

Chapter 1: Identification and Monitoring

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Identification

When a jurisdiction enters into an effort to identify where disproportionate minority contact (DMC) may exist within its juvenile justice system, there are at least three reasons to do so:

- To describe the extent to which minority youth are overrepresented in that jurisdiction’s juvenile justice system.
- To begin to describe the nature of that overrepresentation. By collecting and examining data on the volumes of occurrence at major decision points in the juvenile justice system (e.g., arrest, referral, diversion, detention, petition/charges filed, delinquent findings, probation, confinement in secure correctional facilities, and transfer to adult court), one can determine whether overrepresentation exists, where it exists within the jurisdictions, and the degree of overrepresentation at those points within the juvenile justice system.
- To create a foundation for ongoing measurement of DMC and provide the basis for monitoring activity. This is an ongoing process that is repeated—preferably annually, but at a minimum of at least every 3 years.

Although one may think of the identification phase as the first step in a jurisdiction’s DMC efforts, it is also an *ongoing* process. OJJDP requires all states to collect these data statewide and from their targeted local DMC reduction sites on a continuing basis (updated at least every 3 years with the submission of a new 3-year comprehensive juvenile justice and delinquency prevention plan).¹

The primary purpose of the identification phase is descriptive—it provides a quantitative answer to the question, are there differences based on race and ethnicity in the contact that youth have with the juvenile justice system?² In addition, this phase provides initial guidance on what questions to ask (assessment) about the mechanisms and reasons for such differences. These purposes are summarized by the following questions:

- Are there differences in the rates of contact (e.g., arrest) that are based on race or ethnicity? If so, at what stages of the justice system are these differences more pronounced?

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- Are there differences in the processing of juveniles within the justice system that are based on race or ethnicity? If so, at what stages of the justice system are these differences more pronounced?
- Are the racial or ethnic differences in contact and processing similar across jurisdictions within a state? If not, in which jurisdictions are these differences more pronounced?
- Are the differences in contact and processing similar across all racial and ethnic groups? If not, which groups seem to show the greatest differences?
- Are racial or ethnic differences in contact and processing changing over time?

It is important to note what is not included at this stage: any attribution about the reasons for the differences. Therefore, the identification phase of information neither describes the reasons for any differences that occur nor creates strategies to reduce those differences. The **identification** stage, and the use of the Relative Rate Index in this stage, is designed to help narrow the field of inquiry for the **assessment** stage, which describes the process of identifying the likely mechanisms that create differences in juvenile justice system contacts for minority youth and which, in turn, leads to the **intervention** stage. Both are described in later chapters of this manual.

The Relative Rate Index Method

Overview

The method that OJJDP has selected for the identification stage is termed the Relative Rate Index (RRI). This method involves comparing the relative volume (rate) of activity for each major stage of the juvenile justice system for minority youth with the volume of that activity for white (majority) youth. The RRI provides a single index number that indicates the extent to which the volume of that form of contact or activity differs for minority youth and white youth. In its simplest form, the RRI is simply the rate of activity involving minority youth divided by the rate of activity involving majority youth.

The RRI method involves the following general components (a more detailed description of the specific steps is provided later):

- The number of events in various stages of the juvenile justice system is tallied for the minority groups of interest, generally those groups that the federal Office of Management and Budget specifies as necessary for data collection (Hispanic and non-Hispanic members of the following racial groups: African American, Asian American, Native Hawaiian and other Pacific Islanders, Native Alaskan, and American Indian).
- The number of events is translated into rates of activity by dividing the number of events in one stage by the number of events in a preceding stage. For example, one divides the number of probation placements by the number of *adjudications*—situations in which youth were found delinquent—to determine the rate of probation placement. This calculation is performed separately for each minority

group in which the size of that group's youth population is at least 1 percent of the total youth population in the jurisdiction.

- The rates for minority groups are compared to the rates for white (majority) youth by dividing the rate for each minority group by the rate for white youth. This creates an RRI, which provides a numeric indicator of the extent to which the rate of contact for minority youth differs from the rate of contact for white youth.
- Each RRI is tested to determine if it is statistically significant, that is, whether it differs sufficiently from a neutral value (1.00) such that the differences in the rates are not likely to be the result of random chance processes.

Characteristics

The RRI method has a number of features or characteristics that one must understand to interpret the results. First, one must calculate the relative volume (rate) of activity involving minority youth and contrast it with the relative volume of activity involving white youth. By using rates of activity to reflect the relative volume of activity at each stage, the process can take into account the relative size of the white and minority populations and the relative amount of activity in preceding stages of the justice system. However, this method is not the same as calculating the odds of particular types of contact because one is not tracking individual youth across time; instead, one is comparing the relative volume of activity within a specific time period. That relative volume may be created by the rapid turnover (churning) of a few youth or may be the result of a lower level of involvement of a large number of youth.

A second major feature of the RRI method is that it involves a stage-by-stage calculation of these relative rates or relative volume. This is important because it shows the incremental increase or decrease in contact levels as youth move through the justice system. It would be unrealistic to assume that differences in processing of minority and white youth are constant across the various decision stages of the justice system. Moreover, it would be unrealistic to assume that the same stages of the justice system account for disproportionate minority contact across all justice systems. By basing the rate calculation on the volume of activity in the preceding stage of the justice system, one can examine the changes in rates of contact as youth of a certain racial or ethnic group move through the system.

A third major feature of the RRI method is that it minimizes the extent to which calculations of differences between groups depend on accurate census information. The previous method of calculating disproportionality for each contact stage—by dividing the percentage of minority juveniles represented at that stage by the percentage of minority juveniles in the jurisdiction's total juvenile population at risk for juvenile court involvement—was based entirely on comparison with the percentage representation in the population. This created several types of problems; notably, in many instances it appeared that the general population census amounted to a significant undercount of minority populations. The effect of such an undercount was to dramatically increase the previously recommended index or measure of disproportionate contact—Disproportionate Representation Index (DRI)—in which all stages of the juvenile justice

system were compared with the percentage distribution of race and ethnicity in the general census numbers. With the use of the RRI, once one moves past the first stage (arrest) in the justice system, a significant problem in the census numbers will have no marked effect on the RRI values.

A fourth useful feature of the RRI method is that it does not require a transactional data system that tracks youth throughout the juvenile justice system. Indeed, the method does not require that the data available to describe the justice system all come from a single data system. It is possible to mix multiple data sources, although doing so raises concerns about common definitions of race and ethnicity as well as concerns about the comparability of the counting and classifying rules used in multiple agencies.

Fifth, one of the attributes of the RRI method is that as long as the data are counted in a consistent fashion for a particular stage within the jurisdictions being examined, the method can relatively easily accommodate differences from some standard definitions in the particular counting rules. For example, in some states it is possible to obtain a count of the number of youth who are subject to secure detention each year. In other states, detention data are maintained by counting the number of juvenile cases in which detention is used, and in still other states it is possible to count only the number of detention episodes in which a youth is checked into a detention facility. Each of these methods will, of course, yield a different number, and that difference in numbers will yield a rate that seems to have a very different scale (e.g., the rate of detention episodes is likely to be much higher than the rate of youth detained). However, as long as the method of counting is applied uniformly to youth of color and white youth, the index value—the ratio of the rates—will actually be comparable across the three examples used. It will represent the general degree to which the rate of detention activity (however measured) will differ between youth of color and white youth. Indeed, the RRI values for jurisdictions using these different definitions can still be roughly compared to determine the differential detention contact rates for minority youth, even though the absolute measures of detention contact may be on different scales. However, if at all possible, each jurisdiction should maintain the same definitions from year to year to reduce the possibility that changing definitions may appear to indicate that the DMC levels in that jurisdiction are changing.

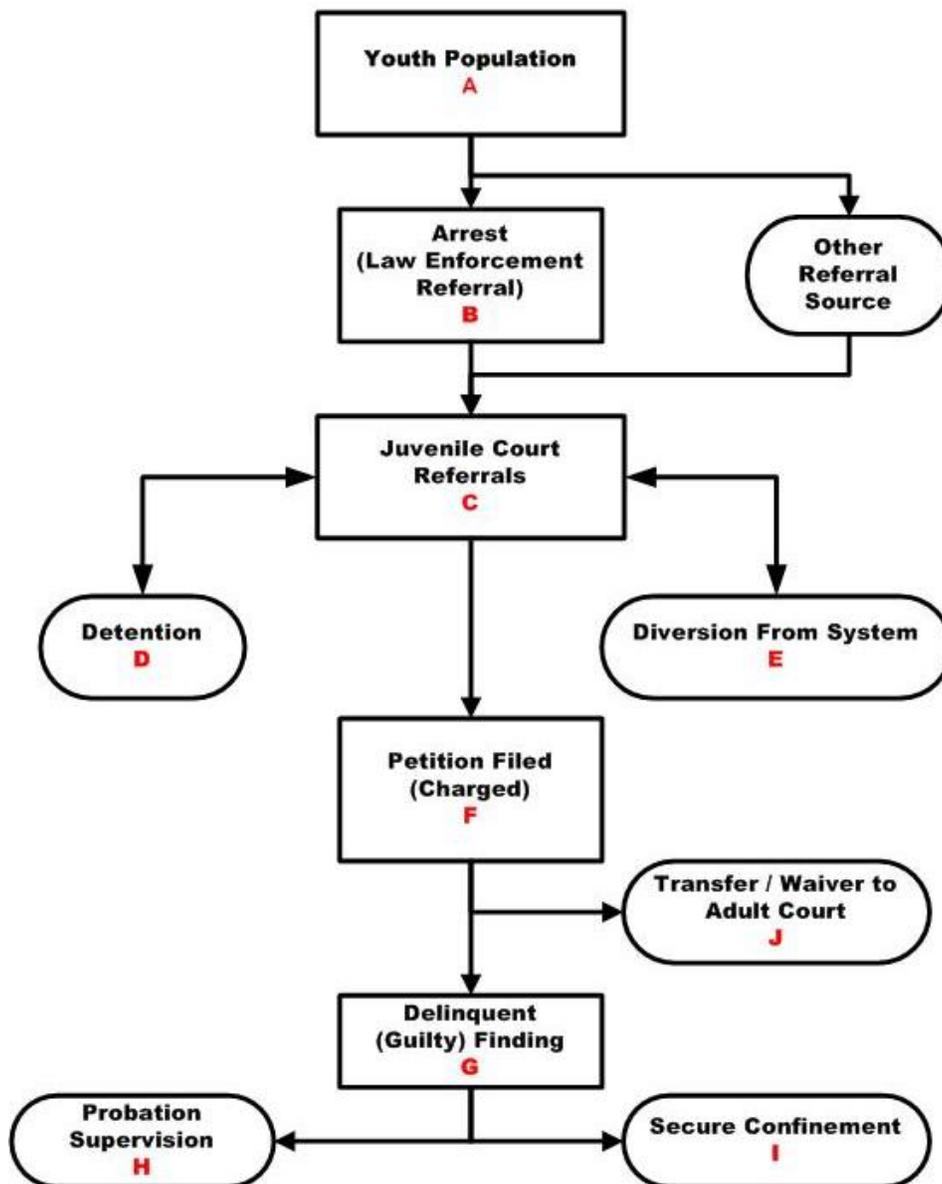
Implementing the RRI Calculation: Step by Step

The following materials provide step-by-step instructions for completing the initial identification stage for examining disproportionate minority contact within a jurisdiction. These instructions should provide some guidance in the analysis process, by both specifying the steps to take (including data, data definitions, and basic descriptions of the juvenile justice system) and providing an example to follow, using a data tool developed for the purposes of this analysis. What follows is an example of an actual jurisdiction with a fairly typical juvenile justice system.

As a first step in understanding the example, and the analysis process, we have created a general model of the juvenile justice system (figure 1). Cases flow between major stages in the justice system and are depicted in such a way that one can follow the major

components and can record the number of cases passing through each stage during a year. The number of cases is used to compute a rate of occurrence, and those rates are compared among racial and ethnic categories. So, for example, one may calculate arrest rates for white youth and for Hispanic youth, comparing these two rates to determine the extent to which Hispanic youth may have a higher arrest rate than white youth. The result of that comparison is the RRI. It must be emphasized that the RRI is a first step in examining disproportionate minority contact. The RRI points to areas for more intensive examination and provides an ongoing set of “vital signs” or an “early warning system” for the management of the juvenile justice system. The following sections discuss each step of the RRI calculation process.

Figure 1: Relationship of Data Elements for Relative Rate Index Calculations



Step 1: Understanding System Elements

The use of the RRI methodology begins with understanding the basic relationship of the elements in the juvenile justice system and then comparing those elements to the general model in figure 1. Figure 1 does not show all of the possible pathways that a case involving a juvenile might follow in the juvenile justice system. Rather, it shows the major flows and the major points at which data are likely to be available. Because much of the RRI model is based on the relationship of these elements, each jurisdiction should confirm that its juvenile justice system generally fits the model. If there is not a good fit, then the jurisdiction must modify the model, either by changing the location of some decision points or by adding others. A jurisdiction may have to change its model (e.g., if diversion occurs only after a juvenile has been found guilty/delinquent, or probation can be ordered without a finding of delinquency) or may add another decision point to its model if an important decision stage exists in the local justice system that consistently generates reliable data that can be used to calculate relative rates.

In many instances represented in figure 1, there are double-headed arrows between the stages—for example, between referrals and diversion. This indicates that some cases are indeed returned from diversion to the legal/court process due to violation of conditions or other reasons. The important feature, however, is that the total number of diversions is counted, both those resulting in an exit from the system and those resulting in return to further processing.

Step 2: Defining Data Elements

Next, gather the definitions for each data element. This means gathering both the legal definitions for the action (e.g., the definition of an arrest for the jurisdiction, or the definition of diversion, probation, etc.) and the operational definition for that stage (e.g., what action actually creates the data to count the number of instances of diversion, arrest, or a sentence of probation?).

