

# An Interpretation of the National DMC Relative Rate Indices for Juvenile Justice System Processing in 2010

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December 2013

Suggested Citation: Puzzanchera, C. and Hockenberry, S. An Interpretation of the National DMC Relative Rate Indices for Juvenile Justice System Processing in 2010. *National Disproportionate Minority Contact Databook*. Prepared by the National Center for Juvenile Justice for the Office of Juvenile Justice and Delinquency Prevention. Released December 2013.  
<[www.ojjdp.gov/ojstatbb/dmcdcb/](http://www.ojjdp.gov/ojstatbb/dmcdcb/)>

## Introduction

The National Disproportionate Minority Contact (DMC) Databook is designed to give users an understanding of the Relative Rate Index (RRI) and an assessment of the levels of disproportionate minority contact at various stages of juvenile justice system processing at the national level. New users should review the sections entitled “What is an RRI?” and “Constructing an RRI Matrix.” The first briefly discusses the benefits in using an RRI Matrix to investigate disproportionate minority contact within a jurisdiction. The second discusses how an RRI Matrix can be prepared using available information and the compromises that at times need to occur. For a more detailed discussion of these topics, users are encouraged to review Chapter One of the online *Disproportionate Minority Contact Technical Assistance Manual*. Available from [https://www.ncjrs.gov/html/ojjdp/dmc\\_ta\\_manual/](https://www.ncjrs.gov/html/ojjdp/dmc_ta_manual/).

In the National DMC Databook, users can review the raw counts and rates that characterize the processing of delinquency cases by the juvenile justice system and then study the RRI Matrix that helps to pinpoint and quantify the levels of racial disparity introduced at various decision points within the system. For those who need assistance, some possible interpretations of the most current RRI Matrices are given, as are interpretations of the trends in the level of disparity for each decision point. It is hoped that users can develop a better understanding of the RRIs from these interpretations and can apply this understanding when studying the many other RRIs that are available for review in this data dissemination tool or the RRIs developed locally to capture the nature of disproportionate minority contact in their own communities.

### What is an RRI?

At its simplest, the RRI is a means of comparing the rates of juvenile justice contact experienced by different groups of youth. The RRI is best explained by example. For the Databook, the first decision point that is assessed with an RRI Matrix is the arrest decision. For this decision point, the RRI compares the arrest rate for white youth with the arrest rate for all racial minorities as a group (and for each racial minority group individually). To calculate an arrest rate (or any rate), you need a numerator and a denominator. Typically an arrest rate for a racial group uses a measure of their arrests in a year as the numerator and a measure of population as the denominator. Many arrest counts could be used depending on the process that one wishes to study (e.g., all arrests, violent crime arrests, drug arrests). Let's assume we want to study the juvenile justice system's handling of all delinquency matters as a whole, so we must find a count of all delinquency arrests for each racial subgroup we wish to study.

At times, what we want and what is available may not be the same. The production of an RRI or the RRI Matrix is always limited by the quality of available data. For our work we used arrest estimates developed by the Bureau of Justice Statistics, which are based on data reported to the FBI's Uniform Crime Reporting Program. These reports give us estimates on the annual number of delinquency arrests for persons under age 18 by the racial groups: (1) White, (2) Black or African American, (3) American Indian and Alaska Native, and (4) Asian/Native Hawaiian/Other Pacific Islander. With these data it was not possible to study racial disparities in arrest experiences involving Hispanic youth because the available data did not support this distinction (Hispanic identity). So we are limited to the four racial groupings. For the denominator we used population estimates from the Centers for Disease Control and Prevention available in *Easy Access to Juvenile Population* (<http://ojjdp.gov/ojstatbb/ezapop/>). The question we had here was

what population we should use in the denominator. Certainly we should match the racial group to the racial group in the numerator, but what age range should we use? The arrest data captures arrests for all persons under age 18, so we could use their population counts as the denominator; but that seemed somewhat problematic because very few persons under the age of 10 are arrested in the U.S. So we chose to use as a population base ages 10 through 17. It would not have been “wrong” to use 0 through 17; we chose 10 through 17.

So now we can calculate the arrest rates. For simplicity, let’s talk about only two: the arrest rate for white juveniles and for black juveniles. By dividing their counts of delinquency arrests in 2010 by their 10 to 17 population in 2010, we find the white arrest rate was 40.2 arrests for every 1,000 white persons ages 10–17 in the U.S. population, and the black arrest rate was 84.9. The Relative Rate Index for arrest is simply the black rate divided by the white rate, yielding an RRI of 2.1. This means that the black arrest rate in 2010 was more than double the white rate, documenting a racial disparity at arrest. Does this imply a racial bias in the arrest process? Not necessarily. There could be many reasons other than racial bias that produced this racial disparity at arrest (e.g., different levels of delinquency behavior by white juveniles and black juveniles). All the RRI can say is that disparity exists and additional exploration is needed to determine the source of the bias.

## **Constructing an RRI Matrix**

If you think of the juvenile justice system as a set of individual decisions, the RRI concept can be used to assess the level of racial disparity introduced at each decision point — if the numerator and denominator used to construct the rates are carefully selected. For example, what should be the numerator and denominator to assess disparity at the point of referral to juvenile court? The numerator is rather obvious, some measure of referrals to juvenile court (e.g., number of referrals disposed in 2010 or the number of offenses referred in 2010). One possibility for the denominator is the juvenile population, the same as we used at the arrest decision; but this choice has inherent problems — and understanding this point is key to developing and appropriately interpreting the RRI. Using population as the denominator for the juvenile court referral rate yields a rate whose magnitude could depend on many factors (e.g., the level of delinquency behavior, the level of reporting crime to law enforcement, and any disparities or biases in the arrest process). But we already have a measure of disparity at the arrest decision; so by using population as the denominator in the court referral decision rate, the rate will really be a combination of the disparity at the arrest decision plus any additional disparity added at the court referral decision. To isolate the disparity introduced at the court referral decision, a better denominator for the court referral would be the number of arrests. Using this, the court referral rate for each racial group would answer the question “For every 100 arrests of white youth in our jurisdiction, how many court referrals occurred in 2010?” Using this denominator, any disparity in the arrest decision is removed from the calculation, and any resulting disparities between the white and the minority juvenile court referral rates can be attributed to the referral process and not disparities in the amount of crime juveniles commit or disparities with the arrest process.

Therefore, the general rule in creating the rates to be used in an RRI is to select a denominator that captures the decisionmaking stage immediately preceding the stage measured by the numerator or, in other words, the stage that feeds the numerator. For example, to a great extent arrests feed juvenile court referral; if arrests increase, most likely juvenile court referrals will increase. There are certainly other paths to juvenile court beyond arrest (e.g., parents may refer the youth or a probation officer may refer a youth back to court on a probation violation); but arrest is the most controlling preceding stage. Using this logic, a measure of:

- ◆ juvenile court referrals is the denominator for pre-disposition detentions
- ◆ juvenile court referrals is the denominator for diversion
- ◆ juvenile court referrals is the denominator for petitions
- ◆ petitions is the denominator for adjudications
- ◆ adjudications is the denominator for formal probation
- ◆ adjudications is the denominator for out-of-home placements
- ◆ petitions is the denominator for waivers

For each racial group, using a set of decision process rates (e.g., arrest rate, juvenile court referral rate, detention rate, diversion rate, petition rate, adjudication rate, waiver rate, etc.) an RRI can be developed. By dividing one group's rate for a decision point by another group's rate at the same decision point, the relative rate (or the relative size of one rate to the other) can be calculated. Some decisions increase the extent of minority youth contact with the justice system. Other decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions may actually counteract or reduce the extent to which minority youth are overrepresented in the juvenile justice system. The magnitude of cumulative or overall racial disparity at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points plus that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system.

## Case Processing Summary of Relative Rate Indices for Delinquency Offenses

**Relative Rate Indices<sup>1</sup> for Delinquency Offenses, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	1.6	2.1	0.8	0.3
Referral rate	1.1	1.1	1.3	1.1
Diversion rate	0.7	0.7	0.7	0.9
Detention rate	1.3	1.4	1.3	1.1
Petitioned rate	1.2	1.2	1.2	1.1
Adjudicated rate	0.9	0.9	1.1	1.0
Probation rate	0.9	0.9	1.0	1.1
Placement rate	1.2	1.2	1.1	0.9
Waiver rate	1.4	1.4	1.6	0.6

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of delinquency cases in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision point was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 1.6 means that the minority youth arrest rate was 60% greater than the white arrest rate. The arrest decision's RRI is even greater (2.1) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) youth indicates that the arrest rate for AIAN youth (0.8) was slightly below that of white youth, suggesting an arrest disparity for these two groups that brings fewer AIAN youth into the juvenile justice system. Similarly, the arrest RRI for Asian, Hawaiian, or Pacific Islander (AHPI) youth (0.3) indicates that their arrest rate was far below that of white youth, signifying an arrest disparity for these groups that brings a disproportionately smaller number of AHPI youth into the juvenile justice system for a delinquency offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit delinquencies at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court (which is greater than 1.0 for all racial groups) indicates that the level of racial disparity in the juvenile justice system was further increased as a result of this decision. In 2010, even after controlling for possible disparities up to the arrest decision, minority youth were more likely than white youth to be referred to juvenile court for a delinquent offense.

The RRI for the detention decision indicates that there were racial disparities at this decision point also in 2010 that resulted in a greater proportion of minority youth than white youth who were referred to juvenile court being securely detained. Many factors could have lead to this racially disparate decision.

The petitioning decision further added to the level of racial disparity in the processing of delinquency cases. In 2010 minority youth referred to juvenile court for a delinquent offense were, in general, more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at this decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that these decisions actually helped somewhat to reduce the overall level of racial disparity in the processing of delinquency referrals by the system given that the RRI for minority youth was less than 1.0. Once petitioned, minority youth charged with a delinquent offense in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth were more likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that there were racial disparities at this decision point in 2010 that resulted in a greater proportion of minority youth than white youth who were referred to juvenile court being judicially waived to criminal court. Again, many factors could have lead to this racially-disparate decision.

In all, in 2010 many decisions made in the juvenile justice system processing of delinquency cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of delinquency cases (e.g., violent, property, drugs, and public order) or various types of juvenile offenders (e.g., males and

females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some types of delinquency cases than to others. In addition, considerations of the magnitude of the various RRI's highlight the decision points where the contribution to disparity was greatest in the processing of delinquency cases in 2010 (e.g., arrest, detention, and waiver) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

The minority RRI for the arrest decision in delinquency offense cases increased between 1990 and 1993 and then fell, reaching a low point in 2002. The RRI then increased to 1.6 in 2005, a level that would remain stable through 2010. The overall pattern indicates a small decline between the mid-1990s and 2010 in the degree of racial disparity at this decision point. The delinquency arrest rates for white youth and minority youth both increased through the mid-1990s and then declined. The relative decline in the minority arrest rate was greater than the white arrest rate, resulting in an overall drop in the RRI during this period. This overall minority pattern generally reflects that of black juveniles. The RRI for AIAN juveniles show there to be little, if any, racial disparity for them at arrest compared with white juveniles while the RRI for AHPI juveniles indicate they were far less likely to be arrested than were white juveniles.

