	-1.06	0.35	0.42	-2.98	0.05	1.01

Note: Bolded entries represent statistically significant estimates at p<0.05; B = logit coefficient; OR = odds ratio; SE = standard error
¹ Violent/sex offense is the reference category, ² Felony is the reference category, ³ Low risk is the reference category.

Figure 15a. Summary of Initial Probabilities and Conditional Probabilities for Detention, Dismissed, and Adjudicated

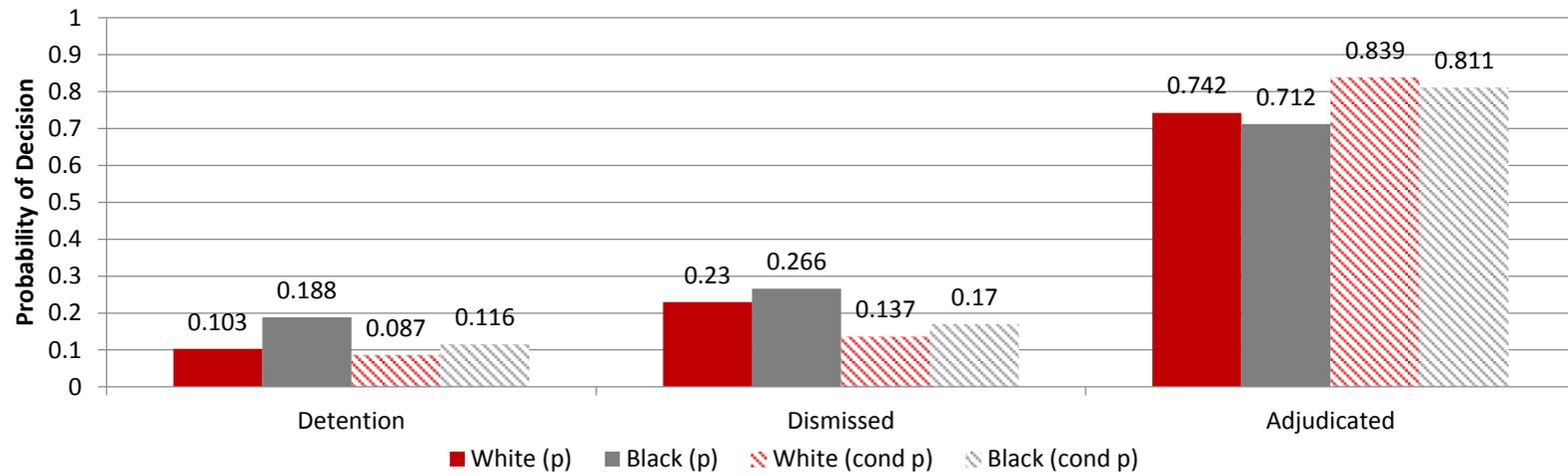
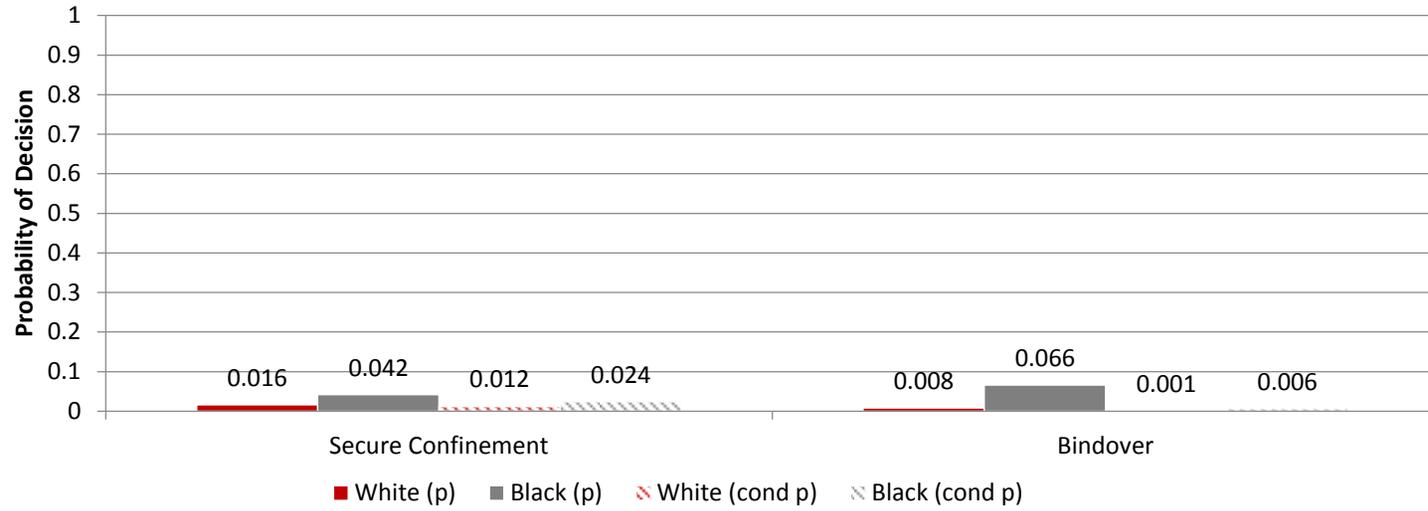


Figure 15b. Summary of Initial Probabilities and Conditional Probabilities for Secure Confinement and Bindover



Summary of juvenile court record analysis. African-American youth accounted for 66 percent of referrals to the juvenile court in 2010-2011, but they comprised only 31 percent of the juvenile population for Hamilton County during this time. Similarly, White youth comprised 62 percent of the juvenile population in Hamilton County, yet only 30 percent of the referrals involved White youth. These numbers indicate that, on the surface, there was a degree of disproportionate minority contact with the juvenile court.

In the initial bivariate models (race and outcome), youth's race was a significant predictor of each of the five outcomes. Specifically, African-American youth were significantly more likely than their White counterparts to be detained prior to adjudication, have their case dismissed, be placed in secure confinement, and be waived to criminal court, while they were less likely to adjudicated delinquent. It is important to note that the direction of the relationships between race and case dismissal and adjudication were opposite of what would be expected based on prior research, suggesting that some aspects of the process may be offsetting DMC earlier in the process (Leiber et al., 2011). There also may be more seriousness in the process in terms of fact-finding on the charges at the adjudication stage.

To better understand how race might impacts decision-making in the juvenile court, we estimated statistical models that controlled for legally-relevant and extralegal factors (age, sex, number of prior charges, offense type, offense seriousness, and OYAS risk level). The results of the full models indicated that race still played a significant role in decision-making after controlling for the above factors. African-American youth maintained their significant relationship (and in the same direction) with each of the five outcomes. Similarly, except for adjudication, the bivariate relationships for youth in the "Other" race category retained their

significance and direction in the full model; the “Other” race category went from a significant predictor of adjudication in the bivariate model to nonsignificant in the full model.

Hamilton County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Hamilton County court staff in March of 2013. We used semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court involvement and outcomes. Twelve interviews were conducted with administrative (department supervisors), supervision, intervention specialists, and judicial staff. The interviews lasted between 30 and 90 minutes, depending on the interviewees’ roles in the court and their level of response. Ancillary data were then gathered on a number of court hearings.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and DMC in the juvenile justice system. Representative quotes and rating scales were utilized to exemplify important aspects of the results. A summary of the main findings follows.

System factors. Respondents were asked to identify key factors in pre-adjudication detention decisions and discuss how these factors might contribute to DMC in the juvenile justice system. Most staff identified offense severity as a key factor in the decision-making process, but went on to explain that these factors were considered in a broader context.

Specifically, where the crime occurred (in the community, home, school), when the crime took place (during school hours or curfew hours), the severity of the crime with regard to weapons (serious and weapons-related offenses resulted in mandatory holds), whether the incident resulted in a probation or parole violation, and the impact of the offense on community safety. Accordingly, not all offenses (or types of offenses) were considered severe and deemed appropriate for pre-adjudication detention. Detention observations were consistent with these responses. A majority of the cases observed were felony-level, involved a firearm or weapon, and resulted in preventative detention. Nearly all of these youth had a prior adjudication or were under court supervision at the time of the hearing (71%).

Similarly, nearly every respondent (90%) identified parents' willingness to pick up youth, home environment (e.g., level of family dysfunction, level of supervision), and parental involvement in the court process as key factors in intake and detention decisions. Respondents also noted that system and community resources were important factors with regard to detention decisions. One interviewee mentioned that,

"DMC is an economic and social issue. Sometimes the explanation [for detention] is disadvantage. Parents are not able or willing to pick up youth from the detention center. [Other times, detention is a necessary option for court officers] since the family is [unstable] or moves a lot...disadvantage also contributes [to DMC] because youth sell drugs [or must rely on illegal means]."

To this end, interviewees discussed the benefit and continued need for resources to provide alternatives and treatment for youth. Staff explained that budget cuts have impacted the availability of such resources and services, however. Moreover, a majority of staff (75%) rated the lack of alternatives to detention and incarceration as a factor to the overrepresentation of minority youth in the Hamilton County. Staff members commented that the court could better

meet needs of youth “with more resources,” or “funding to fully staff the detention center.”

Others suggested that additional funding would support alternative, short-term placements that are less correctional like the “stay center.” For example, one staff member mentioned that, “[The court] used to place youth at the stay center rather than use detention, but this is no longer an option.” Another interviewee added that,

“Detention should only be used [to ensure] community safety, but there are [limited] options... [In particular] there are no alternative options for youth with mental health issues, substance abuse, or who run away.”

Others emphasized that although resources are limited, the court is “fortunate to have dedicated court actors,” which suggests that they believed the court was doing what it could in light of resource constraints. Further, respondents explained that the department has implemented a strategic plan to make discretionary (non-mandatory detentions or overrides) detention determinations based on objective criteria rather than the intake offense, criminal history, or the judgment of the clerk officer. Supervisors will also review the reasons youth are in detention and daily monitor the detention population. Interviewees suggested that while this may not be the only answer for reducing DMC, these efforts have “reduced discretion in decisions” and the number of minority youth held in detention. Others commented that, “Overrides are used less often, we divert more youth than we hold;” “supervisor approval is required for [youth who do not meet standard] criteria or for override decisions on [assessment instruments];” and that non-compliance “is still an overriding factor, but supervisor approval is needed, “and emphasized that these strategies provide a layer of “oversight and objectivity” in the decision-making process.

Overall, staff believed that DMC-reduction goals could be achieved (and continued) through detention reform. Specifically, examining the use of automatic holds, the impact of SB 337, the length of stay, and consideration of other social factors that may impact DMC. It was particularly noteworthy that at the time of the site visit, one staff person estimated a third of youth were in detention for at least a year.

The education system. A majority of interviewees (58%) rated the educational system as a strong contributing factor to disproportionate minority contact, but differed in their opinion of how these factors impacted juvenile justice processes and DMC. While some interviewees linked youth's weak regard for academic achievement or lack of motivation as a contributing factor and potential pathway to the juvenile justice system, most participants identified inadequate resources and school officials' zero tolerance approach to school misconduct as a contributing factor. According to staff, a majority of referrals come from a small subset of inner-city schools that disproportionately rely on the court to address behavioral and/or truancy issues. Making this point directly, one interviewee commented that,

“The educational system is a key entry point for minority youth. Behavior problems that go unnoticed or [that are harshly dealt with result] in case referrals or filings [and] involve youth with the juvenile justice system.”

Others explained that, “there are a number of reasons [the education system contributes to DMC], but more [and more], youth aren't motivated and that “Urban districts offer fewer classes, have less alternative vocational programs, and are less responsive to different learning styles” than resource-rich schools.

Court staff also identified School Resource Officers' (SROs) and school officials' discretion regarding school misconduct as a contributing factor and potential pathway

that youth take to the juvenile justice system. In spite of their concerns, however, some respondents went on to acknowledge that SROs are an important addition to schools that help discourage misbehavior and divert youth from more serious involvement in the system. “SROs’ [goal] is to deescalate situations and divert arrests. The SROs and schools are working to identify alternatives to [address these issues],” explained one staff member.

At least two interviewees (2 of 12) rated the education system as not contributing or only slightly contributing to the overrepresentation of minority youth. They attributed DMC to other factors such as family, socioeconomic conditions, or neighborhood context, which are, at least in some regard, interrelated with the educational system. As one interviewee explained, “increased patrol and surveillance in hot spot areas contribute to minority overrepresentation, especially since youth are more likely to be picked up on truancy charges in these areas.” The respondent went on to explain that, “the education system contributes, but we need better relations between the community and police, and economics are an important factor.”

The family system. Respondents almost consistently cited a lack of family cooperation and structure as contributing to the overrepresentation of minority youth in the juvenile justice system (92%), and indicated that juvenile justice officials make decisions, in part, based on the perceptions of youth’s home environment and circumstance. Staff also indicated that parent’s may play a direct role by calling the police or requesting that the court be more involved with youth. Making this point directly, one staff member stated,

“Parents call and file charges to get [youth] arrested. Parents claim their child hit them, aren’t doing stuff, or [truant] when they were in school. What I am seeing... [some] parents increase or cause youth to get arrested so they [aren’t their] responsibility and don’t have to deal with them.”

One staff member noted that at-risk parents may be less willing to deal with disruptive behavior, or lack the skills to manage their children (i.e., parents lack effective disapproval and discipline techniques), which then may reinforce perceptions that they are ill-equipped or unable to control their children. White families, however, are typically perceived as more engaged or capable of handling their child's behavior since they are more likely to be involved in the court process. Further, staff estimated that about 80-percent of the time parents—who are frequently minority—refuse or are unable to pick up their youth from the detention center, which also suggests that family can impact detention and release decisions. Respondents also explained that youth involved with (Children Youth and Family Services (CYFS) or who have had previous placement(s) (e.g. group homes) were more likely to be held in the detention center.

One staff member stated,

“There is an association [between DMC and the role of family]. White youth are picked up by their parents or guardians automatically and [Black] youth are not picked up. Families and parents don't have the resources or skills to [adequately] monitor or raise youth.”

Respondents also noted that poor families, particularly minority families from disadvantaged areas, are often led by single working mothers or single mothers on welfare with other young children at home. If the parents are employed, they are often employed in low-paying, low-status jobs and lack the flexibility to take time off work. “Family is a strong contributing factor to the overrepresentation of minority youth. Parents have low-paying jobs that lead them to work longer hours and have less flexibility to supervise [children].”

Consequently, it is even more difficult for them to engage in court processes. Court staff also indicated that transportation was a critical issue for families and that public transportation was

limited and may not operate near their homes or court offices. In this way, inter-generational poverty and disadvantage affect parents' ability to participate in the court process, seek out the appropriate resources, and in some cases manage their child's behavior. Additionally, disadvantaged families were sometimes characterized as placing less emphasis on educational achievement and distrusting authority and the juvenile justice system. Consequently, staff members were more likely to regard these families as less cooperative, but also in need of more intensive services. Consistent with staff interviews, in observations, court actors highlighted the importance of family structure and parent involvement, and even thanked families, guardians, or advocates for participating in the court process during observed hearings.

Socioeconomic conditions and community context. Across all interviews, staff members attributed disproportionality, at least to some degree, to the overrepresentation of minority youth and families in urban areas with high rates of poverty, residential instability, family dysfunction, and where social and economic resources are limited. More generally, staff explained that, "DMC exists. The majority of youth entering our system are young, African American males who live in poverty or disadvantaged conditions." Throughout interviews and system discussions, the socioeconomic, familial, and behavioral factors were described as being subsumed by the broader implications of low socioeconomic status and overall community disadvantage. Staff explained that these challenges increase the likelihood that youth will be involved with delinquency, and increase these youth's risk of further involvement and penetration into the justice system.

Summary. Overall, interviewees indicated that just as it is important to understand the potential causes of disproportionate minority involvement within the system (e.g., the role of detention), it is equally important to understand the relatively strong influence of social, economic, and familial factors contributing to the overrepresentation of minority youth. Interviews and observations suggest that minority overrepresentation in the system, in part, is likely a result of minority representation in urban areas with high rates of poverty, residential instability, family dysfunction, disparate educational resources, and where youth and families are only weakly attached to academic success.

As with most complex issues, respondents emphasize that the solution is multifaceted. Some staff noted that education and training for court actors is key for effective change. Others suggested parenting programs and services to teach parents how to effectively reinforce and disapprove of their child's behavior (such as Beach Akers), techniques to increase supervision and reduce conflict, as well as informing youth and families about how to be involved in the process. Regarding the system itself, it was suggested that the system should create alternatives to secure detention. For example, "officer training to locate alternative placements or locate family or guardians rather than arrest and detain youth would be helpful, especially during curfew sweeps." Other suggestions included increasing the number of mentoring programs and availability of Talbert House and Lighthouse Youth Services in the local area. Assessment techniques and automatic hold policies were also highlighted as an area of the justice system that needs to be carefully examined and reviewed. One interviewee suggested that a fairly simple program, having local college interns call youth and families to remind them of court dates, might play a useful role in lowering detention rates—particularly for those who

may disproportionately be detained because of family or socioeconomic circumstances that are intertwined with race.

Summary of Findings and Implications: Hamilton County

Reports for each county included in the DMC Assessment are intended to address two research aims. First, is there evidence of disproportionate minority representation, and, if so, at what points in the process does it occur? Second, what is the explanation(s) for the presence of DMC? After answering those questions, we identify some implications for future policy and practice based on suggestions from study participants and the broader literature on DMC in the juvenile justice system. This summary draws important findings from the preceding analyses to offer some responses to those questions and some ideas for future policy and practice.

Looking at the arrest record data, the findings suggest that DMC (in terms of juvenile arrests) appears to be an issue in Cincinnati and Colerain Township. African-American and minority (includes African Americans) youth are significantly more likely to be arrested than White youth. The issue seemed to be less pronounced in Forest Park and Colerain—still there are some important findings beyond those aggregate results. For example, arrests of minority youth generally involve more serious crime types and levels than White youth. Also, in Forest Park, minority youth are more likely to be arrested at schools than White youth. White youth are more likely to be arrested at home or in a park, field, or street than minority youth. The data also reveal that White youth were more likely to be arrested for drug and alcohol related offenses compared to their minority counterparts in all three locales.

Within the police focus groups, officers overwhelmingly expressed the belief that reducing DMC within the juvenile justice system was not their responsibility—generally

pointing toward factors in communities and families as a driving force behind minority youths' disproportionate involvement in crime. They also discussed calls for service and targeted enforcement areas as being important influences on where they patrol and, by extension, encounter delinquent youth. Focus group participants recognized that no single program is going to have 100 percent success rate. Therefore, they argued that it is necessary to create multiple ways in which law enforcement can have positive contact with youth. Officers suggested focusing on the prevention and proactive programs (such as those placing officers in schools with youth) which can bolster rapport between officers and youth within the community, expose youth to positive role models at a young age, and work to provide youth with skills and tools to make prosocial decisions. They argued that these type of programs in collaboration with community initiatives that invest in the creation of juvenile activities can provide prosocial alternatives to crime that work to keep youth busy, supervised, and out of trouble. Still, it is important to be careful with further integration of police officers in schools. For example, the data from Forest Park shown above suggest that minority youth frequently reached the juvenile court by way of a school-related arrest. Interviews with those in the juvenile court also suggest that school-based referrals may be a source of DMC.

Black youth accounted for 66 percent of referrals to the juvenile court, but they comprise only 31 percent of the juvenile population for Hamilton County. Similarly, White youth comprise 62 percent of the juvenile population in Hamilton County, yet only 30 percent of the referrals involved White youth. These numbers indicate that, on the surface, there is a degree of disproportionate minority contact with the juvenile court. In the initial bivariate models (race and outcome), youth's race was a significant predictor of each of the five

outcomes. Specifically, Black youth were significantly more likely than their White counterparts to be detained prior to adjudication, have their case dismissed, be placed in secure confinement, and be waived to criminal court, while they were less likely to be adjudicated delinquent. It is clear that seriousness of offense and the involvement of weapons are partly accounting for case outcomes in a way that affects the prevalence numbers for minority youth. Still, the race effects in the statistical models for the relevant decision points are not fully diminished, suggesting that those factors are not fully accounting for observed summaries like the relative rate index (RRI).

The direction of the relationships between race and case dismissal and adjudication are opposite of what would be expected based on prior literature, suggesting that some aspects of the process may be offsetting DMC earlier in the process—although any “correction” falls short of mathematically offsetting the earlier disproportion. The results of the full models indicate that race still plays a significant role in decision-making after controlling for legally-relevant factors. Cases involving Black youth still show the same patterns across each of the five outcomes. These findings suggest a mixed conclusion with respect to the question of disproportionality. There clearly is some evidence of DMC at important points in the process—especially detention—but there are others where the effects dissipate or are reversed slightly.

Interviews with court personnel and observations of court proceedings provide further insight on the possible reasons for disproportionate contact with minority youth. As with the police focus group participants, interviewees indicated that just as it is important to understand the relatively strong influence of social, economic, and familial factors contributing to the overrepresentation of minority youth. Interviews and observations suggest that minority

overrepresentation in the system, in part, is likely a result of minority representation in urban areas with high rates of poverty, residential instability, family dysfunction, disparate educational resources, and where youth and families are only weakly attached to academic success. At the same time, interviewees did describe points in the system where disparities might emerge. In interviews, detention was a recurring subject of discussion across participants with varying roles in the juvenile court process. This parallels the findings from the analysis of court records in that detention was a place early in the justice process where there was disproportionality. These decisions seem to be intertwined with assessments about dangerousness as well as views about supervision at home and family arrangements. As with the police officer focus group comments, it is clear that juvenile court actors have reasonably-well developed theories about why many youth reach the justice system. Dealing with DMC problems likely necessitates some consideration of the nuances of those theories and a review of the ways in which they might affect their decision-making.⁴⁵ For example, some factors like neighborhood of residence and parental supports are out of the control of individual youth and this should be borne in mind when making decisions that may have ramifications for their future prospects.

Although some interviewees identified efforts at that stage thought to have improved DMC, it is possible that more action might be taken to minimize disparities as much as possible. As with most complex issues, respondents emphasize that the solution is multifaceted. Some staff noted that education and training for court actors and police officers is key for effective

⁴⁵ Bridges, G. S., & Steen, S. (1998). Racial disparities in official assessments of juvenile offenders: Attributional stereotypes as mediating mechanisms. *American Sociological Review*, 63, 554-570.

change. Assessment techniques and automatic hold policies were also highlighted as an area of the justice system that needs to be carefully examined and reviewed. Like other sites, although the data identified some disparities in use of secure confinement and bindover, there were relatively few comments or suggestions around those stages of the process.

Table 49. Summary of Key Findings from DMC Assessment: Hamilton County

Available Data (w Notes)	Key Findings	Implications
<p>Records from three PDs (N=8,764)</p> <p>Four police focus groups (29 officers)</p> <p>16,108 juvenile court records</p> <p>Twelve interviews with court officials and four days of observations</p>	<p>Some disproportionality in arrest data for two agencies (2.4 and 2.1 RRI), with patterns in crime type, levels, school-arrests, and drug-alcohol involvement</p> <p>Officers stated that reducing DMC is not really their responsibility—generally pointing to communities and families as key factors</p> <p>Also discussed calls for service and targeted enforcement areas as affecting where they patrol and encounter delinquent youth</p> <p>Some evidence of DMC at important points in the process—especially detention (+48%) and secure confinement (4x)—but others where relationships dissipate or are reversed (adjudication, -17%)</p> <p>Court officials mention broader factors affecting minority involvement in delinquency, but also some decision-making points that are very important (detention)</p>	<p>Some patterns in given localities identify some offense characteristics that may be insightful for intervention</p> <p>Necessary to create multiple ways in which law enforcement can have positive contact with youth; mentioned SRO programs, but important to be careful with those in light of some arrest data</p> <p>Important also to consider targeted enforcement strategies and how they might affect DMC</p> <p>Contextualize and address “working theories of minority of offending” in training efforts</p> <p>Mentioned automatic holds and assessment policies as places to educate and train; also highlighted simple program that made sure youth and families were aware of court date</p>

LORAIN COUNTY, OH

Lorain County Police Agency Data

Neither the Lorain County or Oberlin Police Departments identified by DYS agreed to participate in the study. Both agencies were contacted in the Summer of 2013 at the start of the study. Multiple follow up emails and phone calls were made in an attempt to encourage the sites to participate. Eventually, we held a meeting with Lorain PD's Chief of Police in October of 2013 to discuss the project. Staff also followed up via email with an overview of the study and a request that the department identify a primary site contact. Despite these efforts, we did not hear from this agency. Similarly, we never received data or held a focus group with Oberlin PD. Therefore, the report for Lorain County is restricted to data from juvenile court records and interviews with personnel in those agencies.

Lorain County Juvenile Court

Data collection. Lorain County Juvenile Court electronically submitted their court data using a secure upload procedure to transfer case records from 2010 and 2011 to University of Cincinnati research staff. These data were available for roughly 3,100 cases. Following transfer, the files were converted for data analysis and recoded to ensure variables similar in structure to those from other sites.

Measures included in the analysis. The primary independent variable of interest was race, but we also include indicators for sex, age, number of offenses in the current case, most serious offense category, and most serious offense level. *Race* was recorded as White, African American, and Other, and was recoded as a set of three variables capturing membership in each of these categories (or not). *Sex* is a dichotomous variable that indicates whether the

youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of offenses* is a continuous variable indicating the number of separate charges in the current case. If a youth was charged with more than one offense in the current case, *most serious offense category* reflects the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property offense, drug/alcohol offense, status offense, probation violation/violation of court order (PV/VCO), and other. Similarly, the *most serious offense level* indicator captures whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly in juvenile courts, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables are dichotomous measures of case outcomes at four decision points: diversion, dismissal, adjudication, and secure confinement.⁴⁶ Each of these variables is coded as yes/no. *Diversion* indicates whether youth were shifted from formal prosecution at the front end of the court process. *Dismissed* identifies whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent). *Adjudicated* indicates whether a youth was formally found delinquent for the current case. *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility.

⁴⁶ Bindover was not included in the analysis due to only 12 cases being waived to criminal court. Likewise, detention was not included in the analysis because Lorain County Juvenile Court did not provide data on youth who were detained.

Data coverage and preparation. Overall, there were 3,123 cases referred to the Lorain County Juvenile Court between January 1, 2010 and December 31, 2011. Fifty-two cases were excluded from the analysis because the youth's race was not identified, leaving a final sample of 3,071 cases. There was relatively little missing information in the data. There was complete coverage (i.e., no missing data) for race, sex, age, number of offenses, and most serious offense category. There was 8.6 percent missing data for most serious offense level and 3.9 percent missing for adjudicated. In addition, there was 0.7 percent missing data for diversion, dismissed, and secure confinement.

To retain all cases for analysis, we used multiple imputation (MI) to impute the missing values for these variables. MI replaces missing observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, age, sex, number of offenses, and most serious offense category. MI first generates a specified number of datasets—in this case, ten—in which missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from each of the ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Descriptive statistics. In 2010-2011, White youth represented 53.8 percent of the petitions to Lorain County Juvenile Court, while African-American youth made up 32.8 percent, and Other youth comprised the remaining 13.3 percent (this group consisted of predominately Biracial youth [12.5%]). According to the 2010 Census for Lorain County, these groups accounted for 78.2 percent, 10.8 percent, and 11.1 percent of the juvenile population ages 10-

17, respectively. Taken at face value, these figures indicate a relatively moderate level of disproportionality in terms of the profile of cases coming into the juvenile justice system. Males accounted for 68.3 percent of the petitions. The average age at filing was 15.9 years old (SD=1.46). The mean number of offenses in the current case was 1.85 (SD=1.69). Almost two-thirds (64.6%) of the youth were charged with a misdemeanor or status offense. The most frequent offense type in the sample was status offenses/disorderly conduct (29.8%), followed by violent/sex offenses (28.3%), property offenses (24.1%), PV/VCO (6.8%), other offenses (5.6%), and drug/alcohol offenses (5.5%).

Court outcomes. We estimated three statistical models for each of the four decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for African-American and Other youth as opposed to White youth, the first model considered only the effects of race on the justice decision variable. The second model included race and other legally relevant factors (number of offenses, most serious offense category, and most serious offense level). The final model (see Table 50) included the above variables, as well as the extralegal factors sex and age. Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Diversion. The analysis predicting diversion produced mixed results in the initial model including only race. Specifically, the odds of being diverted from official court processing were significantly higher for youth in the Other category (OR=2.13) compared to their White counterparts, while the effect for African-American youth was not significant. When the legally-relevant variables were added in the second model, the race effect remained mixed. Youth in

the Other category (OR=2.00) were still significantly more likely to be diverted relative to White youth (although the effect did decrease slightly), while the effect for African-American youth remained nonsignificant. Number of offenses in the current case was not a significant predictor of diversion. Youth charged with a status offense/disorderly conduct (OR=0.44) or PV/VCO (OR=0.05) were significantly less likely to be diverted relative to those charged with a violent or sex offense. The effect for youth charged with a property or other offense was not statistically significant.⁴⁷ Youth charged with a misdemeanor or status offense were 73 percent less likely to be diverted relative to those charged with a felony (OR=0.27).

In the final model that included extralegal variables, the effect of race was again mixed: youth in the Other category were over twice as likely to be diverted relative to White youth (OR=2.06), while the effect for African-American youth was not statistically significant. Each of the significant legally-relevant factors from the second model maintained its significance in the final version with only negligible changes in the results. Neither of the extralegal variables—age and sex—were significant predictors of diversion. Overall, the effect of race on diversion was mixed: the effect for African American youth was not significant in any of the three models, while youth in the Other category were at least twice as likely to be diverted relative to White youth in each model.

Dismissed. In the race-only model examining case dismissal, African-American youth were over 30 percent less likely to have their case dismissed relative to their White counterparts (OR=0.66). The effect for youth in the Other category was not statistically significant. In the second model, which included legally-relevant factors, the effect of race on

⁴⁷ Drug/Alcohol offenses were removed from this analysis because it perfectly predicted diversion.

case dismissal remained mixed, although the effect for African-American youth did decrease slightly (OR=0.72). In addition, a one unit increase in the number of offenses in the current case predicted a significant decrease in the odds of dismissal (OR=0.89). Youth charged with a PV/VCO (OR=0.40) were significantly less likely to have their case dismissed relative to those charged with a violent or sex offense. The remaining legally-relevant variables were not statistically significant.

In the final model, the effect of race remained consistent with the first two models. The effect for African-American youth was statistically significant (OR=0.70) and the effect for Other youth was not. Similarly, the two significant legally-relevant variables from the second model remained so in the final model. A one year increase in youth's age predicted a significant increase of 11 percent in the odds of dismissal, and females were 26 percent more likely to have their case dismissed relative to males. Overall, the effect of race on case dismissal was mixed. In each of the three models, African-American youth were significantly less likely to have their case dismissed relative to White youth, while the effect for youth in the Other category was not statistically significant in any of the analyses.

Adjudication. There were no statistically significant effects in the initial race-only model for adjudication. After adding legally-relevant variables in the second model, the effect of race remained nonsignificant for both groups. In fact, there were only two statistically significant effects in this model: youth charged with a PV/VCO were over five times more likely to be adjudicated relative to those charged with a violent or sex offense (OR=5.11) and those charged with a misdemeanor or status offense were 49 percent more likely to be adjudicated compared to youth charged with a felony offense (OR=1.49).

In the final model, which included extralegal variables, the effect of race remained nonsignificant. Similar to the second model, the only significant legally-relevant factors were for youth charged with a PV/VCO relative to a violent or sex offense and those charged with a misdemeanor or status offense relative to a felony. The effect of youth's sex was not significant. A one year increase in youths' age predicted a statistically significant 8 percent decrease in the odds of adjudication (OR=0.92). Overall, race was not a significant predictor of youth's status as an adjudicated delinquent in any of the three models. Instead, the results indicated that the adjudication outcome was associated with offense type, offense seriousness, and youth age.

Secure confinement. The analysis of secure confinement outcomes used the subsample of youth who were adjudicated delinquent in Lorain County Juvenile Court (N=2,425). In the initial model, African-American youth were over two times more likely to be placed in secure confinement compared to their White counterparts (OR=2.29). The effect for youth in the Other category was not significant. After adding legally-relevant factors in the second model, the effect of race remained consistent with that found in the first model. African-American youth were still over twice as likely to be placed in secure confinement relative to White youth (OR=2.05), while the effect for Other youth was not significant. A one unit increase in the number of offenses charged in the current case predicted a statistically significant 33 percent increase in the odds of a secure confinement disposition (OR=1.33). Youth charged with a status offense/disorderly conduct were 85 percent less likely to be placed in secure confinement compared to those charged with a violent or sex offense (OR=0.15). None of the effects of the remaining offense categories were statistically significant. Adjudicated youth who

were charged with a misdemeanor or status offense were 78 percent less likely to be placed in a secure facility relative to those charged with a felony (OR=0.22).

When the extralegal factors were added in the final model, the effect of race remained significant. African-American youth were 2.16 times more likely to be placed in secure confinement relative to White youth. The effect for Other youth was not significant. A one unit increase in the number of offenses in the current case predicted a 32 percent increase in the odds of secure placement (OR=1.32). Youth charged with a property offense (OR=0.65), drug/alcohol offense (OR=0.34), status offense/disorderly conduct (OR=0.15), or PV/VCO (OR=0.55) were significantly less likely to be placed in secure confinement relative to those charged with a violent or sex offense. Similar to the previous statistical model, youth charged with a misdemeanor or status offense were 76 percent less likely to be placed in secure confinement relative to those charged with a felony. Finally, each of the extralegal variables was significant. A one year increase in youth's age predicted a 29 percent increase in the odds of secure confinement (OR=1.29) and females were 36 percent less likely to be placed in a secure facility relative to males (OR=0.64). Overall, in each of the three models, African-American youth were over two times more likely to receive a secure placement disposition relative to White youth. The effect for youth in the Other category was not statistically significant in any of the models.

Initial and conditional probabilities of case outcomes. Figure 16 displays the initial and conditional probabilities for each of the four outcomes by youth's race (White/African American). The initial probabilities reflect the likelihood that White and African-American youth will experience the case outcome without consideration of any other factors. These estimates

are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and African-American youth will experience a certain case outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case. This also allows us to consider whether any differences between White and Non-White youth observed for the base analysis shifts when accounting for other relevant case factors.⁴⁸

Overall, the results follow those discussed above. Cases involving African-American youth had slightly higher probabilities of diversion, adjudication, and secure confinement and lower probabilities of case dismissal. Generally, the gaps between White and African-American youth tended to be larger in the unconditional cases and narrowed somewhat when other legally-relevant and extralegal variables were considered, but they did not fully diminish when those factors added. For example, the unconditional probability of secure confinement was 0.120 for African-American youth and 0.056 for White youth (a difference of 0.064). Once the other variables were included, the conditional probabilities for secure confinement decreased to 0.095 for African-American youth and 0.046 for White youth, a difference of 0.049 points on a proportion scale.

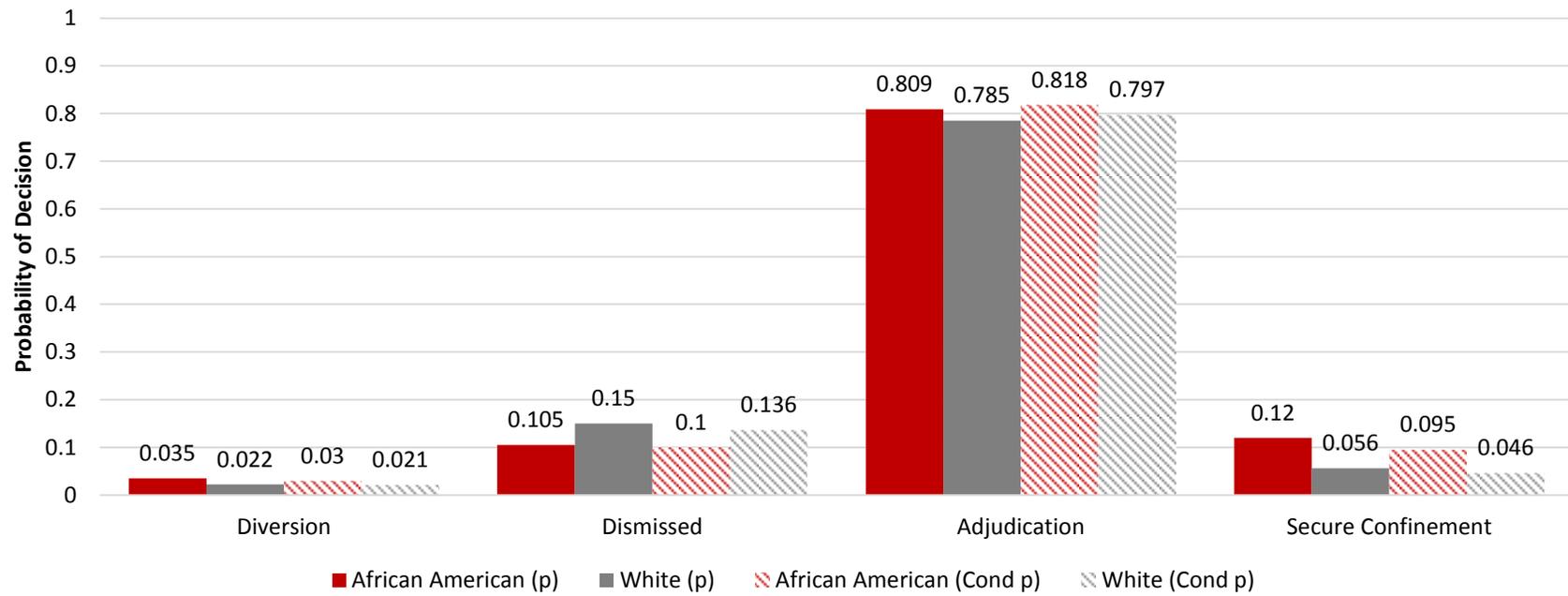
⁴⁸ The mean values for number of offenses in the current case (1.85), and age at case initiation (15.90) were used to calculate predicted probabilities for each of the four outcomes. The remaining variables were set to their most frequently appearing categories: offense type – violent/sex offense; offense seriousness – misdemeanor/status offense; and sex – male.

Table 50. Binary Logistic Regression – Outcomes for Lorain County Juvenile Court (Full Models)

	Diversion			Dismissed			Adjudication			Secure Confinement		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Black/AA	0.38	1.46	0.25	-0.36	0.70	0.13	0.13	1.14	0.10	0.77	2.16	0.18
Other	0.72	2.06	0.29	-0.23	0.79	0.17	-0.03	0.97	0.14	0.28	1.33	0.27
Num. of Offenses	0.03	1.03	0.05	-0.12	0.89	0.05	0.02	1.02	0.03	0.28	1.32	0.04
Misd/Status	-1.24	0.29	0.24	0.05	1.05	0.15	0.41	1.50	0.12	-1.44	0.24	0.19
<i>Offense Type</i>												
Property	-0.20	0.82	0.26	0.26	1.30	0.15	-0.13	0.87	0.12	-0.43	0.65	0.21
Drug/Alcohol	----	----	----	0.32	1.38	0.24	-0.16	0.85	0.20	-1.08	0.34	0.42
Other	0.17	1.18	0.38	-0.58	0.56	0.31	0.05	1.06	0.21	-0.23	0.79	0.33
Status/DC	-0.79	0.46	0.36	-0.03	0.97	0.15	0.16	1.18	0.13	-1.90	0.15	0.41
PV/VCO	-2.88	0.06	1.02	-0.98	0.37	0.35	1.67	5.33	0.30	-0.60	0.55	0.28
Sex	-0.48	0.62	0.29	0.23	1.26	0.12	-0.09	0.92	0.10	-0.44	0.64	0.21
Age at Filing	-0.07	0.93	0.07	0.10	1.11	0.04	-0.09	0.92	0.03	0.25	1.29	0.06
Constant	-1.50		1.13	-3.33		0.65	2.29		0.53	-6.14		1.04

Note: Bolded entries represent statistically significant estimates at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error

Figure 16. Summary of Initial Probabilities and Conditional Probabilities for Lorain County Juvenile Court



Summary of juvenile court record analysis. White youth accounted for 54 percent of referrals to the Lorain County Juvenile Court, African-American youth accounted for 33 percent of referrals, and youth in the Other category accounted for the remaining 13 percent. However, according to the 2010 U.S. Census, these groups accounted for 78 percent, 11 percent, and 11 percent of the juvenile population of Lorain County, respectively. These numbers indicate that there was a degree of disproportionate minority contact in referrals to the Lorain County Juvenile Court.

In the initial bivariate models, youth race was a significant predictor (to varying degrees) in three of the four outcomes. Specifically, African-American youth were significantly less likely to have their case dismissed and more likely to be placed in a secure confinement facility relative to their White counterparts. Similarly, youth in the Other category were significantly more likely to be diverted compared to White youth. Race was not a significant predictor of the adjudication outcome.

To better understand how race might affect juvenile court decision-making relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal factors. The results of the full models mirrored those of the bivariate models and indicated that race still played a significant role in three of the four decision points. In particular, the secure confinement decision appeared to show the most pronounced differences between African-American and White youth.⁴⁹

⁴⁹ Given the fact that the “Other” group was predominately multiracial, we re-estimated our statistical models comparing White and Non-White youth. In those analyses, Non-Whites were significantly more likely to be diverted, significantly less likely to have their cases dismissed, and significantly more likely to be placed in secure confinement. No significant difference was observed for the delinquency adjudication outcome.

Lorain County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Lorain County court staff in April of 2014. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court involvement and outcomes. Eight interviews were conducted with administrative (programming directors and department supervisors), detention, supervision, and legal staff. The interviews lasted between 30 and 90 minutes, depending on the interviewees' roles in the court and their level of disclosure. Data were also gathered on case review, disposition, and arraignment hearings (15) in April of 2014.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. Respondents were asked to rate the degree of DMC in the juvenile justice system, and discuss what factors, if any, contributed to the overrepresentation of minority youth in the local area. Three primary explanations emerged. First, there was the belief that police-juvenile encounters and arrests contribute to disproportionate contact, and patrols are

distributed to geographic areas with a greater number of calls for service and the highest rates of reported crime. “Consequently, these areas are more likely to be minority and lower-socioeconomic status,” explained one staff member. Others noted that the type and context of police-juvenile interactions were important considerations in arrest and referral decisions. Specifically that, “the attitude of the person making the arrest, the attitude of the youth, and the tone and value of the word choice contributes to disparities in detention and at intake.”

Another staff person commented that,

“Law enforcement forward an arrest report with recommendations. A copy is also sent to the Juvenile Court, and, you know, the police make judgments [about culpability and dangerousness]. We take that into consideration.”

However, staff members suggested that court decisions (and outcomes) were primarily based on factors other than youths’ race or demeanor. Specifically, punishment and culpability concerns, which direct decision-makers’ attention to the seriousness of the offense and risk to recidivate were identified as important factors in the decision making process. Staff also referenced the quality of the family environment, alcohol and drug use, and mental illness as important factors in the decision-making process.

Discussions also focused on the need to expand existing services and reduce wait-lists for treatment. According to staff, the longer youth and families wait to begin treatment, the more likely they are not to follow through with services. Staff also referenced the importance of assessing the needs, gaps, and barriers to treatment (e.g., transportation) that result in overlapping and/or ineffective services within the court.

The education system. Respondents were divided in their opinion on how the education system contributed to disproportionate minority contact. Several respondents rated

the education system as contributing to DMC, but did not elaborate on any differences that might exist due to educational factors. A number of participants (3 of 8) pointed to the inadequacy of the education system to meet the academic needs of students, particularly minority students, as contributing to school dropout and truancy. Demands placed on the juvenile court by school officials were also seen as contributing to disproportionate minority contact. Staff members commented that, “schools depend on the police and court to handle student issues,” and that, “they [schools] pass off everything to the court”. A more specific recommendation included having intake and supervision staff track referral decisions and review truancy policies.

The family system. A majority of the interviewees indicated that family structure and the quality of supervision, including parent’s use of reinforcement and discipline techniques within the home, were important considerations in the decision making process and strongly contributed to DMC. Further, staff believe that youth are best served by intervention(s) that actively include parents and family members in the treatment process. For example,

“Parents have a strong influence. But, [can be] resistant. [Parents are encouraged] to participate in pre-treatment, orientation, sessions for our Thinking for a Change and Aggression Replacement Training® group. [They] don’t show, or say things like ‘why should I be affected?’ Kids see that.”

“We make an effort to get the family involved. But it’s rare. Parents just want to get it over as soon as possible!”

“Family plays a very important role... [to encourage participation] we discuss potential barriers or challenges to treatment, and ask the family what services they feel are important...engagement is key.”

Discussions also focused on how family dynamics led to patterns of delinquent behavior and brought youth, particularly minority youth, into greater contact with the juvenile justice

system. Specifically, matriarchal and single-parent households, intergenerational involvement in the criminal justice system, substance abuse, and economic strain were identified as contributing to DMC.

Socioeconomic conditions and neighborhood context. The majority of staff members cited poverty, and poverty-related circumstances as strongly contributing to the overrepresentation of minority youth in the juvenile justice system. Specifically, respondents linked high rates of unemployment, limited access to learning and enrichment opportunities, differential resource availability (e.g., transportation), and as noted above, single-parent households to disparate outcomes. Making this point directly, one court official commented,

“Socioeconomics have a [tremendous] influence. This is a blue-collar area, you know, with limited opportunities. Families are sometimes forced to do what they have to do to get by...and when people struggle, they can make poor or illegal choices...money isn’t the answer, but it sure would help.”

Summary. The majority of staff agreed that system, education, family, and neighborhood factors contributed, at least in part, to disproportionate minority contact in the juvenile justice system. However, explanations on how and the degree to which these factors contributed to the overrepresentation of minority youth differed. Interviewees tended to focus on the pathways that youth take to the system through police contact or schools, as opposed to court-related factors. Family engagement was also regarded as important. Similarly, suggestions on how to address these issues varied across decision points. A number of staff suggested that DMC-efforts focus on police-youth interactions calling for a community-policing approach, while others identified the need more programming and services as important next steps to address DMC. In particular, staff stressed the need for mental health, substance abuse,

and re-entry services. Additionally, staff urged more training (and research) on how to prevent disengagement and DMC in juvenile justice and related child-service agencies.

Participants also referenced the importance of (and continued need for) Thinking for a Change and Aggression Replacement Training® programs to meet the risks and needs of the youth in Lorain County. The need for family-based interventions such as the Strengthening Families Program (SFP) that works to encourage participation and skill development also emerged as a central theme among staff members (see Kumpfer et al. 1989).

Summary of Findings and Implications: Lorain County

No data were acquired from police agencies in Lorain County, which does leave a somewhat incomplete picture of DMC and the possible reasons for it. Still, the court data and interviews with personnel do offer some potentially valuable insights. In both the initial and full analyses of court outcomes, with approximately 3,100 cases from Lorain County, we found that African-American youth were significantly less likely to have their case dismissed and more likely to be placed in a secure confinement facility relative to White youth. Race was not a significant predictor of the adjudication outcome, however. The secure confinement decision appeared to show the most pronounced differences between African-American and White youth. In general, we obtained similar results when repeating these analyses comparing outcomes for White and Non-White youths.

Eight members of the Lorain County Juvenile Court staff were interviewed. The majority of staff agreed that system, education, family, and neighborhood factors contributed, at least in part, to disproportionate minority contact, but explanations differed somewhat as to why that was the case. They tended to emphasize the pathways that youth take to the system through

police contact or schools, as opposed to court-related factors. Family engagement was also believed to be an interactive factor that might lead to differential outcomes for minority youth. Suggestions on how to address these issues varied somewhat as well. A number of interviewees suggested that programs focus on police-youth interactions. Looking within the court, others felt that program availability was important to dealing with potential DMC issues. Additionally, staff urged more training how to better address DMC in juvenile justice and related child-service agencies.

Table 51. Summary of Key Points from DMC Assessment: Lorain County

Available Data w Notes	Key Findings	Implications
No police department participation	African-American youth were significantly less likely to have case dismissed (-30%), more likely to be placed in secure facility (+120%)	Secure confinement decision point showed the most pronounced relationship with race
3,071 Juvenile court records	Race was not a significant predictor of the adjudication outcome, but was a significant effect where minority youth were more likely diverted	Further emphasis on diversion/dismissal to identify any possible patterns in case or youths
Eight court interviews and 15 case hearings	Interviewees emphasized pathways youth take through police contact or schools, as opposed to court-related factors	Highlighted potential of Strengthening Families Program and need for family engagement Mentioned the need for further training on issues relevant to DMC
	Family engagement was also believed to lead to differential outcomes for minority youth	Need to involve other child-service agencies

LUCAS COUNTY, OH

Lucas County Police Agency Data

Description of Lucas County arrest data. The UC research team made contact with one agency within Lucas County, Ohio beginning July 2013. A formal letter outlining the details of the study and data requests were sent to the head of Toledo Police Department. The research staff followed up with Toledo Police Department in November 2013. The agency agreed to participate in the study. The findings from the analysis of juvenile arrests records from Toledo Police Department between 2010 and 2011 are described below.

Toledo Police Department. Toledo Police Department maintained electronic individual arrest records of youth arrested between 2010 and 2011. These files were sent electronically to the UC research staff in 2014. The records included individual and offense-related information. The research team cleaned and transferred the arrest records to a data-management software program.

Basic demographic characteristics of the individual and offense were obtained for juvenile arrests between 2010-2011. The available explanatory variables from Toledo Police Department are listed below:

- Age
- Sex
- Race
- Most Serious Offense Category
- Most Serious Offense Level
- Number of Offenses
- Use of a Weapon

Basic description of cases. Table 52 below provides an overview of the basic characteristics of arrested youth in Toledo, Ohio between 2010 and 2011. Toledo Police Department made 782 arrests of youth ages 10-17 during that timeframe.⁵⁰ Of those, the majority of juvenile arrests were of African-American youth (N=586; 75.0%). White youth accounted for a much smaller percentage of juvenile arrests (N=194; 24.8%). Toledo Police Department arrested one youth classified as ‘other’ (0.1%) and one arrest of a youth whose race was unknown (0.1%). Males made up the vast majority of juvenile arrests (N=691; 88.4%) compared to females (N=91; 11.6%). The average age of arrested youth was 16 years old with a standard deviation value of 1.55 suggesting that there is a moderate amount of variation in youths’ age around the mean age of arrested youth.

Table 52. Basic Characteristics of Arrested Juveniles in Toledo

	Toledo PD (N=782) Valid % (N)
Race	
White	24.8 (194)
Black, AA	75.0 (586)
Multi-Race	0.0 (0)
Other	0.1 (1)
Sex	
Male	88.4 (691)
Female	11.6 (91)
Age	
Mean	16.00
Median	16.36
Standard Deviation	1.547

⁵⁰ Note that Toledo Police Department provided the research staff with arrest records only involving felony and misdemeanor level offenses. The research team did not receive any individual or offense-level data for status/unruly offenses.

Report on RRI and odds ratios. As mentioned in the Ohio DYS RFP, the first component of this study is to identify whether DMC may be an issue at various stages in the juvenile justice system. Table 53 below provides the 2010-2011 Relative Risk Index (RRI) values associated with juvenile arrests in the Lucas County locale of Toledo. The numbers are comprised of a comparison between the juvenile arrest records and 2010 United States Census data. Based on 2010 Census data, there were a total of 29,146 youth ages 10-17 in Toledo. Of those, 15,105 youth were identified as White (51.8% of the total youth population) compared to 14,041 minority youth (48.2%). More specifically, African-American youth made up 35.7 percent of the total population in Toledo (N=10,404). When considering these population values, approximately one percent of arrests involved White youth. A higher percentage of arrests involved minority youth (4%) and to a greater extent African-American youth (6%). These values translate to a Black/White RRI value of 4.39 and a Minority/White value of 3.26. Both RRI values are above the threshold (RRI>1.2) set forth by OJJDP and Ohio DYS. This suggests that there is a statistically significant difference between the relative risk of arrests for White and minority youth (especially African-American youth). Additional analysis reveal that both the Black/White Odds Ratio (OR=4.59) and the Minority/White Odds Ratio (3.35) are statistically significant at $p<0.05$. This indicates that there is a relatively low probability that differences of this magnitude would appear if the relative risk of arrests across race subgroups were in fact the same.