Given the variety of forms of juvenile justice data collected across the nation, two issues, in particular, need to be addressed. For each data element, there is a preferred type of data based on the congressional mandate to address total contact of youth with the juvenile justice system. First, for those data elements that involve “holding” a youth in a particular status, the preferred information is that which identifies the total number of youth in that status during the year, not just the number of new entries into that status during the year. For example, the preferred data element would be the total number of cases in which youth are subject to confinement during the year rather than a count of the new admissions to secure confinement over the year. Likewise, there is the issue of whether data elements reflect “duplicated” or “unduplicated” counts. For example, if a youth is arrested four times during a year, does this count as one youth arrested (unduplicated) or four arrests of a youth (duplicated)? Again, given the congressional mandate to address total contact with the juvenile justice system, the preferred type of data is the duplicated count, one reflecting the total number of youth contacts with the justice system. As part of implementing a national data collection system for DMC issues, OJJDP has created a set of standard definitions for each of the stages in the juvenile justice system depicted in figure 1. These definitions are provided in table 1.

Table 1: Standard Definitions for Each Stage in the Juvenile Justice System

Stage	Definition
Arrest	Youth are considered to be arrested when law enforcement agencies apprehend, stop, or otherwise contact them and suspect them of having committed a delinquent act. Delinquent acts are those that, if an adult commits them, would be criminal, including crimes against persons, crimes against property, drug offenses, and crimes against the public order.
Referral	Referral is when a potentially delinquent youth is sent forward for legal processing and received by a juvenile or family court or juvenile intake agency, either as a result of law enforcement action or upon a complaint by a citizen or school.
Diversion	The diversion population includes all youth referred for legal processing but handled without the filing of formal charges. Youth referred to juvenile court for delinquent acts are often screened by an intake department (either within or outside the court). The intake department may decide to dismiss the case for lack of legal sufficiency, resolve the matter informally (without the filing of charges), or resolve it formally (with the filing of charges).
Detention	Detention refers to youth held in secure detention facilities at some point during court processing of delinquency cases (i.e., prior to disposition). In some jurisdictions, the detention population may also include youth held in secure detention to await placement following a court disposition. For the purposes of DMC, detention may also include youth held in jails and lockups. Detention should not include youth held in shelters, group homes, or other non-secure facilities.
Petition/ charges filed	Formally charged (petitioned) delinquency cases are those that appear on a court calendar in response to the filing of a petition, complaint, or other legal instrument requesting the court to adjudicate a youth as a delinquent or status offender or to waive jurisdiction and transfer a youth to criminal court. Petitioning occurs when a juvenile court intake officer, prosecutor, or other official determines that a case should be handled formally. In contrast, informal handling is voluntary and does not include the filing of charges.
Delinquency findings	Youth are judged or found to be delinquent during adjudicatory hearings in juvenile court. Being found (or adjudicated) delinquent is roughly equivalent to being convicted in criminal court. It is a formal legal finding of responsibility. If found to be delinquent, youth normally proceed to disposition hearings where they may be placed on probation, committed to residential facilities, ordered to perform community service, or receive various other sanctions.
Probation	Probation cases are those in which a youth is placed on formal or court-ordered supervision following a juvenile court disposition. Note: Youth on "probation" under voluntary agreements without adjudication should not be counted here; they should be part of the diverted population instead.
Confinement in secure correctional facilities	Confined cases are those in which, following a court disposition, youth are placed in secure residential or correctional facilities for delinquent offenders. The confinement population should not include all youth placed in any form of out-of-home placement. Group homes, shelter homes, and mental health treatment facilities, for example, would usually not be considered confinement. Every jurisdiction collecting DMC data must specify which forms of placement do and do not qualify as confinement.
Transferred to adult court	Waived cases are those in which a youth is transferred to criminal court as a result of a judicial finding in juvenile court. During a waiver hearing, the juvenile court usually files a petition asking the juvenile court judge to waive jurisdiction over the case. The juvenile court judge decides whether the case merits criminal prosecution. When a waiver request is denied, the matter is usually scheduled for an adjudicatory hearing in the juvenile court. If the request is granted, the juvenile is judicially waived to criminal court for further action. Juveniles may be transferred to criminal court through a variety of other methods, but most of these methods are difficult or impossible to track from within the juvenile justice system, including prosecutor discretion or concurrent jurisdiction, legislative exclusion, and the various blended sentencing laws.

In some instances, a jurisdiction may have access to the local data required to support these standard definitions for each stage of processing, using the preferred units of count (e.g., cases placed in confinement, or number of arrests). In other jurisdictions, the ideal data may not be available. In many instances, such jurisdictions may have alternative definitions that the available data may support. Such alternative definitions and data are accepted in the OJJDP DMC data entry system as long as they are carefully defined and consistent over time. Therefore, persons who construct a jurisdiction's RRI must develop a comprehensive understanding of the types of available information about its juvenile justice system processing and select from among those available data the ones that best represent each processing stage. In other words, these researchers must become experts in data that can be harvested to fulfill the DMC goals that OJJDP has established. To assist in this process, this chapter includes an appendix (see appendix A) that serves as a primer of the nature and sources of available data that researchers may use to populate the RRI matrix. Although no single source can meet all user needs, this appendix provides a sound foundation for those faced with the task of quantifying DMC at the jurisdictional level. When one uses alternative definitions, he or she should note the definition and sources of data at appropriate locations in the data entry screens provided in the online data tool.

Step 3: Determining Racial/Ethnic Categories

The next step is to determine the available race and ethnicity categories for each data element. This means determining not only what groups are counted but also what the source is for that classification (e.g., self-identification, classification by officials, records from other sources). This will also involve determining whether the classification is a single label for each youth, a set of possibilities (e.g., Hispanic and Asian), or a "check all that apply" format. When possible, determine whether the classification system can be converted to follow the U.S. Census Bureau classification as referenced in the OJJDP regulations.

Step 4: Entering Information Into the Data Tool

Once the racial/ethnic categories are determined, gather the counts of events involving youth in each of the various stages (A–J) classified in each racial/ethnic category and enter that information into the data entry module of the data tool (see table 2). The data tool analysis of DMC data is available on the Internet at <http://www.ojjdp.dmcdata.org>.

Table 2: Sample State Data for Entry Into the DMC Model

Data element	White	Black or African American	Hispanic	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/Mixed
A. Population at risk (ages 10 through 17)	1,097,108	184,372	65,596	27,925		3,564	**
B. Juvenile arrests	69,759	34,754	7,975	845		39	**
C. Referrals to juvenile court	22,175	12,682	2,531	227		29	1,683
D. Cases diverted	3,588	1,121	275	32		3	222
E. Cases involving secure detention	6,541	5,596	1,378	43		7	115
F. Cases petitioned (charges filed)	14,904	9,273	1,898	165		21	916
G. Cases resulting in delinquent findings	10,373	5,778	1,380	109		12	538
H. Cases resulting in probation placement	5,239	2,792	710	64		5	313
I. Cases resulting in confinement in secure juvenile correctional facilities	148	153	58	1		0	6
J. Cases transferred to adult court	91	84	13	0		0	9

Note: Data elements correspond to figure 1.

** See the discussion of these two entries in step 5.

Assuming that the jurisdiction has been set up for data entry, the first step is to find and enter population data for the age range that is potentially subject to the jurisdiction of the juvenile court. Although many resources are available in some states to obtain these data, OJJDP provides a consistent resource on the Easy Access to Juvenile Populations Web site (<http://www.ojjdp.ncjrs.org/ojstatbb/ezapop/>). After the population data are entered into the tool for a jurisdiction, the tool calculates whether a specific racial or ethnic group meets the 1 percent rule, at which point OJJDP requires that the jurisdiction examine this group separately. In this instance, examine DMC separately for Native American and other/mixed groups. Identify the jurisdiction (state, county, or other entity) and the dates

that the data cover, along with the relevant age range for youth at risk of contact with the juvenile justice system (in this instance, ages 10 through 17). The cells for entering this information, as well as the entry areas for the numeric data, are highlighted in yellow in the data tool. The only other information that is needed for the DMC data tool is the total state juvenile population for the age range under consideration. In this example, the age range is 10 to 17 years, and the total state population for this age range is 1,377,550.

Step 5: Determining the Availability of Data for Racial and Ethnic Groups

Next, determine which racial and ethnic groups are available for analysis. Ideally, a state will have the information available on each of the seven groups shown across the top of table 2. There are, however, several situations in which that may not be so. The numbers presented in table 2 are actual state data that present some of the difficulties a state may encounter. The two empty data cells for other/mixed-race youth, represented with two asterisks, are absent for specific reasons. With respect to the population entry, the estimation derived from the National Center for Juvenile Justice source provides no estimates for mixed- or multiple-race youth; these estimates are spread across the other groups. Second, the law enforcement systems in the state provide no arrest information on mixed-race youth; it simply is not in their set of categories. The juvenile court system, on the other hand, does report and record the categories (as shown in table 2). It is impossible, however, to know how to distribute the numbers of mixed race or other youth across the other categories of youth. This mixture of classification methods across the population estimates and across multiple juvenile justice data systems raises a quandary—there is no accurate way to make categories completely consistent across the data entry system.

For example, one could estimate the number of cases involving mixed or “other” youth at the arrest stage, but the basis for such an estimate would be questionable. It might be possible (but not easy) to go back to population counts of the 2000 census, but the population estimates available for more recent years do not have all categories—they estimate only the major groups. It might be possible to distribute the number of cases involving mixed-race youth across the other stages in the juvenile justice system (e.g., the referral, detention, and other stages) but that could leave the results open to some challenge. Keeping the category of “other/mixed,” as in the example, permits examination of whether any particular issues occur later in the system (e.g., in transition from referral to detention or conviction). Keeping this category means that the degree of DMC for some groups will probably be underestimated because other “other/mixed” youth will be in the population estimates and in the arrest information for those other groups but not in the referral, detention, and other counts. As a result, the rates of activity will be somewhat lower than if one had better information, which, in turn, means that estimates of DMC will tend to be slightly lower than the actual extent of DMC.

Step 6: Determining the Availability of Base Numbers

Determining what base numbers are available for calculating the rates is necessary at this stage. In figure 1, those numbers that the authors recommend as base numbers on which to calculate a rate are in rectangular boxes down the center of the figure. For example, in

calculating the rate of secure confinement (oval I in figure 1), the authors suggest that the appropriate base number be the boxed count listed for the number of delinquent (guilty) findings. In this example, the rate of confinement for white youth is 1.43 per 100 delinquent findings, $100 \times (148/10,373)$, and for African American youth the rate is 2.65 per 100 delinquent findings, $100 \times (153/5,778)$. Given a situation in which that base number is not available, the authors recommend using the preceding boxed number—in this example, the number of petitions (charges) filed (see table 3). The data tool will automatically select the preceding base for the rate if the preferred base is unavailable (all zeros).

Table 3: Identifying the Numerical Bases for Rate Calculations

Stage / Contact point	Preferred base for rates
Arrest	Rate per 1,000 population
Referral to juvenile court	Rate per 100 arrests
Diversion (prior to adjudication)	Rate per 100 referrals
Detention	Rate per 100 referrals
Petition/charges filed	Rate per 100 referrals
Delinquency finding	Rate per 100 petitions/charges filed
Placement in probation	Rate per 100 delinquency findings
Placement in secure correctional facility	Rate per 100 delinquency findings
Transfer to adult court	Rate per 100 petitions filed

However, if data for any stage of the analysis is missing, then the rates will be calculated on the basis of the stage preceding the calculation for which data is available. For example, when examining referral data, the preferred base for referral rates is the number of arrests. If arrest numbers are not available, then the population numbers (the preceding stage with data) will be used. Those analyzing the RRI data must therefore identify the numerical base used for each rate calculation and then understand which stages of the juvenile justice system (figure 1) to use to calculate those rates. If data are missing from one or more stages of the justice system, you will need to identify the base for each rate calculation. At this point, analysis of the index values becomes more complex. For example, in table 2, assume for a moment that arrest information was not available. Although the preferred rate for calculation of court referral rates is the rate per 100 arrests, because arrest numbers are unavailable, the rates are calculated per 1,000 youth. If that were the case, the referral rate for white youth would be 20.2 referrals per 1,000 youth; for African American youth, the rate would be 68.8 referrals per 1,000 youth. The resulting RRI value would be 3.40, leading to the conclusion that the referral process is the source of greatest disparity in the contact experiences of African American youth. However, the full data show that, in this instance, the greatest disparity is in the processes

that lead to arrest—whether that means the behavior of youth, the community processes that lead to the involvement of law enforcement, or the actual processes of arrest. The point is that interpretation of incomplete data is more difficult, leads to even greater ambiguity in identifying stages for examination, and therefore underscores the importance of seeking more complete information.

Step 7: Retrieving the Reports

Once the information is entered in the appropriate analysis tool, two reports are available for the basic RRI analysis. Examples of each report are provided below. The first report is race specific; it provides the rates of contact for white youth and a specific minority group and then provides the RRI value, along with an indication of whether the value is statistically significant (discussed below). This report is valuable in that it provides both the RRI value and the rates that were used to calculate the RRI value. Those rates may be examined to determine if the jurisdiction has a level of contact that is higher or lower than other jurisdictions. The second report is a summary of all RRI values for all minority populations, which provides a snapshot of the level of disproportionate contact that all groups may have (or not) with the juvenile justice system. Although this report also indicates which values are statistically significant, it does not display the rates of contact.

Step 8: Identifying Situations in Which Index Values Cannot Be Calculated

Although it does not occur in this example, there may be situations (particularly for smaller counties and for stages toward the bottom of figure 1) in which no white youth were processed in a particular stage. For example, if no white youth were transferred to adult court, the rate of adult court transfer is zero, meaning that it is impossible to calculate an RRI for that stage (this would require division by zero, which is mathematically impossible). There are two additional situations in which one might calculate a value but in which its interpretation would be questionable. The first of these is when the volume of activity is extremely low (less than five events in the target stage for the group being examined, e.g., less than five instances of African American youth transferred to adult court). The second is when the base number for calculating the rate (the denominator of the rate) is less than 50. In both of those instances, a small fluke occurrence might lead to an abnormally high (or low) number of events (e.g., transfer to adult court) and, given a small base number for calculating rates, a small change in the number of transfers would translate into a large change in the rate of transfers. In other words, at some point it is no longer feasible to examine such data and believe that the examination really provides a pattern of systematic behavior within the justice system, as opposed to a number that might fluctuate greatly on the basis of relatively small actual changes in the justice system. In both of these situations, the data models that OJJDP uses in its data analysis system will not provide numerical answers but rather will indicate that there are insufficient numbers to produce reliable results.