### **Referral rate**

The minority RRI for the court referral decision in delinquency offense cases remained essentially constant, ranging from 1.0 to 1.2 between 1990 and 2010, with a slight increase in the latter years. In general, this pattern indicates that the level of racial disparity at the point of court referral was relatively low and stable most of this time period. This overall minority pattern generally reflects that of black and AHPI juveniles. In contrast, the RRI that compares AIAN with white juveniles shows a greater level of disparity in the early 1990s. In 2010, the court referral RRI for AIAN youth was above the level of the other racial minorities.

### **Diverted rate**

The minority RRI for the diversion decision in delinquency offense cases was below 1.0 and relatively stable between 1990 and 2010. This pattern was generally found in the RRI's for each racial minority, with the set of RRI's for black juveniles being consistently lower than those in the other two minority groups. This means that a white juvenile being processed for a delinquency offense was more likely than a minority (and especially black) juvenile to be diverted from the juvenile justice system in the early stages of system processing.

### **Detention rate**

The minority RRI for the detention decision in delinquency offense cases was high in the early 1990s and declined slightly through 2010; however, the RRI in 2010 was still rather large. This pattern was generally found in the RRI's for each racial minority. The decline in the RRI for delinquency offense cases for black youth was less over the period than for AHPI youth. The RRI for AHPI youth in the early 1990s was above that of black youth, and over the period reduced to a level below that of black youth by 2010. The RRI for delinquency cases involving AIAN youth began the 1990s lower than the other two racial groups and also declined; but increased through 2010 to a level above that of AHPI youth.

### **Petition rate**

The minority RRI for the petitioning decision in delinquency offense cases remained at or above 1.1 each year between 1990 and 2010. This minority pattern was also found in the RRI for black youth. For most of the period the RRI for black youth was slightly greater than the RRIs for the other racial minorities, however, by 2010, the RRIs of each racial minority were about the same.

### **Adjudicated rate**

The minority RRI for the adjudication decision in delinquency offense cases remained constant between 1990 and 2010 at a level below 1.0; this indicates that minority youth petitioned for a delinquency offense were less likely to be adjudicated delinquent than were white youth. This RRI pattern was identical to that for black youth. The RRIs for the other two racial minorities showed no clear pattern of change during this period, but their average values were at or very near 1.0 for the period.

### **Probation rate**

The minority RRI for the probation decision following adjudication in delinquency offense cases stayed at or below 1.0 between 1990 and 2010, indicating that there was little racial disparity at this decision point. This general pattern was found in the RRIs for black and AIAN youth. For AHPI youth, the probation decision RRI was also relatively constant and was the only one to stay at or above 1.0 for the period.

### **Placement rate**

The minority RRI for the placement decision following adjudication in delinquency offense cases was above 1.0 and relatively stable between 1990 and 2010. This general minority RRI pattern was similar to that for black and AIAN youth. The RRIs for AHPI youth declined slightly between 1990 and 2010.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in delinquency offense cases were relatively high in the early 1990s and declined through 2003, before increasing slightly through 2010. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends inadvisable.

## Case Processing Summary of Relative Rate Indices for Person Offenses

**Relative Rate Indices<sup>1</sup> for Person Offenses, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	2.5	3.3	0.8	0.3
Referral rate	1.0	1.0	1.3	1.0
Diversion rate	0.7	0.7	0.8	0.8
Detention rate	1.2	1.2	1.2	1.1
Petitioned rate	1.2	1.2	1.1	1.2
Adjudicated rate	0.9	0.9	1.2	1.0
Probation rate	0.9	0.9	0.9	1.1
Placement rate	1.2	1.2	1.3	1.0
Waiver rate	1.4	1.4	2.0	0.8

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of person offense cases in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision point was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 2.5 means that the minority youth arrest rate was 150% greater than the white arrest rate. The arrest decision's RRI is even greater (3.3) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) youth indicates that the arrest rate for AIAN youth (0.8) was slightly below that of white youth, suggesting an arrest disparity for these two groups that brings fewer AIAN youth into the juvenile justice system. Similarly, the arrest RRI for Asian, Hawaiian, or Pacific Islander (AHPI) youth (0.3) indicates that their arrest rate was far below that of white youth, signifying an arrest disparity for these two groups that brings a disproportionately smaller number of AHPI youth into the juvenile justice system for a person offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit person offenses at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the person offense crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their person offense crimes. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities decreased as a result of this decision. In 2010 minority youth were, in general, equally likely to be referred to juvenile court for a person offense as were white youth. This pattern held for black youth and AHPI youth (RRI of 1.0), however, this pattern did not hold for AIAN youth whose court referral RRIs was 1.3.

The RRI for the detention decision indicates that there were racial disparities at this decision point in 2010 that resulted in a greater proportion of minority youth than white youth who were referred to juvenile court being securely detained. Many factors could have lead to this racially-disparate decision.

The petitioning decision also added to the level of racial disparity in the processing of person offense cases in 2010. Minority youth referred to juvenile court for a person offense were more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at the petitioning decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that these decisions actually helped somewhat to reduce the overall level of racial disparity in the processing of person offense referrals by the system given that the RRI for minority youth was less than 1.0. Once petitioned, minority youth charged with a person offense in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with a person offense were more likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that there were racial disparities at this decision point in 2010 that resulted in a greater proportion of minority youth than white youth charged with a person offense being judicially waived to criminal court. Again, many factors could have lead to this racially-disparate decision.

In all, in 2010 some decisions made in the juvenile justice system processing of person offense cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders

(e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some person offense cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution to disparity was greatest in the processing of person offense cases in 2010 (e.g., arrest and waiver) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

The minority RRI for the arrest decision in person offense cases declined between 1990 and 2000 then increased somewhat through 2010. Overall, there was a decline in the high degree of racial disparity at this decision point compared to the early 1990s. This decline was the result of the minority arrest rate falling much more from the mid-1990s through 2000 than the white rate. Between 2000 and 2010 the minority RRI increased but not back to the levels of the early 1990s. This overall minority pattern generally reflects that of black juveniles. In contrast, the RRIs for AIAN juveniles show there to be little, if any, racial disparity at arrest when compared with white juveniles. The RRI trend for AHPI juveniles indicates they had much lower person offense arrest rates than white juveniles through the period.

### **Referral rate**

The minority RRI for the court referral decision in person offense cases was at or below 1.0 during most of the 1990 to 2010 period. This means there was little, if any, racial disparity at the point of court referral for person offense cases during these years. This overall minority pattern generally reflects that of black juveniles. For AIAN youth, the values of their court referral RRI indicate that there was substantial racial disparity at court referral in the earlier part of the 1990s, followed by a modest decline through 2010. Unlike the court referral RRI for black and AHPI youth, the court referral RRI for AIAN youth was above 1.0 each year between 1990 and 2010.

### **Diverted rate**

The minority RRI for the diversion decision in person offense cases was below 1.0 and relatively consistent between 1990 and 2010. This pattern was generally found in the RRIs for black and AIAN youth, while the RRI for AHPI youth began the period at a relatively high level (1.6 in 1990) then declined. This means that a white juvenile being processed for a person offense was more likely than a minority juvenile to be diverted from the juvenile justice system at an early stage of system processing.

### **Detention rate**

The minority RRI for the detention decision in person offense cases was relatively high in the early 1990s and declined through 2010. This pattern was generally found in the RRIs for black and AHPI youth. However, the decline in the RRI for person offense cases for black youth was less over the period than for AHPI youth. As a result, the RRI for the detention decision involving AHPI youth was higher than that of black youth in nearly all years during the period. The detention RRI for person offense cases for AIAN youth in the early 1990s was lower than those of the other two racial groups; it declined during the early 1990s and stayed within a limited range during the last 10 years.

### **Petition rate**

The minority RRI for the petitioning decision in person offense cases changed little between 1990 and 2010. This general pattern was found in the RRI of each racial minority. In general the AIAN RRI remained near 1.0 through 2004 and then increased somewhat through 2010. The RRI for the other two minority groups reflected a degree of racial disparity at this decision point as each averaged an RRI of 1.2 since 2000.

### **Adjudicated rate**

The minority RRI for the adjudication decision in person offense cases remained constant between 1990 and 2010 at a level below 1.0. This indicates that minority youth petitioned for a person offense were less likely to be adjudicated delinquent than were white youth. This general minority RRI pattern was nearly identical to that for black youth. The RRI for the other two racial minorities showed no clear pattern of change, but their average values were at or slightly above 1.0 for the period.

### **Probation rate**

The minority RRI for the probation decision following adjudication in person offense cases stayed at or below 1.0 between 1990 and 2010, indicating that there was little racial disparity at this decision point. This general pattern was found in the RRI for black and AIAN youth, while the RRI for AHPI youth were at or slightly above 1.0 each year since 1990.

### **Placement rate**

The minority RRI for the placement decision in person offense cases remained relatively stable between 1990 and 2010, varying between 1.0 and 1.2. This general minority RRI pattern was identical to that for black youth. Unlike the pattern for black youth, the placement RRI for AHPI youth varied considerably throughout the 1990s and has since stabilized. The RRI for AIAN youth also fluctuated over the period; however, the placement RRI for AIAN youth has been above the other minority groups for most of the 1990-2010 period.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in person offense cases were relatively high in the early 1990s, declined somewhat through the late 1990s, stabilized then increased through 2010. This RRI pattern was similar to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRI unstable over the period and any summary of their trends inadvisable.

## Case Processing Summary of Relative Rate Indices for Violent Crime Index (VCI) Offenses

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**Relative Rate Indices<sup>1</sup> for Violent Crime Index Offenses,  
2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	3.6	4.9	0.8	0.3
Referral rate	1.1	1.1	1.3	1.3
Diversion rate	0.7	0.7	0.7	0.5
Detention rate	1.1	1.1	1.0	0.9
Petitioned rate	1.1	1.1	1.1	1.2
Adjudicated rate	0.9	0.9	1.0	1.0
Probation rate	0.9	0.9	0.9	1.1
Placement rate	1.1	1.1	1.1	1.0
Waiver rate	1.2	1.2	2.2	0.6

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

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### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of Violent Crime Index (VCI) offense cases (criminal homicide, sexual assault, robbery, and aggravated assault) in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision point was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 3.6 means that the minority youth arrest rate was more than three times greater than the white arrest rate. The arrest decision's RRI is even greater (4.9) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) and Asian, Hawaiian, or Pacific Islander youth indicate that their arrest rate was below that of white youth, signifying an arrest disparity for these three groups that brings a disproportionately smaller number of AIAN and AHPI youth into the juvenile justice system for a VCI offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit VCI offenses at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the VCI crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their VCI crimes. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities was sustained as a result of this decision. In 2010 minority youth were more likely to be referred to juvenile court for a VCI offense than were white youth. This pattern held for black youth whose RRI was 1.1 and for AIAN and AHPI youth whose referral rate was 1.3 each.

