Minorities in Pennsylvania’s Juvenile Justice System
Hunter Hurst Jr. and Susanna Zawacki

Minorities are overrepresented in Pennsylvania’s juvenile justice system. Though members of minority groups make up just one-fifth of the state’s juveniles between the ages of 10 and 17, they account for far more than one-fifth of those arrested, detained, adjudicated, disposed and committed. This disproportionality is a source of great concern in a juvenile justice system that guarantees fair and unbiased treatment, regardless of race, color, or national origin.

The Pennsylvania Commission on Crime and Delinquency (PCCD), working through its Juvenile Justice and Delinquency Prevention Committee and a designated subcommittee, has monitored the issue of Disproportionate Minority Contact (DMC) within the juvenile justice system for the past thirteen years. DMC data are assembled for PCCD by the National Center for Juvenile Justice (NCJJ) from four sources of county-level information in the Commonwealth — juvenile population, juvenile arrest, secure detention admissions, and juvenile court case processing data. This bulletin will summarize the main points that emerge from this wealth of statistical information, including short and long-term trends in DMC, and discuss ways to analyze and interpret the data. Key findings include the following:

- Minority overrepresentation is most severe among juveniles arrested for violent crime index offenses, those admitted to secure detention, and those receiving dispositional commitments to secure residential facilities. In each of these related categories, minority juveniles are represented at three times their proportion in the population.

- Overrepresentation is actually higher in the less populous areas of Pennsylvania outside its three largest urban centers of Allegheny County (Pittsburgh), Dauphin County (Harrisburg) and Philadelphia County.

- Overrepresentation has decreased in several key stages in the juvenile justice process over the 13-year period DMC data has been gathered, but ground has been lost during the most recent three-year period.

- Efforts to monitor the DMC issue continue to be hampered by missing data concerning racial and ethnic origin — information concerning Latino or Hispanic ethnic groups is incomplete across several counties in both arrest data and juvenile court disposition data.
Federal law requires the states to determine if minority youth are confined in secure facilities in disproportionate numbers. The requirement (commonly referred to as the DMC mandate) was passed by Congress in the 1988 reauthorization of the Juvenile Justice and Delinquency Prevention Act (JJDPA). In a 1992 reauthorization of the same act, the DMC mandate was linked to federal monies for state juvenile justice programs. The federal law was passed in response to national data, which indicated minority youth are overrepresented at most stages of juvenile justice system processing and findings from about 50 detailed studies in states and local jurisdictions that indicated possible disparity or discrimination in decision-making.

**What does DMC mean?**

Overrepresentation, disparity and discrimination all have different meanings and neither overrepresentation nor disparity necessarily implies discrimination. The following definitions from *Juvenile Offenders and Victims: 1999 National Report* distinguish the terms.

Overrepresentation refers to a situation in which a larger proportion of a particular group is present at various stages within the juvenile justice system — such as arrest. For example, while minority juveniles (defined as ages 10 through 17 in this bulletin) represent 20% of the population in the Commonwealth, they are involved in 63% of all juvenile arrests for Violent Crime Index offenses.

Disproportionate also refers to a situation in which a larger proportion of a particular group is present relative to their proportion in the general population. However, this term can also be applied relative to a prior decision point; for example, minorities are disproportionately confined given their share of adjudicated juvenile court cases.

Disparity means that the probability of receiving a particular outcome (for example, being detained in a short-term facility versus not being detained) differs for different groups. Disparity may in turn lead to overrepresentation.

**What do data in this bulletin support?**

The data presented in this bulletin address DMC from the perspective of overrepresentation or disproportionate numbers. While the data cannot determine if actual discrimination is occurring in Pennsylvania, they are helpful for diagnosing the outward symptoms of a possible problem. PCCD and its advisory groups have used the data to target funding for research and programs specifically tailored to prevent youth from ever entering the system or minimizing the contact of first time offenders. Finally, the data are easy to understand in comparison to more detailed statistical analyses that control for the influence of other factors that could affect juvenile justice decisions (e.g., gender, age, offense). For this reason, they are useful tools for measuring the problem over time. On the other hand, measuring disparity or discrimination requires more detailed data sets than are currently gathered by justice agencies in the Commonwealth and involves special efforts to gather data at the case level (see box below concerning the *Role of Race* study).

**How is DMC measured?**

The federal Office of Juvenile Justice and Delinquency Prevention (OJJDP) recommends a “DMC Matrix” format (example provided on the facing page) as a departure point for identifying problem areas and targeting more in-depth statistical analyses to determine whether overrepresentation is in fact a product of disparate decisions based on race or ethnic origin.

The DMC matrices are compiled for counties with significant minority populations or arrests defined as 10% or greater minority population and/or 10% or greater minority arrests. Pennsylvania has compiled DMC data and supplied it in summary form to OJJDP since 1989. In 2001, 25 counties made the cut, with a qualifier to eliminate counties with small volumes that produced misleading rate statistics.

Four sources of county-level data are gathered each year to compile the matrices. Two of the sources are summary data and two involve the analysis of case level records. The sources are:

- population data (summary);
- juvenile arrest data (summary);
- juvenile detention admissions data (case level for an admission); and
- juvenile court case processing data (case level for dispositions).