Report 1: Race-Specific RRI Calculations

Minority Report

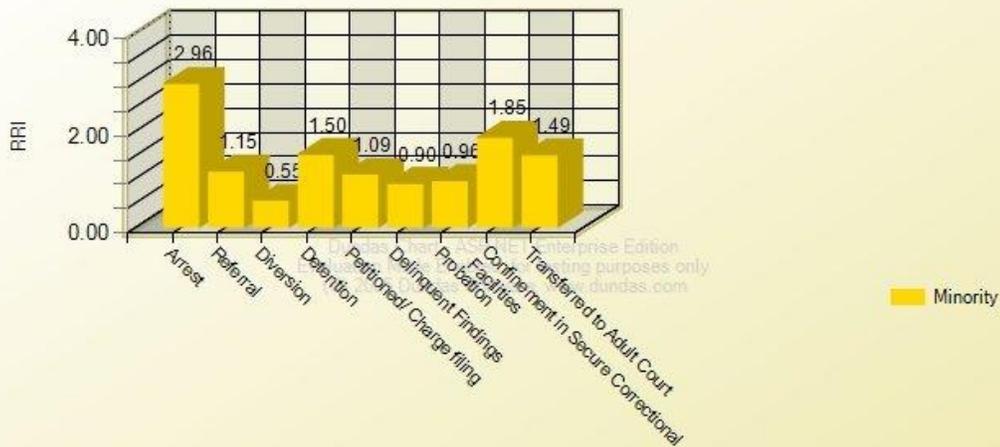
State: **OR** / County: **Statewide**

Reporting Period: **demonstration data - FY2006**
01/01/2006 through 12/31/2006

Select a Race: Black or African American (Non-Hispanic) ■

Data Items	White Rate of Occurrence	Minority Rate of Occurrence	Relative Rate Index
1. Population at Risk			
2. Arrest	63.58	188.50	2.96
3. Referral	31.79	36.49	1.15
4. Diversion	16.18	8.84	0.55
5. Detention	29.50	44.13	1.50
6. Petitioned/ Charge filing	67.21	73.12	1.09
7. Delinquent Findings	69.60	62.31	0.90
8. Probation	50.51	48.32	0.96
9. Confinement in Secure Correctional Facilities	1.43	2.65	1.85
10. Transferred to Adult Court	0.61	0.91	1.49

Black or African American (Non-Hispanic)



Report 2: RRI Summary Values

Summary Report

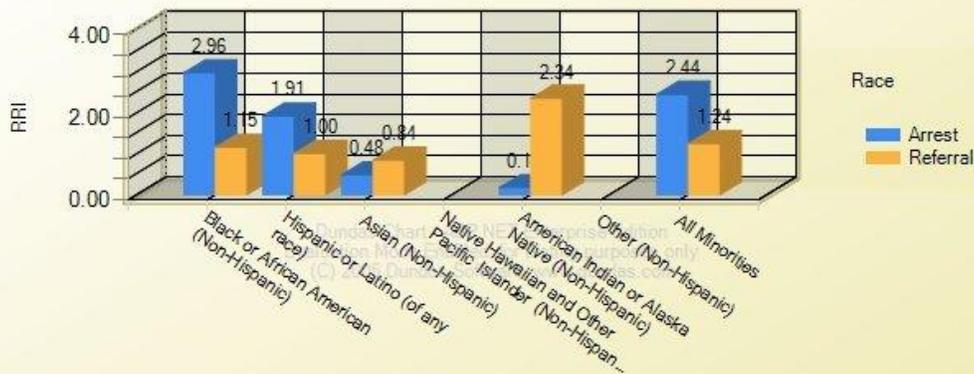
State: **OR** / County: **Statewide**

Reporting Period: **demonstration data - FY2006**
01/01/2006 through 12/31/2006

Select a Point of Contact: **Arrest** ■

Data Items	Black or African American (Non-Hispanic)	Hispanic or Latino (of any race)	Asian (Non-Hispanic)	Native Hawaiian and Other Pacific Islander (Non-Hispanic)	American Indian or Alaska Native (Non-Hispanic)	Other (Non-Hispanic)	All Minorities
1. Population at risk							
2. Arrest	2.96	1.91	0.48	*	*	*	2.44
3. Referral	1.15	1.00	0.84	*	*	*	1.24
4. Diverted	0.55	0.67	0.87	*	*	*	0.60
5. Detention	1.50	1.85	0.64	*	*	*	1.41
6. Petitioned	1.09	1.12	1.08	*	*	*	1.06
7. Delinquent	0.90	1.04	0.95	*	*	*	0.92
8. Probation	0.96	1.02	1.16	*	*	*	0.98
9. Confinement in Secure Facilities	1.85	2.94	**	*	*	*	1.95
10. Transfer to Adult Court	1.49	--	--	*	*	*	1.41

RRI: Arrest compared with Referral



Collecting DMC Data To Implement the RRI Tool

First, it is essential to become familiar with appendix A: Data Required To Populate the Cells of the DMC Relative Rate Index Matrix. This document provides an excellent road map from which to harvest population data and volume of activity data for all nine juvenile justice system decision points.

A number of situations exist in which the basic RRI model described above may be insufficient for the analytic needs of the identification stage. In addition to the calculations and issues of data manipulation, additional factors to consider include data availability, defining the minority groups to be studied, and pushing the RRI process so that it begins to point to areas to study further in the assessment process.

Specifying System Stages To Be Examined

Specifying the stages of the justice system to be examined is perhaps the most frequent situation in which jurisdictions modify the RRI process. This variation on a theme is played out in two directions. First, it may be the case that a jurisdiction lacks access to sufficient data to describe some of the stages outlined in figure 1. For example, some communities do not maintain sufficient records to adequately explore such stages as the diversion decision or the decision to refer a youth to the juvenile courts. As noted above in the discussion of the sample jurisdiction, when a stage is missing (court referral in the example above), the rate calculations for the stages following that missing stage (e.g., the cases in which a petition is filed) are based on the volume in the preceding stage (in this instance, the number of arrests). That substitution has several impacts that must not be overlooked. First, the RRI value that results from this calculation no longer represents simply the effect of one major decision, but the effects of two—both the referral to the juvenile court and the subsequent decision to file a petition of delinquency. Although the resulting RRI number for filing of petitions is labeled as “filing of petitions,” it is likely to be a larger number than the comparable stages in other jurisdictions because it is the accumulated effect of two sets of decisions.

Moreover, in terms of helping to focus attention on an appropriate stage for assessment, if the referral stage is missing, then one does not know whether to target the assessment study on that referral stage or on the subsequent stage of filing a petition. That will make the assessment study more difficult to design, more expensive to conduct, and less likely to actually pinpoint the areas in which intervention is most likely to be productive. Thus, the more missing stages that occur within the RRI analysis for a jurisdiction, the more problematic it will be to conduct an assessment and focus on changes within that system in a manner that will have maximum impact on reducing DMC. Although it is possible to calculate the RRI values with simply the population in a jurisdiction and one other set of numbers (e.g., the volume of admissions to secure confinement), such information would be of relatively little value in identifying areas of the justice system that might benefit from a variety of possible interventions. Beyond that, it would be unlikely that such a single set of numbers would be of much value in assessing the impact of changes in the justice system over time.

Adding a Stage to the Analysis

The second variation on this theme is in the opposite direction—what can be done when a jurisdiction believes it must add another stage to the analysis? In this instance, assuming that data of appropriate quality exist to describe such a decision stage, the difficulty is to add a stage to the analytic model in a way that augments the jurisdiction’s ability to make sense of the addition and also to compare this jurisdiction to others within the state or region. There are, of course, some very good policy reasons to add another stage or to subdivide cases into sets handled through a discretionary pathway as opposed to those prescribed by legislation or other agencies. The additional wrinkle in such an addition is that the analytic model that OJJDP tools use to calculate the RRI are relatively tightly integrated. It is not feasible to simply add a column or row to the models. As a result, those jurisdictions wishing to add a stage to their justice system model should contact their OJJDP state representatives to discuss and request technical assistance regarding that addition. In any event, one of the most critical elements of the state effort must be to ensure that all participating jurisdictions use consistent definitions of terms and data collection methods. This is especially important if some jurisdictions within a state are more likely to be home to the majority of minority youth. To obtain an accurate statewide picture of DMC issues, those jurisdictions with significant numbers of minority youth should record information using the same definitions and processes as other jurisdictions. If this is not the case, it is likely they will introduce some distortion into the measurement of DMC because of the differences in definitions and processes.

Selecting Minority Groups to Be Examined

Standards and guidelines. In addition to the stages of the justice system, the RRI process relies on identifying appropriate minority groups to be examined throughout the process for evidence of DMC issues. Several standards come into play in this selection. First, the basic selection of groups to be examined follows direction of the Office of Management and Budget (OMB), which has devised guidelines and groupings for addressing the issues of race and ethnicity and collecting such data. OMB’s guidance is available on the White House Web site, <http://www.whitehouse.gov/omb/>. In addition to the OMB information, a number of other fields, such as the study of health disparities (see the Health Research and Education Trust Disparities Toolkit at <http://www.hretdisparities.org/>), have gathered additional advice. Beyond the guidance of such general sources of information, jurisdictions may examine the census estimates for a particular state or jurisdiction. In general, as an OJJDP requirement, states should analyze information on each group that comprises 1 percent or more of the general youth population (e.g., the ages at risk of contact with the juvenile justice system or of coming under the jurisdiction of the juvenile court system).

Issues in counting Hispanic youth. It is clear that additional issues arise in the identification of groups. These issues are addressed in depth in chapter 7 of this manual, on DMC of Hispanic youth, so the discussion here is simply an introduction to the issues raised.

The rapid growth of Hispanic/Latino communities in the United States, for example, raises a relevant challenge. Hispanics, as a pan-ethnic group, can represent multiple races,

depending on national origin (e.g., black, indigenous, or of European or Asian descent). As such, the identification of race for recent immigrants is more a foreign term than a term of meaning—ethnicity is more relevant. Similarly, generational status and acculturative stress may reflect more meaningful information for intervention but may represent challenges for data collection. Such challenges and stress may even extend to the selection of language to be used; for example, whether the local community prefers the terms Chicano, Latino, or Hispanic may be a source of tension. Although recommendations for data collection have been offered,³ one important issue is that the terminology be consistent across jurisdictions and across agencies within a jurisdiction.

Consistent with *Guidelines for Collection and Recording the Race and Ethnicity of Juveniles in Conjunction with Juvenile Delinquency Disposition Reporting to the Juvenile Court Judges' Commission*, discussed in Chapter 7 and included in its entirety as an appendix, OJJDP recommends that jurisdictions ask two questions to more accurately determine the issue of ethnicity and race for youth in the system: (1) a question about ethnic identification (Hispanic, Latino, or the appropriate local terminology) and (2) a question about racial identification. When jurisdictions ask one question instead of two, they lose not only important information but also information that is critical to accuracy. Without a true count of Hispanic youth in the justice system, jurisdictions cannot accurately assess the need for bilingual/bicultural staff and services, written materials in Spanish, certified translators, culturally appropriate programs, and so on, nor can they determine whether dollars allocated to services for Hispanic youth are sufficient and whether monies have been judiciously spent. Moreover, generational status or length of time in the United States may influence linguistic competencies in multiple languages, not just English. Such information is critical to providing needed services for youth whose linguistic choice is non-English.

Potential inconsistencies in data definitions. A state or jurisdiction with multiple data systems may encounter problems if these systems use inconsistent methods to collect data about race and ethnicity. This may lead the jurisdiction to identify the same youth in several ways as he or she travels through the justice system, primarily because the data collection systems have different classification schemes and categories into which they subdivide their clients. This is essentially the problem that was previously presented in table 2. Although it may be possible to creatively identify combinations of categories in which the data systems may be treated as consistent, one should exercise great care whenever comparatively analyzing the data from classification systems that differ with respect to race and ethnicity.

Common Issues in DMC Data Collection To Obtain RRI Values

Missing Data Elements

In many juvenile justice information systems, it is not feasible to obtain all of the data elements for the complete RRI model. For example, information on some stage such as referral or diversion may not be recorded or is reported only in a format that does not include race and ethnicity. In such instances, there is little alternative but to exclude these stages from the analysis. As noted earlier, this will have the effect that the rates that are

available may be based not on the immediately preceding stage of the system but on a stage that is one or more levels “upstream” from the preferred stage. As an example, if the referral information is not available, then the volume of diversion, detention, and petitions filed will all be calculated as rates per 100 arrests rather than as referrals (the preferred base for these rates). And if the arrest information is also unavailable, then the rates will be calculated on the basis of population: “per 1,000 in the population.” In either of these cases, the interpretation of the resulting RRI value is more difficult for two reasons. First, the value is likely to be higher than for other jurisdictions because it contains the impact of DMC in two (or more) major decision stages. Second, because the value contains the impact of multiple decision stages, it is more difficult to identify specific areas that may need attention for the assessment and intervention stages.

Unavailable Hispanic Arrest Data

National FBI procedures for the Uniform Crime Reports data do not require that jurisdictions report data on non-Hispanic groups or on Hispanic groups. As a result, the analysis of arrest information for Hispanic youth may be problematic. In many jurisdictions, this problem may be avoided by using state or local data systems for law enforcement records that provide information in the required format or that may be programmed to provide such information. In other jurisdictions, however, this may not be available, which creates several difficulties. First, the data on arrests of Hispanic youth are probably included in other groups’ data, the arrest index value will be missing for Hispanic youth, and their impact will be included in other groupings, including white youth. Second, the referral index value will be missing for Hispanic youth because there is no base number for arrests with which to calculate rates of referral for Hispanic youth. One solution for this situation is to ignore the use of arrests as a base (set all arrests for all youth to zero) and then all referral rates will be comparably based on the population. For a more thorough treatment of these issues, see chapter 7 in this volume: *DMC Data and Intervention Strategies for Serving Hispanic Youth in the Juvenile Justice System*.

Data Definitions and OJJDP Recommendations Don’t Match

Each state has a separate juvenile code, and in many states there are multiple information systems that capture data according to slightly different operational definitions. The recommendations given earlier (table 1) are only recommendations, not absolute requirements. The goal is to adhere as closely as possible to the meaning and intent of the OJJDP recommendations. This will undoubtedly require some interpretations and some decisions at the state level.