The RRI for the detention decision indicates that there were racial disparities at this decision point in 2010 that resulted in a greater proportion of minority youth than white youth who were referred to juvenile court being securely detained. Many factors could have lead to this racially-disparate decision.

The petitioning decision also added to the level of racial disparity in the processing of VCI cases in 2010. Minority youth referred to juvenile court for a VCI offense were more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at the petitioning decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that these decisions actually helped somewhat to reduce the overall level of racial disparity in the processing of VCI referrals by the system given that the RRI for minority youth was less than 1.0 (0.9). Once petitioned, black youth charged with a VCI offense in 2010 were somewhat less likely to be adjudicated than were white youth while AIAN and AHPI were equally likely to be adjudicated. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with a VCI offense were more likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that there were racial disparities at this decision point in 2010 that resulted in a greater proportion of minority youth than white youth charged with a VCI offense being judicially waived to criminal court. Again, many factors could have lead to this racially-disparate decision.

In all, in 2010 some decisions made in the juvenile justice system processing of VCI cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and

females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some VCI cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution to disparity was greatest in the processing of VCI cases in 2010 (e.g., arrest and waiver) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

The minority RRI for the arrest decision in VCI cases declined between 1990 and 1998, leveled off through 2002 before increasing through 2010, all the while indicating a substantially large degree of racial disparity. This overall minority pattern generally reflects that of black juveniles. In contrast, the RRIs for AIAN juveniles show there to be little, if any, racial disparity at arrest when compared with white juveniles. The RRI trend for AHPI juveniles indicates they had much lower VCI arrest rates than white juveniles through the period.

### **Referral rate**

The minority RRI for the court referral decision in VCI cases was slightly more than 1.0 during most of the time period between 1990 and 2010. This overall minority pattern generally reflects that of black juveniles. For AIAN youth, the values of their court referral RRI indicate that there was substantial racial disparity at court referral in the earlier part of the 1990s, followed by a modest decline through 2000 before a general increase through 2010. The RRI for the court referral decision involving AHPI youth remained at or below 1.0 between 1990 and 2000. An increase in the AHPI RRI in the latter years brought the level of racial disparity at the court referral decision point to be similar to AIAN youth as the RRI for both groups was 1.3 in 2010.

### **Diverted rate**

The minority RRI for the diversion decision in VCI cases was below 1.0 and relatively consistent between 1990 and 2010. This pattern was generally found in the RRIs for each racial minority. This means that a white juvenile being processed for a VCI offense was more likely than a minority juvenile to be diverted from the juvenile justice system at an early stage of system processing.

### **Detention rate**

The minority RRI for the detention decision in VCI cases remained constant between 1990 and 2010. This pattern was generally found in the RRIs for each racial minority. The RRI for the detention decision involving AHPI youth was higher than that of black youth in nearly all years during the period. The detention RRI for VCI cases for AIAN stayed close to 1.0 throughout most of the period between 1990 and 2010.

### **Petition rate**

The minority RRI for the petitioning decision in VCI cases consistently remained slightly above 1.0 for each minority group between 1990 and 2010, indicating a degree of racial disparity at this decision point.

### **Adjudicated rate**

The minority RRI for the adjudication decision in VCI cases remained constant between 1990 and 2010 at a level below 1.0. This indicates that minority youth petitioned for a VCI offense were less likely to be adjudicated delinquent than were white youth. This general minority RRI pattern was identical to that for black youth. The RRIs for the other two racial minorities fluctuated somewhat during the period with no discernible pattern, but their average values were at or above 1.0 for most of the period. At certain points during the time period, the AIAN RRI dipped slightly below 1.0.

### **Probation rate**

The minority RRI for the probation decision following adjudication in VCI cases remained below 1.0 between 1990 and 2010, indicating that white youth were more likely than minority youth to be placed on probation. This general pattern was identical for black youth, while the RRIs for AIAN and AHPI youth hovered around 1.0 for most of the period.

### **Placement rate**

The minority RRI for the placement decision in VCI cases remained relatively stable between 1990 and 2010, varying between 1.1 and 1.2. This general minority RRI pattern was identical to that for black youth. Unlike the pattern for black youth, the placement RRI for AHPI youth decreased considerably throughout the 1990s and has since stabilized. The RRIs for AIAN youth showed no obvious trend.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in VCI cases were relatively high in the early 1990s and declined through 1998 before gradually increasing through 2010. This RRI pattern was identical to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends inadvisable.

## Case Processing Summary of Relative Rate Indices for Robbery Offenses

**Relative Rate Indices<sup>1</sup> for Robbery Offenses, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	7.0	9.8	0.6	0.5
Referral rate	1.1	1.1	1.4	1.4
Diversion rate	0.8	0.7	1.6	0.5
Detention rate	1.0	1.0	0.7	0.7
Petitioned rate	1.0	1.0	0.9	1.1
Adjudicated rate	0.9	0.9	0.9	1.0
Probation rate	1.0	1.0	0.9	1.3
Placement rate	0.9	1.0	1.2	0.7
Waiver rate	1.0	1.0	3.2	0.5

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of robbery cases in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision point was significantly greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 7.0 means that the minority youth arrest rate was about 600% greater than the white arrest rate. The arrest decision's RRI is even greater (9.8) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) youth (0.6) and Asian, Hawaiian, or Pacific Islander (AHPI) youth (0.5) indicates that their arrest rate was far below that of white youth, signifying an arrest disparity for these two groups that brings a disproportionately smaller number of AIAN and AHPI youth into the juvenile justice system for a robbery offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit robbery offenses at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the robbery crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their robbery offenses. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities increased slightly as a result of this decision. In 2010 minority youth (RRI of 1.1) were somewhat more likely to be referred to juvenile court for a robbery offense than were white youth. This pattern held for black youth whose RRI was also 1.1. The court referral RRI for AIAN and AHPI youth (1.4 for each) indicates that this decision point brings a disproportionate number of these youth into the juvenile justice system.

The RRI for the detention decision indicates that minority youth were as likely to be securely detained as were white youth in 2010. This pattern held for black youth, but not for AIAN and AHPI youth; the detention RRI for AIAN and AHPI youth was 0.7 in 2010, indicating that AIAN and AHPI youth referred to juvenile court for a robbery offense were less likely to be securely detained than were white youth.

The petitioning decision maintained the level of racial disparity in the processing of robbery offense cases in 2010. Minority youth referred to juvenile court for a robbery offense were equally likely to be processed formally (but less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at the petitioning decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that these decisions actually helped somewhat to reduce the overall level of racial disparity in the processing of robbery offense referrals by the system given that the RRI for minority youth was less than 1.0. Once petitioned, minority youth charged with a robbery offense in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with a robbery offense were less likely to be placed out of the home than white youth, and equally likely to be placed on probation as were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that, overall, little racial disparity was found at this decision point in 2010; minority youth charged with a robbery offense were equally likely to be judicially waived to criminal court as white youth. Again, many factors could have lead to this racially-disparate decision.

In all, in 2010 few decisions made in the juvenile justice system processing of robbery offense cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example,

DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some person offense cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution to disparity was greatest in the processing of robbery cases in 2010 (e.g., arrest and, to a lesser degree, court referral) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

After a period of decline in the 1990s, the minority RRI for the arrest decision in robbery cases increased through 2005, and fell slightly through 2010. The recent decline was the result of the minority arrest rate falling much more than the white rate. Between 2000 and 2009 the minority RRI increased but not back to the levels of the early 1990s. This overall minority pattern generally reflects that of black juveniles, except the arrest RRI for black youth has remained at 10.0 since 2005. In contrast, the RRIs for AIAN and AHPI juveniles show there to be little, if any, racial disparity at arrest when compared with white juveniles. The RRI trend for AIAN and AHPI juveniles indicates they had much lower robbery arrest rates than white juveniles through the period.

### **Referral rate**

The minority RRI for the court referral decision in robbery cases remained at 1.0 through the early 2000s, then increased to 1.1, where it has remained since 2004. This means there was racial disparity at the point of court referral for robbery offense cases during the 2004 to 2010 period. This overall minority pattern generally reflects that of black juveniles. For AIAN youth, their court referral RRI generally declined through the 1990s, increased sharply through 2004, then declined and leveled off through 2010. Unlike the pattern for other racial minorities, the referral RRI for AIAN youth was above 1.0 the entire period, indicating disparity at court referral. The RRI for the court referral decision involving AHPI youth remained below 1.0 for most of the 1990s, then generally increased, varying between 1.2 and 1.5 since 2003.

### **Diverted rate**

The minority RRI for the diversion decision in robbery cases was at or below 1.0 and relatively consistent between 1990 and 2010. This pattern was found in the RRIs for black youth. This means that a white juvenile being processed for a robbery offense was more likely than a minority juvenile to be diverted from the juvenile justice system at an early stage of system processing. The annual RRI for AIAN and AHPI varied considerably throughout the period, showing no clear pattern.

### **Detention rate**

The minority RRI for the detention decision in robbery cases remained within a narrow range (1.0 to 1.2) throughout the 1990 to 2010 period. This pattern was also reflected in the RRI for black youth. The RRI for the detention decision involving AHPI youth was relatively high in the 1990s, and then generally declined through 2010. With few exceptions in the mid-1990s, the detention RRI for robbery cases for AIAN remained at or below 1.0 throughout the period and was generally lower than those of the other two racial groups.

### **Petition rate**

The minority RRI for the petitioning decision in robbery cases changed little between 1990 and 2010. This pattern was found in the RRIs of each racial minority. In fact, the average RRI for the petitioning decision for black youth and AIAN youth was 1.0 over the 21-year period, while the average RRI for AHPI youth was 1.1.

### **Adjudicated rate**

The minority RRI for the adjudication decision in robbery cases was relatively stable between 1990 and 2010, at a level below 1.0 each year since the early 1990s. This general minority RRI pattern was identical to that for black youth. The RRIs for the other two racial minorities showed greater variation and their annual values were generally higher than the corresponding RRI for black youth.

### **Probation rate**

The minority RRI for the probation decision following adjudication in robbery cases stayed at or below 1.0 between 1990 and 2010, indicating that there was little racial disparity at this decision point. Unlike the pattern for black youth, the placement RRI for AHPI generally increased throughout the period, and exceeded the value for black youth each since 2000. The RRIs for AIAN youth fluctuated over the period showing no obvious trend.