Additionally, a special rate called the DMC index statistic is contained in the far right column of each matrix to quickly gauge the level of overrepresentation across various events or counties.

### The Role of Race in Juvenile Justice Processing in Pennsylvania

Pennsylvania funded detailed data collection in the late 1980s to actually measure disparate decision-making based on race. *The Role of Race in Juvenile Justice Processing in Pennsylvania* (Kempf, 1992) indicated disparate decision-making in the early decisions regarding detention and formal versus informal handling of a delinquency case. The study also indicated a positive relationship between a youth’s placement in pre-adjudicatory detention and a later sentence of out-of-home placement — therefore suggesting an *indirect* race effect in adjudication and placement.

The key findings of Pennsylvania’s early *Role of Race* study continue to be reflected in the research findings of other states that have commissioned similar in-depth studies to identify disparate decision-making.
Understanding the DMC index statistic.

The DMC index statistic is the focus of the state’s current approach to monitor DMC at the county level. The index is based upon the work of Carl Pope and William Feyerherm – researchers who developed a strategy for OJJDP to promulgate guidelines for states to report minority representation data that was consistent with JJDPA mandates.4

Pope and Feyerherm’s DMC index statistic represents the minority proportion for a certain event, such as total arrests, divided by the minority proportion (across all racial and ethnic groups) in the youth population.

The purpose of the DMC index is to provide an easy comparison statistic that measures the proportion of minority youth for a juvenile justice system event (e.g., arrest), while controlling for their percentage in the population. Index values of 1.00 indicate that minorities are represented the same as their proportion in the population. An index value of 2.00 indicates that minority youth are represented at twice their proportion in the juvenile population.

The DMC index statistic is a “quick indicator” of overrepresentation across the various decision points. It also enables easy comparisons across jurisdictions with different proportions of minority youth in the juvenile population.

While the DMC index has utility it also has some shortcomings:

1. The index can mute possible DMC issues when minorities are actually the majority in the population (e.g., Philadelphia).
2. The model fails to address the odds of transition from one stage to another in the juvenile justice system or allow consideration of the effects of one decision process on later decisions. A more detailed analysis model that addresses some of these concerns is presented on page 11 of this bulletin.

### The DMC Index Calculation

\[
\text{DMC Index Calculation} = \frac{\% \text{ minority for a certain event}}{\% \text{ minority in the youth population}}
\]

While the DMC index has utility it also has some shortcomings:

1. The index can mute possible DMC issues when minorities are actually the majority in the population (e.g., Philadelphia).
2. The model fails to address the odds of transition from one stage to another in the juvenile justice system or allow consideration of the effects of one decision process on later decisions. A more detailed analysis model that addresses some of these concerns is presented on page 11 of this bulletin.

### Table 1: Sample DMC Matrix, State of Pennsylvania, 2001

<table>
<thead>
<tr>
<th>DATA ELEMENTS</th>
<th>TOTAL NUMBER</th>
<th>NUMBER OF MINORITIES</th>
<th>PERCENT OF MINORITIES</th>
<th>INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARRESTED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Delinquent</td>
<td>102,209</td>
<td>39,460</td>
<td>38.6%</td>
<td>1.9</td>
</tr>
<tr>
<td>DETAINED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-In Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Shelter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Nonsecure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Secure</td>
<td>20,452</td>
<td>12,727</td>
<td>62.2%</td>
<td>3.1</td>
</tr>
<tr>
<td>PROSECUTED</td>
<td>30,811</td>
<td>14,230</td>
<td>46.2%</td>
<td>2.3</td>
</tr>
<tr>
<td>ADJUDICATED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Delinquent</td>
<td>19,062</td>
<td>8,968</td>
<td>47.0%</td>
<td>2.3</td>
</tr>
<tr>
<td>TRANSFER/ADULT COURT’</td>
<td>174</td>
<td>77</td>
<td>44.3%</td>
<td>2.2</td>
</tr>
<tr>
<td>DISPOSITION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Probation</td>
<td>10,345</td>
<td>4,812</td>
<td>46.5%</td>
<td>2.3</td>
</tr>
<tr>
<td>-Commit/Priv</td>
<td>3,669</td>
<td>1,879</td>
<td>51.2%</td>
<td>2.5</td>
</tr>
<tr>
<td>-Commit/State</td>
<td>544</td>
<td>327</td>
<td>60.1%</td>
<td>3.0</td>
</tr>
<tr>
<td>COMMITTED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-State Secure</td>
<td>276</td>
<td>180</td>
<td>65.2%</td>
<td>3.2</td>
</tr>
<tr>
<td>-Local Secure</td>
<td>95</td>
<td>41</td>
<td>43.2%</td>
<td>2.1</td>
</tr>
<tr>
<td>POPULATION AT RISK (AGES 10-17)</td>
<td>1,366,472</td>
<td>276,433</td>
<td>20.2%</td>
<td></td>
</tr>
</tbody>
</table>
Minority youth continue to be overrepresented at various stages in Pennsylvania’s juvenile justice process.

Figure 1 presents a short-range (3-year) view across key juvenile justice decisions. To read the chart, recognize that bars extending beyond the vertical line at 20% indicate the level of minority overrepresentation, relative to their proportion of the total juvenile population (i.e., 20%). Therefore, progress, or change toward the proportion of minorities in the juvenile population, is indicated by bars that are moving back from one year to the next closer to the vertical minority juvenile population line at 20%.

