



WISCONSIN SENTENCING COMMISSION

**RACE AND SENTENCING IN  
WISCONSIN:  
A MONOGRAPH SERIES**

**REPORT NUMBER 1**

**STARTING POINTS: THE STATE AND NATIONAL LANDSCAPE**

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## Executive Summary

Section 973.30(1)(g) of Wisconsin Statutes requires the Wisconsin Sentencing Commission to “[s]tudy whether race is a basis for imposing sentences in criminal cases and submit a report and recommendations on this issue to the governor, to each house of the legislature under s.13.172(2), and to the supreme court.” The attached report is the first of a series of monographs planned by the Commission to meet that legislated mandate. This report reviews existing practice and academic research to show the current state of knowledge about the issue and to highlight potential concerns and problems which the studies might face. Future reports will examine the topic regarding the most frequent offenses within the state’s major offense categories—violent, drug, sex, and other property or non-violent offenses, providing recommendations for policy and practice. The series will conclude with a report compiling all Commission recommendations to address race and sentencing in Wisconsin overall and by particular offenses.

The major findings of the attached report and the Commission’s recommendations concerning the issues raised are listed below:

### *Report Findings*

- African-Americans and other minorities constitute a disproportionate percentage of incarcerated populations both nationally and in Wisconsin, compared to their percentages of the general population. Wisconsin’s ratio of African-Americans incarcerated to whites incarcerated is the sixth largest in the nation.
- Academic research indicates that racial disparity in American criminal justice is the result of two factors—differential participation by offenders and differential treatment within the process. Differential participation, according to the research, contributes to 40%-80% of the disparity, is associated with low wages, unemployment, and family instability, and may be in part the result of differential patrolling and calls to service. Differential treatment accounts for 20%-60% of the disparity in the studies and is more often found for some offenses or in some jurisdictions than in the aggregate in a state.
- Research also indicates that African-Americans are incarcerated at a higher rate than whites when they make up a smaller percentage of a total state population but receive more severe sentences when they are a higher percentage. The more urban a state’s African-American population is, the more likely it is to have a higher incarceration rate.
- Between 1990 and 1998, approximately 25% of the increase in African-American inmates nationally was due to drug offenses, compared to 12% of the increase in white inmates.
- Imprecision in collecting racial data on offenders can lead to mistakes in measuring disparity. The two commonly used methods—self-identification and face-to-face recording by officials—each can produce inaccurate results. The problem is particularly common for Hispanic/Latino offenders, notably so in Wisconsin and its correctional data, and has been exacerbated by the many racial and ethnic categories required for the US census.
- Conclusions about the impact of race on sentencing are affected by decisions made at all prior points in the criminal justice process—from calls for service to arrests to prosecution or release.
- Conclusions about the impact of race on sentencing must address both decisions to incarcerate or not and decisions about the length of incarceration, if chosen.
- Sentencing guidelines have had a marginal impact on lessening sentencing disparity in the few states that have studied them systematically. However, guideline systems are not sufficient in themselves to address problems of disparity in criminal justice.

## *Policy Recommendations*

### **Collecting Accurate, Reliable Data on Race**

- The Commission recommends that the State develop and adopt a uniform protocol for data collection and reporting on race and ethnicity for all jurisdictions in Wisconsin. Such a protocol should include standards for identifying race and ethnicity, and account for the problematic nature of identification or self-report in the field.
- The Commission will continue to support integration of justice information across systems, through the WIJIS project. The Commission recommends that WIJIS consider the needs of criminal justice researchers as it works toward integrating criminal justice data.

### **Research Models and Methods**

- The Commission recommends funding and staffing of a multi-year project to collect data from selected jurisdictions on calls for service, arrests and failures to arrest, prosecutions and failures to prosecute, and other data relevant to determining disparity prior to sentencing. The data collected should be used to categorize sentencing decisions and to determine the impact of sentencing alone on subsequent disparate treatment. The Commission should also attempt, through case sampling, to compare the outcomes of plea bargains, jury trials, and other types of proceedings.
- The Commission also recommends developing a series of statistical models of the determinants of sentencing decisions. From the data the Commission collects, staff will categorize cases that result in convictions and study how demographics, offense and community characteristics interact to produce sentencing outcomes.
- The objective of this research is to determine statistically the factors that impact both the decision to incarcerate and the length of sentence imposed. These may include:
  - High incarceration rates of specific age groups
  - The role of high-crime neighborhoods and policing patterns
  - Which specific offenses produce the greatest disparities
  - Variation in racial disparities by county, or by size of county.
  - Different outcomes due to differences in complexity of individual cases (number of charges) or criminal history of defendants.
- This research will employ all of the data on case, community and defendant characteristics at the disposal of the Commission as control variables to isolate the relationship between race and sentencing outcomes.

### *Next Steps*

The Commission intends to produce a series of reports on the impact of race on sentencing. The overall objective is to advise and inform policymakers and practitioners, and search for ways to reduce observed racial disparities.

The Commission recommends that all practitioners include in their conferences, workshops, and other meetings the results of these reports with goals to address concerns outlined in the reports. Practitioners must also continue to be sensitive to the possible unintended consequences that attention to and data collection about race in Wisconsin criminal justice may that lead to less ability to study its impact.

The Commission invites comment on this and future monographs via its website—<http://wsc.wi.gov>.