Table 53. Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority/ White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Toledo PD	0.01	0.06	0.04	4.39*	3.26*	4.59* (3.89–5.41)	3.35* (2.85–3.95)

Note: Toledo data does not include status offenses.

*RRI greater than 1.20 Threshold or OR that is statistically significant at p<0.05

Analysis of key case characteristics by race/ethnicity. Table 54 below displays the findings from the analysis of the potential explanatory variables of juvenile arrests by race subgroups (i.e., White vs. Non-White youth). While none of the findings were statistically significant, several interesting findings did emerge from this analysis. First, the findings seem to suggest that there are subtle differences in the most serious offense category between White and Non-White youth arrests. A slightly higher percentage of arrests for violent/sex offenses involved White youth (N=86; 44.3% of arrests involving White youth) compared to arrests of Non-White youth (N=218; 37.1% of arrests of Non-White youth). Conversely, a greater percentage of arrests involving Non-White youth were for property related offenses (N=321; 54.7%) compared to White youth (N=97; 50.0%). Lastly, there were minor differences in the number of offenses youth were arrested for between White and Non-White youth. A slightly larger percentage of arrests involving White youth were for a single offense (N=132; 68.0%) compared to their Non-White counterparts (N=389; 66.3%). Conversely, arrests of Non-White youth were more likely to be for two offenses (N=148; 25.2%) compared to arrests of White youth (N=39; 20.1%). A slightly larger percentage of arrests involving White youth were for 3 or more offenses (N=23; 11.9%) compared to arrests of Non-White youth (N=50; 8.5%). The Phi

statistics shown in the table demonstrate that the relationships between these factors were very slight, ranging from .01 to .08 on a scale that goes up to 1.0.

Table 54. Arrest Characteristics by Race Subgroups – Toledo PD

	White % (N)	Non-White % (N)	χ² V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	44.3 (86)	37.1 (218)	4.96	0.1
Property	50.0 (97)	54.7 (321)	0.08	
Drug/Alcohol	1.0 (2)	3.1 (18)		
Other	4.6 (9)	5.1 (30)		
<i>Most Serious Offense Level</i>				
Felony	90.4 (169)	89.6 (507)	0.10	3.7
Misdemeanor	9.6 (18)	10.4 (59)	0.01	
<i>Number of Offenses</i>				
1	68.0 (132)	66.3 (389)	3.40	0.1
2	20.1 (39)	25.2 (148)	0.07	
3+	11.9 (23)	8.5 (50)		
<i>Weapon Use?</i>				
No	92.3 (155)	92.3 (502)	0.00	9.0
Yes	7.7 (13)	7.7 (42)	0.00	

Summary of police agency record analysis. Overall, the arrest data suggest that African-American youth account for the majority of juvenile arrests in Toledo (75.0%). When considering the RRI and odds ratio values, it appears that disproportionality of minority arrests may be an issue. This finding is especially true for African-American youth. With the data provided it is somewhat difficult to point to specific factors that might be driving these differentials. Most serious offense level and weapon use data suggest that the race groups are reasonably comparable on those arrest characteristics. Also, although there are small differences between the groups in the most serious offense category, they tend to suggest that White youth are more often arrested for violent/sex offenses. These run counter to arguments that are sometimes given in making a differential offending argument for DMC. Nevertheless, it

is important to consider these questions at later stages in the juvenile justice process where we can account for additional legally-relevant factors.

Lucas County Focus Group Analysis

In November of 2013, two focus group sessions were conducted within one law enforcement agency in Lucas County. Each focus group session lasted approximately 90 minutes. Fourteen officers with varying levels of experience (ranging between 14 and 30 years), contact with youth in the community, and positions within the department participated in these sessions. Specifically, focus group participants held positions such as School Resource, Patrol, or Field Operations Officer.

Findings. Officers in Lucas County identified several explanations for disproportionate minority contact in their jurisdiction. Though differential treatment explanations for DMC were briefly discussed, the majority of officers attributed DMC to the differential offending patterns of minority youth, stressing the significant effect of these offending patterns on police contact with this population. Findings from the Lucas County police focus groups are outlined below.

Differential offending. When outlining explanations for disproportionate minority contact, officers consistently emphasized the differential offending patterns of minority youth, and stressed the impact of these offending patterns on both informal and formal juvenile-officer interactions in their jurisdiction. In particular, participants suggested minority youth were more likely to be gang-affiliated and consequently more likely to engage in serious and violent crime. Additionally, both school resource and patrol officers noted the high number of repeat offenders among minority youth, generating a greater likelihood of police contact with

this population. Ultimately, officers identified the differential offending patterns and high contact of minority youth with police as a product of geographic and familial factors.

Geographic location. When explaining the high level of police contact with minority youth, officers briefly observed the influence of calls for service generated from lower income, minority communities within their jurisdiction. Specifically, it was mentioned by several officers that minority dominant areas have higher demands for police service. Additionally, officers commented that their department is “data driven,” suggesting that, due to the higher calls for service from these areas, patrol officers are directed to spend more time in lower income, minority neighborhoods (when not responding to calls). Overall, the higher calls for service and directed patrol heightened police presence in these communities, increasing the likelihood of officers coming into contact with minority youth from these neighborhoods.

Family Factors. Familial factors were the most cited cause for the differential offending patterns of minority youth. Officers within both focus groups highlighted the significant influence of family structure, the lack of prosocial role models for minority youth, and the lack of discipline in minority homes on the offending patterns of youth and their subsequent contact with police. Specifically, officers cited the lack of family structure as the most prevalent explanation for DMC. This theme was discussed in a variety of contexts and through various points of the focus group session. Specifically, officers commented that there is a greater lack of family structure in the minority population within their jurisdiction than in the White population. It was argued that this breakdown of the traditional family structure is evidenced by the high number of single-parent households and the large population of very young parents in minority communities (“kids raising kids”). Officers observed that these parents are typically

unable to effectively raise or provide support (emotional or financial) for their children. Further, youth in minority communities were often observed to be on their own, as their parents are unaware or uninterested in the day-to-day lives of their children. One officer highlighted this problem saying, “That is another issue [previous commenter in groups] touched on is the parents. Where are the parents?...these kids are just turned loose.”

Officers also believed that younger and/or absentee parents do not provide children with stable role models. Instead, minority youth find role models on the streets of the community, often spending time with older individuals who affiliate with gangs and live following “hood-life expectations” rather than expectations that are more prosocial. However, officers also suggested that when parents are present in minority households they often teach criminal behaviors to their children. One school resource officer spoke of his experience with the parents of delinquent youth observing that parents often encourage their kids to fight if they feel disrespected.

Officers went on to explain that criminal behavior is supported by parents who do not discipline their children or teach youth to respect authority figures. The lack of discipline and respect for authority in minority homes was thought to significantly increase the likelihood of formal police contact with minority youth. Specifically, officers suggested that, when youth come into contact with police or other authority figures, they refuse to adhere to instructions, often escalating into serious levels of anger and violence. The focus group participants discussed that youth may react this way to “save face” in front of their peers, but often these reactions are due to the fact that youth have never been told “no,” or instructed in anger management. One SRO described his experience with a simple incident within a school that

quickly escalated to violence due to the youth's unmanageable anger. Concluding his story, the officer stated, "...that particular kid he has never been taught to have respect for the police." He went on to mention that the youth and their family don't have respect for education or the school, either. Overall, officers observed a recurring pattern: teenagers or single-parents having children, these young single parents being unable to provide proper child-rearing, and subsequently those children become involved in delinquency and/or having children as teenagers themselves.

Differential treatment. While some officers suggested that race influences the likelihood of arrest, the majority linked legal factors such as offense severity and prior record (if known) to DMC at arrest. The demeanor of the youth was also cited as potential contributing factor, but was contingent on youth's criminal history. Overall, these officers were adamant that race was not a defining factor in arrest/intake decisions, but a youth's attitude might be. Making this point directly, one officer explained,

"For me, one of the things I consider when how to respond to a case is how the person responds to me...if he shows me respect then I will show him respect. Obviously that is influenced by the nature of the offense, but how somebody comes across to me makes a big difference in how I deal with them."

School resource officers, in particular, stated that the mental health and emotional stability of youth impacts whether formal measures are taken in their interactions with youth. Specifically, when asked what factors influence their decision-making, one officer responded,

"In the schools, because it is a community in itself, whether they are first time offenders, whether they have mental or emotional issues, if I have a student that I know is bipolar or is not taking meds that they are supposed to be receiving I try to take those things into consideration when I deal with their behaviors... Usually we have more information to base a decision on. Sometimes that can make it more difficult, the more factors, the more you've got to crunch it. It's not a real easy cuff 'em, stuff 'em, take 'em down type of thing because you are

taking in all these factors. You may have family history, you may know their parents or older siblings. There are a lot of different factors that go into it. You want to be fair but you also want to know if there are some extenuating circumstances behind their actions.”

Although some participants acknowledged that the differential treatment of minority youth may contribute to DMC in their jurisdiction, most officers observed, from their experience, race is not a significant factor in their decision making. Instead, legal factors and demeanor-related factors were identified as the most significant influences on the outcomes within most police-youth encounters.

Suggestions to reduce juvenile offending. In their discussion of potential ways to reduce juvenile crime and DMC, officers emphasized three major mechanisms to address juvenile offending in their jurisdiction: (1) limit the leniency of the juvenile justice system, (2) increase parental accountability for youth, and (3) prioritize early intervention and education programs for youth.

Regarding the leniency of the juvenile justice system, officers consistently commented that youth are not provided formal punishments and, therefore, are not held accountable for their crimes. The focus groups observed that, by the time the juvenile justice system responds to serious juvenile offenders in a substantive manner, the youth are typically “too far gone.” Ultimately, officers believed that the lack of repercussions allows for the escalation in the amount and seriousness of offending among youth. An officer discussed this problem, stating, “...that deterrent is not there to the same extent that it was when I came on to the department [25 years ago].” S/he went on to state, “I believe we have gotten away from holding people responsible for their actions too and given counseling instead.”

For this reason, officers within both focus groups highlighted the need to expand the range of responses to juvenile crime to hold youth accountable for their criminal actions. Additionally, officers suggested the importance of apprehending and addressing problem youth at younger ages for more minor crimes as an attempt to stem future offending. While focus group participants recognized the efficacy of counseling and rehabilitation services for less serious youth offenders, they emphasized the importance of expanding juvenile detention facilities to separate the more serious, dangerous, habitual juvenile offenders from society. It was believed by officers that providing more punitive responses to juvenile crime, such as detention, would enhance the accountability among these youth while serving as a deterrent for others. One officer discussed this approach, saying, "Again we want to try the 'soft' approach for the kids that it's appropriate for. For the ones it's just not working for know when to hold 'em and when to fold 'em and put them into a facility where they can't hurt the rest of society." This officer went on to say that a "multi-pronged approach" was needed as opposed to just "counseling."

Outside of their suggestions regarding formal means of punishment for specific youth, officers largely focused on the importance of parental involvement to reduce juvenile offending and DMC. Officers emphasized enhancing the accountability of the family within the juvenile justice system, suggesting that juvenile courts must place more pressure on parents to be involved in the counseling, rehabilitation, and ultimately the lives of their children. Overall, officers believed that the juvenile justice system would be more successful in addressing juvenile crime with heightened parental accountability. Additionally, officers highlighted the importance of the family and home environment of youth in the prevention of future offending.

As one example, it was suggested that for change in the prevalence of juvenile offending to occur (particularly in minority communities) changes must first be made in the home, “[Juvenile offending] needs to be addressed, but it has got to start at home.”

Specifically, officers suggested the potential efficacy of going into homes to assist parents earlier in the lives of youth and assessing the needs of specific families (e.g. parenting classes, relationship classes, employment). The goal of this type of service is to build a stable support network early on, rather than supply ‘Band-Aid’ solutions for deep-rooted problems years later. In the absence of such programs and services, officers suggested providing monetary compensation, or similar rewards, for effective parenting in certain communities – in essence incentivizing the development of proper child-rearing skills.

Finally, officers suggested the importance of early intervention and education programs for youth, arguing that community-based counseling, education, and mentor-type programs should be provided to youth at younger ages (i.e. elementary school ages) to increase the likelihood of positive life outcomes. Officers also argued for the early exposure of youth to police in positive ways, allowing for police to familiarize themselves with youth in the community and providing youth insight into the nature of policing, specifically that not all police are ‘bad guys.’ From their own experience, the focus group participants suggested that school resource officers can assist in this endeavor, commenting that SROs are an asset both in creating contacts with youth in schools and in providing patrol officers/other units with information regarding specific youth that can help inform the decision-making of officers in specific encounters with youth. Regarding education, officers consistently commented that learning opportunities must be expanded beyond the standard school curriculum. Specifically, it

was suggested that the introduction of trade or manual labor type skills could increase the likelihood of future employment, ultimately reducing the need for less traditional means of making money (i.e. crime).

Summary. In their discussion of disproportionate minority contact, the focus group participants in Lucas County emphasized the differential offending patterns of minority youth within their jurisdiction. While officers suggested several explanations for these patterns, overall the substantial degree to which minority youth were observed to offend was believed to be significantly influenced by the family and home environment of youth. Specifically, officers observed minority communities in their jurisdiction to be characterized by the breakdown of the traditional family structure, resulting in ineffective child-rearing practices (i.e. lack of prosocial models and discipline) and the perpetuation of antisocial/criminal behaviors among youth. Though officers highlighted the specific influence of these behaviors on police contact with minority youth, their discussion regarding this population's overall lack of deference to authority figures and other officials illustrates the broader tensions between predominantly minority communities and institutions, like schools and police, that may affect how youth develop and treat (and are treated by) agents of those institutions like teachers and police officers.

While officers largely focused upon the influence of family factors, their pointing out higher rates of juvenile offending in *lower income*, predominately minority communities suggests that the socioeconomic status of a given neighborhood may play some role in police contact with minority youth as well. Officers consistently hinted at the interaction between higher rates of poverty, reliance on government assistance, and the prevalence of single parent

homes in minority communities. Collectively, this cross-section of factors was viewed to increase offending among minority juveniles, resulting in higher calls for service and the identification of minority communities as crime-prone areas, increasing police presence and the enforcement of laws in these areas.

In the conclusion to the focus group discussion on disproportionate minority contact within their jurisdiction, the officers outlined several ways to reduce juvenile offending and (potentially) DMC. The number and scope of these recommendations (ranging from increasing the certainty/severity of punishment to increasing early intervention and family services) suggests the utility of a “multi-pronged” approach that responds to juvenile offending based upon the specific history and individual factors of a youth. Evident within this discussion was the officers’ belief that reducing juvenile crime and DMC is largely out of the control of the police. In fact, officers generally perceived themselves as the catchall for juvenile crime and a scapegoat for the juvenile justice system. They were also reluctant to handle incidents involving youth due to a time-consuming process that rarely generates substantive outcomes. Therefore, excluding their observations concerning the efficacy of placing SROs within schools, officers typically pointed to the responsibility of the juvenile court and community service agencies to effectively prevent and respond to the criminal involvement of youth.

Lucas County Juvenile Court

Data collection. The UC research team made contact with the Lucas County Juvenile Court in January 2013. Two conference calls were held with court administrators and IT/data management personnel to go over the requested cases and data fields and secure the court’s agreement to participate in the study. Lucas County then provided the research team with a

database file extraction of their record system in early 2015; this was recoded and revised to ensure appropriate inclusion of cases and measures. This resulted in the sample of roughly 7,000 records included in the analysis below.

Measures included in the analysis. The primary independent variable of interest was race, but we also included indicators for sex, age, number of charges in the current case, school attendance, weapon use, most serious offense category, and most serious offense level. *Race* was recorded as White, African American, and Other, and was recoded as a set of three variables capturing membership in each of these categories (or not). *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of charges* is a continuous variable indicating the number of separate charges in the current case. *School attendance* is a dichotomous measure that indicates whether the youth was attending school at the time of case initiation (0 = Attending school/Graduated, 1 = Not Attending/Suspended). *Weapon use* is a binary variable indicating whether the youth used a weapon in any offense in the current case (0=No, 1=Yes). If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property, drug/alcohol, and "other."⁵¹ Similarly, the *most serious offense level* variable (labeled "MisdStatus") captures whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status

⁵¹ The "Other" category includes all status offenses, among others.

offenses tend to be treated similarly, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables were dichotomous measures of whether youth experienced particular outcomes at four decision points: detention, dismissal, adjudication, and secure confinement.⁵² *Detention* indicates whether a youth was placed in secure detention while awaiting further proceedings. *Dismissed* identifies whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent, diversion). *Adjudicated* indicates whether a youth was formally found delinquent for the current case. *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility.

Data coverage and preparation. Overall, there were 7,143 cases referred to Lucas County Juvenile Court between January 1, 2010 and December 31, 2011. Fifty-four cases were excluded from the analysis because the youths' race was not identified, leaving a final sample of 7,089 cases. Among the variables used in the analyses, there was relatively little missing information regarding the case or youth. There was complete coverage (i.e., no missing data) for race, sex, age, weapon use, number of charges, most serious offense category, most serious offense level, and detention. There was 16.9 percent missing data for school attendance and 1.9 percent missing data for dismissal, adjudicated, and secure confinement. To retain all cases for analysis, we used multiple imputation (MI) to insert values for these four variables. MI replaces missing observations with predicted values based on other variables included in the

⁵² Diversion was not included in the analysis because the Lucas County Juvenile Court did not provide data on diverted cases. In addition, bindover was not included in the analysis because of the 28 cases waived to criminal court, only two cases involved White youth.

data—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, age, weapon use, number of charges, most serious offense category, and most serious offense level. MI first generates a specified number of datasets—in this case, ten—in which missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from those ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Descriptive statistics. In 2010-2011, African-American youth comprised 62.9 percent of the petitions to Lucas County Juvenile Court, White youth accounted for 30.7 percent, and Other youth accounted for the remaining 6.4 percent. According to the 2010 Census for Lucas County, these groups accounted for 23.6 percent, 65.9 percent, and 10.5 percent of the juvenile population ages 10-17, respectively. Taken at face value, these figures indicate a relatively substantial level of disproportionality in terms of the profile of cases coming into the juvenile justice system. Males accounted for 72.2 percent of the petitions, and the average age at case initiation was 15.84 years old (SD=1.52). Seventy-nine percent of the cases involved youths who were currently enrolled in school at the time of referral. A weapon was used in 9.1 percent of the cases. The mean number of charges in the current case was 1.51 (SD=1.08). The most frequent offense type was “other” (37.4%), followed by violent/sex (30.1%), property (24.2%), and drug/alcohol (8.3%). Most youth were charged with a misdemeanor or status offense (82.3%), with the remaining 17.7 percent charged with a felony.

Court outcomes. We estimated three statistical models for each of the four decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a

particular case outcome for African-American and Other youth as opposed to Whites, the first model considered only the effects of race on the decision point. The second model included race and other legally-relevant factors (number of offenses, most serious offense category, most serious offense level, and weapon use). The final model included the variables above (see Table 55), as well as the extralegal factors sex, age, and school attendance. Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Detention. In the initial model, the effect of race was mixed. African-American youth were 94 percent more likely to be detained than their White counterparts (OR=1.94), while the effect for Other youth was not significant. After adding legally-relevant variables in the second model, African-American youth remained significantly more likely to be detained compared to White youth, although the size of the effect decreased slightly (OR=1.90). The effect for Other youth remained nonsignificant. A one-unit increase in the number of charges in the current offense predicted a 106 percent increase in the odds of detention (OR=2.06). Youth charged with a drug/alcohol offense (OR=0.44) or “other” offense (OR=0.74) were significantly less likely to be detained relative to those charged with a violent or sex offense. Cases involving a misdemeanor or status offense were 65 percent less likely to result in the youth being detained compared to those involving a felony. The effect for weapon use was not significant.

When the extralegal variables were added in the final model, the effect for African-American youth remained significant (OR=1.68), while the effect for Other youth was nonsignificant. Each of the statistically significant legal variables from the second model maintained its significance in the final model with only negligible changes in the odds ratio.

Females were 31 percent less likely to be detained compared to males (OR=0.69), while youth who were not attending school or were suspended were 70 percent more likely to be detained relative to those who were attending school or had graduated. Age at filing was not a significant predictor of detention. Overall, the effect of race was mixed. The effect for African-American youth was statistically significant in each of the models, but the contrast between Other youth and Whites was nonsignificant.

Dismissed. In the initial model that included only race, both African-American (OR=0.77) and Other youth (OR=0.77) were significantly less likely to have their case dismissed relative to their White counterparts. After adding the legally-relevant variables in the second model, the effect for African-American (OR=0.78) and Other youth (OR=0.72) remained significant. A one-unit increase in the number of offenses in the current case predicted a 55 percent decrease in the odds of case dismissal (OR=0.45). Youth charged with a property offense (OR=0.61) were significantly less likely to have their case dismissed relative to those charged with a violent or sex offense. Youth charged with a misdemeanor or status offense were three times more likely to have their case dismissed compared to youth charged with a felony (OR=3.00). The effect of weapon use was not a significant predictor of case dismissal.

In the final model that included extralegal variables, the effect of race on case dismissal remained almost identical to the second model for both African-American (OR=0.78) and Other youth (OR=0.71). A one-unit increase in the number of offenses in the current case significantly increased the odds of case dismissal by 55 percent. Youth charged with a property offense (OR=0.65) were significantly less likely to have their case dismissed relative to those charged with a violent or sex offense. Of the extralegal variables, only youths' sex and age were

significant. Specifically, females were 71 percent more likely to have their case dismissed relative to males (OR=1.71), while a one-year increase in youths' age predicted a 5 percent decrease in the odds of case dismissal (OR=0.95). Overall, the effect of race for both African-American and Other youths was significant in each of the models.

Adjudication. In the initial model, African-American (OR=1.36) and Other youth (OR=1.27) were significantly more likely to be adjudicated delinquent relative to White youth. After adding legally-relevant variables in the second model, African-American (OR=1.34) and Other youth (OR=1.36) remained significantly more likely to be adjudicated compared to White youth. A one-unit increase in the number of charges in the current case predicted a 117 percent increase in the odds of adjudication (OR=2.17). Youth charged with a property offense were 70 percent more likely to be adjudicated relative to those charged with a violent or sex offense (OR=1.70). Youth charged with a misdemeanor or status offense (OR=0.38) were significantly less likely to be adjudicated compared to those charged with a felony. The effect for weapon use was not significant.

When the extralegal factors were added in the final model, the effects for both African-American (OR=1.34) and Other youth (OR=1.37) were almost identical to those in the second model. Similarly, the effects for number of charges in the current case (OR=2.14) and youth charged with a property offense (OR=1.62) remained significant, although each decreased slightly in size. Youth charged with a misdemeanor or status offense were 59 percent less likely to be adjudicated relative to those charged with a violent or sex offense (OR=0.41). Finally, females were 40 percent less likely to be adjudicated relative to males (OR=0.60), while a one-year increase in age at filing predicted a 4 percent increase in the odds of adjudication

(OR=1.04). Overall, both African-American and Other youth were significantly more likely to be adjudicated delinquent relative to their White counterparts in each of the statistical models.

Secure confinement. The analysis of secure confinement outcomes used the subsample of cases for youth who were adjudicated delinquent in Lucas County Juvenile Court (N=3,680). In the initial model, African-American youth were 24 percent more likely to be placed in secure confinement compared to their White counterparts (OR=1.24). The effect for youth in the Other category was not significant. After adding legally-relevant factors in the second model, the effect of race remained consistent with that found in the first model. African-American youth were 43 percent more likely to be placed in secure confinement relative to White youth (OR=1.43), while the effect for Other youth was not significant. A one-unit increase in the number of charges in the current case predicted an 11 percent increase in the odds of secure confinement (OR=1.11). Youth charged with a property offense (OR=1.44) were significantly more likely to be placed in secure confinement relative to those charged with a violent or sex offense, while youth charged with a drug or alcohol offense (OR=0.60) were significantly less likely to be placed in secure confinement.⁵³ Similarly, youth charged with a misdemeanor or status offense were 99 percent less likely to be placed in a secure facility relative to those charged with a felony (OR=0.01).⁵⁴ Secure confinement was the only decision point examined in

⁵³ 18% of the youth charged with a property offense were placed in secure confinement, while only 8% of those charged with a violent or sex offense were placed in secure confinement. This finding may be explained by the fact that of the cases involving violent or sex offenses, 80% of them were misdemeanors. Thus, even though these youths were charged with a violent or sex offense, it was a relatively minor offense.

⁵⁴ Of the cases involving youth charged with a misdemeanor, only 0.3% were placed in secure confinement (while 44.9% of cases involving felonies were placed in secure confinement). This low base rate of secure confinement for misdemeanor cases is the primary cause of the extremely low odds ratio for this variable.

which weapon use was significant. Specifically, cases involving a weapon were 57 percent more likely to result in secure confinement relative to cases where no weapon was used (OR=1.57).⁵⁵

When the extralegal factors were added in the final model, African-American youth were significantly more likely to be placed in secure confinement relative to White youth (OR=1.42), while the effect for Other youth remained nonsignificant. Youth charged with a drug/alcohol offense (OR=0.42) or an “other” offense (OR=0.53) were significantly less likely to be placed in a secure facility relative to those charged with a violent or sex offense. The effects for weapon use and for those charged with a property offense were no longer significant in the final model. Youth charged with a misdemeanor or status offense were 99 percent less likely to be placed in secure confinement relative to those charged with a felony. Each of the three extralegal variables was significant. Females were 71 percent less likely to be placed in secure confinement (OR=0.29) compared to males, while youth who were not attending school or were suspended were twice as likely to be placed in secure confinement relative to those attending school or who had graduated (OR=2.02). Finally, a one-year increase in youths’ age predicted a 17 percent increase in the odds of secure confinement. Overall, in each of the three models, African-American youth were significantly more likely to receive a secure confinement disposition relative to White youth. The effect for cases involving youth in the Other category was not statistically significant in any of the models.

Initial and conditional probabilities of case outcomes. Figure 17 displays the initial and conditional probabilities for each of the outcomes by youths’ race (White/African American). The initial probabilities reflect the likelihood that White and African-American youth will

⁵⁵ This finding is expected since any youth convicted/adjudicated in Ohio for an offense that involves displaying, possessing, or using a firearm to commit an offense is required to be placed.

experience the case outcome without consideration of any of the other influences mentioned above. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and African-American youth will experience a particular case outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case.⁵⁶ This also allows us to consider whether any differences between White and African-American youth observed for the base analysis shift when accounting for other relevant case factors.

Overall, the results follow those discussed above. Cases involving African-American youth had slightly higher probabilities of detention, adjudication, and secure confinement. In addition, African-American youth had lower probabilities of case dismissal. Generally, the gaps between White and African-American youth tended to be larger in the unconditional cases and narrowed somewhat when other legally-relevant and extralegal variables were considered, but they did not fully diminish. For example, the unconditional probability of case dismissal was 0.426 for African-American youth and 0.492 for White youth—a difference of 0.066. Once the other variables were included, the conditional probabilities for case dismissal increased to 0.446 for African-American youth and 0.509 for White youth, a difference of 0.063 points on a proportion scale.

⁵⁶ The mean values for number of charges in the current case (1.51) and age at case initiation (15.84) were used to calculate predicted probabilities for detention, dismissal, and adjudication. The remaining variables were set to their most frequently appearing categories: offense type – “other”; offense seriousness – misdemeanor/status offense; sex – male; school attendance – attending/graduated; and weapon use – no. Because secure confinement is typically reserved for the most serious offenses/offenders, the values for offense type and offense seriousness were changed to violent/sex and felony, respectively, in the calculation of the conditional probabilities for this decision point. The values for the other variables remained the same.

Table 55. Binary Logistic Regression – Outcomes for Lucas County Juvenile Court (Full Models)

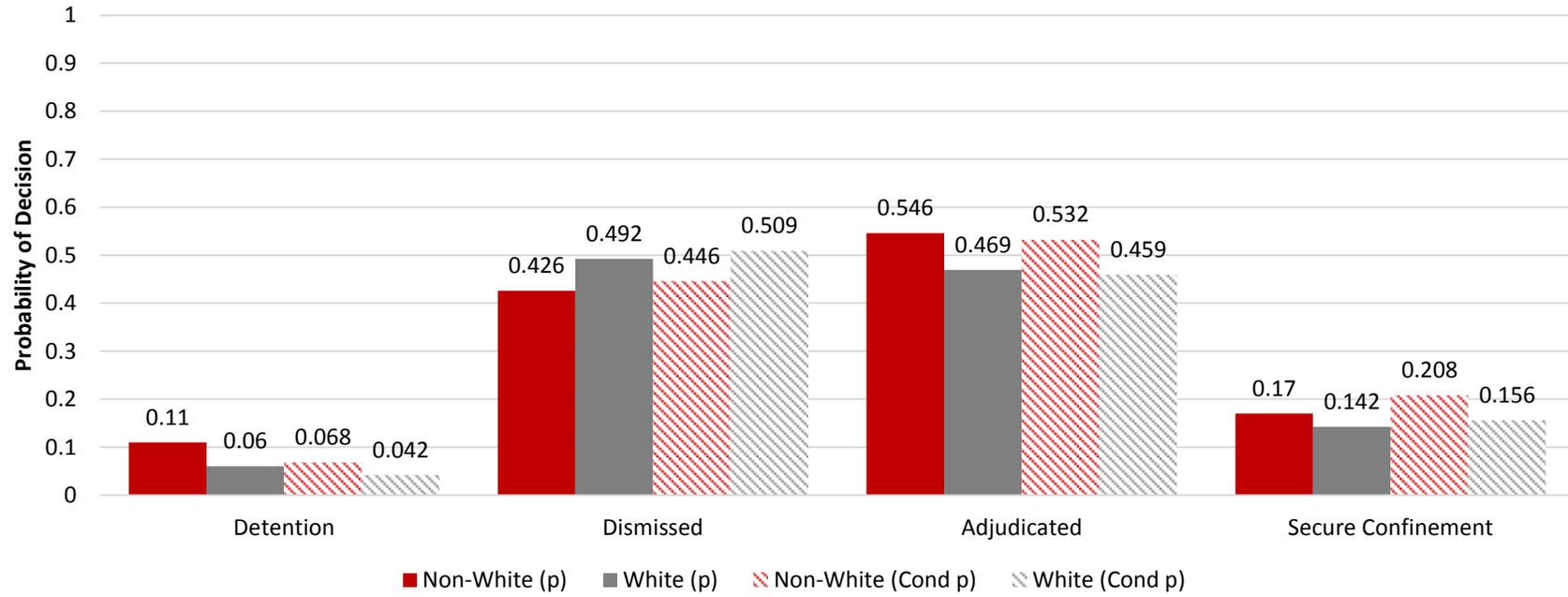
	Detention			Dismissed			Adjudicated			Secure Confinement*		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Black/AA	0.52	1.68	0.12	-0.25	0.78	0.06	0.29	1.34	0.06	0.35	1.42	0.15
Other	0.26	1.30	0.23	-0.34	0.71	0.11	0.31	1.37	0.11	-0.20	0.81	0.33
Num. of Charges	0.70	2.02	0.04	-0.79	0.45	0.04	0.76	2.14	0.04	0.13	1.14	0.05
<i>Offense Type</i> ¹												
Property	-0.06	0.94	0.12	-0.43	0.65	0.08	0.48	1.62	0.07	0.19	1.21	0.15
Drug/Alcohol	-0.94	0.39	0.21	-0.04	0.96	0.11	0.02	1.02	0.11	-0.87	0.42	0.24
Other	-0.32	0.72	0.13	0.11	1.11	0.07	-0.05	0.95	0.07	-0.63	0.53	0.29
Misd/Status	-0.95	0.39	0.11	1.02	2.78	0.09	-0.89	0.41	0.08	-5.01	0.01	0.24
Weapon Use	-0.10	0.91	0.16	-0.05	0.95	0.10	-0.18	0.84	0.09	0.38	1.47	0.21
Sex	-0.36	0.69	0.13	0.54	1.71	0.06	-0.50	0.60	0.06	-1.23	0.29	0.21
Age	0.05	1.05	0.03	-0.05	0.95	0.02	0.04	1.04	0.02	0.15	1.17	0.05
School Attendance	0.53	1.70	0.19	0.15	1.17	0.14	-0.19	0.83	0.14	0.70	2.02	0.34
Constant	-3.69		0.57	0.87		0.30	-1.00		0.30	-2.50		0.76

Notes: Bolded entries represent statistically significant estimates at $p < .05$; B = logit coefficient; OR = odds ratio; SE = standard error

* This analysis used the subsample of youth who were adjudicated delinquent; N = 3,680

¹ Reference category is Violent/Sex Offense

Figure 17. Summary of Initial Probabilities and Conditional Probabilities for Lucas County Juvenile Court



Summary of juvenile court record analysis. African-American youth accounted for 62.9 percent of the petitions to the Lucas County Juvenile Court, White youth accounted for 30.7 percent, and youth in the Other category accounted for the remaining 6.4 percent. According to the 2010 U.S. Census, however, these groups accounted for 23.6 percent, 65.9 percent, and 10.5 percent of the juvenile population in Lucas County, respectively. These numbers indicated that, on the surface, there was a high degree of disproportionate minority contact within the cases coming into the Lucas County Juvenile Court.

In the bivariate models, youths' race was a significant predictor—to varying degrees—in each of the four outcomes. Specifically, African-American youth were significantly more likely to be detained, adjudicated, and placed in secure confinement, and less likely to have their case dismissed relative to White youth. Similarly, youth in the Other category were more likely to be adjudicated and less likely to have their case dismissed compared to White youth.

To better understand how race might affect juvenile court decision-making relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal factors. The results of the full models mirrored those of the bivariate models and indicated that race still played a significant role in each of the four decision points in the data provided by Lucas County.

Lucas County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Lucas County court staff in May of 2014. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and

the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court involvement and outcomes. Sixteen interviews were conducted with administrative (programming directors and department supervisors), supervision, intervention, and judicial staff. Representatives from the Prosecutor and Public Defender's Office were also interviewed. The interviews lasted between 30 and 90 minutes, depending on interviewees' roles in the court and their level of disclosure. Data were then gathered on initial review and disposition hearings (9) observed in May of 2014.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. A majority of respondents believed that system policies and procedures contributed to the overrepresentation (and disadvantage) of minority youth. Staff differed in their opinion of how these factors impacted juvenile justice processes in Lucas County, however. Most court officials (38%) linked system bias to police practices, rather than court policies and procedures, and identified differential street-level policing strategies as potential explanations for DMC. Recognizing the impact of front-end decisions on DMC, staff (4 of 16) also cautioned that jurisdictional differences between urban and rural ordinances contributed to disparate outcomes and different opportunities for diversion.

Others (31%) linked racial biases and the perceptions of decision makers to disparities in case processing outcomes. Further, staff (2 of 16) recognized that the coalitions tasked with identifying strategies to address (and temper) DMC lacked diversity and excluded important members of the community. Making this point specifically, one staff member explained,

“[As an agency] we’ve made progress, but the reality is that the people in power are disconnected... and ideas look different through privilege... Juvenile Justice and DMC [coalitions] should reflect the community and [include] the perspectives of those directly impacted...For example, we surveyed the Family Advisory Committee. [Responses ranged from] families needing more chances, [more time] to make progress, and hearing [feedback on areas of strength and progress] rather than only things they do poorly...We need more community advocates to be engaged. We want their voices.”

The education system. Staff linked poor academic performance, a lack of attachment to school, truancy, and punitive approaches to school discipline and misconduct under the Safe School Ordinance (SSO) to disparate outcomes. Discussions also focused on strategies to address educational factors including, a review of school-discipline data to track and/or identify patterns on the number of school-based arrests and school-based referrals to the juvenile court (e.g., court’s review of SSO violations); the development, promotion, and (continued) funding of training opportunities for teachers, administrators, and school resource officers on classroom and behavior management, de-escalation techniques, alternative interventions and supports such as the Pathways to Success Initiative (PtSI) (Malsch et al. 2012), and the need to implement proactive discipline policies. For example, case observation #2-3 illustrated the court’s effort to de-emphasize the use of detention (or intensive intervention) with school-related offenses. During review, the court noted the youth’s progress at school and the positive reports from teachers. As a result, the youth’s SSO charge was dismissed.

The family system. Staff felt that the interests of youth are best served by intervention(s) that include family members as active participants in the treatment and supervision process. They also viewed family dysfunction (i.e., ineffective parental discipline, lack of parental involvement, family conflict) as contributing to the overrepresentation of minority youth and as justification for court intervention.

“Parents have a direct impact. [With no alternative], families involve the court because they lack the skills to handle their child’s behavior. In other cases, families foster this type of behavior and reinforce attitudes [favorable] of crime.”

“If parents are willing to cooperate and provide [structure], [we] are more likely to release the child to their parent rather than hold them, or place them under intensive supervision.”

“Family doesn’t play a role in the decision making process per se – legal factors are more relevant. But, it can influence [detention/release decisions]. [Youth from involved families] are likely to be released, since [there’s the perception youth will be] supervised and monitored.”

Discussions also focused on how community disadvantage and cultural bias exacerbate familial risk. For example, one interviewee said that,

“[Officials] rely on perceptions about youth and their family. Youth who are perceived as coming from higher-risk families are perceived needing more supervision. [Cultural] differences in styles of speech, expression, demeanor, dress, [and parenting] also [shape] perceptions of youth.”

This interviewee went on to say that “officials lack rapport and struggle [to connect] with families. Families feel misunderstood and are resistant.” This seemingly reinforces the impression that the youth and their family are uncooperative in the court and treatment process. These staff (3 of 16) cautioned that families, particularly minority families living in poor areas with limited access to transportation and/or flexibility to take time off work, are misjudged (or stereotyped) as being un-invested in their child’s wellbeing and progress despite

their effort to be involved. Overall, staff identified familial issues as contributing to DMC but also noted how staff's perceptions (or misperceptions) of family interacted with the court's operations and recommendations for interventions.

Socioeconomic status and neighborhood context. Respondents (38%) explained that the risks and needs of youth, particularly minority youth, are multifaceted and subsumed by broader community disadvantage. Specifically, minority overrepresentation was seen as a result of differential offending due to impoverished conditions, dysfunctional families, and affiliation with gangs. Making this point directly, one staff member commented, "Youth live in [environments that are de-sensitized to] violence, and where guns and gangs [are a potential] choice." Another staff member commented that, "We see a number of youth commit property crimes to support their families."

Interviewees also recognized the importance of and challenges to interagency collaboration when addressing these issues, and attributed a lack of progress to constituents—and especially law enforcement's—limited support for and investment in reform strategies. Staff commented that, "Agencies aren't proactive, "Not much has changed," "We need to take a bottom-up approach that includes *all* facets (or areas) of the Criminal Justice System," and that "Progress is evident, but for continual growth we need our constituents to be honest and willing to participate." In general, during the interview process, staff emphasized that dialogue builds consensus around DMC issues. Making this point specifically, one staff member stated that, "we need people at the table to be less defensive and more willing to engage."

Others (31%) linked differential policing and deployment strategies to disparate outcomes, and suggested that the higher surveillance or targeting of "hot spot" areas cause

youth, particularly minority youth, to be more visible, arrested, or detained. These views were consistent with system-level discussions, as noted above. As one staff member explained, “DMC is a result of broader issues of poverty [and disadvantage].” Another respondent added that, “policing high crime neighborhoods and the crackdown of (sic) crime increases youths’ contact [with the system] and impacts [DMC].”

Summary. Respondents identified jurisdictional differences in police practices, front-end policies and procedures, and cross-cultural barriers as contributing to the overrepresentation of minority youth in the juvenile justice system. They also mentioned the schools’ approach to delinquency and Safe School Ordinance policies as playing a role in DMC. Finally, respondents linked racial and ethnic-based biases to system-level, neighborhood, and familial factors. Specifically, minority overrepresentation in the system was seen as a result of differential offending due to impoverished conditions, dysfunctional families, and affiliation with gangs. Accordingly, regard for weapons-related, and particularly gun-related offenses, were considered key factors in referral and detention decisions by staff and evident in the court observations. Other considerations in decision-making, according to staff, include youths’ mental health and substance abuse history.

Notwithstanding these challenges, the court has implemented a number of initiatives that have subsequently re-shaped their approach to juvenile justice, including the opening of the Assessment Center and the revision of warrant and court violation policies. Specifically,

“The collaboration led to significant reforms...The court implemented a tiered system to reduce its use of detention. Red warrants are more severe and [require] youth be held in detention. Green warrants are issued for less [serious incidents] or violations of court order. Green warrants are [diverted] to the Assessment Center.”

The use of “pocket cards” to identify detention alternatives carried by the police, the cultivating of local partnerships to address delinquency, participation in Catherine MacArthur Foundation’s Models for Change, RECLAIM, decision point mapping and data review (e.g., school-based law enforcement and discipline strategies were identified as contributing to DMC) were also cited as contributing to the court’s success addressing delinquency and disproportionate minority contact. One interviewee commented that, [At the] outset of these initiatives, the court was an ‘open gate.’ Detention was the default. It was very disparate, and [there were] serious issues.” This interviewee went on to say that, since those initiatives took hold, however, the court has worked to change practice and balance community desire for safety with appropriate diversion and treatment.

Summary of Findings and Implications: Lucas County

Overall, the arrest data suggest that African-American youth account for the majority of 782 juvenile arrests provided by the Toledo Police Department (75.0%). The RRI and odds ratio values do suggest some disproportionality in minority arrests, especially for African-American youth. Most serious offense level and weapon use data suggest that the race groups are reasonably comparable on those arrest characteristics and White youth are more often arrested for violent/sex offenses. This makes it somewhat difficult to explicitly point toward possible reasons for the different likelihood of arrest across the two groups.

Two focus groups were held in Lucas County, including 14 officers in total. In their discussion of disproportionate minority contact, the focus group participants in Lucas County emphasized the differential offending patterns of minority youth as the primary reason for

DMC. In particular, officers emphasized the importance of family structure and parenting processes in affecting youth behavior and shifting the burden onto the police and juvenile justice system. While officers largely focused upon the influence of family factors, their observations of higher rates of juvenile offending in lower income, minority areas indicate that socioeconomic status may also play a role in police contact with minority youth. The officers believed that reducing juvenile crime and DMC must fall to agencies other than the police. The participants suggested that they were often blamed for the shortcomings of families, schools, and juvenile justice and had to handle problems that would be better left to those institutions.

We analyzed 7,089 court records provided by the Lucas County Juvenile Court. The relative prevalence of minority and White youth in the sample—compared to their population numbers—suggests that there was a degree of disproportionate minority contact within the cases coming into the Lucas County Juvenile Court. In the bivariate models, youths' race was a significant predictor—to varying degrees—in each of the four outcomes. Specifically, African-American youth were significantly more likely to be detained, adjudicated delinquent, and placed in secure confinement, and less likely to have their case dismissed relative to White youth. Similarly, youth in the other race group were more likely to be adjudicated and less likely to have their case dismissed compared to White youth. The results of the statistical models that included legally-relevant factors were similar to those of the bivariate models, suggesting that race did have a significant relationship with the case outcomes of interest when incorporating relevant alternative influences.

Sixteen interviews and several court observations were conducted in Lucas County Juvenile Court. Respondents identified jurisdictional differences in police practices, front-end

court policies and procedures, and cross-cultural barriers as contributing to the overrepresentation of minority youth in the juvenile court. They also mentioned the schools' policy and practices around student behavioral issues as playing a role in DMC. Respondents also linked racial and ethnic-based biases to system-level, neighborhood, and familial factors. Specifically, minority overrepresentation in the system was seen as a result of differential offending due to impoverished conditions, dysfunctional families, and affiliation with gangs. Accordingly, regard for weapons-related, and particularly gun-related offenses, were considered to be important in referral and detention decisions by staff and evident in the court observations. Some of the concerns about parental influences and other related problems raised in the interviews were quite similar to the points raised by the police officers. The interviewees suggested that holistic, integrated approaches to DMC issues would be most effective in alleviating the problem. Given this, we would recommend review of records for the time period after commencement of work with the Burns Institute and Juvenile Detention Alternatives Initiative (JDAI). Those efforts may not be fully captured in the case records analyzed here, which show disproportionality in each of the four case outcomes analyzed in the time range considered here.

Table 56. Summary of Key Findings from DMC Assessment: Lucas County

Available Data w Notes	Key Findings	Implications
782 arrest records from one police department	African-American youth account for majority of arrests (75%), but difficult to point to specific factors (e.g., offense level, weapon use comparable by race)	Focus group participants mentioned respect for authority and police in some comments, which highlights some divides between police and minority youth (and communities) that require work
Two focus group sessions (14 officers)	Officers suggested several explanations for DMC, but generally differential offending was key factor and was influenced by home environment and poverty	SROs provided some insight on problems that sometimes drive youth behavior that could be incorporated in training
7,089 juvenile court records	Mention aspects of interaction between youth and officers that might affect arrest	Should consider DMC patterns and possible intervention across multiple stages—especially any front-end and cultural barrier issues that could be addressed
16 interviews with court staff and nine observations	Significant, moderate-sized relationship between race and four court outcomes analyzed (Detention, Dismissal, Adjudication, and Secure Confinement) that are indicative of DMC	Partnership with schools Began working with JDAI and Burns after record period
	Interviewees identified jurisdictional differences in police practices, front-end policies and procedures, and cross-cultural barriers	
	Also mentioned the schools’ policy and practices around student behavioral issues Gun-related offenses were considered to be important in referral and detention decisions	

MAHONING COUNTY, OH

Mahoning County Police Agency Data

Neither of the Mahoning County police agencies, Boardman Township PD or Youngstown PD, agreed to participate in the study. Each agency was initially contacted in the Spring of 2013. In both cases, research staff did make contact with those at the site and answered preliminary questions but that did not lead to participation. Specifically, Boardman Township did not respond after three contacts with research staff (including the return of contact form). Multiple attempts were made to follow up without success. Youngstown PD was contacted in April of 2013 as well. Several attempts were made to secure the agency's agreement to participate. Research staff had some correspondence regarding data requests—including scheduling a phone call with agency staff—but communication stopped in September of 2013.

Mahoning County Juvenile Court Record Data

Data collection. Paper court records were hand-collected from the Mahoning County Juvenile Court and coded by research staff. The main objective was to include about 300 records total, with a roughly 50:50 split of White and Non-White youth for comparative purposes. Court records were organized by youth name so any active case in a given year was included in the sample if it was selected. The sampling and data collection process was followed for all 2010 and the majority of 2011 cases – excluding approximately 15 pages of the 2011 roster (as described below). Per requirements of the site, rosters remained at the Mahoning Court when not used for data collection/extraction, but were not available during the second round of data collection. This resulted in a small percentage of cases that were not sampled

(9.9%) but instead selected consecutively from the roster. There were no significant differences in racial composition between this subgroup of cases and the rest of the sample.

Measures included in the analysis. The primary variable of interest was race, but we also include indicators for sex, age at case initiation, number of charges in the current case, most serious offense category, and most serious offense level. Because there are very few Non-African-American minority youth in the sample, *race* is recorded as *White/Non-White*. *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of charges* is a continuous variable indicating the number of separate charges in the current case. If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property, drug/alcohol, and other.⁵⁷ Similarly, the *most serious offense level* variable captures whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly in juvenile courts, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables were dichotomous measures that indicated whether youth experienced particular outcomes at four decision points: diversion, detention, dismissal, and adjudication.⁵⁸ Each of these variables is coded as yes/no. *Diversion* indicates whether youth were diverted from formal processing at the front end of the court process. *Detention*

⁵⁷ Due to the small number of status offenses (16) in the sample, these offenses were included in the other category of most serious offense category.

⁵⁸ Waiver to adult court and secure confinement were not included in this analysis because none of the 57 White youth in the sample were placed in secure confinement or waived to criminal court. This means that there was no variation to analyze on those measures.

indicates whether youth were placed in secure detention while awaiting further proceedings. *Dismissed* identifies whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent). *Adjudicated* indicates whether a youth was formally found delinquent for the current case.

Data coverage and preparation. As noted above, the research team collected a random sample (N=328) from the population of juveniles who were petitioned to the Mahoning County Juvenile Court in 2010 and 2011. One case was excluded because the youth's race was not identified, leaving a final sample of 327 cases. The sampling procedure, which attempted to ensure relatively equal groups, required us to weight the sample prior to conducting analyses. The weights were computed based on the 2009 referral numbers provided to DYS by the Mahoning County Juvenile Court. Table 57 provides the data used to calculate these weights.

There was relatively little missing data in the sample. There was complete coverage (i.e., no missing data) for race, sex, number of charges, most serious offense category, most serious offense level, diversion, dismissed, and adjudication. There was 1.5 percent missing data for age and 15.6 percent for detention. To retain all cases for analysis, we used multiple imputation (MI) to insert values for these two variables. MI replaces missing observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, number of charges, most serious offense category, and most serious offense level. MI first generates a specified number of datasets—in this case, ten—in which the missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each

imputation and then the results from each of the ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Initial and conditional probabilities of case outcomes. Figure 18 displays the initial and conditional probabilities for each of the four outcomes by youths' race (White/Non-White). The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any of the other factors discussed above. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and Non-White youth will experience a certain outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case.⁵⁹ This also allows us to consider whether any differences between White and Non-White youth observed in the base analysis are affected when accounting for other relevant influences attached to the case.

Descriptive statistics. In 2010-2011, males accounted for 81.7 percent of the petitions in the sample and Non-White youth represented 82.6 percent. The average age at filing was 15.8 years old (SD=1.51). The mean number of charges in the current case was 1.56 (SD=0.75). Slightly more than half (51.7%) of the youth were charged with a felony offense; the remaining 48.3 percent were charged with a misdemeanor or status offense. The most frequent offense type was violent/sex offenses (44.6%), followed by property offenses (31.8%), other offenses (16.8%), and drug/alcohol offenses (6.7%).

⁵⁹ The mean values for number of charges in the current case (1.56) and age at filing (15.83) were used to calculate predicted probabilities for each of the four outcomes. The remaining variables were set to their most frequently appearing categories: offense type – violent/sex offense; offense seriousness – felony; and sex – male.

The racial distributions for each of the four decision points showed relatively few differences between White and Non-White youth. Only 5.3 percent of White youth and 5.9 percent of Non-White youth had their cases diverted. Approximately 22 percent of White youth and 30 percent of Non-White youth were detained prior to adjudication. Regarding case dismissal, 3.5 percent of White youth and 3.0 percent of Non-White youth had their case dismissed. Finally, the percentages of White youth (82.5%) and Non-White youth (82.2%) who were adjudicated delinquent were almost identical.

Court outcomes. We estimated three statistical models for each of the four decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for Non-White youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and other legally relevant factors (number of charges, most serious offense category, and most serious offense level). The final model (see Table 58) included the variables above, as well as the extralegal factors sex and age. Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Diversion. In the race-only model, the effect of race on diversion was not statistically significant. Specifically, while the initial probability of diversion for White youth (0.05) was slightly lower than that for Non-White youth (0.06), this small difference was not statistically significant (see Figure 18). This indicates that there was no evidence of initial disproportionality in these data. When the legally-relevant factors were included in the second model, the effect

of race remained nonsignificant. None of the legally-relevant variables were statistically significant.

In the final model, which included extralegal variables, the effect of race remained nonsignificant. Each of the legally-relevant and extralegal factors was nonsignificant as well. The predicted probabilities of diversion for White and Non-White youth were the same (0.05) and almost identical to the initial probabilities. As shown in Table 58, none of the measures available in the data collected from Mahoning County, including race, were statistically significant predictors of diversion.

Detention. In the initial model, race was not a significant predictor of pre-adjudication detention. As shown in Figure 18, the initial probability of detention for White youth (0.21) was lower than that for Non-White youth (0.31), but this difference was not statistically significant. After adding legally-relevant factors in the second model, youth's race remained nonsignificant. Youth charged with a property offense (OR=0.33) or other offense (OR=0.41) were significantly less likely to be detained than those charged with a violent or sex offense. None of the remaining legally-relevant factors had a statistically significant effect on the detention outcome.