The 3-year view (1999-2001) suggests that the problem has become more severe with regard to overall juvenile arrests. In other words, a higher proportion of minorities are involved — 39% of the total in 2001, compared to 32% of the total in 1999. The same is true for arrests for violence using the FBI’s Violent Crime Index (i.e., murder, rape, robbery and aggravated assault).

Figure 1 also suggests some minor setbacks in 2001 with regard to secure detention and formal dispositions by the juvenile court. On the other hand, the Commonwealth continues to reduce overrepresentation of minorities in commitments to public and private residential facilities, including secure placements. Furthermore, minorities are a higher proportion of the juvenile court cases that received dispositions for juvenile probation (i.e., community supervision). Dispositions for probation are generally less restrictive than those for placements and help maintain minority youth in the community.

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**Figure 1: DMC Short Range Trend, 1999 – 2001**

*Percentage of minority youth* at key decision points in Pennsylvania’s juvenile justice system

<table>
<thead>
<tr>
<th>Decision Point</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania population, ages 10-17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All juvenile arrests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juvenile arrests for Violent Crime Index offenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency cases disposed by juvenile courts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admissions to secure detention facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency cases formally handled in juvenile court</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency cases adjudicated in juvenile court</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency cases disposed to probation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency cases disposed to placements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency cases disposed to secure facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquency cases waived to criminal court***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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* Includes all non-white racial groups and Hispanics or Latinos.

** Reflects populations from the 2000 Census; county estimates with age and race detail for 2001 were unavailable at the time of this analysis.

*** Counts judicial waiver only. Statewide data for other transfer cases (e.g., Act 33 exclusions) are unavailable.
The long-range picture looks a little more promising.

While minority youth are still overrepresented in Pennsylvania’s juvenile justice system, some progress was made during the 13-year period the DMC matrices have been assembled to focus attention on the issue, particularly at the back end of the system (Figure 2).

The proportion of overall arrests involving minority juveniles increased between 1989 and 2001, including the minority proportion of arrests for Violent Crime Index offenses. Despite this increase at the early stage of the juvenile justice process, overrepresentation was reduced at subsequent decision points, with the most dramatic improvement involving commitments to secure facilities. Minority youth were involved in 78% of juvenile court dispositions to secure facilities in 1989, whereas they represent 60% of the cases in 2001 – a decrease of 18 percentage points. A substantial decrease is also visible in delinquency cases waived to criminal courts. However, an OJJDP research report suggests the difference can be attributed to the 1995 enactment of new transfer laws that shifted a segment of youth into “Act 33” exclusions based on age and offense that were formerly transferred to criminal court through judicial waiver proceedings in the juvenile court.5 Unfortunately, the study only covered the first year the act was effective (1996) and state-wide information concerning the exclusions is not gathered on an annual basis.

Reductions in the percentage of minority youth placed or committed may also reflect policy changes that have transferred additional minority youth out of the juvenile justice system.

Figure 2: 2001 DMC Long Range Trend, 1989, 1996, and 2001
Percentage of minority youth* at important decision points in Pennsylvania’s juvenile justice system

<table>
<thead>
<tr>
<th>Decision Point</th>
<th>1989</th>
<th>1996</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania population ages 10-17</td>
<td>15%</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td>All juvenile arrests</td>
<td>27%</td>
<td>33%</td>
<td>39%</td>
</tr>
<tr>
<td>Juvenile arrests for Violent Crime Index offenses</td>
<td>48%</td>
<td>45%</td>
<td>43%</td>
</tr>
<tr>
<td>Delinquency cases disposed by juvenile courts</td>
<td>53%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Admissions to secure detention facilities</td>
<td>45%</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td>Delinquency cases formally handled in juvenile court</td>
<td>47%</td>
<td>47%</td>
<td>47%</td>
</tr>
<tr>
<td>Delinquency cases adjudicated in juvenile court</td>
<td>53%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Delinquency cases disposed to probation</td>
<td>61%</td>
<td>61%</td>
<td>61%</td>
</tr>
<tr>
<td>Delinquency cases disposed to placements</td>
<td>52%</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>Delinquency cases disposed to secure facilities</td>
<td>60%</td>
<td>74%</td>
<td>78%</td>
</tr>
<tr>
<td>Delinquency cases waived to criminal court***</td>
<td>45%</td>
<td>55%</td>
<td>65%</td>
</tr>
</tbody>
</table>

* Includes all non-white racial groups and Hispanics or Latinos.
** Reflects populations from the 2000 Census; county estimates with age and race detail for 2001 were unavailable at the time of this analysis.
*** Counts judicial waiver only. Statewide data for other transfer cases (e.g., Act 33 exclusions) are unavailable.
DMC Index Comparisons

The next series of seven charts (Figures 3 – 9) provide county comparisons using the DMC index, starting with the first decision — total arrests (Figure 3). Thereafter, they step through key decision points and conclude with court dispositions to secure placement facilities (Figure 9).