# RACE AND SENTENCING—REPORT # 1

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	1
<b>Report Findings</b> .....	1
<b>Policy Recommendations</b> .....	2
INTRODUCTION .....	4
MEASURES OF DISPARITY .....	5
<b>National Overview</b> .....	5
<b>Wisconsin Overview</b> .....	7
SENTENCING COMMISSIONS AND RACIAL DISPARITY .....	8
<b>PROBLEM: THE CAPTURE OF DATA ON RACE</b> .....	9
<b>Lack of Attention to the Problem</b> .....	11
<b>EXPLAINING RACIAL DISPARITY</b> .....	11
<b>Differential Participation vs. Differential Treatment</b> .....	12
<b>Poverty Rates and Group Threat Theory</b> .....	13
<b>The Impacts of Drug Enforcement Policy</b> .....	14
RESEARCH METHODS AND MODELS .....	15
<b>Modeling the Criminal Justice Process</b> .....	15
<b>Getting to Why: Regression Analysis</b> .....	16
WISCONSIN DATA.....	16
CONCLUSION .....	17
BIBLIOGRAPHY .....	17
APPENDIX A: CRIMINAL JUSTICE PROCESSING.....	20
APPENDIX B: REGRESSION ANALYSIS .....	23
APPENDIX C: ANECDOTAL INFORMATION ON CAPTURE OF RACE DATA.	25

## Introduction

The Wisconsin Sentencing Commission's enabling legislation (2001 Wisconsin Act 199) instructs it to, among other things, "[s]tudy whether race is a basis for imposing sentences in criminal cases and submit a report and recommendations on this issue to the governor, to each house of the legislature under s. 13.172 (2), and to the supreme court" (973.20(g), Wis. Stats).

Governor Jim Doyle has charged the Sentencing Commission with improving the current sentencing system to help build a more consistent and stronger sentencing system in Wisconsin. An important piece of this work is to examine racial disparity in sentencing. Wisconsin has been at or near the top of national lists in terms of disproportionate representation of minorities in our state prison system. This report provides an overview of disproportionate representation nationally and in Wisconsin, discusses empirical research on racial disparity and identifies challenges in collecting data on race and ethnicity. It is the first in a series of monographs that will approach the problem from a system-wide perspective, and conduct research into the sources and consequences of disparity.

Racial disparity in the criminal justice system is not unique to Wisconsin. Nationally, minorities are incarcerated at disproportionate rates in both state and federal prison systems. The extent of disproportionate representation varies across the states and within states by jurisdiction. There are two main theories as to why disproportionate representation occurs: differential involvement and differential treatment. The first theory proposes that minorities are involved in more crimes while the second suggests that there is bias in the criminal justice system that leads to differential treatment of minorities. Research indicates that both differential involvement and differential treatment play a role in disproportionate representation.

Diagnosing the specific reasons for racial disparities in Wisconsin's criminal justice system is more complicated. Accurate data on race and ethnicity of offenders are necessary to get at the root of what is happening in Wisconsin's system. Currently, the state does not have a consistent strategy for collecting this information. To address racial disparities, an improved data collection strategy is necessary as well as a comprehensive analysis of the entire criminal justice system. Sentencing is basically the criminal justice

community's last chance to address disparate treatment. A thorough analysis of all decision points in the criminal justice system—and the local community context in which they take place—is necessary for a comprehensive solution.

## Measures of Disparity

### *National Overview*

The United States Department of Justice estimates that one-third of all African-American males will spend time in state prison in their lifetimes. Similarly, Pettit and Western estimate the “lifetime risk of imprisonment for African-American men is 28.5 percent compared to 4.4 percent for white men. The risk of entering prison for the first time is highest at ages 20 to 30, and declines significantly from age 35” (2004, p. 156).

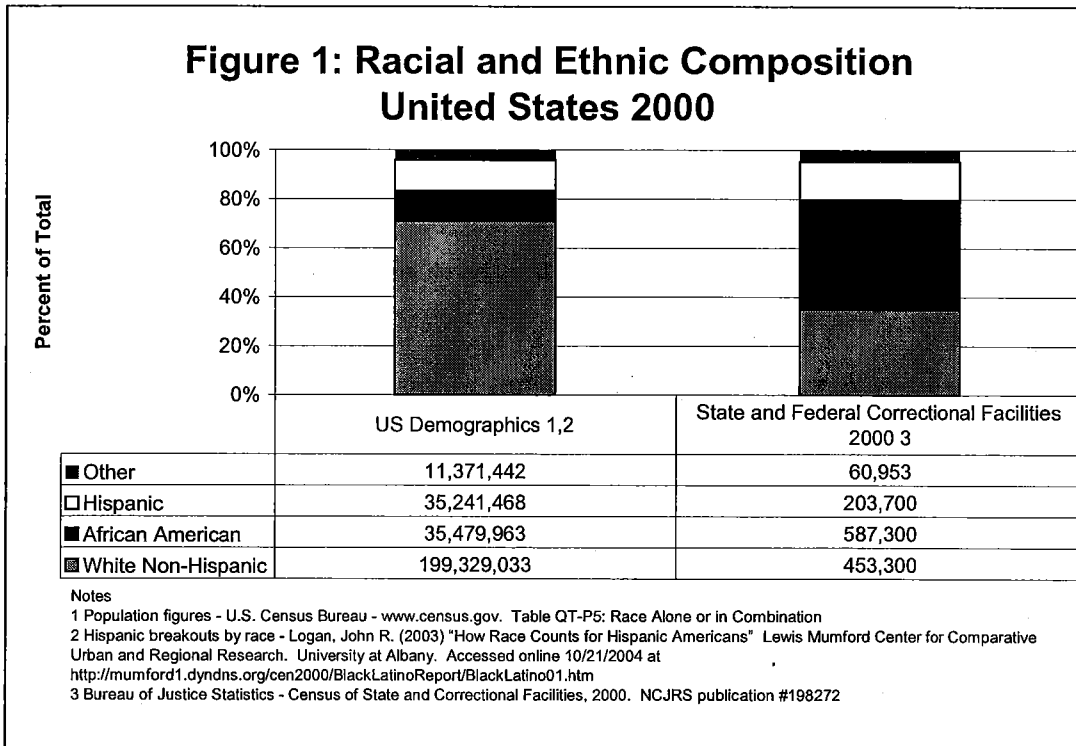
Disproportionate representation occurs when the percentage of minorities incarcerated is higher than the percentage of minorities in the general population. Minorities are incarcerated at disproportionate rates in both state and federal prison systems. The U.S. Justice Department's Bureau of Justice Statistics conducts a periodic inmate census of state and federal correctional facilities. In 2000, 45 percent of the 1.3 million inmates in state, federal, or private (contracted) correctional institutions were African-American<sup>1</sup>, 37 percent were White, 14 percent were Hispanic, 1 percent were Native American or Alaskan Native, and less than one percent were Asian or Pacific Islander (U.S. Department of Justice, 2003).