When the extralegal factors were added in the final model, the effect of race remained nonsignificant. The significant effect for those charged with a property offense (OR=0.30) or other offense (OR=0.38) increased slightly from the second model. The effects of the two extralegal variables—sex and age—were not statistically significant. For detention, the conditional probabilities for both White (0.35) and Non-White youth (0.52) were greater than the initial probabilities and the gap between the two increased slightly, although the difference

was still not statistically significant. Overall, the effect of race on detention was not significant in any of the analyses, which suggest that there was no statistically detectable presence of DMC in these data. Instead, results indicated that the decision to detain youth was most affected by offense type.

Dismissed. In the race-only model, race was not a significant predictor of case dismissal. The initial probabilities for white (0.04) and non-white youth (0.03) were almost identical, indicating no initial disproportionate contact in the data. Similarly, in the second model that included legally-relevant factors, the effect for race remained nonsignificant. In addition, none of the legally-relevant factors was statistically significant.

In the final model that included extralegal variables, the effect of race was nonsignificant. Similar to the second model, none of the legally-relevant or extralegal variables were significant predictors of case dismissal. The conditional probabilities for White and Non-White youth (0.02) were identical and only slightly lower than the initial probabilities. Overall, none of the measures available in the data—including race—was a statistically significant predictor of case dismissal.

Adjudication. The final decision point examined was adjudication. In the initial model, race was not a significant predictor of this decision. The initial probability of adjudication for White youth (0.83) was almost the same as that for Non-White youth (0.82), which suggests that there was no initial disproportionality in these data. After adding legally-relevant variables in the second model, the effect of race remained nonsignificant. The only significant effect found in the remaining variables was for youth charged with a drug or alcohol offense

(OR=0.10), who were significantly less likely to be adjudicated delinquent relative to those charged with a violent or sex offense.

In the final model with the extralegal variables, the effect of race remained nonsignificant. Similar to the second model, youth charged with a drug or alcohol offense (OR=0.09) were significantly less likely to be adjudicated delinquent compared to youth charged with a violent or sex offense. None of the remaining legally-relevant or extralegal variables were statistically significant. For adjudication, the conditional probabilities for White (0.89) and Non-White youth (0.88) were very similar and only slightly higher than the initial probabilities, again indicating no presence of DMC in these data when holding other influences constant. Overall, race was not a significant predictor of adjudication in any of the three models. Instead, the results indicated that the adjudication outcome was associated with offense type.

Table 57. Stratification Sample Weights for Mahoning County Juvenile Court

Race	“Referral Population” N (2009)	Proportion of Population	Sample N	Proportion of Sample	Weight
White	802	0.3787	57	0.1743	2.172
Non-White	1,316	0.6213	270	0.8257	0.753
Total	2,118	1	327	1	

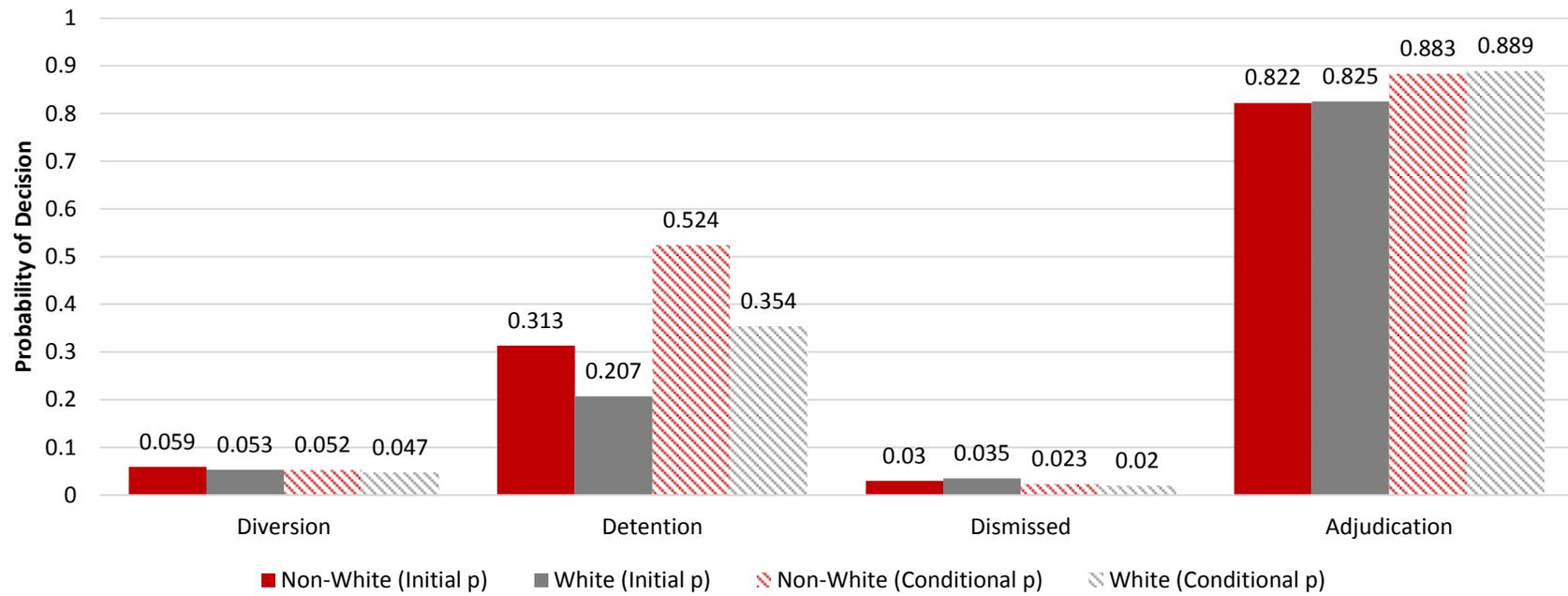
Table 58. Binary Logistic Regression – Outcomes for Mahoning County Juvenile Court (Full Models)

	Diversion			Detention			Dismissed			Adjudication		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	0.10	1.10	0.77	0.70	2.01	0.38	0.11	1.12	0.65	-0.07	0.94	0.39
Num. of Charges	-0.19	0.82	0.39	0.20	1.23	0.20	0.19	1.22	0.59	0.17	1.19	0.28
Fel/Misd	-0.86	0.42	0.63	-0.56	0.57	0.34	-0.78	0.46	0.68	0.21	1.24	0.36
<i>Offense Type</i> ¹												
Property	0.44	1.55	0.60	-1.22	0.30	0.35	0.68	1.98	0.58	-0.67	0.51	0.41
Drug/Alcohol	0.23	1.26	1.21	0.24	1.28	0.60	----	----	----	-2.42	0.09	0.61
Other	0.54	1.72	0.78	-0.96	0.38	0.43	-0.31	0.74	1.26	-0.63	0.53	0.48
Sex	0.31	1.37	0.68	-0.74	0.48	0.49	0.04	1.04	0.77	0.12	1.13	0.45
Age at Filing	-0.37	0.69	0.22	0.03	1.03	0.11	0.64	1.89	0.42	0.18	1.20	0.13
Constant	3.21		2.85	-1.37		1.99	-14.27		7.14	-1.05		2.17

Notes: Bolded entries represent statistically significant estimates at p<0.05; B = logit coefficient; OR = odds ratio; SE = standard error

¹ Reference is Violent/Sex Offense

Figure 18. Summary of Initial Probabilities and Conditional Probabilities for Mahoning County Juvenile Court



Summary of juvenile court record analysis. Overall, the case record data analyzed for Mahoning County Juvenile Court provides relatively little evidence of disproportionate minority contact. Even when analyzed alone, race was not a significant predictor of any of the four court outcomes. This can be observed in the very slight differences between White and Non-White youth probabilities of outcomes at the four decision points that were analyzed. Although the difference between the White and Non-White probabilities for detention (0.10) was slightly larger than the other decision points, it was not statistically significant. To better understand how race might affect juvenile court decisions relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal variables. Like the bivariate models, race was not a significant predictor in any of the models. Instead, it appears that the most consistent predictor of detention and adjudication was offense type. None of the legal or extralegal variables was significant predictors in the diversion or dismissal analysis.

Mahoning County Juvenile Court Interviews

Procedure. Researchers interviewed a cross-section of court staff in April of 2013. A semi-structured discussion protocol that asked questions in the areas of disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and legal and social services available in the community was used. Questions also focused on identifying community assets and strategies to address identified causes of disproportionality. The thirteen interviews were conducted with detention and treatment staff (intake staff and treatment facilitators), administrative staff (programming directors and department supervisors), court actors (Judges

and magistrates), and one community stakeholder. Interviews lasted between 30 and 90 minutes, depending on the respondent's role and their level of disclosure.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth. Representative quotes and rating scales were drawn out to support explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. Respondents were asked to rate the degree to which disproportionate minority contact existed in the court and, if so, what factors contributed to minority overrepresentation in the local jurisdiction. Three primary explanations emerged. First, there was the belief that differential street-level policing contributed to minority overrepresentation. One respondent gave the possible explanation that police target areas with high crime rates, gang and drug activities, violence, and that these neighborhoods typically have large populations of African-American youth. A second explanation centered on the need for system resources. Specifically, respondents mentioned the need to implement gender-specific and gender-sensitive programs designed to meet the risks and needs of girls' and to promote positive self-image. Females were described as "being at a [further] disadvantage" because there were fewer resources to address gender-specific needs (e.g., history of trauma and abuse, mental health, physical and sexual health, importance of relational connections). System resources (and budget cuts) were also regarded as important given the "vast geographical area" the court serves. Participants argued that access to resources is limited by geography, and that the risks and needs of urban and rural youth differ markedly. Several other respondents rated

the juvenile justice system as contributing to disproportionate contact, but offered no further explanation about system factors.

Approximately half (7 of 13) of respondents believed that disproportionate contact was no longer an issue in Mahoning County, due to the court's "balanced and consistent" approach and support for programming and treatment. Respondents identified legal (e.g., severity of the intake offense, prior involvement), administrative (e.g., OYAS and risks/needs assessment recommendations), and individual (e.g., need factors amenable to change such as family, school record, substance abuse) criteria as key factors in the decision-making process and linked these policies and procedures to favorable outcomes. Staff members also favored diversion and community-based programs for long-term behavior change, commenting that "diversion and treatment are an important focus of the court [rather than race]." This view was reflected in another interviewee's response who mentioned that their decisions generally are based on "the severity of the offense and public safety. A lot of diversion [happens]. [We dedicate] a lot of resources to programming." Staff ratings on the courts' effort to implement and direct initiatives toward DMC, as well as ratings on the court's ability to deal with the problem of DMC, were consistent with these observations.

The education system. Staff members suggested that while disparities may be, in part, attributed to real differences in youths' circumstances (socioeconomic and family factors), school officials and parents also play a role by passively allowing youth, particularly minority youth, to disengage or drop out from school. Staff also recognized the role that schools play in the prevention and, in some cases, escalation of juvenile offending. One staff member commented that,

“Schools are failing. The [education] system works against students who are dependent on substances, mentally ill, or at-risk for gang involvement. We lose students because [overwhelmed] parents put them in alternative school programs like Life-Skills.

Others felt that law enforcement and schools’ responses to misconduct were sometimes disproportionate (overreliance on suspension, expulsion, or court referral), and that alternatives to charging (or, referring) youth were not always considered or known. For example, one staff member stated that “SROs and school [officials] mark youth [who have behavior issues] early. [There] needs to be more awareness.”” Importantly, a number of staff members recognized that inter-agency collaboration and training were a part of an agenda on DMC issues, and credited a recent decrease in school disciplinary referrals to the informational and training sessions held with school and law enforcement officials.

The family system. Staff (5 of 13) felt that social conditions of poverty and family structure brought youth, particularly minority youth, into greater contact with the juvenile justice system. Specifically, single-parent households, intergenerational involvement in the system, drug use, and family dysfunction by way of neglect, abuse, or conflict were discussed. As noted above, the stability of the family was also connected to school performance and behavioral problems. System actors’ also perceived youth as being more vulnerable to, or at greater risk for juvenile justice involvement when they came from homes with poor family involvement.

“Our biggest obstacle is engaging parents. Behavior change is difficult [especially] when kids share that they’ve tried to use problem solving skills (e.g., an intervention skill taught at the court) and their parents are resistant.”

Staff members’ concerns about family involvement in all cases were evidenced by the number of programs and services provided by the court. Staff listed wraparound services to

identify multi-system youth and their families, Family Therapy Intervention Pilot (FTIP), and the use of incentives to increase family engagement (bus tokens, gas cards, and food). Wraparound is an intensive, individualized care-planning and family-based intervention that attempts to provide youth with a number of services simultaneously to address multiple risks and needs. Wraparound also seeks to expand youth's support network and include extra-familial support systems in treatment including, supervision officers, treatment providers, teachers, or coaches. Notwithstanding these efforts, the effectiveness of interventions may be moderated, at least in part, by structure and functioning of families.

Socioeconomic conditions and neighborhood context. Nearly all respondents (92%) identified poverty, and poverty-related circumstances, as strongly contributing to the overrepresentation of minority youth in the juvenile justice system. As one staff member explained, "Mahoning is the second-most impoverished county in the state. I think that in order to understand the impact [of DMC], we need to consider the [context] of how children live." Specifically, respondents linked high rates of unemployment, limited access to learning and enrichment opportunities, residential transiency, and differential resource availability (transportation, social support networks, health care) to disparate outcomes. Respondents also noted how economic strain diminishes the court's ability to address the needs of youth with whom it comes into contact.

Summary. While some staff reported that DMC was not an issue in the Mahoning court, interviews generally suggest that the unique social welfare concerns (based on real and perceived family, school, and socioeconomic problems), combined with the traditional social control concerns (focused on risk and community safety), contribute to disproportionate

minority involvement in the juvenile justice system. Participants also discussed how policing patterns, poor family engagement, and differential access to community and system resources contributed to DMC.

Summary of Findings and Implications: Mahoning County

No police agency data were collected for Mahoning County so this report focused solely on juvenile court records and staff interviews. The cases analyzed for Mahoning County Juvenile Court provide relatively little evidence of disproportionate involvement for Non-White youth. Even when analyzed alone, race was not a significant predictor of case outcomes for diversion, pre-adjudication detention, dismissal, or delinquency adjudication. This can be observed most simply in the very slight differences between Non-White and White youth probabilities of given outcomes shown in Figure 1. The detention outcome was an exception to as there is a larger-sized difference, however, and it is likely that data limitations affected the lack of significant relationships observed there. Therefore, this difference in detention rates across race groups is worth further attention in the future.

Mahoning Juvenile Court interviewees offered some important insight in their discussions with research staff. The majority of staff rated disproportionate contact as a relatively limited problem, but mentioned sociodemographic, family, and school factors as important forces in any observed disparities that are present. Although it was a less prominent theme of discussion in the interviews, officials identified programs aimed at reducing school-based referrals and family-focused interventions as possible initiatives for responding to juvenile offending and disproportionate minority contact (DMC).

Table 59: Summary of Key Findings of DMC Assessment: Mahoning County

Available Data w Notes	Key Findings	Implications
<p>No police agencies agreed to participate in the project</p> <p>328 Juvenile court records (no secure confinement or bindover analysis)</p> <p>13 interviews with court personnel</p>	<p>Limited evidence of DMC in four decision points</p> <p>Most differences were very small, but detention was an exception as there is a large difference (2x odds for Non-White), but formal testing was affected by data limitations</p> <p>Majority of court staff rated DMC as a relatively limited problem, but mentioned SES, family, and school factors as important forces in any observed disparities that are present</p> <p>Identified programs aimed at reducing school-based referrals and family-focused interventions as possible initiatives for reducing juvenile offending and DMC</p> <p>Court officials credited a recent decrease in school disciplinary referrals to informational and training sessions held with school and law enforcement officials</p>	<p>Race and detention relationship is worth looking at further and identifying intervention strategies</p> <p>Although no focus group(s), interview responses helped to reinforce the disconnect between law enforcement and juvenile court processes mentioned in other sites; important to consider bridging this in dealing with DMC</p> <p>Although we could not evaluate initiatives, the focus on school-based referrals as a specific place where DMC might emerge and then targeted training offers a template for responses to DMC</p>

MONTGOMERY COUNTY, OH

Montgomery County Police Agency Data

Description of Montgomery County arrest data. The UC research team sent formal letters outlining the study and data requests to the head of each agency in Fall of 2012. The research team followed up with the unresponsive agencies with several emails and periodic phone calls encouraging them to participate in the study. All four agencies agreed to participate in the study (i.e., Montgomery County Sheriff’s Office [MCSO], Dayton Police Department, Huber Heights Police Department, and Trotwood Police Department). The findings from the analysis of these four agencies are discussed below.

Table 60. Basic Characteristics of Arrested Juveniles in Locations with Available Data

	MCSO (N=380)	Dayton PD (N=3,123)	Huber Heights PD (N=903)	Trotwood PD (N=151)
	Valid % (N)	Valid % (N)	Valid % (N)	Valid % (N)
<i>Race</i>				
White	34.9 (132)	24.1 (754)	57.4 (512)	18.0 (27)
Black, AA	64.3 (243)	75.7 (2,364)	41.9 (374)	82.0 (123)
Multi-Race	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)
Other	0.8 (3)	0.0 (0)	0.7 (6)	0.0 (0)
<i>Sex</i>				
Male	67.4 (256)	59.5 (1,857)	65.8 (594)	47.0 (71)
Female	32.6 (124)	40.5 (1,266)	34.2 (309)	53.0 (80)
<i>Age</i>				
Mean	15.57	15.70	15.39	15.51
Median	15.78	15.95	15.65	15.84
Standard Deviation	1.70	1.63	1.74	1.80

Table 60 provides an overview of the basic characteristics for youth arrested within four Montgomery County locales. The total number of arrests between 2010 and 2011 ranged from 151 (Trotwood PD) to 3,123 (Dayton PD). African-American youth made up the majority of

juvenile arrests in three of the four agencies (ranges from 64.3% of juvenile arrests made by Montgomery County Sheriff's Office to 82.0% of arrests made by Trotwood PD). In Huber Heights, however, White youth accounted for 57.4 percent of juvenile arrests compared to approximately 42 percent of African-American youth. A greater percentage of male youth were arrested in three of the four locales (67.4%, 59.5%, and 65.8% by Montgomery County Sheriff's Office, Dayton PD, and Huber Heights PD, respectively). In Trotwood, however, a slightly greater percentage of females was arrested (53.0% of arrests) compared to males (47.0% of arrests). The average age of youth arrested in these locales ranged from 15.39 to 15.70 years. The standard deviation values associated with mean age, which were generally around two years, indicate that there is a fair amount of variation as a majority of the cases are likely to fall between 13 and 17 within that general 10 to 17 age range.

As outlined in the Ohio DYS RFP, the first major component of this study is to determine whether DMC may be an issue at each stage in the justice process. Table 61 below displays the 2010-2011 Relative Rate Index (RRI) values for three police agencies in Montgomery County. Overall, the findings suggest that disproportionality in arrests of minority youth may be an issue in two of the three locales with available data.

Table 61. Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority/ White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Dayton PD	0.16	0.29	0.26	1.88*	1.67*	2.25* (2.05–2.46)	1.91* (1.75–2.09)
Huber Heights PD	0.16	0.49	0.30	2.99*	1.81*	4.90* (4.13–5.82)	2.14* (1.84–2.50)
Trotwood PD	0.07	0.06	0.05	0.83	0.78	0.82 (0.53–1.26)	0.77 (0.50–1.18)

*RRI greater than 1.20 Threshold or OR that is statistically significant at $p < 0.05$

Note: Cannot create RRI or probability of arrest for Montgomery County Sheriff's Office based on lack of clear catchment area for all county cases.

Montgomery County Sheriff's Office. Montgomery County Sheriff's Office houses electronic files on juvenile arrests within the department. After several requests, MCSO delivered the requested data in an electronic format to the UC research team. The data files contained youth arrest records for 2010 and 2011 in addition to key offender and offense-level characteristics. UC researchers retrieved the data and entered it into an SPSS database for data management and analysis. Basic offender characteristic and offense-level information were provided for all juvenile arrests. Listed below are the available key predictors.

- Race
- Sex
- Age
- Most Serious Offense Category
- Most Serious Offense Level
- Number of Offenses
- Weapon Involved Offense (Y/N)
- Drug or Alcohol Involved Offense (Y/N)
- Any Co-Offenders (Y/N)

Basic description of cases. There were 380 juvenile arrests made by the Montgomery County Sheriff's Office (MCSO) between 2010 and 2011. African-American youth accounted for

approximately two-thirds of juvenile arrests (64.3%; N=243). The MCSO arrested a smaller percentage of White youth during the same time frame (34.9% of youth arrests; N=132). A greater percentage of males were arrested compared to females (67.4% and 32.6%, respectively). The average age of juveniles arrested by the MCSO was 15.57 (SD=1.70).

Report on RRI and odds ratios. Given the nature of Census data, we were unable to create accurate estimates of the Relative Risk Index or probabilities of arrest for Montgomery County Sheriff's Office. However, the population figures for Montgomery County can be noted and compared to the prevalence of minorities represented in the arrest data for MCSO.⁶⁰ In 2010, there were 56,152 youth ages 10-17 years old in Montgomery County. Of those, 66.4 percent (N=37,274) were White compared to 26.2 percent (N=14,717) African American. In Montgomery County, 64.3 percent of arrests involved African-American youth compared to a lesser percentage of White youth (34.9%).

Analysis of key case characteristics by race/ethnicity. Table 62a below contains the analysis of explanatory variables by race for each agency in Montgomery County. Several interesting findings emerged when examining these variables by race in the data from the Montgomery County Sheriff's Office. The percentage of youth arrested for certain crime types differed significantly across youth from different race groups ($\chi^2=29.20$; $\Phi=0.28$). White youth were more likely to be arrested for a status offense or disorderly conduct offense (20.5% of White arrestees) compared to their Non-White counterparts (9.3% of non-White arrestees). Conversely, a greater percentage of Non-White youth were arrested for a property offense (37.0% of non-White arrestees) than were White youth (13.6% of White arrestees). The

⁶⁰ The population numbers for Montgomery County are inclusive of all locales located within the county. Thus, these figures should be examined with caution when compared to the prevalence of minority arrests in the data.

percentage of White youth arrested for a violent/sex offense or a drug/alcohol offense (44.7% and 11.4% of White arrestees, respectively) was slightly higher than for Non-White youth (39.8% and 5.3% of Non-White arrestees, respectively).

There is a moderate relationship between offense level and race of the arrestee in these records. When considering offense level, Non-White youth were significantly more likely to be arrested for more serious offenses whereas White youth were more likely to be arrested for less serious crimes ($\chi^2=12.34$; $\Phi=0.24$). Specifically, 30.2 percent of arrests involving Non-White youth were for felony offense compared to 14.5 percent of arrests involving White youth. Furthermore, the relationship between offense level and race subgroups is also moderate in strength. White youth were also significantly more likely to be arrested for an offense that involved alcohol and/or drug use ($\chi^2=11.47$; $\Phi=-0.17$). A greater percentage of arrests for alcohol/drug use involved White youth (13.6%) compared to Non-White youth (4.1). Lastly, a greater percentage of arrests that involved a co-offender(s) involved Non-White youth (26.8%) compared to their White counterparts (15.2%). The measure of association indicates that the relationship between arrests involving co-offenders and race subgroups is relatively weak.

Table 62a. Arrest Characteristics by Race Subgroups – MCSO

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	44.7 (59)	39.8 (98)	29.20*	0.5
Property	13.6 (18)	37.0 (91)	0.28	
Drug/Alcohol	11.4 (15)	5.3 (13)		
Other	9.8 (13)	8.5 (21)		
Status/DC	20.5 (27)	9.3 (23)		
<i>Most Serious Offense Level</i>				
Felony	14.5 (11)	30.2 (42)	12.34*	43.4
Misdemeanor	47.4 (36)	51.1 (71)	0.24	
Status/Unruly	38.2 (29)	18.7 (26)		
<i>Number of Offenses</i>				
1	73.5 (97)	76.8 (189)	1.22	0.5
2	18.9 (25)	18.3 (45)	0.06	
3	7.6 (10)	4.9 (12)		
<i>Alcohol/Drug Use?</i>				
No	86.4 (114)	95.9 (236)	11.47*	0.5
Yes	13.6 (18)	4.1 (10)	-0.17	
<i>Any Co-Offenders?</i>				
No	84.8 (112)	73.2 (180)	6.67*	0.5
Yes	15.2 (20)	26.8 (66)	0.13	
<i>Weapon Used?</i>				
No	59.8 (79)	65.4 (161)	1.16	0.5
Yes	40.2 (53)	34.6 (85)	-0.06	

* statistically significant at $p < 0.05$

Dayton Police Department. Dayton Police Department stored electronic file records on juvenile arrests. The UC research team received very basic individual and offense-related information on juvenile arrests between 2010 and 2011. After retrieval, the data were entered into a data management and analysis program (SPSS). Basic characteristics of the individual and offense-related information were collected for all juvenile arrests:

- Name
- Date of Birth/Age
- Sex
- Race
- Offense Category

- Offense Level
- Number of Offenses

Basic description of cases. There were 3,123 juvenile arrests made in Dayton between 2010 and 2011. Of those arrests, approximately three-fourths involved African American youth (75.7%; N=2,364) compared to 24.1 percent White youth (N=754). The majority of juvenile arrests involved males (59.5%; N=1,857) compared to females (40.5%; N=1,266). The average age of juveniles arrested in Dayton was 15.70 years (SD=1.63).

Report on RRI and odds ratios. Based on the 2010 United States Census, approximately 9.8 percent (N=13,885) of the total population in Dayton (N=141,527) was 10 through 17 years old. Of those, 4,822 youth were White (34.7%) and 8,034 youth were African American (57.9%). White youth had a lower proportion of arrests ($p_{\text{Arrest}}=0.16$) relative to their population numbers compared to African-American youth ($p_{\text{Arrest}}=0.29$) and to all minority youth ($p_{\text{Arrest}}=0.26$). Further examination of these proportions reveals that the Black/White and Minority/White RRI values exceed the threshold established by Ohio DYS and OJJDP. These findings indicate that there is a large difference between the proportions of minority youth (and more specifically, African-American youth) arrested compared to the proportion of White youth. Lastly, both the Black/White and Minority/White odds ratio values are statistically significant ($p<0.05$) – indicating that there is a low likelihood that these differences would exist if the groups' relative risk of arrest were actually the same. The odds of an arrest record involving the African-American youth were 2.25 times greater than the odds of arrest for White youth. Furthermore, arrests were 1.91 times more likely to involve a minority youth than a White youth.

Analysis of key case characteristics by race/ethnicity. Analysis of the case characteristics revealed several statistically significant findings (Table 62b). Arrests involving White youth were significantly more likely to be for more serious crime types compared to arrests of Non-White ($\chi^2=16.37$; $\Phi=0.08$); the measure of association indicates that there is a relatively weak relationship between offense category and race subgroups. For example, a greater percentage of arrests involving a violent/sex offense were of White youth (33.6%) compared to arrests of Non-White youth (25.7%). Conversely, a greater percentage of arrests for a status/disorderly conduct offense involved Non-White youth (48.4%) in comparison to their White peers (43.7%). Arrests involving Non-White youth were also more likely to be for felony and status/unruly level offenses (21.8% and 47.6%, respectively) than White youth (16.0% and 42.5%, respectively) whereas a greater percentage of arrests for a misdemeanor level offense involved White youth (41.5%) compared to their Non-White counterparts (30.6%). The strength of the relationship between offense level and race subgroups is relatively weak ($\chi^2=28.29$; $\Phi=0.10$). Lastly, number of offenses by race subgroups was statistically significant ($\chi^2=9.83$; $\Phi=0.06$). Arrests of Non-White youth were more likely to be for just a single offense (86.2%) compared to White youth (81.4%). A slightly greater percentage of White youth were arrested for two offenses (13.8%) than Non-White youth (9.6%). Again, the strength of this relationship is fairly weak.

Table 62b. Arrest Characteristics by Race Subgroups – Dayton PD

	White % (N)	Black/AA ⁶¹ % (N)	χ^2 V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	33.6 (214)	25.7 (528)	16.37*	13.7
Property	17.6 (112)	19.2 (396)	0.08	
Drug/Alcohol	1.1 (7)	1.3 (27)		
Other	3.9 (25)	5.3 (110)		
Status/DC	43.7 (278)	48.4 (997)		
<i>Most Serious Offense Level</i>				
Felony	16.0 (102)	21.8 (449)	28.29*	13.7
Misdemeanor	41.5 (264)	30.6 (629)	0.10	
Status/Unruly	42.5 (270)	47.6 (980)		
<i>Number of Offenses</i>				
1	81.4 (518)	86.2 (1,773)	9.83*	13.7
2	13.8 (88)	9.6 (197)	0.06	
3+	4.7 (30)	4.3 (88)		

* statistically significant at $p < 0.05$

Huber Heights Police Department. After several contact attempts, Huber Heights Police Department agreed to participate in the current study. Huber Heights Police Department stored physical files on juvenile arrests between 2010 and 2011. Data requests were directed to the department's IT-specialist. Trained researchers from UC systematically coded/collected all requested items on juvenile arrests between 2010 and 2011. The data were then entered into a data management program (SPSS). Basic characteristics of the individual and offense-related information were collected for all juvenile arrests:

- Name
- Date of Birth/Age
- Sex
- Race
- Processing Outcome
- Offense Category
- Offense Level
- Number of Offenses

⁶¹ Dayton had only Black/African-American and White arrests in the race information provided with the arrest record data.

- Source of Referral
- Number of Co-Offenders
- Drug Use or Possession (Y/N)
- Weapon Involved Offense (Y/N)

Basic description of cases. In Huber Heights, 903 juvenile arrests occurred between 2010 and 2011. White youth accounted for 57.4 percent of juvenile arrests compared to 41.9 percent of African-American youth. Males made up the majority of juvenile arrests – accounting for 65.8 percent of the total arrests. The average age of those arrested was 15.39 (SD=1.74).

Report on RRI and odds ratios. Based on the 2010 US Census, youth ages 10 and 17 years old make up 11.9 percent (N=4,407) of the total population (N=37,142) in Huber Heights. Of those, 70.9 percent are White (N=3,123) and 17.3 percent are African American (N=763). Considered against the population of youth ages 10-17, White youth had a 0.16 probability of arrest, African-American youth a 0.49 probability of arrest, and minority youth a 0.30 probability of arrest. The Black/White RRI value suggests that there is a large difference between relative risk of arrests between White youth and African-American youth, and White youth and minority youth. Furthermore, the odds of arrest for African Americans are 4.90 times higher than the odds for White youth (OR=4.90). Additionally, arrests were 2.14 times more likely to involve a minority relative to Whites.

Analysis of key case characteristics by race/ethnicity. In Table 62c below, analysis of case characteristics by race revealed several interesting findings. First, processing outcome by race subgroup was statistically significant ($\chi^2=8.42$; Cramer's V=0.13). A greater percentage of

Non-White youth (46.7%) were detained after processing compared to White youth (34.1%).⁶²

The measure of association indicates that the relationship between processing outcome and race is relatively weak. Offense category is also statistically significant ($\chi^2=13.29$; $\Phi=0.12$).

Arrests for a violent/sex offense were more likely to involve Non-White youth (20.3%) compared to White youth (15.4%). Conversely, a greater percentage of arrests for a drug/alcohol-related offense involved White youth (11.1%) than Non-Whites (5.5%). Relatedly, a greater percentage of arrests for drug use or possession involved White youth (15.0%) compared to their Non-White counterparts (7.9%). Offense level is also statistically significant at $p<0.05$ ($\chi^2=6.48$; $\Phi=0.10$). Non-White youth were more likely to be arrested for more serious offense levels (i.e., felony and misdemeanor) whereas a greater percentage of status offense arrests involved White youth. However, the strength of this relationship is fairly weak. Although not statistically significant, the source of referral to the police does differ by race. For example, a greater percentage of referrals made by school official/school resource officers and calls for service to the police involve Non-White youth (10.2% and 44.2%, respectively) in comparison to White youth (7.6% and 37.5%, respectively).

⁶² Interpretation of these findings must be tempered due to a relatively high percent of missing cases (42.1%).

Table 62c. Arrest Characteristics by Race Subgroups – Huber Heights PD

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Processing Outcome</i>				
Released	65.9 (205)	53.3 (113)	8.42*	42.1
Detained	34.1 (106)	46.7 (99)	0.13	
<i>Most Serious Offense Category</i>				
Violent/Sex	15.4 (79)	20.3 (77)	13.29*	1.2
Property	33.2 (170)	30.0 (114)	0.12	
Drug/Alcohol	11.1 (57)	5.5 (21)		
Other	7.4 (38)	10.0 (38)		
Status/DC	32.8 (168)	34.2 (130)		
<i>Most Serious Offense Level</i>				
Felony	11.9 (42)	13.3 (35)	6.48*	31.9
Misdemeanor	40.6 (143)	49.4 (130)	0.10	
Status/Unruly	47.4 (167)	37.3 (98)		
<i>Number of Offenses</i>				
1	79.3 (406)	78.7 (299)	0.76	1.2
2	17.6 (90)	17.1 (65)	0.03	
3	3.1 (16)	4.2 (16)		
<i>Source of Referral⁶³</i>				
Parent/Neighbor	30.7 (141)	27.9 (96)	8.53	11.1
School Official/SRO	7.6 (35)	10.2 (35)	0.10	
Police Response While in Progress	13.7 (63)	9.0 (31)		
Police Call for Service	37.5 (172)	44.2 (152)		
Other	10.5 (48)	8.7 (30)		
<i>Any Co-Offenders?</i>				
No	59.9 (306)	60.8 (231)	0.08	1.3
Yes	40.1 (205)	39.2 (149)	-0.01	
<i>Drug Use or Possession?</i>				
No	85.0 (435)	92.1 (350)	10.55*	1.2
Yes	15.0 (77)	7.9 (30)	-0.11	
<i>Weapon Used?</i>				
No	95.7 (490)	97.6 (371)	2.42	1.2
Yes	4.3 (22)	2.4 (9)	-0.05	

* statistically significant at $p < 0.05$

⁶³ The “other” category includes various sources (e.g., siblings, store employees, loss prevention, victims, police surveillance, walk-in reports).

Trotwood Police Department. Montgomery County Sheriff's Office stores and manages Trotwood Police Department's arrest data. The UC research team discussed the data requests with MCSO. UC received the requested data on juvenile arrests between 2010 and 2011 (merged with MCSO data) in an electronic format. The research team compiled MCSO and Trotwood Police Department's data into two separate data files. The data were then entered into a data management program (SPSS). Basic individual and offense-level information were collected for all juvenile arrests between 2010 and 2011:

- Name
- Date of Birth/Age
- Sex
- Race
- Offense Category
- Offense Level
- Number of Offenses
- Any Co-Offenders (Y/N)
- Weapon Use (Y/N)

Basic description of cases. There were 151 juvenile arrests in Trotwood between 2010 and 2011. An overwhelming majority of juvenile arrests in Trotwood were of African-American youth (82%; N=123). White youth accounted for 18 percent of juvenile arrests in this locale (N=27). Slightly over half of the arrests involved females (53%; N=80) whereas males made up 47 percent of arrests (N=71). The average age of youth arrested in the locale of Trotwood is 15.51 years (SD=1.80).

Report on RRI and odds ratios. Trotwood is unique in terms of its demographic composition compared to the other Montgomery County locales included in this study. Based on the 2010 US Census, Trotwood had a population of 24,431 residents in 2010. Of those, 2,757 residents were ages 10 to 17. African-American youth account for 80.1 percent of the

total number of youth in this age range (N=2,209) whereas White youth make up 14.6 percent of the total number of juveniles in Trotwood (N=402). Based on these population data, the proportion of arrests for White youth (pArrest=0.07) is similar to that of African-American youth (pArrest=0.06) and minority youth (pArrest=0.05). Further analysis of these numbers reveals that both the RRI and odds ratio values are not statistically significant. This suggests that, at least considering these data, disproportionality in the arrests of minority youth is not a problem in Trotwood.

Analysis of key case characteristics by race/ethnicity. The analysis of case characteristics by race does not reveal any statistically significant findings (Table 62d).⁶⁴ However, several interesting findings did emerge from this analysis. Arrests for property offenses were relatively more likely to involve Non-White youth as opposed to White youth (30.1% and 7.4%, respectively). Conversely, a greater percentage of arrests for status/disorderly conduct offenses involved White youth (48.1%) compared to Non-White youth (35.8%). Additionally, a slightly greater percentage of arrests for two or more offenses involved Non-White youth (19.5%) compared to their White counterparts (14.8%). Lastly, a higher percentage of arrests that involved the use of a weapon during the commission of an offense were of White youth (25.9%) compared to Non-White youth (18.7%).

⁶⁴ This finding should be tempered slightly given the relatively few number of total arrests in Trotwood (N=151). This issue may have an effect on the analysis due to small cell frequencies (e.g., drug/alcohol offenses, felony offenses, weapon involved offenses).

Table 62d. Arrest Characteristics by Race Subgroups – Trotwood PD

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	33.3 (9)	28.5 (35)	7.10	0.7
Property	7.4 (2)	30.1 (37)	0.22	
Drug/Alcohol	3.7 (1)	0.8 (1)		
Other	7.4 (2)	4.9 (6)		
Status/DC	48.1 (13)	35.8 (44)		
<i>Most Serious Offense Level</i>				
Felony	5.3 (1)	9.9 (7)	0.82	40.4
Misdemeanor	15.8 (3)	15.5 (11)	0.07	
Status/Unruly	78.9 (15)	74.6 (53)		
<i>Number of Offenses</i>				
1	85.2 (23)	80.5 (99)	0.32	0.7
2+	14.8 (4)	19.5 (24)	0.05	
<i>Any Co-Offenders?</i>				
No	70.4 (19)	73.2 (90)	0.09	0.7
Yes	29.6 (8)	26.8 (33)	0.02	
<i>Weapon Used?</i>				
No	74.1 (20)	81.3 (100)	0.72	0.7
Yes	25.9 (7)	18.7 (23)	0.07	

Summary of police agency record analysis. African-American youth account for the majority of juvenile arrests in three of the four agencies in Montgomery County (64.3% by MCSO, 75.7% in Dayton, and 82.0% in Trotwood). The analysis of the Relative Risk Index (RRI) and the Odds Ratios (OR) suggest that minority youth (particularly African-American youth) were disproportionately arrested in Dayton and Huber Heights. This, however, was not the case in Trotwood where the probability of arrest for minority youth was minimally lower than for White youth (although not significantly lower). In Dayton, those arrests were more likely to involve less serious crimes (i.e., offense level and category). In Huber Heights, however, those arrests were more likely to come from more serious crimes. Furthermore, there were a greater percentage of arrests of White youth for weapon involved offenses compared to arrests for Non-White youth made by Montgomery County Sheriff’s Office (MCSO), Huber Heights Police

Department, and Trotwood Police Department. Furthermore, a greater percentage of White youth arrests involved the use of alcohol and/or drugs compared to Non-White youth arrests made by MCSO and Huber Heights Police Department. Additionally, co-offenders were more prevalent in arrests of Non-White youth than arrests of White youth made by MCSO. These analyses provide points for discussion around the characteristics associated with arrests for Whites and Non-Whites, especially within the context of different locales within the same county.

Montgomery County Focus Group Analysis

Between the months of February 2013 and August 2013, four focus groups were conducted across four law enforcement agencies in Montgomery County. These agencies were located in jurisdictions of very different sizes and identified to have varying degrees of disproportionate minority contact (DMC).⁶⁵ Each focus group session lasted approximately 2 hours. Collectively, these groups consisted of a total of 30 participants with varying levels of experience in law enforcement (2 years to 31 years) and degrees of contact with juveniles. Generally, focus group participants held positions within the patrol, school resource, investigative, and detective units in their respective agencies.

Findings. Officers involved in these four focus groups identified several potential causes of disproportionate minority contact within Montgomery County. Overall, participating officers opposed explanations involving the differential treatment of youth, arguing that similarly situated juvenile offenders receive the same treatment/response of law enforcement in their

⁶⁵ Little evidence of DMC was found for one of these sites. Therefore, focus group participants were asked to provide general explanations for statewide DMC, rather than for specific explanations for DMC within their jurisdiction.

respective jurisdictions regardless of race. Therefore, the causes of DMC were entirely identified as explanations involving the differential offending patterns among minority youth.

Differential offending. Within the focus groups, participating officers consistently identified differential offending among minority juveniles as the primary explanation for disproportionate minority contact with police. These explanations emerged in response to the presentation of arrest statistics from the participating law enforcement agencies that generally showed the overrepresentation of minority youth. Additionally, officer observations concerning differential offending among minority youth were advanced in the discussion of recent juvenile crime trends and conversations concerning major factors that contribute to juvenile crime. Officers identified three main mechanisms of differential offending among minority youth that increase their likelihood of coming into contact with law enforcement. These mechanisms include (1) the prevalence of repeat offenders among minority juveniles, (2) higher involvement in serious types of crime, and (3) variation in methods of offending (e.g., greater use of weapons, type of drug distribution networks). Overall, these differential offending patterns among minority youth are believed to be associated with factors such as geographic location, socioeconomic status (SES), family, and cultural differences. In turn, each of these factors is observed to contribute to DMC.

Repeat offenders. First, in their discussion of differential offending patterns among juveniles, officers consistently noted the prevalence of repeat offending among certain groups of minority youth. Officers observed that crime and other forms of delinquency become expected from these youth, facilitating the identification of problem youth as officers become more familiar with different areas of their jurisdiction. One officer explained his observation of

these patterns in recent years, saying, “I am sure everybody in the room could agree we have a core group of juveniles in each part of our city that are routine offenders...unfortunately, that’s (sic) the majority of them are Black.”

Types of offending. Second, minority youth were identified as being more involved in violent offenses as well as other serious criminal activities that officers described as more “bold” or “brazen” when compared to the crimes committed by their White counterparts. Officers consistently reported that these more serious types of offenses demand greater police attention and typically require responses involving little police discretion. Therefore, officers argued that minority youth are more likely to be handled formally due to situational constraints in police discretion.

Methods of offending. In addition to their prevalence of repeat offending and involvement in more serious types of crime, officers suggested that minority juveniles are generally more visible when committing crime, facilitating the ease and efficiency of detection by the police. In one instance, officers provided drug-sales as an example of the differential offending patterns of youth by race, emphasizing that disproportionate minority contact with police is a function of how youth are selling various drugs, rather than a direct function of race. Specifically, one officer commented that minority youth have traditionally conducted their sales out in the open, “hanging out on the corner,” and approaching potential customers on the street. In contrast, officers observed that White youth are much more likely to make “acquaintance-to-acquaintance” sales, typically conducting their business indoors and out of sight of others. An officer explained how variation in visibility affects police contact, commenting that Minority youth involved in drug sales were more likely to locate on corners

where sweeps could be conducted whereas White youth who were also involved in drugs were far less visible and therefore investigative resources would have to be allocated to finding and arresting them.

Geographic location. Officers argued that disproportionate contact of minority youth with law enforcement is a product of agencies policing neighborhoods that have higher minority populations. This concentration of enforcement and patrol in minority neighborhoods was observed to be a function of the differential offending of youth and subsequent calls for service. Arguing that the primary strategy for the policing of juveniles is reactive in nature, patrol officers across the four sites in Montgomery County consistently identified DMC as a product of the high calls for service from residents within minority neighborhoods.

Officers also consistently recognized their practice of aggressive enforcement through the proactive patrol of areas that are known to have problems with crime (i.e., hotspots) as well as other well-known juvenile hangouts. Often these hotspots and hangouts are located within lower income, minority neighborhoods, increasing the likelihood of police contact with minority youth within these areas. Additionally, officers commented that, though they are assigned specific beats within their jurisdiction, they are allowed a certain amount of freedom to patrol within those beats (when not responding to a call for service). Patrol officers observed that, when given this freedom, they often patrol the lower income, minority dominated areas known to have significant crime problems, thus increasing their likelihood of coming into contact with minority youth.

Socioeconomic status. In addition to the contribution of geographic location on the disproportionate contact of minority youth with police, it was consistently observed that the

socioeconomic status (SES) of individual youth greatly affects the likelihood of their involvement in crime and subsequent police contact. Some officers found that, for both White and African-American youth, lower SES seemed to explain their prevalence of offending. As one officer observed,

“If you overlaid poverty on our city you would see the two poorest areas are where we make the most arrests or where the kids that we arrest are at. That is the thing, not race; it is poverty because I would bet that most Whites we arrest are from those two areas too.”

Other officers highlighted the presence of larger populations of minority residents in these low SES neighborhoods, observing that these areas generally have higher rates of crime and subsequently higher police presence, increasing the likelihood of minority youth coming into contact with police. In particular, several school resource officers (SROs) commented that they found differences in the amount and type of offending depending on the SES of the areas the schools were located in. Specifically, youth coming from lower SES backgrounds (identified as primarily minority) were recognized to commit more serious, violent offenses resulting in increased contact with the police. In comparison, significantly lower rates of offending were observed in the more affluent, White area schools in the county.

In their attempt to understand why crime is higher in lower income neighborhoods officers suggested that individual youth coming from lower socioeconomic backgrounds may feel the need to steal in order to obtain certain ‘necessities’ that, for various reasons, may not be provided for them by their parents or acting guardians. As an example, it was discussed how in the weeks before school there is a significant increase in crime in the lower income, minority communities as youth attempt to obtain the materials that they will need for the new school year.

Finally, socioeconomic status was thought to affect disproportionate minority contact with police by influencing the opportunities in a youth's life to curb or avoid delinquent/criminal behavior. Specifically, officers commented that youth in more affluent communities (typically White youth) typically have more opportunities to address their antisocial behaviors in informal ways, such as medication and counseling, reducing their contact with police in the long-run. In contrast, it was observed that minority youth are often not afforded the same opportunities, therefore increasing their contact with police later down the road. As one officer commented:

“What’s interesting is when you talked about the total number of arrests. We have to talk about opportunities and I think that for the most part like anywhere else opportunities are afforded to stop and delay the behavior much quicker in an affluent family whether it be for drug treatment or whether it be opportunities for family members to get involved in their life, better school system and mentoring programs...”

Family factors. Officers often explained variation in the offending patterns of youth as a product of the breakdown of the traditional family structure and support within minority communities. It was generally argued that minority youth become more involved in crime because they lack supervision and parental involvement in their lives. Minority youth were observed to often come from homes with absentee parents, or households where parents are unable (e.g., single mother working several jobs) or uninterested in watching over and taking responsibility for their children's actions.

Additionally, officers explained DMC as a result of parents within minority homes failing to set the example for their children as positive role models and consequently depriving their children of guidance early in life. The observed prevalence of offending among several members of minority families was viewed as evidence of this lack of prosocial models.

Specifically, officers observed generations of criminals within a family, suggesting that older generations pass on their anti-social values and behavior to their children, encouraging their involvement in crime. A veteran officer commented on these observations of intergenerational offending, saying, "...what I am seeing is the old saying 'the apple doesn't fall far from the tree.' ...Those same kids that I dealt with when I first started my career are now adults, they now have kids and I am dealing with their kids."

Cultural factors. In addition to the geographic, socioeconomic, and familial factors outlined above, participating officers within Montgomery County consistently commented on the influence of culture on minority youth's differential rates of offending and subsequent disproportionate contact with police. Officers relayed their belief that lower income, minority communities appear to be more accepting of the commission of crime than predominately White communities. Officers observed that among minority youth, participation in crime has become increasingly normalized as very little stigma is associated with being part of the juvenile justice system (e.g., being on probation viewed as 'cool', using arrest record as a 'badge of honor'). While the degree of cultural influence was argued to vary by neighborhood, officers observed that youth (predominately minority youth) raised in these crime-normative environments are much more likely to become involved in delinquency.

The culture within these neighborhoods was viewed to be part of the larger rap/hip-hop lifestyle that has become more prevalent over time. Specifically, this lifestyle was viewed to decrease respect for life and property and, instead, emphasize the importance of items/actions that generate instant gratification or increase status within the social groups. This, in turn, was thought to promote the use of crime and violence to achieve social status and gain material

possessions. One officer explained, “I see a lot of it with just the different culture. I mean race set aside, age set aside, the hip hop culture; you go out and play the game...”

Variation in aspects of offending, such as those outlined previously, were thought to be part of a mentality among minority youth that crime is “cool.” Minority youth were identified as being more likely to flaunt their criminal activities either on the street or via social media to establish or enhance their social status among friends and within their communities, noting that a Black kid with a gun “wants people to know” because it has a “coolness” factor.

Suggestions to reduce juvenile crime. In their discussion of ways to reduce juvenile crime and DMC, officers across the four law enforcement agencies within Montgomery County were adamant in their belief that no real change will occur unless issues often found in the homes of delinquent youth are properly addressed. For this reason, officers consistently suggested that a top priority in efforts to reduce juvenile crime should focus on linking families of delinquent youth to agencies and programs that may provide family counseling, empower parents by encouraging the use of discipline in the home, and, above all, reduce their dependence on the justice system to supervise and manage the behavior of their children.

Additionally, officers suggested focusing on prevention and proactive programs, particularly those placing officers in schools with youth. To be effective, officers argued that these programs must be aimed at establishing/enhancing rapport between officers and youth within the community and exposing youth to positive role models at a young age. Participants further suggested that the placement of officers in schools would also encourage collaboration between law enforcement and school officials on the management and education of youth within the community and would facilitate a more informed policing of juveniles by providing

law enforcement with background information on youth that may otherwise be unknown or unavailable.

In addition to mentoring programs and the placement of officers in schools, participants emphasized the need for community initiatives that invest in the creation of juvenile activities, such as athletic leagues and other recreational programs that might provide prosocial, structured activities for youth within the community. These types of programs were viewed to enhance youth's education in the importance of teamwork, community, and the development of long-term goals. Overall, officers suggested that these community-based initiatives were important in preventing delinquency.

Though officers outlined the potential benefits of police mentorships, programming, and family counseling in reducing juvenile offending and subsequently DMC, it was consistently argued across sites within Montgomery County that for any real improvement to occur regarding responses to DMC and juvenile crime, more space needs to be made available within the county's juvenile detention hall and the processing of youth through the juvenile justice system must be improved. Specifically, officers commented that the inability to provide immediate and certain punishment for crimes (through detention or other processing) causes many juveniles to fail to see the repercussions of their actions. Overall this lack of a prompt response to juvenile offending was viewed to contribute to the overall juvenile crime rate as well as the escalation of minor to more serious offending among individual juveniles.

Summary of Focus Group Results. As a whole, officers within Montgomery County viewed disproportionate minority contact within their respective jurisdictions as a product of the differential offending patterns of minority youth. The prevalence and seriousness of

offending among minority youth was consistently observed to be influenced by neighborhood context. Specifically, officers suggested that, due to their lack of resources and the limited availability of youth supervision and prosocial models, minority neighborhoods characterized by economic disadvantage and family disruption tend to create an environment that provides little opportunity to proactively address or deter youth behaviors that may later escalate to delinquency. Additionally, the economic environment within these neighborhoods was often observed to encourage delinquency as youth attempt to provide for themselves in an effort to obtain necessities or maintain a specific lifestyle.

Officers provided detailed insights regarding explanations for DMC by emphasizing the influence of neighborhood culture on juvenile offending. Specifically, through their perception of the normalization of crime in minority communities, officers suggested that the stigma traditionally associated with crime has dissipated among minority community residents, with crime and violence being viewed as a tool for youth to “move up in the world.” This neighborhood culture is argued to increase rates of juvenile offending and also facilitate formal police contact with minority youth as their “no care” attitude makes their methods of offending more visible, either on the street (e.g., drug sales) or via social media. Collectively, these defining factors of disadvantaged minority neighborhoods (i.e. low SES, family disruption, delinquent culture) are viewed to increase both rates of offending and offense severity among juveniles, resulting in higher calls for service, the identification of minority communities as “hotspots” for crime, and subsequent contact with police.

Though officers did not explicitly provide differential treatment explanations for DMC, the discussions regarding their departmental strategies to address juvenile crime highlight

several reasons that minority youth may be subject to different outcomes than their White counterparts. For example, though officers identified that similarly situated youth receive the same treatment, their discussion of the influence of neighborhood context stresses that minority youth are typically at a disadvantage (due to the fact that they are not similarly situated when compared to their White counterparts) based upon the environments they live in. Additionally, the officers' commentary regarding the impact of 'hotspot policing' on the concentration of police presence within minority communities suggests that all neighborhoods are not necessarily policed equally. Specifically, while directing patrols to minority areas is driven by higher crime rates and subsequent calls for service, the higher deployment of resources to these areas inevitably increases the likelihood of officer contact with minority youth.