The analysis began with the 25 counties that met selection criteria (10% minority population and/or arrests). However, some counties are removed from each chart due to unstable rates produced by a small volume of occurrences (typically less than 100 for an event). On certain measures, only a few counties are portrayed for comparison purpose due to unstable rates (e.g., Figure 4, Juvenile Arrests for VCI Offenses).

Minority youth are overrepresented in total juvenile arrests in the Commonwealth.

Minority youth are represented in total juvenile arrests at about twice their proportion in the juvenile population (Figure 3). Overrepresentation is only slightly greater when considering the state outside its three largest urban counties (Philadelphia, Allegheny and Dauphin). Note that in York County, minority youth are underrepresented at arrest (10.9% of juvenile arrests divided by 12.5% of the juvenile population).

Although the DMC matrix format requires the portrayal of total juvenile arrests, the statistic is dominated by fairly minor offenses, limiting its utility for portraying the DMC issue. For example, at the state level, 53% of juvenile arrests in 2001 were for less serious offenses (16% disorderly conduct, 20% curfew and loitering, 9% liquor law violations, and 8% simple assault). In some counties these same offense categories comprised upward to 80% of total offenses. However, offense detail is available in the source data used to complete the DMC matrices. The following two charts (Figures 4 and 5) go beyond the DMC matrices to consider juvenile arrests for violent crimes and drug offenses.

![Figure 3: DMC Index Comparison: Total Juvenile Arrests, 2001](image)

- Visible bars indicate the level at which minority youth are overrepresented in total juvenile arrests.
- Of the 21 comparison counties, 10 had an index over 2.0, or two times the minority proportion of the juvenile population in the county, and 4 had an index over 2.5.

Note: Cambria, Fayette, Lawrence and Venango counties made the cutoff for inclusion (more than 100 minority occurrences), with 199, 113, 131, and 107 minority juvenile arrests, respectively. However the fairly low volume of occurrences in these four counties continued to produce erratic comparisons and they were removed from Figure 3.
Overrepresentation at arrest increases substantially when considering violent offenses.

Minority juvenile arrests for violent crimes are measured by the four crimes that make up the FBI’s Violent Crime Index (VCI). Statewide, the minority share of juvenile arrests for VCI offenses is slightly more than three times the minority proportion of the juvenile population (Figure 4). The level of overrepresentation approaches four times the minority proportion of the population for counties outside the three largest urban centers.

In addition to being overrepresented in arrests for violence, minority youth are also overrepresented in arrests for Property Crime Index (PCI) offenses (i.e., burglary, larceny/theft, motor vehicle theft, and arson). However, the level of overrepresentation for PCI arrests is lower than the level of arrests for violence — 1.8 for the state and 2.1 outside the three largest urban counties (not shown).

Minority youth are overrepresented in juvenile arrests for drug abuse violations.

Minority youth are also overrepresented in juvenile arrests for drug abuse violations at 2.0 times their proportion in the juvenile population in the Commonwealth. Overrepresentation increases to 2.4 times when considering the state outside its three largest urban counties (Figure 5). Among the counties with 100 or more minority juvenile drug arrests for minority youth, Lancaster recorded the highest index at 3.4 times the minority proportion of the juvenile population in the county.

The category of drug abuse violations, which includes both drug possession and drug sales, is important because of dramatic increases at the national level, particularly with regard to black rates. Specifically, the juvenile arrest rates for drug abuse violations nationally were nearly equal for whites and blacks in 1980. However, by 1989 the black rate was five times the white rate. The gap narrowed somewhat during the 1990s with all groups continuing to increase. However, the black rate is still about 60% higher than the white rate.6
Minority youth continue to be overrepresented in secure detention admissions in the Commonwealth.

Minority youth are represented in admissions to secure detention in Pennsylvania at about three times their proportion in the juvenile population. (Figure 6). The level of overrepresentation is greater at this step in the juvenile justice process than it is for total arrests (1.9 versus 3.1) but is comparable to the level for violent offense arrests. The surface relationship between minority overrepresentation in arrests for violent offenses and secure detention (they both occur at about 3 times the minority population) should be the focus of more detailed research to isolate the influence of race and offense severity.

The problem is more severe (by 3.5 times) when considering the state outside its three largest urban centers. Lancaster County has the highest level of overrepresentation for admissions to secure detention at almost four times the minority proportion of the juvenile population in the county. Lancaster is followed by Beaver, Allegheny, Chester, and York counties, each recording over three times the expected level for minority admissions to secure detention facilities. Several additional counties have an overrepresentation level of 2.5 or higher. Philadelphia is the only county close to approaching equality on the detention admission measure. However, its index statistic is potentially misleading because ethnic and racial minorities are the majority among youth in the county (87.6% minority detention admissions divided by 69.7% minority juvenile population). The source for Philadelphia data is also independent of the single source for the remainder of the state, introducing the possibility that differences in defining an “admission” contribute to the good showing.

A consistent finding across DMC studies relying upon detailed data that supports more sophisticated statistical analysis (e.g., multivariate analysis) is that the decision to securely detain a juvenile is directly influenced by race, and secure detention has a direct influence on subsequent confinement in secure facilities. As a result, bias in the detention decision exerts an indirect influence for race in subsequent stages of processing, such as adjudication and placement decisions (where no direct race effect was noted). The influence of race on the detention decision has placed secure detention alternatives in the spotlight as possible solutions for DMC that can help prevent the progression of minorities into long-term secure confinement.7

![Diagram](image-url)
The juvenile court intake decision can move minority youth deeper into the system.