One of the critical issues in the application of these interpretations is that the same definition needs to be applied within a state across time, across each racial/ethnic group, and across jurisdictions. As long as the definitions are applied consistently, no biases are introduced into the use of the index. One of the virtues of using an index is that it compares the relative occurrence of events—the emphasis being on the word *relative*. As a result, the differences in definitions between state juvenile justice codes will have a considerable impact on the volume of activity when one state is compared to another.

However, when the relative treatment of population segments is compared, the differences in definitions should not have as much impact.

A Small Volume of Activity Is Hard to Measure

This issue of small numbers may refer to the overall number of youth in the system, particularly because those numbers shrink as we examine the “end” of the system, or it may refer to the relative scarcity of some racial/ethnic subgroups. In either instance, small numbers make it more difficult to use statistical procedures to understand what is happening in the justice system. The net effect of such small volumes of activity is to decrease the power of statistical tests. In other words, it becomes more difficult to separate “real” cases of disparities in handling of minority youth from the differences that may occur because of random variation. As a general approach, the reports on the DMC data Web site are set up not to provide results in two situations: the number of events is less than five, or the base for calculating the rate is less than 50 events. Under those circumstances, it is difficult to detect *real* disproportionate contact for minority youth.

Strategies for increasing statistical power include at least two methods: combining multiple years and combining jurisdictions. For example, the state might combine several counties into one region for analytic purposes. In either case, there is an unavoidable tradeoff in which the specificity of being able to locate disparities in a particular year or in a particular place is weakened in order to gain the ability to use a statistical test to see if there are actually disparities at work in the more general setting.

Sometimes there is just not enough activity to use statistical procedures; other sources of information may be needed, such as qualitative studies. In some instances, it may be necessary to rely on other processes, including interviews, observation, focus groups, or conversations with the community at large.

In earlier years, the OJJDP minimum standard was that the state must examine at least three counties. The selection of these counties reflects the counties with the greatest proportions of minority youth within their juvenile population, as well as reflecting those jurisdictions within the state that contain the greatest numbers of minority youth. The intent of the minimum standard is to enable the state subsequently to make data-driven decisions in selecting appropriate local jurisdictions for targeted DMC reduction efforts. More recently, due to the increasing recognition of the importance of implementing DMC reduction at local levels and the increasing number of states with targeted DMC reduction sites, OJJDP has required that states track DMC data from their DMC reduction sites on a regular basis (preferably annually but every 3 years at a minimum). Therefore, a state should collect data on all counties that are likely to be (or become) specific targeted or pilot sites for DMC activities in the foreseeable future. The state should select which counties to track with some care because the expectation is that, for purposes of monitoring the projects, there will be continuity in the set of counties that are the subject of state reporting on a recurring basis.

A Racial “Minority” May Be the Statistical Majority

There are a growing number of jurisdictions in the United States in which one or another group that has been historically denoted as a “minority group” is actually the statistical majority, and a larger number of jurisdictions in which the “white, non-Hispanic” group is not the statistical majority. These changes in demography raise the question of whether the RRI values should be calculated with reference to the white, non-Hispanic rates of contact. From a mathematical perspective, the groups will remain in the same relationship to one another regardless of which group is being used as the reference group, the basis of comparison. However, for purposes of presentation and understanding, it may be useful to change the reference group that is used. The DMC tool allows states to specify the group to be used as the reference point for RRI calculations; this may be separately specified for each county within a state.

Homogenous Communities With Few White Youth

There are some communities in which the overwhelming majority of youth in the community are members of a racial “minority group” rather than being members of the “white, non-Hispanic” group. Although there may not be issues of disproportionate minority contact **within** such a community, the experiences of youth in that community may be so different from other places within the United States that DMC is created on a larger scale (statewide or nationally). In other words, even if all youth have the same experience, it is possible that, compared to minority youth in other jurisdictions, they may experience markedly greater (or lesser) contact with the justice system—in ways that may create many of the issues related to DMC—even if there is little apparent disparity as reflected in the RRI values for the jurisdiction.

In the absence of a statistically appropriate reference/comparison group within the jurisdiction, state or national rates of juvenile justice activity may be used to determine if the youth in this jurisdiction have different experiences that warrant DMC attention. National DMC information may be obtained from the national DMC databook, <http://ojjdp.ncjrs.gov/ojstatbb/dmcdp/index.html>. If it is appropriate to obtain other forms of comparative rates, the OJJDP state representatives can assist in designing the request for such comparative data through a technical assistance request.

Likewise, there are likely to be some instances in which differences between various minority groups within a jurisdiction need to be studied rather than comparing their differences with white youth. The DMC Web site will permit the analysis of one minority group in comparison to another by changing the reference group from white, non-Hispanic to some other group.

Systematic Analysis of DMC RRI Values: Five Steps in Interpreting and Analyzing RRI Values To Drive Decisionmaking

Experience with the RRI process over several years has created a series of steps in the analysis of index values in order to drive decisionmaking within a community. The objective is to identify a small set (maximum of 3–5) contact point/racial group

combinations that will be the focus of later assessment, intervention, and evaluation work. In other words, the objective is to select points of focus for the ongoing DMC activity within a community. The five-step process involves:

1. Identifying those RRI values that are statistically significant.
2. From among RRI values that are statistically significant, identifying those with the greatest magnitude, that is, those that reflect the greatest degree of disproportionate contact.
3. From among statistically significant RRI values, identifying those that involve the greatest volume of activity, that is, the largest number of minority youth who potentially may be affected.
4. Comparing the RRI values noted in step 2 or 3 with the range of RRI values across other jurisdictions and noting which jurisdictions may be particularly different from the others.
5. Examining the local context for each of the RRI values identified in steps 1–4 to consider which jurisdictions may be the more feasible target populations for activities designed to reduce disproportionate minority contact.

Step 1: Assessing the Statistical Significance of RRI Values

In statistics, a result is termed significant if there is statistical evidence that a difference in rates is **unlikely to have occurred by chance**. A **statistically significant difference** simply means there is statistical evidence that there is a difference; it does not mean the difference is necessarily large, important, or significant in the usual sense of the word. Statistically significant does *not* mean that a difference is *big* or *important*. A statistically significant difference *does* mean that there is statistical evidence that a difference in rates is **unlikely to have occurred by chance**. In other words, we can have confidence that 95 times out of 100 the difference was not random.

In the data analysis system provided by OJJDP on the DMC Web site, those RRI values that are statistically significant at a level of 95 percent confidence are designated by red numbers in bold font. Standard statistical textbooks will warn that the ability to reach statistical significance (statistical power) is a combination of the size of the difference between groups and the number of observations. In this case the number of observations will be the volume of case activity occurring on an annual basis. Thus, some RRI values that appear very large, but involve very few cases, may not be statistically significant. The reverse may also be true: RRI values that reflect apparently small differences in the processing of minority youth may be significant if they involve large volumes of activity. Nonetheless, the first filter for analysis and interpretation of the RRI values is for statistical significance because those are the areas in which there is sufficient confidence that, indeed, some level of disproportionate minority contact is occurring.

Step 2: Examining the Magnitude of RRI Values

Among those RRI values that are statistically significant, some will appear to be more important than others. The objective in this second step is to identify the RRI values in

which the highest degree of disproportionate contact occurs. The philosophy here is to ask a community to focus on those stages in their justice system where the greatest degree of difference between racial and ethnic groups occurs.

It is useful to recall that the RRI is created by dividing the rate of minority contact by the rate of majority contact. If the two rates are equal, then the resulting index value will be 1.00. Values that are both **more than and less than 1.00** thus reflect disproportionate contact. In two stages of the system diagram, lower volumes of activity will reflect a disadvantage for minority youth. If the diversion index is less than 1.00, this means that a lower rate of diversion is used for minority youth. In the probation index, a value less than 1.00 typically means that a more restrictive option than probation is being used for minority youth. In these instances, a low value will be problematic for minority youth. However, because the range of values only goes between 1.00 and 0.00, it may not appear that the index values for these stages are as “serious” as those for other stages, in which the more usual values range up from 1.00 without an upper boundary. To deal with this situation, it is useful to consider that an index of 2.00 represents the same degree of disproportionate treatment as an index of 0.50: Both indicate that one group has a rate that is two times greater than the other. Similar equivalences exist between 3.00 and 0.33, 4.00 and 0.25, and 5.00 and 0.20. Thus, an index of 0.33 for the diversion stage would reflect the same degree of disproportionate contact as an index of 3.00 for the referral stage.

Table 4 summarizes the areas in which RRI values greater than or less than 1.00 are of greatest concern:

Table 4: Relative Rate Index (RRI) Values

Area of concern	Decision stages or contact points
More than 1.00	Arrests Referrals to juvenile court Cases involving secure detention Cases petitioned Cases resulting in delinquency findings Cases resulting in confinement in secure juvenile correctional facilities Cases transferred to adult court
Less than 1.00	Cases diverted Cases resulting in probation placement
Note: RRI values that cause DMC concern can be greater than 1 or less than 1.	

Step 3: Examining the Volume of Activity

As cases progress through the juvenile justice system, the total volume of activity tends to decrease. The point of that observation is that one criterion for determining where to focus DMC reduction efforts is to examine those locations within the justice system that may have the impact on the greatest number of minority juveniles. From that vantage

point, it may be useful to identify those contact points (among the ones that are noted as being statistically significant) in which the greatest numbers of minority youth are involved. In applying this logic, it is important to remember that, for the diversion stage, the number of cases that is of concern is really the number of youth who could have been diverted but were not. From that perspective, the relevant volume would be the numbers of youth not diverted. Examining the volume is essentially a judgment call based on the total number of minority youth in the juvenile justice system of the jurisdiction. As a starting point, it may be useful to identify no more than 8–10 combinations of decision points and racial groups in which the volume appears to be the greatest (5–6 would be a better target, if achievable).

Step 4: Examining the Comparative Magnitude of RRI Values Relative to Other Jurisdictions

In choosing points of contact for further examination and assessment, it may be useful to compare the degree of DMC in a jurisdiction that has the same points of contact as other communities. For example, if a community has a relatively high RRI value compared with other places, it may be the case that standard practices or policies from other jurisdictions may be introduced in ways that facilitate the reduction of DMC. On the other hand, if an RRI value is relatively lower than in other places (even if it is statistically significant), it may be relatively more difficult to achieve additional DMC reduction.

The information needed to conduct this comparative analysis may be generated by examination of the collective entries in the OJJDP Web-based DMC data system. At the time of this report, data for 715 jurisdictions have been entered in this system. A tool for comparing a specific jurisdiction to the combined data from these 715 jurisdictions is available in the DMC Tools section of the OJJDP Web site. Specific instructions are available on this Web site and are included in the following section on county comparisons. The information from these more than 700 jurisdictions is used to place each RRI value into the percentile grouping it represents, relative to all jurisdictions, or to all jurisdictions within specific population size groupings. These percentile groupings represent the percentage of jurisdictions that have an RRI value equal to or smaller than the jurisdiction being examined. In most instances, a smaller percentile value means that the RRI value for that decision stage and racial grouping is “better” in the sense that the jurisdiction has an RRI value lower than many of the other jurisdictions and thus has less of an issue with DMC. For diversion and probation RRI values, however, that interpretation is reversed: A smaller value means that the extent of DMC is higher than in other jurisdictions. The 50th percentile ranking would mean that the jurisdiction is at or very near the median RRI value for that decision point and racial grouping. The objective of this criterion is to find those jurisdictions that reflect the highest relative degree of DMC (a higher percentile for most decision points, but a lower percentile for diversion and probation).

The basis for comparison. During 2006–2007, data were entered on the OJJDP Web site for 715 jurisdictions. It should be noted that the data reported during this year include statistics from earlier years because of normal lags in data reporting. In addition, because

those lag periods differ among the states, and because this was the first full year of using the Web-based data collection system, the data reported for these localities were from several different years. Because DMC data usually do not change dramatically across time, such rough comparisons still have value for those who wish to compare localities. To maximize the utility of this DMC Local Data Comparison Tool, OJJDP plans to update it periodically.

In order to facilitate comparisons for roughly equivalent-sized jurisdictions, the 715 jurisdictions have been grouped into approximate thirds on the basis of the size of the total juvenile population, as follows. There remains an option for comparison with the entire set of jurisdictions. Additional comparisons may be added over time and will be clearly noted on the comparison tool as they become available.

- Less than 5,000 total youth.
- 5,000 through 19,999 youth.
- 20,000 or more total youth.
- All jurisdictions.

Using the RRI comparison tool. The comparison tool is available from the OJJDP “DMC Tools” Web page (<http://ojjdp.ncjrs.gov/dmc/tools.html>) or as an Excel spreadsheet (downloaded from <http://web.pdx.edu/~feyerhw>). The following pages illustrate the output and reports available from the tool. In the example, data from one community are used to illustrate the mechanics of using the tool and an interpretation of the results (see figures 2 and 3, following the DMC tool examples).

County Name ANYWHERE County

Select County Size for Comparison 1 (1 = Large, 2 = Medium, 3 = Small, 4 = Comparison to all counties)

Comparison to be used: Compared with jurisdictions reporting in 2006–7 and having 20,000 youth or more.

	Black or African-American	Hispanic	Asian	Native Hawaiian/Pacific Islanders	American Indian or Alaska Native	Other/Mixed	All minorities
2. Juvenile arrests	5.67	1.13	0.52	*	1.45	*	2.40
3. Referrals to juvenile court	0.83	0.95	1.01	*	1.16	*	0.87
4. Cases diverted	0.90	1.06	0.82	*	0.90	*	0.93
5. Cases involving secure detention	1.28	0.96	1.05	*	1.86	*	1.22
6. Cases petitioned	1.40	1.54	1.70	*	1.72	*	1.46

7. Cases resulting in delinquent findings	0.93	0.84	1.23	*	**	*	0.93
8. Cases resulting in probation placement	1.00	1.05	1.02	*	**	*	1.01
9. Cases resulting in confinement in secure juvenile correctional facilities	1.12	0.74	**	*	**	*	1.07
10. Cases transferred to adult court	1.79	2.88	**	*	**	*	2.03

Note: All cells for entry are highlighted in yellow.

