# Report to the Supreme Court Systemic Proportionality Review Project

2000-2001 Term

By Hon. David S. Baime Special Master June 1, 2001

# TABLE OF

II.	BIV	ARIATE ANALYSIS 6					
ш.	MULTIVARIATE REGRESSION 12						
	<b>A.</b>	History 12					
	В.	Development of a Parsimonious Model					
	C.	Implementation					
		1. Identification of Base Variables					
		2. Defining the Appropriate Sample					
		3. Coding of Race and Ethnicity					
	D.	Results of Regression Studies					
		1. Penalty Trial Universe - Race of Defendant					
		2. Penalty Trial Universe - Race of Victim					
		3. Death-Eligible Universe - Race of Defendant					
		4. Death-Eligible Universe - Race of Victim					
		5. Advancement to Penalty Trial - Race of Defendant					
		6. Advancement to Penalty Trial - Race of Victim					
		7. Advancement to Penalty Trial-A Closer Look at White Victim Effect 35					
IV	CA	SE-SORTING 37					
	Α.	Race of Defendant					
	В.	Race of Victim					
	C. White Victim Effect - Confounding Factors						

# I. INTRODUCTION

On August 2, 2000, our Supreme Court rendered its decision In re Proportionality Review, 165 N.J. 200 (2000), and adopted a multifaceted system to determine whether the administration of capital punishment in New Jersey is infected by racial discrimination. The monitoring system consists of three components: (1) bivariate analyses, (2) regression studies, and (3) case-sorting techniques. The system rests on the thesis that no single method is sufficiently reliable to provide convincing evidence respecting whether or not racial discrimination exists in death penalty sentencing. Thus, a defendant must relentlessly document the risk of racial disparity in order to establish systemic disproportionality. The test requires a substantial converging of outcomes produced by the application of the three different modes of analysis.

The Court directed the Special Master to update the database and report his findings on an annual basis. This report is intended to fulfill that mission. In addition, I will describe the methodology in implementing the new system. The approach I have taken is described at length in my earlier report. David S. Baime, Report to the New Jersey Supreme Court: Systemic Proportionality Review (Dec. 1, 1999) (Baime Report II). On occasion, I have found it necessary to deviate slightly from the procedures previously recommended in order to meet the demands of contingencies

that were not initially envisioned or fully appreciated. These instances will be described in detail. For the most part, however, I have remained faithful to the methodology previously described.

The first step in establishing a system of proportionality review is to determine the universe of cases within which the death penalty is to be analyzed. Our study focuses upon two separate universes: (1) a universe consisting of all clearly deatheligible cases as determined by the Special Master and the Administrative Office of the Courts (AOC), and (2) a universe consisting of all cases that have reached the penalty phase of a capital prosecution. I stress, however, that the number of cases in the data samples studied depends on the mode of analysis utilized. For example, there are 490 death-eligible cases considered in our bivariate analysis, but only 445 death-eligible cases in our regression studies. Similarly, there are 179 cases in the death penalty universe for the purpose of our bivariate analysis, but a smaller data sample is considered in our regression studies. This deviation is caused by our elimination of various classes of multiple homicides for the purpose of regression analysis in order to preserve the independence of each case. Where a defendant has simultaneously committed multiple homicides, the AOC has historically eliminated all but one of the cases in its database. In a similar vein, we have adopted a rule requiring that where a death penalty case has been reversed and results in another disposition or dispositions,

either by plea or trial, only one of these cases is counted for the purpose of our regression analysis. I will describe the policies underlying these somewhat arbitrary rules later in this report. Suffice it to say here, these policies are designed to assure the independent evaluation of each case for the purpose of regression studies. The point to be emphasized is that there are certain rules applicable to formulation of the data sample for regression studies that are not necessarily required for bivariate analyses. The matter will be discussed at length later in this report. I note it here merely to clarify the apparent inconsistencies in the data samples set forth in tables appearing in the appendix.

Our approach seeks to isolate and describe potential racial discrimination at various critical stages in death penalty proceedings. All three modes of analysis – bivariate, regression and case-sorting – are applied to three decision points: (1) death outcomes at penalty trials, (2) death outcomes among all death-eligible cases, and (3) advancement of death-eligible cases to penalty trials. We consider possible disparities in terms of both the race or ethnicity of the defendant and the race or ethnicity of the victim. We examine three identifiable groups: (1) African-Americans, (2) Whites, and (3) Hispanics. Because the number of cases involving Hispanic defendants or Hispanic victims is relatively few, we diverge from that approach when necessary to provide meaningful analyses.

Within this analytical framework, we find no statistical evidence supporting the thesis that the race or ethnicity of a defendant constitutes an important factor in penalty phase verdicts. Nor does the available evidence indicate that minority defendants who commit death-eligible crimes are more likely than Whites to receive the death penalty. Nor do we find that minority defendants who commit death-eligible crimes are more likely than Whites to advance to penalty trials. Simply stated, we discern no sound basis from the statistical evidence to conclude that the race or ethnicity of the defendant is a factor in determining which cases advance to a penalty trial and which defendants are ultimately sentenced to death. The statistical evidence abounds the other way – it strongly suggests that there are no racial or ethnic disparities in capital murder prosecution and death sentencing rates. Because the results reached by all three modes of analysis converge, we are extremely confident in our finding that the administration of capital punishment in New Jersey in terms of the race or ethnicity of the defendant is color-blind and free from taint or prejudice.

Our findings respecting the effect of race or ethnicity of the victim on the administration of capital punishment laws are more equivocal. We are entirely satisfied that the race or ethnicity of the victim has no impact on death penalty outcomes. There is no appreciable difference in the death sentencing rate between defendants who kill White victims and defendants who kill minority victims. Bivariate analysis,

regression studies, and case-sorting techniques yield the same result. In terms of the actual imposition of the death penalty, our capital punishment system does not discriminate against defendants who kill White victims as opposed to defendants who kill minority victims.

This much conceded, there is unsettling statistical evidence indicating that cases involving killers of White victims are more likely to progress to a penalty trial than cases involving killers of African-American victims. Bivariate analysis and several regression studies trend toward that conclusion. The question then is whether these findings are beclouded by confounding factors.

We conclude that they are. Although we find a consistent and strong effect of race of victim in our regression studies utilizing relevant variables defined by judges and by our statutes, that finding essentially disappears in three of four regression studies when county variability is introduced. Specifically, an important variable that is confounded with progression to penalty trial is the county where the charging decision and trial take place. A disproportionate number of minority victim cases are tried in counties with the lowest overall rates of progression to penalty trial. The fact that minority victim cases are concentrated in counties with low penalty trial rates has a strong impact on the results of regression studies. When county variability is accounted for in the regression model, the evidence does not suggest that the race of

the victim plays an important role in determining which death-eligible cases advance to the penalty phase. This conclusion is strongly confirmed by the application of case-sorting techniques, which discloses that defendants who kill White victims are not discriminated against in terms of which cases progress to a penalty trial.

We hasten to add that county variability may itself be a problem. It is arguable that the county in which a death-eligible crime takes place should not influence whether a case is capitally prosecuted. We offer no opinion on the subject, because the issue goes well beyond the contours of this report. The point to be stressed is that we have found no relentless documentation of the thesis that race of victim impacts upon which cases progress to penalty trial.