Commonly referred to as the juvenile court “intake decision,” prosecutors or juvenile probation staff decide how to proceed with a delinquency referral, either by formal or informal handling. Cases that are handled formally with the filing of a petition obviously risk moving youth deeper into the juvenile justice system (e.g., adjudication and secure confinement) as opposed to those cases handled informally through informal supervision by the juvenile probation department or diversion to a community agency.

Minority youth are overrepresented in formal juvenile court dispositions.

Minorities are overrepresented in formal court dispositions at 2.3 times their proportion in the juvenile population (Figure 7).

Statewide, the level of overrepresentation is somewhat higher at the intake decision stage in the juvenile justice process than it was at arrest, but lower than the level for secure detention. Considering the state without its three largest urban jurisdictions does not substantially increase the overrepresentation level. However, minorities are overrepresented in several medium-sized counties at two times the minority population level. Lancaster County is the highest at over three times the minority juvenile population in the county, followed by several of the counties that ranked high alongside Lancaster for secure detention admissions — Beaver, Allegheny and Chester counties.

Black youth account for a disproportionate share of those receiving formal juvenile court dispositions at the national level. They are represented at about twice the expected level in national estimates of juvenile court statistics for manner of handling. Accordingly, diversion from court has also been a focus of efforts to reduce DMC. However, the DMC matrices do not capture information on alternatives to formal court process, and formal dispositions and diversion do not share an exactly inverse relationship since the cases of some youth are dismissed, withdrawn or transferred to another jurisdiction prior to a petition being filed. Diversion data may provide a more direct view of juvenile justice decision-making, but from a positive angle (who is benefiting from alternatives to court.)

Pennsylvania relies upon juvenile court disposition data to monitor DMC confinement issues.

County-level data concerning admissions to public and private long-term or post-dispositional residential facilities are unavailable in Pennsylvania. A census of youth in placement is also unavailable across Pennsylvania’s hundreds of public and privately operated residential placement facilities. Fortunately, the state’s juvenile court processing or disposition data contain detail concerning cases disposed to placement by type of placement and even the specific placement facility. Without detailed juvenile court disposition data from the Center for Juvenile Justice Training and Research (CJJTR), Pennsylvania would have no single, trusted data source to gauge the important deep-end issue that has been the focus of the national debate.

Figure 7
DMC Index Comparison: Formal Juvenile Court Dispositions, 2001

- Of 14 counties with 100 or more formally handled juvenile court cases for minority youth, 12 counties have a DMC Index higher than 2.0, or twice the minority proportion of the juvenile population.
- Only two of the 14 counties eligible for comparison had a DMC Index less than 2.0, Bucks and Philadelphia.

Note: Visible bars indicate the level at which minority youth are overrepresented in formal court dispositions.
Minority youth are overrepresented in juvenile court cases involving placements to residential facilities.

Figure 8 indicates that minority youth are overrepresented in court cases disposed to residential facilities (private or public, secure and non-secure) at 2.6 times the minority proportion of the juvenile population in the state. The minority overrepresentation level increases to nearly three times when considering the state outside its three largest urban counties. Philadelphia and Allegheny counties represent the two ends of the spectrum on this statistic, with Allegheny County having the highest DMC index for placements and Philadelphia approaching equality on the issue. However, minority youth are about 70% of the youth population ages 10 to 17 in Philadelphia, possibly exaggerating the difference between counties having much lower proportions of minority youth. After Allegheny County, Lehigh, Berks, Dauphin and Delaware counties all had a DMC index well over two times the minority proportion of the juvenile population in the county.

Although minority youth are overrepresented in cases disposed to placement, the decision does not always have a negative connotation. In some instances judges may order placements to address problems such as drug abuse, mental illness or to develop important competencies. This phenomenon is particularly evident in Pennsylvania where a notable network of private agencies has developed for the treatment and rehabilitation of delinquent youth.

A disproportionate number of minority cases in juvenile court are disposed to secure placement facilities.

Data concerning placements to secure residential facilities are also recorded in the DMC matrices for each county. However, comparisons are misleading because no single county recorded more than 100 commitments to secure facilities in 2001 and small numbers or volume for an event produce unstable rates. The same problem does not exist, however, for the two state comparison statistics – the entire state and the state outside its three largest urban jurisdictions. A comparison on these two measures for commitments to secure residential facilities suggests the DMC index increases significantly when considering counties outside the three largest urban counties (Figure 9).

Figure 8
DMC Index Comparison: Residential Placements, 2001

<table>
<thead>
<tr>
<th></th>
<th>DMC Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>State total</td>
<td>2.6</td>
</tr>
<tr>
<td>State w/o 3 largest urban counties</td>
<td>2.9</td>
</tr>
<tr>
<td>Allegheny</td>
<td>3.1</td>
</tr>
<tr>
<td>Lehigh</td>
<td>2.9</td>
</tr>
<tr>
<td>Berks</td>
<td>2.7</td>
</tr>
<tr>
<td>Dauphin</td>
<td>2.4</td>
</tr>
<tr>
<td>Delaware</td>
<td>2.4</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>1.3</td>
</tr>
</tbody>
</table>

- Four of the five counties that met the threshold for the analysis had a minority index of 2.4 or higher for juvenile court dispositions to placements.