### **Placement rate**

The minority RRI for the placement decision in robbery cases remained relatively stable between 1990 and 2010, generally at or below 1.0 for most years. This general minority RRI pattern was similar to that for black youth. Unlike the pattern for black youth, the placement RRI for AHPI youth generally decreased throughout the period, falling from 1.2 in 1990 to 0.7 in 2010.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in robbery cases were relatively high in the early 1990s and then declined somewhat through 1998. The minority waiver RRI changed little over the last 10 years, holding at 1.0 since 2001. This RRI pattern was similar to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends inadvisable.

## Case Processing Summary of Relative Rate Indices for Aggravated Assault Offenses

**Relative Rate Indices<sup>1</sup> for Aggravated Assault Offenses,  
2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	2.5	3.3	0.9	0.3
Referral rate	1.2	1.2	1.2	1.3
Diversion rate	0.8	0.8	0.6	0.5
Detention rate	1.0	1.0	1.1	1.0
Petitioned rate	1.1	1.1	1.2	1.2
Adjudicated rate	0.9	0.9	1.1	1.0
Probation rate	1.0	1.0	0.9	1.0
Placement rate	1.0	1.0	1.2	1.1
Waiver rate	0.9	0.9	2.3	0.3

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of aggravated assault cases in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision point was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 2.5 means that the minority youth arrest rate was about 150% greater than the white arrest rate. The arrest decision's RRI is even greater (3.3) when comparing black youth to white youth. The arrest RRI (0.9) for American Indian or Alaskan Native (AIAN) youth indicates that the arrest rates for AIAN and white youth were about equal, suggesting there was little racial disparity at the arrest stage for these two groups. The arrest RRI for Asian, Hawaiian, or Pacific Islander (AHPI) youth (0.3) indicates that their arrest rate was far below that of white youth, signifying an arrest disparity for these two groups that brings a disproportionately smaller number of AHPI youth into the juvenile justice system for an aggravated assault offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit person offenses at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the aggravated assault crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their aggravated assault crimes. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities increased as a result of this decision. In 2010 minority youth were, in general, more likely to be referred to juvenile court for an aggravated assault offense than were white youth. This pattern held for all racial minority groups.

The RRI for the detention decision indicates that, overall, minority youth were as likely as white youth referred for an aggravated assault offense to be detained. However, the detention RRI for AIAN youth indicates they were more likely to be detained than their white peers.

The petitioning decision added to the level of racial disparity in the processing of aggravated assault cases in 2010. Minority youth referred to juvenile court for an aggravated assault offense were, in general, more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at the petitioning decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that these decisions actually helped somewhat to reduce the overall level of racial disparity in the processing of aggravated assault referrals by the system given that the RRI for minority youth was less than 1.0. Once petitioned, minority youth charged with an aggravated assault offense in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with an aggravated assault offense were equally likely to be placed out of the home and equally likely to be placed on probation as were adjudicated white youth in 2010.

Finally, the RRI for the waiver decision indicates that these decisions actually helped somewhat to reduce the overall level racial disparity at this decision point in 2010, as a smaller proportion of minority youth than white youth charged with an aggravated assault offense were judicially waived to criminal court.

In all, in 2010 some decisions made in the juvenile justice system processing of aggravated assault cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some aggravated assault cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the

contribution to disparity was greatest in the processing of aggravated assault cases in 2010 (e.g., arrest and referral) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

The minority RRI for the arrest decision in aggravated assault cases declined throughout the 1990s, reaching its lowest point of the period in 2001. The RRI has held steady at about 2.5 through 2010, showing a relatively high degree of racial disparity at this decision point. Between 2000 and 2009 the minority RRI increased but not back to the levels of the early 1990s. This overall minority pattern is largely influenced by the trend among black juveniles. In contrast, the RRIs for AIAN juveniles show there to be little, if any, racial disparity at arrest when compared with white juveniles. The RRI trend for AHPI juveniles indicates they had much lower aggravated assault arrest rates than white juveniles through the period.

### **Referral rate**

The minority RRI for the court referral decision in aggravated assault cases has been relatively stable, holding at a level of about 1.2 since the mid 1990s. This means there was racial disparity at the point of court referral for aggravated assault cases during these years. For AIAN and AHPI youth, the values of their court referral RRIs also show racial disparity at this decision point; in fact, the average court referral RRIs for AIAN and AHPI youth (1.3 for each) over the last 10 years exceeded that of black youth.

### **Diverted rate**

The minority RRI for the diversion decision in aggravated assault cases was below 1.0 between 1990 and 2010. This pattern was generally found in the RRIs for each racial minority. This means that a white juvenile being processed for an aggravated assault offense was more likely than a minority juvenile to be diverted from the juvenile justice system at an early stage of system processing.

### **Detention rate**

The minority RRI for the detention decision in aggravated assault cases was relatively high in the early 1990s and has declined in recent years. This pattern was generally found in the RRIs for each racial minority. The decline in the RRI for aggravated assault offense cases for black youth was less over the period than for AHPI youth. As a result, the RRI for the detention decision involving AHPI youth was higher than that of black youth in nearly all years during the period. The detention RRI for aggravated assault cases involving AIAN youth followed a similar pattern as black youth.

### **Petition rate**

The minority RRI for the petitioning decision in aggravated assault cases changed little between 1990 and 2010. This pattern was generally found in the RRI black youth. The AIAN RRI for the petitioning decision began the period at a relatively high level, fell through 2002, and then increased slightly through 2010. Conversely, the AHPI RRI varied throughout the 1990s before steadying in the last 10 years.

### **Adjudicated rate**

The minority RRI for the adjudication decision in aggravated assault cases remained constant between 1990 and 2010 at a level below 1.0 for all but two years. This indicates that minority youth petitioned for an aggravated assault offense were less likely to be adjudicated delinquent than were white youth. This general minority RRI pattern was identical to that for black youth. The RRIs for the other two racial minorities were relatively constant during the period, ranging between 1.0 and 1.1 for most years.

### **Probation rate**

The minority RRI for the probation decision following adjudication in aggravated assault cases stayed at or below 1.0 between 1990 and 2010, indicating that there was little racial disparity at this decision point. This general pattern was found in the RRIs for each racial minority.

### **Placement rate**

The minority RRI for the placement decision in aggravated assault cases remained relatively stable between 1990 and 2010, varying between 1.1 and 1.2. This general minority RRI pattern was similar to that for black youth. Unlike the pattern for black youth, the placement RRI for AHPI youth varied considerably throughout the 1990s and has since stabilized. The RRIs for AIAN youth fluctuated over the period showing no obvious trend.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in aggravated assault cases were relatively high in the early 1990s and declined through 2004, before increasing slightly through 2010. Despite the recent increase, the minority RRI for waiver decision has remained below 1.0 each year since 1996. This RRI pattern was similar to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends inadvisable.

## Case Processing Summary of Relative Rate Indices for Simple Assault Offenses

**Relative Rate Indices<sup>1</sup> for Simple Assault Offenses, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	2.1	2.9	0.7	0.3
Referral rate	1.0	1.0	1.4	1.0
Diversion rate	0.8	0.8	0.8	0.8
Detention rate	1.1	1.1	1.3	1.1
Petitioned rate	1.1	1.1	1.2	1.2
Adjudicated rate	0.9	0.9	1.2	1.0
Probation rate	0.9	0.9	0.9	1.1
Placement rate	1.1	1.1	1.4	0.9
Waiver rate	1.0	1.0	1.5	0.5

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of simple assault cases in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision point was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 2.1 means that the minority youth arrest rate was more than double than the white arrest rate. The arrest decision's RRI is even greater (2.9) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) and Asian, Hawaiian, or Pacific Islander (AHPI) youth indicate that their arrest rates were far below that of white youth, signifying an arrest disparity for these three groups that brings a disproportionately smaller number of AIAN and AHPI youth into the juvenile justice system for a simple assault.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit simple assaults at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the simple assault crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their simple assault crimes. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities decreased as a result of this decision. In 2010 minority youth were, in general, equally as likely to be referred to juvenile court for simple assault as white youth. This pattern held for black and AHPI youth (RRI of 1.0 for both); however, this pattern did not hold for AIAN youth whose court referral RRI was 1.4.

The RRI for the detention decision indicates that there were racial disparities at this decision point in 2010 that resulted in a greater proportion of minority youth than white youth who were referred to juvenile court being securely detained. Many factors could have lead to this racially-disparate decision.

The petitioning decision also added to the level of racial disparity in the processing of simple assault cases in 2010. Minority youth referred to juvenile court for a simple assault were more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at the petitioning decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that these decisions actually helped somewhat to reduce the overall level of racial disparity in the processing of simple assault referrals by the system given that the RRI for minority youth was less than 1.0 (0.9). Once petitioned, minority youth charged with a simple assault in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with simple assault were more likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that there was no racial disparity at this decision point in 2010 as equal proportions of minority youth and white youth charged with a simple assault were judicially waived to criminal court.

In all, in 2010 some decisions made in the juvenile justice system processing of simple assault cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some simple assault cases than to others. In

addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution to disparity was greatest in the processing of simple assault cases in 2010 (e.g., arrest) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

Despite a decline in the late 1990s, the high level of racial disparity at the arrest decision point for simple assault cases was sustained between 1990 and 2010. The minority RRI in 2010 was only marginally lower than the RRI in 1990. This overall minority pattern generally reflects that of black juveniles. In contrast, the RRIs for AIAN juveniles show a substantial decrease so that racial disparity when compared to white juveniles was eliminated by the late 1990s. Between 1998 and 2010, white juveniles were more likely than AIAN juveniles to be arrested for a simple assault offense. The RRI trend for AHPI juveniles indicates they had much lower simple assault arrest rates than white juveniles through the period.

### **Referral rate**

The minority RRI for the court referral decision in simple assault cases remained near 1.0 for most years between 1990 and 2010. This overall minority pattern generally reflects that of black juveniles. For AIAN youth, the values of their court referral RRI indicate that there was substantial racial disparity at court referral in the earlier part of the 1990s, followed by a modest decline through 2010. The RRI for the court referral decision involving AHPI youth remained near 1.0 between 1990 and 2010.

### **Diverted rate**

The minority RRI for the diversion decision in simple assault cases was below 1.0 and relatively consistent between 1990 and 2010. This pattern was generally found in the RRIs for each racial minority. This means that a white juvenile being processed for simple assault was more likely than a minority juvenile to be diverted from the juvenile justice system at an early stage of system processing.

### **Detention rate**

The minority RRI for the detention decision in simple assault cases was relatively high in the early 1990s and declined through 2010. This pattern was generally found in the RRIs for each racial minority. The decline in the RRI for simple assault cases for black youth was less over the period than for AHPI youth. As a result, the RRI for the detention decision involving AHPI youth was higher than that of black youth in nearly all years during the period. Though the detention RRI for simple assault cases for AIAN youth declined through 2002, it increased through 2010 and now rests at a level higher than the RRI for both black and AHPI youth.