# II. BIVARIATE ANALYSIS

We first examine the raw numbers. In a bivariate analysis, there is only one independent variable. Because we are testing for the presence of racial or ethnic discrimination, each factor – race or ethnicity – is the independent variable in our analysis.

At the outset, we note that bivariate analysis has its limitations. Statisticians uniformly stress that "[u]nadjusted gross racial disparities in death sentence rates are a highly suspect basis for inferring racial discrimination in the treatment of similarly situated defendants . . . . " David C. Baldus et al., Racial Discrimination and the Death Penalty in the Post-Furman Era: An Empirical and Legal Overview, With Recent Findings from Philadelphia, 83 Cornell L. Rev. 1638, 1656 (1999); see also Peter J. Bickel et al., Sex Bias in Graduate Admissions: Data from Berkeley, in Statistics and Public Policy 13 (William B. Fairley and Frederick Mosteller eds., 1977).

1

In this piece, Professor Bickel described a well known study of sexual discrimination in the graduate programs of a leading university. I cited this study in my earlier report. Baime Report II at 34. I recount it again here because it so aptly illustrates the problems inherent in drawing conclusions from raw numbers. A large, unadjusted statistical disparity indicated that the university admitted women at a much lower rate than men. This disparity led to a charge of sexual discrimination. On closer examination, however, it became apparent that the great bulk of women applied to departments with low admission rates, while men applied to departments with very high admission rates. The failure to control for the department to which the students applied fatally undercut the validity of the unadjusted disparity as a basis for inferring systemic gender discrimination.

Nevertheless, raw numbers, percentages and fractions benefit from their transparency, and tell a tale that can easily be understood by laypersons. Moreover, they provide a basis for annual comparison. We thus consider bivariate analysis as an essential tool in our multifaceted system to detect the presence of racial or ethnic discrimination.

For the purpose of our bivariate analysis, we consider a death-eligible universe consisting of 490 cases. We first examine the relationship between the race and ethnicity of the defendant with progression to penalty trial and death outcome. Of the 490 death-eligible cases, 151 involved White defendants, 283 involved African-American defendants, and 52 involved Hispanic defendants. Sixty-nine of the 151 White defendants advanced to the penalty phase, approximately forty-six percent. Ninety-one of the 283 African-American defendants advanced to the penalty phase, approximately thirty-two percent. Eighteen of the 52 Hispanic defendants advanced to the penalty phase, approximately thirty-five percent. Thus, White defendants were much more likely to progress to a penalty trial than African-American or Hispanic defendants.

Of the 151 death-eligible White defendants, twenty-two received the death sentence, approximately fifteen percent. Of the 283 death-eligible African-American defendants, thirty received the death sentence, approximately eleven percent. Of the fifty-two death-eligible Hispanic defendants, two received the death sentence,

approximately four percent. Thus, death-eligible White defendants were more likely to receive the death penalty than death-eligible African-American or death-eligible Hispanic defendants.

Of the sixty-nine White defendants who advanced to a penalty trial, twenty-two were sentenced to death, approximately thirty-two percent. Of the ninety-one African-American defendants who advanced to a penalty trial, thirty were sentenced to death, approximately thirty-three percent. Of the eighteen Hispanic defendants who advanced to a penalty trial, two were sentenced to death, approximately eleven percent. Thus, in terms of the penalty trial universe, White and African-American defendants were sentenced to death at approximately the same rate, while Hispanic defendants were less likely to receive the death penalty.

The following chart best illustrates the impact of the race or ethnicity of the defendant on progression to a penalty trial and death outcome:

Breakdown of 490 Death-Eligible Cases by Outcome and Race of Defendant.							
Defendant's Race	<u>White</u>	African-American	<u>Hispanic</u>	<u>Other</u>	TOTAL		
Number of cases	151	283	52	4	490		
Fraction of cases that went to penalty trial	69/151 0.46	91/283 0.32	18/52 0.35	1/4 0.25	179/490 0.37		
Fraction of cases that received death sentence	22/151 0.15	30/283 0.11	2/52 0.04	0/4	54/490 0.11		

Fraction of penalty trial	22/69	30/91	2/18	0/1	54/179
cases that received death	0.32	0.33	0.11	0	0.30
sentence					

From the raw numbers alone, it cannot fairly be argued that the race of a defendant affects the likelihood that he or she will be sentenced to death. The sample is composed of too few Hispanic defendants to reach any viable conclusion. However, it is fair to say that our bivariate analysis does not disclose in any way that the race of the defendant has an impact on death outcome. A disparity does exist, however, respecting the rate at which White and African-American defendants progress to the penalty phase. White defendants are more likely than African-American defendants to advance to the penalty stage of a capital prosecution.

We next turn to the race and ethnicity of the victim. Of a death-eligible universe composed of 490 cases, 220 involved White victims, 192 involved African-American victims, 61 involved Hispanic victims, and seventeen involved victims of other races or ethnicities. One-hundred and five of the 220 cases involving White victims advanced to the penalty phase, approximately forty-eight percent. Forty-nine of the 192 cases involving African-American victims advanced to the penalty phase, approximately twenty-six percent. Twenty-one of the sixty-one cases involving Hispanic victims advanced to the penalty phase, approximately thirty-four percent. The remaining cases are negligible in number and therefore do not enter into our study.

Thus, cases involving White victims progressed to a penalty trial at a higher rate than cases involving African-American victims.

Of the 220 death-eligible cases involving White victims, thirty-two resulted in imposition of the death penalty, approximately fifteen percent. Of the 192 death-eligible cases involving African-American victims, eighteen resulted in imposition of the death penalty, approximately nine percent. Of the sixty-one death-eligible cases involving Hispanic victims, three resulted in imposition of the death penalty, approximately five percent. The remaining cases are too few to warrant comment.

Of the 105 death-eligible cases involving White victims that progressed to the penalty phase, thirty-two resulted in imposition of the death sentence, approximately thirty percent. Of the 49 death-eligible cases involving African-American victims that progressed to the penalty phase, eighteen resulted in imposition of the death sentence, approximately thirty-seven percent. Of the 21 death-eligible cases involving Hispanic victims, three resulted in imposition of the death sentence, approximately fourteen percent. Again, the cases involving victims of other races or ethnicities are too few in number to warrant comment. Thus, cases involving White victims and cases involving African-American victims resulted in imposition of the death sentence at essentially the same rate.

The following chart best illustrates the impact of the race or ethnicity of the

victim on progression to penalty trial and death outcome:

Breakdown of 490 Death-Eligible Cases by Outcome and Race of Victim.						
Victim's Race	<u>White</u>	African-American	<u>Hispanic</u>	<u>Other</u>	TOTAL	
Number of cases	220	192	61	71	490	
Fraction of cases that went to penalty trial	105/220	49/192	21/61	4/17	179/490	
	0.48	0.26	0.34	0.24	0.37	
Fraction of cases that received death sentence	32/220	18/192	3/61	1/17	54/490	
	0.15	0.09	0.05	0.06	0.11	
Fraction of penalty trial cases that received death sentence	32/105	18/49	3/21	1/4	54/179	
	0.30	0.37	0.14	0.25	0.30	

From the raw numbers alone, it cannot fairly be argued that the race of the victim affects the likelihood that the defendant will be sentenced to death. The percentage of cases involving White victims that resulted in imposition of the death penalty is essentially the same as the percentage of cases involving African-American victims that resulted in imposition of the death penalty. However, our bivariate analysis supports the thesis that cases involving White victims are more likely to advance to the penalty stage than cases involving African-American victims. The difference in the rates of progression to a penalty trial are statistically significant.