Instructions:

1. Enter the name of the jurisdiction in cell B1.
2. Select the appropriate comparison group for this jurisdiction, based on the total number of youth of an age at which they might be eligible for juvenile court jurisdiction.
3. Enter the RRI values for each population group and stage of the juvenile justice system. This may be handled by typing the values or by a cut-and-paste operation from the DMC Web site or RRI spreadsheet.
4. Select the type of comparison you want from the tabs at the bottom of the page:
 - (a) The Percentile tab shows the percentile groupings for the RRI values and provides some general guides to interpretation of the findings. Start your analysis using the percentile tab. (The other tabs and materials make more sense, once you understand the ranking of your county on this page of results.)
 - (b) The Combined Percentile tab graphs the percentiles for all groups and decision stages.
 - (c) The Percentile Charts tab shows the percentiles for all decision stages separately by group.
 - (d) The RRI Comparison Charts tab contains separate charts for each population group—showing the range of RRI scores for that group across all stages—and plots the RRI score of your jurisdiction in the range of scores for comparable sized jurisdictions. The range of RRI values is shown by the 20th and 80th percentile as well as the median RRI value for each decision stage.

ANYWHERE County

Percentile Groups

Compared with jurisdictions reporting in 2006–7 and having 20,000 youth or more.

	Black	Hispanic	Asian	Native	Other	All
Arrest	95	55	90	0	0	70
Referral	15	20	95	0	0	15
Diversion	70	85	80	0	0	75
Detention	30	15	85	0	0	40
Petition	95	99	95	0	0	99
Delinquency	30	5	95	0	0	25
Probation	70	80	90	0	0	75
Corrections	25	10	0	0	0	25
Transfer	65	75	0	0	0	75

Note: No information is presented for "Hawaiian or other Asian and Pacific Islands" youth because fewer than six jurisdictions reported on that population segment. A value of zero means that the data are not present or are not reported.

General interpretation: This jurisdiction has an RRI score for the designated demographic group and decision point in the juvenile justice system that is numerically higher than the indicated percentage of the jurisdictions reporting to the OJJDP Web site. For example, if the value in the cell for "Arrest" and "All" is 70, this would mean that this jurisdiction has an RRI value that is numerically greater than 70% of the jurisdictions reporting to OJJDP.

Users of this information should keep in mind that the RRI scores for the diversion and probation stages are typically the reverse of the other stages: A lower numeric value typically means under-utilization of diversion and probation (two less restrictive, therefore desirable options). However, a greater numeric value means greater utilization of diversion and probation for minority youth.

Figure 2: Percentile grouping: RRI Values for African-American Youth

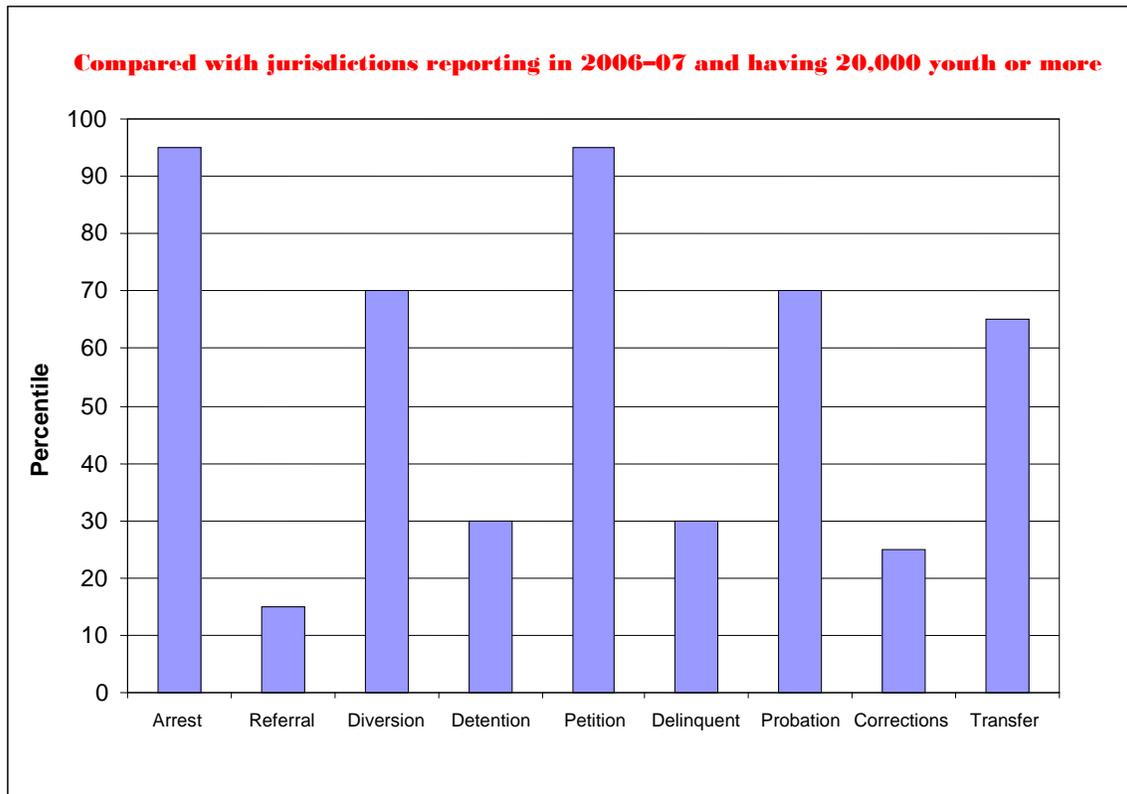
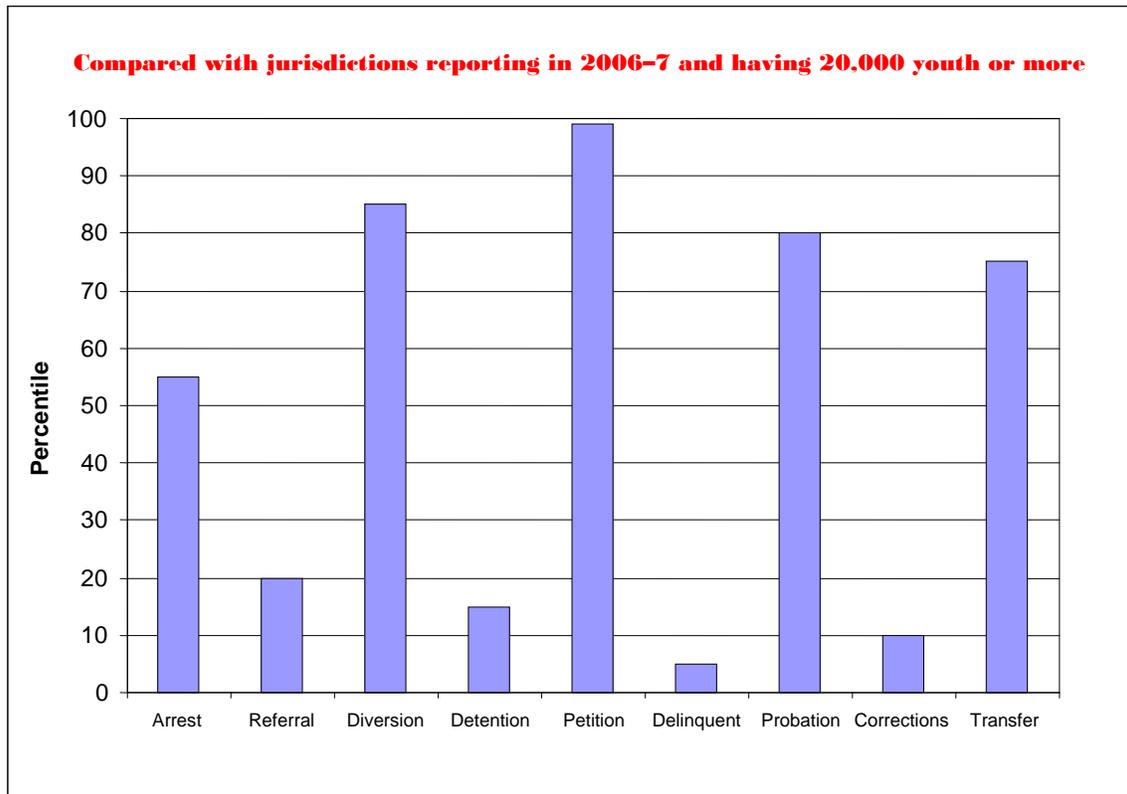


Figure 3: Percentile grouping: RRI Values for Hispanic Youth



Step 5: Considering Whether the Agency and Community Context Support DMC Reduction

Jurisdictions use the identification stage, in large part, to select fruitful areas (combinations of decision points and racial groupings) to focus their assessment and intervention efforts. The selection of such areas must be informed not only by the statistical properties of the RRI values but also by practical considerations such as the following:

- Is the agency involved in that decision point amenable to change?
- Have there been recent events (public relations issues) that make a change in DMC patterns more or less likely?
- Are funds or resources available that might assist (or hinder, if lacking) the DMC effort at this decision point?
- Is strong leadership available that is committed to addressing DMC issues?
- Are best practices models for this decision point available and applicable?
- Is there support for DMC reduction within the affected minority group and within the political leadership of that group?
- Are there issues with the affected minority group regarding media attention at this decision point (e.g., potentially high visibility events that could generate support or resistance for DMC)?

It is important to consider these issues and decide whether the context for a particular decision point and racial group combination represents a viable selection for intervention. If not, the data should still be monitored, but other areas can be selected as initial targets for attention.

Combining the Five Steps

The RRI Analysis Tracking Sheet (table 5) shown below is designed to organize the results of this systematic analysis. Within each of the cells in table 5, it is possible to insert up to five letters: “S” for those combinations that are statistically significant, “M” for the subsets that have the greatest magnitude, “V” for the subsets that represent the greatest volume of minority youth potentially affected, “Cm” for the subsets that have the highest comparative level of DMC concerns, and “Ct” for the subsets that appear to have a supportive context for DMC reduction. Ideally, there will be a small set of combinations of the contact stage and racial grouping in which four or five of the letters will be present in the applicable cell. These are reasonable targets for the assessment and intervention stages of the DMC process.

Table 5: RRI Analysis Tracking Sheet

Contact Point	Black or African-American	Hispanic	Asian	Native Hawaiian or other Pacific Islander	American Indian or Alaska Native	Other/Mixed
2. Juvenile arrests						
3. Referrals to juvenile court						
4. Cases diverted						
5. Cases involving secure detention						
6. Cases petitioned (charges filed)						
7. Cases resulting in delinquency findings						
8. Cases resulting in probation placement						
9. Cases resulting in confinement in secure juvenile correctional facilities						
10. Cases transferred to adult court						

Directions: Use this tracking sheet to organize your analysis. Fill out the chart with RRI and volume data, using the following keys: S = significant, M = magnitude, V = volume, Cm = compared with medians of 715 counties. Ct = Context is supportive of DMC reduction.

Continued Monitoring of DMC

Purpose

The purpose of the monitoring activity is at least threefold:

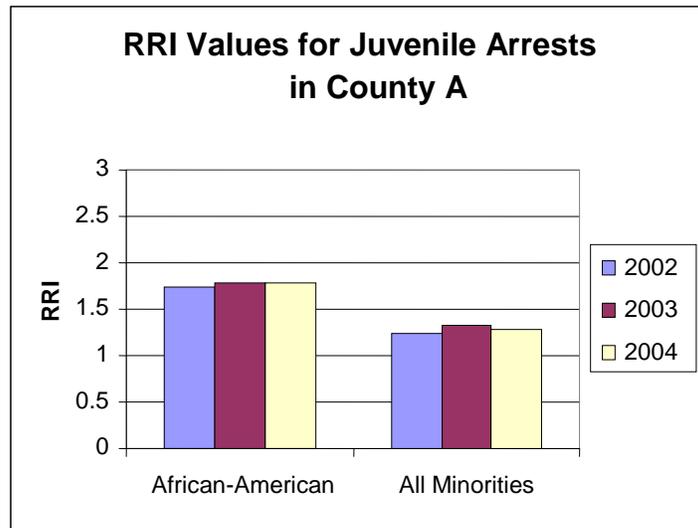
- The ultimate question that jurisdictions must answer is: Has DMC been reduced? Whether such a change is directly attributable to specific DMC efforts is a secondary issue that requires a specific evaluation, but the first issue for any community is determining whether a high rate of DMC has been reduced and whether the rate of DMC is increasing or decreasing over time.
- When rates of DMC change, adjustments can be made in the intervention strategies—selecting the next targets and making sure that past gains in DMC reduction are not lost and that the system is managed in a consistent manner.
- Monitoring and providing feedback of simple data may encourage change. Positive results may provide tremendous encouragement for DMC efforts. The ongoing monitoring of DMC rates keeps the issue alive and fuels the urgency to reverse DMC.

Using RRI Values for Monitoring

This involves assessing multiple years of information and looking for patterns in the data. The following section includes examples of some of the patterns jurisdictions might expect. The RRI scores and the graphic materials represent the actual results in several counties in a Midwestern state.

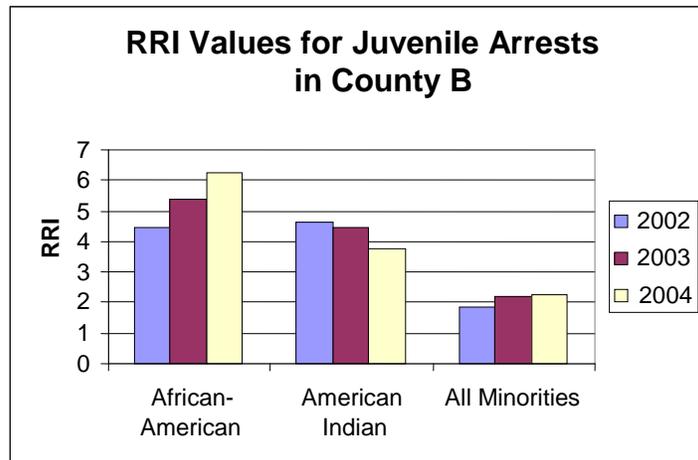
Constant values. In sample graph 1, relatively flat RRI values indicate system stability and generate greater confidence that the RRI pattern reflects real differences in minority contact rates. In this instance, there is a pattern that African American youth have a greater volume of arrest activity relative to that of white youth and that this pattern is relatively consistent across time. The same consistency applies to the RRI values for all minority youth. In this county's instance, the arrest stage was not targeted for DMC intervention, and the display simply indicates that not much has changed here.