### **Petition rate**

The minority RRI for the petitioning decision in simple assault cases changed little between 1990 and 2010. This pattern was generally found in the RRIs of each racial minority. In general the AIAN RRI was near 1.0 for most of the period, while the RRIs for the other two minority groups reflected a degree of racial disparity at this decision point.

### **Adjudicated rate**

The minority RRI for the adjudication decision in simple assault cases remained constant between 1990 and 2010 at a level below 1.0. This indicates that minority youth petitioned for simple assault were less likely to be adjudicated delinquent than were white youth. This general minority RRI pattern was similar to that for black youth. The RRIs for the other two racial minorities showed no clear pattern of change, but the average values for AIAN youth were at or slightly above 1.0 for the period.

### **Probation rate**

The minority RRI for the probation decision following adjudication in simple assault cases stayed at or below 1.0 between 1995 and 2010, indicating that there was little racial disparity at this decision point. This general pattern was found in the RRIs for black and AIAN youth, while the RRIs for AHPI youth were at or slightly above 1.0 for most of the period.

### **Placement rate**

The minority RRI for the placement decision in simple assault cases remained relatively stable between 1990 and 2010. This general minority RRI pattern was identical to that for black youth. Unlike the pattern for black youth, the placement RRI for AIAN and AHPI youth varied considerably throughout the 1990s and has since stabilized. The placement RRI for AIAN indicates that these youth were consistently more likely to be placed than their white counterparts, while the opposite was true for AHPI youth.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in simple assault cases were relatively high in the early 1990s and declined considerably through 2004, before increasing through 2010. This RRI pattern was identical to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends inadvisable.

## Case Processing Summary of Relative Rate Indices for Property Offenses

**Relative Rate Indices<sup>1</sup> for Property Offenses, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	1.7	2.2	0.8	0.4
Referral rate	1.0	1.0	1.4	1.0
Diversion rate	0.8	0.8	0.8	1.0
Detention rate	1.4	1.4	1.3	1.0
Petitioned rate	1.2	1.2	1.2	1.0
Adjudicated rate	0.9	0.9	1.1	0.9
Probation rate	0.9	0.9	1.0	1.1
Placement rate	1.2	1.3	1.2	0.8
Waiver rate	1.2	1.2	1.6	0.4

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of property offense cases in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 1.7 means that the minority youth arrest rate was about 70% greater than the white arrest rate. The arrest decision's RRI is even greater (2.2) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) youth indicates that the arrest rates for AIAN youth (0.8) was below that of white youth, suggesting an arrest disparity for these two groups that brings fewer AIAN youth into the juvenile justice system. The arrest RRI for Asian, Hawaiian, or Pacific Islander (AHPI) youth (0.4) indicates that their arrest rate was far below that of white youth, signifying an arrest disparity for these two groups that brings a disproportionately smaller number of AHPI youth into the juvenile justice system for a property offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit property crimes at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the property offense crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their property offense crimes. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities was maintained as a result of this decision. In 2010 minority youth were, in general, as likely as white youth to be referred to juvenile court for a property offense.

The RRI for the detention decision indicates in 2010 that the decision to detain a youth referred for a property offense resulted in a much greater proportion of minority youth than white youth being securely detained.

The petitioning decision in the processing of property cases added to the level of racial disparity in the handling of these cases. In 2010 minority youth referred to juvenile court for a property offense were, in general, more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at this decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that this decision actually helped to reduce the overall level of racial disparity in the processing of property offense referrals by the juvenile justice system, given that the RRI was less than 1.0. Once petitioned, minority youth charged with a property offense in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with a property offense were more likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the waiver decision in the processing of property offenses added to the level of racial disparity in the handling of these cases. In fact, the minority RRI of 1.2 in 2010 indicates that minority youth charged with a property offense were about 20% more likely to be judicially waived to criminal court than their white peers.

In all, in 2010 some decisions made in the juvenile justice system processing of property offense cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some property offense cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the

contribution to disparity was greatest in the processing of property offense cases in 2010 (e.g., arrest, detention, and waiver) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

Between 1990 and 2010, the arrest rates for white youth and minority youth both declined substantially. The minority RRI for the arrest decision in property offense cases was relatively stable through 2004, and then increased through 2010. This overall minority RRI pattern generally reflects that of black juveniles. In contrast, the RRIs for AIAN juveniles show there was little, if any, racial disparity at arrest when compared with white juveniles; while the RRIs for AHPI juveniles indicate they were far less likely to be arrested than were white juveniles.

### **Referral rate**

The minority RRI for the court referral decision in property offense cases was at or near 1.0 during most of the 1990 through 2010 period, meaning there was little, if any, racial disparity at the point of court referral for property offense cases during these years. This general minority RRI pattern held for black youth, but not for AIAN and AHPI youth. For AIAN youth, the values of their court referral RRI indicate that there was substantial racial disparity at court referral in the earlier part of the 1990s, followed by a modest decline through 2010. Unlike the pattern for black and AHPI youth, the court referral RRI for AIAN youth was well above 1.0 each year during the period. The RRI for the court referral decision involving AHPI youth remained near 1.0 between 1990 and 2010, with a slight increase in the latter years.

### **Diverted rate**

The minority RRI for the diversion decision in property offense cases was consistently below 1.0 between 1990 and 2010. This minority RRI pattern was generally found in the RRIs for each racial minority. This means that during this period, a white juvenile being processed for a property offense was more likely than a minority juvenile to be diverted from the juvenile justice system at an early stage of system processing.

### **Detention rate**

The minority RRI for the detention decision in property offense cases changed little between 1990 and 2010, holding at relatively high levels (an average of 1.5 during this period). This pattern was generally found in the RRIs for black youth. The property offense RRI for AHPI youth began the 1990s at a higher level than that for black youth, but by 2010 had declined to a level below that for black youth. In contrast, the detention RRI for property cases involving AIAN youth began the 1990s at a lower level than the other two racial minorities, remained near 1.0 through 1994, dipped, and then increased through 2010.

### **Petition rate**

The minority RRI for the petitioning decision in property offense cases changed little between 1990 and 2010. This pattern was found in the RRIs of each racial minority. The yearly RRIs for black youth were generally greater than the RRIs for the other two racial minorities.

### **Adjudicated rate**

The minority RRI for the adjudication decision in property offense cases remained constant between 1990 and 2010 at a level below 1.0; this indicates that minority youth petitioned for a property offense were less likely to be adjudicated delinquent than were white youth. This general minority RRI pattern was identical to that for black youth. The AHPI RRI for the adjudication of property offense cases was at or below 1.0 for the entire period, while the RRI for AIAN youth was at or above 1.0 each year since 1990.

### **Probation rate**

The minority RRI for the probation decision following adjudication in property offense cases stayed at or below 1.0 each year between 1990 and 2010, indicating that there was little racial disparity at this decision point. This general pattern was found in the RRI for black, AIAN, and AHPI youth.

### **Placement rate**

The minority RRI for the placement decision following adjudication in property offense cases remained relatively constant between 1990 and 2010, at a level above 1.0. This general minority RRI pattern was identical to that for black youth. The RRI for AHPI youth declined somewhat between the early portion and the latter portion of the 1990 through 2010 period. In contrast, the trend of RRI for AIAN youth fluctuated over the period showing no obvious trend.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in property offense cases between 1990 and 2010 were relatively small (compared with other offenses) and displayed a general pattern of decline over the period. This general minority RRI pattern was similar to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRI unstable over the period and any summary of their trends inadvisable.

## Case Processing Summary of Relative Rate Indices for Property Crime Index (PCI) Offenses

**Relative Rate Indices<sup>1</sup> for Property Crime Index Offenses,  
2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	1.8	2.4	0.8	0.4
Referral rate	1.0	1.0	1.4	1.1
Diversion rate	0.8	0.8	0.8	1.0
Detention rate	1.4	1.4	1.2	0.9
Petitioned rate	1.2	1.2	1.2	0.9
Adjudicated rate	0.9	0.9	1.1	0.9
Probation rate	0.9	0.9	1.0	1.1
Placement rate	1.2	1.2	1.2	0.8
Waiver rate	1.1	1.1	1.6	0.3

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of Property Crime Index (PCI) offense cases (burglary, larceny-theft, motor vehicle theft, and arson) in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 1.8 means that the minority youth arrest rate was about 80% greater than the white arrest rate. The arrest decision's RRI is even greater (2.4) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) youth and Asian, Hawaiian, or Pacific Islander (AHPI) youth indicate that the arrest rates were below that of white youth. This signifies an arrest disparity for these three groups that brings a disproportionately smaller number of AIAN and AHPI youth into the juvenile justice system for a PCI offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit PCI crimes at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the PCI offenses of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their PCI offenses. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities was maintained as a result of this decision. In 2010 minority youth were, in general, as likely as white youth to be referred to juvenile court for a PCI offense.

The RRI for the detention decision indicates in 2010 that the decision to detain a youth referred for a PCI offense resulted in a greater proportion of minority youth than white youth being securely detained.

The petitioning decision in the processing of PCI cases added to the level of racial disparity in the handling of these cases. In 2010 minority youth referred to juvenile court for a PCI offense were, in general, more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at this decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that this decision actually helped to reduce the overall level of racial disparity in the processing of PCI referrals by the juvenile justice system, given that the RRI was less than 1.0. Once petitioned, minority youth charged with a PCI offense in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with a PCI offense were more likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that the racial disparity that existed at other stages of case processing was maintained at the waiver decision point as the RRI for minority youth was 1.1. In other words, minority youth were more likely than white youth to have their PCI case waived to criminal court in 2010.

In all, in 2010 some decisions made in the juvenile justice system processing of PCI cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some PCI cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution to disparity was

greatest in the processing of PCI cases in 2010 (e.g., arrest and detention) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

The minority RRI for the arrest decision in PCI cases changed little between 1990 and 2004, then increased through 2010, holding at relatively high levels. This overall minority RRI pattern generally reflects that of black juveniles. In contrast, the RRIs for AIAN juveniles show a steady decrease between the mid-1990s and 2010. Between 2002 and 2010, AIAN youth were equally or less likely to be arrested for a PCI offense than their white counterparts. The RRIs for AHPI juveniles indicate they were far less likely to be arrested for a PCI offense than were white juveniles.

### **Referral rate**

The minority RRI for the court referral decision in PCI cases decreased substantially between 1991 and 1995 before fluctuating through 2010. This general minority RRI pattern held for black youth, but not for AIAN and AHPI youth. For AIAN youth, the values of their court referral RRI indicate that there was substantial racial disparity at court referral in the earlier part of the 1990s, followed by a modest decline through 2010. The RRI for the court referral decision involving AHPI youth remained near 1.0 between 1990 and 2010.