# III. MULTIVARIATE REGRESSION

Creating reliable multivariate regression models in systemic proportionality review has been our biggest challenge. With the valuable assistance of Professors David Weisburd and Joseph Naus, I proposed a methodology for the development of parsimonious multiple regressions in my earlier report. Baime Report II at 40-42. The Court adopted that proposal with slight modifications. In re Proportionality Project, 165 N.J. at 215-21. We have implemented the new methodology during the past year. The Public Defender and the Attorney General made substantial contributions in completing this work. This section describes: (1) the history of multivariate regression application in systemic proportionality review, (2) our methodology in creating parsimonious models, (3) problems and solutions in implementing the new system, and (4) findings and conclusions.

# A. HISTORY

We begin with the regression models developed by former Special Master David C. Baldus. These models were created for the purpose of conducting regression studies in the context of individual proportionality review, i.e., the index of outcomes test. They were not intended to detect the presence or absence of racial discrimination. Assessment of a race effect developed only indirectly as a

consequence of Professor Baldus's efforts to include all relevant predictors of death sentence outcome in the regression models used for conducting individual proportionality review.

A basic assumption underlies the use of multivariate regression – all relevant predictors must be included in the statistical models in order to obtain accurate conclusions with respect to the dependent variable, because exclusion of a significant variable is likely to yield biased results. Professor Baldus's first problem was thus to choose the variables in a correctly specified model. Clearly, all statutory aggravating and mitigating factors had to be included because, by the mandate of the Legislature, these are the standards that are to guide prosecutors and juries in their decision making. Professor Baldus then added variables for the race of the defendant and victim, their socioeconomic status, and the defendant's gender. David C. Baldus, Death Penalty Proportionality Review Project: Final Report to the New Jersey Supreme Court, 93-94 (Sept. 24, 1991) (Baldus Report). For the final set of variables, the professor employed a statistical screening technique that is commonly used by social scientists, but which has generated much debate. In essence, this methodology involves a series of screenings of the data to identify independent variables that have a residual relationship with the dependent variable, <u>i.e.</u>, progression to a penalty trial or death outcome. The residual variables derived from the screenings are statistically

significant at the .10 level or beyond, meaning that there is a one-in-ten chance a variable appearing to have an effect on a dependent variable has emerged by reason of random chance. See John M. Conley and David W. Peterson, The Science of Gatekeeping: The Federal Judicial Center's New Reference Manual on Scientific Evidence, 74 N.C. L. Rev. 1183, 1209 n.159 (1996).

Having defined the applicable variables, Professor Baldus was confronted with another problem. Multivariate regression requires variability in the measures examined "in order to disentangle the effects in a model." David Weisburd, Good for What Purpose? Social Science, Race and Proportionality in New Jersey, in Social Science, Social Policy and the Law, 268 (Patricia Ewick, et al. eds., 1999). As the number of relevant independent variables increases, "the variability or split of scores in the dependent variable is divided up into smaller and smaller pieces." <u>Ibid.</u> It becomes increasingly difficult to determine the relationship of the independent variable to other independent variables and to the dependent variable, i.e., progression to a penalty trial or death outcome. <u>Ibid.</u> This difficulty is reflected statistically in the instability of the models estimated. <u>Ibid.</u> Although there is no hard and fast rule defining the number of independent variables that may be included, "models should be reviewed for instability when there are fewer than ten cases in the infrequent category, [progression to penalty trial or death outcome] for each of the independent variables." <u>Ibid.</u> The eminent statistician, Dr. John Tukey, suggested a rule of thumb "that requires at least five, and more conservatively ten, of the less frequent outcomes per independent variable." Dr. John Tukey, <u>Report to the Special Master</u>, 5 (1997). This is the principle of parsimony referred to by former Special Master Richard Cohen in his <u>Report to the New Jersey Supreme Court</u>, 27 (1997).

Because the number of cases that have advanced to the penalty phase and the number of cases that have resulted in the imposition of the death penalty are relatively few, we are required to deal with a comparatively small database. Professor Baldus's models violated Dr. Tukey's "rule of thumb." For example, several of the models included thirty-five independent variables, but at that point there were less than twenty cases that had resulted in the imposition of the death penalty. The models were highly unstable and produced wholly divergent and unreliable results. See David S. Baime, Report to the New Jersey Supreme Court: Individual Proportionality Review, 85-88 (April 28, 1999) (Baime Report I).

Professor Baldus recognized the instability and confusion that resulted from the lack of parsimony. He was nevertheless faced with an unsolvable problem. Because his regression models were designed to predict progression to a penalty trial and death outcome, the number of relevant variables could not be reduced. However, the small

database required elimination of independent variables in order to meet the demands of parsimony.

#### B. DEVELOPMENT OF A PARSIMONIOUS MODEL

We sought to alleviate the tension resulting from these competing demands by more sharply focusing on the question to be answered. The basic premise upon which our methodology rests is that in assessing race effect, as contrasted to defining culpability levels for individual proportionality review, we do not have to account for all factors that influence death penalty sentencing. Rather, we need only to include in our models those factors that are related to the outcome variable (either advancement to a penalty trial or imposition of a death sentence) and the race or ethnicity variable examined. This is so because our effort is not to develop a reliable estimate of culpability level on the outcome measure, but only to control for potential confounding of the race or ethnicity variable.

Our thesis is that we need only to identify and control such confounders in order to isolate and measure any race or ethnicity effect that may exist. Thus, where race or ethnicity is distributed equally, or in statistical terms where all else is equivalent, there is no need to take account of that variable in the model. But where there is variability in a parameter, <u>i.e.</u>, where race or ethnicity is unevenly distributed, that variable should be considered for its inclusion in the model. The difference between

the goal of gaining a reliable prediction of the outcome measure and that of controlling for confounding provides an opportunity to develop more parsimonious models than those that have been used in assessing death penalty sentencing. Variables must be theoretically related to the outcome measure examined (progression to penalty trial or imposition of the death penalty) and empirically related to the race or ethnicity variable being evaluated. This permits us to define a much smaller set of variables for inclusion in the regression model.

Our methodology consists of the following steps:

- (1) Define a base set of variables thought to have an effect on the outcome measured. These variables are to be identified by judges having significant experience in trying capital punishment cases. In addition, all statutory factors are included in the base set of variables.
- (2) Examine the bivariate relationship between the race variables and each of the variables included in the base set. The objective here is to determine which of the base set of variables are possible confounders.
- (3) Exclude from the analysis any variable that does not reach a set threshold of statistical significance. Different

thresholds of significance are to be used depending on the outcome measure examined because size is an important component of statistical significance. All else being equal, larger samples will produce more significant findings. In dealing with questions relating to the larger death-eligible universe, a .05 significance threshold is to be applied. In dealing with questions relating to the smaller penalty trial universe, a less stringent criterion of .10 is to be applied.

(4) Estimate the regression model including only those variables that have reached the thresholds described, plus the race and ethnicity variables. This assumes that the number of variables is small enough to allow for the reliable estimation of regression equations. Using the guidelines on parsimony we have previously described, which require at least five cases in the infrequent category (progression to a penalty trial or imposition of the death penalty) for each of the independent variables, we arrive at a model containing a relatively small number of variables. Under our original proposal, we suggested that the significance criteria be raised if too many variables were identified as possible confounders. We altered our course in that respect.