Overall, officer emphasis on the influence of neighborhood context suggests that attempts to reduce juvenile crime and, in many cases, DMC must incorporate efforts directed at the community and the homes of juvenile offenders, rather than solely concentrate on troubled youth. These officers consistently identified that the root of many problems facing youth is often found within the environment rather than within the individual. Therefore, linking families to agencies, providing prosocial models and lessons in schools and the creation of community initiatives to establish youth activities is of utmost importance. However, officers also emphasized the need of more reasonable sanctions, ideally characterized as both swift and certain, that can coincide with the treatment and rehabilitation of youth.

Montgomery County Juvenile Court Data

Data collection. The research team provided the Montgomery County Juvenile Court with a list of requested fields for the study. Members of the research team met with representatives of the court and IT-department to discuss the data collection process, availability, and extraction methods for key measures. Subsequently, the court uploaded an Excel database containing case-level information on all youth, age 10-17, petitioned to the court between January 1, 2010 and December 31, 2011. These data were then processed and “cleaned” to develop needed measures for the analysis below.

Measures included in the analysis. The primary independent variable of interest was race, but we also included measures of sex, age at filing, number of charges, number of prior referrals, offense seriousness, most serious offense category, whether the youth was on probation at the time of referral, onset age, education status, and whether a family member had been arrested. *Race* is recorded as White/Non-White due to the small percentage of youth who fell into the “other” race category (3.2%). *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth’s age at case initiation. *Number of charges* is a continuous indicator comprising the count of separate charges included in the current case. *Number of prior referrals* is a continuous measure that indicates the total number of referrals the youth had prior to the current case. *Offense seriousness* is a dichotomous measure coded as 0=felony, 1=misdemeanor/status offense. *Most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex, property, drug/alcohol, status offense,

and other. *Current probation* is a dichotomous measure that indicates whether the youth was on probation at the time of case initiation. *Onset age* is a continuous measure that indicates the youth's age at the time of first arrest. *Educational status* is a binary measure indicated youths' school attendance status at the time of referral, coded as 0=not enrolled/suspended/expelled, and 1=enrolled/graduated. *Family arrest* is a binary measure indicating whether any of the youth's immediate family members had ever been arrested at the time of referral.

The primary outcome variables comprised dichotomous measures of whether youth experienced particular outcomes at six decision points: diversion, detention, dismissal, adjudication, secure confinement, and bindover. Each of these variables is coded as yes/no. *Diversion* indicates whether youth were shifted away from formal prosecution at the front end of the court process. *Dismissed* indicates whether youth had their case dismissed for any reason (e.g., requested by prosecutor, youth incompetent to go through hearing process). *Detention* indicates whether youth were placed in secure detention while awaiting further proceedings. *Adjudicated* indicates whether a youth was adjudicated delinquent for the current case (e.g., found "guilty" of the current charges). *Secure confinement* reflects whether youth who were adjudicated delinquent were placed in an out-of-home secure correctional facility. *Bindover* indicates whether a youth was waived to criminal court.

Data coverage and preparation. Overall, there were 11,305 cases referred to the Montgomery County Juvenile Court between January 1, 2010 and December 31, 2011. Twenty-nine cases were dropped from the analysis because no race was indicated, leaving a final sample of 11,276. There was a relatively small amount of missing information in this data. There was complete coverage (i.e., no missing data) for age, sex, race, number of prior

referrals, number of charges, current probation, family arrest, onset age, and detention.

Diversion (12.9% missing), dismissal (12.9%), adjudication (12.9%), secure confinement (12.9%), bindover (12.9%), education status (12.4%), most serious offense level (0.4%), and most serious offense category (0.2%) each had a relatively small amount of missing data. To retain all cases for analysis, we used multiple imputation (MI) to impute the missing values for each of these variables. MI replaces missing observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, age, number of charges, number of prior referrals, current probation, family arrest, most serious offense category, and most serious offense level. MI first generates a specified number of datasets that can vary based on the introduction of random variation—in this case, 10—in which the imputed variables are based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from each of the ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Additionally, since certain youth may have multiple cases in the records included in the sample, we considered the possibility that clustering of those individuals might impact the tests of statistical significance. We conducted additional analyses that controlled for the clustering and found that there was no impact on the results presented here.

Descriptive statistics. In 2010-2011, White youth accounted for 50.1 percent of the referrals to Montgomery County Juvenile Court, while Non-White youth accounted for the remaining 49.9 percent. According to the 2010 Census for Montgomery County, these groups accounted for 66.4 percent and 33.6 percent of the juvenile population ages 10-17,

respectively. This suggests some level of initial disparity in involvement with the juvenile justice system. Males accounted for 61.7 percent of the petitions filed, and the mean age at referral was 15.75 (SD=1.88). The average number of prior referrals was 2.57 (SD=4.04), although 41.7 percent of the youth had no previous contact with the juvenile court. The mean number of charges in the current case was 1.36 (SD=0.95) and the most serious offense type was status/disorderly conduct (44.9%), followed by property offenses (25.5%), violent/sex offenses (17.3%), other offenses (6.2%), and drug/alcohol offenses (6.0%). Looking at offense seriousness, 10.5 percent of the referrals involved a felony offense, while the remaining 89.5 percent of referrals were for misdemeanors or status offenses. Almost one quarter (24.5%) of the referrals involved youth who were on probation at the time of petition, and approximately three quarters (78.4%) of the youth were enrolled in school or had graduated. The average onset age was 13.81 (SD=2.31). Finally, 27.3 percent of the youth had at least one immediate family member who had been arrested prior to case initiation.

Court outcomes. We estimated three statistical models for each of the six outcomes. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for Non-White youth as opposed to White youth, the first model considered only the effect of race on the outcome. The second model included race and other legally relevant factors (number of prior referrals, number of offenses in the current case, current probation, most serious offense category, and most serious offense level). The final model (see Tables 63a and 63b), which are the only ones formally shown here, included the above variables, as well as the extralegal factors age, sex, onset age, family arrest, and educational status. Analyses were

conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Diversion. In the race-only model, youths' race did not have a significant effect on the odds of being diverted from official court processing. After adding legally relevant factors in the second model, however, Non-White youth (OR=1.26) were significantly more likely to be diverted than their White counterparts. A one unit increase in the number of prior referrals and number of charges in the current case both led to a significant decrease in the odds of diversion (OR=0.90 and 0.50 respectively). Youths charged with a misdemeanor or status offense were over three times more likely to be diverted (OR=3.55) than those charged with a felony. Finally, youth charged with a property offense (OR=1.35) or status offense/DC (OR=2.56) were significantly more likely to have their case diverted than those charged with a violent or sex offense. Conversely, youth charged with a drug or alcohol offense (OR=0.46) were significantly less likely to be diverted as compared to violent/sex offenders.

When the extralegal variables were added in the final model, race remained a significant predictor of diversion and the odds ratio (1.26) was identical to that in the second model. Similarly, each of the significant legally-relevant variables from the second model remained significant in the final model with almost identical odds ratios. In addition, a one-unit increase in age significantly decreased the odds of diversion by 14 percent (OR=0.86), while a one-unit increase in onset age increased the odds of diversion by 10 percent (OR=1.10). Youths' sex was significant in that females were 29 percent more likely than males to be diverted (OR=1.29). Family arrest was not significant. Finally, youth who were enrolled in school were 36 percent more likely to be diverted than those who were not enrolled (OR=1.36).

Detention. The odds of being detained prior to adjudication were significantly higher for Non-White youth relative to White youth in the initial model containing only the race variable (OR=1.75). When legally-relevant factors were added in the second model, Non-White youth remained significantly more likely to be detained, although the effect decreased considerably from the race-only model (OR=1.44). A one-unit increase in the number of prior referrals significantly increased the odds of detention by 3 percent (OR=1.03). Similarly, a one-unit increase in the number of charges in the current offense increased the odds of detention by 18 percent (OR=1.18). Youth on probation at the time of case referral were over twice as likely to be detained as those who were not on probation (OR=2.43). Youth charged with a misdemeanor or status offense were 69 percent less likely to be detained relative to those charged with a felony (OR=0.31). Compared to those charged with a violent or sex offense, youth charged with a property offense (OR=0.43), drug/alcohol offense (OR=0.31), status offense/disorderly conduct (OR=0.12), or other offense (OR=0.52) were significantly less likely to be detained.

In the final model, which included extralegal factors, race maintained its significant effect on detention, although the strength of the relationship decreased slightly. Specifically, Non-White youth were 31 percent more likely than White youth to be detained prior to adjudication (OR=1.31). Number of prior referrals was no longer significant. A one-unit increase in the number of charges in the current case increased the odds of detention by 16 percent (OR=1.16). The effects of offense seriousness and offense type remained significant in the final model with odds ratios almost identical to those in the second model. Each of the extralegal variables was a significant predictor of detention. A one-unit increase in age at filing increased

the odds of detention by 12 percent (OR=1.12), while a one unit increase in onset age predicted a 7 percent decrease in the odds of detention. Females were 13 percent less likely to be detained relative to males (OR=0.87). Youth with a history of family arrest were 28 percent more likely to be detained (OR=1.28). Finally, youth who were enrolled in school were 27 percent less likely to be detained relative to those not enrolled. Overall, race maintained a significant effect on the decision to detain across all three models, although the strength of the effect decreased as legally relevant and extralegal variables were added to the models.

Dismissed. In the race-only model, there was a significant race effect that favored Non-White youth. Specifically, Non-White youth were 35 percent more likely to have their case dismissed relative to their White counterparts (OR=1.35). After adding legally-relevant factors in the second model, Non-White youth remained significantly more likely to have their case dismissed, although the effect decreased slightly (OR=1.23). A one unit increase in number of prior referrals significantly *increased* the odds of dismissal by 5 percent (OR=1.05), while youth on probation at the time of case referral were 2.38 times *more* likely to have their case dismissed relative to youth who were not on probation. A one unit increase in the number of charges in the current offense predicted a 40 percent decrease in the odds of dismissal (OR=0.60). Offense seriousness was not a significant predictor of case dismissal. Regarding offense type, youth charged with drug/alcohol offenses (OR=1.78), status offenses/DC (OR=1.68), or other offenses (OR=1.67) were significantly more likely to have their case dismissed compared to youth charged with a violent or sex offense.

After adding the extralegal variables in the final model, the effect of race remained almost identical to that of the second model. Specifically, Non-White youth were 20 percent

more likely to be dismissed relative to White youth (OR=1.20). Each of the statistically significant legal variables from the second model maintained its significance in the third model with negligible changes in the odds ratios (see Table 63a). In addition, each of the extralegal variables was a significant predictor of case dismissal. A one-year increase in youths' age predicted a 10 percent increase in the odds of dismissal (OR=1.10), while a one-unit increase in onset age decreased the odds of dismissal by 7 percent (OR=0.93). Regarding youths' sex, females were 15 percent less likely to have their case dismissed (OR=0.85). Youth who had a family member arrested prior to case initiation were 16 percent more likely to have their case dismissed. Youths who were enrolled in school were 20 percent *less* likely to have their case dismissed. Overall, there was a moderate race effect in the decision to dismiss, although the effect *avored* minority youth. Specifically, Non-White youth were significantly more likely to have their case dismissed in each of the three models; however, the effect did diminish slightly when legal and extralegal factors were introduced in the model.

Adjudication. Similar to case dismissal, there was a significant race effect for adjudication that favors minority youth in that Non-White youth were 20 percent less likely to be adjudicated than their White counterparts (OR=0.80). When the legally relevant variables were included in the second model, the significant race effect remained and was slightly stronger (OR=0.76). A one unit increase in the number of prior referrals significantly decreased the odds of adjudication by 2 percent (OR=0.98). Conversely, a one unit increase in the number of charges in the current case increased the odds of adjudication by 63 percent (OR=1.63). Youth on probation at the time of referral were 28 percent more likely to be adjudicated delinquent relative to those not on probation, while youth charged with a misdemeanor or

status offense were 18 percent less likely to be adjudicated compared to those charged with a felony (OR=0.82). Those charged with a status offense or disorderly conduct were significantly less likely to be adjudicated relative to those charged with a violent or sex offense (OR=0.42); there was no significant difference in the odds of adjudication between violent/sex offenses and any of the other offense categories.

In the final model, which included extralegal factors, the effect of race remained statistically significant. Specifically, Non-White youth were 23 percent less likely to be adjudicated delinquent relative to White youth (OR=0.77), a slight decrease from the second model. Similarly, each of the legally relevant variables maintained its significance and direction with only a minimal change in strength. Furthermore, none of the extralegal variables (age, onset age, sex, family arrests, educational status) were significant predictors of the adjudication decision. Overall, race had a moderate effect on adjudication that favored Non-White youth, net of legal and extralegal variables. In each model, Non-White youth were significantly less likely to be adjudicated relative to their White counterparts.

Secure confinement. The next decision point examined was the placement of youth in secure confinement facilities. This analysis used the subsample of youth who were adjudicated delinquent (N = 6,646). In the race-only model, Non-Whites were over 60 percent more likely to be placed in secure confinement relative to adjudicated White youth (OR=1.63). In the second model that included legally-relevant factors, the effect of race was no longer significant, indicating that the decision to place adjudicated youth in secure confinement was driven less by race and more by legal variables, which were all significant in this model. A one-unit increase in the number of prior referrals and number of charges in the current case predicted 5 percent

(OR=1.05) and 16 percent (OR=1.16) greater odds of secure confinement, respectively.

Similarly, youth on probation at the time of referral were almost six times more likely to be placed in secure confinement compared to those not on probation (OR=5.72). Youth charged with a misdemeanor or status offense were 69 percent less likely to be placed in secure confinement compared to youth charged with a felony (OR=0.31). Finally, youth charged with a status offense/disorderly conduct (OR=0.33) were significantly less likely to be placed in secure confinement than those charged with a violent or sex offense. The remaining offense categories (property, drug/alcohol, and other) were not significant predictors of secure confinement when considered relative to violent/sex offenses.

The effect of race on secure confinement remained nonsignificant in the final model that included extralegal variables. Overall, the effect of race on the decision to place youth in secure confinement facilities was mixed. Non-White youth were significantly more likely to be placed in secure confinement in the race-only model. However, when legal and extralegal variables were included, the effect of race was no longer significant. The models indicate that legal variables (e.g., number of prior referrals, number of charges in the current case, offense type) were the driving force for decisions made at this point.

Bindover. The final decision point examined was waiver to criminal court, or bindover. Because no youth charged with a misdemeanor or status offense was waived to criminal court, this analysis was restricted to the sample of youth charged with a felony offense (N = 1,184). There was a very small base rate of youth waived in Montgomery County (less than 1 percent of all cases were waived), which means that a relatively small numerical difference in its prevalence in each racial group could substantially affect the estimates and odds ratios. In the

race-only model, Non-White youth were almost three times more likely to be waived to the adult system relative to White youth (OR=2.64). When the legally relevant variables were added in the second model, the effect of race increased to where Non-White youth were over four times more likely to be waived than their White counterparts (OR=4.37).⁶⁶ A one-unit increase in number of prior referrals increased the odds of bindover by 14 percent (OR=1.14). Similarly, a one-unit increase in the number of charges in the current case led to an increase of 54 percent (OR=1.54) in the odds of bindover. Current probation status was not a significant predictor of waiver. Regarding offense type, youth charged with a property offense were significantly less likely to be waived relative to those charged with a violent or sex offense (OR=0.22).

In the final model that included both legal and extralegal variables, the effect of race on waiver remained significant. In this model, Non-White youth were almost five times more likely than their White counterparts to be waived (OR=4.78). A one-unit increase in prior referrals and number of charges increased the odds of bindover by 8 percent (OR=1.08) and 59 percent (OR=1.59), respectively. Current probation remained nonsignificant. Similar to the second model, youth charged with a property offense (OR=0.15) were significantly less likely to be waived than those charged with a violent or sex offense. Regarding the extralegal variables, only age and sex were significant predictors of waiver. A one-year increase in age increased the odds of waiver by 187 percent (OR=2.87), and females were 91 percent less likely to be waived relative to males (OR=0.09). Overall, Non-White youth were significantly more likely to be waived to adult court relative to White youth in each of the three statistical models.

⁶⁶ No youth charged with a drug/alcohol offense or a status offense/disorderly conduct were waived to criminal court; as such, these variables were removed from the final models.

Initial and conditional probabilities of case outcomes. Figures 19a and 19b display the initial and conditional probabilities for each of the six outcomes by youths' race (White/Non-White). The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any of the other factors mentioned above. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. Conversely, the conditional probabilities indicate the probability that White and Non-White youth will experience a certain case outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case. This also allows us to consider whether the difference between White and Non-White youth that we observed for base analysis (if any) tends to shift when accounting for other relevant case factors.

For the conditional probabilities for the first four court outcomes (diversion, detention, dismissal, and adjudication), the mean values for number of prior referrals (2.57), number of charges (1.36), age (15.76), and onset age (13.81) were used. The remaining variables were set to their modes: current probation – no; offense seriousness – misdemeanor/status; offense type – property; sex – male; family arrest – no; and education status – enrolled/graduated. Because secure confinement and bindover were typically reserved for the most serious offenses/offenders, the values for offense type and offense seriousness were changed to violent/sex offense and felony, respectively, in the calculation of the conditional probabilities for these two decision points. The values for the other variables remained the same.

Overall, the results tend to follow those discussed above. Non-White youth had higher probabilities of diversion, dismissal, detention, secure confinement, and bindover. Conversely, White youth had higher probabilities of being adjudicated delinquent. Generally, the gaps between White and Non-White youth tended to be considerably larger in the unconditional probabilities and narrowed somewhat when other legally relevant and extralegal variables were considered; however, they did not diminish fully. For example, the unconditional probability of pre-adjudication detention was 0.22 for Non-White youth and 0.14 for White youth (a difference of 0.08). When the other variables were included, the conditional probabilities for detention decreased to 0.15 for Non-White youth and 0.12 for White youth, a difference of only 0.03.

Table 63a. Binary Logistic Regression – Outcomes for Montgomery County Juvenile Court (Full Models)

	Diversion			Detention			Dismissed		
	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	0.23	1.26	0.06	0.27	1.31	0.06	0.18	1.20	0.06
Num. of Prior Referrals	-0.05	0.95	0.02	0.01	1.00	0.01	0.03	1.03	0.01
Num. of Offenses	-0.69	0.50	0.08	0.15	1.16	0.03	-0.51	0.60	0.06
Current Probation	-2.69	0.07	0.21	0.75	2.13	0.07	0.78	2.18	0.07
Misd/Status <i>Offense Type</i> ¹	1.19	3.29	0.21	-1.21	0.30	0.08	0.03	1.03	0.11
Property	0.30	1.35	0.11	-0.82	0.44	0.07	-0.03	0.97	0.10
Drug/Alcohol	-0.65	0.52	0.23	-1.24	0.29	0.13	0.52	1.69	0.14
Other	-0.30	0.74	0.20	-0.71	0.49	0.11	0.44	1.55	0.13
Status/DC	0.96	2.60	0.10	-2.16	0.12	0.09	0.53	1.70	0.10
Age	-0.15	0.86	0.02	0.11	1.12	0.02	0.09	1.10	0.02
Onset Age	0.09	1.10	0.02	-0.07	0.93	0.02	-0.07	0.93	0.02
Sex	0.26	1.29	0.06	-0.13	0.87	0.07	-0.17	0.85	0.06
Family Arrest	-0.07	0.93	0.07	0.25	1.28	0.06	0.15	1.16	0.07
Education Status	0.31	1.36	0.14	-0.32	0.73	0.09	-0.22	0.80	0.09
Constant	-1.59		0.36	-0.67		0.29	-2.13		0.32

Note: Bolded entries represent statistically significant estimates at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error

¹ Violent/Sex Offense is reference category

Table 63b. Binary Logistic Regression – Outcomes for Montgomery County Juvenile Court (continued)

	Adjudicated			Secure Confinement*			Bindover**		
	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	-0.27	0.77	0.05	0.07	1.08	0.10	1.57	4.78	0.56
Num. of Prior Referrals	-0.02	0.98	0.01	0.04	1.04	0.01	0.08	1.08	0.03
Num. of Offenses	0.49	1.63	0.05	0.14	1.15	0.03	0.46	1.59	0.09
Current Probation	0.25	1.28	0.06	1.63	5.11	0.52	0.24	1.28	0.40
Misd/Status	-0.19	0.83	0.09	-1.14	0.32	0.03	-----	-----	-----
<i>Offense Type¹</i>									
Property	-0.09	0.92	0.08	-0.14	0.87	0.09	-1.92	0.15	0.58
Drug/Alcohol	-0.02	0.98	0.12	0.04	1.04	0.19	-----	-----	-----
Other	-0.18	0.83	0.11	-0.29	0.75	0.13	-0.68	0.50	1.07
Status/DC	-0.87	0.42	0.07	-1.08	0.34	0.05	-----	-----	-----
Age	0.03	1.03	0.02	0.04	1.04	0.03	1.06	2.87	0.23
Onset Age	-0.01	0.98	0.01	-0.02	0.98	0.03	-0.10	0.91	0.10
Sex	-0.08	0.92	0.05	-0.20	0.82	0.09	-2.42	0.09	1.04
Family Arrest	-0.02	0.98	0.05	0.14	1.15	0.11	-0.41	0.67	0.42
Education Status	0.08	1.08	0.08	-0.37	0.69	0.09	-0.65	0.52	0.44
Constant	0.41		0.24	-1.71		0.09	-19.11		4.01

* This analysis used the subsample of youth who were adjudicated delinquent (N = 6,646).

** This analysis used the subsample of youth charged with a felony offense (N = 1,184)

¹ Violent/Sex Offense is reference category

Figure 19a. Summary of Initial Probabilities and Conditional Probabilities for Diversion, Detention, Dismissal, and Adjudication

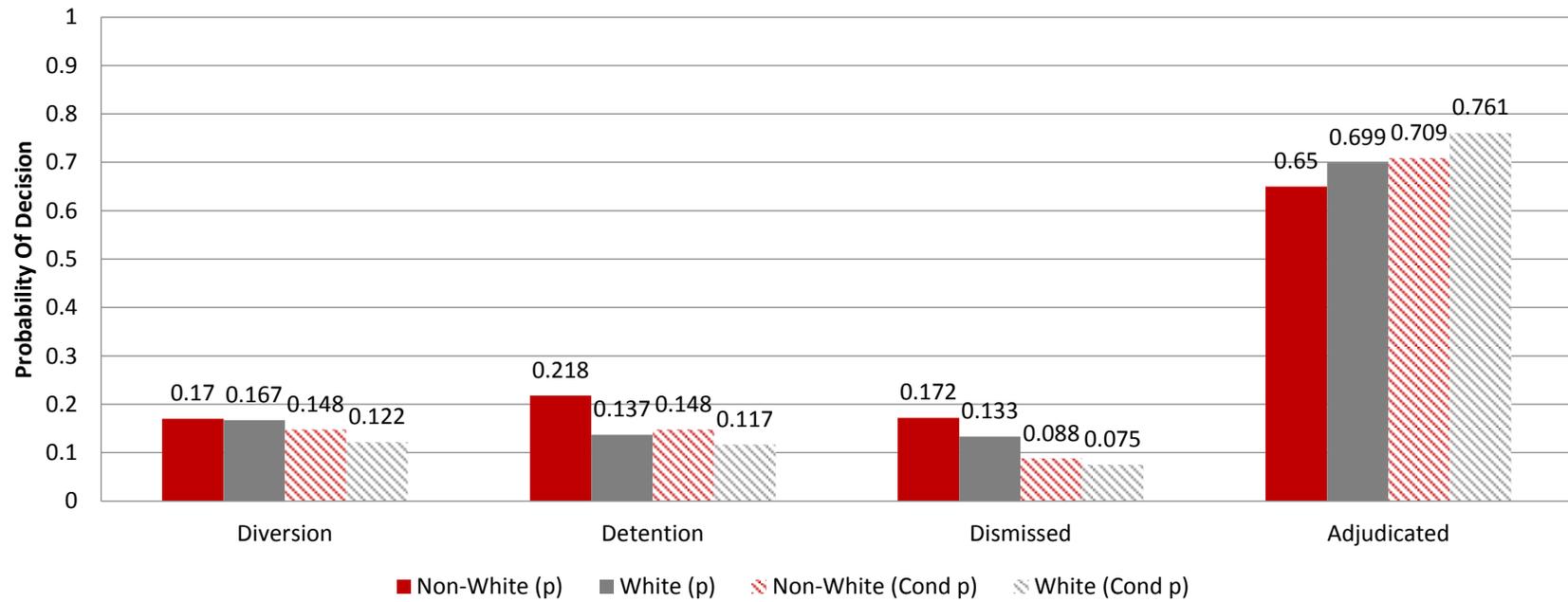
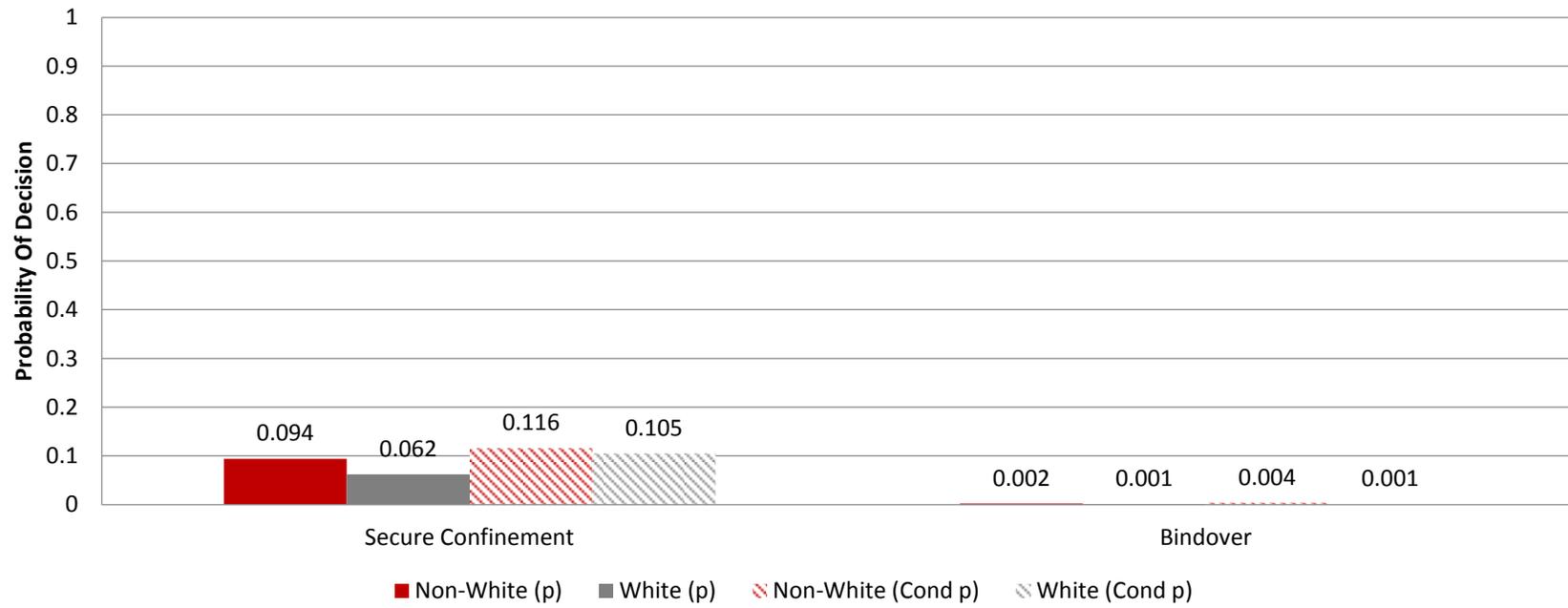


Figure 19b. Summary of Initial Probabilities and Conditional Probabilities for Secure Confinement and Bindover



Summary of juvenile court record analysis. White and Non-White youth both made up 50 percent of referrals to the Montgomery County Juvenile Court. However, according to the 2010 Census, these groups accounted for 66.4 percent and 33.6 percent of the juvenile population ages 10-17, respectively. These numbers suggest that, on the surface, there is some level of disparity in involvement with the juvenile court.

In the bivariate statistical models that included only race and each of the case outcomes, the effect of race varies among the outcomes. For case dismissal and adjudication, there is a significant race effect that favors Non-White youth. Specifically, Non-White youth were more likely to have their case dismissed and less likely to be adjudicated than their White counterparts. Conversely, Non-White youth were significantly more likely to be detained, placed in secure confinement, and waived to criminal court. There was no significant race effect for diversion in the bivariate model.

To better understand how race impacts decision-making in the juvenile court, we estimated statistical models that controlled for legally relevant and extralegal factors. The significant effects for detention, case dismissal, adjudication, and bindover found in the bivariate models maintained their significance and direction in the final models. The effect of race on diversion changed from a nonsignificant effect in the bivariate model to a significant effect that favors Non-White youth in the final model. Conversely, the race effect for secure confinement was significant in the race-only model but nonsignificant in the final model. Overall, the results of the full models indicated that race still plays a significant role in five of the six court outcomes, although not always to the disadvantage of Non-White youth.

Montgomery County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Montgomery County staff in May and June of 2013. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and legal and social services available in the community. Questions also focused on identifying community assets and suggestions for strategies for addressing causes of disproportionality in court involvement and outcomes. Twelve interviews were conducted with administrative staff, supervision, intake/assessment specialists, and judicial staff. Three of the twelve interviewees participated in DMC related-committee events or initiatives in the area, suggesting that they had some degree of involvement with the County's work on the issue. Interviews lasted between 30 and 90 minutes, depending on interviewee's roles in the court and their level of disclosure. Data were then gathered on detention (2), administrative (4), and specialized case review (2) hearings in May and June of 2013.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. A majority of respondents believed that policies and procedures in the court have focused on the individualized needs of youth, and that particular emphasis has been placed on processing, assessment, and programming strategies at the Montgomery County Intervention Center (IC). The Intervention Center is a centralized intake model that link youth to

social service interventions as a means of limiting youth's involvement in the juvenile justice system. The court's strategy (or mission) to "act in the best interests of youth" was discussed across several interviews. Formal ratings on the court's ability to address the risks and needs of youths were also consistent with this theme.

This orientation was evident in the court's support for DMC-reduction initiatives and effort to connect at-risk youth with services in their local community. Specifically, the cultivating of local partnerships and coalition building, direct advocacy through training seminars such as *Bridges Out of Poverty*, JDAI efforts (e.g., population control committee meetings, electronic home monitoring), the implementation of the Disproportionate Minority Contact Diversion Program (DMC/DP), and data review were identified as contributing to the court's success. The DMC/DP was developed in response to local concerns regarding the number of youth referred to the court from select areas within the county (i.e., high risk or hot spot zones). Eligibility is restricted to non-violent offenders who are willing to participate in the diversion program. The average length of service is 90-days, depending on the youth's level of need. Staff also identify community interventions, work with family members (if appropriate) to support youth, monitor progress, and seal arrest and court records at successful completion. Youth who do not complete program requirements, however, are referred to the Juvenile Justice system by program staff. One staff member estimated that at the time of the assessment, approximately 200 to 250 youth are served through DMC/DP each year.

Notwithstanding the court's efforts, a number of respondents explained that relationships across stakeholder groups were sometimes difficult to manage, which could affect communication and progress. They noted that despite the court's effort to implement and

direct DMC-reduction strategies, education and child welfare partners in the area exerted little effort to be involved, and emphasized that a “plan for change” should “include community stakeholders.” Others acknowledged the importance of a collaborative approach to enhance the quality of the existing interventions, expand the array of program and service options, and *potentially* reduce the number of juvenile justice and minority referrals in the area. Staff also believed that as collaborative efforts take more of a foothold, potential benefits from DMC-strategies could extend to the mental health, family, education, and child welfare sectors.

Overall, staff advocated for greater collaboration to engage in discussions about disproportionate minority contact and develop shared strategies for a greater impact. Participants shared that, “people need to be comfortable discussing these issues;” and “we need people at the table that are not afraid to be transparent and say what needs to be said.” Others added that, “[the court] would benefit from more coordination,” and that the lack of collaboration, “despite the conscious effort to engage agency partners,” were “frustrating” and represented “lost opportunities for improvement.”

The education system. While some interviewees linked inadequate resources, teacher-student ratios, qualifications, school mission statements, and the lack of school pride (2 of 12) to DMC, most participants identified the need for truancy intervention programs and expressed their concerns regarding the number of youth referred to the court. One staff member estimated that in a recent school year the majority of referrals came from inner-city school districts, which were disproportionately minority. Others highlighted the potential impact of youths’ environment on academic success as a contributing factor and potential pathway that youth take to the juvenile justice system. One staff member explained that,

“Schools impact disproportionate minority contact. Youth aren’t invested [or attached] to their school, and have no school pride. [What I mean is that] youth feel disconnected from their school and either [choose] not to go or act out.”

Another staff member added that,

“Families don’t value academic [success anymore]. The court would benefit from having educational, truancy, and literacy programs to involve [and re-incentivize] youth.”

The family system. Respondents were asked to describe the role of family in the decision-making process and discuss how the family might contribute to DMC in the area. Staff explained that family interaction processes (the nature of their engagement) were key ways in which family played a role. Staff also noted that referral decisions do not hinge solely on youth’s risk to the safety of the community (i.e., severity of the intake offense or prior history), but also depend on families’ willingness to participate in the court process, the parents’ expressed interest in the child, and the quality of the parent-child interactions. Elaborating on these points, respondents commented that, “families can be barriers and resist,” and “[families] can pose a risk to youths’ success.” Similarly, “uncooperative parents affect youth, and [make it more difficult] to change [behavior]” commented another staff member.

Other participants attributed the breakdown of the family unit as contributing to disparities in the juvenile justice system. As one participant described it, “the lack of male role models contributes to [minority youth contact].” Participants also pointed to the need for family resource centers, such as the Victory Center, to remedy these issues. The focus of the Victory Center is to support and assist families by providing mentoring and tutoring services, and well-being services (e.g., nutrition and health). Staff also noted that the importance of family was evidenced by the court’s commitment to engage youth and their support network in

the supervision process. For example, one staff member noted that “we extend service hours so that parents don’t have to take off work.” Another interviewee mentioned that the court,

“[Encourages] families to be as involved as possible...In residential care, for example, we contact youths’ family [or other support] to explain the visitation process and hours [so that they are more likely to come].”

Socioeconomic conditions and neighborhood context. Respondents were divided in their opinion of how socioeconomic status and neighborhood disadvantage contributed to disproportionate minority contact. Several respondents rated socioeconomic conditions as a strong contributing factor, but did not elaborate on how these factors impacted system involvement. Among those who felt that resident perceptions’ of community risk contribute to DMC, it was believed that the volume of minority referrals were due to a greater police presence. Other participants linked community disadvantage and differential resource availability to disparities. Participants who raised these issues felt that additional resources were necessary in order for youths to succeed. These participants discussed inviting community, legal, and faith advocates “to the table” and implementing centers where youth can receive services as potentially promising approaches.

Summary. Interviewees recognized the importance of and challenges to inter-agency collaboration when addressing the risks and needs of youth in Montgomery County. As suggested by staff, the needs of youth who are at risk, particularly minority youth, are multifaceted and require systematic approaches to prevention and service delivery. Moreover, explanations of how education, family, and community factors contribute to disproportionality provide further impetus for stakeholders to work together. Although the interview results clearly shows a good deal of effort to date, a comprehensive approach to replace the

fragmentation between system, education, and child welfare agencies appears to be still evolving.

Summary of Findings and Implications: Montgomery County

Four police agencies in Montgomery County contributed arrest record data to the study. African-American youth account for the majority of juvenile arrests in all but Huber Heights, and the analysis of the Relative Risk Index (RRI) and the Odds Ratios (OR) suggest that minority youth (particularly African-American youth) were disproportionately arrested in two of the sites. This disproportionate contact with minority youth was found to be related to various factors in those arrests. In Dayton, for example, those arrests were more likely to come from less serious crimes while in Huber Heights the arrests were more likely to come for serious crimes. Additionally, a greater percentage of White youth arrests involved the use of alcohol and/or drugs compared to Non-White youth arrests made by MCSO and Huber Heights Police Department. In comparison, co-offenders were more prevalent in arrests of Non-White youth than arrests of White youth made by MCSO.

Police officers from the four agencies participated in focus groups as well. Despite the mixed findings presented in the police record data regarding Non-White versus White patterns for serious offenses, those officers generally suggested that the prevalence and seriousness of offending among minority youth increases their likelihood of coming into contact with police and, therefore, explains disproportionate minority contact within their respective jurisdictions. These offending patterns were consistently observed to be influenced by neighborhood and family context. Specifically, the compounding of neighborhood cultural, economic, and family context was perceived to create an environment that consistently places minority youth at a

disadvantage regarding their involvement in crime and their subsequent contact with the police.

Though officers did not explicitly provide differential treatment explanations for DMC, some comments regarding departmental strategies to address problem juveniles—and juvenile crime in general—highlights the impact of minority concentration in areas perceived as crime hotspots. Though directed patrol within minority areas may be generated by higher crime rates and subsequent calls for service, this deployment of resources in certain neighborhoods emphasizes that decisions made at the administrative level can increase individual officer contact with minority youth. Additionally, discussions about the differential nature of drug offenses across racial subgroups suggest that the value of arrests for certain types of drug offenses may influence officers' approach to enforcement. The officers also mentioned factors like firearm carrying, particularly conspicuous possession, as potentially forcing their hand in responding more formally to minority youth (see, however, Hemenway et al., 1996; Molnar et al., 2004 for research on reasons for firearm possession among minority youth).

Although officers suggest that further connection of officers to schools would help to alleviate juvenile crime problems and DMC, some evidence suggests that this may contribute to greater numbers of referrals to the juvenile court for some offenses—especially in schools that are predominantly minority (Theriot, 2009). Officer emphasis on the influence of neighborhood context suggests that attempts to reduce juvenile crime and, in many cases, DMC must incorporate efforts directed at the community.

Although the effect of race on juvenile court case outcomes varies across the decision points that we considered here, it does somewhat reflect some of the efforts that have been

made in Montgomery County to date. For case dismissal and adjudication, there is a significant race effect that favors non-White youth. Specifically, non-White youth were more likely to have their case dismissed and less likely to be adjudicated than their White counterparts. Conversely, Non-White youth were significantly more likely to be detained, placed in secure confinement, and waived to criminal court. To better understand how race impacts decision-making in the juvenile court, we estimated statistical models that controlled for legally relevant and extralegal factors. The significant effects for detention, case dismissal, adjudication, and bindover found in the bivariate models maintained their significance and direction in the final models. The effect of race on diversion was significant and favors Non-White youth in the final model. Conversely, the race effect for secure confinement was significant in the race-only model but nonsignificant in the final model. Overall, the results of the full models indicated that race still plays a significant role in five of the six court outcomes. It appears that there is some type of offset for Non-White youth emerges at certain points in the process that may involve greater formality (e.g., case dismissal, diversion, adjudication), but DMC issues persist in other places—even when appropriate controls are added to the analysis. This type of adjustment, which can emerge for multiple reasons, has been identified in other studies where court actors might be more cognizant of weaker cases for minority youth that come into the system (see, e.g., Bishop & Leiber, 2011). Still, given the initial arrest statistics described earlier, the degree to which this might offset earlier disparities is likely somewhat limited.

In general, the twelve court officials who were interviewed for the study pointed out the importance of “acting in the best interests of youth.” They pointed to several initiatives that have been implemented within the county to try to help improve the system for youths and

also deal with DMC issues. They also identified some areas where improvements could be made in order to further address the problem. In particular, they highlighted the need to foster collaboration in the community and multiple local agencies while also delivering better education and family services to at-risk youth and families. Interestingly, this was also mentioned in one of the police focus groups where, in referencing SES, officers suggested that the prosocial opportunity structure is different for White and Non-White youth.

Both police and court actors assert that area-based enforcement patterns contribute to DMC issues in the county. This echoes comments from other sites and some discussion about the potential trade-off between public safety concerns and disproportionate minority involvement in the system that may emerge with targeted enforcement efforts. Respondents in both groups—especially court officials—suggest a need to focus more on collaborative efforts directed at juvenile crime problems and DMC. This is an important theme that also came up from multiple participants in Montgomery County police and courts (and which also emerged in other sites throughout the DMC Assessment Project).

Table 64. Summary of Key Findings from Ohio DMC Assessment: Montgomery County

Available Data w Notes	Key Findings	Implications
Four police agencies provided arrest records (n=4,557)	African-American youth account for the majority of juvenile arrests in three of the four agencies in Montgomery County (e.g., RRs~1.7), but there was variability in pattern of arrests beyond that	Important to look at local arrest and referral patterns for reasons for disparities—e.g., seriousness of offense for arrest varied by agency
Four focus groups with a total of 30 officers 11,276 juvenile court case records	Officers suggested that prevalence and seriousness of offending increased likelihood of police contact, explaining DMC; Also mentioned minority concentration in “hot spot” enforcement areas	Highlights the need to broadly consider targeted enforcement efforts in terms of both impact on crime and community and identify ways to offset potential unintended side effects
12 interviews with court officials and observation of eight hearings	<p>Full court data analysis shows that race has significant relationship with five of the six court outcomes. Some reflect DMC (e.g., detention[+31%], bindover[4.8x]) and others do not (e.g., adjudication[-23%])</p> <p>Court officials identified several initiatives that have been implemented within to try to help improve the system for youths and also deal with DMC They also identified some areas where improvements could be made in order to further address the problem (collaboration)</p>	Seems some court efforts highlighted in interviews may be having impact, but it would be valuable to look at detention, where there are still disparities, to identify relevant interventions (or extensions to those already implemented)

STARK COUNTY, OH

Stark County Police Agency Data

Description of Stark County arrest data. The UC research team reached out to two DYS-selected police agencies in Stark County, Ohio in May of 2013. Research staff sent a formal letter detailing the Ohio DMC Assessment study objectives and data requests to the head of each department. The research team followed up with one unresponsive agency with several emails encouraging them to participate in the study. In August 2013, both of the targeted agencies within Stark County agreed to participate and provide us with the requested data (i.e., Canton Police Department and Stark County Sheriff’s Office). The findings from the analysis of 2010 and 2011 juvenile arrest records from these two agencies are reviewed below.

Table 65. Basic Characteristics of Arrested Juveniles in Locations with Available Data

	Stark Co. Sheriff (N=500) Valid % (N)	Canton PD (N=776) Valid % (N)
<i>Race</i>		
White	76.4 (378)	35.8 (278)
Black, AA	23.2 (115)	64.2 (498)
Multi-Race	0.0 (0)	0.0 (0)
Other	0.4 (2)	0.0 (0)
<i>Sex</i>		
Male	73.6 (368)	70.4 (546)
Female	26.4 (132)	29.6 (230)
<i>Age</i>		
Mean	15.74	15.78
Median	15.92	16.02
Standard Deviation	1.63	1.81

Note: For Canton PD, age is a proxy based on an arrest date of 1/1/2011.

Canton Police Department. Canton Police Department stores individual arrest record files for juveniles. These files were sent electronically to the UC research team in October 2013. The records included individual and offense-related information. The research team cleaned and transferred the arrest records to a data management and analysis program. Basic demographic characteristics of the youth and offense were obtained for youth arrested between 2010 and 2011. The available explanatory variables are listed below:

- Age
- Sex
- Race
- Most Serious Offense Category
- Most Serious Offense Level
- Weapon Use
- Any Co-Offenders Present

Basic description of cases. Table 65 above displays a breakdown of the characteristics of arrested youth in Canton, Ohio between 2010 and 2011. Canton PD provided a total of 776 arrest records for youth ages 10-17 years old. African-American youth accounted for nearly two-thirds of those arrested between 2010-2011 (N=498; 64.2%). The remaining 35.8 percent of arrests involved White youth (N=278). Males made up the majority of arrests (N=546; 71%) compared to females (N=230; 29.6%). Lastly, the estimated average age of youth arrested by Canton PD is 15.78 years old (SD=1.81) indicating that the majority of youth fell between 14 and 18 years old.

Report on RRI and odds ratios. As detailed in the Ohio DYS RFP, one major component of this study is to assess whether DMC may be an issue at each stage in the justice process. Table 66 below provides the 2010-2011 Relative Risk Index (RRI) values associated with juvenile arrests in the Stark County locale of Canton. These values are based on a comparison between

juvenile arrest records and 2010 United States Census data. Based on the Census data, there was a total of 7,611 youth ages 10-17 in Canton. Of those, 54.1 percent were identified as White (N=4,119) compared to 45.9 percent Non-White (N=3,492). Specifically, 33.2 percent of the youth population in Canton is African American (N=2,529). When considering these population values, approximately 7 percent of arrests involved a White youth compared to a higher percentage of arrests involving minority youth (14%). The distinction is greater when focus turns to the proportion of arrests for African-American youth (20%). The proportion of arrest values translate to a Black/White RRI value of 2.92 and a Minority/White RRI of 2.11. Both RRI values are above the threshold established by OJJDP and Ohio DYS (RRI>1.2), suggesting that there is a difference between the relative risk of arrests for White and minority youth (particularly African-American youth). Additional analysis reveals that both the Black/White Odds Ratio (OR=3.39) and the Minority/White Odds Ratio (OR=2.30) are statistically significant at p<0.05. These findings suggest that there is a relatively low probability that differences of this size would appear if the relative risk of arrest for White and Non-Whites was the same indicating that disproportionality in arrests of minority youth may be an issue in Canton.

Table 66. Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority / White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Canton PD	0.07	0.20	0.14	2.92*	2.11*	3.39* (2.90–3.96)	2.30* (1.97–2.68)

Note: Could not compute arrest probabilities or RRIs for Stark County Sheriff.

***RRI greater than 1.20 Threshold or OR that is statistically significant at p<0.05**

Analysis of key case characteristics by race/ethnicity. Table 67a below displays the findings from analyzing the potential explanatory variables of youth arrests by race subgroups (i.e., White vs. Non-White youth).⁶⁷ While none of the findings are statistically significant, one interesting finding emerged from this analysis. A much higher percentage of arrests for felony level offenses involved Non-White youth (N=65; 36.7%) compared to White youth (N=29; 27.9%). Conversely, a greater percentage of misdemeanor arrests involved White youth (N=75; 72.1%) compared to Non-White youth (N=112; 63.3%). This relationship was fairly modest in terms of its strength, however (phi=0.09).

Table 67a. Arrest Characteristics by Race Subgroups – Canton PD

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	61.2 (85)	63.0 (143)	1.71	52.8
Property	38.1 (53)	37.0 (84)	0.07	
Other	0.7 (1)	0.0 (0)		
<i>Most Serious Offense Level</i>				
Felony	27.9 (29)	36.7 (65)	2.30	63.8
Misdemeanor	72.1 (75)	63.3 (112)	0.09	
<i>Weapon Use?</i>				
No	59.5 (154)	60.6 (284)	0.08	6.2
Yes	40.5 (105)	39.4 (185)	0.01	
<i>Any Co-Offenders Present?</i>				
No	80.6 (133)	80.8 (219)	0.00	43.8
Yes	19.4 (32)	19.2 (52)	0.00	

Stark County Sheriff's Office. Stark County Sheriff's Office maintained individual juvenile arrest records. The files were sent to UC research staff in 2014. The records included limited individual youth and offense-related information. The research team cleaned and transferred the record data to a data management program for storage and analysis.

⁶⁷ Note that several of the cross tabulations have high levels of missing data. Thus, the findings should be interpreted with caution.

Basic demographic characteristics of the individual and detailed offense-related information were obtained for juvenile arrests between 2010 and 2011. The available explanatory variables from Stark County Sheriff's Office are listed below:

- Age
- Sex
- Race
- Most Serious Offense Category
- Most Serious Offense Level
- Number of Offenses
- Drug Use
- Alcohol Use
- Any Co-Offenders Present

Basic description of cases. Of the 500 arrests made by SCSO, the overwhelming majority were of White youth (i.e., 76.4%; N=378). Approximately, 23.2 percent of arrests involved a Black/African-American youth (N=115). Four arrests were of youth that were identified as "Other" (0.4%; N=2). A much higher percentage of arrests were of males (73.6%; N=368) compared to females (26.4%; N=132). The average age of arrested youth is 15.74 years old (SD=1.63), indicating that there is a fair amount of variation around the average age.

Report on RRI and Odds Ratios. Given the nature of Census data, the research team was unable to create accurate estimates of the Relative Risk Index or probabilities of arrest for Stark County Sheriff's Office.⁶⁸ However, the population figures for Stark County can be noted and compared to the prevalence of minorities represented in the arrest data for Stark County Sheriff's Office. In 2010, there were 40,892 youth ages 10-17 years old in Stark County. Of

⁶⁸ The population numbers for Stark County are inclusive of all locales located within the county. In order to create RRI or probabilities of arrest one must be able to parse out the specific areas patrolled by Stark County Sheriff's Office. Therefore, we were unable to create accurate estimates of the RRI or probabilities of arrest due to the nature of Census data. These figures should be examined with caution when compared to the prevalence of minority arrest in the arrest data.

those, 81.8 percent (N=33,431) were White compared to 10.1 percent (N=4,115) African-American. In Stark County, 76.4 percent of arrests involved White youth compared to a lesser percentage of African-American youth (23.2%).

Analysis of key case characteristics by race/ethnicity. Table 67b below displays the findings from analyzing the potential explanatory variables by race subgroups (i.e., White vs. Non-White) for each agency in Stark County. One statistically significant finding emerged from this analysis. There is a statistically significant difference in most serious offense levels between White and Non-White youth ($\chi^2=6.65$; Cramer's $V=0.12$) although the relationship is relatively weak. Arrests for felonies and misdemeanors were more likely to involve Non-White youth (21.6% and 73.3%, respectively) compared to White youth (19.6% and 66.3%, respectively). Conversely, arrests for status/disorderly conduct offenses were more likely to involve White youth (N=53; 14.1%) in comparison to Non-White youth (N=6; 5.2%).

Several additional findings came up as well. A slightly greater percentage of arrests for violent/sex offenses were of Non-White youth (N=46; 39.3%) compared to their White counterparts (N=134; 35.4%). Conversely, a higher percentage of arrests for alcohol/drug related offenses involved White youth (N=40; 10.6%) compared to Non-White youth (N=8; 6.8%). Additionally, a greater percentage of arrests for a single offense involved White youth (N=251; 66.4%) compared to Non-White youth (N=71; 60.7%). Conversely, a greater percentage of arrests for three or more offenses involved Non-White youth (N=16; 13.7%) in comparison to White youth (N=35; 9.3%). A larger percentage of arrests for drug use and alcohol use were of White youth (10.8% and 12.2%, respectively) compared to Non-White youth (7.7% and 6.8%). Lastly, a slightly greater percentage of arrests where a co-offender was

present involved White youth (N=203; 54.0%) compared to their Non-White counterparts (N=60; 51.7%).

Table 67b. Arrest Characteristics by Race Subgroups – Stark County Sheriff’s Office

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	35.4 (134)	39.3 (46)	1.82	1.0
Property	29.6 (112)	29.9 (35)	0.06	
Drug/Alcohol	10.6 (40)	6.8 (8)		
Other	6.9 (26)	7.7 (9)		
Status/DC	17.5 (66)	16.2 (19)		
<i>Most Serious Offense Level</i>				
Felony	19.6 (74)	21.6 (25)	6.65*	1.4
Misdemeanor	66.3 (250)	73.3 (85)	0.12	
Status/Unruly	14.1 (53)	5.2 (6)		
<i>Number of Offenses</i>				
1	66.4 (251)	60.7 (71)	2.20	1.0
2	24.3 (92)	25.6 (30)	0.07	
3+	9.3 (35)	13.7 (16)		
<i>Drug Use?</i>				
No	89.2 (337)	92.3 (108)	0.98	1.0
Yes	10.8 (41)	7.7 (9)	0.04	
<i>Alcohol Use?</i>				
No	87.8 (332)	93.2 (109)	2.61	1.0
Yes	12.2 (46)	6.8 (8)	0.07	
<i>Any Co-Offenders Present?</i>				
No	46.0 (173)	48.3 (56)	0.18	1.6
Yes	54.0 (203)	51.7 (60)	0.02	

* statistically significant at p<0.05

Summary of police agency record analysis. Overall, the arrest records indicate that African-American youth made up the majority of arrests made by Canton PD. Conversely, White youth accounted for the majority of juvenile arrests made by Stark County Sheriff’s Department (76.4%). After examining the RRI and odds ratio values, the findings indicate that disproportionality of minority arrests may be an issue in Canton (especially for African-American youth). A more general comparison of the Census data and arrest records for Stark

County seem to indicate that disproportionality may be an issue in the area patrolled by Stark County Sheriff's Office as well. Findings from the analysis of the potential explanatory variables by race subgroups identified relatively few clear relationships. They do seem to indicate that disproportionality in arrests of minority youth may partly be attributed to the seriousness of the offense (i.e., offense level). In both jurisdictions, Non-White youths were more likely to be arrested for more serious offense levels compared to White youth.