Figure 1 illustrates disproportionate confinement by comparing those figures to U.S. Census figures. The adult (18 and over) population in the United States in the year 2000 was 71 percent white/non-Hispanic just 13 percent African-American, 13% Hispanic of any race, and 4% other races (Logan, 2003). In contrast, the 2000 state and federally incarcerated population was 35% white, 45% African-American, 16% Hispanic of any race, and 5% from other races.

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<sup>1</sup> Figures reported by race are exclusive of persons of each race identified as Hispanic.

Disproportionate confinement is expressed even more succinctly as a single number, what is known as a *disparity ratio*<sup>2</sup>. The data in Figure 1 suggest that the disparity ratio for African-Americans in 2000 was 7.27, meaning that nationwide, African-Americans were more than seven times more likely than whites to be incarcerated.



A good deal of the available research on race and incarceration comes from The Sentencing Project, a non-profit organization that does advocacy work on sentencing reform. Despite its advocacy mission, this group has built a credible body of objective research in this policy area. It used different data to reach a strikingly similar result (The Sentencing Project, 2004). A state-by-state analysis of 1997 state

*Disparity Ratio:* The ratio of a given minority group's incarceration rate to the incarceration rate of the majority group, whites in this case. The Disparity Index,  $D$  is calculated as follows:

$$D = \frac{I_a}{P_a} \div \frac{I_w}{P_w}$$

Where  $I$  is the incarcerated population and  $P$  is the total population for the races African-American ( $a$ ) and White ( $w$ )

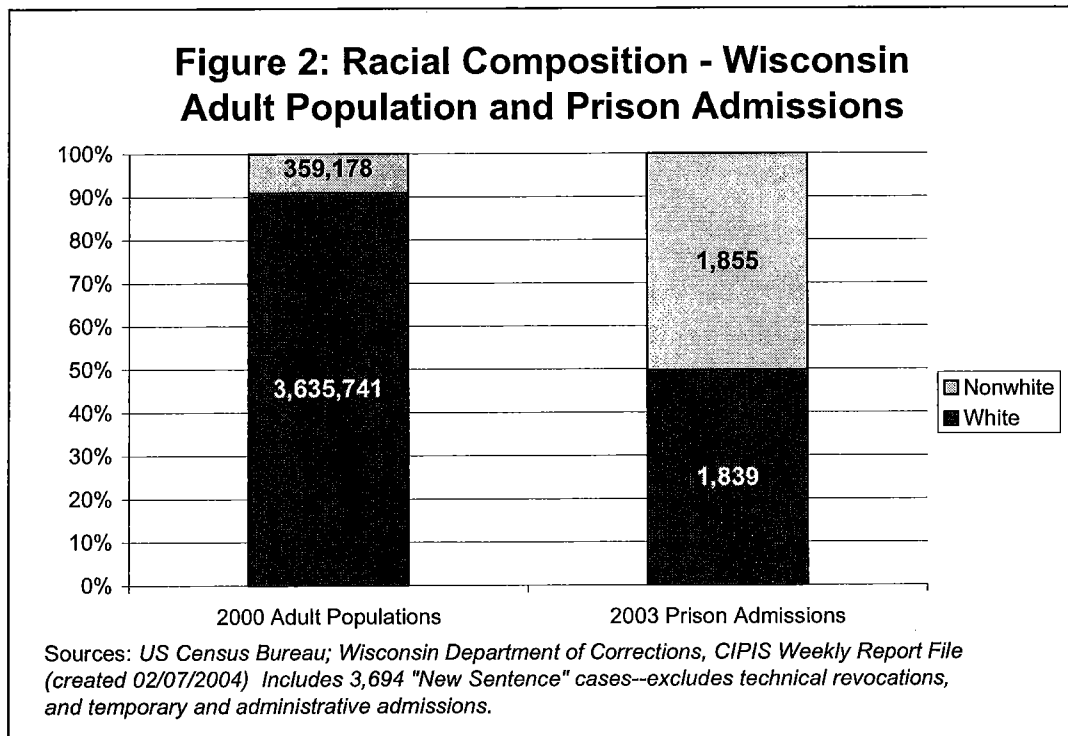
From Figure 1, the Disparity Index for African-Americans would be  $\frac{587,300}{35,479,963} \div \frac{453,300}{199,329,033} = 7.27$

and local jail populations found a national disparity ratio of 6.04. The nature and extent of racial disparity varies widely among the states—from a ratio of 28.9 in the District of Columbia to 1.34 in Hawaii.

**Wisconsin Overview**

Wisconsin has been at or near the top of national rankings in terms of disproportionate representation in its state prison system. By mid-year 2001 Wisconsin led the nation with an estimated 4,058 African-American prison and jail inmates per 100,000 African-American state residents (Beck, Karberg & Harrison, 2002). The Sentencing Project’s study of disparity indexes at the state level ranked Wisconsin sixth in the nation with a disparity index of 11.59 (The Sentencing Project, 2004). Notably, Illinois and Minnesota also often rank high among the states on disparity or minority incarceration rates (Lurigio, 2004).

Wisconsin’s adult population is just under 10% minority as shown on Figure 2. However, minorities made up about half of the adults prison admissions<sup>3</sup> in 2003.