Figure 9
DMC Index Comparison: Secure Commitments, 2001

<table>
<thead>
<tr>
<th></th>
<th>DMC Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>State total</td>
<td>2.9</td>
</tr>
<tr>
<td>State w/o 3 largest urban counties</td>
<td>4.3</td>
</tr>
</tbody>
</table>

- No Pennsylvania county, including Philadelphia, had more than 100 minority commitments at initial disposition to local and state secure facilities in 2001.*

Note: Visible bars indicate the level at which minority youth are overrepresented in residential placements and secure commitments.

* Surprisingly low counts for juvenile court cases disposed to secure residential facilities are impacted by: 1) a decision to analyze only initial dispositions, thereby excluding review cases, and 2) missing placement type data for out-of-state facilities (about 50 such placements at initial disposition in 2001).
The next generation of law enforcement data is the FBI’s National Incident-Based Reporting System (NIBRS). NIBRS data provide information concerning crime incidents reported to police, including the characteristics of the crime, the victim, the victim’s perception of the offender, and the characteristics of anyone arrested for the crime. With this level of detail, more sophisticated statistical analyses are possible to isolate the influence of offender race on law enforcement behavior.

A recent study analyzing data from law enforcement agencies in 17 states (141,768 juvenile offenders) demonstrates the value of using NIBRS data to consider the decision-making at an early point in the juvenile justice process. Utilizing the richness of the NIBRS data, researchers Carl Pope and Howard Snyder were able to look for evidence of racial bias in the arrest of juveniles for violent crime, including murder, violent sex offenses, robbery, aggravated assault, simple assault or intimidation. The study found that for these crimes, there was no difference in the likelihood of arrest of white juveniles and nonwhite juveniles, after controlling for all other incident characteristics. The likelihood of juvenile arrest was affected, however, by several other incident characteristics independent of the race of the offender. The race of the victim influenced the odds of arrest and arrest odds increased when the victim was an adult or multiple victims were involved in the offense. While offender race did not play a role in the characteristics that contributed to arrest, arrest odds increased when the offender was male and acted alone. The study is limited to summarizing the arrest patterns in the 17 states that reported NIBRS data to the FBI in 1997 and 1998. Overall patterns may be different in individual states. However, the study demonstrates the potential in those states to consider the influence of race in law enforcement behavior.
Figure 10: Juvenile Court Processing of Delinquency Cases by Race in Pennsylvania, 2001

White

24,010 cases

Petitioned 15,992 (67%)

Nonpetitioned 8,018 (33%)

24,010 cases

Judicial Waiver 103 (1%)

Adjudicated 8,921 (56%)

Nonadjudicated 6,968 (44%)

Placed 6 (<1%)

Probation 56 (1%)

Other Sanction 6,757 (84%)

Dismissed 1,199 (15%)

White

Black or African American

14,822 cases

Petitioned 11,219 (76%)

Nonpetitioned 3,603 (24%)

14,822 cases

Judicial Waiver 64 (1%)

Adjudicated 6,284 (56%)

Nonadjudicated 4,871 (43%)

Placed 4 (<1%)

Probation 22 (1%)

Other Sanction 1,862 (52%)

Dismissed 1,715 (48%)

Black or African American

Other

537 cases

Petitioned 386 (72%)

Nonpetitioned 151 (28%)

537 cases

Judicial Waiver 0

Adjudicated 227 (59%)

Nonadjudicated 159 (41%)

Placed 0

Probation 3 (2%)

Other Sanction 109 (72%)

Dismissed 39 (26%)

Other
The Other Sanction category includes a wide range of dispositions, including:
- warned, counseled, case closed;
- informal adjustment;
- fines and or costs ordered;
- referred to another agency, individual;
- consent decree;
- bench warrant;
- deferred adjudication; and
- deferred placement.

The dismissal category includes dismissed cases, withdrawn petitions and cases transferred to another jurisdiction.

Following the top branch from the petition decisions, little difference exists between the three race categories on adjudication — between 56% to 59% of the petitioned cases involve an adjudication of delinquency for all three groups. Of the adjudicated youth, all three race groups had similar probabilities of being placed in a residential facility, put on probation, given another type of sanction, or having the case dismissed, withdrawn or transferred to another jurisdiction. All three groups were unlikely to receive placement or probation without an adjudication, although it can happen at times in some counties—possibly representing deferred adjudication or consent decree cases that were not coded consistently in the data.

Following the bottom branch of each diagram to its conclusion for the nonpetitioned cases, blacks or African Americans were significantly more likely than whites to have a case dismissed by the court ($p < .01$). Almost half of the black or African American nonpetitioned cases were dismissed, withdrawn or transferred to another jurisdiction as opposed to only 15% of white cases. On the other hand, nonpetitioned white cases were significantly more likely to receive other sanctions ($p < .01$) than those involving black or African American youth.

Diagrams depicting juvenile court processing by ethnicity are not possible with the current data sets.