Because many of the variables defined as theoretically relevant to death penalty sentencing by the judges did not have a high correlation with death outcome, we decided that a fairer approach is to examine the relationship between the selected variables and the outcome measure examined. Preference in this situation is given to variables that are both significantly related to the examined racial or ethnic criterion and to the outcome assessed.<sup>2</sup> This option conformed with the approach suggested by the Public Defender.

The methodology we have utilized was approved by the Supreme Court. <u>In re</u> <u>Proportionality Project</u>, 165 <u>N.J.</u> at 217-18. The only modification is the one we have described, <u>i.e.</u>, according preference to variables significantly correlated with outcome when too many measures meet the specified criteria to satisfy the demands of parsimony.

#### C. <u>IMPLEMENTATION</u>

2

In such cases, where race was not significantly related to outcome, it was still included in the regression models if the rule of parsimony allowed. Our decision was based on the centrality of race in our monitoring procedure and the very strong confounding between race of victim and race of defendant in these analyses. However, variables that were significantly related to race and outcome were given preference in the scenario in which the rule of parsimony did not allow for the inclusion of additional measures.

In this section, I discuss the problems we faced in implementing our multivariate regression system. Specifically, I describe: (1) the procedures we utilized in conducting the judicial survey to identify a base set of variables, (2) the alternative methods used in determining the data sample, and (3) the coding of race and ethnicity.

#### 1. <u>Identification of Base Variables</u>

In our prior reports, we criticized the methods used by Professor Baldus in determining the variables to be included in the regression models. The principle that all relevant predictors must be included in a stable model is known as "correct model specification." Franklin M. Fisher, Multiple Regression in Legal Proceedings, 80 Colum. L. Rev., 702, 709 (1980). Exclusion of a relevant factor is commonly called "misspecification." Ibid. The definition of variables that must be included in a correctly specified model is always a difficult one for social scientists. Professor Baldus confronted this problem by beginning with a baseline of statutory aggravating and mitigating factors, adding "suspect" variables such as the race of the defendant and the victim, their socioeconomic class and the defendant's gender, and by examining the remaining factors in the database to identify which variables "disclose a 'residual' relationship with the dependent variable that is statistically significant at the .10 level and beyond and show a nonperverse relationship" with the outcome measure. Baldus Report, Technical Appendix at 3. For the residual variables that satisfied this

criteria, Professor Baldus performed a factor analysis to cluster them into single factors related to variables to be included in the models. <u>Ibid.</u> The database was thus "mined" in order to determine which variables were to be utilized. Our major concern was that after screening literally hundreds of variables for their relationship to death sentencing outcomes, the professor was likely simply by chance to gain measures that showed a statistical relationship.<sup>3</sup> Such an approach is likely to lead to serious misspecifications of statistical models. <u>See</u> Franklin M. Fisher, <u>Multiple Regression in Legal Proceedings</u>, 80 <u>Colum. L. Rev.</u> at 714.

Like Professor Baldus, we began our identification of base variables by including the statutory aggravating and mitigating factors. Because these factors were too limited, we used experts to identify non-statutory factors relevant to death penalty sentencing. More specifically, we selected sixteen judges having experience in conducting capital trials and in trying criminal cases. They were asked to rate whether non-statutory variables in the database were important in predicting death sentencing outcomes.

,

I would be remiss if I failed to note that our methodology is subject to challenge for similar reasons. We examine the database to determine whether a variable identified by the judges as important in determining outcome is significantly correlated with race or ethnicity. However, we do not screen huge numbers of variables to determine their relationship with race or ethnicity. To that extent, our methodology is not at all like that employed by Professor Baldus.

The first problem we confronted was to identify which variables in the database were to be presented to the judges for their evaluation. The Public Defender, Attorney General, AOC and Special Master prepared separate lists of variables for possible inclusion. The Public Defender and the Attorney General were then asked to select variables from the combined lists. They were then directed to eliminate clearly duplicate variables. The product of the joint efforts of the Public Defender and Attorney General was then submitted to us for screening.

In order to provide as concise a list as possible to the judges, we adopted three basic rules for exclusion. The first rule was to eliminate measures that did not have sufficient variability. In other words, if a trait appeared only rarely, it was eliminated. We set a threshold of appearance in nine cases or less as the basis for excluding these variables.

The second and third rules were designed to prevent unnecessary duplication in the measures assessed. Variables that overlapped considerably with the statutory factors were eliminated. We saw no reason to include variables that measured the same characteristic or trait. Multicolinearity – including variables that are too similar – can cause instability in the statistical models estimated. We thus gave precedence to statutory factors in this situation. When the relevant statutory factor was found to be present in eighty percent or more of the cases where the non-statutory factor was

present, the non-statutory factor was subject to exclusion. Further, if there were less than ten cases in the database in which the statutory factor was present and the non-statutory factor was not present or in which the non-statutory factor was present and the statutory factor was not present, the non-statutory factor was subject to exclusion. Where a non-statutory factor violated both rules, it was eliminated. Where a non-statutory factor violated only one of the two rules, we made a case-by-case decision concerning whether the non-statutory factor was to be eliminated. In this process, our overarching objective was to identify and eliminate variables that were so similar to the statutory factors as to compel their exclusion. Ninety-four variables were ultimately included in the survey.

Before submitting the survey to the judges, we engaged in various pretesting techniques. Specifically, the survey was presented to two judges. Following their completion of the survey, the judges were interviewed and asked their views concerning presentation and format. Upon being assured that the directions were understandable and that no other problems existed, we presented the survey to the full complement of judges.

All sixteen judges rated the ninety-four variables selected. They were told not to confer, and to consider the survey individually. In order to prevent "order bias" in the ratings, the ninety-four questions were randomized with each judge receiving a

different presentation. The judges ranked each item on the following scale:

- 0 Not at all important
- 1 Slightly important
- 2 Moderately important
- 3 Very important

The judges were also asked whether there was any variable not included in the survey that they believed was meaningful in determining death sentence outcome.

If more than half the judges scored a factor as "very important," we included that item in the base set of variables. In two instances in which less than half of the judges rated the item as "very important," all of those who did not rate the item as "very important" rated the factor as "moderately important." These two variables were included in the base set. Of the ninety-four variables included in the survey, twenty-two survived and were added to the sixteen statutory factors. That left thirty-eight variables. Unfortunately, one of these variables, "planning of the homicide," had to be eliminated because our database did not contain sufficient information pertaining to that characteristic. Eighteen percent of the values for "planning of the homicide" was missing in the overall database. Although intuitively, "planning" would seem to be an important factor bearing on death penalty outcomes, sound statistical practice

<sup>4</sup> 

In our descriptions of the models that follow, we do not list each variable used in every regression run. This information is provided in Professors Weisburd's and Naus's report. We list the base set of variables in the Technical Appendix.

required that the factor be eliminated in its entirety.

#### 2. <u>Defining the Appropriate Sample</u>

As we noted earlier, we examine two different universes in individual and systemic proportionality review. However, the data sample examined depends upon the mode of analysis applied, i.e., bivariate, regression or case-sorting. In our prior report pertaining to systemic proportionality review, Professors Weisburd and Naus questioned the inclusion of the same defendant multiple times in the data sample.