<sup>3</sup> Re-admissions for technical violations of probation or parole and temporary, administrative admissions are excluded in an attempt to more accurately represent the flow of people into correctional facilities.



University of Wisconsin sociologist Pamela Oliver (2004) calculated a disparity ratio in 1999 prison admissions of 20.6 to one. According to Oliver, the extent of racial disparity varies by county. Only six Wisconsin counties in 2000 had a high enough African-American population to provide statistically meaningful information on imprisonment rates: Milwaukee, Dane, Racine, Rock, Kenosha, and Waukesha. Of these counties, Dane and Waukesha counties had the largest racial disparities. In Dane County, African-American males were 35.5 times more likely to be in prison than were white males. Milwaukee, Rock, Racine, and Kenosha counties all had similar, relatively low disparity measures (Oliver, 2004, p. 20).

**Table 1**

### **Wisconsin Prison Population and Admissions**

*Years 2000, 2003 (compiled from Department of Corrections data)*

	<b>White</b>	<b>Non-white</b>	<b>Total</b>
<b>2000 Adult Population</b>	3,635,741	359,178	3,994,919
<b>2003 Prison Admissions</b>	1,839	1,855	3,694
<b>Admissions per 1000 population</b>	0.51	5.16	0.92

## **Sentencing Commissions and Racial Disparity**

Advocates of less racial disparity in sentencing frequently cite sentencing guidelines as a mechanism to introduce more uniformity into sentencing decisions. Presumptive sentencing systems require judges to sentence within selected ranges based on limited variables or to give reasons, often appealable, for departing from the ranges. Thus, advocates see these systems as a good means of reducing the influence of demographic factors on sentences. In practice, however, the results have not lived up to the hopes.

For example, Minnesota, which adopted presumptive guidelines in the early 1980s with one stated goal of reducing sentencing disparity, initially reported success. Nevertheless, Minnesota saw its initial gains erode back almost to pre-guidelines levels (Stolzenberg and D'Alesso, 1994), and currently Minnesota has one of the highest rates of racial disparity in incarceration in the nation (Johnson and

Heilman, 2001; The Sentencing Project, 2004). Similarly, federal sentencing guidelines initially received liberal support in Congress as a means to reduce unwarranted disparity but that goal was not fully realized, in part because of differential sentencing for crack and powder cocaine offenses (Stith and Cabranes, 1998). Thus, while it appears that sentencing guidelines can influence unwarranted disparity in sentencing, it is not clear that their impact will be sufficient to address racial differences in incarceration or severity of sentences.

## **Problem: The Capture of Data on Race**

Collecting data on race and ethnicity is an important part of diagnosing and correcting disparate treatment. However, we find inconsistency and identification problems both across state criminal justice data sources, and across the data used in academic research nationwide. Of even greater concern, we find virtually no instances where researchers raise concerns about the impacts that reliability and consistency of race data might have on the validity of their conclusions.

### **RECOMMENDATIONS**

- The Commission recommends that the State develop and adopt a uniform protocol for data collection and reporting on race and ethnicity for all jurisdictions in Wisconsin. The protocol should comply with US Census Bureau standards and should include standards for identifying race and ethnicity, and for handling cases in which race is unclear. Some incentives or method of enforcing the standards is also necessary.
- The Commission will continue to support integration of justice information across systems, through the WIJIS project.
- The Commission encourages the WIJIS to develop and produce data that are useful to researchers.

The first challenge is defining racial categories. In 1940 the only Census racial categories were non-white and white. Over time the categories evolved to encompass 43 racial categories and subcategories by the 1980 and 1990 Censuses (Spickard, et al, 1995). As of 2000, the new census standards include a minimum of five categories for race: American Indian or Alaskan Native, Asian, Black or African-American, Native Hawaiian or Pacific Islander, and White. Respondents are allowed to select more than one category. For ethnicity, a minimum of two categories is required: "Hispanic or Latino" and "not Hispanic or Latino."

The other key challenge is how to capture data on race and ethnicity for an individual. There are basically two ways this is done: observation or self-reporting. Neither option is perfect. Observation allows

for the perception of the individual recording the information to be revealed. Some would argue that how an individual is perceived is the information that we want to capture. However, observation relies on guessing an individual's race or ethnicity and leads to some (unknown) level of inaccuracy.

There are also several challenges in collecting accurate information through self-reporting. Individuals often are inconsistent with the way they identify race or ethnicity. This is mainly seen with individuals who identify with more than one race or ethnicity. Also, the choices presented to an individual reporting race and ethnicity influence their choices. For example, the number of people who say they are white is influenced by the presence or absence of a Hispanic-origin question. (Evinger, 1996).

It appears that in practice confusion remains about the distinction between race and ethnicity. Only about half of Hispanics identified with standard racial categories on the 2000 Census. Many Hispanics wrote in Latino or Hispanic under race—despite the fact that “ethnicity” is a separate Census category, identifying Hispanic origin. In the United States there are almost one million black Hispanics who share socioeconomic status similar to non-Hispanic blacks. Interestingly, whether Hispanics choose to identify their race as white, Hispanic, or black reflects the socioeconomic status of group members (Logan, et al, 2003).

In Wisconsin, many, if not most state and local data systems continue to include “Hispanic” or “Latin American” as a category of “Race.” Obviously, this makes comparisons across data sets perilous at best. And those that do have a separate ethnicity category, in line with Census Bureau guidelines, may not use it consistently. For example, a recent analysis of 2003 prison admission data identified only 850 offenders as Hispanic—out of a total of over 13,000 prison admissions in 2003.