Stark County Focus Group Analysis

Between the months of December 2013 and September 2014, two focus groups were completed across two law enforcement agencies in Stark County. These agencies managed jurisdictions varying both in size and population and, therefore, provided distinct observations regarding disproportionate minority contact.⁶⁹ Each focus group session lasted approximately 90 minutes. Together, these groups consisted of a total of 10 participants that varied between 11 and 31 years of experience in law enforcement. The participants held positions within the patrol, school resource, detective, and investigative units within their respective agencies.

Findings. Notably, given the limited diversity in the population they manage, officers from one site did not observe DMC in their day to day experiences. Therefore, while observations from that site regarding factors that contribute to juvenile crime may supplement the information provided by participants within the other, much of the discussion below is based upon analysis of the focus group session with the larger of the two agencies. Officers from that site identified a number of factors that contribute to disproportionate minority contact in their jurisdiction. As a whole, these officers opposed explanations involving the

⁶⁹ While one of the two sites was located in an urban setting, the second was more rural. Therefore, observations among officers in the latter site were significantly limited in comparison.

differential treatment of youth based on race. Instead, the causes of DMC were believed to be driven by the differential offending patterns among minority youth within their jurisdiction.

Differential offending. The participating officers consistently identified the differential offending patterns of minority youth as the principal explanation for disproportionate minority contact with police. Specifically, minority juveniles were observed to have greater involvement in violent crimes, such as aggravated robbery and armed burglary, which result in higher levels of confrontation with law enforcement. Furthermore, minority youths' involvement in gang activity was argued to increase the prevalence of offending among this population and enhance their degree of contact with law enforcement. In contrast, White youth were observed to be more involved in "sneaky crimes" (e.g. arson, non-violent burglary) that rarely result in confrontations with police. Overall, the involvement of White youth in violent crime was suggested to "pale in comparison" to minority youth within their jurisdiction.

The focus group participants suggested several explanations for these differential offending patterns of minority youth. Though the explanations largely emerged in response to the presentation of arrest statistics from their department indicating the overrepresentation of minority youth, they were also advanced during the discussion concerning factors that are believed to contribute to juvenile crime. As a whole, officers attributed the differential offending patterns of minority youth to familial and socioeconomic factors. In turn, these factors were observed to contribute to DMC.

Family factors. The influence of the family and home environment was the most consistent explanation for the differential offending and subsequent contact of minority youth with police and the juvenile justice system. Specifically, officers observed that family factors

directly influence a youth's involvement in crime, officers' decision-making, as well as the efficacy of juvenile justice programs designed to prevent further offending.

Officers suggested that the higher rate of criminal involvement and subsequent contact with police among minority juveniles are affected by the breakdown of the traditional family structure in minority communities. Specifically, in neighborhoods characterized by low socioeconomic status, minority youth were observed to come from homes with absentee parents (particularly absent father figures) that dismiss parental responsibilities and, thus, provide little supervision, discipline, or guidance. It was suggested that this lack of structure in the home allows for the escalation of youth misbehavior and an overreliance on police to correct this misbehavior. Furthermore, the lack of parental involvement in minority youths' formative years was argued to greatly affect their daily routines and general involvement in delinquency. Summarizing these effects, one officer stated, "Not to beat a dead horse, but I think almost everybody in here at one point has went back to the family."

Based on these observations of the family and home environment in minority communities, officers observed that many youth within these neighborhoods raise themselves, finding structure and guidance amongst peers outside of the home, which generally fosters a greater involvement in delinquency. Overall, the enhanced involvement of delinquency among minority youth and the reliance of minority parents on police to provide structure and discipline for their children were viewed to significantly increase the likelihood of minority youth coming into contact with law enforcement.

In addition to increasing the likelihood of offending and police contact, the lack of accountability among parents in minority households was observed to influence police

decision-making in incidents involving youth. Specifically, focus group participants proposed that when parents are available and willing to take responsibility for their child's actions, officers are more inclined to informally handle incidents involving the youth. However, if the youth has a history of offending and the parents are absent or uncaring (suggesting the youth's transgressions will not be addressed in the home), officers tended to opt for more formal action. When discussing the factors that influence their discretion, one respondent highlighted this practice saying, "If I am able to make contact with a parent and the parent appears to me that they are going to take [care of] some business, then I will be more lenient than what the court would do." This officer then went on to say that if the parent is unreachable or this was a repeat case, s/he would then be less likely to be handle things informally.

Though beneficial to many first-time juvenile offenders and their families, the officers highlighted that the reliance on familial factors in police decision-making appears to place minority youth at a greater disadvantage than their White counterparts. For example, when discussing the high rate of contact between police and minority youth, one officer suggested,

"I think it breaks down to the breakdown of the family. I think most officers would give a kid a break if they felt the parents or parent is a parent. But if they feel there are no other options but to charge this kid...then that's where they're going to go."

This officer went on to say that minority youth tend to come from homes where parents might be less available and "that might be a reason why the numbers are high."

Finally, officers suggested that the family and home environment of minority youth significantly impacts the efficacy of the juvenile justice system in decreasing the antisocial behaviors and delinquency of established juvenile offenders. In particular, it was observed that the therapy and counseling rehabilitative-based methods of the juvenile justice system only

work for the youth that have a solid family structure (typically described as a two-parent household) that can supplement counseling services by providing discipline and guidance to youth in the home. In contrast, these types of services were not viewed as effective for inner-city, minority youth who came from homes lacking a support system to uphold the influence/teachings of therapy.

Officers argued that the juvenile justice system is meant to support parents by helping to provide other means of guidance in situations that parents have issue handling on their own. However, without this parent-system partnership, officers argued that the juvenile justice system seems to exacerbate the antisocial behavior of delinquent youth and their subsequent contact with the juvenile justice system by elongating the disciplinary process and providing few 'real' consequences (outside of counseling) for their crimes.

Socioeconomic status. In addition to the importance of familial factors, officers consistently identified socioeconomic status (SES) to be significantly associated to minority youth's involvement in crime and their likelihood of coming into contact with police. Observing that the minority population in their jurisdiction overwhelmingly live within low SES neighborhoods, the officers suggested that minority youth are more likely to experience a number of negative factors (e.g. poverty and broken family) simultaneously that impact the availability and quality of guidance that youth are provided. As suggested above, this lack of structure within the home and larger community permeates youths' lives to result in higher proclivities to delinquency and greater contact with police. When discussing reasons for their department's high rate of contact with minority youth, one officer explained, "Well the whole socioeconomic, poverty, broken family that whole thing I think for whatever reason I think the

Black population experiences that more..." This, in turn, led them to have greater contact with the police.

Due to the influence of socioeconomic factors in predominantly minority communities, officers observed that youth are provided less opportunity to succeed, limited by the lack of structure and high rate of residential mobility often associated with lives of lower income families. For example, one officer described the disadvantage of minority youth in their jurisdiction, saying, "it's just these kids don't stand a chance because they can't get out of it." Finally, officers observed that much of the crime in their jurisdiction occurs in inner-city areas characterized by a concentration of lower income, minority households. Due to the prevalence of crime and the elevated number of calls for service, officers identified that the majority of their time is spent within these lower income, minority neighborhoods. Ultimately, the higher degree of police presence and law enforcement in these areas greatly enhances the likelihood of officers coming into contact with minority youth either through routine patrol or in response to calls for service.

Recommendations to reduce juvenile crime. Focus group participants from both sites provided several suggestions concerning ways to reduce juvenile offending in Stark County. These suggestions outlined mechanisms by which the juvenile justice system, the school system, and communities within their jurisdictions could decrease offending and promote prosocial lifestyles among youth.

Regarding the juvenile justice system, the need to increase the certainty and celerity of punishment for juvenile crime was consistently highlighted in officers' discussions. To enhance the juvenile justice process and reduce juvenile offending, officers suggested the need to

expand the range of sanctions for minor crimes committed by youth. It was largely agreed upon that providing meaningful consequences for less serious offenses—particularly if they are repeated—could enhance youth perceptions that the juvenile justice system poses a threat to their freedom, ultimately deterring potential new offenders and reducing the escalation in the prevalence and seriousness of offending among juveniles.

The focus group participants also argued for the hiring of additional personnel within the court and corrections (i.e. probation) segments of the juvenile justice system. Based upon observations that the system is typically overwhelmed, it was believed that the addition of personnel would increase the ability of the court and probation offices to manage the ever growing population of juvenile offenders in a swift manner. Finally, officers emphasized the need for the juvenile court to hold parents accountable for the actions of their children. Specifically, it was suggested that the juvenile justice system should incorporate court-mandated education and counseling courses for parents. Officers explained these courses should be designed to enhance parental accountability and improve the home environment of youth.

Officers within these focus groups also emphasized the utility of the school system in addressing juvenile crime. Specifically, it was suggested by SROs that the school setting provides a unique opportunity to observe youth and stem the development of delinquent behavior. For this reason, officers supported the use of SROs and counselors within schools to maintain contact and to provide necessary services and guidance to the youth population. Furthermore, officers highlighted the potential efficacy of a school/juvenile justice partnership involving open communication between the two systems regarding the history of youth's

offending, behavioral profiles, and education status to make sure that delinquency is being addressed properly.

Finally, officers suggested the importance of mentorship programs for youth. Provided by the community, these programs were argued to increase youth's association with prosocial models and provide structured time outside school. Though not entirely able to address family-related problems, it was believed that mentorship programs could take steps toward decreasing youth's involvement in crime through the provision of the supervision and support that is often lacking within their homes.

Summary of Focus Group Analysis. Two focus groups were completed in Stark County. Within these groups, officers generally identified disproportionate minority contact with police as the product of the differential offending patterns of minority youth in their jurisdiction. Overall, this differential offending was attributed to youths' familial and socioeconomic environments. Officers observed that these economically disadvantaged, minority communities are typically characterized by high numbers of households with absentee parents where youth are observed to reign free in their day to day activities, with no structure or discipline to guide them away from a delinquent lifestyle. Collectively, these factors were thought to increase the likelihood of youth involvement in crime and, in turn, the juvenile justice system.

The officers' emphasis on the role of family in youth delinquency and their subsequent contact with the juvenile justice system, in particular, highlighted the consistent disadvantage of minority youth, compared to their White counterparts, in their interactions with the juvenile justice system. Specifically, the lack of accountability among parents was the most cited explanation for the differential offending of minority youth and DMC (at all points of the

juvenile justice system). Officers characterized the coupling of disadvantaged family situations with reliance on familial factors in the decisions and processes of system actors as a factor in the disproportionate contact observed at multiple stages of the justice process. In particular, it was suggested that the juvenile justice system was originally constructed in a time when parents could generally be relied upon to provide the structure and discipline youth require to become prosocial additions to society. However, it was observed that the system has failed to evolve as the dynamic and responsibilities of family have changed over time. Ultimately, the officers argued that the juvenile justice system cannot support, or expect support from parents in a positive home environment that does not exist. Therefore, it was proposed that measures must be taken to create the structure and accountability that they observed to be lacking in the homes of juvenile offenders through the advent of court-mandated parenting courses and counseling.

Concluding their discussion, the officers within Stark County emphasized the need to enhance the certainty and celerity of punishment, highlighting several mechanisms by which the juvenile justice system can improve (i.e. expanding range of sanctions, hiring more personnel, court-mandated parenting classes). However, officers also suggested the need to enhance communication among the various agencies involved in the lives of youth. The School resource officers, in particular, proposed the efficacy of sharing information across youth counselors, police, and courts in assessing and addressing youth behaviors and needs. Furthermore, officers identified the benefit of the community, suggesting that mentorship programs can help provide the prosocial models that are often lacking from within the homes of youth. Overall, it was clear that the focus group participants advocated a holistic approach,

suggesting that an effective reduction in juvenile crime (and potentially DMC) will require the joint efforts of the juvenile justice system, the school system, and the community.

Stark County Juvenile Court

Data collection. The data request was sent to the Stark County Juvenile Court in Spring of 2013. UC staff conducted two phone calls with court staff to clarify the request and offer assurances regarding data security. The court submitted data comprised of basic case records for 2010 and 2011 electronically in January 2015. These data were then processed and analyzed by UC research staff.

Measures included in the analysis. The primary variable of interest was race, but we also include indicators for sex, age, number of charges in the current case, prior record, and most serious offense level. *Race* was recorded as White and Non-White, and was recoded as a set of two variables capturing membership in each of these categories (or not). *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of charges* is a continuous variable indicating the number of separate charges in the current case. *Priors* is a dichotomous measure indicating whether the youth had any petitions filed prior to the current case. *Most serious offense level* captures whether the case involved a felony, misdemeanor, or status offense and was recoded as a set of three dummy variables capturing membership in each of these categories.

The primary outcome variables were dichotomous measures of whether youth experienced particular outcomes at four decision points: detention, dismissal, adjudication, and

secure confinement.⁷⁰ *Detention* indicates whether a youth was placed in secure detention while awaiting further proceedings. *Dismissed* identifies whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent, diversion). *Adjudicated* indicates whether a youth was formally found delinquent for the current case. *Secure confinement* indicates whether adjudicated youth were placed in an out-of-home secure correctional facility.

Data coverage and preparation. Overall, there were 4,894 cases referred to Stark County Juvenile Court between January 1, 2010 and December 31, 2011. Thirty-four cases were excluded from the analysis because the youths' race was not identified, leaving a final sample of 4,860 cases. Among the variables used in the analyses, there was relatively little missing information regarding the case or youths. There was complete coverage (i.e., no missing data) for race, sex, priors, and number of charges. There was 20 percent missing data for most serious offense level, 4 percent missing data for age, and 0.3 percent missing for each of the four outcome variables. To retain all cases for analyses, we used multiple imputation (MI) to insert values for these six variables. MI replaces missing observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, priors, and number of charges. MI first generates a specified number of datasets—in this case, ten—in which missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from those ten analyses are pooled

⁷⁰ Diversion was not included in the analysis because the Stark County Juvenile Court did not provide data on diverted cases. In addition, bindover was not included in the analysis because only four cases were waived to criminal court.

together. This ensures that the results appropriately account for the variation in the imputed values.

Descriptive statistics. In 2010-2011, White youth comprised 69.3 percent of the petitions to Stark County Juvenile Court and Non-White youth accounted for 30.7 percent. According to the 2010 Census for Stark County, these groups accounted for 83.4 percent and 16.6 percent of the juvenile population ages 10-17, respectively. Taken at face value, these figures indicate a moderate level of disproportionality in terms of the profile of cases coming into the juvenile justice system. Males accounted for 64.8 percent of the petitions, and the average age at case initiation was 15.91 years old (SD=1.55). The mean number of charges in the current case was 1.47 (SD=1.08). Most youth were charged with a misdemeanor (75.7%), followed by felony (14.4%) and status offense (9.9%). Finally, 51.6 percent of cases involved a youth with at least one prior petition and 48.4 percent of cases involved youth with no prior petitions.

Court outcomes. We estimated three statistical models for each of the four decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for Non-White youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and other legally-relevant factors (priors, number of charges, and most serious offense level). The final model included the variables above, as well as the extralegal factors sex and age (see Table 68). Analyses were conducted in such a manner as to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Detention. There were only 49 cases that led to a detention decision (1.0%) in the records provided. In the race-only model, the effect of race was not statistically significant. The initial probabilities for both White and Non-White youths were 0.01, indicating there was no initial disproportionality in these data. After adding the legally-relevant variables in the second model, the effect of race remained nonsignificant. The only significant variable in this model was priors. Specifically, youths that had at least one prior petition were over four times more likely to be detained relative to those with no prior petitions (OR=4.15).

When the extralegal variables were added in the final model, the effect of race was not significant. The predicted conditional probabilities of detention for White and Non-White youth were identical (0.003), indicating equal likelihood of detention when using fixed values for the other variables. Prior petitions (OR=3.18) remained the only significant legally-relevant variable. Of the two extralegal variables, only youths' age was significant. Specifically, a one year increase in age predicted a 119 percent increase in the odds of detention (OR=2.19). Overall, the effect of race on detention was not significant in any of the models. Instead, results indicated that the decision to detain youth was predicted by prior petitions and the youth's age.

Dismissed. In the race-only model, Non-White youth were 30 percent less likely to have their case dismissed relative to White youth (OR=0.70). After adding legally-relevant variables in the second model, Non-White youth remained 30 percent less likely to have their case dismissed (OR=0.70). Youth with at least one prior petition were significantly less likely to have their case dismissed relative to those with no prior petitions (OR=0.80). Youth charged with a

misdemeanor (OR=0.59) or status offense (OR=0.59) were significantly less likely to have their case dismissed compared to those charged with a felony.

In the final model that included extralegal variables, Non-White youth were 31 percent less likely to have their case dismissed relative to White youth. Each of the statistically significant legal variables from the second model maintained its significance with little (if any) change in the odds ratio. Finally, females were 67 percent more likely to have their case dismissed compared to males (OR=1.67). Overall, the effect of race was a significant predictor of case dismissal in each of the three models.

Adjudication. In the initial model, the effect of race was not significant. The initial probabilities for White and Non-White youth were identical (0.76), indicating no disparity in adjudication in these data. The effect of race remained nonsignificant in the second statistical model. A one unit increase in the number of charges in the current case predicted a significant 20 percent increase in the odds of adjudication (OR=1.20). Youth with at least one prior petition were significantly more likely to be adjudicated relative to those with no prior petitions (OR=1.42). Youth charged with a misdemeanor (OR=1.79) were 79 percent more likely to be adjudicated delinquent compared to those charged with a felony, while those charged with a status offense (OR=0.44) were 56 percent less likely to be adjudicated.

When the extralegal factors were added in the final model, the effect of race remained nonsignificant. The predicted probabilities of adjudication for White (0.80) and Non-White youth (0.79) were almost identical, indicating no significant difference in the likelihood of adjudication when using fixed values for the other variables. Each of the statistically significant legal variables from the second model maintained its significance with little change in the odds

ratio. Both of the extralegal variables were significant as well. Females were 22 percent less likely to be adjudicated delinquent relative to males (OR=0.78) and a one year increase in age predicted an 8 percent decrease in the odds of adjudication (OR=0.92). Overall, the effect of race was not a significant predictor of adjudication in any of the models. Instead, the adjudication decision appeared to be more closely associated with number of charges, prior petitions, offense seriousness, and youth's sex and age.

Secure confinement. The final decision point examined was placement in secure confinement. This analysis used the subsample of cases for youth who were adjudicated delinquent for a felony offense in Stark County Juvenile Court (N=522).⁷¹ There is a very small base rate of youth who were placed in secure confinement in Stark County (~1%), which means that a relatively small numerical difference in its prevalence in each racial group could affect the estimates and odds ratios.

In the initial model, the effect of race was not statistically significant. The probability of secure confinement for White youth (0.05) was slightly lower than for Non-White youth (0.08). This difference was not statistically significant, however, indicating no reliable initial disparity in secure confinement in these data. After adding legally-relevant factors in the second model, the effect of race remained nonsignificant. A one-unit increase in the number of charges in the current case predicted a significant 14 percent increase in the odds of secure confinement (OR=1.14). Youth with at least one prior petition were over three times more likely to be placed in secure confinement relative to those with no previous petitions (OR=3.24).

⁷¹ This analysis was limited to youth adjudicated for a felony because no youths charged with a status offense and only 4 youths charged with a misdemeanor were placed in secure confinement.

When the extralegal factors were added in the final model, the effect of race remained nonsignificant. The conditional probability of secure confinement for White youth (0.02) was marginally lower than that for Non-White youth (0.04), although this difference was not statistically significant. None of the remaining legally-relevant or extralegal variables were significant predictors of secure confinement. Overall, the effect of race was not significant in any of the three models.

Initial and conditional probabilities of case outcomes. Figure 20 displays the initial and conditional probabilities for each of the outcomes by youths' race (White/Non-White). The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any of the other influences mentioned above. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and Non-White youth will experience a particular case outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case.⁷² This also allows us to consider whether any differences between White and Non-White youth observed for the base analysis shift when accounting for other relevant influences attached to the case.

⁷² The mean values for number of charges in the current case (1.47) and age (15.91) were used to calculate predicted probabilities for detention, dismissal, and adjudication. The remaining variables were set to their most frequently appearing categories: offense seriousness – misdemeanor; sex – male; and priors – no. Because secure confinement is typically reserved for the most serious offenses/offenders, the value for offense seriousness was changed to felony in the calculation of the conditional probabilities for this decision point. The values for the other variables remained the same.

Table 68. Binary Logistic Regression – Outcomes for Stark County Juvenile Court (Full Models)

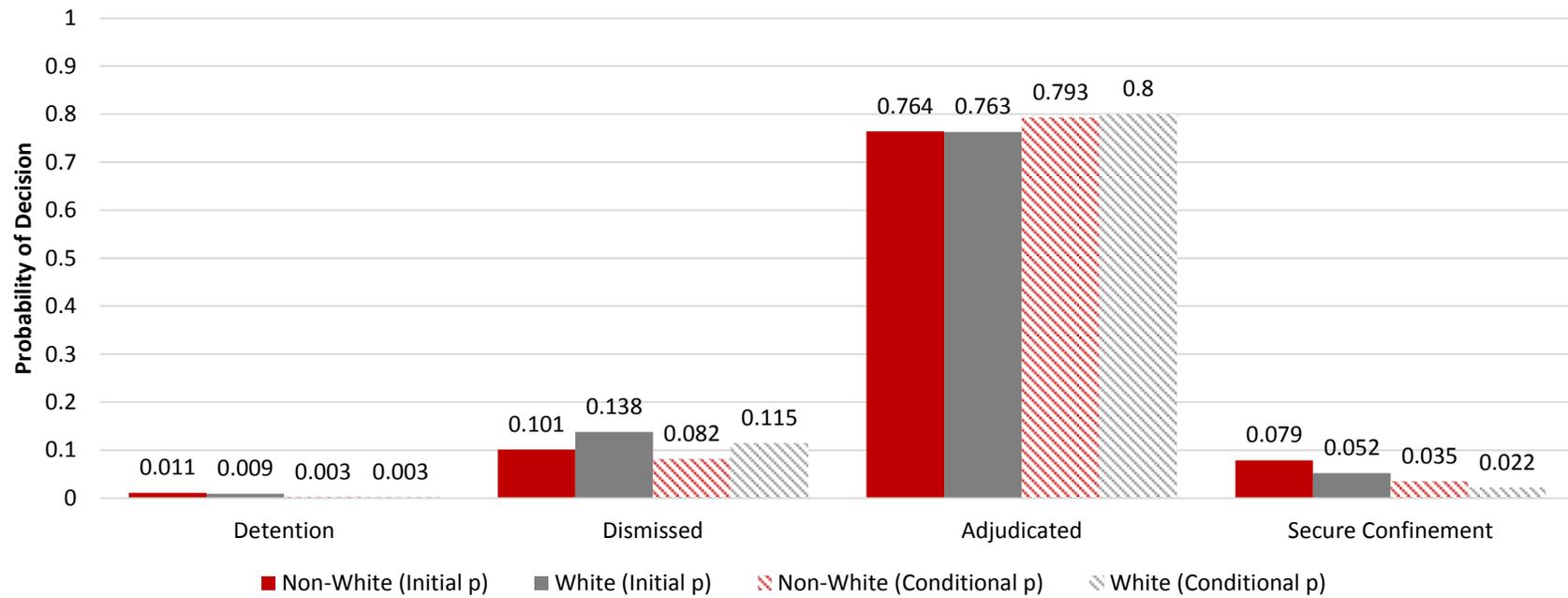
	Detention			Dismissed			Adjudicated			Secure Confinement ²		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	0.16	1.17	0.32	-0.37	0.69	0.10	-0.03	0.97	0.08	0.47	1.60	0.39
Num. of Charges	0.04	1.04	0.10	0.05	1.05	0.04	0.18	1.19	0.04	0.11	1.12	0.06
Priors	1.16	3.18	0.38	-0.19	0.83	0.09	0.40	1.49	0.07	0.85	2.35	0.58
<i>Offense Seriousness</i> ¹												
Misdemeanor	-0.01	0.99	0.47	-0.64	0.53	0.13	0.64	1.90	0.12	----	----	----
Status/Unruly	-0.53	0.59	1.09	-0.68	0.51	0.20	-0.76	0.47	0.15	----	----	----
Sex	-0.14	0.87	0.34	0.51	1.67	0.09	-0.25	0.78	0.07	----	----	----
Age	0.78	2.19	0.21	-0.02	0.98	0.03	-0.09	0.92	0.02	0.28	1.33	0.17
Constant	-18.45		3.54	-1.22		0.49	1.87		0.40	-8.47		2.65

Notes: Bolded entries represent statistically significant estimates at p<0.05; B = logit coefficient; OR = odds ratio; SE = standard error

¹ Set of dummy variables with Felony as the reference

² This analysis used the subsample of youth who were adjudicated delinquent; N = 3,858

Figure 20. Summary of Initial Probabilities and Conditional Probabilities for Stark County Juvenile Court



Summary of Stark County Juvenile Court record analysis. White youth comprised the majority (69%) of the referrals to Stark County Juvenile Court; Non-White youth made up the remaining 31 percent. According to the 2010 Census for Stark County, however, these groups accounted for 83.4 percent and 16.6 percent of the juvenile population, respectively. These figures indicated that, on the surface, there was a degree of disproportionate minority contact in the cases coming into the Stark County Juvenile Court during the years for which we have records.

In the initial statistical models, the effect of youths' race varied among the four outcomes. Non-White youth were significantly less likely to have their case dismissed compared to White youth. However, the effects of race were not significant for detention, adjudication, or secure confinement. To better understand how race might affect juvenile court decision-making relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal factors. The effect of race mirrored that found in the bivariate models. Specifically, Non-White youth were significantly less likely to have their case dismissed relative to White youth, while the effect of race was not significant for the remaining outcomes. Instead, results indicated that the most consistent predictors of these outcomes were prior petitions and offense seriousness, suggesting that the race differences observed initially in the groups' respective prevalence of petitions were explained—to a degree—by those legally-relevant factors.

Stark County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Stark County court staff in June of 2014. We used a semi-structured discussion protocol that asked questions about

disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court involvement and outcomes. Eight interviews were conducted with administrative (programming directors and department supervisors), supervision, intervention, and judicial staff. The interviews lasted between 30 and 90 minutes, depending on interviewees' roles in the court and their level of disclosure. Data were also gathered on a limited number of initial review and disposition hearings (3) in June of 2014.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. A majority of respondents (63%) agreed that system factors contributed to the overrepresentation (and disadvantage) of minority youth. Explanations of how, and the degree to which, these factors impacted juvenile justice processes in the area differed, however. Most court officials (5 of 8) attributed DMC to the limited number of community-based prevention and intervention programs, and stressed the need for mentoring, mental health, and trauma-informed services to better meet the risks and needs of the youth that come into contact with the court. Additional trainings on how to prevent disengagement and DMC in juvenile justice and social services, as well as alternatives to detention were also

identified as important areas of need in the court. In fact, when staff asked interviewees how to better address DMC, one respondent explained that,

“Early intervention and [more] family-based programs are needed. [Alternatives] to detention are also limited, youth are either held in detention or released...In some cases, unruly youth are held in detention; and although the length of stay is short, youth [especially minority youth] can be [de-sensitized] by the routine.”

Two of the eight respondents believed that DMC was no longer (or less of) an issue in the local jurisdiction than it was in previous years. They pointed to prior cultural competency trainings, a re-allocation of funding and the hiring of culturally diverse staff, participation in programs that kept youth in the community, and the implementation of evidence-based, multisystem services as reasons for this shift.

The education system. Respondents were divided in their opinion of how educational factors contributed to disproportionate minority contact. Explanations ranged from the differential use of suspension and expulsion strategies to the failure of youth to fully participate in the educational system or value academic achievement. In particular, staff linked chronic absenteeism, poorly educated parents who neither value or model academic skills (e.g., reading), punitive responses to misconduct, and an over-reliance on alternative educational placements to school disengagement and disproportionate contact. “Alternative schools are an issue, and being used as a discipline strategy. They offer [lower-track or remedial] course-work, less instructional time in the classroom, and allow youth to be [sent] home rather than have staff [address misconduct] incidents with youth,” cautioned one staff member. Others (3 of 8) rated the education system as not or only slightly contributing to DMC.

The family system. A majority of respondents (5 of 8) cited families' willingness to participate in court processes or treatment as an important consideration in the decision-making process, and linked families' involvement to successful outcomes for youth. "Family is key. Without engagement, interventions aren't successful. If staff can't see that, then they are missing the mark," exclaimed one staff member. Another interviewee added that, "Family is an important piece of this puzzle. We encourage parents to be actively involved, especially if they want to help [their child] succeed."

While most staff acknowledged the role of family in the "successful" provision of services, others (2 of 8) explicitly acknowledged the challenges involved. One of those respondents explained that minority families living in disadvantaged urban communities often have "suspicions about the court's intentions" that discourage their full investment in the process. Further compounding their distrust in the system, according to these staff, are language and cultural barriers, high staff turnover, and long wait-lists for family-based services. Making this point directly, one staff member commented,

"Although resources are limited, the court's biggest [barrier] is families' lack of trust and reluctance to engage in the court. [Our approach has improved], [but sometimes] think our approach isn't working...It's important that we [encourage staff to be responsive to treatment-related] barriers, and be [willing] to meet families and youth in their homes [or at the court] during non-traditional hours."

Socioeconomic conditions and neighborhood context. The majority of respondents (75%) identified poverty, and related circumstances (e.g., work, as contributing to the overrepresentation of minority youth in the juvenile justice system. Specifically, staff linked high resident turnover (or transiency), an increase in single-parent and disrupted households, high unemployment, a lack of local support networks in densely populated areas, poor housing,

and inadequate healthcare to disparate outcomes. Furthermore, conditions in the home (e.g., attitudes favorable to violence or crime), the availability of firearms, exposure to antisocial peer networks and gang affiliation were also linked to challenges in prosocial adolescent development and disproportionate minority contact.

Summary. While some reported that DMC was no longer an issue in the local area, others linked socioeconomic and educational factors to disproportionate minority contact and stressed the need for prevention and intervention programs that serve multi-risk and multi-need youth. Staff also identified familial issues as contributing to DMC and noted how families' distrust of the system impacted the court's recommendations for interventions. In response, the court implemented the Community Support and Diversion program in 2011 to provide high fidelity wrap-around (HFWA) services to high-risk minority youth in targeted zip codes. In doing so, system actors have been able "to *wrap* services around youth and families to prevent deep-end involvement and address DMC." Noting the county's success in addressing the risks and needs of youth that come into the court, one service provider explained that, "Over time, [minority] families view their therapist as a [n] advocate." This leads to improved compliance and facilitates linkages to other community services.

Summary of Findings and Implications: Stark County

UC obtained data for 776 arrest records from Canton PD and 500 records from the Stark County Sheriff's Department. African-American youth made up the majority of arrests made by Canton PD. Conversely, White youth accounted for the majority of juvenile arrests made by Stark County Sheriff's Department (76.4%). After examining the RRI and odds ratio values, the findings indicate that disproportionality of minority arrests may be an issue in Canton

(especially for African-American youth). A more general comparison of the Census data and arrest records for Stark County seem to indicate that disproportionality may be an issue in the area patrolled by Stark County Sheriff's Office as well. Findings from the analysis of the potential explanatory variables by race subgroups identified relatively few clear relationships. They do seem to indicate that disproportionality in arrests of minority youth may partly be attributed to the seriousness of the offense (i.e., offense level). In both jurisdictions, Non-White youth were more likely to be arrested for more serious offense levels compared to White youth.

The UC research team conducted two focus groups, with a total of ten officers, in Stark County. Officers generally believed that disproportionate minority contact with police in their jurisdiction stemmed from the offending patterns of those youth. This differential offending was attributed to disadvantaged family situations among minority youth, compared to their White counterparts. In particular, officers suggested that these environments, which led to deficits in parenting, affected youth behavior and available options for treatment. They also noted that the reliance on the family in the juvenile justice process led to additional disadvantage for these youth. Ultimately, the focus group participants argued that steps must be taken to create the structure and accountability that they saw as lacking in the homes of juvenile offender. For example, officers suggested the need to expand the range of sanctions, hire more personnel, and mandate parenting classes in juvenile courts. Additionally, SROs proposed more collaborative work among schools, police, and courts as a method of addressing youth behavior and needs—and the DMC problem more specifically.

Stark County provided approximately 4,800 juvenile court records for analysis. White youth comprised the majority (69%) of the referrals to Stark County Juvenile Court; Non-White youth made up the remaining 31%. A comparison of the relative prevalence of White and Non-White youth to 2010 Census figures showed that, on the surface, there was a degree of disproportionate minority contact in the cases coming into the Stark County Juvenile Court during the two years studied.

In the initial statistical models, the effect of youths' race varied among the four outcomes. Non-White youth were significantly less likely to have their case dismissed compared to White youth. However, the effects of race were not significant for detention, adjudication, or secure confinement. To better understand how race might affect juvenile court decision-making relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal factors. The effect of race mirrored that found in the bivariate models. Specifically, Non-White youth were significantly less likely to have their case dismissed relative to White youth, while the effect of race was not significant for the remaining outcomes.

Eight members of the Stark County Juvenile Court staff were interviewed for the study. Some felt that DMC was no longer an issue in the county. Some saw DMC as a problem and pointed toward socioeconomic, educational, and family factors as contributing factors. In particular, they noted the difficulties of involving minority families in the court and treatment process. Some mentioned specific efforts like the Community Support and Diversion Program as examples of efforts to deal with this issue in a strategic way.

Table 69. Summary of DMC Assessment: Stark County

Available Data w Notes	Key Findings	Implications
Police records from two agencies (n=1,276)	Overall comparison of arrests suggests some disproportionality, but there were relatively few clear patterns on case characteristics—except for differences in levels of offense	Further consider pattern of arrests for felony/misdemeanor/status offenses across race subgroups—any particular types of offenses?
Two police focus groups with a total of 10 officers 4,860 juvenile court records	Officers generally thought DMC with police stemmed from offending patterns of minority youth. Attributed to disadvantaged family situations. Also noted that reliance on family in court process fosters further disadvantage	Suggestions from focus groups ranged from to increased sanctions in juvenile court for deterrence to increased school-court-police partnerships suggested by SROs
Eight interviews with court officials	Non-White youth were significantly less likely to have their case dismissed relative to White youth, while effect of race was not significant for remaining outcomes	Look at front end case processing decisions and reasons for dismissal to identify any further patterns and identify possible interventions
	Interviewees pointed toward socioeconomic, educational, and family factors as contributing to DMC. In particular, mentioned involving minority families in the court and treatment process	Some court staff mentioned efforts like the Community Support and Diversion Program as examples of efforts to deal with DMC in strategic way

SUMMIT COUNTY, OH

Summit County Police Agency Data

Description of Summit County arrest data. The UC research team made contact with one targeted agency within Summit County, Ohio beginning November 2013. A formal letter detailing the study and data requests were sent to the head of Akron Police Department. The research staff followed-up with Akron Police Department in February 2014. The agency agreed to participate in the study. The findings from the analysis of arrests records from Akron Police Department are described below. They did not, however, participate in the requested focus group. The analysis, therefore, is limited to the arrest record data.

Akron Police Department. Akron Police Department maintained individual arrest records of youth arrested between 2010 and 2011. These files were sent electronically to the UC research team in 2014. The records included individual youth and offense-related information. The research staff cleaned and transferred the arrest records to a data management and analysis program.

Basic demographic characteristics of the individual and offense were obtained for juvenile arrests between 2010 and 2011. The available explanatory variables are listed below:

- Age
- Sex
- Race
- Most Serious Offense Category
- Most Serious Offense Level
- Number of Offenses
- Use of a Firearm

Basic description of cases. Table 70 below provides an overview of the characteristics of arrested youth in Akron, Ohio between 2010 and 2011. Akron Police Department made a total of 3,116 arrests of youth ages 10-17 during the aforementioned timeframe. Of those, the majority of juvenile arrests involved African-American youth (N=2,392; 76.8%). White youth comprised the second largest percent of arrests (N=684; 22.0%). A much smaller percentage of youth were either classified as multi-racial or 'other' (N=40; 1.3%). Males made-up the majority of juvenile arrests (N=2,261; 72.6%) compared to females (N=855; 27.4%). The average age of arrested youth is 15.24 years with a standard deviation value of 1.64.

Table 70. Basic Characteristics of Arrested Juveniles in Akron

	Akron PD (N=3,116) Valid % (N)
Race	
White	22.0 (684)
Black, AA	76.8 (2,392)
Multi-Race	0.0 (1)
Other	1.3 (39)
Sex	
Male	72.6 (2,261)
Female	27.4 (855)
Age	
Mean	15.24
Median	16.00
Standard Deviation	1.636

Report on RRI and odds ratios. As outlined in the Ohio DYS RFP, the first component of the analysis attempted to identify whether DMC may be an issue at various stages in the juvenile justice system. Table 71 below displays the 2010-2011 Relative Risk Index (RRI) values associated with juvenile arrests in Akron. Based on the 2010 Census, there were a total of 20,102 youth ages 10-17 in Akron. Of those youth, 47.5 percent were White (N=9,541) compared to 52.5 percent minority (N=10,561). More specifically, African-American youth

accounted for 42.7 percent of the total population in Akron (N=8,576). When considering the population values in Akron, approximately 7 percent of arrests involved White youth and a much greater percentage of arrests involved minority youth (23% of arrests). Furthermore, a larger percentage of arrests involved African-American youth (28% of arrests). This proportion of arrests translates to a Black/White RRI value of 3.89 and a Minority/White RRI value of 3.21. Both RRI values are above the threshold (RRI>1.2) set forth by OJJDP and Ohio DYS. This suggests that there is a reasonably large degree of difference between the relative risk of arrests for White and minority youth (especially African-American youth). Additional analyses reveal that both the Black/White Odds Ratio (OR=5.01) and the Minority/White Odds Ratio (OR=3.87) are statistically significant at p<0.05. This indicates that there is a low likelihood that differences of this magnitude would be present if the relative likelihood of arrest were in fact the same across the groups. Overall, these findings indicate that disproportionality in arrests of minority youth may be an issue in the Summit County locale of Akron.

Table 71. Analysis of Disproportionality with Available Data (2010-2011 Cases)

	pArrest White	pArrest Black, AA	pArrest Minority Youth	RRI Black/ White	RRI Minority/ White	OR Black/ White (95% CI)	OR Minority/ White (95% CI)
Akron PD	0.07	0.28	0.23	3.89*	3.21*	5.01* (4.57–5.49)	3.87* (3.54–4.24)

*RRI greater than 1.20 Threshold or OR that is statistically significant at p<0.05

Analysis of key case characteristics by race/ethnicity. Table 72 below displays the findings from the analysis of potential explanatory variables by race subgroups (i.e., White vs. Non-White youth). Several interesting and statistically significant findings emerge from this

analysis. First, most serious offense level was statistically significant ($\chi^2=20.18$; $\Phi=0.10$).⁷³ A greater percentage of arrests for felony level offenses involved Non-White youth (25.1% of arrests) compared to arrests of White youth (18.6%). Conversely, a much greater percentage of arrests for status/unruly offenses involved White youth (29.3%) compared to arrests involving Non-White youth (20.1%). However, the strength of the relationship between race subgroups and offense level is somewhat weak indicating that offense level is not all that strongly related to the race of the arrestee. Firearm use was statistically significant across race subgroups although again the relationship is fairly weak ($\chi^2=12.17$; Cramer's $V=0.06$). A greater percentage of arrests of Non-White youth were for offenses involving the use of a firearm (5.8%) compared to arrests involving White youth (2.5%). Although not statistically significant, several interesting differences emerged between most serious offense category for arrests involving Non-White youth and White youth. A greater percentage of arrests involving Non-White youth were for property related offenses (38.9%) compared to White youth (34.6%). Conversely, a greater percentage of arrests involving White youth were for drug/alcohol related offenses (10.5%) compared to arrests of Non-White youth (7.6%).

Table 72. Arrest Characteristics by Race Subgroups – Akron PD

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>Most Serious Offense Category</i>				
Violent/Sex	25.3 (173)	24.4 (593)	8.18	0.0
Property	34.6 (237)	38.9 (945)	0.05	
Drug/Alcohol	10.5 (72)	7.6 (186)		
Other	8.3 (57)	8.6 (209)		
Status/DC	21.2 (145)	20.5 (499)		
<i>Most Serious Offense Level</i>				

⁷³ These findings should be viewed with caution because approximately one-third of the data were missing for these fields.

Felony	18.6 (83)	25.1 (416)	20.18*	32.4
Misdemeanor	52.1 (233)	54.8 (909)	0.10	
Status/Unruly	29.3 (131)	20.1 (334)		
<i>Number of Offenses</i>				
1	68.9 (471)	71.0 (1727)	1.27	0.0
2	22.2 (152)	20.4 (496)	0.02	
3+	8.9 (61)	8.6 (209)		
<i>Firearm Use?</i>				
No	97.5 (667)	94.2 (2291)	12.17*	0.0
Yes	2.5 (17)	5.8 (141)	0.06	

* statistically significant at $p < 0.05$

Summary of police agency record analysis. Overall, the arrest data suggests that African-American youth account for the majority of juvenile arrests (76.8%). When considering the RRI and odds ratio values, it appears that disproportionality of minority arrests may be an issue in the Summit County locale of Akron. This finding is especially true for African-American youth. It appears that arrests of minority youth were more likely to be for felony-level offenses, property-related offenses, and involve the use of a firearm while arrests of White youth were more likely to be for status/unruly offenses and drug/alcohol related offenses. While these data are somewhat limited, several interesting findings, such as the differential proportion of arrests for firearm use among minority youth and differences in status/unruly and property offenses, warrant further examination at later stages in the Summit County justice process – where we can account for legally-relevant factors.

Summit County Juvenile Court Records

Data collection. The UC research team made contact with the Summit County Juvenile Court in 2013. We then held subsequent meetings and video conferences to go over the requested cases and data fields and secure the court’s agreement to participate in the study. This included contact with court administrators and IT/data management personnel. Summit

County then provided the research team with a database file extraction of their court information management system in the summer of 2014. UC staff then recoded and revised the files to extract appropriate cases and measures. This resulted in the sample of 8,385 records included in the analysis below.

Measures included in the analysis. The primary independent variable of interest was race, but we also include indicators of sex, age, number of charges in the current case, number of prior petitions, most serious offense category, and most serious offense level. Because there are very few minority youth in the sample who are not African American, *race* is recorded as White/Non-White. *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of charges* is a continuous variable indicating the number of separate charges in the current case. *Number of priors* is a continuous measure that indicates the total number of referrals the youth had prior to the current case. If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious crime type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property, drug/alcohol, status offense/disorderly conduct, and "other." Similarly, the *most serious offense level* variable (labeled "MisdStatus") captures whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables were dichotomous measures of whether youth experienced particular outcomes at two decision points: dismissal and adjudication.⁷⁴ Each of these variables is coded as yes/no. *Dismissed* identifies whether youth had their case dismissed for any reason (e.g., requested by prosecutor). *Adjudicated* indicates whether a youth was formally found delinquent for the current case.

Data coverage and preparation. Overall, there were 8,385 cases referred to Summit County Juvenile Court between January 1, 2010 and December 31, 2011. Seventy-six cases were excluded from the analysis because the youth's race was not identified, leaving a final sample of 8,309 cases. Among the variables used in the analyses, there was relatively little missing case or youth information. There was complete coverage (i.e., no missing data) for race, sex, age, number of charges, number of priors, and most serious offense level. There was 0.8 percent missing data for most serious category and 14.1 percent missing for dismissal and adjudication. To retain all cases for analysis, we used multiple imputation (MI) to insert missing values for these three variables. MI replaces missing observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, age, sex, number of charges, number of priors, and most serious offense level. MI first generates a specified number of datasets—in this case, ten—in which missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from those

⁷⁴ Diversion was not included in the analysis because the court did not provide data on diverted cases. In addition, detention and secure confinement were very limited due to missing data on the majority of cases. We present the findings based on analysis of available cases below, but acknowledge that they may be somewhat tenuous (especially secure confinement) as they are based on smaller sample sizes and less data coverage than the other analyses.. Finally, bindover was not included in the analysis because only 19 cases (0.2%) were waived to criminal court, precluding reliable statistical analysis.

ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Descriptive statistics. In 2010-2011, White youth comprised 47.9 percent of the petitions to Summit County Juvenile Court, while Non-White youth accounted for the remaining 52.1 percent. According to the 2010 Census for Summit County, these groups accounted for 74.0 percent and 26.0 percent of the juvenile population ages 10-17, respectively. Taken at face value, these figures indicate a relatively large level of disproportionality in terms of the profile of cases coming into the system. Males accounted for 65.9 percent of the petitions and the average age at case initiation was 15.87 years old (SD=1.57). The mean number of charges in the current case was 1.65 (SD=1.23) and the mean number of prior petitions was 3.17 (SD=4.18). Both of these vary considerably across the cases included in the Summit County court sample. The most frequent offense type was status offenses/disorderly conduct (35.6%), followed by property (31.7%), violent/sex (18.8%), drug/alcohol (8.3%), and “other” (5.5%). Most youth (86.7%) were charged with a misdemeanor or status offense, with the remaining 13.3 percent charged with a felony.

The race group distributions for the decision points indicated slight differences between White and Non-White youth for two outcomes and larger differences for the two, more-limited, outcomes. White youth were slightly—but not significantly—more likely to have their case dismissed (18.7%) compared to Non-White youth (17.8%). Similarly, 80.9 percent of White youth and 82.0 percent of Non-White youth were adjudicated delinquent. In this sample of cases, proportionally more Non-White youth were detained before adjudication (47%)

compared to White youth (35%). Although it was a rare event for both groups, more Non-White than White youth were placed in a secure facility (1.1% vs. 0.5%).

Initial and conditional probabilities of case outcomes. Figure 21 displays the initial and conditional probabilities for the four outcomes by youth’s race (White/Non-White). The initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any of the other influences mentioned above. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and Non-White youth will experience a particular case outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case.⁷⁵ This also allows us to consider whether any differences between White and Non-White youth observed for the base analysis shift when accounting for other relevant case factors.

Court outcomes. We estimated three statistical models for each of the decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for Non-White youth as opposed to White youth, the first model considered only the effects of race on the decision point. The second model included race and other legally relevant factors (number of offenses, number of priors, most serious offense category, and most serious offense level). The final model included the variables above (see Table 73), as well as the extralegal factors sex and age. Analyses were conducted in such a manner as to observe the

⁷⁵ The mean values for number of charges in the current case (1.65), number of prior petitions (3.17), and age at case initiation (15.87) were used to calculate predicted probabilities for each of the outcomes. The remaining variables were set to their most frequently appearing categories: offense type – property offense; offense seriousness – misdemeanor/status offense; and sex – male.

change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Detention. In the initial model that included only race, race was a significant predictor of detention. The initial probability of detention for White youth (0.36) was a good deal lower than for Non-White youth (0.47), which suggested that there was some degree of disproportionality in these data initially. This is also reflected in the odds ratio value, which indicates 60 percent greater odds of detention for Non-White youth relative to White youth.

After adding the legally-relevant variables in the final model, the effect of race remained statistically significant. Non-White youth had 56 percent greater odds of being detained before adjudication than White youth. The predicted probabilities of detention for White and Non-White youth were 0.38 and 0.47 for Whites and Non-Whites respectively, indicating distinctions in the likelihood of detention when using fixed values for the other variables. Also, a one-unit increase in the number of charges in the current case significantly increased the odds of detention by 51 percent and an increase in the number of prior charges in the court increased the likelihood of detention by 12 percent. Youth charged with a property offense (OR=0.20), drug/alcohol offense (OR=0.08), status offense/disorderly conduct (OR=0.06), or “other” offense (OR=0.22) were significantly less likely to be detained compared to those youth who were charged with a violent or sex offense. Cases involving a misdemeanor or status offense were 79 percent less likely to lead to detention compared to those involving a felony. Neither sex nor age was a statistically significant predictor of detention. Overall, the relationship between race and pre-adjudication detention was statistically significant in all of the statistical models that were estimated.

Dismissed. In the initial model that included only race, race was not a significant predictor of case dismissal. The initial probability of dismissal for White youth (0.19) was almost identical to that for Non-White youth (0.18), which suggested that there was no initial disproportionality in these data. After adding the legally-relevant variables in the second model, the effect of race remained nonsignificant. A one-unit increase in the number of charges in the current case significantly decreased the odds of case dismissal by 46 percent. Youth charged with a property offense (OR=0.50), drug/alcohol offense (OR=0.52), status offense/disorderly conduct (OR=0.74), or “other” offense (OR=0.66) were significantly less likely to have their case dismissed relative to those charged with a violent or sex offense. Cases involving a misdemeanor or status offense were 25 percent less likely to be dismissed compared to those involving a felony.

In the final model that included extralegal variables, the effect of race was not statistically significant. The predicted probabilities of detention for White and Non-White youth were identical (0.12), indicating equal likelihood of detention when using fixed values for the other variables. Each of the legally-relevant variables from the second model maintained its significance in the final model with minute changes in the size of the effects. Of the extralegal variables, only youths’ age was statistically significant. Specifically, a one-year increase in age predicted a 5 percent decrease in the odds of case dismissal. Overall, the effect of race on case dismissal was not significant in any of the analyses, which suggests that there was no statistically detectable presence of DMC at this decision point. Instead, results indicated that the decision to detain youth was predicted by number of charges in the current offense, offense type, offense seriousness, and youths’ age.

Adjudication. In the initial model, race was not a significant predictor of the decision to adjudicate a youth delinquent. Like those for case dismissal, the initial probabilities of being adjudicated delinquent for White and Non-White youth (0.81) were identical, indicating no initial disproportionality in the decision to adjudicate. After adding legally-relevant variables in the second model, race remained nonsignificant. A one-unit increase in the number of charges in the current case significantly increased the odds of adjudication by 84 percent. Youth charged with a property offense (OR=1.95), drug/alcohol offense (OR=1.80), status offense/disorderly conduct (OR=1.33), or “other” offense (OR=1.46) were significantly more likely to be adjudicated delinquent relative to youth charged with a violent or sex offense. Similarly, youth charged with a misdemeanor or status offense were significantly more likely to be adjudicated delinquent compared to those charged with a felony.

When the extralegal factors were added in the final model, the effect of race remained nonsignificant. The conditional probability of adjudication for White youth (0.87) was almost identical to that for Non-White youth (0.88), indicating no statistically significant difference in the likelihood of adjudication. The legally-relevant variables from the second model maintained their significance in the final model with negligible changes in the size of odds ratios. A one-year increase in youth’s age predicted a 6 percent increase in the odds of adjudication (OR=1.06). Overall, the effect of race on adjudication was not statistically significant in any of the three models. Results indicated that the decision to adjudicate was more often related to number of charges in the current case, offense type, offense seriousness, and youth’s age.

Secure Confinement. The analysis of the secure confinement data is based on a fairly-limited subset of data in this case. The initial analysis of the relationship between race and this

outcome point suggests relatively low probabilities for both groups, less than 0.01. Non-White youth did have a higher likelihood of secure confinement than White youth, however (0.01 to 0.005). This translates to an odds ratio of 2.0, meaning that their likelihood of secure confinement was roughly twice as high. At the same time, this estimate was not significant in this data set. This is likely due to the case limitations described above.

As shown in Table 73 below, there were fairly strong relationships between number of prior offenses (+11% odds for each additional), charges in the current case (+36% odds for each additional), offense type (property, drug/alcohol, and other offenses less likely to lead to secure confinement), and age (+52% for each additional year). The findings again suggest that, while there was some distinction in the likelihood of secure confinement across the race groups, it was not statistically reliable in this case.