### **Diverted rate**

The minority RRI for the diversion decision in PCI cases was consistently below 1.0 between 1990 and 2010. This minority RRI pattern was generally found in the RRIs for black and AIAN youth, indicating that a white juvenile being processed for a PCI offense was more likely to be diverted from the juvenile justice system at an early stage of system processing. The diverted RRI for AHPI youth was above 1.2 in 1990 but decreased to 0.9 in 2001 and leveled off through 2010.

### **Detention rate**

The minority RRI for the detention decision in PCI cases remained at relatively high levels between 1990 and 2010. This pattern was found in the RRIs for black youth. The PCI RRI for AHPI youth began the 1990s at a higher level than that for black youth, but by 2010 had declined to a level below that for black youth and to a level below 1.0. In contrast, the detention RRI for PCI cases involving AIAN youth began the 1990s at a lower level than the other two racial minorities, remained near 1.0 through 1996, and then increased through 2010.

### **Petition rate**

The minority RRI for the petitioning decision in PCI cases changed little between 1990 and 2010. This pattern was found in the RRIs of each racial minority. The yearly RRIs for black youth were generally greater than the RRIs for the other two racial minorities. The AHPI RRI at this stage stayed at or below 1.0 each year since 1990, while the RRIs for the other two minority groups reflected a degree of racial disparity at this decision point.

### **Adjudicated rate**

The minority RRI for the adjudication decision in PCI cases remained constant between 1990 and 2010 at a level below 1.0; this indicates that minority youth petitioned for a PCI offense were less likely to be adjudicated delinquent than were white youth. This general minority RRI pattern was identical to that for black youth. The RRI for AHPI youth stayed at or below 1.0 for the entire period, while the RRI for AIAN youth was at or slightly above 1.0 since 1990.

### **Probation rate**

The minority RRI for the probation decision following adjudication in PCI cases stayed below 1.0 each year between 1990 and 2010, indicating white youth were more likely to be placed on probation than minority youth. The RRIs for AIAN and AHPI youth for the probation decision following adjudication in PCI cases stayed at or near 1.0 for most years between 1990 and 2010, indicating that there was little racial disparity at this decision point.

### **Placement rate**

The minority RRI for the placement decision following adjudication in PCI cases remained relatively constant between 1990 and 2010, at a level above 1.0. This general minority RRI pattern was identical to that for black youth. The RRI for AHPI youth declined between the mid-1990s and 2010. In contrast, the trend of RRIs for AIAN youth decreased through 1999 to a level where racial disparity was virtually eliminated before increasing through 2002 and leveling off somewhat through 2010.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in PCI cases decreased between 1991 and 2003 before increasing to a rate of 1.1 in 2010. This general minority RRI pattern was identical to that of black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends inadvisable.

## Case Processing Summary of Relative Rate Indices for Burglary Offenses

**Relative Rate Indices<sup>1</sup> for Burglary Offenses, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	2.0	2.7	0.5	0.3
Referral rate	0.9	0.9	1.8	1.2
Diversion rate	0.7	0.7	0.9	0.6
Detention rate	1.4	1.4	1.1	1.0
Petitioned rate	1.1	1.1	1.0	1.0
Adjudicated rate	1.0	1.0	1.2	0.9
Probation rate	0.9	0.8	1.0	1.1
Placement rate	1.3	1.3	1.1	0.9
Waiver rate	1.2	1.2	1.8	0.2

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of burglary cases in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 2.0 means that the minority youth arrest rate was twice the white arrest rate. The arrest decision's RRI is even greater (2.7) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) youth (0.5) and for Asian, Hawaiian, or Pacific Islander (AHPI) youth (0.3) indicate that their arrest rates were far below that of white youth, signifying an arrest disparity for these three groups that brings a disproportionately smaller number of AIAN and AHPI youth into the juvenile justice system for a burglary offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit burglary crimes at a greater rate than white youth, with the greater arrest rate simply

reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the burglary crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their burglary crimes. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system decreased for minorities as a result of this decision. In 2010 black youth were less likely than white youth to be referred to juvenile court for a burglary offense, given that the RRI was 0.9. In contrast, AIAN were considerably more likely (1.8) and AHPI were slightly more likely (1.2) than white youth to be referred to juvenile court for a burglary offense.

The RRI for the detention decision indicates in 2010 that the decision to detain a youth referred for a burglary offense resulted in a greater proportion of minority youth than white youth being securely detained.

The petitioning decision in the processing of burglary cases added to the level of racial disparity in the handling of these cases. In 2010 minority youth referred to juvenile court for a burglary offense were, in general, more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at this decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that this decision actually helped to reduce the overall level of racial disparity in the processing of burglary offense referrals by the juvenile justice system, given that the RRI was equal to 1.0. Once petitioned, minority youth charged with a burglary offense in 2010 were equally as likely to be adjudicated as were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with a burglary offense were more likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that further disparity occurred in the decision to judicially waive to criminal court youth charged with a burglary offense in 2010, given that the RRI for minority youth was 1.2.

In all, in 2010 some decisions made in the juvenile justice system processing of burglary offense cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some burglary cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution

to disparity was greatest in the processing of burglary cases in 2010 (e.g., arrest and detention) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

The minority RRI for the arrest decision in burglary cases increased substantially between 1990 and 2010, with most of the growth occurring in the last seven years. Over this period the arrest rates for white youth and minority youth both increased substantially. This overall minority RRI pattern generally reflects that of black juveniles. In contrast, the RRIs for AIAN juveniles show there was little racial disparity at arrest when compared with white juveniles between 1990 and 1997; however, since 1998, AIAN juveniles were less likely to be arrested than white juveniles. The RRIs for AHPI juveniles indicate they were far less likely to be arrested than white juveniles during the 21 year period.

### **Referral rate**

The minority RRI for the court referral decision in burglary offense cases was at or near 1.0 during most of the 1990 through 2010 period, meaning there was little, if any, racial disparity at the point of court referral for burglary cases during these years. This general minority RRI pattern held for black youth, but not for AIAN and AHPI youth. For AIAN youth, the values of their court referral RRI indicate that there was substantial racial disparity at court referral in the earlier part of the 1990s, followed by a leveling off through 2004, at which point the RRI increased again through 2010. The RRI for the court referral decision involving AHPI youth remained at or below 1.0 between 1990 and 1999. Since 2000, the RRI for the court referral decision involving AHPI youth remained at or above 1.2.

### **Diverted rate**

The minority RRI for the diversion decision in burglary cases was consistently below 1.0 between 1990 and 2010. This minority RRI pattern held for black youth but varied for AIAN and AHPI youth. During this period, a white juvenile being processed for a burglary offense was more likely than a black youth to be diverted from the juvenile justice system at an early state of system processing. This pattern held true for AHPI youth from 1997 onwards. The pattern for AIAN youth showed considerable variation; since 1990, the diversion RRI for AIAN youth charged with burglary was below 1.0 in all but a handful of years.

### **Detention rate**

The minority RRI for the detention decision in burglary cases changed little between 1990 and 2010, holding at relatively high levels. This pattern was also found in the RRIs for black youth. The detention RRI for AHPI youth began the 1990s at a higher level than that for black youth, but by 2010 had declined to a level below 1.0 and below the RRI for black youth. In contrast, the detention RRI for burglary cases involving AIAN youth began the 1990s at a lower level than the other two racial minorities, remained below 1.0 through 2003, and then increased through 2010.

### **Petition rate**

The minority RRI for the petitioning decision in burglary cases varied somewhat between 1990 and 2010. This pattern was found in the RRI of black youth, but not for AIAN or AHPI youth. While the RRIs for AIAN and AHPI youth remained at or near 1.0 between 1990 and 2010, the RRI for black youth was at its

highest level in 1990, decreased through 1995 to a level below 1.0, fluctuated through 2007 before increasing again through 2010. The yearly RRIs for black youth were generally greater than the RRIs for the other two racial minorities.

### **Adjudicated rate**

The minority RRI for the adjudication decision in burglary cases remained below 1.0 for most years between 1990 and 2010; this indicates that minority youth petitioned for a burglary offense were less likely to be adjudicated delinquent than were white youth. This general minority RRI pattern was identical to that for black youth. The RRIs for the other two racial minorities showed no clear pattern of change, but their average values were above those of black youth for most of the period.

### **Probation rate**

The minority RRI for the probation decision following adjudication in burglary cases remained substantially below 1.0 each year between 1990 and 2010. Although AIAN were considerably less likely to be ordered to probation than their white counterparts between 1990 and 1996, the RRIs for AHPI and AIAN youth were at or near 1.0 between 1997 and 2010, indicating that little racial disparity existed for these groups at the probation decision point.

### **Placement rate**

The minority RRI for the placement decision following adjudication in burglary cases remained relatively constant between 1990 and 2010, at a level above 1.2. This general minority RRI pattern was identical to that for black youth. The RRI for AHPI youth declined somewhat between the early portion and the latter portion of the 1990 through 2010 period. In contrast, the trend of RRIs for AIAN youth fluctuated over the period showing no obvious trend.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in burglary cases between 1990 and 2010 were relatively small (compared with other offenses) and displayed a general pattern of decline through 2003 and of increase through 2010. This general minority RRI pattern was identical to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth make the value of their annual RRIs unstable over the period and any summary of their trends unadvisable.

## Case Processing Summary of Relative Rate Indices for Larceny-theft Offenses

**Relative Rate Indices<sup>1</sup> for Larceny-theft, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	1.8	2.3	0.9	0.4
Referral rate	1.0	1.0	1.3	1.1
Diversion rate	0.8	0.8	0.8	1.0
Detention rate	1.4	1.4	1.3	1.0
Petitioned rate	1.2	1.2	1.3	1.0
Adjudicated rate	0.9	0.9	1.1	0.9
Probation rate	1.0	1.0	1.0	1.1
Placement rate	1.1	1.1	1.2	0.7
Waiver rate	1.1	1.1	1.6	0.1

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of larceny-theft cases in 2010. The decision point that contributed the most to the overall level of disparity in the system is the point of arrest. The Relative Rate Index of the arrest decision was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 1.8 means that the minority youth arrest rate was about 80% greater than the white arrest rate. The arrest decision's RRI is even greater (2.3) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) and Asian, Hawaiian, or Pacific Islander (AHPI) youth indicate that their arrest rate was below that of white youth, signifying an arrest disparity for these three groups that brings a disproportionately smaller number of AIAN and AHPI youth into the juvenile justice system for a larceny-theft offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit larceny-theft crimes at a greater rate than white youth, with the greater arrest rate

simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the larceny-theft crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their larceny-theft crimes. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities was maintained as a result of this decision. In 2010 minority youth were, in general, as likely as white youth to be referred to juvenile court for a larceny-theft offense.

The RRI for the detention decision indicates in 2010 that the decision to detain a youth referred for a larceny-theft offense resulted in a greater proportion of minority youth than white youth being securely detained.