One can begin to fully appreciate the scope of the problem by thinking through the numerous points of contact at which criminal justice data are collected. Police officers make traffic stops. Sheriff's deputies book arrestees at the county jail. Assistant district attorneys enter complaints. Judges or clerks open court case files. They often rely on information from an offense report or booking record, thereby perpetuating any inaccuracies or omissions. Public defenders' offices in Wisconsin ask defendants to indicate their race—and about fifty percent of all clients decline to do so. And, finally, Corrections employees complete intake, assessment, and evaluation at the Dodge Correctional Facility and the eight Community Corrections regions around the state. All have different forms, with different categories for

race and possibly ethnicity, unless it is mixed in with race categories. The criminal justice system comprises thousands of different interpreters of race and ethnicity, with differing levels of understanding of the importance of reliable data capture. The geographic and bureaucratic dispersion of data collection points exponentially complicates the move toward uniformity.

### ***Lack of Attention to the Problem***

Of even greater concern than the challenges to collecting race and ethnicity data is the lack of attention given the problem in the academic research that uses race data. In fact, we find a general dearth of discussion on how race data are collected, let alone the impacts of collection procedures on the validity of the conclusions drawn from them<sup>4</sup>. Policymakers and researchers alike will need to invest in—and be willing to enforce—greater uniformity and accuracy of data capture or face abandoning the discussion of racial disparity altogether. This report charts a course down the middle of the road

The irony, as a Sentencing Commissioner has succinctly pointed out, is that if policymakers wish to eliminate race as a factor, they must become more sensitive to it at the multiple points of data capture. Indeed, each of the practitioners listed above essentially has a mandate to be colorblind in their administration of justice and allocation of resources. To emphasize to them the need to accurately capture race *and* ethnicity of those same subjects, if not done with sensitivity, would send them a mixed signal. Still, concerned policymakers must push for greater uniformity in identification and data capture.

## **Explaining Racial Disparity**

There is no disputing that minority groups in the United States are imprisoned at higher rates than whites. But what may on its face appear to be disparate treatment by “the system” is the result of many complex, historically intertwined factors. Isolating the impacts of sentencing on measures of racial disparity, as the Commission is mandated to do, requires careful, rigorous statistical analysis to unravel those relationships. The next section summarizes the research literature examining those factors and relationships.

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<sup>4</sup> One recent study (Hardyman, et al, 2004) of prison intake facilities and procedures presents racial breakdowns at intake, without discussing how the race classifications are derived.

### *Differential Participation vs. Differential Treatment*

In theory, there are two types of factors that contribute to racial disparity: 1) differential participation (or involvement) in criminal activity; and 2) differential treatment by the criminal justice systems and processes.

Differential participation, or involvement, describes whether, and how, different demographic groups differ in terms of the percentage of their members who commit crimes. Sociologists routinely point out, for example, that young males are the most susceptible of falling into criminogenic behavioral patterns, and cite evidence that they account for a large share of the nation's violence (Blumstein, 2000; Fox, 2000). Differential treatment, as the name implies, describes bias—whether intentional and overt, or circumstantial—reflected in the ways the actors in the criminal justice system (police, prosecutors, defense attorneys, judges) treat subjects of different demographic groups.

Some authors have sought to quantify the difference between the two. Using arrest data by race, Blumstein (1982) calculated that 80 percent of racial disproportionality in imprisonment is explained by differential participation by minority groups in criminal activity. Other analysts have since refined the data and methods employed to yield estimates of 66% (Crutchfield, Bridges, and Pitchford, 1994) and 40% (American Society of Criminology, 2000; Austin & Allen, 2000). In reality, any observed racial disparity is likely the result of some combination of environmental influences and system processes (see sidebar on “caveats”, next page). Any research into the reasons for racial disparity must take both into account. In a presentation to the Sentencing Commission, Oliver (2004) used comparisons of incarceration rates and sentence lengths, subdivided by race and type of crime, to describe how observed racial disparity stems from “factors [that] include a combination of bias, real differences in serious crime [patterns], social and political conditions.” Whether attributed to criminal justice processing or differential participation, those “patterns are arising from the core structures of our society.” (Oliver, p 34).

The tension between differential participation and differential treatment receives the most mainstream attention in the debate about racial profiling in law enforcement. Concerns about profiling spawned a number of studies comparing “hit rates” for African-American and white drivers. The hit rate in this context is the rate at which police actually identify individuals with warrants, uncover guns, confiscate drugs, or find other criminal activity when they perform stops and searches. Studies in which data

collection has allowed for the hit rate to be calculated show that hit rates are higher for whites in comparison to African- Americans and Latinos (Harris, 2003).

### ***Poverty Rates and Group Threat Theory***

According to Oliver (2001), the national data suggest three significant factors that contribute to racial disparities in imprisonment: the white incarceration rate, the percentage of the population that is African-American, and the ratio of the African-American poverty rate to the white poverty rate. States with a high white incarceration rate also have a high African-American incarceration rate. Some national studies show that African-Americans are incarcerated at a higher rate where they are a smaller percentage of the population. However, other studies have shown the opposite effect in terms of predicting sentence severity for minorities. Racial group threat theory predicts that the higher the percent of minorities in the local population, the more severe are the sentences imposed on minority defendants.. Hawkins and Hardy found that the more urban a state's African-American population, the higher the disparity (1989).

Group-threat theory also predicts more severe sentences in situations where there are larger African-American or Hispanic populations (Ulmer & Johnson, 2004). Ulmer and Johnson find that prejudice among whites increases with local African-American population

### **Measuring Criminal Participation: Caveats**

In reality, actual participation is something that criminologists can never directly observe. They have to develop a *proxy* for it. Just as a proxy is used as a substitute vote in one's absence, researchers must find measures to "proxy" real-world phenomena that they cannot measure.

There are significant problems in using arrest as that proxy, as the studies cited above have done. Arrest depends not only on a crime being committed, but also on police resources being available to apprehend "participants" in it. Thus, arrest is influenced by the patterns of policing in a given community. Residents of communities that are more heavily policed stand a higher chance of being caught. To the extent that police focus on high-crime neighborhoods, and to the extent that such neighborhoods also happen to be disproportionately minority, arrest over-estimates minority participation in criminal activity.