Baime Report II at 17, Technical Appendix at 11-12. Three separate categories of cases were identified: (1) simultaneous killings by a defendant, (2) multiple killings on separate occasions by one defendant, and (3) cases involving reversals and subsequent dispositions either by trial or guilty plea. Ibid. Professors Weisburd and Naus were particularly concerned with the third category of cases. Ibid. We note that this concern was shared by the Public Defender 's consultant as well.

Multiple regression rests on the assumption that there is no systematic relationship between measured characteristics of the cases and unmeasured characteristics that influence death penalty sentencing. This assumption may or may not be reasonable for cases involving different individuals, but it is certainly suspect when there are multiple cases involving the same individual in a single analysis. There are statistical strategies designed to ameliorate the effect of the "nesting" of cases

involving the same defendant. However, Professors Weisburd and Naus are of the view that our database is not large enough to allow the development of nested regression models. Although "robust variance estimation," a statistical strategy beyond my ability to describe, provides a possible solution to the problem, this technique is generally used in situations involving larger samples. Professors Weisburd and Naus have long advocated, for simplicity, adoption of a method for defining a single case for each defendant for statistical purposes. <u>Id.</u> at 13.

Candor requires me to note that I resisted this proposal in my earlier report. Although the AOC had historically coded simultaneous killings by the same defendant as a single case, I questioned the advisability of expanding that principle to cover killings on different occasions by the same defendant and multiple dispositions by reasons of a reversal of a death penalty conviction. <u>Baime Report</u> II at 35-36.

We have reached a compromise rooted in common sense. As noted earlier, in our bivariate analysis, we have considered the death-eligible universe as composed of 490 cases and the penalty trial universe as composed of 179 cases. These numbers are based on a full complement of cases, but, utilizing the AOC's historical rule, counting simultaneous killings as a single case. In our regression studies and, to some extent in our case-sorting analysis, we consider a smaller sample by counting as one case those death penalty convictions that were reversed and resulted in multiple

dispositions. We thus include in our data sample only one case where there has been a reversal of a death penalty conviction and a subsequent disposition by trial or plea. We apply a different rule with respect to multiple killings by one defendant. In the context of multiple killings in different cases, i.e., killings on separate occasions by one defendant, we think it reasonable for all of these cases to be counted in a single statistical analysis. While such cases involve the same defendant, the victims and circumstances of each homicide are different.

The question then is which case should be considered in the category of multiple dispositions resulting from a reversal of a death penalty conviction. It is arguable that the case that was reversed should be eliminated, because the conviction was flawed. However, many convictions are reversed for reasons other than the reliability of the evidence presented. This is particularly true with respect to earlier death penalty convictions that were reversed before capital punishment jurisprudence became more settled and certain. To automatically eliminate those cases might present a biased portrait of death penalty sentencing decisions.

We could not find a convincing logic for choosing one case for inclusion over another. In our prior reports, we dealt with similar problems by examining the data utilizing alternative assumptions. Specifically, if reasoned argument cannot be found for the primacy of one sample over another, we consider both. We thus use two samples for each of the two universes. The first sample, which is denominated "first case sample," includes only the first case for each defendant whose death penalty conviction reversal resulted in multiple dispositions. A second sample, denominated "last case sample," includes only the last disposition. The "first case sample" includes 445 cases in the death-eligible universe and 146 cases in the penalty trial universe. The "last case sample" includes 445 cases in the death-eligible universe and 134 cases in the penalty trial universe.

In the "first case sample," forty-six cases resulted in the imposition of the death penalty. In the "last case sample," only twenty-six cases resulted in imposition of the death penalty. The decline in death outcomes has a dramatic effect on the specification of the regression models. Under the principle of parsimony previously described, we are much more restricted in the number of variables that can be included in the models estimated for the "last case sample." We note, however, that the overall results, which will be described in a separate section, are relatively uniform regardless of which sample is estimated.

#### 3. Coding of Race and Ethnicity

In prior systemic proportionality reviews, two measures were used. As to the race of the defendant, African-American defendants were compared with all other defendants. With respect to victims, White victim cases were compared with all other victim cases. Although the AOC has historically recorded Hispanics as a separate category, this group was not analyzed in terms of the presence or absence of discrimination. Hispanics were grouped with White defendants and African-American victims.

While seemingly contradictory, this approach was not wholly illogical. The appropriate approach depends upon what question is asked. If we want to know whether African-American defendants are discriminated against in the administration of capital punishment laws, it makes sense to compare African-American defendants with all other defendants. If we want to know whether those who kill White victims are discriminated against in the administration of capital punishment laws, it makes sense to compare White victim cases with all other cases.

We stress, however, that combining of race categories in this manner can result in confounding race effects if there is a different causal pattern in practice. Moreover, there may be patterns of bias in sentencing decisions pertaining to Hispanics that warrant consideration and monitoring. In response to these concerns, the Court

ordered that "both defendants and victims be coded as white, black, Hispanic, Asian or other." In re Proportionality Project, 165 N.J. at 320. We, of course, follow that approach. However, we do not include in our models a variable for "Asian or other" at this point because there are too few of such cases at this time in the death-eligible or penalty trial universe.

We add that the number of cases involving Hispanic defendants or Hispanic victims is also relatively small. There are fifty-two Hispanic defendants and sixty-one Hispanic victim cases. The number is even smaller in the context of the exclusion of single defendant-multiple disposition cases noted previously. Because the number of Hispanic defendant and victim cases is small, and because the comparison of Whites with African-Americans has historically been our concern, we examine race effects both including and excluding Hispanics as a separate category.

#### D. RESULTS OF REGRESSION STUDIES

As we noted earlier, we examine possible race and ethnicity effects at three decision points: (1) death outcomes at penalty trials, (2) death outcomes among all death-eligible cases, and (3) advancement to penalty trial. We conduct regression analyses within each of these categories, first including the three main groups (Whites, African-Americans, and Hispanics), and then comparing only Whites with African-Americans excluding Hispanics. We consider possible race or ethnicity effects in

terms of defendants and victims.

#### 1. Penalty Trial Universe – Race of Defendant

Against the backdrop of the "first case sample," including the three main categories (Whites, African-Americans, and Hispanics), two measures are sufficiently correlated with race to permit their inclusion in the model. Estimating the model with these variables included, African-American and Hispanic defendants do not differ significantly from White defendants in terms of death outcomes. For the "last case sample," one additional variable was included in the model. The results are nonetheless essentially the same. The race of the defendant does not have a significant impact on death outcomes.

Comparing White and African-American defendants only, one variable satisfied the significance threshold as to the "first case sample." The race effect of African-American defendants is extremely small and is statistically insignificant. In the "last case sample," two additional variables meet our significance threshold. Again, the race of defendant effect is close to zero, and is not statistically significant.

Our regression studies do not provide evidence of a statistically significant effect of race of the defendant on death outcomes. This finding is wholly consistent with the conclusion reached under our bivariate analysis.

# 2. Penalty Trial Universe – Race of Victim

Within the context of the "first case sample" including the three main categories (Whites, African-Americans, and Hispanics), four additional variables (not including race of victim and race of defendant) are sufficiently correlated with race to permit their inclusion in the model. Estimating the model with these variables, neither White victim cases nor Hispanic victim cases differ significantly from African-American victim cases in terms of death outcomes. In the "last case sample," too many measures meet the significance threshold to satisfy the principle of parsimony. Excluding the variables not significantly correlated with outcome, we arrive at a model containing five variables. Again, there is no evidence of a statistically significant race of victim effect.