State comparisons on ethnicity are not feasible in the court disposition data due to the large volume of unreported data for Hispanic or Latino ethnicity in many counties. Of 42,483 total cases disposed, only a little over one half (51%) had valid ethnicity (i.e., Hispanic) data, and this problem was not isolated to a single urban county. More than any other data quality issue, unreported ethnicity data limits Pennsylvania’s effort to describe DMC for that population at the most basic level each year.$^{10}$

Summary

Minority youth continue to be overrepresented in Pennsylvania’s juvenile justice system, a fact that in and of itself does not represent a wrong unless it is the product of disparate decisions influenced by factors of race or ethnic origin (i.e., discrimination). While the DMC index is useful for identifying jurisdictions with high levels of overrepresentation at specific decision points, reasonable explanations unrelated to race or ethnicity may exist on a case by case basis. A prime example is the consistency between minority indices for arrests for violence and subsequent stages in the process that involve confinement or loss of freedom (secure detention and commitment). Moreover, some of the decision points analyzed, such as public or private placements or commitments, are not in and of themselves a negative response. Examined at the case level, they may demonstrate an effort by juvenile court decisionmakers to protect the public and to bring intervention resources or needed services to youth — a distinct possibility given Pennsylvania’s rich network of private providers.

Notwithstanding these cautions, a steady flow of the best available descriptive statistics concerning minorities in the juvenile justice system ensures that policy makers ask questions about overrepresentation and keep the issue at the front of policy discussions for juvenile justice reform at both the state and local levels. Reliable descriptive data are also a prerequisite for taking the next research step, recommended by Pope and his colleagues: to isolate the influence of race in a chain of juvenile justice decisions in order to document whether minority overrepresentation is truly related to disparate decisions solely based on race.$^{11}$ The challenge is to balance the objectives of point-in-time research with ongoing annual collections of descriptive statistics like those presented in this report.

Pennsylvania has commissioned DMC research studies but struggles to sustain them on more than an ad hoc basis (e.g., special intensive data collection at a point-in-time to support multivariate analysis). The most recent example is over ten years old. While these studies strike at the heart of the matter, they are expensive and often are criticized for the weakness of the researcher’s statistical model. Pennsylvania should continue to pursue more sophisticated research on the role of race in juvenile decision making. However, detailed studies should be balanced with efforts to make full use of the existing data sets, improving them in the process and expanding to others. In the long run such efforts will help focus limited resources for the more sophisticated investigations.

Recommendation: Improve and expand the sources of information that inform the DMC issue on an annual basis.

Pennsylvania diligently pursues DMC data on an annual basis, relying on the best available official sources for county level population, court, detention and juvenile court disposition data. The information presented in this bulletin is a reflection of a 13-year commitment to organizing the information per federal mandates. While the framework for compiling DMC matrices has been in place for years, Pennsylvania can expand its annual data gathering to:

1) improve the utility of existing data sets for DMC analyses;
2) pursue additional sources of “core” DMC descriptive data;
3) consider options for additional, useful data collection efforts; and
4) expand the matrix format to include additional items and a “positive event” perspective.

13
1) Improve the utility of existing data sets for DMC analyses.

Much is possible to improve the usefulness and reliability of existing data sets used to monitor DMC, starting with the treatment of race and ethnicity in the data sources.

- Require compliance with federal guidelines for coding race and ethnicity.

Efforts to document possible DMC problems are greatly hampered when they fail to follow standards adopted by the U.S. Census Bureau for the 2000 Decennial Census. The Bureau gathers the population data necessary to create rates such as the DMC index. Where the methods for coding race and ethnicity significantly depart from the example set by the Census, the utility of the data is severely limited to only consider volume, making rate comparisons across race categories or counties impossible.

- Improve coverage and accuracy of existing data.

The Commonwealth should also work to improve the coverage and accuracy of data gathered on race and ethnicity. For example, data on Hispanics or Latinos is unreported or the information is suspect in its accuracy in the majority of Pennsylvania counties.

The pathway for improving these data involves documenting existing requirements for coding race and ethnicity in the State, adopting protocols where they may not exist, training the appropriate government agencies supplying the information (e.g., juvenile courts) and providing regular oversight for data integrity to quickly address problems.

In addition to race and ethnicity, other pre-existing information essential to documenting DMC issues falls into disuse from time to time, depending on the county. For example, the accuracy of the “detained” variable in the juvenile court disposition data has become suspect in recent years. Requirements of detention facilities to separately report admissions to CJJTR may have caused some courts to stop using the detention variable in the juvenile court disposition data. The two data sets measure different events that are independent.

The inability to use the detention variable in the court disposition data sacrifices an important facet of the DMC picture — cases disposed involving secure detention — and limits the ability to relate the detention decision to other juvenile court decisions like placement. Juvenile courts should be required to report this variable in the court disposition data they provide to CJJTR, particularly in light of research findings that the detention decision is influenced by race and the decision to detain subsequently moves minority youth forward in the juvenile justice process.

2) Pursue additional sources of core DMC descriptive data.

Although Pennsylvania has access to some “core” DMC data, it lacks access to others (see box below concerning Core Sources of DMC Data). Statewide information concerning processing of cases excluded from juvenile court jurisdiction to criminal court tops the list of information missing in Pennsylvania’s current DMC monitoring effort. Research suggests minority youth are heavily overrepresented in transfers to adult court.