The petitioning decision in the processing of larceny-theft cases added to the level of racial disparity in the handling of these cases. In 2010 minority youth referred to juvenile court for a larceny-theft offense were, in general, more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at this decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that this decision actually helped to reduce the overall level of racial disparity in the processing of larceny-theft referrals by the juvenile justice system, given that the RRI was less than 1.0. Once petitioned, minority youth charged with a larceny-theft offense in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated, the RRIs indicate that minority youth charged with a larceny-theft offense were more likely to be placed out of the home and equally as likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that the racial disparity that existed at other stages of case processing was maintained at the waiver decision point as the RRI for minority youth was 1.1. In other words, minority youth were more likely than white youth to have their PCI case waived to criminal court in 2010.

In all, in 2010 some decisions made in the juvenile justice system processing of larceny-theft cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example, DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some larceny-theft cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution to disparity was greatest in the processing of larceny-theft cases in 2010 (e.g., arrest and detention) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

The minority RRI for the arrest decision in larceny-theft cases changed little between 1990 and 2010, holding at relatively high levels. Over this period the arrest rates for white youth and minority youth both increased. This overall minority RRI pattern generally reflects that of black juveniles. In contrast, the RRI for AIAN juveniles show that racial disparity has decreased since the mid-2000s, while the RRI for AHPI juveniles indicate they were far less likely to be arrested than were white juveniles.

### **Referral rate**

The minority RRI for the court referral decision in larceny-theft cases was at or near 1.0 during most of the 1990 through 2010 period, meaning there was little, if any, racial disparity at the point of court referral for larceny-theft cases during these years. This general minority RRI pattern held for black youth, but not for AIAN and AHPI youth. For AIAN youth, the values of their court referral RRI indicate that there was substantial racial disparity at court referral in the earlier part of the 1990s, followed by a modest decline through 2010. The RRI for the court referral decision involving AHPI youth remained near 1.0 between 1990 and 2010, with a slight increase in the latter years.

### **Diverted rate**

The minority RRI for the diversion decision in larceny-theft cases was consistently below 1.0 between 1990 and 2010. This minority RRI pattern was generally found in the RRI for black and AIAN youth. This means that during this period, a white juvenile being processed for a larceny-theft offense was more likely than a black or AIAN juvenile to be diverted from the juvenile justice system at an early stage of system processing. The AHPI RRI for the diversion decision was above 1.0 through 1998, then remained at or near 1.0 through 2010.

### **Detention rate**

The minority RRI for the detention decision in larceny-theft cases generally decreased between 1990 and 2010, but still remained at a high level in 2010. This pattern was found in the RRI for black youth. The larceny-theft RRI for AHPI youth began the 1990s at a higher level than that for black youth, but by 2010 had declined to a level below that of black youth. In contrast, the detention RRI for larceny-theft cases involving AIAN youth began the 1990s at a lower level than the other two racial minorities, remained near 1.0 through 1994, increased through 2009, then declined slightly by 2010.

### **Petition rate**

The minority RRI for the petitioning decision in larceny-theft cases changed little between 1990 and 2010. This pattern was generally found in the RRI of each racial minority. Until 2007 when the petition decision RRI for AIAN outpaced that of black youth, the yearly RRI for black youth were generally greater than the RRI for the other two racial minorities. From 2000 to 2010, the AHPI RRI stayed at 1.0 for the petitioning decision in larceny-theft cases, while the RRI for the other two minority groups reflected a degree of racial disparity at this decision point. The RRI for AIAN youth was higher in 2010 than it was in 1990.

### **Adjudicated rate**

The minority RRI for the adjudication decision in larceny-theft cases remained consistently below 1.0 between 1990 and 2010 and decreased through the time period; this indicates that minority youth petitioned for larceny-theft were less likely to be adjudicated delinquent than were white youth. This general minority RRI pattern was similar to that for black youth. The adjudicated RRI for AIAN youth was at or above 1.0 each year since 1990, while the RRI for AHPI youth remained below 1.0 each year since 1990.

### **Probation rate**

The minority RRI for the probation decision following adjudication in larceny-theft cases stayed at or below 1.0 each year since 1990, indicating that minority youth were generally as likely to be placed on probation as were white youth. This general pattern was found in the RRIs for black youth and AIAN youth. Conversely, the AHPI RRI for the probation decision was above 1.0 nearly every year since 1990, indicating AHPI youth were more likely to be placed on probation than white youth.

### **Placement rate**

The minority RRI for the placement decision following adjudication in larceny-theft cases was at or above 1.0 each year since 1990, with the 1990s showing greater levels of racial disparity than the 2000s. This general minority RRI pattern was identical to that for black youth. While the RRIs for AIAN and AHPI youth fluctuated between 1990 and 2010, AIAN were consistently more likely than white youth to be placed outside of the home, and AHPI were consistently less likely than white youth to be placed outside of the home.

### **Waiver rate**

For many years (1998-2009), the RRI for the waiver decision indicated that this decision point actually helped to reduce the overall level of racial disparity as minority youth were considerably less likely to be waived to criminal court than their white counterparts. This general minority RRI pattern was similar to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends unadvisable.

## Case Processing Summary of Relative Rate Indices for Drug Offenses

**Relative Rate Indices<sup>1</sup> for Drug Offenses, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	1.1	1.5	0.6	0.2
Referral rate	0.9	0.8	1.5	1.1
Diversion rate	0.6	0.6	0.8	0.8
Detention rate	1.8	1.8	1.3	1.4
Petitioned rate	1.3	1.3	1.1	1.1
Adjudicated rate	1.0	0.9	1.2	0.9
Probation rate	0.9	0.9	1.1	1.0
Placement rate	1.6	1.7	1.0	1.0
Waiver rate	1.3	1.3	0.7	0.6

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of drug offense cases in 2010. The arrest decision contributed substantially to the level of disparity in the processing of drug offense cases. The Relative Rate Index of the arrest decision point was substantially greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 1.1 means that the minority youth arrest rate was about 10% greater than the white arrest rate. The arrest decision's RRI was even greater (1.5) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) youth (0.6) and Asian, Hawaiian, or Pacific Islander (AHPI) youth (0.2) were both lower than that of white youth, suggesting an arrest disparity for these two groups that brings a disproportionately larger number of white youth into the juvenile justice system for a drug offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit drug offenses at a greater rate than white youth, with the greater arrest rate simply

reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the drug offense crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth for their drug offense crimes. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court for minority youth overall indicates the level of racial disparity in the juvenile justice system for minorities decreased as a result of this decision. In 2010 minority youth were, in general, less likely to be referred to juvenile court for a drug offense than were white youth. This pattern held for black youth whose RRI was less than 1.0 (0.8); however, this pattern did not hold for AIAN youth or AHPI youth whose court referral RRIs were 1.5 and 1.1, respectively.

Different than in the processing of other types of delinquencies, the RRI for the detention decision in the handling of drug offense cases in 2010 was much greater than the RRI for the arrest decision. The decision to detain youth referred for a drug offense resulted in a much greater likelihood that minority youth would be securely detained.

Based on the RRI for minority youth overall, the petitioning decision added to the level of racial disparity in the processing of drug offense cases. In 2010 minority youth referred to juvenile court for a drug offense were, in general, more likely to be processed formally (and less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Looking at the racial groups separately, this pattern was found primarily in the processing of black youth. Once again, the disparities added at this decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that this decision maintained the overall level of racial disparity in the processing of drug offense referrals within the juvenile justice system given that the RRI was 1.0 for minorities overall. Once petitioned, minority youth charged with a drug offense in 2010 were as likely to be adjudicated as were white youth. In fact, the RRI at the adjudication stage for black youth and AHPI youth was below 1.0, while the RRI for AIAN youth charged with a drug offense shows these youth more likely than white youth to be adjudicated in 2010. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Once adjudicated the RRIs indicate that minority youth charged with a drug offense were far more likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010. Once again, there could be many reasons for these racially-disparate decisions, factors that only additional research can identify.

Finally, the RRI for the waiver decision indicates that there were racial disparities at this decision point in 2010 that resulted in a greater proportion of minority youth than white youth charged with a drug offense being judicially waived to criminal court. Again, many factors could have lead to this racially-disparate decision.

In all, in 2010 most decisions made in the juvenile justice system processing of drug offense cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decision-making process. Only more targeted research can uncover the most likely causes. For example, DMC

Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) or crime types (e.g., drug possession or drug selling) to see if the disparity patterns are linked more strongly to some drug cases than to others. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution to disparity was greatest in the processing of drug offense cases in 2010 (e.g., detention, and placement) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

The minority RRI for the arrest decision in drug offense cases dropped precipitously between the early 1990s and the mid-2000s, reaching a low point in 2004. This overall minority pattern generally reflects that of black juveniles. In sharp contrast, the RRIs for AIAN and AHPI juveniles indicate they were far less likely to be arrested for drug offenses than were white juveniles every year between 1990 and 2010.

### **Referral rate**

The minority RRI for the court referral decision in drug offense cases was consistently below 1.0 for all but one year of the 21-year period. This means that during this period it was more likely to send white juveniles than minority juveniles arrested for a drug offense into the juvenile justice system. This pattern held for black youth but not for AHPI and AIAN juveniles. The RRI for the court referral decision involving AHPI youth remained near 1.0 between 1990 and 2010, with a slight increase in the latter years. For AIAN youth, the substantially higher values of their court referral RRIs indicate that there was considerable racial disparity at court referral throughout the 1990 to 2010 period.

### **Diverted rate**

The minority RRI for the diversion decision in drug offense cases was far below 1.0 each year between 1990 and 2010. This general minority pattern was primarily found in the RRIs for black youth. The RRIs for AIAN and AHPI youth over this period were substantially greater than those of black youth, wavering above and below 1.0 over the period. This means that a white juvenile being processed for a drug offense was far more likely than a black juvenile to be diverted from the juvenile justice system at an early stage of system processing between 1990 and 2010, but had an equal likelihood to be diverted as AIAN and AHPI youth.

### **Detention rate**

The minority RRI for the detention decision in drug offense cases was relatively high and consistent between 1990 and 2010. This general pattern was seen in the RRI for black youth. Over the period the RRIs for black youth were consistently above those of AHPI youth and substantially above those of AIAN youth. In fact, the RRI for AIAN youth was close to 1.0 for most of the years in this period.

### **Petition rate**

Even though there was some decline, the minority RRI for the petitioning decision in drug offense cases remained relatively high between 1990 and 2010. This pattern was reflected in the RRI for black youth. In sharp contrast, the RRIs for AIAN and AHPI youth remained essentially constant, hovering around 1.0 for most of the period.

### **Adjudicated rate**

The minority RRI for the probation decision following adjudication in drug offense cases stayed at or below 1.0 throughout the 1990 and 2010 period, indicating that there was little racial disparity at this decision point. This general minority pattern was found in the RRI for black youth. The RRI for AIAN youth was relatively stable through the mid-1990s at or below 1.0. This period of stability was followed by a general increase through 2010. In fact, the annual RRI for AIAN youth was above the values for black and AHPI youth each year since 1990.