Table 73. Binary Logistic Regression – Outcomes for Summit County Juvenile Court (Full Models)

	Detention			Dismissed			Adjudication			Secure Confinement		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	0.44	1.56	0.12	-0.04	0.96	0.06	0.06	1.06	0.06	0.55	1.74	0.50
Num. of Priors	0.12	1.13	0.02	0.02	1.01	0.01	-0.01	0.99	0.01	0.11	1.12	0.04
Num. of Charges	0.41	1.51	0.05	-0.61	0.54	0.05	0.60	1.82	0.05	0.31	1.37	0.10
<i>Offense Type</i> ¹												
Property	-1.62	0.20	0.15	-0.66	0.51	0.09	0.64	1.90	0.09	-1.91	0.15	0.52
Drug/Alc	-2.49	0.08	0.23	-0.57	0.57	0.15	0.51	1.66	0.15	-2.53	0.08	1.06
Other	-1.51	0.22	0.22	-0.37	0.69	0.15	0.34	1.40	0.15	-1.92	0.15	1.05
Status/DC	-2.74	0.06	0.16	-0.28	0.76	0.08	0.25	1.29	0.08	--	--	--
Misd/Status	-1.57	0.21	0.18	-0.31	0.74	0.11	0.34	1.40	0.10	--	--	--
Sex	0.04	1.04	0.12	0.09	1.09	0.07	-0.08	0.92	0.07	--	--	--
Age at Filing	-0.01	0.99	0.03	-0.06	0.95	0.02	0.06	1.06	0.02	0.42		0.19
Constant	1.28		0.61	0.84		0.34	-0.90		0.33	-10.98		3.24

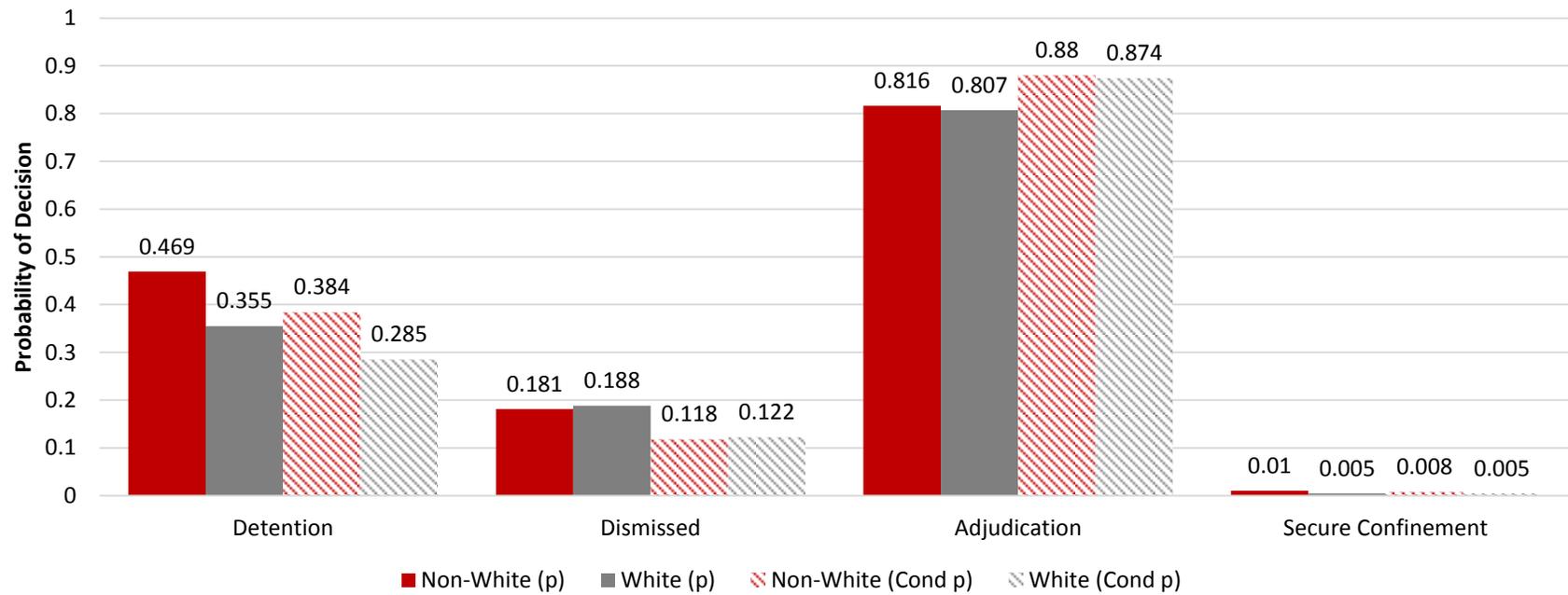
Notes: Bolded entries represent statistically significant estimates at $p < 0.05$; B = logit coefficient; OR = odds ratio; SE = standard error

¹ Reference category was Violent/Sex Offense

Detention model includes 2,053 cases

Secure Confinement model includes 761 cases

Figure 21. Summary of Initial Probabilities and Conditional Probabilities for Summit County Juvenile Court



Summary of juvenile court record analysis. Descriptive analysis suggested a relatively large degree of disproportionality in the prevalence of court petitions for White/Non-White youth relative to their proportion of the general population. In looking at the court outcomes, however, the data analyzed for Summit County Juvenile Court provide evidence of DMC for detention only. Race was not a significant predictor of either dismissal or adjudication, as evidenced by the negligible differences between the initial probabilities of case dismissal and adjudication for White and Non-White youth. There were some differences between the race groups on secure confinement, but these were not statistically significant. To better understand how race might affect juvenile court decisions relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal variables. Like the bivariate models, race was a significant predictor in the pre-adjudication detention case. Legally-relevant factors, like severity of the current case and prior record were important, too. In other court outcomes, it appears that the most consistent predictors of the decisions studied here were number of charges in the current case, prior record, offense type, offense seriousness, and youth age.

Summit County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Summit County court staff in July of 2014. We used a semi-structured discussion protocol that asked questions in the areas of disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court

involvement and outcomes. Thirteen interviews were conducted with administrative (programming directors and department supervisors), supervision, intervention, and judicial staff. A representative from the Prosecutor's Office was also interviewed. The interviews lasted between 30 and 90 minutes, depending on interviewees' roles in the court and their level of disclosure. No court observations were completed in Summit County.

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. A majority of respondents believed that system policies and procedures contributed to the overrepresentation (and disadvantage) of minority youth, but differed in their opinion of how these factors impacted juvenile justice involvement and outcomes. Most court officials (62%) linked system disproportionality to police practices, rather than court policies and procedures, and identified zero-tolerance and differential street-level policing strategies as potential explanations for DMC. Recognizing the overall impact of front-end decisions, one staff member explained that law enforcement and court processes jointly contribute to DMC. Indicating that the process started at the initiation of youth contact with the system, one interviewee framed the DMC issue as follows: "Arrest summaries, to rap sheets, to detention is off balance. On any given day, 70 to 80 percent of the kids in detention are minority. These kids are from the city neighborhoods."

A slight majority of respondents (54%) also linked the perceptions of decision makers and racial bias to disparities in case processing outcomes. One interviewee noted that the court “work[s] with the referrals we get.” Others echoed these themes, but noted the need for greater cultural sensitivity among court staff. They explained that biases contribute to individual’s distrust and cynicism of the juvenile justice system, which potentially impacts youth outcomes.

Emphasizing the impact of these factors, two interviewees added,

“Families [especially minority families], have difficulty relating to staff. It’s important they feel comfortable, and that staff are empathetic to needs. That’s part of the job.”

Overall, staff were divided in their opinion of how justice-system factors contributed to disproportionate minority contact. Two key themes emerged. A majority of staff members linked police practices and front end court decisions to the overrepresentation of minority youth (e.g., differential access to legal representation and diversion opportunities). Others discussed how a lack of cultural understanding contributed to racial disparities in the juvenile justice system. Accordingly, greater collaboration between police, juvenile justice, and community stakeholders, as well as cultural competency training, were cited as potential solutions to reduce DMC among staff members.

The education system. While some interviewees linked inadequate resources and student-teacher ratios to DMC (2 of 9), most participants (44%) identified School Resource Officers’ (SROs) and school officials’ zero tolerance approach to school misconduct as a contributing factor and potential pathway that youth take to the juvenile justice system. Others

(4 of 9) rated the education system as contributing to race differences, but did not elaborate on how these factors impact system involvement.

The family system. Staff members (6 of 13) cited dysfunctional familial processes (family climate, autonomy, quality of parent-child relationship) and ineffective behavior management styles (structure and supervision, favorable attitudes toward crime, or mental or behavioral health needs) as contributing to disproportionate minority contact. Discussions also focused on how community disadvantage and cultural bias exacerbate familial risk. One interviewee commented that, “we really need to be responsive to family [cultural] barriers.” Overall, responses did identify familial issues as contributing to DMC but also had a transactional relationship in that some interviewees mentioned the manner in which this interacted with the courts’ operations and treatment referral options.

Socioeconomic conditions and neighborhood context. The majority of respondents (85%) identified poverty, and poverty-related circumstances, as contributing to the overrepresentation of minority youth in the juvenile justice system. Specifically, staff linked high rates of unemployment, residential transiency, and community disadvantage (e.g., limited transportation, homelessness, and nutritional deficiencies) to disparate outcomes. They explained that these disadvantages are also more likely to spill into the mental and public health sectors, and perpetuate a subculture of poverty and violence in which gang membership and the use of firearms is likely to ensue. These interwoven issues were described as complex and difficult to unravel, but were recognized as an important area of need in Summit County.

To this end, interviewees discussed the benefit and continued need for the Behavioral Health Juvenile Justice Initiative (BHJJ). BHJJ supports evidence-based and/or evidence-

informed programming alternatives as a means to divert juvenile-justice involved youth with mental and behavioral health needs (Kretschmar et al. 2014). In this way, BHJJ has helped Summit County “better serve youth” and downsize its DMC population.

Respondents also felt it was important the court consider the needs of youth, particularly African-American youth, at higher risk for juvenile justice involvement or re-entering into the community. Utilizing a case management model, the Family Resource Center (FRC) provides service coordination, monitoring, and connects youth and families to social service interventions (e.g., school-to-work programs, educational or mentoring programs). Residents in Summit County seeking information on other local program/service options (e.g., parents of truants in danger of dropping out of school, teens who are pregnant or have children) are also able to visit the FRC.

Summary. Respondents identified jurisdictional differences in police practices, front-end policies and procedures, and racial and ethnic-based biases as contributing to the overrepresentation of minority youth in the juvenile justice system. They also mentioned the schools’ approach to delinquency and the implementation of zero-tolerance policies as playing a role in DMC. Finally, respondents linked cross-cultural barriers to system-level, neighborhood, and familial factors, and underscored the importance of cultural competency training to support local DMC-reduction efforts. Cultural barriers entered the discussion in the general theme of disproportionality and the justice system and also through discussion of family and the court process.

Consistent with participants’ feedback on ways to better address the issue of DMC, training topics might include the impact of implicit racial bias on youth outcomes; the impact of

front-end policies and procedures on minority youth and families; core correctional and cultural competence skills to support long-term behavior change and participant retention; and knowledge of community-based services and alternatives to juvenile justice involvement such as de-escalation housing and the Peace, Justice, and Equality Circles. PJ&E Circles are an alternative juvenile justice approach that helps youth take responsibility for their actions by recognizing the harm they have caused, develop awareness, and provide an opportunity to make amends to victims and community members. It was also recognized that in order to reduce disproportionate minority contact, community stakeholders and criminal justice agencies must work collaboratively. Of specific concern was law enforcement's lack of participation and support for the court's DMC-reduction strategies. Likewise, staff pointed to the need for additional mental health, substance abuse, and transportation services to better meet the risks and needs of the youth that come into contact with the court. Notwithstanding these challenges, the use of "pocket cards" to determine eligibility criteria for PJ&E diversion Circles, improved access to legal representation, the Crossroads intensive probation program, and participation in the Juvenile Detention Alternatives Initiative (JDAI) and Targeted RECLAIM were cited as contributing to the court's efforts to address disproportionate minority contact.

Summary of Findings and Implications: Summit County

One Summit County police agency provided arrest record data for the DMC Assessment, but we were not able to conduct a focus group. The Akron Police Department made a total of 3,116 arrests of youth ages 10-17 during the two year period of interest to the study. The majority of juvenile arrests involved African-American youth (N=2,392; 76.8%). White youth made up 22 percent of the arrests (N=684). When considering the RRI and odds ratio values, it

appears that disproportionality of minority arrests in Akron is worth looking at further. Comparatively, arrests of minority youth were more likely to be for felony-level offenses, property-related offenses, or in cases involving the use of a firearm. The arrests of white youth were more likely to be for status/unruly offenses and drug/alcohol related offenses.

Descriptive analysis of the roughly 8,000 cases provided by Summit County Juvenile Court showed a degree of disproportionality in the prevalence of court petitions for White/Non-White youth relative to their proportion of the general population. In analyzing the outcomes of two court decisions, the court outcomes, however, the data for Summit County Juvenile Court provide little evidence of DMC. Even when analyzed alone, race was not a significant predictor of any of either of the court outcomes, as evidenced by the negligible differences between the initial probabilities of each outcome for White and Non-White youth. To better understand how race might affect juvenile court decisions relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal variables. Like the bivariate models, race was not a significant predictor in any of the analyses. It appears that the most consistent predictors of the two court decisions considered here were number of charges in the current case, offense type, offense seriousness, and youths' age.

The thirteen interviews conducted with Summit County Juvenile Court staff provide some important insights regarding their perceptions of what may generate DMC problems and also about how their agency has responded to date. Interviewees pointed to jurisdictional differences in police practices, front-end policies and procedures, and lack of cultural awareness as contributing to the overrepresentation of minority youth in the juvenile justice system. They also mentioned the schools' approach to delinquency and the implementation of

zero tolerance policies as playing a role in DMC. Finally, respondents linked cross-cultural barriers to system-level, neighborhood, and familial factors. Overall, their responses covered a number of dimensions and were, comparatively, thorough in considering both strengths and weaknesses of current practices and DMC.

Consistent with participants' feedback on reasons for DMC, they suggested that future efforts be directed at training on the impact of racial biases and cultural sensitivity on youth outcomes; the impact of front-end policies and procedures on minority youth and families; core correctional and cultural competence skills; and knowledge of community-based services and alternatives to juvenile justice involvement. Some described Peace Justice, and Equality (PJ&E) Circles, which involves a community-based restorative justice approach to many offenses, as something that helps to both divert youth from the system and increase the investment of local stakeholders to a greater degree than in the past.

With that, respondents identified the need to improve collaborative work with a variety of stakeholders and other justice agencies in order to further reduce disproportionate minority contact. Despite these challenges, the Summit County Court staff pointed out some successes in the PJ&E Circles, improved access to legal representation, the Crossroads intensive probation program, and participation in the Juvenile Detention Alternatives Initiative (JDAI) and Targeted RECLAIM.

Table 74. Summary of Key Findings from DMC Assessment: Summit County

Available Data w Notes	Key Findings	Implications
<p>Arrest record data from one PD (n=3,116) but did not participate in focus group</p> <p>8,385 court records, but limited to two outcomes based on available fields</p> <p>13 interviews with court staff</p>	<p>Race differential in arrests relative to population (RRI =3.2 for Non-Whites)</p> <p>Arrests of minority youth more likely for felony-level and property-related offenses while those of White youth were more likely status/unruly offenses and drug/alcohol related offenses</p> <p>Difference in “firearm-involved” arrests for Non-White and White youth</p> <p>Negligible differences in case dismissal and adjudication for White/Non-White youths; there was a significant difference between Non-White and White youth for detention</p> <p>Interviewees pointed to jurisdictional differences in police practices; front-end policies and procedures of the court; and subtle biases as affecting overrepresentation of minority youth in the juvenile system—comparatively inward-looking</p>	<p>Consider particular types of offenses/interactions that might be driving DMC</p> <p>Weapons-offense distribution by race is a particularly important point from this county/police agency</p> <p>Court officials offered several suggestions for responding to DMC, ranging from partnership with national initiatives like JDAI to localized, collaborative responses like Peace, Justice, and Equality Circles</p> <p>Began participation in JDAI after record period for the study</p> <p>Also emphasized some simpler actions like creating more awareness of alternatives to detention at front of system</p>

TRUMBULL COUNTY, OH

Trumbull County Police Agency Data

In April of 2013, the UC research team reached out to the one police agency in Trumbull County identified in the Ohio DYS DMC Assessment Request for Proposals (RFP) (Warren Police Department). The agency followed up in June of 2013 requesting additional information on the study and data requests. In response, UC researchers sent a follow-up email detailing the purpose of the study and the importance of each data item. This information was sent to the agency's primary contact. A final attempt was made to encourage the agency's participation, but the agency declined to participate in June 2013.

Trumbull County Juvenile Court

Data collection. After making contact with the juvenile court administrator in early 2013, UC research staff was able to travel to Trumbull County to extract paper records for 2010 and 2011. These activities were completed in April and May of 2013. As described below, this involved a random sampling procedure (approximately 500 cases) to facilitate efficient retrieval of records from the population of approximately 2,000 cases per year that were processed in the court. After extraction of available fields from the records into the standardized data collection forms, the data were electronically entered, cleaned, and analyzed by the members of the research team.

Measures included in the analysis. The primary independent variable of interest was race, but we also include indicators for sex, age at filing, number of charges in the current case, number of prior arrests, most serious offense category, and most serious offense level. Because over 90 percent of the minority youth in the sample were African American, *race* is recorded as

White/Non-White. *Sex* is a dichotomous variable that indicates whether the youth is male or female. *Age* is a continuous measure that indicates the youth's age at case initiation. *Number of charges* is a continuous variable indicating the number of separate charges in the current case. *Number of priors* is a continuous measure that indicates the total number of arrests that the youth had prior to the current case. If a youth was charged with more than one offense in the current case, *most serious offense category* indicates the most serious offense type among all of the charges. If a youth was charged with only one offense, this variable indicates the category of that offense. The offense categories include violent/sex offense, property, drug/alcohol, status offense, and other. Similarly, the *most serious offense level* variable indicates whether the case involved a felony, misdemeanor, or status offense. Because misdemeanors and status offenses tend to be treated similarly in juvenile courts, this variable was coded as 0 = Felony, 1 = Misdemeanor or Status Offense.

The primary outcome variables include dichotomous measures of whether youth experienced certain case outcomes at four decision points: diversion, detention, dismissal, and adjudication.⁷⁶ Each of these variables is coded as yes/no. *Diversion* indicates whether youth were diverted from formal prosecution at the front end of the court process. *Detention* indicates whether youth were placed in secure detention while awaiting further proceedings. *Dismissed* identifies whether youth had their case dismissed for any reason (e.g., requested by prosecutor, incompetent). *Adjudicated* indicates whether a youth was formally found delinquent for the current case (e.g., found guilty on the current charges).

⁷⁶ Waiver to adult court and secure confinement were not included in this analysis due to the low number of waived (2) and confined (7) cases present in the sample.

Data coverage and preparation. The research team collected a random sample (N=507) from the population of juveniles who were petitioned to the Trumbull County Juvenile Court in 2010 and 2011. Nine cases were excluded because the youths' race was not indicated, leaving a final sample of 498 cases. This sampling procedure required us to weight the sample based on race prior to conducting analyses. The weights were computed based on the 2009 referral numbers provided to DYS by the Trumbull County Juvenile Court. Table 75 provides the data used to calculate these weights.

There was a relatively small amount of missing data for the sample of records. There was complete coverage (i.e., no missing data) for race, sex, age, number of charges, most serious category, and most serious offense level. There was 17.5 percent missing data for number of prior arrests, 5.6 percent missing data for detention, and 1.4 percent missing data for diversion, dismissed, and adjudication. To retain all cases for analysis, we used multiple imputation (MI) to insert values for each of these variables. MI replaces missing observations with predicted values based on other variables included in the data—accounting for expected variation in the process. The variables used to impute the missing values were race, sex, age, number of charges, most serious category, and most serious offense level. MI first generates a specified number of datasets—in this case, ten—in which missing values are imputed based on all relevant predictor variables. Next, MI performs the statistical analysis separately on each imputation and then the results from each of the ten analyses are pooled together. This ensures that the results appropriately account for the variation in the imputed values.

Initial and conditional probabilities of case outcomes. Figure 22 displays the initial and conditional probabilities for each of the outcomes by youths' race (White/Non-White). The

initial probabilities reflect the likelihood that White and Non-White youth will experience the case outcome without consideration of any of the other influences mentioned above. These estimates are similar in intent to the Relative Rate Index but allow for conditioning on other relevant factors as we move across statistical models. The conditional probabilities indicate the likelihood that White and Non-White youth will experience a particular case outcome—given fixed, average values on the set of measures included in each statistical model. This gives us the ability to examine the likelihood of an outcome for a “typical” case.⁷⁷ This also allows us to consider whether any differences between White and Non-White youth observed for the base analysis change when accounting for other relevant influences attached to the case.

Descriptive statistics. In 2010-2011, males accounted for 66.1 percent of the referrals in the sample and Non-White youth comprised 56.8 percent. The mean age at filing was 15.9 years old (SD=1.46). The average number of prior arrests was 1.5 (SD=2.62), although 48.6 percent had no previous arrests. The mean number of charges in the current case was 1.2 (SD=0.45). Generally, most cases in the sample were non-serious as 87.6 percent of the youth were charged with a misdemeanor or status offense. The most serious offense type was status/disorderly conduct (35.7%), followed by property offenses (23.7%), violent/sex offenses (17.9%), other offenses (17.5%), and drug/alcohol offenses (5.2%).

Court outcomes. We estimated three statistical models for each of the four decision points. To obtain a baseline odds ratio (OR), which identifies the relative likelihood of a particular case outcome for Non-White youth as opposed to White youth, the first model

⁷⁷ The mean values for number of charges in the current case (1.2), number of prior arrests (1.5), and age (15.9) were used to calculate predicted probabilities for each of the outcomes. The remaining variables were set to their most frequently appearing categories: offense type: status/disorderly conduct; offense seriousness – misdemeanor/status; and sex – male.

considered only the effects of race on the decision point. The second model included race and other legally relevant factors (number of charges, number of priors, most serious offense category, and most serious offense level). The final model (see Table 76) included the above variables, as well as the extralegal factors sex and age. Analyses were conducted in such a manner in order to observe the change (if any) in the effect of race on decision-making after the addition of relevant control variables (especially legally-relevant factors).

Diversion. In the initial model, race was not a significant predictor of diversion. As shown in Figure 22, the initial probability of diversion for both White and Non-White youth was 0.33. This indicates that there was no initial disproportionality in these data. After adding legally-relevant factors in the second model, youth's race remained nonsignificant.⁷⁸ Number of charges in the current case was also nonsignificant. A one unit increase in number of prior arrests significantly decreased the odds of being diverted by 97 percent (OR=0.03). Youth charged with a property offense (OR=8.86), drug/alcohol offense (OR=7.42), or a status offense/disorderly conduct (OR=11.46) were significantly more likely to be diverted relative to those charged with a violent or sex offense. The effect for youth who committed other types of offenses was not significant.

When the extralegal factors were added in the final model, the effect of race remained nonsignificant. The conditional probabilities for both White and Non-White youth were significantly lower than the initial probabilities. Like the initial probabilities, the two are identical (0.01), indicating no racial disproportionality in the data. The significant effect for number of prior arrests remained identical to that in the second model (OR=0.03), while the

⁷⁸ Offense seriousness was excluded from the diversion analysis because no case involving a felony offense was diverted.

significant effect for those charged with property offenses (OR=9.14), drug/alcohol offenses (OR=8.84), or status offenses/disorderly conduct (OR=12.80) increased slightly from the second model. Of the two extralegal variables included in the final model (sex and age), only age was significant. Specifically, a one-year increase in age decreased the odds of diversion by 22 percent (OR=0.78). Overall, the effect of race was not significant in any of the analyses, which suggests that there was no detectable presence of DMC in these data. The decision to divert youth from formal processing was instead affected by the number of prior arrests, offense type, and youths' age.

Detention. In the race-only model, the effect of race on pre-adjudication detention was not statistically significant. The initial probability of detention for White youth (0.47) was slightly lower than that for Non-White youth (0.49), although this difference was not statistically significant (see Figure 22). When the legally-relevant factors were included in the second model, the race effect remained nonsignificant. A one unit increase in the number of prior arrests significantly increased the odds of detention by 25 percent (OR=1.25). Youth charged with a property offense (OR=0.42), drug/alcohol offense (OR=0.30), or status offense/disorderly conduct (OR=0.31) were significantly less likely to have their case dismissed compared to those charged with a violent or sex offense. The number of charges in the current case was not a significant predictor of detention.

In the final model that included extralegal variables, the effect of race again remained nonsignificant. The predicted probability of detention for White youth (0.43) was slightly higher than the probability for Non-White youth (0.42). Although this is opposite from the initial probabilities (in which Non-White youth had a slightly higher probability of detention), the

difference remains nonsignificant. The significant effects for number of prior arrests (OR=1.25) and those charged with property offenses (OR=0.41), drug/alcohol offenses (OR=0.28), and status offenses/disorderly conduct (OR=0.29) were almost identical to those in the second model. Neither of the extralegal variables was statistically significant. Overall, results indicated that race was not a significant predictor of pre-adjudication detention in any of the three models. Instead, like the diversion decision, the strongest predictors of detention were number of prior arrests and offense type.

Dismissed. In the race-only model, race did not have a significant effect on case dismissal. The initial probability of diversion for White youth (0.06) was almost identical to that for Non-White youth (0.07), which suggests that there was no initial disproportionality in these data. After adding legally relevant variables in the second model, the effect of race remained nonsignificant.⁷⁹ None of the legally relevant variables were significant either.

In the final model that included extralegal variables, the effect of race on case dismissal remained nonsignificant. The conditional probabilities for White and Non-White youth were identical (0.01), yet significantly lower than the initial probabilities. Similar to the second model, none of the legally-relevant or extralegal factors were significant. Overall, as shown in Table 76, none of the measures available in the data collected from Trumbull County, including race, were statistically significant predictors of case dismissal.

Adjudication. The final decision point examined was adjudication. In the initial model, race was not a significant predictor of this decision. The initial probabilities of adjudication for White and Non-White youth were both 0.60, indicating no initial disproportionate contact in

⁷⁹ Drug/alcohol offense was removed from this analysis because no youth charged with a drug or alcohol offense had their case dismissed.

the data. Similarly, in the second model that included legally relevant factors, the effect of race remained nonsignificant. In addition, a one unit increase in the number of prior arrests doubled the odds of adjudication (OR=2.01). Youth charged with a misdemeanor or status offense were significantly less likely to be adjudicated delinquent relative to those charged with a felony offense (OR=0.16). Similarly, youth charged with a property offense (OR=0.25) or status offense/disorderly conduct (OR=0.18) were significantly less likely to be adjudicated relative to those charged with a violent or sex offense. The effects for those charged with a drug/alcohol offense or other offense were not significant.

In the final model that included extralegal variables, the effect of race remained nonsignificant. The conditional probabilities of adjudication were higher than the initial probabilities, and the gap between White and Non-White youth actually increased slightly. The expected probability of adjudication was lower for Non-White (0.65) than White (0.70) youth, but this predicted difference was not statistically significant. Similar to the second model, the effect for number of charges in the current case was not significant. Conversely, a one unit increase in the number of prior arrests significantly increased the odds of adjudication by 94 percent (OR=1.94). In addition, youth charged with a misdemeanor or status offense were 83 percent less likely to be adjudicated relative to those charged with a felony offense (OR=0.17). Youth charged with a property offense (OR=0.25) or status offense/disorderly conduct (OR=0.17) were significantly less likely to be adjudicated delinquent compared to those charged with a violent or sex offense. Finally, of the two extralegal variables included in the final model, only age was significant. Specifically, a one-year increase in youths' age at the time of referral increased the odds of adjudication by 21 percent (OR=1.21). Overall, the effect of race was not

a significant predictor of adjudication in any of the three models. Instead, the results indicate that, like the previous decision points, the adjudication outcome was associated with the number of prior arrests, offense type, offense seriousness, and age.

Table 75. Stratification Sample Weights for Trumbull County Juvenile Court

Race	"Referral Population" N (2009)	Proportion of Population	Sample N	Proportion of Sample	Weight
White	1,456	0.7579	215	0.4317	1.756
Non-White	465	0.2421	283	0.5683	0.426
Total	1,921	1	498	1	

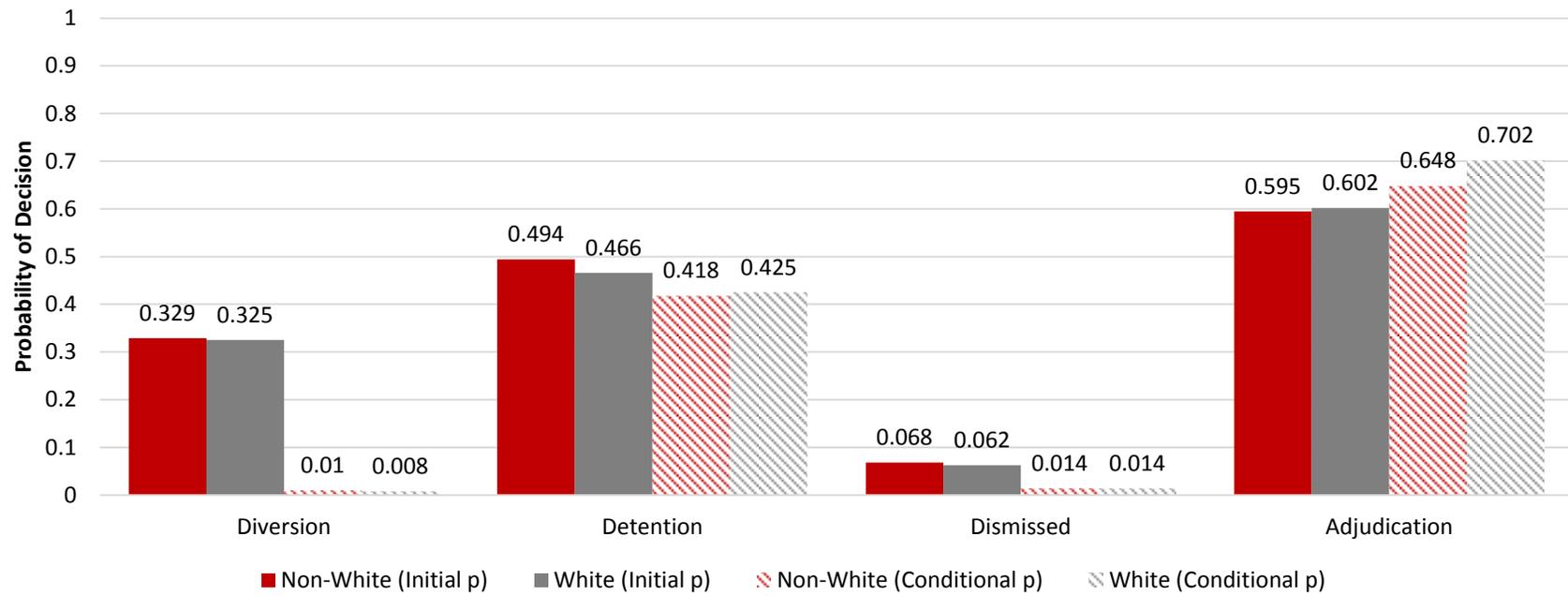
Table 76. Binary Logistic Regression – Outcomes for Trumbull County Juvenile Court (Full Models)

	Diversion			Detention			Dismissed			Adjudication		
	B	OR	SE	B	OR	SE	B	OR	SE	B	OR	SE
Race (1=Non-White)	0.19	1.20	0.31	-0.03	0.97	0.23	0.00	1.00	0.40	-0.25	0.78	0.24
Num. Prior Arrests	-3.62	0.03	1.05	0.21	1.23	0.10	-0.03	0.97	0.13	0.66	1.94	0.26
Num. Charges	-0.54	0.58	0.42	0.12	1.12	0.31	-0.65	0.52	0.73	0.37	1.45	0.39
<i>Offense Type</i> ¹												
Property	2.21	9.14	0.56	-0.88	0.41	0.40	-0.69	0.50	0.96	-1.39	0.25	0.46
Drug/Alcohol	2.18	8.84	0.81	-1.28	0.28	0.58	----	----	----	-1.02	0.36	0.67
Status	2.55	12.80	0.55	-1.25	0.29	0.38	0.40	1.49	0.76	-1.79	0.17	0.45
Other	1.19	3.28	0.71	0.15	1.16	0.45	1.39	4.02	0.76	-1.03	0.36	0.56
Fel/Misd	----	----	----	-0.44	0.65	0.53	-0.64	0.53	0.90	-1.75	0.17	0.82
Sex	0.10	1.11	0.37	-0.12	0.89	0.25	0.74	2.10	0.45	-0.24	0.78	0.28
Age at Filing	-0.25	0.78	0.10	0.10	1.11	0.08	0.24	1.27	0.17	0.19	1.21	0.09
Constant	3.13		1.88	-1.04		1.55	-5.97		2.67	-0.48		1.64

Notes: Bolded entries represent statistically significant estimates at $p < .05$; B = logit coefficient; OR = odds ratio; SE = standard error

¹ Reference is Violent/Sex Offense

Figure 22. Summary of Initial Probabilities and Conditional Probabilities



Summary of juvenile court record analysis. Overall, the case record data analyzed for Trumbull County Juvenile Court provide relatively little evidence of disproportionate involvement for Non-White youth. Even when analyzed alone, race was not a significant predictor of any of the four court outcomes. This can be observed in the very slight differences between Non-White and White youth probabilities of given outcomes at the four decision points that were analyzed. To better understand how race might affect juvenile court decisions relative to other influences, we estimated statistical models that controlled for legally-relevant and extralegal variables. Like the bivariate models, race was not a significant predictor in any of the models. Instead, it appears that the strongest predictors of diversion, detention, and adjudication were number of prior arrests, offense type, offense seriousness, and age. None of the legal or extralegal variables were significant predictors in the case dismissal model.⁸⁰

Trumbull County Juvenile Court Interviews

Procedure. UC Researchers interviewed a cross-section of Trumbull County court staff in April of 2013. We used a semi-structured discussion protocol that asked questions about disproportionate minority contact; the effects of family involvement and participation on delinquency and crime; the context and effects of community and neighborhood factors; and the legal and social services available in the community was used. Questions also focused on identifying community assets and strategies for addressing causes of disproportionality in court

⁸⁰ We considered statistical power both in planning the sampling and data collection process and also upon observing the results presented above. Both the planned and the final samples exhibited sufficient power (0.80) to detect a difference in proportions across groups of about 1.60 on an odds ratio scale (or 0.625 as the inverse). Using one of the outcome variables studied here this would translate to a scenario where 45% of White youth were detained compared to about 58% of Non-White youth. Although effects of this size were not found in Trumbull County, they have shown up routinely in other analyses in the DMC assessment. This gives greater credence to the conclusions presented here as they are not merely a function of scenarios where there are differences between White and Non-White youths that were not “picked up” in the data.

involvement and outcomes. Seven interviews were conducted with administrative, (programming directors and department supervisors), detention, and judicial staff. The interviews lasted between 30 and 90 minutes, depending on the interviewees' roles in the court and their level of disclosure. Data were also gathered on arraignment and detention hearings (4).

All interview materials were transcribed by research staff and systematically reviewed to identify patterns relevant to decision-making processes and the overrepresentation of minority youth in the juvenile justice system. Representative quotes and rating scales were drawn out to elaborate on explanations of DMC identified in that analysis. A summary of the main findings follows.

The system. The majority of staff rated disproportionate contact as a relatively stable problem, with general fiscal and programming constraints noted as a major driving force for any disparities. Specifically, staff discussed the need for substance abuse interventions, gender-specific interventions such as Girls Circle, and transportation assistance to improve engagement in the court process. Respondents also discussed the need for preventative strategies to divert youth who may be at-risk for truant and delinquent behavior, and stressed the importance of the Truancy Intervention Program. "There was a real need for the program, but the grant is no longer available" explained one interviewee. Others generally noted the "need" for the program and emphasized the value of collaborating with the local community center to "conduct visits" and "build rapport". Overall, staff estimated that in 2011 the program had served approximately 50 African-American youth between the ages of 15 and 17 that resided in "high-risk" areas. Recognizing the potential impact of schools on DMC overall, one staff

interviewee explained that, “[chronic] absenteeism and truancy are the gateway to more [serious] problem behaviors” and potential pathway to delinquency.

Despite resource constraints, however, staff felt that they were “addressing issues to the best of their ability.” Ratings on the court’s ability to meet the risks and needs of youth were also consistent with staff’s perceptions. The waiver of excessive court fines and fees, as well as the implementation of the DMC and Intensive Community Probation programs were identified as promising approaches to reducing disproportionate contact in the local area. This program engages in outreach to provide educational, vocational, and mentoring programs. More practically, it also offers transportation to court, job, and school activities.

Similarly, the Intensive Community Probation Program was implemented as a way to reduce violations and supervise high-risk, multi-need, minority youth in the community. “The officer’s work closely with youth and their families to develop an individualized plan,” explained one staff member. They also attributed some of their success to staff “working non-traditional, flex hours; and working closely with the school system” to address youth’s risks/needs.

The education system. A majority of interviewees rated the education system as not contributing or only slightly contributing to DMC. Only one participant pointed to the inadequacy of the education system as contributing to school disengagement and disproportionate contact. However, as noted above, respondents did identify some connections between at-risk, minority youth and truancy problems that can become a gateway into the system.

The family system. Family was cited as a strong contributing factor to DMC throughout the court interviews (6 of 7 interviews). Several staff interviewees indicated that parents’

unwillingness (or perceived unwillingness) to be involved in the court process led to patterns of delinquent behavior among youth, particularly minority youth, and led to more contact and a greater degree of penetration in the juvenile justice system. “Half of the time families are helpful...Disengaged parents [reinforce problem behavior], which hinders progress in treatment and completing the program. This is particularly true for the more serious cases.”

Family was also implicitly linked to disproportionate involvement in staff’s reference to family in the decision-making process. System actors’ perceived youth as being more vulnerable to, or at greater risk for juvenile justice involvement when they came from homes with poor family management and supervision. “...nothing we do matters without a safe and sustainable family [environment]. [The court] relies on family cooperation and [unfortunately] parents sometimes prefer their child to be locked up,” stated one staff member. Another interviewee suggested that, “youth from dysfunctional backgrounds – particularly families where the parent has been incarcerated and/or involved in substance abuse – [need more] supervision and structure.” However, at least one interviewee mentioned the severity of the offense, and youth’s attitude toward in the court as important factors in the decision-making process.

Socioeconomic conditions and neighborhood context. Throughout interviews, staff described the socioeconomic, familial, and behavioral factors as subsumed by the broader implications of low socioeconomic status. In particular, staff discussed the economic strain of families living in poor, urban areas, and pointed to the potential impact of such constraints on youth’s progress and/or compliance with the court. One staff member mentioned “resource-related barriers” and budget cuts in local communities and schools as a potential contributor to DMC.

Community safety and police patrol patterns were also cited as key factors by which neighborhoods contribute to disproportionate minority contact. Staff explained that an increased surveillance of certain areas cause youth to be more visible and, particularly when there is an indication of serious or violent activity, more likely to be arrested or referred to the court. As noted above, respondents also identified connections between family dysfunction and neighborhood conditions that contribute to DMC. For example, one staff member explained that, “Police focus more on Black kids who are in the streets,” and that “minorities struggle economically, and here, live in higher-crime areas.”

Summary. Most respondents believed that social and economic conditions external to the decision-making process contributed to the overrepresentation of minority youth rather than system-level factors. Staff also identified the family as playing some role in the decision-making process—or at least offered some constraints on what might be done with delinquent youth. Further, staff stressed the need for additional resources, as well as substance abuse, gender-responsive, and truancy prevention programs to meet the risks and needs of the youth that come into contact with the court. Still, system-reform efforts including, the development of a more comprehensive intake department and cultural sensitivity training were listed as important future steps to addressing DMC issues in the area. According to some interviewees, realignment and staff training should focus on reducing inconsistencies at front-end decisions and on the acquisition of specific interpersonal engagement skills to improve supervision with youth. Respondents also underscored the importance of inter-agency collaboration to increase the capacity and availability of court services.

Summary of Findings and Implications: Trumbull County

No police agency data were collected for Trumbull County. Only one agency was identified by Ohio DYS in the RFP and, unfortunately, the department declined to participate. UC research staff was, however, able to obtain a random sample of approximately 500 case records and conduct several interviews with the juvenile court staff.

The cases analyzed for Trumbull County Juvenile Court provide relatively little evidence of disproportionate contact for Non-White youth. Even when analyzed alone, race was not a significant predictor of case outcomes for diversion, pre-adjudication detention, dismissal, or delinquency adjudication. This can be observed most simply in the very slight differences between Non-White and White youth probabilities of given outcomes shown in Figure 22.

With this in mind, there are a few highlights from the interviews conducted with personnel from Trumbull Juvenile Court. The majority of staff rated disproportionate contact as a relatively stable problem, with general fiscal and programming constraints noted as a major driving force for any disparities. When they discussed DMC they tended to focus on the family, loss of or limitations in delivering potentially effective programs, and the need for other reform efforts (e.g., expansion of intake reviews/staffing, cultural sensitivity training). Conversations with staff in the court also identified some examples of programs that may play a role in the relatively low degree of disparity observed in this county. In particular, the Truancy Intervention Program and a specific DMC program implemented by the court may be beneficial (although the former seems to have been curtailed over the last few years based on our interviews). The DMC program provides mentorship to support positive development and well-being for minority youth. At a more practical level it also provides transportation services to

court, job, and school-related activities. Interviewees also mentioned the waiver of some financial sanctions (court fees, fines) as holding some potential to affect DMC. Given the findings observed in Trumbull relative to some sites included in the DMC assessment, it may be useful to look a bit more closely at the programs offered by the court and its community partners.

Table 77. Summary of Key Findings of DMC Assessment: Trumbull County

Available Data w Notes	Key Findings	Implications
<p>No police data as the one identified police agency in county declined to participate</p> <p>Random sample of 498 juvenile court records, but limited data on secure confinement and bindover decisions</p> <p>Seven interviews with court staff</p>	<p>Relatively small, nonsignificant differences between Whites and Non-Whites for Diversion, Detention, Dismissal, and Adjudication</p> <p>The majority of staff rated disproportionate contact as a relatively stable problem, with general fiscal and programming constraints noted as a major driving force for any disparities.</p> <p>When staff members discussed DMC they tended to focus on the family and the need for other reform efforts (e.g., expansion of intake reviews/staffing, cultural sensitivity training)</p>	<p>The Truancy Intervention Program and a specific DMC program implemented by the court may be beneficial. The latter program provides mentorship to support positive development for minority youth. At a more practical level it also provides transportation services</p> <p>Interviewees also mentioned waiver of some financial sanctions (court fees, fines) as holding some potential to affect DMC</p> <p>Given some other findings, may be useful to look more closely at programs offered by court and its community partners</p>

5. DMC ASSESSMENT IN DYS FACILITY DATA

Table 78 below presents an overview of the sample characteristics for a random subsample of 1,514 youth committed to Department of Youth Services’ facilities between February 2010 and April 2014. These youth come from 73 Counties in Ohio. Approximately 65

percent of the sample was Non-White (86% of Non-Whites are Black/African-American). Males make-up the majority of youth confined in this sample (N=1,408; 93%). The average age of youth admitted to DYS facilities is 17.09 years old with a small amount of variation around the average age at admission (SD=1.06) indicating that the majority of youth fall between 16 and 18 years old. Youth were on average at a 9th grade education level at admission. Approximately 70 percent of youth had a known mental health problem (N=1,058), with an average of 2.53 identified mental health diagnoses (SD=2.38). The average number of committing offenses is 1.56. The majority of youth were committed to DYS facilities for a violent/sex offense as their most serious offense (N=904; 59.7%) compared to youth with a property offense (N=456; 30.1%), drug/alcohol offense (N=51; 3.4%), or an offense classified as 'other' (N=103; 6.8%). The average OYAS risk score (closest to the date of admission) is 15.30.⁸¹ There was a fair amount of variation between youth classified as low-risk (37%), moderate-risk (44%), and high-risk (19%). The average length of confinement is 10.43 months with a standard deviation of 8.74 months, indicating that there is a fair amount of variation in the amount of time spent in DYS facilities. Youth committed an average of 9.71 security related infractions while in custody, but there is a great deal of variation around the average number of infractions (SD=21.09). A fair number of youth did not commit any disciplinary infractions while in custody, however (34.7%); a few outlier cases had numerous infractions. Of the 1,514 youth in this subsample, 988 youth spent time in seclusion (65.3%). The average number of days youth spent in seclusion was 9.63 days (SD=26.03).

⁸¹ The OYAS assessment scores are missing for a considerable number of youth in the random sample (N=842; 55.6%). We examined the missingness of OYAS data between race subgroups (i.e., White and Non-Whites). The association between the two was not statistically significant. Therefore, we include the OYAS score in some multivariate analyses.

Treatment programming data were available for a small subsample of youth confined in DYS facilities between 2013 and April 2014 (N=435). Of those youth, 153 youth received treatment related services (35.2%). The number of treatment related contacts greatly varied among those for whom we received treatment-related data, ranging from 0 to 657 contacts with an average of about 68 (SD=128.75).

Table 78. Description of Key Sociodemographic, Baseline, and Custodial Experiences

Variable	Mean/ Proportion	SD	Min.	Max.	% Missing
Race (1=Non-White)	0.65	----	0	1	0.7
Gender (1=Female)	0.07	----	0	1	0.0
Age at Admission	17.09	1.06	11.27	20.52	0.0
Grade Level at Admission	9.17	0.84	6	13	6.0
Any Mental Health (1=Yes)	0.70	----	0	1	0.0
Number of MH Diagnoses	2.53	2.38	0	18	0.0
Number of Offenses	1.56	0.85	1	7	0.0
<i>Most Serious Category</i>	----	----	----	----	0.0
Violent/Sex	0.60	----	0	1	----
Property	0.30	----	0	1	----
Drug/Alcohol	0.03	----	0	1	----
Other	0.07	----	0	1	----
<i>OYAS Risk Level</i>	----	----	----	----	55.6
Low	0.37	----	0	1	----
Moderate	0.44	----	0	1	----
High	0.19	----	0	1	----
OYAS Risk Score	15.30	6.48	1	34	55.6
Length of Stay (Months)	10.43	8.74	0	46.26	0.0
Number of Infractions	9.71	21.09	0	271	0.0
Seclusion Time (Days)	9.63	26.03	0	323.45	0.0
Days Present in Class	96.42	92.98	0	514	6.0
Days Absent in Class	12.49	20.48	0	188	6.0
Total Days of Class	109.24	104.75	0	638	6.0
Any Treatment (1=Yes)	0.35	-	0	1	71.3
Number of Txt. Contacts	67.76	128.75	0	657	71.3
Total Hours Spent in Txt.	47.81	90.85	0	485.30	71.3

Note: SD = Standard Deviation; Min. = Minimum; Max. = Maximum

Comparison of Pre-Admission and In-Custody Outcomes by Race/Ethnicity

Table 79 below summarizes findings from several comparisons between White and Non-White youths. The table also contains the related measure of association for each cross-tabulation (i.e., Phi or Cramer's V), which provides a sense of the strength of the relationship on a scale from 0 to 1. We examined whether there was a significant association between race subgroups and mental health diagnosis and risk level. Neither test revealed any statistically significant differences. We also examined whether there was an association between race and most serious offense category. Non-White youth were committed to Ohio DYS for more serious crime types than White youth ($\chi^2=43.87$; Phi=0.17). Non-White youth were more likely to be confined for violent or sex offenses (65.0%) than White youth (49.7%). White youth, however, were more likely to be committed for property offenses (40.2%) compared to their Non-White counterparts (24.9%). The strength of the relationship between race subgroups and offense category is somewhat weak indicating that most serious offense category is not all that strongly related to the race of the youth, however. Lastly, we found that there was a statistically significant association between whether a youth received any treatment related services and race subgroups although the relationship is somewhat weak ($\chi^2=3.99$; Cramer's V=0.10).⁸² A greater percentage of Non-White youth received treatment services (37.9%; N=121) compared to White youth (27.6%; N=32).

⁸² This analysis was limited to treatment-related entries for 435 youth that were in DYS custody between 2013 and 2014.

Table 79. Comparisons of Key Baseline Factors and Experiences by Race

	White % (N)	Non-White % (N)	χ^2 V/Phi	Percent Missing
<i>MH Diagnosis</i>				
No	28.5 (149)	31.0 (304)	1.01	0.01
Yes	71.5 (374)	69.0 (677)	-0.03	
<i>Most Serious Offense Category</i>				
Violent/Sex	49.7 (260)	65.0 (638)	43.87*	0.01
Property	40.2 (210)	24.9 (244)	0.17	
Drug/Alcohol	4.4 (23)	2.8 (27)		
Other	5.7 (30)	7.3 (72)		
<i>Risk Level</i> ⁸³				
Low	40.9 (95)	34.5 (150)	2.76	55.9
Moderate	41.4 (96)	45.3 (197)	0.06	
High	17.7 (41)	20.2 (88)		
<i>Treatment</i> ⁸⁴				
No	72.4 (84)	62.1 (198)	3.99*	71.3
Yes	27.6 (32)	37.9 (121)	0.10	

*p<0.05

Table 80 below contains the findings from the analysis of average differences between race groups on some key measures and the strength of that relationship. The Hedge's G statistic, which ranges from zero to one, provides a sense of the strength of a relationship after establishing its statistical significance (Grissom & Kim, 2005). Several key findings emerged from this analysis. White youth have a significantly higher average age at admission ($\bar{X} = 17.20$) compared to Non-White youth ($\bar{X} = 17.03$), but the difference is small. White youth also have a higher average number of mental health diagnoses ($\bar{X} = 2.82$) compared to Non-White youth ($\bar{X} = 2.38$). The measure of association value suggests that there is a relatively weak relationship between race and the number of identified mental health diagnoses. Non-White

⁸³ Risk score/level associated with OYAS assessment closest to date of DYS admission. We also considered whether missing OYAS information varied across White and Non-White youth. No statistically significant differences were found when examining missing OYAS data by youths' race.

⁸⁴ We only received treatment-related data for 435 youth who were committed in 2013 and 2014.

youth have a higher average number of committing offenses ($\bar{X} = 1.66$) compared to White youth ($\bar{X} = 1.39$) and the measure of association value suggests that this is a weak to moderate relationship. Non-Whites have a higher average OYAS risk score ($\bar{X} = 15.93$) than White youth ($\bar{X} = 14.09$). The related measure of association value indicates that this is a weak to moderate relationship (Hedge's $G = -0.28$). On average, Non-White youth spend a significantly longer time in custody ($\bar{X} = 11.47$ months) in Ohio DYS facilities compared to White youth ($\bar{X} = 8.49$ months). The related measure of association indicates that there is a moderately-strong relationship between race and length of stay (Hedge's $G = -0.34$). Non-White youth, on average, commit a significantly higher number of infractions ($\bar{X} = 11.88$ incidents) than White youth ($\bar{X} = 5.72$ incidents) while in DYS custody. The measure of association indicates that there is a moderate relationship between the race of confined youth and number of disciplinary infractions committed while in confinement (Hedge's $G = -0.29$). Relatedly, Non-White youth spend a significantly higher number of days in seclusion ($\bar{X} = 12.30$ days) compared to White youth ($\bar{X} = 4.76$ days). Again, the Hedge's G value suggests that there is a moderate relationship between race subgroups and time spent in seclusion (Hedge's $G = -0.29$).