Comparing White victim and African-American victim cases only, five additional measures meet our significance threshold as to the "first case sample." Again, the race effect is not statistically significant. In the "last case sample," only one measure meets our significance threshold. The results are similar, and do not suggest a statistically significant race of victim effect on death outcome.

Our regression studies do not provide evidence of a statistically significant effect of race of the victim on death outcome. This finding comports with the conclusion reached under our bivariate analysis.

# 3. <u>Death-Eligible Universe – Race of Defendant</u>

Within the context of the "first case sample" including the three main categories (Whites, African-Americans, and Hispanics), seven measures are sufficiently correlated with race of defendant to permit their inclusion in the model. Because the model does not satisfy the principle of parsimony, we exclude the variables that are not significantly correlated with outcome, thus arriving at a model containing a total of eight variables. There is no evidence of a statistically significant race of defendant effect on death outcomes. For the "last case sample," we also were required to reduce the variables to satisfy the principle of parsimony. Excluding the variables not significantly correlated with outcome, we arrive at a model containing five variables. There is no evidence of a statistically significant race of defendant effect on death outcomes.

Examining White and African-American defendants only, seven measures meet our significance threshold as to the "first case sample." The effect of race of defendant is once again small, and is not statistically significant. For the "second case sample," too many variables meet our significance threshold to satisfy the principle of parsimony. Eliminating variables that are not significantly correlated with outcome, we arrive at a model containing five variables. The effect of race of defendant is once again small, and is not statistically significant.

Our regression studies do not provide evidence of a statistically significant

effect of race of defendant on death outcomes. This conclusion comports with that reached in our bivariate analyses. In our bivariate analyses, White defendants were sentenced to death at a higher rate than either African-American defendants or Hispanic defendants. However, the bivariate results were not statistically significant.

#### 4. <u>Death-Eligible Universe – Race of Victim</u>

Within the context of the "first case sample" including the three main categories (Whites, African-Americans, and Hispanics), eleven measures are sufficiently correlated with race to permit their inclusion in the model. Because this model does not satisfy the principle of parsimony, we exclude the variables that are not significantly related with outcome, arriving at a model containing nine variables. We find no evidence of a statistically significant race of victim effect. For the "last case sample," twelve measures are sufficiently correlated with race to permit their inclusion in the model. Eliminating those variables least correlated with outcome in order to satisfy the principle of parsimony, we arrive at a model containing three variables as well as race of victim. Again, neither White victim nor Hispanic victim cases are significantly different from African-American victim cases in terms of death outcome.

Comparing White victim and African-American victim cases only, too many measures are correlated with race to satisfy the principle of parsimony as to the "first case sample." We thus exclude variables not significantly correlated with outcome,

arriving at a model containing six variables in addition to race of victim. We do not find a statistically significant effect of race of victim on death outcome. For the "last case sample," three measures meet our two-step selection process. Once again, the analysis does not show a statistically significant race of victim effect on death outcomes.

We find no evidence of a statistically significant race of victim effect on death outcomes for death-eligible cases. This finding comports with the conclusion reached in our bivariate analyses.

#### 5. Advancement to Penalty Trial – Race of Defendant

Within the context of the "first case sample" including the three main categories (Whites, African-Americans, and Hispanics), seven measures are sufficiently correlated with race to permit their inclusion in the model. The race of defendant effect is not statistically significant. For the "last case sample," seven measures are sufficiently correlated with race to permit their inclusion in the model. The race of defendant is not statistically significant in terms of advancement to a penalty trial.

Comparing White and African-American defendants only, seven measures are sufficiently correlated with race to permit their inclusion in the model as to the "first case sample." We find a small, statistically insignificant African-American race effect on advancement to a penalty trial. For the "second case sample," seven measures, the same measures used in the model including the three main categories, meet our criterion. We do not find a statistically significant race of defendant effect in terms of advancement to a penalty trial.

Our regression studies do not provide evidence of a statistically significant race of defendant effect in terms of advancement of a case to a penalty trial. This finding deviates from the conclusion we reached in our bivariate analyses. It will be recalled that we found a statistically significant race of defendant effect in terms of progression of a case to a penalty trial in our bivariate analyses. White defendants were more likely

to advance to a penalty trial than African-American defendants.

#### 6. Advancement to Penalty Trial – Race of Victim

For the "first case sample" including the three major categories (Whites, African-Americans, and Hispanics), eleven variables are sufficiently correlated with race to meet our significance threshold. We find a significant and strong White victim effect in terms of a case advancing to a penalty trial. White victim cases are more likely to progress to a penalty trial than African-American victim cases. Race of victim overall, taking into account the three categories we measure, is also statistically significant at conventional levels. For the "last case sample," twelve measures are found to be sufficiently correlated with race to meet our significance threshold. The results once again suggest a significant and strong White victim effect in terms of a case advancing to a penalty trial. White victim cases are more likely to progress to a penalty trial than African-American victim cases and the race of victim factor is statistically significant.

These results are even more pronounced when we compare White victim cases to African-American victim cases and exclude Hispanic victim cases. For the "first case sample," eleven variables are sufficiently correlated with race to meet our significance threshold. We again find a significant and strong White victim effect in terms of a case progressing to a penalty trial. White victim cases are approximately three times more likely to advance to a penalty trial than African-American victim

cases. Moreover, this result is significant at the .001 level. For the "last case sample," the White victim effect is also strong and statistically significant.

Applying our methodology, we find strong evidence that White victim cases proceed to a penalty trial at a higher rate than African-American victim cases. This finding comports with the conclusion reached in our bivariate analyses.

# 7. Advancement to Penalty Trial – A Closer Look at White Victim Effect

We have long suspected substantial county variability in the progression of cases to penalty trial. The point was first raised by Professor Baldus. <u>Baldus Report</u> at 22-23. At a relatively early stage, the professor found that the penalty trial rates in several counties were much higher than those in other counties. <u>Id.</u> at 24. The professor's studies disclosed a "sixty-eight percentage point spread, from the low county with a penalty trial rate of .32 (plus three others in the .30 range) to two counties in which all death-eligible cases advanced to a penalty trial." <u>Ibid.</u> Professor Baldus also found "higher penalty trial rates in the non-urban counties." <u>Id.</u> at 23.

We, too, noticed that penalty trial cases were unevenly distributed among the counties. A simple review of the cross-tabulation of advancement to penalty trial suggested a wide variability in rates at which cases advance to penalty trial in the individual counties. We thought it significant that counties having the lowest rates of

cases progressing to the penalty phase had substantial minority populations, and counties having the highest rates of cases progressing to the penalty phase had substantial White populations. This issue is explored further in the section dealing with case-sorting techniques. We decided to test the thesis that county variability may serve as a confounder in assessing race effects in terms of cases progressing to a penalty trial. We thus constructed additional regression models to control for county variability.

This proved to be a complex task. I need not describe the problems here. They are discussed at length in the report prepared by Professors Weisburd and Naus which appears in the <u>Technical Appendix</u>. Suffice it to say, including county variability controls in the regression studies pertaining to the three main categories (Whites, African-Americans, and Hispanics), the White victim effect disappears. The race of victim variable is no longer statistically significant either in the comparison of specific race categories or in the overall assessment of the three category race measure. This is true both with respect to the "first case sample" and the "last case sample."