Even if a statistical relationship between race and crime patterns is found, there are likely to be other intervening factors that explain the apparent relationship. First, to the extent that minority groups in America are younger, there is a greater percentage of them in the high-categories—males under age 25. Second, minority groups may be more likely to live in higher-crime urban neighborhoods, where young males would have a more negative set of influences. And to the extent that police resources are focused in neighborhoods where the calls for service are highest, these groups are exposed to a higher risk of arrest than young white males, who are more likely to live in suburban communities.

Pettit and Western (2004) found that incarceration is closely associated with low wages, unemployment, and family instability among other factors. According to the study, the strongest evidence for differential treatment is found for some offenses and in some jurisdictions rather than at the aggregate level. And class—measured by educational attainment—seems to be a stronger correlate of incarceration rates than race. So racial disparity in incarceration rates is to some extent a *spurious* relationship—created in part by the well-documented racial gap in income and educational attainment (Western, et al, 2003).

size, consistent with Taylor's findings (1998). Ulmer and Johnson find that Hispanics and African-Americans are punished more severely in counties with larger Hispanic or African-American population.

### *The Impacts of Drug Enforcement Policy*

The historic federal, state and local responses to illegal drug use and its collateral criminal activity make drug crimes a special case when examining racial disparity. Drug arrests are affected in large part by law enforcement decisions regarding how to use available resources (and by public policy decisions to allocate resources, in part, on the number and type of arrests for violations of drug laws).

In 1980 the number of prisoners convicted for drug offenses was approximately 19,000 (6 percent of the state prison population). By 1998 that number had jumped to approximately 237,000 (21 percent of the state prison population). (American Society of Criminology, 2000). The average sentence length for drug offenses also increased from 13 months in 1985 to 30 months by 1994. African-Americans have been prosecuted, convicted, and imprisoned at increasing rates since the 1980s, according to Tonry (1995: 21-26).

The 2003 prison admission data from the Wisconsin Department of Corrections shows that 30 percent of the 3,694 prison admissions for a new offense had a drug violation as the controlling offense. Non-white defendants make up 68 percent all drug offense admissions (compared to 49 percent of the total admission population, see Figure 2, above). Most of the prison admissions in drug cases—723—came from Milwaukee County, where 81 percent of these prison admittees were non-white.

While the volume of cases is disproportionately minority, DOC data show that the average sentence length<sup>5</sup> is lower for non-white 2003 prison admissions -- 68 months versus 80 for white defendants. This finding could be the result of higher case pressures in urban counties, which contribute to lower average sentences. It could also be an indication that white defendants are more likely to receive probation for less severe drug infractions. In either case, it illustrates the need for more in-depth research of the extent to which drug offenses contribute to or ameliorate overall racial disparity. The Commission plans to dedicate a future monograph report exclusively to drug offenses and offenders.

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<sup>5</sup> Total bifurcated sentence, initial confinement plus extended supervision.

## Research Methods and Models

To this point, this paper has made two explicit points:

1. There are observed differences between racial groups in incarceration.
2. Those observed differences are attributable to some combination of contextual, historical or community influences and differential treatment within the criminal justice system.

There are various research methods and models that can assist the Commission in more fully describing the interactions between community and system influences. The Commission recommends taking two different research approaches. One is to measure disparity at each stage in the criminal justice process. The other is to use statistical modeling techniques like multiple regression to try to identify the effects of race, separated from all of the other community and system variables that impact criminal justice outcomes.

### *Modeling the Criminal Justice Process*

Sentencing is one of the final stages in the criminal justice process that begins when a citizen calls 911 or an investigator builds a case for arrest. Consequently, courts are one of the last actors in the criminal justice system to interact with defendants. The courts, at the stage of sentencing, are dealing with a cross-section of a community's population that has already been "filtered" by law enforcement, prosecutors, and possibly others. To examine "whether race is a basis for sentencing..." Wis. Stats. Sec. 973.30(1)(g), the Commission must study and describe what happens throughout the criminal justice process.

Schranz & McElroy (2000) produced a hypothetical matrix (see Appendix A) using disparity ratios (see footnote 2, above) for each decision point in the system. The matrix provides a simple, visual overview of the percentage of minorities involved at different stages in the criminal justice system.

### **RECOMMENDATIONS**

- The Commission recommends funding and staffing of a multi-year project to collect data from selected jurisdictions on calls for service, arrests and failures to arrest, prosecutions and failures to prosecute, and other data relevant to determining disparity prior to sentencing. The data collected should be used to categorize sentencing decisions and to determine the impact of sentencing alone on subsequent disparate treatment. The Commission should also attempt, through case sampling, to compare the outcomes of plea bargains, jury trials, and other types of proceedings.



### *Getting to Why: Regression Analysis*

However, simply calculating disparity ratios does nothing to explain *why* disparity might exist at any stage in the process. For the Sentencing Commission's purposes, multivariate statistical techniques provide the best opportunity to begin understanding why racial disparities exist.

Criminal-justice theory acknowledges that there are many complex factors that influence both race and sentencing outcomes. We have summarized those theories in the above discussion of differential participation and differential treatment. But the question remains: does race still have a bearing on sentencing decisions, holding all of the other influences constant? Regression analysis and other *multivariate* techniques attempt to answer the "all-else-equal" question.

#### **RECOMMENDATIONS**

- The Commission also recommends developing a series of statistical models of the determinants of sentencing decisions. From the data the Commission collects, staff will categorize cases that result in convictions and study how demographics, offense and community characteristics interact to produce sentencing outcomes.
- The objective of this research is to determine statistically the relationships that best define racial disparity. These may include:
  - High incarceration rates of specific age groups
  - The role of high-crime neighborhoods and policing patterns
  - Which specific offenses produce the greatest disparities
  - Variation in racial disparities by county, or by size of county.
  - Different outcomes due to differences in complexity of individual cases (number of charges) or criminal history of defendants.
- This research will employ all of the data on case, community and defendant characteristics at the disposal of the Commission as control variables to isolate the relationship between race and sentencing outcomes.