We also analyzed education measures by race subgroups. Each difference was statistically significant (i.e., days present, days absent, and total days). For example, Non-White youth were absent from class, on average, about 5 more days ($\bar{X} = 14.05$ days) than White youth ($\bar{X} = 9.41$ days). The strength of this relationship is weak. Lastly, we examined whether there were statistically significant differences for the treatment-related measures across race. Although the average number of treatment programming contacts and the average time spent

in treatment (in hours) appear to vastly differ between race subgroups, these differences are not statistically significant.⁸⁵

Table 80. Bivariate Comparisons of Key Experiences by Race

	Mean	Standard Deviation	t-value	Mean Difference	Hedge's G
<i>Age at Admission</i>					
Whites	17.20	1.11	2.80*	0.16	0.15
Non-Whites	17.03	1.04			
<i>Num. of MH Diagnosis</i>					
Whites	2.82	2.43	3.36*	0.437	0.18
Non-Whites	2.38	2.35			
<i>Num. of Offenses</i>					
Whites	1.39	0.75	-5.87*	-0.268	-0.32
Non-Whites	1.66	0.89			
<i>Risk Score</i>					
Whites	14.09	6.41	-3.50*	-1.83	-0.28
Non-Whites	15.93	6.46			
<i>Length of Stay (Months)</i>					
Whites	8.49	7.07	-6.93*	-2.98	-0.34
Non-Whites	11.47	9.36			
<i>Num. of Infractions</i>					
Whites	5.72	13.87	-6.33*	-6.17	-0.29
Non-Whites	11.88	23.87			
<i>Seclusion Time (Days)</i>					
Whites	4.76	15.61	-6.42*	-7.54	-0.29
Non-Whites	12.30	29.93			
<i>Days Present in Class</i>					
Whites	73.70	70.29	-7.44*	-34.30	-0.37
Non-Whites	107.99	100.59			
<i>Days Absent from Class</i>					
Whites	9.41	18.45	-4.23*	-4.64	-0.23
Non-Whites	14.05	21.31			
<i>Total Days of Class</i>					
Whites	83.43	78.73	-7.52*	-38.95	-0.38
Non-Whites	122.37	113.46			
<i>Num. of Txt Contacts</i>					
Whites	51.91	124.01	-1.59	-21.61	-0.17
Non-Whites	73.53	130.15			
<i>Time Spent in Txt (Hours)</i>					
Whites	36.31	87.49	-1.63	-15.68	-0.17
Non-Whites	51.99	91.82			

*p<0.05

⁸⁵ Non-significant findings are in part due to the high levels of variation in treatment-related activities within and across race subgroups. This is evident from the large standard deviation values relative to the means.

Multivariate Analysis of DYS Custody Experiences

The multivariate analysis contains statistical models for four key outcome variables extracted from the data provided by Ohio DYS: seclusion time, length of stay, proportion of time absent from education services, and disciplinary infractions. The first step includes sociodemographic controls (youth sex, age, grade level, mental health diagnosis, where applicable). We introduce the race measure in the second step of the models. For the third step we include all legally-relevant factors that might impact that outcome (e.g., number of committing offenses, most serious offense category, disciplinary infractions). We present the findings for the dependent variables of seclusion time, length of stay, and proportion absent from class in Table 81 below. Table 81 contains the results from a different type of statistical model used to examine disciplinary infractions.⁸⁶ In the final step we include the OYAS risk score measure associated with DYS admission.⁸⁷ We describe two types of estimates: unstandardized, which relates the expected effect of a given factor in the original units of the outcome variable (e.g., number of days, number of infractions) and standardized, which places the effect on an alternate scale to better understand its strength.

Seclusion Time. The first set of models examines whether race predicts seclusion time in days when controlling for demographic control variables and legally relevant variables. After we include race in the second model predicting seclusion time, the demographic controls remain statistically significant. Race is also statistically significant indicating that Non-Whites spend

⁸⁶ We use a negative binomial regression model to estimate the effects of our key predictors on disciplinary infractions due to the nature of its distribution. More specifically, the number of disciplinary infractions in this sample clustered around zero incidents and is also measured as a count (MacDonald & Lattimore, 2010). A small number of cases were responsible for committing a disproportionate number of infractions.

⁸⁷ We received OYAS data for 672 youth of the 1,514 youth confined in DYS facilities. The OYAS juvenile justice history subdomain score from the overall OYAS risk score in this analysis due to overlap with criminal history items (i.e., most serious offense category and number of committing offenses).

more time in seclusion than White youths. On average, Non-White youth spend approximately seven more days in seclusion compared to White youth when taking into account gender, age, and mental health diagnosis ($b=6.95$). In the third model, which accounts for the legally-relevant factors and disciplinary infractions, race is no longer a statistically significant predictor of seclusion time and the effect greatly diminished ($b=0.12$; $\text{Beta}=0.00$). Mental health diagnosis is also not statistically significant when accounting for legally relevant factors. Disciplinary infractions and number of offenses in the case for which the youth was in custody was statistically significant in predicting differences in seclusion time as well ($b=1.15$; $b=1.61$, respectively). Furthermore, disciplinary infractions and number of offenses accounted for the most variation in seclusion time ($\text{Beta}=0.93$; $\text{Beta}=0.05$, respectively).

In the final model, we include youth OYAS scores (excluding criminal history subdomain scores) closest to date of admission.⁸⁸ Risk score is not statistically significant in the model predicting the number of days spent in seclusion controlling for all other predictors. The effect of race on seclusion time is statistically significant in this model ($b=-1.92$; $\text{Beta}=-0.03$), indicating that the effect is relatively small when accounting for OYAS information.⁸⁹ The relationship between number of disciplinary infractions and number of offenses remains statistically significant. For example, a one-unit change in disciplinary infractions results in an increase in days spent in seclusion by 1.24 units.

⁸⁸ Note that including OYAS greatly reduces the overall sample size included in the analysis ($N=666$). As previously mentioned, missing OYAS data was examined by race subgroups and no statistically significant findings emerged from that analysis.

⁸⁹ The effect changes direction in this model, which includes the very strong effect of disciplinary infractions. When that is removed from the analysis, the relationship between race and seclusion time reflects a significantly higher level for minority youth. Similarly, the OYAS score suggests a significantly higher level of seclusion time when the disciplinary infractions variable is removed from the analysis. This pattern of relationships and its implications is discussed further below.

Table 81. Multivariate Analyses of Race and Key Custodial Outcomes (without OYAS)

	Seclusion Time (N=1,504)				Length of Stay (N=1,416)				Prop. Absent Class (N=1,408)			
	b	S.E.	Beta	t	B	S.E.	Beta	t	b	S.E.	Beta	t
Gender	-2.17	0.95	-0.02	-2.28*	-2.18	0.75	-0.06	-2.91*	0.58	0.16	0.09	3.69*
Age	0.51	0.23	0.02	2.20*	-0.55	0.19	-0.06	-2.86*	0.13	0.04	0.09	3.24*
Any MH	-0.53	0.53	-0.01	-0.99	3.45	0.41	0.18	8.50*	-	-	-	-
Grade	-	-	-	-	0.40	0.23	0.04	1.74	-0.27	0.05	-0.15	-
Level												5.50*
Race	0.12	0.52	0.02	0.23	0.53	0.40	0.03	1.35	0.02	0.08	0.01	0.19
<i>Most Serious</i>												
<i>Category</i>												
Property	0.27	0.55	0.01	0.50	-4.76	0.42	-0.25	-11.4*	-0.05	0.09	-0.02	-0.61
Drug/Alc	0.21	1.36	0.00	0.15	-5.30	1.04	-0.11	-5.09*	-0.20	0.22	-0.02	-0.90
Other	-0.04	0.99	0.00	-0.04	-4.38	0.72	-0.13	-6.06*	-0.19	0.15	-0.03	-1.28
Num.	1.61	0.30	0.05	5.48*	3.14	0.22	0.31	14.3*	0.10	0.05	0.06	2.22*
Offenses												
Seclusion	-	-	-	-	-	-	-	-	0.02	0.00	0.29	11.0*
Time												
Infractions	1.15	0.01	0.93	96.16*	0.12	0.01	0.28	13.2*	-	-	-	-
R ²		0.87				0.42				0.12		
Model F		18.2*				100.4*				21.2*		

* p ≤ 0.05; S.E. = Standard Error of Estimate

Table 82. Multivariate Analyses of Race and Key Custodial Outcomes

	Disciplinary Infractions (N=1,504)		
	B	S.E.	expB
Gender	-0.03	0.17	0.97
Age	-0.20*	0.04	0.82
Any MH	-0.05	0.10	0.95
Race	0.38*	0.09	1.46
<i>Most Serious Category</i>			
Property	-0.08	0.10	0.92
Drug/Alc	-0.10	0.25	0.90
Other	-0.25	0.18	0.78
Num. Offenses	-0.06	0.06	0.94
Length of Stay	0.10*	0.01	1.10
OYAS	-	-	-
Likelihood Ratio		365.30*	

* $p \leq 0.05$; S.E.-Standard Error of Estimate

Length of Stay in DYS Facility. In the second set of models we examine length of stay in months as the outcome variable. In the first step we introduce the demographic characteristics of the youth into the model. The sex of the youth, age at admission, and having a mental health diagnosis are statistically related to length of stay in months. When race is introduced in the second model predicting length of stay, the demographic controls (except for grade level) remained statistically significant. Race is also statistically significant which suggests that Non-White youth have approximately a 3 month-longer length of stay than White youths on average. When accounting for the effects of legally-relevant factors in the third model, the effect of race is no longer statistically significant and diminished substantially ($b=0.53$). Less serious offense categories are statistically related to length of stay in months when compared to youth who committed a violent/sex offense. Number of offenses at commitment and count of disciplinary infractions while in custody are related to increases in length of stay in months

($b=3.14$; $b=0.12$, respectively). The effect sizes indicate that race has a rather limited effect when predicting length of stay ($\text{Beta}=0.03$).

In the final model, we include OYAS scores closest to the date of admission for youth with a documented OYAS assessment ($N=624$). Youth gender, age, grade level, and race are not statistically significant when accounting for OYAS scores. Mental health diagnosis remained statistically significant and so too did the legally relevant factors. OYAS risk score is also statistically significant. This finding suggests that for every one-unit increase in risk score there is a 0.21 decrease in length of stay in months ($b=-0.21$).⁹⁰ The number of disciplinary infractions and number of committing offenses were the strongest predictors of length of stay in the final model ($\text{Beta}=0.38$ and 0.31 , respectively).

Proportion of Time Absent from Educational Services. In the third set of models, we regress the proportion of time that youth was absent from educational services to total days of educational services on our core set of demographic and legally relevant factors. The proportion was converted to a logit value (see Fox, 2008) which allowed us to conduct the analysis using linear regression. Race is statistically significant when added to the model suggesting that Non-White youth are absent from class a greater proportion of the time compared to White youth (+18% of proportion). In the third model, we account for legally-relevant factors that may predict the proportion of being absent to the total number of days educational services were offered to the youth. Both number of prior offenses and number of days spent in seclusion are statistically significant. For example, a one-unit increase in the

⁹⁰ We compared this finding to the bivariate analysis to examine for a potential suppression effect. The correlation between OYAS and length of stay is not statistically significant, is weak in magnitude, and in the negative direction ($r=-0.1$).

number of days spent in seclusion increases the proportion absent from class by 2 percent on average ($b=0.02$). Race is no longer statistically significant when we account for these legally-relevant predictors.

In the final model, where we factor in available OYAS information ($N=623$), the race variable is not statistically significant. Both number of days spent in seclusion and risk score are statistically significant, however. On average, a one-unit increase in risk score results in an increase in the proportion absent from class by 0.04 logit units ($b=0.04$). The effect sizes of seclusion time and OYAS risk score on proportion absent to total days of educational services suggest that they have the greatest explanatory value ($Beta=0.27$ and 0.16 , respectively).

Disciplinary Infractions. The final variable of interest is the number of disciplinary infractions between admission and release dates (see Table 83 below). As previously noted, we utilized a count model for this analysis to account for the nature and distribution of the disciplinary infraction measure, which is a count with a great deal of variation. The first step of this analysis includes the relevant demographic characteristics. In this model, age at admission, gender, and mental health diagnosis are related to the number of disciplinary infractions. In the second model, we introduce the measure of race and it is statistically significant. On average, Non-White youth have higher expected counts of disciplinary infractions than White youth on average when controlling for the demographic control variables ($b=0.76$). The other demographic controls remained statistically significant when accounting for race. In the third step, we introduce legally-relevant factors that include most serious offense category and

number of committing offenses.⁹¹ One new significant finding emerged from this step in the analysis (i.e., length of stay). For example, a one-month increase in length of stay would increase the expected count of disciplinary infractions by 10 percent. Race remains statistically significant although the coefficient is greatly reduced ($b=0.38$). Non-White youth still have an average of 46 percent more disciplinary infractions compared to White youth after accounting for length of stay and the legally relevant measures.

We account for OYAS risk score in the final statistical model. Risk score is statistically significant, which suggests that a one unit change in risk score predicts a 7 percent increase in the count of disciplinary infractions. Race remains statistically significant in this model even when accounting for OYAS risk score. In this model, Non-White youth commit an average of 114 percent more disciplinary infractions than White youth.

⁹¹ We also account for length of stay in the third step of this model. Length of stay represents the total time that youth were “at-risk” to commit a disciplinary infraction(s), which means that it may artificially affect the relationship due simply to the fact that some youth will have more time to accumulate infractions.

Table 83. Multivariate Analyses of Race and Key Custodial Outcomes (with OYAS Subsample)

	Seclusion Time (N=666)				Length of Stay (N= 624)				Prop. Absent Class (N= 623)			
	B	S.E.	Beta	t	b	S.E.	Beta	t	B	S.E.	Beta	t
Gender	-2.13	1.41	-0.02	-1.51	-1.34	1.05	-0.04	-1.29	0.46	0.21	0.08	2.19*
Age	0.17	0.38	0.01	0.45	-0.49	0.31	-0.05	-1.62	0.07	0.06	0.05	1.18
Any MH	-1.17	0.88	-0.02	-1.32	2.98	0.65	0.14	4.57*	-	-	-	-
Grade Level	-	-	-	-	-0.07	0.35	-0.01	-0.20	-0.25	0.07	-0.14	-3.65*
Race	-1.92	0.86	-0.03	-2.23*	0.03	0.63	0.00	0.05	0.10	0.12	0.03	0.82
<i>Most Serious Category</i>												
Property	0.28	0.89	0.00	0.32	-4.64	0.65	-0.23	-7.11*	-0.07	0.13	-0.02	-0.51
Drug/Alc	-0.19	2.23	-0.00	-0.08	-5.28	1.63	-0.10	-3.24*	0.29	0.32	0.03	0.89
Other	-0.28	1.77	-0.00	-0.16	-4.33	1.24	-0.11	-3.48*	-0.12	0.25	-0.02	-0.50
Num. Offenses	1.98	0.46	0.05	4.31*	3.33	0.33	0.31	9.99*	0.07	0.07	0.04	1.00
Seclusion Time	-	-	-	-	-	-	-	-	0.01	0.00	0.27	6.62*
Infractions	1.24	0.02	0.95	72.41*	0.14	0.01	0.38	11.56*	-	-	-	-
OYAS	-0.31	0.07	-0.01	-0.43*	-0.21	0.05	-0.13	-4.11*	0.04	0.01	0.16	4.25*
R ²	0.91				0.47				0.16			
Model F	17.0*				49.1*				11.7*			

* p ≤ 0.05; S.E. = Standard Error of Estimate

Table 84. Multivariate Analyses of Race and Key Custodial Outcomes (with OYAS subsample)

	Disciplinary Infractions (N=666)		
	B	S.E.	expB
Gender	-0.20	0.20	0.82
Age	-0.12	0.05	0.88*
Any MH	-0.01	0.13	0.99
Race	0.76	0.12	2.14*
<i>Most Serious Category</i>			
Property	-0.27	0.13	0.76*
Drug/Alc	0.11	0.31	1.11
Other	-0.11	0.25	0.90
Num. Offenses	-0.03	0.07	0.97
Length of Stay	0.09	0.01	1.10*
OYAS	0.07	0.01	1.07*
Likelihood Ratio		348.99*	

* $p \leq 0.05$; S.E. = Standard Error of Estimate

Analysis of Treatment Data Subsample

Within this sample of cases, the UC research team received treatment-related data for 435 youth committed to Ohio DYS facilities between 2013 and 2014. Of those, approximately three-fourths were Non-Whites compared to Whites (26.7%). The overwhelming majority of this subsample is male (94.9%). Most of these youth were identified as having a mental health diagnosis (N=339; 77.9%). The majority of youth in this subsample were committed for a violent/sex offense as their most serious offense (N=296; 68.0%) as opposed to a property offense (N=111; 25.5%), a drug or alcohol-related offense (N=7; 1.6%), or an offense classified as 'other' (N=21; 4.8%). These youth were committed for an average of 1.79 offenses (SD=1.01). Approximately 35 percent of these youth were documented as having received some type of treatment service while in custody (N=153; 35.2%). Youth in this subsample received an average of 67.76 treatment-related services (SD=128.75) indicating that there is a great deal of variation in the number of treatment-related services rendered to these youth. Youth spent an average of 47.81 hours in treatment services and this is quite varied in this sample (SD=90.85).

Treatment-related data were obtained for some of the DYS facilities sample (N=435). In the original treatment contact log data provided by DYS, there were 40,439 treatment entries for 153 youth that fell into 771 distinct types. Some of the entries did not really constitute treatment (e.g., visitation, assessment) and many of the contact categories (e.g., “CBT-Prosocial Skills – Group”; “#16 Expressing your Feelings”) could be collapsed into more meaningful categories (e.g., Cognitive Behavioral Therapy [CBT]). Consequently, the 771 treatment entry types were collapsed into ten descriptive categories (e.g., CBT, Substance Abuse, Anger Management, Victim Awareness) and four non-treatment categories (e.g., Visitation, Case Updates/Notes). Table 85 below displays the number of entries for each of the treatment-related and non-treatment related contact categories. Approximately 73 percent of the 40,439 entries were classified as treatment contacts.

After creating an indicator for treatment-related and non-treatment contacts, we were able to develop a binary measure of treatment contact for each of these cases (0=No; 1=Yes). A total of 35 percent of the 435 youth had at least one of these contacts during their time in the facility. The remaining 282 cases had no documented treatment entries were coded as having received no treatment contacts.

Table 85. DYS Treatment Entries Variable

	Number of Entries	Percent
<i>Treatment-Related</i>		
CBT	1,137	2.8
Substance Abuse	1,148	2.8
Sex Offender	584	1.4
Anger Management	899	2.2
Mental Health/Counseling	5,949	14.7
Victim Awareness	369	0.9
Life Skills/New Freedom	10,966	27.1
Gang Intervention	603	1.5
Other	948	2.3
Unknown Treatment	6,874	17.0
<i>Non-Treatment Related</i>		
Non-Treatment Activities	2,177	5.4
Visitation	152	0.4
Contact w/Justice Personnel	3,001	7.4
Case Updates/Notes	5,632	13.9
<i>Total</i>	<i>40,439</i>	<i>100</i>

The analysis of the treatment subsample is similar to the full multivariate analysis in that there are three major steps to the analysis. The first step consists of examining the effects of the demographic controls on the treatment related outcomes (i.e., any treatment, number of treatment services, and total time spent in treatment related services). In the second step we introduce race as a covariate to determine whether race can account for any of the variation in those measures. Third, we insert the legally-relevant factors in the models to examine whether these measures have an effect on the relationship between race and our dependent variables. We present two types of estimates: unstandardized (B), which provides insight about the relationship between the independent variables and the dependent variables on a logit scale and odds ratio, $\text{Exp}(B)$, which is the exponentiation of the log odds coefficients producing the expected change in odds for a particular outcome given the influence of independent variables.

The first treatment-related outcome of interest is whether youth in this subsample received any treatment-related services. Given that this measure is dichotomous, we use binary logistic regression which allows us to produce odds ratio values [i.e., $\text{Exp}(B)$] for each predictor. The findings from this analysis are shown in Table 86 below. In the first step both age and any mental health diagnosis are statistically significant at $p < 0.05$. We include race in the second step of this model. Age and mental health diagnosis remain statistically significant with just slight changes to the effects. Race is also statistically significant. Non-White youth have a 73 percent higher likelihood of receiving services compared to White youth ($\text{OR} = 1.73$). We then inserted legally-relevant predictors into the final model predicting whether youth received treatment. Age and mental health remained statistically significant although the effects were diminished slightly. Race is no longer statistically significant. Youth who committed a violent/sex offense had a significantly higher likelihood of receiving treatment than those that did not commit a violent/sex offense ($\text{OR} = 3.16$). Furthermore, the odds of receiving treatment increased by 35 percent for every one-unit increase in the number of prior offenses ($\text{OR} = 1.35$).

Table 86. Final Binary Logistic Statistical Model – Any Treatment Contact (N=435)

	B	S.E.	Sig.	Exp(B)
Age	-0.34	0.10	0.00*	0.72
Gender	-1.16	0.66	0.08	0.31
Any MH	1.19	0.32	0.00*	3.30
Race	0.29	0.26	0.27	1.34
Violent/Sex Offense	1.15	0.27	0.00*	3.16
Num. Offenses	0.30	0.11	0.01*	1.35
Constant	2.52	1.73	0.15	12.37
Hosmer Lemeshow: $p=0.17$ Cox & Snell $R^2=0.17$ Nagelkerke $R^2=0.24$				

* $p<0.05$; S.E. = Standard Error of Estimate; Sig. = Significance Level

In the second set of models, we predict the total number of treatment contacts for this subsample of youth using a count model to account for the nature and distribution of the number of treatment-related contacts variable, which is a count with a great deal of variation (see Table 87 below). In the first step of the model, only mental health diagnosis was statistically significant. A mental health diagnosis would increase the expected count of treatment related contacts by about four times ($\text{Exp}[B]=3.82$). After accounting for race in the second step of this model, mental health diagnosis remains statistically significant. Race is not statistically significant in this model. In the final step, mental health remains statistically significant and the effect further increases when accounting for the legally-relevant predictors ($\text{Exp}[B]=4.66$). Race remains nonsignificant in this step. The indicator for a violent/sex offense is statistically significant, however. Youth that committed a violent/sex offense had approximately 179 percent more treatment contacts than those that did not.

Table 87. Statistical Model – Number of Treatment Contacts (N=435)

	B	S.E.	Sig.	Exp(B)
Age	-0.29	0.17	0.09	0.75
Gender	-1.04	0.86	0.23	0.35
Any MH	1.54	0.43	0.00*	4.66
Race	0.04	0.44	0.94	1.04
Violent/Sex Offense	1.03	0.41	0.01*	2.79
Num. Offenses	0.32	0.22	0.16	1.37
Likelihood Ratio				21.80*

*p<0.05

Description of DYS Commitments, County, and Race Subgroups

A secondary aim for this part of the study considered the source of referrals (i.e., county) and any associated racial disparities. Within the random sample of DYS commitments, 73 Ohio counties referred 1,514 youth to DYS facilities. The number of referrals per county ranges from 1 to 303 youth in that full sample of cases.

The relative prevalence of referrals by race for the 13 counties included in the Ohio DMC Assessment study are displayed in Table 88 below (N=1,062 youth referrals). The county entries are arranged in order of lowest to highest percentage of referrals of Non-White youth. The analysis reveals that 83 percent of the 1,062 youth referred to DYS were Non-White. The relative percentage of youth referrals from each county, however, did vary by race subgroups. Two counties (i.e., Butler and Clark) had similar trends in terms of referrals by race subgroups. For example, approximately 54 percent of referrals made by Butler County were of White youth compared to 46 percent of Non-White youth. Clark County had a slightly greater White/Non-White group split (56 to 44%). Those are considerably lower than the overall prevalence of Non-White youth among referrals. Still, 11 of the 13 counties referred a much greater percentage of Non-White youth to DYS facilities compared to White youth although the

magnitude of these differences varied by county. Several counties fall between 60 and 70 percent Non-White referrals. For example, in Stark County 63.2 percent of referrals were of Non-White youth compared to 36.8 percent of White youth.

Two counties had relatively large differences between race subgroups that were between 70 and 80 percent Non-White referrals (i.e., Lorain and Summit Counties). The differences in referrals between the race subgroups were more pronounced in Cuyahoga County, for example, where 94.1 percent of their referrals were of Non-White youth compared to 5.9 percent of White youth. Cuyahoga also referred considerably more youth to DYS during this time frame. Hamilton County had a similar distribution in that 92 percent of youth referred to DYS were Non-White. Proportionally, they referred far fewer youth than other counties during the study period, however. Other counties, such as Montgomery, Lucas, and Mahoning have less pronounced differentials between Non-White and White referrals, but are each above an 80-20 percent split.

Table 88. Race Subgroup Distribution by Committing County (n=13)

County	White % (N)	Non-White % (N)	Total % (N)
Clark	55.6 (15)	44.4 (12)	100 (27)
Butler	53.8 (14)	46.2 (12)	100 (26)
Trumbull	37.5 (9)	62.5 (15)	100 (24)
Stark	36.8 (14)	63.2 (24)	100 (38)
Allen	34.5 (10)	65.5 (19)	100 (29)
Lorain	27.3 (21)	72.7 (56)	100 (77)
Summit	23.4 (15)	76.6 (49)	100 (64)
Montgomery	19.7 (14)	80.3 (57)	100 (71)
Lucas	16.4 (10)	83.6 (51)	100 (61)
Mahoning	14.0 (6)	86.0 (37)	100 (43)
Franklin	12.7 (26)	87.3 (178)	100 (204)
Hamilton	8.4 (8)	91.6 (87)	100 (95)
Cuyahoga	5.9 (18)	94.1 (285)	100 (303)
<i>Total</i>	<i>16.9 (180)</i>	<i>83.1 (882)</i>	<i>100 (1,062)</i>

Summary of Key Results from Analysis of Ohio DYS Data

Overall, the majority of this random sample of youth committed to DYS facilities was Non-White (65%; of which 86% were African-American). Youth spent an average of 10.43 months in custody. We conducted bivariate analysis to examine whether there were differences between race subgroups (White vs. Non-White) on the key variables identified above. These comprised both pre-admission variables and youth experiences while in custody. Several statistically significant findings emerged in this analysis. Independent samples t-tests revealed that Non-White youth spent a significantly longer time confined (in months) and in disciplinary seclusion (in days) than White youth. Furthermore, Non-White youth had more disciplinary infractions in DYS facilities than their White counterparts. All of these relationships were reasonably sizeable in statistical terms—suggesting differences that were substantively relevant. Some significant differences were also observed in the comparisons of school-related performance while in custody as well. While these analyses provide some insight into differences between key measures and race subgroups, multivariate analysis allow us to account for potentially relevant factors (e.g., offense-seriousness and number of offenses) that allow for a more valid estimate of the relationship between race and the focal variable.

The findings from the multivariate analysis indicate that race has inconsistent effects on the various outcomes for youth in DYS custody. Race is a significant predictor of time spent in seclusion (even when accounting for legally-relevant factors). The effect size is somewhat small in magnitude, however. This finding remains when we account for risk score (excluding criminal history subdomain) in the OYAS subsample. Race, however, is not statistically significant in predicting length of confinement as the legally-relevant variables produce the

strongest effects in the statistical model. Risk score is also a significant predictor in the OYAS subsample analysis; however, the direction of the relationship runs counter to our expectations.⁹² Race is non-significant in the models predicting the proportion of time absent from class. Seclusion time and grade level are the strongest predictors of proportion of time absent from class in the full model. This is not the case, however, in the OYAS subsample analysis. In this analysis, risk score and seclusion time are the strongest predictors of proportion of time absent from class. Lastly, race has a statistically significant effect in all models concerning disciplinary infractions, although the effect size is greatly diminished when controlling for legally-relevant measures (-50%). The effect of race was also statistically significant when we accounted for risk score in the OYAS subsample analysis.

We received treatment-related data for 435 youth who were in custody in Ohio DYS facilities between 2013 and 2014. A majority of these youth had a mental health diagnosis (N=339; 77.9%) and were committed to a DYS facility for a violent/sex offense (N=296; 68%). Approximately one-third of these youth received treatment services during the timeframe. The findings from the multivariate analysis revealed that race was related to the indicator for any treatment-related service receipt; however, the effect of race was rendered nonsignificant and diminished considerably after accounting for legally-relevant factors. Race was not a statistically significant predictor of the number of treatment-related contacts at any stage of the multivariate analysis. Thus it is not a strong predictor for either treatment receipt or

⁹² We checked for the potential of a suppression effect on this relationship due to the pattern of associations among multiple variables included in the statistical model. Excluding disciplinary infractions from this model renders the effects of risk score on length of stay non-significant.

number service contacts--especially when considering other relevant influences (e.g., mental health diagnosis and focal offense type).

Finally, a descriptive analysis of committing county among the thirteen key study sites in the Ohio DMC assessment identified two important trends pertaining to the make-up of cases referred to DYS. First, the vast majority of youth in the sample were Non-White (~83%). Second, looking at the end-stage of the system provides some insight into the fact that there are a few counties that inevitably drive the broader trends. Not only did the larger counties generally refer more youth (which is expected), but proportionally they tend to have a high relative prevalence of Non-White youth. Franklin and Cuyahoga provide good examples in this sample. The analysis also identifies some counties that seem to have a closer split in the prevalence of White and Non-White youth being referred to DYS facilities (e.g., Clark and Butler Counties).

6. DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

SUMMARY AND DISCUSSION OF KEY RESULTS

Although results were periodically summarized in the relevant sections, it is useful to consider some of the key points that can be extracted from the different data sources and analyses prior to moving on to the recommendations stemming from this DMC assessment. In general, this assessment project found some evidence of DMC at relevant points in the justice process, but there was variation in where and the degree to which those held up when accounting for legally-relevant factors like current offense seriousness and prior record. Explanations for the problem are more difficult to identify, but the data show that there are likely to be elements of differential offending patterns as well as some justice practices that do

affect minority youth more substantially than Whites. For instance, differential enforcement patterns are more likely to affect minority youth on the policing side and there are some considerations in juvenile court that can have a disproportionate impact on minority youth (perception of home stability in detention decisions). Police and juvenile court respondents provided useful insight in better understanding these patterns and generating some ideas for future consideration.

Analysis of Police Record Data

Non-White youth made up the majority of juvenile arrests, accounting for 72 percent of cases in the sample of 20,000 records. While the comparison of arrests between White and Non-White youth identified several statistically significant differences, they were typically small to moderate in size. The most serious charge and offense level (e.g., felony, status) for which the youth was arrested fell into that category. The strongest relationships were found for weapon type, offenders' role in offense, and source of complaint – all of which included much smaller sample sizes than the pooled police data file as a whole – therefore a degree of caution is necessary.

Information on weapon-involved arrests was available for a small subset of cases (n=6,840). White and Non-White youth were very similar in their prevalence of arrests for weapons offenses (7.4% and 8.0%, respectively). In cases that involved a weapon, which also had data on its type, Non-White youth were far more likely to be arrested in an offense involving a firearm than White youth (74% to 38%). The role played in offenses differs slightly across White and Non-White arrestees as well. For example, Non-White youth arrests more

often involve arguments/disputes whereas incorrigible/status offenses are relatively more frequent for White youth.

Inconsistent with focus group findings, White youth are more likely to be arrested due to a complaint from their parent/guardian. Many officers observed that they get more calls for service from the parents in minority communities – suggesting either officers’ contact with youth stemming from calls from minority parents must be informal in nature (i.e. contact but no arrest), or minority parents do not call as often as officers perceive. Consistent with previous literature and observations from court personnel, school officials (including SROs) were more likely to be the source of the complaint resulting in arrest for minority youth – this finding provides some contention for focus groups’ recommendations to place officers in schools to both reduce juvenile crime and formal contact with the juvenile justice system. Finally, slightly more Non-White youth were found to be arrested due to police associated complaints. Unfortunately, given details in the records, it is difficult to fully determine whether these complaints originate from proactive police contacts or reactive contacts, but the overall pattern for “source of complaint” is insightful. Additional relationships, although significant statistically, were comparatively smaller in size – suggesting that, White and Non-White youth do not vary substantially from one another on many characteristics of their arrests. Overall, however, it is clear that minority youth make up the majority of arrests in nearly all sites and the sample as a whole. There are also a number of offenses type patterns in certain locales that may be useful for identifying potential alternative responses that may have an impact on DMC.

Analysis of Juvenile Court Record Data

Non-White youth accounted for 60 percent of cases in the sample used for this portion of the DMC assessment. According to the 2010 Census, this group accounted for 22 percent of the juvenile population in Ohio. On the surface, this indicates disproportionate minority contact in the cases coming into the juvenile courts during the years for which we had records. In general, once all possible influences were included in the final models, the effect of race decreased in each but was still statistically significant in five of the six case outcome measures. Relative to White youth, Non-White youth were more likely to be detained prior to adjudication, have their case dismissed, be placed in a secure facility, and be waived to criminal court. Conversely, Non-White youth were significantly less likely to be adjudicated delinquent compared to White youth. Race was not a significant predictor of diversion. The legally-relevant factors (e.g., number of prior petitions, offense seriousness) appeared to be more closely associated with that outcome. There was, however, variation across the 13 sites with respect to the size and consistency of these relationships that is identified and discussed in each of the individual site reports.

The statistical analysis of the integrated measure reflecting the degree of penetration into the juvenile justice process suggests that Non-White youth tend to fare worse in terms of the severity of court decisions. There is a distinction with the dismissal outcome that tends to suggest minority youth are more likely to have their cases dismissed than White youth. A matched pairs analysis of the race group differences for this outcome suggested that the case dismissal effect dropped when scrutinized further, making it difficult to come to a firm conclusion about this relationship. The pattern of relationships at the site-level suggests that

some counties had proportionately more cases involving non-whites dismissed than whites. That pattern does not hold in all counties, though. Most agencies did not provide information for the underlying reasons for dismissal, which limits the inferences that can be drawn about those cases. This effect was one of those that tended to vary across the sites included in the study. Four of the sites had effects suggesting that White youth were more likely to have their cases dismissed and three showed patterns where Non-White youth had greater levels of dismissal in the statistical models.

The relationship between race and the adjudication stage also suggests that Non-White youth are less likely to be adjudicated delinquent than their White peers. Effects of this nature are not unprecedented in previous research and some suggest that there may be a “correction” that enters the process at the point where more formality and facts are introduced (see Bishop & Leiber, 2012, for a discussion). Still, like the anomalous dismissal effect, this relationship seems to diminish when we utilize alternate matching methods that provide a stronger control for alternate influences. This is likely due to cross-site variation in the pattern of relationships (e.g., Non-White youth were comparatively less likely to be adjudicated delinquent in Hamilton County, but comparatively more likely in Cuyahoga County). On balance, this led to an effect that a lower likelihood of adjudication, but it is important to consider that variation across counties in identifying places in the process where efficient planning and intervention might occur.

In the initial model for secure confinement, Non-White youth were 82 percent more likely to be placed in a secure facility relative to White youth. This percentage dropped to only 12 percent in the final secure confinement model, a pronounced drop of 70 percentage points.

Similarly, in the race-only model, Non-White youth were 24 percent less likely to be diverted compared to White youth, but the effect was reduced and became nonsignificant in the final model that controlled for legally-relevant factors. This suggests that a lot of the variation in outcomes can be explained by characteristics of the referral offense(s) or youth history, but there is a residual relationship between race and these outcome points in these data.

Race had a statistically significant and moderate-sized relationship with detention in all relevant statistical models. This has important implications because studies have found that detention can have a “snowball” effect where decisions made at earlier stages in the process can affect those at later stages (see Rodriguez, 2010). For this reason, detention was included as an explanatory variable in supplementary analyses for adjudication and secure confinement. In those cases, youth who were detained were 87 percent more likely to be adjudicated delinquent and 93 percent more likely to be placed in secure confinement relative to those not detained.

Like detention, the findings for secure confinement and bindover decision points tended to be more robust to relevant statistical checks. Also, these relationships did not shift direction across the sites in terms of whether they tended to affect Non-White youth more than White youth when they were statistically significant in the full models. Although the size of the relationships did diminish as adjustments were made for legally-relevant factors, the overall effect was about a 12 percent difference in the likelihood of secure confinement and about 112 percent (i.e., more than twice) for bindover—accounting for other available influence

measures.⁹³ These effects warrant further attention in terms of whether the same (or similar) policies or practices might be affecting these outcomes. Some analysis of a subsample of the data did identify that inclusion of a weapons charge indicator did have an impact in reducing the relationship between race and secure confinement, but did not fully reduced that for bindover. Given the nature of these decisions, it is worth looking further at broader policies that mandate certain sanctions while also considering available alternatives in cases where there is more discretion.

This supplemental analysis suggests the importance of considering how relationships between race and risk assessment might affect court outcomes (or not). This information gave us another point to “control” for alternative influences on juvenile court outcomes. It led to mixed conclusions and indicates that the effects may vary across counties (as is the case with other aspects of assessment, see McCafferty, 2016a). Still, the data coverage is arguably better in Hamilton County and those findings seem to hold to a pretty similar pattern compared to what was found in the main site-level analysis discussed below. Given the prominence of risk and needs assessment in contemporary juvenile justice and Ohio courts it is worth considering further whether and how OYAS is used in different locales as a factor that might obviate some differentials, have little to do with them, or capture certain disadvantages among youth as they encounter the system (McCafferty, 2016b).

Given the nature of the data and the sensitivity of the relationships tested here, several checks and ancillary analyses were used to further scrutinize the findings from the pooled data set. These included checks on possible interactions between race and other legal influences

⁹³ As noted above, the number of cases, especially for the bindover outcome, is relatively small (<1% of all records) so that may lead to some magnification of the effects.

and effects due to variation among counties. We also considered important data requirements and assumptions that are inherent in the analyses used here to identify any impact that may have on the conclusions. Aside from the exceptions noted above, these analyses confirmed the main findings included in the summary and larger report.

Analysis of Police Focus Group Data

Officers who participated in the focus groups overwhelmingly viewed disproportionate minority contact as a product of the differential offending patterns of minority youth. Despite different job responsibilities (e.g., School Resource Officers vs. Patrol Officers), participants across the various agencies consistently identified familial, socioeconomic, and geographic factors within minority communities as a driving force in delinquency by youth and subsequent contact with police. Inherent in the officers' discussions was their belief that these factors were connected and that they led to more serious and higher levels of offending and, in turn, disproportionate arrests of minority youth. With respect to later decisions, they suggested that the juvenile court often relies on factors (i.e. family involvement) in its processing and responses to youth, which are the same that contributed to their delinquency in the first place. In sum, the officers' message could be characterized as follows: the convergence of familial, socioeconomic, and geographic factors within the same neighborhood context places minority youth at a disadvantage that persists from their likelihood of involvement in crime to their experiences and reaction to them the juvenile justice system.

Although relatively few officers made comments regarding the influence of "differential treatment" practices on DMC, those who did provided significant insight. Specifically, some of these officers pointed to community, departmental, and individual factors that can impact

outcomes for minority youth, such as public expectations of crime control in minority neighborhoods, the presence of implicit biases held by the community, the direction of law enforcement to “hot spot” locations that have greater minority presence, and the possible inclusion of extra-legal factors in officer decision-making--although officers did argue that there were departmental checks on this practice.

Relatedly, some officers observed that law enforcement agencies tend to patrol more heavily and formally enforce more laws in minority communities. The majority of focus group participants recognized the concentration of law enforcement in minority neighborhoods and subsequent DMC as a product of data-driven policing strategies, but viewed it as a matter of going where their supervisors and the community directed them based on the differential offending patterns described above. Differential treatment also came up in response to discussion of situational characteristics of interactions between youth and the police. Officers from the majority of the participating agencies confirmed that, when the characteristics of the incident allows for officer discretion, the attitude and demeanor of youth do impact decisions. In particular, youth that exhibit negative attitudes were identified as more likely to be handled formally. Still, in cases where this came up in the sessions, officers overwhelmingly observed that adolescents are equally disrespectful to them across groups and that DMC was not a product of any weight given to race in arrest decisions.

The officers’ explanations for DMC with respect to police were mirrored in the range of recommendations to reduce juvenile crime (and, potentially, DMC). Generally, these recommendations fell outside of law enforcement practices, focusing instead on the capabilities of families, communities, schools, and later stages of the juvenile justice system to

both prevent youth involvement in crime and effectively manage the behavior of delinquent youth. Ultimately, officers advocated for a holistic approach, targeting multiple areas in the lives of youth and, therefore, increasing the likelihood of making a positive impact. Some participants did also argue, however, that juvenile offending problems and DMC would best be addressed by enhanced sanctions in juvenile courts and the expanded use of detention and secure placement for youth who were repeat or serious offenders.

SROs seemed more willing to view police as having an active role in the reduction of juvenile crime and DMC, often through their presence in schools to improve rapport with youth. A number of officers argued for the benefits of School Resource Officer programs in potentially reducing juvenile offending and DMC. As noted in earlier parts of the report, in light of the youth and adolescent focus of the study, close attention was paid to the fact that some SROs were included in the focus group sample (this was requested of the agencies whenever possible, in fact). Although we found relatively few differences between them and other officers in terms of their general explanations for DMC or delinquency, there were some places that insight could be drawn and those were considered in as much depth as the data would allow. In addition to previous research that raises some questions about the link between schools and juvenile justice (Skiba et al., 1997; Costenbader & Markson, 1998), some of the evidence here—including court interviews and a small portion of arrest records that had information on “source of complaint”—suggest that school-based referrals may contribute in some ways of the DMC problem. Consequently, it is important to be deliberate in thinking through (and potentially limiting) what police are asked to do in schools as part of these programs. In fact, while they generally did advocate for this approach, there was some variant

on the general “targeted enforcement” theme expressed elsewhere suggesting that SROs might increase DMC due to their consistent presence in schools with high proportions of minority youth. In some ways, this parallels officers’ comments about “hot spots” policing and calls for service in that they believed that inner-city schools with larger minority populations request officer presence more often than private, majority White schools. This exemplifies the difficulty of engaging in targeted policing strategies, which these officers saw as being needed in certain neighborhoods or schools, while also keeping racially-disproportionate referrals to the juvenile justice system at bay.

Our focus on DMC requires that we look beyond merely what may be effective in reducing crime to explore how certain strategies affect contact with minority populations, public perceptions of system legitimacy, and police-community relationships. These issues are all connected. Discussions within the focus groups highlighted the officers’ experiences as the main crime control mechanism in the communities they serve. Comparatively fewer officers suggested the importance of officers maintaining active roles in those communities outside of the law enforcement function (with the exception of some SROs). At the same time, participants in all focus groups emphasized the need to address underlying community problems to decrease juvenile crime and DMC.

This suggestion aligns with the intentions of community-oriented policing (Eck & Rosenbaum, 1994). However, contrary to many officers’ suggestions within the focus groups – police must be actively involved in these community initiatives (Goldstein, 1990). Therefore, it appears that the community aspect of policing must be reintroduced. However, it is important to simultaneously preserve POP approaches – because, while community oriented policing can

improve police-public relations and perceptions of neighborhood conditions, it has fewer effects on crime prevention and reduction (Eck & Maguire, 2000; MacDonald, 2002). At the same time, comprehensive efforts aimed at particular areas, drawing not just on policing strategies but also building up institutions and informal social controls stand to provide better results in the long term (Weisburd et al., 2014)—not just in terms of criminal behavior but neighborhood health and equality more generally.

Analysis of Juvenile Court Interview Data

While some staff reported disproportionate minority contact (DMC) was not a major issue in their courts, most interviewees thought it was a problem—at least to an extent—and suggested that the juvenile justice system, education, family, and neighborhood are contributing factors. Court personnel, like police, were reluctant to explicitly discuss the decision-making process and system-related factors as contributors to DMC or saw them as secondary influences. Staff tended to focus more on broader problems that may lead youth to the system, rather than court policies and practices. This is consistent with the perception that differential offending is the main cause of DMC, but allows for the possibility that minority youth are more likely to reach the juvenile justice system due to front-end decisions in communities and schools. In that vein, some interviewees mentioned that they do not have control over the cases referred to them and that lower tolerance for misbehavior in schools and “hot spots” policing in certain targeted areas generally lead to a higher volume of juvenile court referrals, particularly of minority youth from urban areas.

Although interviewees did describe some points of the system where disparities might emerge (e.g., detention), responses centered on the need for sustainable programs that

address the risks and needs of youth across multiple domains. Interviewees in every site mentioned resource constraints and the lack of prevention and intervention programs as contributing to the overrepresentation of minority youth in the juvenile justice system. They mentioned a variety of programs—either directly related or more general—that they thought might be better resourced to address DMC but were not always specific about how.

Court staff perceived youth as being more vulnerable for juvenile justice involvement when they came from homes with poor family management, limited supervision, or discord. They also mentioned that this contributed to the overrepresentation of minority youth in the court, but also justified its involvement in their lives based on its *parens patriae* mission. With that in mind, however, some court interviewees did raise the question of differences in perception that might affect the response to minority families and youth. In particular, they mentioned that court decisions are partly predicated on parental involvement, but it can be challenging for some parents—even when well-intentioned—to participate fully due to other competing demands like work, housing, or transportation problems. Some respondents also indicated that minority youth and families may have difficulty fully trusting the system and those who work for the court, referring to potential “suspicions” about its intentions in one interview.

Court interviewees provided a host of general and specific suggestions on how to reduce juvenile delinquency and deal with DMC issues. Some seemed to have limited direct connection to specific DMC efforts, but others are specifically at the issue (e.g., Summit’s Peace, Justice, & Equality Board; Montgomery County’s DMC diversion program) or seemingly could have an impact (e.g., alternatives to detention early in the court process). The

recommendations included initiatives of different sizes, scopes, and missions; different levels of cost; and varying origins (e.g., local, state, public/private partnerships). Some focused on relatively small aspects of the juvenile justice system like providing resource directories (or, pocket cards) to relevant personnel and extending service hours, while others centered on larger system-change efforts such as reforming detention and mandatory hold policies; ensuring equitable access to diversion programs and services through assessment and central intake centers; and establishing family resource centers. Some have ceased to exist while others are ongoing or in planning stages. They also range in terms of levels of past success or basis in evaluation evidence. Summarizing the various recommendations is difficult due to the sheer amount of ground they covered, but many of them contained notions of collaboration, multi-agency partnerships, evidence-driven decision making and programming, and cultural competence. Given the variation in findings across site and decision points it would follow that appropriate strategies be developed and implemented with a specific problem focus in mind.

Analysis of DYS Facilities Data

This part of the assessment project is somewhat novel relative to the DMC research (and intervention) to date. Most efforts have been aimed at earlier stages in the juvenile justice process and generally end with the decision to place or not. Statistical models were estimated for four key outcome variables extracted from the data provided by Ohio DYS: seclusion time, length of stay, proportion of time absent from education services, and number of disciplinary infractions. Treatment receipt data were analyzed for a subsample of cases that covered the last two years of the study period as well. Sixty-five percent of the cases in the sample of 1,514 DYS cases records included in this assessment were Non-White. Non-White

youth accounted for a higher proportion of the cases that came from the 13 main study sites (83%).

In the multivariate analysis, which is the most conclusive with respect to assessing the relationship between race and the outcomes of interest, the only consistent finding was one for race and disciplinary infractions. This was true whether using the main sample and baseline criminal history measures and also in a subsample of cases that had Ohio Youth Assessment System information. Non-White youth in custody had 50 percent more infractions than White youth—even accounting for several other relevant influences. Although there were some small race effects in the models for seclusion time, that seems to be driven almost entirely by its relationship to disciplinary infractions, which was quite strong (a correlation of 0.93 on a scale from 0 to 1.0). Similarly, number of disciplinary infractions also has a significant, moderate relationship with the total length of stay in DYS facilities (0.40 on scale from 0 to 1.0). The nature of that correlation is likely more complicated due to the fact that length of stay may be largely determined at the start of the custodial term, which means that could be capturing the “time at risk” for infractions, but it is worth considering as a potential consequence of disciplinary problems that may further affect minority youth.⁹⁴ When analyzed comprehensively, there were no observed differences across race for length of stay in custody, educational outcomes, or the treatment receipt variables.

Race distributions in county referrals to DYS were also examined as part of the assessment. The vast majority of youth in the sample were Non-White (~83%). Larger counties generally refer more youth (which is expected), but proportionally they tend to have a higher

⁹⁴ We did not have a presumptive term and actual term breakdown of this measure to fully parse that type of relationship.

relative prevalence of Non-White youth (e.g., Cuyahoga, Franklin). The analysis also identified some counties that seem to have a closer split in the prevalence of White and Non-White youth being referred to DYS facilities (e.g., Clark, Butler Counties). Similar patterns are evident in the site analysis of secure confinement decisions in the court records.

LIMITATIONS

Several limitations in aspects of the data should be kept in mind as context for these results. First, it is unlikely that the final sample is fully representative of Ohio. Although the study was in some sense designed that way based on the sites identified in the original Ohio DYS request for proposals, there was further slippage due to sites that did not wish to participate. As described above, the site outreach and follow up protocol included letters, emails, phone calls, videoconferences, and in-person meetings in order to explain the study and answer both general and specific questions pertaining to the data and focus group/interview requests. This resulted in 13 of 14 identified courts participating in some aspect of the study and 20 of 40 original police agencies. The sample also included an array of agencies both large and small from most regions of the state.

The scope of time covered in the records is also something of a limitation, but, generally, was unavoidable due to the lag in obtaining, retrieving, and analyzing official records. In most cases, it does not seem that major efforts have been undertaken in the time since that might alter main conclusions reached here. There are some cases where agencies have begun to address detention reform and DMC (e.g., Lucas County, Montgomery County) that should be kept in mind. Additionally, the DYS records cover a slightly more recent time frame and the disproportion in commitments by race persists, reflecting some likely stability in the trends

seen in the court record data from the early part of the study period. Still, in cases where interventions have been undertaken following the time period covered in the records that should be factored into conclusions reached here (e.g., Lucas County's efforts with public-private partnerships).

Considering the sites that did participate, there were issues in the available or collected data that do limit our ability to assess and explain DMC in these sites in some instances. The appendix provides information on the full list of fields requested from the court and police agencies. Unfortunately, many of those were unavailable in agency records. Beyond the difference in the ideal measures and what was available for this study, these issues include factors such as inconsistencies across agencies in the availability of measures, how those measures were operationalized, and the coverage (case "missingness") on each of the available fields. Even in cases where comprehensive records were provided or collected from the standpoint of the agency's available information, there were frequent mismatches between agencies in the scope and type of information that was accessible. So, for example, while there might be an indicator of race in an arrest record, the level of information provided about the arresting offense itself might vary. In court records, a common problem was a lack of OYAS information, which precluded optimal use of that field in the assessment. Although we did have information that correlates with aspects of OYAS, greater coverage would have likely allowed us to expand some analyses. Also, information on reasons for case dismissal or some disposition outcomes, including the specific nature of placements and probation supervision orders, were available in some sites but not others. This creates some unevenness in the different points that might be measured and analyzed across all sites concurrently. These

issues are to be expected in agency data that is generally collected for purposes distinct from those of a study like the one reported on here, however (Hatry, 2004; Jacob, 1984). We attempted to find alternative measures where possible, such as working backward from later decision measures like secure confinement or adjudication to determine that a given case was *not* diverted or a more technically-involved process of “multiple imputation” for some data fields where it was an appropriate option.

Police record data are inherently “selected” on the outcome as information was not available for contacts that did not lead to arrest. “Contact card” data were requested as part of the study, but the conversations with site contacts and results suggest that agencies generally do not collect or systematically store that type of information. This, in conjunction with the fact that relatively few case details were available in the records, puts some constraints on how much can be learned about DMC based on the analysis of police data. The limited nature of the pooled police data demonstrates the utility in a mixed methods approach. The qualitative data obtained from police focus groups and interviews provides insight into the numbers, allowing for some exploration of what findings are consistent or inconsistent across the different information sources. Also, the findings from the police data do provide a reasonable “baseline” on the degree to which Non-White youths are arrested relative to their White peers, which contextualizes some of the results on later stages in the juvenile justice process and focus group and interview responses.

The focus group and interview data provided some richness and depth in understanding how system actors perceive the presence of DMC, explanations for it, and potential responses. We relied on agency contacts to help direct us to the optimal participants so it is possible that

that they steered us toward certain individuals and therefore our sample is not fully representative of the views of personnel in these agencies. Also, certain themes may not have been drawn out as well as possible in the interview and focus group protocols or processes, which would have limited the nature of the information we received. Still, except for a seeming (natural) disinclination from focusing on explanations related to their decision-making or agency practices or policy, the content of the data for those parts of the study does not seem to reflect a desire to tell the researcher exactly what s/he wanted to hear or cherry pick certain positive statements and leave out the rest. From the perspective of the analysis, we also tried to ensure that we had a thorough and valid sense of the data through an iterative process of analysis, questioning, and revision, to reach final conclusions about key themes from the focus groups and interviews.