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Core Sources of DMC Data: A Pennsylvania Report Card

( ● = mostly available ○ = partially available ○ = unavailable )

- Juvenile populations with age, race, ethnic and sex detail
- Law Enforcement Arrest Data
- Juvenile Detention Data
  - Facility population caseflow (e.g., admissions and discharges)
  - Standing population (one day counts)
- Juvenile Court Processing Data
  - Juvenile Corrections Data
    - Facility population caseflow (e.g., admissions and discharges)
    - Standing population (one day counts)
- Transfers to Criminal Court
  - Judicial waiver
  - Direct file & exclusion
- Adult Corrections Data (e.g., transferred youth; juveniles held in adult jails/prisons)

Additional Sources of DMC Data

- Local crime victimization survey data
- Case-level law enforcement data that are incident based (e.g., the FBI’s National Incident Based Reporting System)
- Data for secure placement alternatives (e.g., home detention, electronic monitoring, day treatment)
- Neighborhood detail matched with population estimates at the same level (where possible) to create rates (e.g., secure detention rate comparisons across city neighborhoods)
- Data perhaps not relevant to Pennsylvania, but important for tracking DMC in other states (e.g., Arizona, Texas and California)
  - Tribal facility/court processing data
  - Immigration and Naturalization Services (INS) processing data
As a result, transfer laws are a focus of advocacy groups on the DMC issue. NCJJ researched the issue in Pennsylvania during the first year of new transfers for statutory exclusions under PA Act 33 of 1995. At the time, we documented that 81% of the Act 33 transfers across Philadelphia, Allegheny and Dauphin counties involved black youth. In all likelihood, minority overrepresentation for these exclusions has among the most serious consequences for the decision (criminal prosecution).

The DMC tracking effort also lacks information concerning the utilization of public and private facilities licensed by the Department of Public Welfare for delinquent youth placements. In other words, the ongoing tracking effort misses the deep-end data that stimulated the national discussion in the first place. CJJTR’s juvenile court disposition data shine important light on the issue. However, admissions and/or one day count information will increase the ability to track the problem and should be considered basic information for DMC monitoring.

3) Consider options for additional useful data collection efforts.

For the most part, states have failed to examine the DMC issue from the perspective of law enforcement behavior. In this regard, incident based law enforcement data are beginning to shed light on this issue (see sidebar discussion on p. 11). Where incident based data are available, they permit much richer study of law enforcement handling of minorities, including multivariate analysis that helps to make the transition from merely describing a possible problem to documenting actual disparity in decisionmaking. States that have incident based reporting systems in place have a much higher potential for addressing the shortcomings of detailed statistical research noted by Pope and his colleagues by using multivariate approaches to isolate the influence of race on law enforcement behavior.

4) Expand the matrix format to include additional items and a “positive event” perspective.

The DMC matrix was provided by OJJDP as a starting point for states to document the issue 13 years ago. At this juncture, PCCD should consider expanding the matrix format to assemble additional data that are already available in the official data sources, particularly information that may reveal a positive spin on the issue. In other words, additional items should be added to document the use of alternatives to restrictive resources like secure detention. Detention alternatives are already a part of the matrix, but data are unfortunately lacking in the Commonwealth. However, on other points the data are available but are not a part of the matrices. A prime example is diversion or alternatives to formal court processing. The application of the alternative may be a more direct and easily understood measure, and counties with good rates could be examined to reveal best practices in this area.

Finally, the DMC matrices currently group all minorities into one category. While the analysis is important for the first cut on the issue, racial and ethnic detail is important to fully describe the issue and should be incorporated where possible into the matrix design. The accuracy of racial and ethnic detail may improve if more is done to portray the data, including displaying information concerning unreported data from counties—perhaps even providing a DMC data report card for each jurisdiction that contributes information.

Notes
1 Disproportionate Minority Contact mandates are linked to state eligibility for an important federal funding stream to the states for juvenile justice – the federal Formula Grants Program administered by the Office of Juvenile Justice and Delinquency Prevention in the U.S. Department of Justice.
10 The problem is shared by many other states as noted by Pope and his colleagues in a recent review of the DMC literature and by Villarruel and Walker in a recent report of the Building Blocks for Youth Coalition, Villarruel, F. A. and Walker, N. E. (2002). ¿Dónde está la justicia? A call to action on behalf of Latino and Latina youth in the U.S. justice system. Michigan State University.
12 On October 30, 1997, the Office of Management and Budget (OMB) published “Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity,” Federal Register, 62 FR 58781–58790, which designated the policy for federal agencies, including the Census Bureau, to collect data on race and ethnicity.
Data Source Notes: The information contained in this bulletin was developed from a compilation of data in the NCJJ report, *Minority Overrepresentation in Pennsylvania’s Juvenile Justice System: DMC Matrices, Index Comparisons, and Trend Charts*. The data sources for the matrices are:


4) County Level Populations by Age, Race, and Sex, 2000. Compiled by the National Center for Juvenile Justice using spreadsheets downloaded from the U.S. Census Bureau website, American Fact Finder, Detailed Tables Section, “PCT 12” series of tables (December 19, 2002).

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NCJJ is a non-profit organization that conducts statistical, legal, and applied research on a broad range of juvenile justice topics and provides technical assistance to the field.

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