Sample graph 1



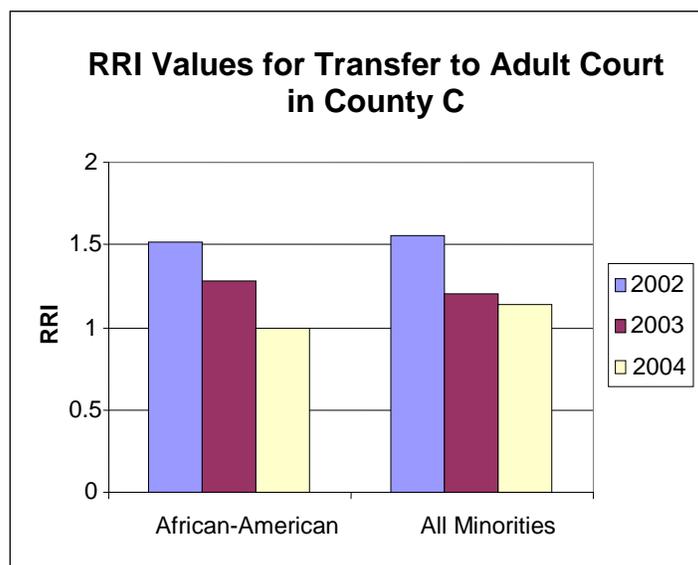
Increasing RRI values. Sample graph 2 shows a second pattern of increasing RRI values that may appear over time. In this instance, the growth generated a concern that the arrest area for African American youth shows an increasing level of DMC and, therefore, should be examined carefully to become part of ongoing intervention efforts.

Sample graph 2

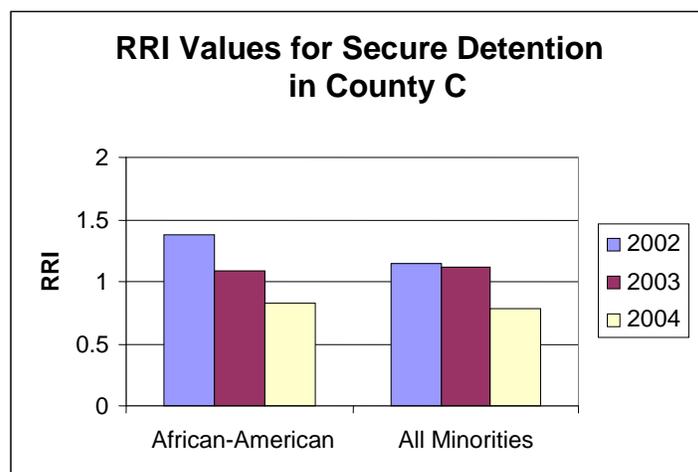


Decreasing RRI values. In sample graphs 3 and 4, which show examples from the same county, it appears that DMC issues are headed in an appropriate direction, whether this is due to system change and interventions or to natural changes such as demographic or economic shifts. In this instance, however, because the target for intervention in the DMC arena involved court processing, it appears possible that the intervention has had a desired impact on DMC issues within the court system. A more extensive evaluation would be required to support such a conclusion, but the results are promising.

Sample graph 3

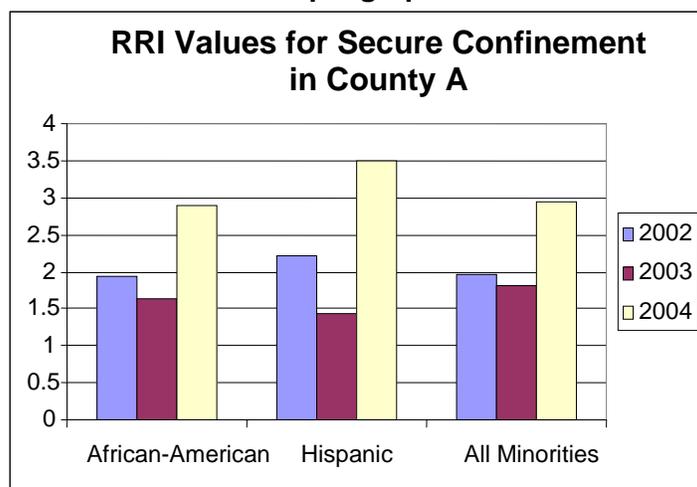


Sample graph 4



Mixed results over time. The system may be unstable relative to DMC issues; that is, the findings for any single year may be a statistical artifact. If the swings are pronounced and the base of volume is large, as is the case with county A (sample graph 5), this may be an area of the system that is undergoing considerable stress and change, an area to watch carefully with respect to DMC and as a possible target for systematic intervention. Discussions with county personnel revealed that the overall use of secure confinement in this county is declining.

Sample graph 5



Interpreting the Results

Relating any changes in rates or index values to the assessment results and to intervention strategies becomes important. In the brief discussions above, one may see some relationship between changes in DMC levels and possible intervention strategies. In the case of county B, the discussion of these results generated a hypothesis that importation, an influx of African American youth, may be one mechanism by which increasing levels of DMC are created (see chapter 2 for more details on importation). The results of monitoring activity alone are not sufficient to establish that the intervention(s) designed to address DMC are responsible for any changes observed in the monitoring process. For that purpose, an evaluation study is more appropriate; some approaches to that topic are outlined in chapter 5. However, as a first set of information, the monitoring process can provide jurisdictions a sense of whether things are moving in the intended direction.

As part of the process of interpreting results, it is also useful to consider other potential explanations for changes. This consideration will give the analysts and policymakers who are working on DMC issues a greater understanding of the context in which they are operating and the way in which they may productively use the monitoring results. Jurisdictions must consider at least four alternatives in addition to simply concluding that the DMC intervention is working as planned (or not working at all).

- The first of these is the prospect of changes in statutes and/or interpretations of statutes and policy. To the extent that the juvenile justice system has changed (e.g., significant new statutes or changes in decisionmaking authority have occurred), the data collected or the assumptions about the juvenile justice system relationships may no longer be comparable across time. Monitoring results may simply reflect the fact that the data are not comparable rather than indicating a fundamental change in the relative handling of minority youth.

- Demographic changes in the state or locality can affect DMC trends. This often implies that changes are taking place over time in the population demographics of the community. These trends bear watching to determine what issues might have an impact on the effectiveness of the juvenile justice system.
- The overall use of the juvenile justice system, budget constraints within the system, and philosophies about appropriate handling of juveniles may change the rates at which activity occurs that leads to contact for juveniles, including minority youth. As was noted in county A above, there is a dramatic shift in the use of secure confinement, partially based on philosophical reasons but also driven by changing budget models. Those changes in rates may make it difficult to compare the RRI values across time.
- Finally, changes in data collection systems or standards may occur that alter the way in which youth are categorized. For example, earlier in this chapter, the authors examined the impact of asking Hispanic youth to identify themselves with one question (What is your race or ethnicity?) as opposed to two questions (What is your race? What is your ethnic identification?). Villarruel and his associates argued that changing the way in which such data are collected may dramatically alter the statistical portrait of Hispanic youth.⁴ If such a change were implemented in any of the juvenile justice information systems within a jurisdiction, the results of the RRI process would not be comparable across the time boundaries of that change, and a monitoring process would provide misleading results.
- The result of considering such factors may lead a jurisdiction to conclude it is necessary to go beyond comparing the RRI values to explore data patterns across time. In that context, it may be useful to consider options such as:
 - Repetition of the assessment analyses that originally supported the selection of intervention strategies.
 - Additional qualitative and quantitative strategies for understanding what is different, or why nothing seems to be different.
 - Specific evaluation studies designed to establish the relationship between interventions and changes in the DMC levels within the jurisdiction.

Important Caveats

The consideration of a monitoring strategy, along with the experience of those jurisdictions that have engaged in DMC work at some point, suggests that the following caveats be taken into account in any monitoring process:

- **Change takes time.** Considering that the juvenile justice system is a dynamic set of systems, with many cases under consideration at any one time, it is not surprising that changing the nature of the process takes considerable time and

effort. Expect that some results will show up slowly over time rather than as discrete and immediate changes in the monitoring graphs.

- **Monitoring is most effective when it is conducted with some frequency.** OJJDP requires data updates at least every 3 years, but more accurate and useful monitoring is conducted more frequently—often annually or, in some instances, quarterly or monthly.
- **Monitoring feedback needs to be at the level at which DMC occurs.** Feedback also needs to be monitored at the targeted DMC reduction sites as well as at the state level.
- **At local levels, monitoring (or at least the display and interpretation of the results) should be housed within an appropriate agency that can present information with legitimacy and credibility.** The use of graphic displays such as those presented above may assist in making the material clear to audiences and to policymakers.

Endnotes

1. Although OJJDP requires states to report DMC data at least every 3 years, the Office encourages states to invest in targeted DMC reduction efforts at the local level and report DMC data at these local DMC reduction sites regularly on a more frequent basis.

2. A substantial body of research exists that indicates juveniles of Hispanic/Latino origin may experience contact with the juvenile justice system that is substantively different from that of other groups. Because Hispanic/Latino is not a race, this combined term—*race and ethnicity*—is used to serve as a recommendation for jurisdictions to systematically and purposefully document how data are collected for Hispanic youth.

3. See F.A. Villarruel, N.E. Walker, P. Minifee, O. Rivera-Vazquez, P. Peterson, and K. Perry, *¿Dónde Está la Justicia? A Call to Action on Behalf of Latino and Latina Youth in the U.S. Justice System*,” Executive Summary, East Lansing, MI: Institute for Children, Youth and Families. Michigan State University, 2002.

4. See Villarruel et al., note 3.

Appendix A: Data Required To Populate the Cells of the DMC Relative Rate Index Matrix

Howard N. Snyder

The data required for the DMC Relative Rate Index (RRI) matrix depend, in part, on the structure of each jurisdiction's juvenile justice system and the data resources that the various subsystems maintain. In general, the RRI matrix requires access to a wide range of information.

- Population data can be extracted from data files developed and/or maintained by the U.S. Census Bureau, the Centers for Disease Control and Prevention, or a state-specific resource, if available (when the validity of the federal data are questioned).
- Arrest data can be extracted from data files developed and/or maintained by state Uniform Crime Reporting (UCR) Programs or law enforcement agencies.
- Court processing data capturing case counts at various stages of court processing can often be obtained from the courts themselves. Most juvenile courts in the nation have automated case management or case tracking information systems.
- Detention data, depending on the administrative structure of the local juvenile justice system, can be obtained from the juvenile courts, the executive entity that provides detention services, or the detention centers.
- Placement data, depending on the administrative structure of the local juvenile justice system, can be obtained from the juvenile courts, the executive entity that provides placement services, or (when no other source is available) a national data collection effort entitled the Census of Juveniles in Residential Placement (CJRP).
- Each of these data requirements presents its own unique challenges to the persons who complete the DMC Relative Rate Index Matrix, but some general knowledge about each may be useful to all who are tasked with this responsibility.

Population Data

Every decade, the U.S. Census Bureau conducts the decennial census, essentially counting each person living in the United States on April 1st of that year and enumerating the age, sex, race, and ethnicity of each person. Between the decennial censuses, the Census Bureau produces population estimates based on the decennial data and other available information resources. In censuses prior to the 2000 census, persons were asked to report if they were of Hispanic origin (or not) and to select from a list of four categories the one race to which they most closely identified, either white, black or African American, American Indian and Alaska Native, or Asian and Pacific Islander. This process resulted in a racial/ethnic coding structure with eight categories (i.e., the four races each with subcategories of "Hispanic" or "non-Hispanic").

Once again, for the 2000 census, persons were ethnically self-classified as being of “Hispanic origin” or “not of Hispanic origin.” However, in 2000, the Bureau changed the race question. First, the “Asian and Pacific Islander” category was divided into Asian and Native Hawaiian and Other Pacific Islander, making five race categories. Then, instead of asking for a single race, persons were presented with the five racial categories and asked to “Check all that apply.” This process enabled individuals to classify themselves into one of 31 possible racial categories—5 single-race categories and 26 mixed-race categories. Together, the Hispanic ethnicity and the race question yielded 62 possible race/Hispanic ethnicity categories. The census did not ask the mixed-race respondents to identify the race to which they most closely identified. Therefore, all population data flowing from the U.S. Census Bureau for the year 2000 and after includes mixed-race categories.

For some uses, the existence of a mixed-race code causes problems. This occurs when a companion data system codes the race in single-race categories. For example, the FBI’s current racial coding structure in its Uniform Crime Reporting (UCR) Program codes arrestees into one of four races: white, black or African American, American Indian and Alaska Native, and Asian or Pacific Islander. How should analysts calculate race-specific arrest rates if all that were available to them were Census population data (with its 5 single race codes and its 26 mixed race categories) and the UCR arrest counts (with its 4 single race codes)? To calculate a race-specific arrest rate, divide the number of arrests in a specific racial group by the number of persons in the residential population who are of that racial group. To calculate these rates, the analyst could combine the two population counts for Asian and Native Hawaiian/Other Pacific Islander to form a new group that would be more congruent with the UCR’s Asian/Pacific Islander category; but the problem of the mixed-race population count still exists. Within the mixed-race group, there are probably some persons who, if asked to identify the race to which they most closely relate, would code themselves into each of the four single-race groups that the UCR Program uses. However, from the available data, the analyst could not confidently spread the mixed-race counts into the single-race categories. So, the existence of the mixed-race population group makes the number of persons identified in each single-race group an undercount; and as the proportion of mixed-race persons in the population increases (which is occurring in the juvenile populations), so does the error in the value of single-race population counts.

Luckily, for this situation, the Centers for Disease Control and Prevention has done the statistical work to spread the mixed-race population counts and produce population estimates for the years following the 2000 decennial census into the pre-2000 four single-race categories. Analysts who prepare the DMC Relative Rate Index matrix may easily access the data through the data dissemination package entitled *Easy Access to Juvenile Populations* (www.ojjdp.ncjrs.gov/ojstatbb/ezapop/), which is available in OJJDP’s Statistical Briefing Book. The opening screen of this package is displayed below. The selection requests the population counts for youth ages 10 through 17 for Los Angeles County, California, for the year 2007.