The limitations just described are somewhat common in the various types of data collection methods used in this assessment. Still, efforts were made to look at the data available in system records and consider the perspectives of those who work in the system and, in cases where there were data limitations, analyses were conducted in order to shore up important conclusions to whatever extent possible.

RECOMMENDATION AND CONCLUSION

Context

The limitations in the scope and nature of the data and analyses just described (and alluded to at other junctions of the report) should be strongly considered in contextualizing the findings and key conclusions. This means that the results of this assessment and the recommendations and conclusions below are based on the best data available to us. Still, the

content of the report—which considers multiple sources of evidence and decision points—highlights the fact that there are disproportionalities in system outcomes across multiple stages that persist after accounting for alternate influences. There are some differential offending patterns at work in the findings from case records and those are highlighted by police and court personnel. The presence and causes of DMC appear to be quite complex and seemingly difficult to deal with in some senses. This likely creates a ceiling on whether the justice system can fully address the underlying problems, but this does *not* mean that shifts in thinking or alternative approaches are destined to fail. Even some of the structural problems that respondents point to (community violence, poverty) have been dealt with somewhat successfully from the ground up without fully solving less tractable, societal-level challenges (see, e.g., Braga & Weisburd, 2011; Turner et al., 2014).

It is also important to note that there was variation around those summary findings in that some sites do not show evidence of disproportionality after other relevant variables are included (or it is confined to certain decision points). It is also likely that the reasons for disproportionality could vary by place and decision point—even when the general patterns are similar. This variability in decision points and study sites might inform priorities related to DMC efforts. It also suggests the need for focused analysis of the problem that considers local contexts and decision-making factors and uses that insight to identify solutions. Although there were exceptions, on balance, the interviews and focus group participants did not point to many specific aspects of the juvenile justice process that drove DMC patterns. They did, however, offer a number of insights that provide a feel for what might be done in future efforts to address these issues.

Recommendations

With this as background, there are several points that might be considered by Ohio DYS and other state and local stakeholders. This may involve incentivizing or providing support to facilitate initiatives in local agencies, but some may require more direct action. Those recommendations and rationales for them based on this assessment and synthesis of other research on DMC in juvenile justice are covered below.

First, in general, it is important to find ways to engage those in the field in discussions about this topic, however demanding they might be. It is understandable that those in the focus groups or interviews tended to look at broader structural factors or qualities of families in explaining patterns in the data. Clearly, the explanations of DMC based on differential offending have some validity, but they are generally not constructive in developing means of addressing disproportionate minority contact among juveniles at different stages of the juvenile justice process. Beyond that, the results of the official record analysis suggest that DMC remains at multiple points and places in the system after controlling for a reasonable host of factors that capture differential offending explanations.

Both police and court officials spend most of their time dealing with youth, families, and communities that face challenges and stressors when looked at through the norms of middle-class professionals. This has always been the case in the juvenile justice system (Platt, 1969). Although a smaller portion of the overall sample of police and court personnel, some interviewees definitely raised the importance of a change in mindset and cultural responsiveness—or at least understanding—that may be a prerequisite to limiting the system’s part of DMC as much as possible. In some cases, the respondents seem to have “working

theories” about the cases that they saw and these may affect the scripts that they follow in making discretionary decisions. Coupling this with concentration in particular places where there is high exposure to minority youth and families is a recipe for fostering stereotypical thinking, which can then be subsequently reinforced by other cases they might encounter.

It is important that these theories are held up to data in debriefing—both looking closely at individual cases and the actual trends across records. For example, police officers spoke extensively about responding to the same youth and families continually, which even in relatively high delinquency neighborhoods, are generally not representative of all youth and families who live there. This can be challenging to overcome in light of cognitive shorthand that is used to make quick decisions (see Bishop & Leiber, 2011; Devine, 1989; Evans, 2008;), but it is valuable to point out that cases are not often reduced to simple explanations based on race or related factors and that they exist within a larger group that may vary tremendously. It is also important to appeal more to the occupational expertise of those involved in identifying ways in which delinquency and DMC problems might be addressed.

Once important system actors—including front-line personnel— are engaged it is important to consider what might be most beneficial in channeling those efforts into policy, programming, or shifts in operational culture. A number of interviewees suggested the need for collaborative efforts among those who work with youth. Kakar (2006) recommends that all community sectors be engaged in reform-efforts to effectively and efficiently reduce DMC. Similarly, Motes and Hess (2007) present factors for building community capacity, and note that forging relationships with local stakeholders is a key factor to address complex issues and sustain long-term change-efforts (see also Trent & Chavis, 2009). The scope and complexity of

the problem suggest that constructive dialogue, focused analysis of the problem in local areas, prioritization of targets for change, and implementation of potentially effective strategies will likely fall to multiple agencies or stakeholders simultaneously.

While it might be easy to conclude based on some of the responses that police officers and court officials were simply shifting responsibility to the other, certain comments from both sets of data indicate that there was just not that much interaction between the two and that may be part of any differences in perspective. The totality of the information here clearly suggests that more dialogue around a wide array of juvenile justice issues, including DMC, would be beneficial. It would be even better if a third side of a triangle could be added to include school and community officials in these efforts. A first step might be a joint problem analysis with local stakeholders to identify any place that there appears to be more significant DMC than in other places (e.g., Family Violence arrests, School-Based Referrals). More broadly, to facilitate success in implementation and achieve desired outcomes, any initiatives that are taken should also be clear about their underlying logic in terms of whether they are generally directed at affecting all justice-involved youth or intended to specifically address DMC. Surely, programs need not focus on one or the other, but there should be a clear definition of relevant, measurable goals. This seems prudent in light of the scope and multifaceted nature of the problem and limited effects of some efforts made to date.

This collaborative approach is particularly important in considering DMC and policing where officers are omnipresent in certain communities or schools due to calls for service and/or “hot spots” policing or targeted enforcement of particular charges that may have attached legislative-mandates (e.g., firearm possession). Still, at the same time, some officers

mentioned that they would probably be criticized if they did not forcefully respond to violent crime in particular neighborhoods. The responses of officers in the focus groups, which mostly occurred prior to recent high-profile incidents involving African-American teens and police use of force, suggest that they perceive significant distrust on the part of the communities that they patrol. Analysis of some content from the focus groups suggests that the residents of those neighborhoods would likely disagree with at least some characterization of the sources of DMC problems as well. This creates a challenging dynamic for implementing strategies aimed at reducing juvenile delinquency and DMC. Still, the evidence here and elsewhere suggests that it would benefit both police agencies and local communities to do so. As noted, we generally found that explanations for DMC provided by SROs were consistent with those of other officers – suggesting that increased contact (both time and quality) does not affect officer perceptions of the extent and causes of DMC. However, when it came to recommendations to reduce juvenile crime and DMC, SROs were the most likely to propose the efficacy of having law enforcement, school systems, and the juvenile justice system work together to address problems within the juvenile population. This indicates that there is some room for strategic engagement of the police in reducing DMC. Dealing with DMC at the front-end of the system will likely require pooled efforts of multiple agencies and community members.

One striking finding from the police focus groups was the fact that, not only did officers (even SROs) have limited training or exposure to the specific DMC issues in the juvenile justice system, but they had very little training in dealing with adolescents at all. This is problematic as it is clear that youth may not interact well in situations involving police officers (or authority of any kind) (see Drury, 2003; Drury & Dennison, 2000). This is likely to even more pronounced in

neighborhoods where youth may be socialized to distrust the police and the justice system based on community norms and/or direct and indirect experiences (see, e.g., Leiber et al., 1998; McGarrell, 2011; Rios, 2014). A recent report from the International Association of Chiefs of Police (2014) strongly suggests that, in general, police could be better equipped to deal with the adolescents that they encounter. That suggestion resonates here as well in light of the focus group responses. Improving interactions between minority youth and police should be a particular point of emphasis.

Like a lot of other research, a number of aspects of the numbers and the narrative responses from court personnel point to the importance of pre-adjudication detention as an early decision that matters by itself, but which may also have an impact on later outcomes (e.g., secure confinement). Seriousness of charge and past record considerations must certainly be factored in these decisions, but agencies should look for alternative placements when the home or family environment is a deciding factor in these decisions as they seem to have compound effects. A number of the strategies mentioned by court personnel target this stage of the court process. It is important that agencies consider the best fit to the specific nature of the decisions made in their court as this may be tied to multiple factors, including early screening and assessment. The availability of alternative pre-adjudication monitoring and detention alternatives should be a priority in responding to DMC as this may have benefits at later stages as well. Ideally, this would be coupled with attempts to try to understand and be responsive to some of the challenges that are faced (often disproportionately) by the parents and families of minority youth. Juvenile court should definitely place a premium on family involvement based on what we know about effective intervention to prevent recidivism and promote positive

development. Still, this should be supplemented with some flexibility and attempts to break down barriers in cases where they may disadvantage youth in the justice process.

Although general reform in the use of secure confinement over the last several years may have affected the absolute number of minority youth now in state custody, there are race differences in the “deeper-end” outcomes (e.g., secure placement, bindover) that remained after alternate influences were incorporated in the analysis and tended to be consistent across sites. These outcomes may be more record-driven and hold less possibility of discretion (e.g., gun specs) than other decision points meaning that they may subject to broader trends in the types of offenses minority youth are involved with more heavily or the records that they accrue over time. Still, these decision points should be given greater consideration at the local and state level to identify and intervene with any factors that may be producing disparities. In particular, it may be worth looking at any processes introduced in courts that do not show disparities in use of secure placement as all counties are working within the same general statutory framework.

As alluded to above, the findings from the analysis of DYS facilities are among the first of their kind and therefore offer less of a “record” to look at in generating ideas for future policy and practice. As is the case when moving from arrest or referral into the juvenile court, the differences that were observed in DYS facilities are driven in part by the pattern of referrals that come into facilities. At the same time, some differences between groups remained when controlling for factors that might predict how a youth would do in the facility (e.g., committing offense, OYAS score). The disciplinary infractions outcome, which also was related to seclusion time and length of stay, was the only outcome that showed a degree of disproportionality in

our analysis. Ohio DYS should examine the specific nature of infractions and related policies and protocols to consider whether or how they might affect different groups of youth. This seems to also have implications for youths' seclusion time, which has become a matter of broad concern in recent years due to its possible long-term developmental impacts on youth in custody (Greene et al., 2006). Ohio DYS has reached this conclusion as well and no longer uses seclusion time as a response to disciplinary infraction. There is still reason to look into the differences in disciplinary infractions across race subgroups, however.

DMC reduction efforts have been underway for some time locally, statewide, and nationally. Consequently, a number of initiatives involving training, programming, or system reform have already been attempted, are ongoing, or just beginning. The variability in results across counties in this report is likely, at least in part, a reflection of some of those efforts. Given that, there are a number of potentially promising ideas highlighted in each of the site reports presented above and it is clear that effective solutions to DMC inherently must be mindful of local circumstances (e.g., establishing better relationships between police and African-American youth).

Interventions and shifts in general approach are underway across the U.S. as well and those provide useful ideas for next steps in addressing DMC issues in the State of Ohio.

Although many suggestions are offered in the guide compiled by OJJDP (see <http://www.ojjdp.gov/mpg/>) the table below highlights some of the key recommendations mentioned in the final section of this report and lists examples and resources that might be considered in further problem assessment, discussion, planning, and implementation at the state and local levels. While relatively few of them have been rigorously evaluated (this is true

of nearly all DMC programs that we reviewed), they are generally recognized as promising and cross all aspects of the findings presented in the report. The degree of DMC evident in this report (and elsewhere in the U.S.) and the fact that it may be explained by multiple factors both within and outside of the control of juvenile justice agencies suggest the need for a multifaceted response. It is likely that an effective response to DMC problems will cover multiple institutions, agencies, and points of contact with juvenile justice in order to maximize the chances of success. It will also require thorough planning, sound implementation, and ongoing monitoring and adjustment if that success is to be maintained (see Feyerherm, 2008). Given this necessary “buy in,” identification of demonstration sites that are particularly engaged in tackling this problem may be a useful next step in planning, implementing, and evaluating a package of strategies and programs aimed at reducing disproportionate contact among minority youth. Demonstration projects in interested sites present an opportunity to consider possible approaches, implement them, evaluate interim outcomes, and then refine the strategy/programs as needed before they might be adopted (and adapted) by other interested counties.

Table 89. Key Recommendations and DMC Reduction Strategies from Around the U.S.

UC CCJR Recommendation	Practice and Program Idea	Example(s)	More Information:
Improve police-youth relations	<p>Foster communication and understanding between police and youth within communities</p> <p>Train police to recognize cultural and developmental differences between adolescent and adult behavior and offending</p>	<p>Community Oriented Policing Services' (COPS) Guide for Improving Relationships and Safety through Engagement and Conversation</p> <p>Effective Police Interactions with Youth Training Curriculum</p> <p>Strategies for Youth's (SFY) Training Curriculum – <i>Policing the Teen Brain</i></p>	<p>http://www.courtinnovation.org/sites/default/files/documents/Police-Youth%20Dialogues%20Toolkit.pdf</p> <p>http://www.ct.gov/opm/cwp/view.asp?q=460244</p> <p>http://strategiesforyouth.org/for-police/training/</p>
Establish dialogue and community support	Identify mechanisms to bring multiple agency and community partners to the table to identify solutions to identify sources of disparity, propose solutions, establish objectives, and monitor success	<p>Guilford County, NC Center for Youth, Family, and Community Partnership</p> <p>Baltimore City, MD DMC reduction initiative</p> <p>The University of Iowa's DMC Resource Center</p> <p>DMC Action Network (Models for Change)</p>	<p>https://www.ncjrs.gov/html/ojjdp/dmc_tamannual/dmcch6.pdf</p> <p>https://www.ncjrs.gov/pdffiles1/OJJDP/218861.pdf</p> <p>http://clas.uiowa.edu/nrcfcp/resources/features/dmc-resource-center-focuses-disproportionality</p> <p>http://www.modelsforchange.net/about/Action-networks/Disproportionate-minority-contact.html</p>

UC CCJR Recommendation	Practice and Program Idea	Example(s)	More Information:
Increase problem awareness, cultural competence, and training for those in the system	Train police and juvenile justice personnel to better understand youth and families of color and establish patrol and processing policies that reward and reinforce that training	<p>Community Oriented Policing Services' Report on Strengthening the Relationship between Law Enforcement and Communities of Color</p> <p>Philadelphia Police Academy's DMC Curriculum Training provided by DMC Youth-Law Enforcement Corporation & Philadelphia DMC Working Group (similar processes might be beneficial for youth and court official contacts outside of formal setting)</p>	<p>http://cops.usdoj.gov/html/dispatch/12-2014/building_trust_in_communities_of_color.asp</p> <p>https://padmc.org/</p>
Review and identify offense-types and referral sources that are impacting DMC trends locally or statewide	Consider potential disparities in offense types or referral sources at early stages of juvenile justice process to formulate possible alternatives	<p>Initiative to identify and respond to specific problem patterns in arrests in Tulsa, OK</p> <p>Initiative to reduce school-based referrals in Hartford, CT</p> <p>Brief screening tool for police use that to help standardize decision-making</p>	<p>http://www.csctulsa.org/content.php?p=105</p> <p>http://www.ct.gov/opm/cwp/view.asp?a=2974&Q=507648&opmNav_GID=1797&opmNav= 46656 %20</p> <p>http://www.nysap.us/MASTLEbrief%20Nov%2015.pdf</p>
Focus on alternatives at detention stage	<p>Identify alternatives that still allow for supervision</p> <p>Reduce barriers to family participation in process that may increase likelihood of detention</p>	<p>Evening and weekend reporting centers</p> <p>Consider weight given to living situation in risk assessment and detention decisions</p> <p>Adolescent Diversion Project (Michigan State University)</p>	<p>http://www.jdaihelpdesk.org/redutech/JDAI_Pathway_8_Reducing_Racial_Disparities_in_Juvenile_Detention.pdf</p> <p>http://www.crimesolutions.gov/ProgramDetails.aspx?ID=332</p>

UC CCJR Recommendation	Practice and Program Idea	Example(s)	More Information:
Address factors that may place minority youth at added risk of offending and justice contact	Several programs address primary, secondary, and tertiary delinquency prevention at community and family levels, which were influences discussed by system actors	<p>Programs that strengthen family capacity</p> <p>Programs that engage in community-level strengthening and delinquency prevention efforts</p>	<p>http://www.cfr.uga.edu/saaf1</p> <p>http://www.extension.iastate.edu/sfp10-14/</p> <p>http://www.familiesforward.net/</p> <p>http://www.sdr.org/ctcresource/</p>

Conclusion

Comparative research across the U.S. and internationally indicates that disproportionate contact with juvenile justice among racial and ethnic minorities is not unique. Both this study and that body of research suggest that, however complex the problem, the stakes are equally high for addressing it due to the long-term developmental implications for the youth involved, the perceived legitimacy of police and juvenile justice agencies, and the relationships between communities (often heavily minority) and government. While limited in certain ways, through multifaceted data collection and analysis spanning multiple stages of the juvenile justice system, this study provides an assessment of DMC in Ohio in the first half of this decade. In turn, it offers some information to guide general and specific initiatives that might be taken in order that police and juvenile justice agencies contribute as much as possible to reducing the problem in the future. This final section recounts some of the reports' major findings before reflecting on their implications and then concluding with summary recommendations.

Key Findings.

- Disproportionate minority contact was identified in the majority of sites at the point of arrest and court petition.
- Police records sometimes showed differences in the nature of arrests by race groups (e.g., seriousness of offenses, firearm involvement), but those findings varied by agency and county.
- There was a consistent, moderate-sized relationship between race and pre-adjudication detention when controlling for legally-relevant decision-making factors. In turn, detention was associated with adjudication and secure confinement outcomes.
- The overall findings for case dismissal and adjudication did not reflect a DMC pattern, but relationships varied across the counties included in the assessment.

- Non-White youth tended to have a greater likelihood of secure confinement and bindover to adult court when controlling for legally-relevant factors. These effects were consistent across the study sites where a relationship was found.
- Police officers overwhelmingly viewed DMC as a product of the differential offending patterns of minority youth based on individual, family, and community factors. Despite different individual job responsibilities (e.g., School Resource Officers vs. Patrol Officers) and variation in the agencies (size, population level and density), responses across the various agencies were fairly consistent.
- Only a few officers made comments regarding possible differential treatment of minority youth. Those who did often mentioned public expectations of crime control, the presence of implicit biases in the community, and the direction of law enforcement to “hot spot” locations that coincidentally have greater minority presence.
- Some interviewees reported DMC was not a major issue in their courts, but the majority thought it was a problem—at least to an extent. Like police, they suggested that it was mostly driven by external factors. Some respondents discussed the idea of cultural competence or mentioned how case outcomes might be affected by differentially by system processes.
- Police focus groups and court interviewees offered potentially useful ideas on how to respond to DMC problems.
- In the DYS facility data, the only consistent relationship was one for race and disciplinary infractions. Non-White youth had significantly more infractions than White youth—even accounting for several other relevant influences. This in turn had some relationship to other experiences like seclusion time.

Implications.

- There were some limitations based on the degree of participation among the agencies originally identified in the Ohio DYS RFP. There was also a good deal of variability in the scope and nature of the data that were provided (or available).
- DMC was present in nearly all counties for which data were obtained—at least in terms of the initial race make-up of arrests and court referrals.
- There was some variability in terms of its presence at different points in the process, but there tended to be more consistency in that finding at arrest, detention, secure confinement, and bindover stages.

- Disparities generally shrunk after controlling for legally-relevant factors, but were still present and at-least moderately-sized.
- Some decisions made at earlier stages of the process had an impact on youth experiences in the system later on.
- Reasons for disparities come from several sources—both outside and within the system. System factors include available resources and alternatives as well as managerial and front-line decision making-patterns that can interact with case factors to disadvantage minority youth and families.

Recommendations.

- Foster collaborative relationships among communities (including minority youth), police, schools, and juvenile courts.
- Identify the ways in which targeted enforcement strategies and mandated dispositions disproportionately affect minority groups and consider alternatives.
- Consider particular offense types, referral sources, and decision points that drive DMC trends and develop and utilize alternatives to formal processing where possible.
- Increase cultural awareness and consciousness of potential stereotypes in decision-making among police, court, and correctional personnel. Engage in broad training efforts, but embed those elements in relevant aspects of organizational philosophy and practice as well.
- Seek out and incentivize counties and cities with leaders and line staff that are willing to engage in comprehensive efforts to address DMC patterns as demonstration sites. Engage in focused goal-setting, implementation, and refinement as needed. Maintain standards for effectiveness in identifying alternative programs to address DMC.

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8. APPENDIX

Requested Data Fields: Arrest Records

ARREST DATA

Youth Characteristics

- Race/Ethnicity
- Sex
- Address of Residence
- Age
- Prior Record
- Name
- Social Security Number

OFFENSE CHARACTERISTICS

- Offense Type
- Weapon Use
- Drug Use
- Alcohol Use
- Victim Characteristics
- Presence/Number of Co-offenders
- Offender Role
- Type of Weapon
- Source of Complaint
- Offense Location
- Street # of Offense
- City of Offense
- Zip Code of Offense

POLICE REPORT – DRUG CRIMES

- Type of Drug
- Amount of Drug

POLICE REPORT – PERSONAL CRIMES

- # of Victims
- Victim's Relationship to Offender
- Victim's Race/Ethnicity
- Victim's Sex
- Victim's Age
- Victim's Involvement
- Nature of Physical Injury
- Sexual Violation

POLICE REPORTS –PROPERTY CRIMES

- # of Victims
- Type of Property
- Value of Most Serious Offense

OFFICER CHARACTERISTICS

- Officer's Race/Ethnicity
- Officer's Sex
- Years of Experience
- Education
- Training
- Assignment

MISCELLANEOUS

- Comments (e.g. demeanor of the suspect)
- Gang Data
- Calls for Service Data
- Police Organizational Boundary Data

Requested Data Fields: Juvenile Courts

YOUTH CHARACTERISTICS

- Name (for Matching)
- Age
- Sex
- Race/Ethnicity
- Educational Status
- Mental Health Status
- Youth Employment
- Time at Current Job
- Overall Risk Level Based on Assessment
- Living Arrangements
- Time at Current Residence
- Drug or Alcohol Abuse
- Social Security Number (for Matching)

JUVENILE JUSTICE HISTORY

- Age at First Arrest
- Prior Commitment to OH DYS
- # of Prior Arrests
- # of Prior Referrals
- # of Prior Status Offenses
- # of Prior Misdemeanor Adjudications
- # of Prior Felony Adjudications
- Seriousness of Prior Offenses
- # of Prior Probation
- Current Probation
- # Prior Diversion
- Current Diversion

FAMILY BACKGROUND

- Parental Occupation
- Gross Family Income
- Family Member(s) Arrested
- Prior Child Protective Services Investigation
- Prior Child Protective Services Placement

DISPOSITIONAL OFFENSE INFORMATION

- Offense of Adjudication
- Code Number of Offense
- Level
- Type of Offense

REFERRAL OFFENSE

- Code Number of Offense
- Level
- Type of offense (property, personal, drug, etc.)

OYAS DOMAINS (OR SIMILAR FROM OTHER TOOL)

- Juvenile Justice History Score
- Family Living and Arrangement Score
- Peers and Social Support Score
- Educational and Employment Score
- Pro-Social Skills Score
- Substance Abuse, Personality, and Mental Health Score
- Values, Beliefs, and Attitudes Score

CASE CHARACTERISTICS

- Youth's Type of Legal Representation
- Parental Involvement with Court Process
- Available Dispositions (E.g, mandatory dispositions involved?)
- Source of Referral
- Detention?

(2) ____ Yes

(v19) Prior Child Protective Services Investigation (1) ____ No
(2) ____ Yes

(v20) Prior Child Protective Services Placement (1) ____ No
(2) ____ Yes

(v21) Youth Educational Status: (1) ____ Completed HS
(2) ____ Regularly Attending
(3) ____ Not Attending

(v22) Youth Employment: (1) ____ Full Time
(2) ____ Part Time
(3) ____ Not Currently Employed

(v23) Time at Current Job: ____ months

Referral Offense Characteristics

(v24) Code Number for Offense _____

(v25) Level _____

(v26) Type of Offense: (1) ____ Property
(2) ____ Personal
(3) ____ Drug
(4) ____ Status Offense
(5) ____ Other

Juvenile Justice History

(v27) Age at First Arrest: ____

(v28) Prior Commitment to Ohio Department of Youth Services: _____

(v29) # Prior Arrests: ____ (code exact #)

(v30) # Prior Referrals: ____

(v31) # Prior Status Offenses: ____

(v32) # Prior Misdemeanor Adjudications: ____

(v33) # Prior Felony Adjudications: ____

(v34) # Prior Probation _____

(v35) Current Probation _____

(v36) # Prior Diversion _____

(v37) Current Diversion _____

OYAS-Assessment Domains

(v38) Juvenile Justice History Score _____

(v39) Family and Living Arrangement Score _____

(v40) Peers and Social Support Score _____

(v41) Education and Employment Score _____

(v42) Pro-Social Skills Score _____

(v43) Substance Abuse, Personality, and Mental Health Score _____

(v44) Values, Beliefs, and Attitudes Score _____

Case Characteristics

(v45) Youth's Legal Representation? (1) _____ Public
(2) _____ Private
(3) _____ Other

(v46) Parent Involvement with Court Process? (1) _____ No
(2) _____ Yes

(v47) Judge Assigned to Case _____

Disposition Offense Information

(v48) Code Number for Offense _____

(v49) Level _____

(v50) Type of Offense: (1) _____ Property
(2) _____ Personal
(3) _____ Drug

(4) ____ Status Offense

(5) ____ Other

(v51) Coder Last Name: _____

Police Record Data: Key Variables

Variable	Variable Attributes
Age at Arrest	Age at Arrest in Years
Sex	0 = Male 1 = Female
Race (dichotomous code)	0 = White 1 = Non-White
Number of Offenses	Number of Individual Offenses in Arrest Record
Most Serious Charge Category	Violent/Sex Property Drug/Alcohol Other Status/DC
Most Serious Offense Level	Felony Misdemeanor Status/Unruly FTA/Probation Violation/VCO Can be Felony or Misdemeanor
Alcohol Involvement	0 = No 1 = Yes
Drug Use	0 = No 1 = Yes
Weapon Use	0 = No 1 = Yes
Weapon Type	Handgun/Firearm Other
Offender's Role in Offense	Approached/Provoked Argument/Dispute Drug-Related Gangland Organized Opportunistic Unruly/Incorrigible Other
Presence of Co-Offenders	0 = No 1 = Yes

Location of Offense	Residential School Street/Public Sidewalk Parking Areas/Public Access Spaces Commercial/Retail Settings Other
Source of Complaint	Parent/Guardian Private Citizen/Neighbor School Related Official Police Associated Other

Court Record Data: Key Variables

Variable Name	Variable Attributes
Age	Age in Years
Number of Charges	Number of Charges in the Current Case
Number of Prior Cases	Number of Prior Petitions to the Court
Onset Age	Age at First Contact with the Court
Race (dichotomous code)	0 = White 1 = Non-White
Race	White African American Asian Bi-Racial Other
Sex	0 = Male 1 = Female
Most Serious Offense Category	Violent/Sex Offense Property Drug/Alcohol Other Status/Disorderly Conduct PV / VCO
Most Serious Offense Level	Felony Misdemeanor Status/Unruly FTA / PV / VCO
Counsel	0 = No 1 = Yes
Weapon Use	0 = No 1 = Yes

Ohio DYS Facilities Data: Key Variables

Variables	Variable Attributes
Age at Admission	Age in years at date of admission
Gender	0 = Male 1 = Female
Race (dichotomous code)	0 = White 1 = Non-White
Race	White Black/African-American Asian Bi-Racial Other Race
Grade Level at Admission	Youth educational level at date of admission
Any Mental Health Diagnosis	0 = No 1 = Yes
Number of MH Diagnosis Received Treatment Services	Sum of documented mental health diagnosis 0 = No 1 = Yes
Number of Treatment Contacts	Sum of all treatment related contacts
Total Hours Spent in Treatment	Sum of time (in hours) of all treatment related activities
Number of Offenses	Number of committing offenses
Most Serious Charge Category	Violent/Sex Property Drug/Alcohol Other
OYAS Risk Score	OYAS risk assessment score
Number of Infractions	Total number of disciplinary infractions committed during length of stay in DYS
Length of Stay (months)	Time spent (in months) confined in DYS facility
Seclusion Time (days)	Total number of days spent in seclusion while confined in DYS facility
Proportion Absent	Proportion of days absent from educational services to total days of educational services

Information Sheet for Focus Group Participants



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Consent to Participate in a Research Study

Research Directors:

Robin Engel, Ph.D.

(513) 556-5850, robin.engel@uc.edu

Christopher Sullivan, Ph.D.

(513) 556-3851, christopher.sullivan@uc.edu

Study Title:

Ohio Disproportionate Minority Contact Assessment

Introduction:

Before you agree to participate in this study, you must read and understand this form. This form explains why we are asking you to be in this study. It will also explain what will happen in this study, and any possible benefits or risks of participation. It is your choice to be included in this study, and you don't have to participate. You can agree to be in this study now and change your mind later.

Who is doing this research study?

The persons in charge of this research study are Dr. Robin S. Engel and Dr. Christopher Sullivan of the University of Cincinnati (UC) School of Criminal Justice.

There may be other people on the research team helping at different times during the study.

Purpose:

The purpose of this research is to understand decision-making with respect to arrest and court processing of juveniles. This information will be used collectively to produce a profile of how decisions are made in police, courts, and detention agencies across Ohio.

Who will be in this research study?

Thirty-seven law enforcement agencies in 14 counties in the State of Ohio have been selected as participants in this study. In total, approximately 400 officers will participate in these focus groups.

Procedures:

If you agree to participate, here is what will happen in this study:

- During this time, you will be asked a series of open-ended questions about decision-making with respect to delinquent youth and other interactions with juveniles.
- These group discussions will involve approximately 8-10 officers each.
- The focus group interviews will vary in time from 30 minutes – 2 hours depending on the amount of information available to participants that they wish to disclose.
- Your participation is voluntary, you are free to leave at any time, and are free to only volunteer information that you wish to disclose.
- UC research staff will take audio recordings and written notes.
- Your identity and participation in this research will not be disclosed in any written reports or verbal communications.

Are there any risks to being in this research study?

There is a possibility that you may feel uncomfortable answering certain questions. You do not have to answer any questions that you wish not to respond to. While the research team will not disclose the specific statements made by any participant in group settings, we must inform you of certain risks involved in participating. We cannot fully protect the identity of those who attended our interviews, as each of you may be known to the other group participants. Likewise, we cannot prevent the other participants in the group meetings from disclosing statements that were made during the group discussions. Therefore, we ask that all participants maintain confidentiality about what is said in the groups, but we are unable to guarantee this confidentiality. We can guarantee that we (UC research team) will not violate your confidentiality.

Are there any benefits from being in this research study?

While you will receive no special direct benefit from your participation in this study, your participation will help us to better understand minority contact with the justice system in your jurisdiction and across the state of Ohio.

Do you have choices about taking part in this research study?

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study without penalty. If you do not want to take part in this research study you may simply not participate.

How will your research information be kept confidential?

Your identity will remain confidential unless disclosure is required by law, such as mandatory reporting of child abuse, elder abuse, or immediate danger to self or others. Audio recordings and UC researchers' notes gathered during the focus group interviews will be kept in a locked file cabinet in project offices at the University of Cincinnati and only UC research staff will have access to these materials, and your identities will not be included in these notes or recordings. The recordings and notes will be destroyed immediately after they are transcribed and aggregated with similar files from other focus group sessions. All information will be reported in aggregate form without reference to individual officer's responses.

Do you HAVE to take part in this research study?

No one has to be in this research study. Refusing to take part will NOT cause any penalty or loss of benefits that you would otherwise have. You may start and then change your mind and stop at any time. To stop being in the study, you should tell the researcher.

What if you have questions about this research study?

If you have any other questions about this study, you may contact Dr. Robin Engel at robin.engel@uc.edu or (513) 556-5850 or Dr. Christopher Sullivan at christopher.sullivan@uc.edu or (513) 556-3851.

The UC Institutional Review Board reviews all research projects that involve human participants to be sure the rights and welfare of participants are protected. If you have questions about your rights as a participant or complaints about the study, you may contact the UC IRB at (513) 558-5259. Or, you may call the UC Research Compliance Hotline at (800) 889-1547, or write to the IRB, 300 University Hall, ML 0567, 51 Goodman Drive, Cincinnati, OH 45221-0567, or email the IRB office at irb@ucmail.uc.edu.

What are your legal rights in this research study?

Nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigators, the Ohio Department of Youth Services, the institution, or its agents from liability for negligence.

Signature and Title of Person Obtaining Consent

Date

Focus Group Discussion Protocol

<p>Session Structure:</p> <p>Assign #s to participants – explain the purpose of numbers and importance of stating numbers prior to speaking.</p> <p>Begin session by establishing the number of years each participant has worked within the department, their current assignment, as well as if they have any experience or specialization with a youth assignment.</p>
<p>AGENDA</p>
<p><input type="checkbox"/> We are here to discuss issues regarding juvenile crime and the juvenile justice system. Let's begin by discussing the general trends in juvenile offending that you have experienced in your jurisdiction. Over the last several years, have you noticed any changes in the amount and type of juvenile crime?</p>
<p>○ Set the tone by being genuine and collaborative</p>
<p><input type="checkbox"/> How would you describe the juvenile justice system?</p>
<p><input type="checkbox"/> What are the goals of the juvenile justice system?</p>
<p>○ Try to identify the what officers perceive as the main goals</p>
<p><input type="checkbox"/> Do you feel the system is able to address these goals?</p>

Are legal procedures effective or do they prevent law enforcement from achieving their goals (i.e. are there policies/procedures that prevent police from doing their job)?

- Explore close scrutiny of law enforcement and public expectations of crime control

In your opinion what are the strengths of the juvenile justice system?

- Try to identify what participants view as some of the positives or ways in which the justice system succeeds in meeting its goals concerning juvenile justice.
- Are there any specific examples of ways the justice system succeeds in addressing juvenile crime/delinquency?

What are the weaknesses of the juvenile justice system?

- Try to identify/understand what participants' view as some of the negatives or ways in which the juvenile justice system fails to meet its goals.
- Can you think of any ways in which the juvenile justice system does not achieve its goals?

DISCUSSION ON DEPARTMENT

What are your department's priorities when it comes to juveniles?

- Are there any specific departmental initiatives or projects that might address juvenile crime?

Does the department have policies aimed specifically at juveniles and/or juvenile crime?

- If so, are these policies effective?

Are there any police or community initiatives that might influence the number of juveniles arrested?

- Explain how these initiatives have shaped the response to juvenile crime

Does the department offer training related to juveniles/juvenile crime?

- If so, describe the type of training available (particularly the quality and quantity).

DISCUSSION OF DISPROPORTIONATE MINORITY CONTACT

The statistics initially collected by DYS for your jurisdiction demonstrate that more black juveniles are arrested compared to their percentage in the population. That is, your own stats show there is an overrepresentation of black juveniles compared to whites.

- What do you think might explain these differences across racial groups?

Is there anything about the department's deployment patterns that might impact the number of minority youth you come into contact with?

- In your opinion, is this problematic or simply the nature of your work?

In your experience, are minority youth more likely to be arrested compared to whites?

- If so, what do you find to be the contributing factors?

Do you see a difference in the amount and type of offending between minority youth and white youth?

- If yes, determine specific differences and possible explanations for this variation.

Do you see a difference in offending between males and females?

OFFICER DECISION-MAKING/OPINIONS OF JUVENILE CRIME

Does attitude and demeanor of youth influence the use of discretion or the decision to arrest?

Are there differences in youth attitudes toward police officers/authority figures across racial/ethnic groups?

SOLUTIONS FOR JUVENILE CRIME

What are your opinions, in general, concerning juvenile crime?

- Do you believe it is a significant problem?
- Do you believe police can have an impact on juvenile crime?

What are your supervisors expectations concerning juvenile crime?

- How do they expect officers to respond to juvenile crime?

Are there any community initiatives that might impact juvenile crime?

If you had unlimited resources, what kinds of programs would you recommend to DYS to reduce juvenile crime?

Do you have any other suggestions?

Is there anything that we missed that you would like to discuss?

Information Sheet for Court Personnel Interviews



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Consent to Participate in a Research Study

Research Directors: Christopher Sullivan, Ph.D.

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Edward Latessa, Ph.D.

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Study Title:

Ohio Disproportionate Minority Contact Assessment

Introduction:

Before you agree to participate in this study, you must read and understand this form. This form explains why we are asking you to be in this study. It will also explain what will happen in this study, and any possible benefits or risks of participation. It is your choice to be included in this study, and you don't have to participate. You can agree to be in this study now and change your mind later.

Who is doing this research study?

The persons in charge of this research study are Dr. Christopher Sullivan and Dr. Edward Latessa of the University of Cincinnati (UC) School of Criminal Justice.

There may be other people on the research team helping at different times during the study.

Purpose:

The purpose of this research is to understand decision-making with respect to court processing and detention of juveniles. This information will be used collectively in an aggregate form to produce a profile of how decisions are made in courts and detention agencies across Ohio.

Who will be in this research study?

Fourteen juvenile courts across Ohio will take part in this study. Approximately 100 officials from each of those courts will be recruited for interviews like this one.

Procedures:

If you agree to participate, here is what will happen in this study:

- During this time, you will be asked a series of open-ended questions about decision-making with respect to delinquent youth and other interactions with juveniles.
- This semi-structured interview will vary in time from 30 minutes – 90 minutes depending on the amount of information that you wish to disclose.
- During the interview sessions, UC research staff will take written notes.
- Your participation is voluntary, you are free to leave at any time, and are free to only volunteer information that you wish to disclose.
- None of the interview questions ask for sensitive personal information and you may choose not to answer any questions.

Are there any risks to being in this research study?

You may feel uncomfortable with certain questions. However, you are free to end the interview at any time. The only other risk regards confidentiality of your responses. In order to maintain confidentiality, names will not be associated with any interview notes and results will not be reported in a way that could identify you as a specific source of information.

Are there any benefits from being in this research study?

While you will receive no special direct benefit from your participation in this study, your participation will help us to better understand minority contact with the justice system in your jurisdiction and across the state of Ohio.

Do you have choices about taking part in this research study?

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study without penalty. If you do not want to take part in this research study you may simply not participate.

How will your research information be kept confidential?

In order to maintain confidentiality, names will not be associated with interview notes. These notes will be kept with the researcher during the data collection process and in a locked file cabinet, in a locked office at UC thereafter. The data from this study may be published; however, your identity and

participation in this research will not be disclosed in any written reports or verbal communications. We will also not report information in a way that will permit identification of you as a provider of any specific data. Your identity will remain confidential unless disclosure is required by law, such as mandatory reporting of child abuse, elder abuse, or immediate danger to self or others.

Do you HAVE to take part in this research study?

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What if you have questions about this research study?

If you have any other questions about this study you may call Dr. Christopher Sullivan at 513-556-3851 or Dr. Edward Latessa at 513-556- 5836.

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Signature and Title of Person Obtaining Consent _____ Date _____

DISPROPORTIONATE MINORITY CONTACT ASSESSMENT

COURT INTERVIEW GUIDE

A. BACKGROUND INFORMATION

1.1 Name of Participant: _____

1.2 Type of Agency: _____

1.3 Years in current position: _____

1.4 Current position or title: _____

Note: Obtain organizational chart, program descriptions, and other material related to court functioning, policies, and programs (if appropriate).

1.5 Generally, describe your role with the Juvenile Court:

B. DECISION-MAKING PROCESSES

2.1 Describe key factors in decisions regarding whether youth enter diversion or formal processing: *Use follow-up questions accordingly, for example: can you give an example of how this item might be considered at this stage of the court-process? Also, note organizational policies or conditions that may be unique to the agency:*

- | | |
|---|--|
| <input type="checkbox"/> Criminal History | <input type="checkbox"/> Substance Abuse History |
| <input type="checkbox"/> Severity of Offense | <input type="checkbox"/> Mental Healthy History |
| <input type="checkbox"/> Attendance & Performance School | <input type="checkbox"/> Criminal Attitudes/Beliefs/Values |
| <input type="checkbox"/> Inadequacy of Parental Supervision | <input type="checkbox"/> Antisocial Peers |
| <input type="checkbox"/> Neighborhood or Living Condition | <input type="checkbox"/> Assessment or Screening Tools |
| <input type="checkbox"/> Other, please specify _____ | _____ |

2.2 Describe key factors in deciding whether to detain youth before adjudication/disposition:

- | | |
|---|--|
| <input type="checkbox"/> Criminal History | <input type="checkbox"/> Substance Abuse History |
| <input type="checkbox"/> Severity of Offense | <input type="checkbox"/> Mental Healthy History |
| <input type="checkbox"/> Attendance & Performance School | <input type="checkbox"/> Criminal Attitudes/Beliefs/Values |
| <input type="checkbox"/> Inadequacy of Parental Supervision | <input type="checkbox"/> Attitude Toward Authority |
| <input type="checkbox"/> Neighborhood or Living Condition | <input type="checkbox"/> Antisocial Peers |
| <input type="checkbox"/> Behavior While at Center | <input type="checkbox"/> Assessment or Screening Tools |

2.3 What role do (a) family, (b) guardians, and/or (c) advocates play in the decision-making processes (or, within your agency)?

Generally, what is the process for PSI's within the agency:

Do they follow the recommendations provided:

If not, why:

Note any other concerns discussed: _____

2.5 How does the court/agency identify, and then prioritize higher-risk cases? Can you provide an example of how you might *intensify* supervision/services/sanctions for those higher risk youth, or those with more needs?

Criminal History/Recidivism

Severity/Nature of
Current Offense

Risk Score

Program/Txmt Completion

Technical Violations

Family/Guardian Involvement

Urine Screen Results

Probation/Parole Officer Recommendation

Other, please specify: _____

C. DISPROPORTIONATE MINORITY CONTACT

3.1 On a scale from 1 to 10, with 1 being very low and 10 being very high, rate the extent to which disproportionate minority contact (DMC) exists within your jurisdiction?

VL
1 2 3 4 5 6 7 8 9 VH
10

3.2 Tell me more about why you chose this rating? Specifically, describe some of the reasons you feel DMC exists at that level (or why it isn't a problem)?

3.3 Do you feel that this problem has worsened or gotten better in recent years? Why?

3.4 On a scale from 1 to 10, with 1 being very low and 10 being very high, how would you rate efforts to implement/direct initiatives toward disproportionate minority contact (DMC)?

VL 1 2 3 4 5 6 7 8 9 10 VH

3.5 Explain or provide examples of some of these initiatives?

3.6 Are there ways in which these issues might be better addressed?

On a scale from 1 to 10, with 1 being very low and 10 being very high, rate the degree to which the following factors both inside and outside the juvenile justice system may contribute to DMC-related issues in your jurisdiction.

Several factors within the juvenile justice system contribute to DMC:

3.7 Racial stereo-typing and cultural awareness:

Disagree 1 2 3 4 5 6 7 8 9 10 Agree

3.8 Lack of alternatives to detention and incarceration:

Disagree 1 2 3 4 5 6 7 8 9 10 Agree

3.9 Processing decisions and local policies:

Disagree 1 2 3 4 5 6 7 8 9 10 Agree

3.10 Educational system

Disagree 1 2 3 4 5 6 7 8 9 10 Agree

3.11 Socioeconomic conditions

Disagree 1 2 3 4 5 6 7 8 9 10 Agree

3.12 Family

Disagree 1 2 3 4 5 6 7 8 9 10 Agree

3.13 Community Safety

Disagree 1 2 3 4 5 6 7 8 9 10 Agree

3.14 On a scale from 1 to 10, with 1 being strongly disagree and 10 being strongly agree, rate your level of agreement with the following statement: the local area has the adequate resources to deal with the problem of Disproportionate Minority Contact with the Juvenile Justice system:

Disagree 1 2 3 4 5 6 7 8 9 10 Agree

D. CAPACITY AND SUPPORT

4.1 What are the major services offered by the court?

-
- Diversion
 - Substance Abuse/Drug Court
 - Vocational/Employment Training
 - Intensive Supervision
 - Domestic Violence/De-escalation
 - Community Service
 - Housing/Foster Care
 - Electronic Monitoring

- Mental Health
- Family Groups/Family Counseling
- Cognitive/Psychological Groups
- Sex Offender
- Anger Management
- Counseling
- Other, please list: _____

4.2 Generally, discuss interventions and programs provided by the court:

4.3 On a scale from 1 to 10, with 1 being very low and 10 being very high, rate the agency/court's ability to meet the needs and risks of the youth that come into it?

VL										VH
1	2	3	4	5	6	7	8	9	10	

4.4 If not, what needs or risks do you feel are not being currently met?

4.5 On a scale from 1 to 10, with 1 being very low and 10 being very high, rate the level of discretion court actors have (e.g. judges, probation department, and the like) in processing youth?

VL 1 2 3 4 5 6 7 8 9 10 VH

Tell me more about the rating you chose?

Final Notes & Questions

Juvenile Court Data: Profile of Missing Data on Key Fields – Number Missing (Percent)

County	Race	Sex	Number of Charges	Number of Prior Charges	Most Serious Category	Most Serious Level	Counsel (Yes/No)	Age at First Petition	Weapon Use (Yes/No)
Allen	22 (2%)	0 (0%)	0 (0%)	1,109 (100%)	3 (0.3%)	1 (0.1%)	430 (38.8%)	1,109 (100%)	1 (0.1%)
Butler	68 (1.3%)	3 (0.1%)	0 (0%)	0 (0%)	0 (0%)	9 (0.2%)	0 (0%)	0 (0%)	12 (0.2%)
Clark	54 (10.3%)	2 (0.4%)	63 (12%)	525 (100%)	63 (12%)	63 (12%)	431 (80.2%)	525 (100%)	63 (12%)
Cuyahoga	0 (0%)	0 (0%)	0 (0%)	16,341 (100%)	0 (0%)	0 (0%)	0 (0%)	16,431 (100%)	16,431 (100%)
Franklin	0 (0%)	8 (0.9%)	0 (0%)	884 (100%)	0 (0%)	4 (0.5%)	884 (100%)	13 (1.5%)	0 (0%)
Hamilton	93 (0.6%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1,101 (6.8%)	16,107 (100%)
Lorain	60 (1.9%)	17 (0.5%)	0 (0%)	3,184 (100%)	0 (0%)	286 (9%)	3,184 (100%)	3,184 (100%)	11 (0.3%)
Lucas	54 (0.8%)	2 (0%)	0 (0%)	7,143 (100%)	0 (0%)	7 (0.1%)	7,143 (100%)	7,143 (100%)	0 (0%)
Mahoning	2 (0.6%)	0 (0%)	2 (0.6%)	330 (100%)	3 (0.9%)	3 (0.9%)	330 (100%)	330 (100%)	0 (0%)
Montgomery	29 (0.3%)	0 (0%)	0 (0%)	0 (0%)	26 (0.2%)	49 (0.4%)	0 (0%)	0 (0%)	39 (0.3%)
Stark	34 (0.7%)	3 (0.1%)	0 (0%)	4,894 (100%)	4,894 (100%)	995 (20.3%)	4,894 (100%)	4,894 (100%)	4,894 (100%)
Summit	76 (0.9%)	1 (0%)	0 (0%)	0 (0%)	71 (0.8%)	0 (0%)	0 (0%)	8,385 (100%)	0 (0%)
Trumbull	9 (1.8%)	1 (0.2%)	0 (0%)	507 (100%)	0 (0%)	3 (0.6%)	507 (100%)	507 (100%)	14 (2.8%)
Total	500 (0.7%)	37 (0%)	65 (0.1%)	35,007 (46.1%)	5,060 (6.7%)	1,420 (1.9%)	37,301 (49.1%)	43,622 (57.4%)	37,572 (49.5%)

DYS Population⁹⁵ and Sample Data Comparison

County	Population N (%)	Sample N (%)
Adams	6 (0.24)	2 (0.13)
Allen	41 (1.67)	29 (1.92)
Ashland	9 (0.37)	5 (0.33)
Ashtabula	79 (3.21)	59 (3.90)
Athens	5 (0.20)	2 (0.13)
Auglaize	6 (0.24)	4 (0.26)
Belmont	5 (0.20)	4 (0.26)
Brown	6 (0.24)	5 (0.33)
Butler	44 (1.79)	26 (1.72)
Carroll	2 (0.08)	2 (0.13)
Champaign	6 (0.24)	3 (0.20)
Clark	38 (1.54)	27 (1.78)
Clermont	2 (0.08)	2 (0.13)
Clinton	3 (0.12)	2 (0.13)
Columbiana	10 (0.41)	9 (0.59)
Coshocton	8 (0.32)	6 (0.40)
Crawford	3 (0.12)	1 (0.07)
Cuyahoga	492 (19.98)	303 (20.01)
Darke	2 (0.08)	1 (0.07)
Defiance	20 (0.81)	9 (0.59)
Delaware	9 (0.37)	7 (0.46)
Erie	16 (0.65)	10 (0.66)
Fairfield	3 (0.12)	2 (0.13)
Fayette	3 (0.12)	3 (0.20)
Franklin	375 (15.23)	207 (13.67)
Fulton	15 (0.61)	7 (0.46)
Gallia	1 (0.04)	-
Geauga	3 (0.12)	-
Greene	13 (0.53)	7 (0.46)
Guernsey	4 (0.16)	2 (0.13)
Hamilton	158 (6.42)	98 (6.47)
Hancock	10 (0.41)	6 (0.40)
Hardin	2 (0.08)	1 (0.07)
Harrison	3 (0.12)	2 (0.13)
Henry	6 (0.24)	3 (0.20)
Highland	22 (0.89)	14 (0.92)
Hocking	1 (0.04)	-
Huron	9 (0.37)	7 (0.46)
Jefferson	12 (0.49)	10 (0.66)

⁹⁵ Population values reflect the removal of duplicate cases (i.e., youth that were committed to a DYS facility multiple times).

Knox	10 (0.41)	4 (0.26)
Lake	11 (0.45)	8 (0.53)
Lawrence	7 (0.28)	5 (0.33)
Licking	68 (2.76)	44 (2.91)
Logan	1 (0.04)	-
Lorain	122 (4.96)	78 (5.15)
Lucas	99 (4.02)	61 (4.03)
Madison	1 (0.04)	1 (0.07)
Mahoning	72 (2.92)	43 (2.84)
Marion	16 (0.65)	12 (0.79)
Medina	26 (1.06)	19 (1.25)
Mercer	1 (0.04)	-
Miami	5 (0.20)	1 (0.07)
Monroe	3 (0.12)	2 (0.13)
Montgomery	115 (4.67)	72 (4.76)
Morrow	10 (0.41)	8 (0.53)
Muskingum	22 (0.89)	15 (0.99)
Noble	1 (0.04)	1 (0.07)
Ottawa	1 (0.04)	-
Paulding	4 (0.16)	-
Pickaway	17 (0.69)	10 (0.66)
Portage	22 (0.89)	18 (1.19)
Putnam	8 (0.32)	3 (0.20)
Richland	24 (0.97)	13 (0.86)
Ross	11 (0.45)	8 (0.53)
Sandusky	16 (0.65)	5 (0.33)
Scioto	6 (0.24)	3 (0.20)
Seneca	3 (0.12)	2 (0.13)
Shelby	9 (0.37)	6 (0.40)
Stark	65 (2.64)	38 (2.51)
Summit	105 (4.26)	64 (4.23)
Trumbull	34 (1.38)	24 (1.59)
Tuscarawas	23 (0.93)	18 (1.19)
Union	1 (0.04)	1 (0.07)
Vinton	2 (0.08)	1 (0.07)
Warren	5 (0.20)	3 (0.20)
Washington	30 (1.22)	18 (1.19)
Wayne	12 (0.49)	6 (0.40)
Williams	9 (0.37)	5 (0.33)
Wood	9 (0.37)	5 (0.33)
Wyandot	4 (0.16)	2 (0.13)
Total N	2,462	1,514