### **Probation rate**

The minority RRI for the probation decision following adjudication in drug offense cases held slightly below 1.0 between 1990 and 2010, indicating that there was little racial disparity at this decision point. This general minority pattern was found in the RRI for black youth. The RRIs for AIAN and AHPI youth also remained relatively constant through this period, but in general closer to 1.0 than the RRI of black youth.

### **Placement rate**

The minority RRI for the placement decision following adjudication in drug offense cases increased between 1990 and 2010. This general minority RRI pattern was similar to that for black youth. In contrast, the RRIs for AIAN and AHPI youth displayed no clear pattern of change during this period.

### **Waiver rate**

The annual values of the minority RRI for the waiver decision in drug offense cases were far greater than in other offenses and showed a general pattern of decline between 1990 and 2010. This general minority RRI pattern was similar to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends unadvisable — although it is clear that the average RRI for AHPI youth was far lower than those of the other two racial minorities.

## Case Processing Summary of Relative Rate Indices for Public Order Offenses

**Relative Rate Indices<sup>1</sup> for Public Order Offenses, 2010**

	Minority	Black	AIAN*	AHPI**
Arrest rate	1.4	1.8	0.9	0.3
Referral rate	1.4	1.4	1.2	1.1
Diversion rate	0.8	0.8	0.6	0.6
Detention rate	1.2	1.2	1.4	1.3
Petitioned rate	1.1	1.1	1.3	1.2
Adjudicated rate	0.9	0.9	1.1	1.0
Probation rate	0.9	0.9	1.1	1.2
Placement rate	1.0	1.0	0.9	0.8
Waiver rate	1.1	1.1	1.0	0.9

<sup>1</sup> All Relative Rate Indices are relative to whites

\* AIAN: American Indian or Alaskan Native

\*\* AHPI: Asian, Hawaiian, or Pacific Islander

### Interpretations

The cumulative disparity experienced by minority youth at any decision point in the juvenile justice system is a combination of the disparities introduced at prior decision points and that added by the decision point of interest. Studying the set of Relative Rate Indices for a specific decision process enables us to see the unique contributions made by each decision point to the overall disparity in the system. Some decisions (those with Relative Rate Indices greater than 1.0) increase disparity in the system. Some decisions (those with Relative Rate Indices equal to 1.0) neither increase nor decrease disparity but maintain the level of disparity that resulted from prior decisions. And some decisions (those with Relative Rate Indices less than 1.0) reduce the level of disparity in the system.

With this background, we can review the set of Relative Rate Indices (RRI) that capture disproportionate minority contact (DMC) in the juvenile justice system's handling of public order offense cases in 2010. As the RRI indicates, there is racial disparity at arrest in these cases. The Relative Rate Index of the arrest decision point was greater than 1.0 when comparing the overall minority arrest rate to that of white youth. This RRI of 1.4 means that the minority youth arrest rate was about 40% greater than the white arrest rate. The arrest decision's RRI is even greater (1.8) when comparing black youth to white youth. The arrest RRI for American Indian or Alaskan Native (AIAN) youth was half (0.9) the RRI for black and slightly below 1.0, indicating no racial disparity at the arrest stage for white and AIAN youth. The arrest RRI for Asian, Hawaiian, or Pacific Islander (AHPI) youth (0.3) indicates that their arrest rate was far below that of white youth, signifying an arrest disparity for these two groups that brings a disproportionately smaller number of AHPI youth into the juvenile justice system for a public order offense.

There are several possible reasons for these racial disparities at the point of arrest. For example, minority youth may commit public order offenses at a greater rate than white youth, with the greater arrest rate simply reflecting these behavioral differences. It may also be that even when minority and white youth commit crimes at similar rates, the crimes of minority youth are more likely to be reported to law enforcement, also resulting in a higher arrest rate. Or it could be that even when both groups commit crimes at similar rates and these crimes are equally likely to be reported to law enforcement, law enforcement is more likely to arrest minority youth. Using only data available for calculating the RRI, it is not possible to determine which or how much each of these factors contribute to racial disparities reflected by the RRIs at the arrest decision point.

The RRI for referral to juvenile court indicates that the level of racial disparity in the juvenile justice system was further increased as a result of this decision. In 2010, based on the magnitudes of their arrest rates, minority youth were more likely to be referred to juvenile court for a public order offense than were white youth. In fact, in 2010, the RRI for this decision point indicates that more racial disparity was introduced into the processing of youth charged with public order offenses at the point of court referral than at any other decision point in the processing system (excluding the arrest decision).

The RRI for the detention decision indicates that there were racial disparities at this decision point in 2010 that resulted in a greater proportion of minority youth than white youth referred to juvenile court for a public order offense being securely detained. Many factors could have lead to this racially-disparate decision.

The petitioning decision added somewhat to the level of racial disparity in the processing of public order offense cases, although its contribution was lower than in other types of delinquency cases. In 2010 minority youth referred to juvenile court for a public order offense were, in general, a slightly more likely to be processed formally (and a little less likely to be diverted from the formal court process) than were white youth referred to juvenile court. Once again, the disparities added at this decision point could be the result of several factors (e.g., differential severities in the nature of their crimes, differences in the youths' prior delinquency histories, and/or decisionmaker bias); only further research can establish the most likely causes.

The RRI for the adjudication decision indicates that these decisions actually helped somewhat to reduce the overall level of racial disparity in the processing of public order offense referrals by the system given that the RRI for minority youth was less than 1.0. Once petitioned, minority youth charged with a public order offense in 2010 were somewhat less likely to be adjudicated than were white youth. One of the many possible reasons for this pattern could be that the screening decision used to petition these cases may have sent a greater proportion of legally weak or less serious cases of minority youth to an adjudication hearing and these cases were screened out at the adjudication decision.

Unlike other offense categories, the placement decision did not add to the level of racial disparity in the processing of public order offense cases. Once adjudicated, the RRIs indicate that minority youth charged with a public order offense were equally likely to be placed out of the home and less likely to be placed on probation than were adjudicated white youth in 2010.

Finally, the RRI for the waiver decision indicates that these decisions added somewhat to the level of racial disparity in the decision to judicially waive to criminal court youth charged with a public order offense in 2010, given that the RRI for minority youth was 1.1.

In all, in 2010 many decisions made in the juvenile justice system processing of public order offense cases were racially disparate. However, this racial disparity may not be the result of racial bias in the decisionmaking process. Only more targeted research can uncover the most likely causes. For example,

DMC Relative Rate Index Matrices could be developed separately for various types of juvenile offenders (e.g., males and females, young and old) or various locations (e.g., urban, suburban, and rural areas) to see if the disparity patterns are linked more strongly to some attributes of public order offense cases than to others. More specifically, given that the category of public order offenses includes such a diverse set of offenses (e.g., weapons possession, disorderly conduct, underage drinking, obstruction of justice, and technical violations of probation and parole), it would be informative to develop separate Relative Rate Index Matrices for the processing of each of the higher volume offenses to determine which disparity pattern is common across the set of offenses. In addition, considerations of the magnitude of the various RRIs highlight the decision points where the contribution to disparity was greatest in the processing of public order offense cases in 2010 (e.g., arrest, court referral, and detention) and can help to prioritize the points at which further study is most warranted.

## **Trends**

### **Arrest rate**

Despite a decline in the late 1990s, the high level of racial disparity at the arrest decision point for public order offense cases was sustained between 1990 and 2010. The minority RRI in 2010 was slightly above the RRI in 1990. This overall minority pattern generally reflects that of black juveniles. Over the period the RRIs for AIAN juveniles show there to be little, if any, racial disparity at arrest when compared with white juveniles. And in contrast to both other minority groups, the RRIs for AHPI juveniles were well below 1.0, indicating that these youth were far less likely to be arrested for public order offenses than were white juveniles.

### **Referral rate**

The minority RRI for the court referral decision in public order offense cases was generally larger than the RRI for any other offense between 1990 and 2010 and changed little. This means that the level of racial disparity at this decision point was relatively high and persistent during the period. This pattern held for black youth. In contrast, after being high in the early 1990s, the RRI for AIAN youth fell to a relatively low level, averaging 1.1 since 2001. The court referral RRI for AHPI youth involved in public order offense cases declined through the late-1990s, increased through 2005, then declined through 2010.

### **Diverted rate**

The minority RRI for the diversion decision in public order offense cases was below 1.0 each year between 1990 and 2010. This overall minority pattern reflects that of black juveniles. The RRIs for AIAN and AHPI youth fell below 1.0 in the mid-1990s and remained relatively constant through 2010; as such, by 2010 the RRIs for each racial minority were similar.

### **Detention rate**

The minority RRI for the detention decision in public order offense cases remained above 1.0 each year between 1990 and 2010. The overall minority trend mirrored the pattern of each racial group. Compared with black youth, trends for AIAN and AHPI youth showed considerable annual variation over the period. The average RRI for the detention decision was 1.3 for AIAN and AHPI youth, slightly above the average for black youth (1.2).

## **Petition rate**

The minority RRI for the petitioning decision in public order offense cases declined in the early 1990s and then remained at its relatively low level (1.1) through 2010. This pattern was found in the RRI for black youth. In contrast, the trends in the RRIs for AIAN and AHPI showed greater variation, especially during the 1990s. For both AIAN and AHPI youth, the RRI for the petition decision was above the level for black youth since 2006.

## **Adjudication rate**

The minority RRI for the adjudication decision in public order offense cases stayed at or below 1.0 between 1990 and 2010, indicating that there was little racial disparity at this decision point. This general pattern was found in the RRIs for black and AHPI youth. The trend of RRIs for AIAN youth was also relatively constant, holding at a level of about 1.1 each year since 1993.

## **Probation rate**

The minority RRI for the probation decision following adjudication in public order cases remained relatively constant between 1990 and 2010, staying at or below 1.0 for most of the period. This RRI pattern was similar to that for black and AIAN youth. The RRI for AHPI youth was also relatively stable, but tended to be slightly above the levels for the other racial groups.

## **Placement rate**

The minority RRI for the placement decision following adjudication in public order offense cases remained relatively constant from 1990 to 2010, varying from 1.1 to 1.2 for most of the period. This general minority RRI pattern was also found in the RRIs for black youth. The RRI for AHPI youth also stayed within a limited range (0.9 to 1.1) during the 21-year period. In contrast, the trend in the RRI for AIAN youth showed more variation than that of black and AHPI youth, particularly during the 1990s.

## **Waiver rate**

The annual values of the minority RRI for the waiver decision in public order offense cases declined substantially through the late 1990s, stabilized through 2004, then generally increased through 2010. The minority RRI for the waiver decision was at or above 1.1 for most years of the 21-year period. This RRI pattern was similar to that for black youth. The small numbers of waived cases involving AIAN and AHPI youth made the value of their annual RRIs unstable over the period and any summary of their trends inadvisable.