Easy Access to Juvenile Populations: 1990-2007

Home **Population Profiles** State Comparisons County Comparisons Data Source Help

Select a year: 2007
 Select a state: California Select a county: Los Angeles County
 Row Variable: Ethnicity Column Variable: Race
 Show Table Clear Selections

Selection criteria (Opens a pop-up window)

Sex
 Male
 Female

Race
 White
 Black
 American Indian
 Asian

Ethnicity
 Non Hispanic
 Hispanic

Check the age(s) of interest below, or use the pull down menus to the right to quickly select an age range

Age
 0 3 6 9 12 15 18 to 20
 1 4 7 10 13 16 21 to 24
 2 5 8 11 14 17 25 & over

Age range
 Lower Age: 0 Upper Age: 0
 Set Range

The table generated from this request is displayed below.

Easy Access to Juvenile Populations: 1990-2007

Home **Population Profiles** State Comparisons County Comparisons Data Source Help

Los Angeles County, California: Ethnicity by Race Population Estimates, 2007

Return to selection page Download data Printer-friendly

Display Options: Count Row % Column %

Selecting: Age 10, 11, 12, 13, 14, 15, 16, 17

Count	White	Black	American Indian	Asian	Total
Non Hispanic	246,473	117,572	3,632	123,305	490,982
Hispanic	669,550	14,019	13,252	8,617	705,438
Total	916,023	131,591	16,884	131,922	1,196,420

Suggested Citation: Puzanzhera, C., Sladky, A. and Kang, W. (2008). "Easy Access to Juvenile Populations: 1990-2007." Online. Available: <http://www.ojdp.ncjrs.gov/ojstatbb/ezapop/>

The counts for the four racial groups are presented and are subdivided by Hispanic/non-Hispanic. The *Easy Access to Juvenile Populations* tool will generate such county- and state-level tables for the years 1990 and onward. It can also generate tables for males and females and for other age groupings. An analyst with the standard UCR arrest data and the population

counts from the *Easy Access* package could then calculate juvenile race-specific arrest rates for each county in the state and the state as a whole.

Arrest Data

There are about 18,000 law enforcement agencies in the United States. Most counties have many more than one agency that may arrest juveniles—some have more than 100. This presents a problem for analysts when all of the agencies do not use the same information system. If RRI analysts need the count of white juveniles arrested in a particular year, they might be forced to contact several agencies and hope that the definitions of race and arrest (and possibly offense) are all compatible. Luckily, for analysts in most places in the country, a state-level entity already has been assigned to report arrest statistics to the FBI.

Since the 1930s, the FBI's UCR Program has asked local law enforcement agencies to report their arrests. Until the 1990s, each reporting agency sent the FBI aggregate counts by gender of arrests within 29 offense categories, subdivided into several age categories: younger than 10, 10–12, 13–14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, and older than 64. So, for example, from the UCR aggregate data, analysts can know the number of arrests involving persons age 16 for burglary in a particular year for each reporting law enforcement agency. These counts for all law enforcement agencies in a county (or a state) could be summed to yield this statistic for a larger geographical area.

DMC work and the RRI matrix require that reporting agencies subdivide arrests by race. Independent of the aggregate reporting of arrests by gender and age, the UCR also collects aggregate arrest data within the 29 offense categories broken into the four race categories of white, black or African American, American Indian and Alaska Native, and Asian or Pacific Islander. The UCR does not collect these aggregate race-specific arrest data separately for males and females, and the only age detail that the UCR captures for race-specific arrest data is “juvenile” and “adult” (i.e., persons younger than age 18 and those age 18 or older). Therefore, it is not possible from the aggregate UCR arrest data to obtain counts of the number of burglary arrests of 16-year-old black youth; the available detail limits counts to burglary arrests of black persons younger than age 18 or black persons older than age 17.

The lack of age detail in the UCR's aggregate race-specific arrest data may cause some RRI analysts problems, specifically in states where the original jurisdiction of the juvenile court ends before the 18th birthday. In most states, the UCR's definition of a juvenile (i.e., younger than age 18) is consistent with the general definition that the state's juvenile justice system uses. However, in about a dozen states, persons age 17 are routinely processed within the adult criminal justice system, and, in a few states, this is true for youth age 16. Therefore, in these states, the FBI's age dichotomy in their race-specific arrests of *juveniles* and *adults* is inconsistent with other data available about their juvenile justice systems.

The UCR's aggregate arrest reporting does not collect information on the Hispanic ethnicity of arrestees. However, some states collect these aggregate counts, independent of the UCR Program. If an RRI analyst has access to such data, he or she should take care to understand the reporting rules. It is likely that these data are reported at the same age (i.e., juvenile and adult) and gender (i.e., no gender) detail as is race. If so, it would be impossible, using these

aggregate counts, to remove the Hispanic counts from each of the four race counts. As a result, each of the four race counts contains arrests of Hispanics to an unknown degree.

In summary, somewhere within most states' aggregate data exist annual counts of arrests of persons younger than age 18 broken down into four race categories for a large number of law enforcement agencies. If your state's definition of juvenile is consistent with the UCR's definition of juvenile (i.e., persons younger than age 18), then the UCR race-specific arrest data would be a likely source of the arrest information needed for the RRI. In most states, these data are compiled at a single point; typically, a Uniform Crime Reporting Program is based at the state police agency, within the state's criminal justice planning agency, or within the state's statistical analysis center. (A list of state UCR reporters can be found in the back of each annual *Crime in the United States* report. The list from *Crime in the United States 2004* is presented in appendix B of this chapter.)

For states in which the definition of a juvenile is inconsistent with the UCR's younger-than-age-18 reporting category, or where analysts would like to have their arrest data broken down by both race and sex (and possibly even Hispanic ethnicity), a potential option may exist. In the late 1980s, the FBI expanded the UCR data collection effort from aggregate reporting to incident-based reporting. That is, instead of a department reporting that it made 10 arrests for burglary of persons ages 25 to 29 (an aggregate count), the new incident-based reporting requirements asked the agency to report for each burglary arrestee the person's age, sex, race, and Hispanic ethnicity. Since the early 1990s, the FBI has collected these incident-based reporting records under the UCR's National Incident-Based Reporting System (NIBRS). When an agency moves from aggregate to incident-based reporting, the information potential of the arrest data increases substantially. From incident-based reporting departments, an RRI analyst can obtain detailed counts of arrests at just about any level of age/sex/race/Hispanic ethnicity desired. For example, from the incident-based reporting data, an analyst can derive the number of burglary arrests of white, non-Hispanic males younger than age 16. The number of law enforcement agencies collecting incident-based data and the number reporting to NIBRS is constantly increasing. Analysts should investigate the availability of NIBRS data in their jurisdiction.

Court Processing Data

The majority of the data needed to complete the RRI matrix could come from juvenile court management information systems. Such systems are common across the nation. The RRI analyst should seek out those who administer their local juvenile court management information systems and request the needed statistics. The information may already be a standard part of the court's reporting effort or could be easily produced. If not, court programmers could prepare a new extract program to summarize the existing data. Most courts will provide these data if the importance of the request is clear to them and if the request gives unambiguous and detailed definitions of the statistics desired. If the statistics do not already exist, there may be some expense involved; but having those who know the data do the work is always far less expensive and less time consuming than having someone unfamiliar with the data set do it—assuming they can even obtain access to it.

Most juvenile courts that collect automated information contribute their data to the National Juvenile Court Data Archive, a resource housed at the National Center for Juvenile Justice, the research division of the National Council of Juvenile and Family Court Judges, and

supported by grants from OJJDP. Currently, courts with juvenile delinquency jurisdictions that serve about 1,800 of the 3,000 counties in the United States contribute their data to the archive. So, court data exist in most counties. Most of these systems collect information on the demographics of the youth referred (including race and ethnicity); date of referral; offense(s) referred; the processing decisions of diversion, petitioning, transfer/waiver, and adjudication; and the disposition of the case, including probation or out-of-home placement.

If all else fails and the data are housed in the National Juvenile Court Data Archive, the RRI analyst could request access to the archived data from the jurisdictions of interest. This process begins with a detailed letter to the archive requesting access to specific data files and detailing the types of analyses that will be performed on these data. The archive will then forward the request to the original data supplier(s) seeking permission to release the file(s). Generally, permission to release the data come with conditions to which the data requestor must agree contractually before the data are released. Also the archive will charge a small fee to oversee this process and prepare the data set(s), along with the SPSS (Statistical Packages for the Social Sciences) program(s) to read them.

Detention Data

Many juvenile court information systems capture information on the court's use of detention within each case processed. If so, then the detention information needed for the RRI Matrix could be found in the court data (see above). However, in more and more jurisdictions, detention information is collected in an information system separate from the court system. This occurs often when detention centers are not administratively within the judicial branch of government. When the source of detention data is not the court, analysts should take care to understand the nature of the detention data, especially their unit of count.

When detention information is within a court information system, the use of detention is likely to be tied to the court case. When this occurs, the court data can answer such questions as: How many delinquency cases involving white youth also involved the use of detention prior to adjudication? In this situation, the unit of count for detention is the court case. That is, a youth may have been detained more than once in the case, but the unit of count indicates whether detention ever occurred—yes or no.

When detention information is extracted from a stand-alone detention information system, the detention information is often not tied to a specific case. In a year, a single youth may have had several detention admissions; if these were tied to one case is unknown. In such situations, the unit of count for detention would be the number of admissions, not the number of court cases with detentions.

For the RRI matrix, it does not matter which of the possible units of count is used, just that the unit of count is clear and that the analysts understand how different units of counts may result in different RRI indexes. For example, a youth is arrested, detained, adjudicated, and ordered to weekend detention for a period of 3 months. When the unit of count is "Detention within case—Yes or No," this scenario would yield "one case detained." If the unit of count were detention admissions, the scenario would yield more than a dozen detention admissions. If some case types were more likely to experience multiple detention admissions, their influence on the RRI would vary with unit of count.

Census of Juveniles in Residential Placement. If no local detention information exists, there is a source of state-level detention (and placement) information that could be used to fill the RRI matrix. OJJDP implemented the Census of Juveniles in Residential Placement (CJRP) in 1997. The 1997 CJRP asked juvenile residential custody facilities in the United States to complete an individual record that described each youth assigned a bed in the facility on the last Wednesday in October. CJRP data were collected again in 1999, 2001, 2003, and 2006.

It is important to understand what CJRP collects and what it does not. The CJRP facility inclusion criteria are as follows: residential facilities in operation on the census reference date, residential facilities that are either publicly or privately (or tribally since 1999) operated, and residential facilities intended for juvenile offenders (although some hold adults as well). Specifically excluded are nonresidential facilities, detention centers operated as part of adult jails, facilities exclusively for drug abusers or dependent/ neglected youth, foster homes, and federal correctional facilities (e.g., Immigration and Naturalization Service, Bureau of Indian Affairs, U.S. Marshals, or Bureau of Prisons). CJRP is not sent to adult facilities or to facilities exclusively for drug or mental health treatment or for abused or neglected children. Inclusion criteria for individual-level data are as follows: youth younger than age 21, assigned a bed in a residential facility at the end of the day on the census reference day, charged with an offense or court-adjudicated for an offense, and in residential placement because of that offense.

CJRP collects an individual record on each juvenile held in the residential facility, with information on the juvenile's gender, date of birth, race, placement authority, most serious offense charged, court adjudication status, date of admission, and security status. Once again, these data are requested for all offenders younger than 21 years of age in the facility.

It should be emphasized that CJRP provides 1-day population counts of juveniles in residential placement facilities. One-day counts give a picture of the standing population in facilities. One-day counts are substantially different from annual admission and release counts, which give a measure of facility population flow. One-day count statistics overrepresent youth with longer lengths of stay (more serious offenders, those in long-term placements) and underrepresent youth with short lengths of stay (those in detention).

The CJRP data do not capture information on the county of offense or the county for which the youth is being held. CJRP does collect for each youth the state in which the offense occurred and the state in which the facility is located. Therefore, CJRP data can yield only state-level counts. With these data, state-level analyses can display the number of youth that the courts have placed in a single state regardless of whether the youth was placed in a facility in the state or elsewhere in the nation.

The National Center for Juvenile Justice developed and maintains the *Census of Juveniles in Residential Placement Databook* for OJJDP to make CJRP data available to a wide variety of users. The CJRP Databook is available at www.ojjdp.ncjrs.gov/ojstatbb/cjrp/. It contains a large set of predefined state-level tables detailing the characteristics of juvenile offenders in custody (age, sex, race/ethnicity, offense, type of facility, and placement status). Users can view custody population profiles for a single state but not for a particular county within the state. Downloaded tables can be saved and imported into spreadsheet software for further analysis. This application is periodically modified or expanded. (Although the CJRP data

files are not generally publicly available due to confidentiality concerns, they may be made available to analysts on a case-by-case basis. Researchers should contact OJJDP for information regarding access requirements and procedures.)

For RRI analysts, the CJRP tables will provide a 1-day count of the number of youth detained in their state in the target year using the population restrictions detailed above. CJRP captures the race/ethnicity of these youth in the following coding structure: white, not of Hispanic origin; black, not of Hispanic origin; Hispanic; American Indian or Alaskan Native, not of Hispanic origin; Asian or Pacific Islander, not of Hispanic origin; and Other. (The “Other” code is rarely used and is likely to indicate a mixed-race youth.). A typical table from the CJRP Databook appears below. This table shows the number of California youth by sex and race/ethnicity in detention status on the census date in 2006.