## **Wisconsin Data**

The two main data systems that Wisconsin has currently for collecting information on offenders are the Department of Corrections (DOC) offender-tracking information systems and the courts' Consolidated Court Automation Program (CCAP) case management system. Each has key strengths and presents unique challenges. The Commission is working on merging criminal case data from the two sources, to capitalize on the strengths of both.

This integrated data set will form the basis for conducting the research contemplated above. The Commission's own worksheets, as submitted by judges around the state on 11 frequent offenses, will

provide supplemental data. Modeling the entire criminal justice system will require collection of data from law enforcement and prosecutors' offices around the state. The State Department of Justice, the Office of Justice Assistance, and the State Department of Administration's DA-IT project could potentially be enlisted for assistance.

## Conclusion

Clearly, there is much work to be done to fully address the issue of race and sentencing. Careful analysis will take time. The Commission is also sensitive to the need to deliver relevant information, findings, and recommendations to policymakers in as timely a manner as possible. In order to report results in a timely and digestible format, the Commission recommends and will implement a series of reports on the impact of race on sentencing concerning the most frequent offenses among violent, drug, sex, and other property and non-violent offenses.

Specific policy recommendations will flow from the more in-depth analysis of specific aspects of the issue. At this time, the Commission proposes three distinct efforts:

1. Addressing the accuracy and consistency with which data on race and ethnicity are captured
2. Modeling the criminal justice by estimating disparity ratios at various decision points, from arrest to sentencing.
3. Employing multiple regression statistical analysis to isolate any impacts on sentencing of race, holding demographic, offense and case-specific variables constant.

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## Appendix A: Criminal Justice Processing

Sentencing is one of the final stages in the criminal justice process that in reality begins when a citizen calls 911, or an investigator builds a case for arrest. Consequently, courts are one of the last actors in the criminal justice system to interact with defendants. This means that the courts, at the stage of sentencing, are dealing with a cross-section of a community's population that has already been "filtered" by law enforcement, prosecutors and possibly others. To examine "whether race is a basis for sentencing..." (Wis Stats 973.30(1)(g)) requires the Commission to effectively describe what happens throughout the criminal justice process.

Schrantz & McElroy, (2000) suggest that racial disparity can build throughout each stage of the criminal justice system and that a strategy to address racial disparity must be done in a coordinated way with players at all levels in the system involved. They suggest the following strategic framework for addressing racial disparity or disproportionate representation at all levels of the criminal justice system:

1. Determine whether the percentage of minorities involved at any stage in the criminal justice system is disproportionate.
2. Identify the reasons for the disparity.
3. Assess decision points where disparities may occur.
4. Design and implementing strategies to reduce disparities.
5. Monitor the effectiveness of the strategies.

The basis for this assessment is a matrix that calculates disparity ratios for each stage in the criminal justice process.

Schrantz & McElroy produced the example below, using hypothetical data to illustrate how this matrix approach might provide a quick overview of racial disparity throughout the criminal justice system. The first stage in the system on the matrix is arrest. To find the disparity index at arrest, they start with a breakdown of the white and minority population affected by the action. They then calculate the minority percentage of the total population affected and the disparity index. This is repeated for each decision point in the system. This visual allows policymakers a brief overview of the percentage of minorities involved at different stages in the criminal justice system.

<b>Community Population</b>	<b>Total: 250,000</b>		<b>White: 215,000 (86%)</b>		<b>Minority: 35,000 (14%)</b>		<b>Minority Percentage of Total Population Affected</b>	<b>Disparity Index (between current and previous stage of system)</b>
<b>Decision or Action</b>	<b>Total Population Affected by Action</b>		<b>White Population Affected by Action</b>		<b>Minority Population Affected by Action</b>			
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>		
<i>Arrest</i>	25,000	10%	13,000	6.0%	12,000	34.0%	48%	3.4
<i>Detain</i>	5,000	20%	2,400	18.5%	2,600	21.7%	52%	1.1
<i>Prosecute</i>	23,750	95%	12,350	95.0%	11,400	95.0%	48%	1.0
<i>Convict</i>	14,250	60%	6,412	51.9%	7,838	68.8%	55%	1.2
<i>Community Sentence</i>	9,975	70%	5,115	79.8%	4,860	62.0%	49%	0.9
<i>Incarcerate</i>	4,275	30%	1,297	20.2%	2,978	38.0%	70%	1.3

*Reproduced from The Sentencing Project, <http://www.sentencingproject.org/pdfs/5079.pdf>. p. 25*

### **Feasibility and Applicability**

The strength of this model is its simplicity. It provides a clear picture of how the various “filters” in the system interact to produce the ultimate outcomes that are the subject of much of the academic literature, and the public focus on racial disparity.

The key challenge to implementing this model is data collection. The authors designed the model for use in a single local community, where it would require collection data from multiple law enforcement agencies, as well as the local prosecutor’s office and courts. The data collection problems would compound for a statewide analysis, although Wisconsin does benefit from statewide case management and reporting systems. The Office of Justice Assistance collects crime and arrest statistics, although a racial breakdown at the county level might be problematic. The Sentencing Commission has already experienced success developing research data out of CCAP, the courts’ case management system. And the State has developed a case management system for District Attorneys, although it is not yet fully implemented, meaning that a

considerable amount of data collection would still have to be performed at the local level to develop a complete, statewide measure of charging decisions.

Recognizing these difficulties, the Commission will consider developing this matrix approach on a sample of Wisconsin communities, that is representative by population and region of the state.