Comparing White victim cases with African-American victim cases only, our findings are more equivocal. For the "first case sample," the race of victim effect continues to maintain statistical significance at the .05 level. For the "last case

sample," the race of victim effect approaches, but does not reach, the .05 threshold of statistical significance.

Thus, controlling for county variability, three of the four regression studies do not provide significant statistical evidence of a White victim effect in terms of cases advancing to a penalty trial. In one analysis, statistical significance is maintained at a conventional level.

# IV. CASE-SORTING

Case-sorting is the third mode of analysis used in systemic proportionality review. This approach relies upon simple cross-tabulations of the data, examining the rates of progression to penalty trial and death outcomes by race, and breaking down the data by various factors and combinations of factors. The analyst identifies factors that have a strong and statistically significant impact on the outcome measure, and then determines how race or ethnicity is distributed within these categories.

The strength of this approach is that the numbers within the categories selected are clear and easy to understand. Moreover, the combinations provide categories which permit the analyst to engage in a type of precedent-seeking review. For example, where a race effect is found in a particular category, the cases within that category can be examined to determine whether there is any explanation other than race that produced the disparity. Its major weakness is that the relationships examined take into account only a few factors and do not control for other variables. Further, it is very difficult to look at all potential combinations. As the analyst sorts the data into smaller and smaller pieces, it becomes increasingly difficult to arrive at solid conclusions about the relationships observed.

Because of the myriad of combinations examined in our study, I report here only on the most salient. The answers can be found in the tables contained in the

Technical Appendix. Our principal findings are: (1) the race of the defendant is not an important factor in determining whether the death penalty is imposed, (2) White defendants are more likely to advance to a penalty trial than African-American defendants, (3) the race of the victim is not an important factor in determining whether the death penalty is imposed, and (4) although the race of the victim appears to influence whether a case progresses to the penalty phase, this conclusion is tempered by significant confounders such as county variability and the influence of non-racial factors.

#### A. RACE OF DEFENDANT

We first examine whether there is evidence that the race of the defendant affects death outcome. The short answer is no.

As we noted in our earlier discussion of regression analysis, the "independence" of each case within the data sample may impact on the reliability of the conclusion reached. We thus examine three data samples, each having cases with different degrees of independence.

Considering a universe of 490 cases,<sup>5</sup> the death penalty is imposed on White and African-American defendants at essentially the same rate. That is equally true

<sup>&</sup>lt;sup>5</sup> See chart set forth at page 8 of this report.

when we examine a data sample in which multiple dispositions of the same homicide are counted as one case, and simultaneous killings are counted as one case.

Of the 445 cases in that data sample,<sup>6</sup> there is no significant difference between the rate that White defendants receive the death penalty and the rate that African-American defendants receive the death penalty. The same conclusion is reached when we consider a data sample counted by individual defendants. The 490 cases in the death-eligible universe involve 434 different defendants.<sup>7</sup> A breakdown of the 434 death-

5

Defendant's Race	<u>White</u>	African-American	<u>Hispanic</u>	<u>Other</u>	<u>TOTAL</u>
Number of cases	136	255	50	4	445
Fraction of cases that went to penalty trial	58/136 0.43	71/255 0.28	16/50 0.32	1/4 25	146/445 0.33
Fraction of cases that received death sentence	20/136 0.15	24/255 0.09	2/50 0.04	0/4	46/445 0.10
Fraction of penalty trial cases that received death sentence	20/58 0.34	24/71 0.34	2/16 0.13	0/1 0	46/146 0.32

7

Defendant's Race	<b>White</b>	African-American	<u>Hispanic</u>	<u>Other</u>	<u>TOTAL</u>
Number of defendants	131	249	50	4	434
Fraction of defendants who have at least one penalty trial	56/131 0.43	70/249 0.28	16/50 0.32	1/4 0.25	143/434 0.33
Among defendants with at least one penalty trial, the fraction that received at least one death sentence	20/56 0.36	23/70 0.33	2/16 0.12	0/1 0	45/143 0.31
Fraction of defendants who received at least one death sentence	20/131 0.15	23/249 0.09	2/50 0.04	0/4	45/434 0.10

eligible defendants shows that the death penalty is imposed on White and African-American defendants at essentially the same rate.

We next consider whether there is evidence that the race of the defendant affects whether a case advances to the penalty stage. As we noted in our bivariate analyses, in terms of a universe composed of 490 cases,<sup>8</sup> White defendants are more likely to advance to the penalty phase than African-American defendants. That result is maintained in the context of the data sample composed of 445 cases.<sup>9</sup> White defendants are substantially more likely to advance to a penalty trial than African-American defendants. Considering the data sample composed of 434 defendants, this effect is even more pronounced.<sup>10</sup> White defendants are far more likely than African-American defendants to advance to a penalty trial.

As in our earlier report, we take into account combinations of aggravating and mitigating factors that are significantly correlated with outcome and that appear in the data enough times to make reasonable comparisons. We also examined important nonstatutory factors in the sorting method. We consider mitigating factor 5D (defendant's ability to appreciate the wrongfulness of his conduct is significantly

<sup>&</sup>lt;sup>8</sup> See Chart set forth at page 8 of this report.

<sup>&</sup>lt;sup>9</sup> See n.6, ante.

<sup>&</sup>lt;sup>10</sup> See n.7, ante.

impaired) and aggravating factor 4C (murder involved torture or depravity of the mind). We examine these factors in the context of a data sample consisting of 410 cases. This data sample consists of: (1) cases involving defendants each with one case, and (2) multiple dispositions resulting from a single homicide. For each of the four combinations, the proportion of minority defendants receiving the death penalty is either no higher than that for Whites or is not significantly different. The same conclusion is reached with respect to the progression of cases to the penalty phase. There is no statistically significant evidence that either African-American or Hispanic defendants advance to a penalty trial at a greater rate than White defendants.

#### **B. RACE OF VICTIM**

We first examine whether there is evidence that the race of victim affects death outcome. In the report prepared by Professors Weisburd and Naus, two approaches are used to assign a victim's race for cases in which multiple decedents are of different races. For the sake of simplicity, the tables I cite in my report are based only on what the professors denominate the "primary victim" approach. I note at the outset that the essential conclusions reached here would be the same regardless of which approach is used to assign race to the victim.

Both within the context of the death-eligible and penalty trial universes, there is no evidence that killers of White victims are more likely to be sentenced to death than

killers of African-American victims. Moreover, African-American defendants who kill White victims are not more likely to receive the death penalty than African-American defendants who kill African-American victims.

These conclusions remain constant when we examine the data set in terms of combinations of aggravating and mitigating factors. We again consider mitigating factor 5D and aggravating factor 4C. There is no statistically significant evidence of a difference in the chance that a White victim case will result in the death penalty and the chance that an African-American victim case will result in the death penalty. Regardless of the data sample considered, there are no statistically significant differences, either within the combinations or overall, between the rates at which cases with White victims and cases with African-American victims result in a death sentence.