Census of Juveniles in Residential Placement Databook

Select a year: 2006

Offense Profile of Detained Residents by Sex and Race/Ethnicity for United States, 2006

Most serious offense	Detained								
	Total	Sex		Race/Ethnicity					
		Male	Female	White	Black	Hispanic	American Indian	Asian	Other
Total	26,344	21,653	4,691	8,167	11,089	5,993	513	367	215
Delinquency	25,508	21,164	4,344	7,776	10,808	5,907	465	356	196
Person	8,171	6,922	1,249	2,177	3,894	1,782	123	128	67
Violent Crime Index*	5,534	4,962	572	1,189	2,817	1,324	70	101	33
Other Person	2,637	1,960	677	988	1,077	458	53	27	34
Property	5,786	4,995	791	1,993	2,272	1,266	115	101	39
Property Crime Index**	4,724	4,102	622	1,616	1,896	993	100	90	29
Other Property	1,062	893	169	377	376	273	15	11	10
Drug	2,179	1,897	282	622	989	498	31	24	15
Public order	2,790	2,327	463	764	1,276	657	41	31	21
Technical violation	6,582	5,023	1,559	2,220	2,377	1,704	155	72	54
Status offense	836	489	347	391	281	86	48	11	19

* Includes criminal homicide, violent sexual assault, robbery, and aggravated assault.
 ** Includes burglary, theft, auto theft, and arson.

Note: U.S. total includes 1,466 juvenile offenders in private facilities for whom State of offense was not reported and 124 juvenile offenders in tribal facilities.
 Note: Detained juveniles include those held awaiting a court hearing, adjudication, disposition or placement elsewhere.
 Note: The "Hispanic" category includes persons of Latin American or other Spanish culture or origin regardless of race. These persons are not included in the other race/ethnicity categories.

Suggested citation: Sickmund, Melissa, Sladky, T.J., and Kang, Wei. (2008) "Census of Juveniles in Residential Placement Databook." Online. Available: <http://www.ojjdp.ncjrs.gov/ojstatbb/cjrp/>

Data source: Author's analysis of OJJDP's *Census of Juveniles in Residential Placement 1997, 1999, 2001, 2003, and 2006* [machine-readable data files].

Placement Data

As with detention data, many juvenile court information systems capture information on the court's use of out-of-home placement within each case processed. If so, then the placement information needed for the RRI matrix could be found in the court data. When placement information is with a court information system, the use of out-of-home placement is likely to be tied to the court case. When this occurs, the court data can answer such questions as: How many delinquency cases involving white youth were placed out-of-the-home at case disposition? In this situation, the unit of count for out-of-home placement is the court case. That is, the court may have placed the youth more than once in the case or in more than one facility, but the unit of count indicates whether out-of-home placement ever occurred in the case.

In many jurisdictions, however, out-of-home placement information is collected in an information system separate from the court system. When the source of placement data is not the court, analysts should take care to understand the nature of the placement data, especially their unit of count.

When out-of-home placement information is extracted from a stand-alone correctional information system, the placement information often is not tied to a specific case. In a year, a single youth may have several facility admissions; it is often unknown if these were tied to one single case. In such situations, the unit of count for placements would be the number of admissions, not the number of court cases in which the youth was placed out of the home.

For placement information in the RRI matrix, it does not matter which of the possible units of count an analyst uses, just that the unit of count selected is clear and that the analyst understands how different units of counts may result in different RRI indices. For example, a youth is arrested, detained, adjudicated, and ordered to the custody of the state department of juvenile corrections. When the unit of count comes from a court data system and is "Out-of-home placement within the case—Yes or No," this scenario would yield one case placed out of the home. If the unit of count was commitment to the state department of juvenile corrections, the scenario would yield one commitment. However, if the correctional information system could only monitor flow into a facility and a youth passes through several facilities during the commitment experience (e.g., a diagnostic and evaluation center, a state training school, a halfway house, recommitment to the training school following a parole violation, and finally another halfway house), the unit of count would yield five placements. If some case types were more likely to experience multiple placements, then their influence on the RRI would vary with unit of count.

As with detention, if no locally available placement information exists, the CJRP data could serve as a source of state-level placement information to fill the RRI matrix. CJRP also has its unique counting rules and characteristics that any analyst using the CJRP data should thoroughly understand.

Conclusion

Analysts who complete the DMC Relative Rate Index matrix should realize that much of the needed data already exist, although they are not always easy to find or easy to access. RRI analysts should be students of the sources and types of relevant information available within their states and counties. Analysts should read the statistical reports of law enforcement, juvenile courts, and other entities that handle youth within the juvenile justice system. By doing so, they will develop an understanding of what data are available, what statistics are reported routinely, and who could be their colleagues in the task to generate and interpret the DMC Relative Rate Index matrix.

Appendix B: State UCR Reporting Agencies, 2004 Listing

Alabama

Alabama Criminal Justice Information Center
Suite 350
770 Washington Avenue
Montgomery, Alabama 36104
(334) 242-4900
www.acjic.state.al.us

Alaska

Alaska Department of Public Safety
Criminal Records and Identification Bureau
5700 East Tudor Road
Anchorage, Alaska 99507
(907) 269-5765

American Samoa

Department of Public Safety
Post Office Box 1086
Pago Pago
American Samoa 96799
(684) 633-1111

Arizona

Access Integrity Unit
Uniform Crime Reporting Program
Arizona Department of Public Safety
Mail Drop 1190
Post Office Box 6638
Phoenix, Arizona 85005-6638
(602) 223-2239
www.dps.state.az.us

Arkansas

Arkansas Crime Information Center
One Capitol Mall, 4D-200
Little Rock, Arkansas 72201
(501) 682-2222
www.acic.org

California

Criminal Justice Statistics Center
Department of Justice
Post Office Box 903427
Sacramento, California 94203-4270
(916) 227-3515

Colorado

Uniform Crime Reporting
Colorado Bureau of Investigation
Suite 3000
690 Kipling Street
Denver, Colorado 80215
(303) 239-4222
www.cbi.state.co.us

Connecticut

Uniform Crime Reporting Program
1111 Country Club Road
Middletown, Connecticut 06457-9294
(860) 685-8030
www.state.ct.us/dps/crime_analysis/crime_analysis.asp

Delaware

Delaware State Bureau of Identification
Post Office Box 430
Dover, Delaware 19903-0430
(302) 739-5901

District of Columbia

Research and Resource Development
Metropolitan Police Department
300 Indiana Avenue, N.W.
Washington, D.C. 20001
(202) 727-4174
www.mpdc.dc.gov

Florida

Criminal Justice Information Services
Uniform Crime Reports
Florida Department of Law Enforcement
Post Office Box 1489
Tallahassee, Florida 32302-1489
(850) 410-7121

Georgia

Georgia Crime Information Center
Georgia Bureau of Investigation
Post Office Box 370748
Decatur, Georgia 30037-0748
(404) 270-8467
www.ganet.org/gbi/

Guam

Guam Police Department
Planning, Research and Development
Building #233
Central Avenue
Tiyán, Guam 96913
(671) 475-8422

Hawaii

Crime Prevention and Justice Assistance Division
Department of the Attorney General
Suite 401
235 South Beretania Street
Honolulu, Hawaii 96813
(808) 586-1150
www.hawaii.gov/ag/cpja

Idaho

Bureau of Criminal Identification
Idaho State Police
Post Office Box 700
Meridian, Idaho 83680-0700
(208) 884-7156
www.isp.state.id.us/identification/ucr/

Illinois

Uniform Crime Reporting Program
Illinois State Police
2nd Floor
500 Iles Park Place
Springfield, Illinois 62703
(217) 782-5794
www.isp.state.il.us

Iowa

Iowa Department of Public Safety
Wallace State Office Building
East Ninth and Grand
Des Moines, Iowa 50319
(515) 281-8494
www.dps.state.ia.us/

Kansas

Kansas Bureau of Investigation
Information Services Division
Incident Based Reporting Section
1620 Southwest Tyler Street
Topeka, Kansas 66612
(785) 296-8279
www.accesskansas.org/kbi/

Kentucky

Criminal Identification and Records Branch
Kentucky State Police
1250 Louisville Road
Frankfort, Kentucky 40601
(502) 227-8790
www.kentuckystatepolice.org

Louisiana

Louisiana Commission on Law Enforcement
Uniform Crime Reporting
12th Floor
1885 Wooddale Boulevard
Baton Rouge, Louisiana 70806
(225) 925-4440
www.cole.state.la.us/lucr.htm

Maine

Records Management Services
Uniform Crime Reporting Division
Maine Department of Public Safety
Maine State Police
Suite 1
45 Commerce Drive
Augusta, Maine 04333-0042
(207) 624-7276
www.maine.gov/dps/

Maryland

Central Records Division
Incident Reporting Section
Maryland State Police
1711 Belmont Avenue
Baltimore, Maryland 21244
(410) 298-3883

Massachusetts

Crime Reporting Unit
Uniform Crime Reports
Massachusetts State Police
470 Worcester Road
Framingham, Massachusetts 01702
(508) 820-2111

Michigan

Uniform Crime Reporting Unit
Criminal Justice Information Center
Michigan State Police
7150 Harris Drive
Lansing, Michigan 48913
(517) 322-1424
www.michigan.gov/msp

Minnesota

Criminal Justice Information Systems
Bureau of Criminal Apprehension
Minnesota Department of Public Safety
1430 Maryland Avenue East
St. Paul, Minnesota 55106
(651) 793-2400
www.bca.state.mn.us/

Missouri

Missouri State Highway Patrol
Criminal Records & Identification Division
CJIS Section—UCR Program Office
1510 East Elm Street
Post Office Box 9500
Jefferson City, Missouri 65102-9500
(573) 526-6278
www.msHP.dps.missouri.gov/MSHPWeb/PatrolDivisions/CRID/index.html

Montana

Montana Board of Crime Control
Post Office Box 201408
Helena, Montana 59620-1408
(406) 444-4298
www.mbcc.state.mt.us

Nebraska

Uniform Crime Reporting Section
The Nebraska Commission on Law Enforcement and Criminal Justice
Post Office Box 94946
Lincoln, Nebraska 68509-4946
(402) 471-3982
www.nol.org/home/crimecom/

Nevada

Uniform Crime Reporting Program
Records and Identification Bureau
808 West Nye Lane
Carson City, Nevada 89703
(775) 687-1600 x235
www.nvrepository.state.nv.us

New Hampshire

Uniform Crime Reporting Unit
New Hampshire State Police
New Hampshire Department of Public Safety
33 Hazen Drive
Concord, New Hampshire 03305
(603) 271-2509

New Jersey

Uniform Crime Reporting Unit
New Jersey State Police
Post Office Box 7068
West Trenton, New Jersey 08628-0068
(609) 882-2000 x2392
www.njsp.org

New York

Statistical Services
New York State Division of Criminal Justice Services
8 th Floor, Mail Room
4 Tower Place
Albany, New York 12203
(518) 457-8381
<http://criminaljustice.state.ny.us>

North Carolina

Crime Reporting and Criminal Statistics
State Bureau of Investigation
Post Office Box 29500
Raleigh, North Carolina 27626-0500
(919) 662-4509
<http://sbi2.jus.state.nc.us/crp/public/Default.htm>

North Dakota

Information Services Section
Bureau of Criminal Investigation
Attorney General's Office
Post Office Box 1054
Bismarck, North Dakota 58502
(701) 328-5500
www.ag.state.nd.us

Ohio

Office of Criminal Justice Services
14th Floor
140 East Town Street
Columbus, Ohio 43215
(614) 466-7782

Oklahoma

Uniform Crime Reporting Section
Oklahoma State Bureau of Investigation
6600 North Harvey
Oklahoma City, Oklahoma 73116
(405) 879-2533
www.osbi.state.ok.us

Oregon

Law Enforcement Data System Division
Oregon State Police
Post Office Box 14360
Salem, Oregon 97309
(503) 378-3055 x55002

Pennsylvania

Bureau of Research and Development
Pennsylvania State Police
1800 Elmerton Avenue
Harrisburg, Pennsylvania 17110
(717) 783-5536
<http://ucr.psp.state.pa.us>

Puerto Rico

Statistics Division
Puerto Rico Police
Post Office Box 70166
San Juan, Puerto Rico 00936-8166
(787) 793-1234 x3113
www.policia.gobierno.pr

Rhode Island

Rhode Island State Police
311 Danielson Pike
North Scituate, Rhode Island 02857
(401) 444-1156
www.risp.ri.gov/

South Carolina

South Carolina Law Enforcement Division
Post Office Box 21398
Columbia, South Carolina 29221-1398
(803) 896-7016
www.sled.state.sc.us

South Dakota

South Dakota Statistical Analysis Center
3444 East Highway 34
Pierre, South Dakota 57501-5070
(605) 773-6312
www.dci.sd.gov

Tennessee

Tennessee Bureau of Investigation
901 R.S. Gass Boulevard
Nashville, Tennessee 37216
(615) 744-4000
www.tbi.state.tn.us

Texas

Uniform Crime Reporting
Crime Information Bureau
Texas Department of Public Safety
Post Office Box 4143
Austin, Texas 78765-9968
(512) 424-2091
www.txdps.state.tx.us/crimereports/citindex.htm

Utah

Data Collection and Analysis
Uniform Crime Reporting
Bureau of Criminal Identification
Utah Department of Public Safety
Post Office Box 148280
Salt Lake City, Utah 84114-8280
(801) 965-4812
www.bci.utah.gov

Vermont

Vermont Crime Information Center
103 South Main Street
Waterbury, Vermont 05671
(802) 244-8727
www.dps.state.vt.us/cjs/crimestats.htm

Virginia

Criminal Justice Information Services Division
Virginia State Police
Post Office Box 27472
Richmond, Virginia 23261-7472
(804) 674-2143
www.vsp.state.va.us/crimestatistics.htm

Virgin Islands

Virgin Islands Police Department
Alexander Farrelly Justice Complex
Saint Thomas, Virgin Islands 00802
(340) 774-2211

Washington

Uniform Crime Reporting Program
Washington Association of Sheriffs and Police Chiefs
Suite 200
3060 Willamette Drive, Northeast
Lacey, Washington 98516
(360) 486-2380
www.waspc.org

West Virginia

Uniform Crime Reporting Program
West Virginia State Police
725 Jefferson Road
South Charleston, West Virginia 25309
(304) 746-2237
www.wvstatepolice.com

Wisconsin

Wisconsin Office of Justice Assistance
Suite 610
131 West Wilson Street
Madison, Wisconsin 53702-0001
(608) 266-3323
<http://oja.state.wi.us/>

Wyoming

Uniform Crime Reporting
Criminal Records Section
Division of Criminal Investigation
316 West 22 nd Street
Cheyenne, Wyoming 82002
(307) 777-7625
<http://attorneygeneral.state.wy.us/dci/>