The other significant weakness of this research design is that it does nothing to explain *why* disparity might exist at any stage in the process. The authors acknowledge as much, by developing a five-stage strategic planning process that flows from the information in the matrix. For the Sentencing Commission's purposes, multivariate statistical techniques provide the best opportunity to begin understanding why racial disparities exist.

## Appendix B: Regression Analysis

Regression analysis as defined by Studenmund (2000) is: “a statistical technique that attempts to ‘explain’ movements in one variable, the dependent variable, as a function of movements in a set of other variables, called the independent (or explanatory) variables, through the quantification of a single equation.”<sup>6</sup> Regression analysis cannot prove causality but can show whether a statistically significant relationship exists. This type of analysis allows the researcher to isolate the relationships of different independent variables on the dependent variable.

The literature on regression analysis examining racial disparities in sentencing is divided on whether or not to estimate a model in two stages. Most researchers argue that two stages are necessary to reflect two major decision points: (1) whether or not to incarcerate and (2) sentence length. Since disparities can occur in both the decision to incarcerate and the length of the term of incarceration, a thorough analysis of sentencing and its correlates should analyze both of those outcomes as dependent variables. The independent variables commonly fall into three categories: legally relevant variables, extralegal variables, and court characteristics. Legally-relevant variables typically include: severity of offense, offense type, criminal history of the offender, presumptive guideline sentence recommendation, and the presence or absence of mandatory minimums<sup>7</sup>. Extralegal variables include: race/ethnicity, age, and mode of conviction. Court characteristics may include: court size, judicial caseload, trial rate, and the available incarceration capacity of each county.

### **Feasibility and Applicability**

There are many different types of regression analysis, which adjust for many different types of data, and different research objectives. However the results that can be drawn from any statistical research design are only as reliable and complete as the data that are fed through it. There are three basic problems that every statistical research design encounters, to varying degrees.

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<sup>6</sup> Studenmund, A. H., *Using Econometrics: a practical guide...*

<sup>7</sup> for a thorough discussion of these variable types as well as an exemplary 2-stage model design, see Ostrom, Ostrom & Kleiman, (2003).



First, do the data accurately measure real-world phenomena? If the "Sentence" field indicates Probation, does it mean the defendant was immediately placed community supervision, or is that probation sentence concurrent to a prison sentence for another count in the current criminal case? Does a "criminal history" field measure all prior arrests, convictions, or terms of imprisonment? The Commission's most significant concern at this early point in the research is the validity of the race data that is available from various sources of criminal justice data. Those concerns --and some long-term recommendations for addressing them-- are described more fully in the body of this report.

A second concern, apart from the validity of individual measures, is whether the analyst has data that measures every relevant variable. Since regression analysis is the attempt to make an "all-else-equal" observation about a specific relationship, in this case race and sentencing, the results will be skewed in some unknown way for every piece of data that is missing from the model. The available data do not include an indicator of which sentences are the result of a plea bargain. The Commission would have to search a representative sample of cases to examine racial patterns in plea bargaining.

Finally, there is always the risk that the data simply will not show any reliable, statistically significant relationships. Statisticians measure the "goodness of fit" of every regression model. This is a measure of how well the set of independent variables correlates with the outcome measure of concern, the dependent variable.

These are problems that every statistical analysis encounters. The various regression models that are available represent the Commission's best means of answering the "all-else-equal" questions implied by its legislative mandate ("study whether race is a basis...").

The Commission's approach will be to thoroughly document data sources and the assumptions made in developing the research models. At the same time, the Commission will select statistical methods and research designs that minimize and control for the drawbacks. One simple example is to run separate models for different types of offenses. Violent crimes, drug offenses, sexual assault and sex offenses, and property crimes all have different sets of characteristics, and are surrounded by different types of local public opinion. They should be analyzed separately to create a true picture.

## **Appendix C: Anecdotal Information on Capture of Race Data**

The Commission conducted an analysis of the collection of race and ethnicity data on an unscientific sample of criminal justice agencies. The basic finding was a lack of uniformity.

Interviews or correspondence with Department of Corrections staff, a clerk of court's office, a sheriff's office, intake offices at adult institutions, parole and probation offices, and a public defender's office reveal that there is not a consistent manner for collecting information on race and ethnicity in Wisconsin. According to the employees questioned at the intake offices at adult institutions and parole and probation offices, information on race and ethnicity is self-reported by the offender. Either the offender fills out a "face sheet" which includes information on race and ethnicity or the agent fills out the sheet but asks the offender the questions.

This method differs significantly from how one Sheriff's office in the state collects information on race and ethnicity. A contact at the Sheriff's Office in an urban center acknowledged that the information collected is based on what the arresting officers report. According to the contact, it is possible that each arresting officer uses a different method to collect information on race and ethnicity. The racial categories used are based on the requirements of the National Crime Information Center. In this particular county there is also a field for Hispanic origin or non-Hispanic origin. This option may vary from department to department. The contact indicated that the race and ethnicity reported is based on skin tones. If an individual looks white, the individual will be recorded as white. Additionally, if the individual has a "Hispanic-sounding" name, the individual will be recorded as Hispanic.

A clerk of court's office in an urban area reported that the information that it uses to record race and ethnicity comes to them from what is reported by the Sheriff's Office. Whatever the method that is used, one thing is clear: Wisconsin does not have a clear, consistent manner for collection information on race and ethnicity of offenders.

One example of a state with a policy on collection this information is Minnesota. Minnesota collects data on gender, race, and ethnicity by distributing a form at the initial appearance. Criminal

defendants are asked to complete the questionnaire and information is collected by the court clerks. Although completion of the form is officially voluntary, the clerks advise defendants to fill out the form. Participation rates vary by jurisdiction with some having completion rates of 98 percent and others as low as 37 percent (Gould, 2002).