We next consider whether there is evidence that the race of victim is associated with progression of a death-eligible case to a penalty trial. Considering a universe of 490 cases, <sup>11</sup> White victim cases progress to a penalty trial at a higher rate than African-American victim cases. The same result is reached by considering the data sample consisting of 445 cases. <sup>12</sup> It will be recalled that this data sample counts as one case

12

#### **Race of Primary Victim**

<sup>&</sup>lt;sup>11</sup> See chart at page 10.

simultaneous killing and multiple dispositions of the same homicide. Once again, killers of White victims are more likely to advance to a penalty trial than killers of African-American victims. The White victim effect remains constant when a data sample consisting of 434 cases is used.<sup>13</sup> This data sample is composed of individual defendants. Utilizing the three different data samples, killers of White victims proceed to a penalty trial at a greater rate than killers of African-American victims. Moreover, African-American defendants who kill White victims are more likely to advance to a penalty trial than African-American defendants who kill African-American victims. African-American defendants who kill White victims proceed to a penalty trial in

	<u>White</u>	African-American	<u>Hispanic</u>	<u>Other</u>	TOTAL
Number	196	177	56	16	445
Fraction going to penalty trial	88/196 0.45	39/177 0.22	16/56 0.29	3/16 0.19	146/455 0.32

13

Race of Primary Victim					
	White	African-American	<u>Hispanic</u>	<u>Other</u>	TOTAL
Number	190	172	56	16	434
Fraction going to penalty trial	86/190 0.45	38/172 0.22	16/56 0.29	3/16 0.19	143/434 0.33

approximately fifty percent of the death-eligible cases. African-American defendants who kill African-American victims advance to a penalty trial in approximately twenty-three percent of the death-eligible cases.

#### C. WHITE VICTIM EFFECT – CONFOUNDING FACTORS

As in our regression studies, when we account for county variability in the rate that death-eligible cases advance to a penalty trial, the White victim effect essentially disappears. Examining the twenty-one counties, we see that a disproportionate number of African-American and Hispanic victim cases are concentrated in counties with the lowest rates of cases progressing to a penalty trial. The three counties with the largest number of cases have among the lowest rates of cases proceeding to the penalty phase. Camden County has fifty-one cases, of which twenty-five percent advanced to a penalty trial. Essex County has ninety-eight cases, of which nineteen percent advanced to a penalty trial. Union County has forty cases, of which eighteen percent advanced to a penalty trial. These three low penalty rate counties have sixtyseven percent of the African-American victim cases, fifty-three percent of the Hispanic victim cases, but only nineteen percent of the White victim cases.

The following tables illustrate the confounding effect of county variability in the

rate cases advance to a penalty trial. Table A (Table 50 in <u>Technical Appendix</u>) shows that the three counties with the largest number of death-eligible cases have a penalty trial rate of twenty-one percent, as opposed to forty-two percent with respect to the eighteen other counties.

**TABLE A** 

County Case Load				
Penalty Trial	18 Lowest	3 Highest	TOTAL	
Number	149 58%	150 79%	299	
Penalty trials percentage	107 42%	39 21%	146	
Total	256	189	445	

Table B (Table 51 in <u>Technical Appendix</u>) shows that only twenty percent of the death-eligible cases in the counties with the largest number of death-eligible cases involve a White victim, as opposed to sixty-two percent in the eighteen other counties.

**TABLE B** 

County Case Load				
Race of Primary Victim	18 Lowest	3 Highest	TOTAL	
White	159 62%	37 20%	196	
African-American	59 23%	118 62%	177	
Hispanic	27 11%	29 15%	56	

Other	11 4%	5 3%	16
Total	256	189	445

In our discussion of the impact of the race of victim on death outcomes, we noted that the African-Americans who kill white victims were no more likely to receive the death penalty than African-Americans who kill African-American victims. We previously observed, and repeat here, however, that African-American defendants who kill White victims are more likely to advance to a penalty trial than African-Americans who kill African-American victims. Table C (Table 53 in Technical Appendix) discloses that in the fifty-eight cases in which African-American defendants killed a White victim, fifty-percent advanced to a penalty trial. Of the 170 cases in which an African-American defendant killed an African-American victim, only twenty-three percent advanced to a penalty trial.

TABLE C

Race of Primary Victim of African-American Defendant				
	<u>White</u>	African-American	<u>TOTAL</u>	
Number of Cases	58	170	228	
Fraction of Cases Going to Penalty Trial	29/58	39/170	68/228	
Percent	50%	23%	30%	

We stress, however, that county variability heavily impacts on this observation. Table D (Table 56 in <u>Technical Appendix</u>) compares the counties with the largest number of death-eligible cases and, as we noted earlier, with a low rate of cases progressing to a penalty trial, with the remaining counties. Only ten percent of the victims in the "high case load" – low penalty trial rate counties are White. In contrast, forty-five percent of the victims in the "low case load" – high penalty trial rate counties are White. Table D shows that there is a county effect that must be taken into account even when we hold the race of the defendant fixed.

TABLE D

Primary Victim's Race	Low Case Load Counties	High Case Load Counties (Camden, Essex & Union)	<u>TOTAL</u>
White	46 45%	12 10%	58

African-American	56 55%	114 90%	170
Total	102	126	228

Tables E and F (Tables 57 and 58 in <u>Technical Appendix</u>) further illustrate why we must take county variability into account when we consider whether White victim cases advance to a penalty trial at a higher rate than African-American victim cases. Table E discloses how African-American defendant cases are distributed in the counties, breaking down the race of the victim.

TABLE E

# **Race of Primary Victim**

<b>County</b>		<u>White</u>	<u>Africa</u>	an-American
1. Atlantic		3/7 (3/8)*		1/11 (1/10)
2. Bergen		2/4		1/3
3. Burlington	3/5		1/2	
4. Camden		0/1		7/23
5. Cape May	2/2		0/1	
6. Cumberland		0/2		0/1
7. Essex		3/8 (3/9)*		10/66 (10/65)
8. Gloucester	2/3		0/1	
9. Hudson		0/3		1/8
10. Hunterdon		-		-
11. Mercer		3/3 (3/4)*		6/15 (6/14)
12. Middlesex	3/6		1/3	
13. Monmouth		4/4		3/3
14. Morris		1/1		1/1

15.	Ocean	1/3		-
16.	Passaic	1/2		3/7
17.	Salem	-		_
18.	Somerset -		1/4	
19.	Sussex	-		-
20.	Union	0/3		4/25
21	Warren	1/1		_

In Table F, we examine six of these counties, breaking down the fractions and percentages of cases proceeding to the penalty phase with the corresponding race of the victim. Every one of the six counties has the fraction of White victim cases advancing to penalty trials either less than or equal to the fraction of African-American cases advancing to penalty trials. However, combining the data for these six counties, thirty-six percent of cases involving White victims proceeded to a penalty trial, as compared to twenty-six percent of cases involving African-American victims proceeding to a penalty trial. It is remarkable that for each one of the six counties, the White victim percent advancing to a penalty trial is less than or equal to the African American percent, but when one combines the data for the six counties, the White victim percent advancing to a penalty trial is greater than the African-American percent. This perplexing, counterintuitive result is known as "Simpson's Paradox." E.H. Simpson, "The Interpretation of Interaction in Contingency Tables," 13 Journal of Royal Statistical Society 238 (1951). The explanation is that African-American victim cases are more heavily concentrated in counties with lower rates of cases advancing to a penalty trial. The point to be stressed is that county variability blurs or beclouds our prior finding of race of victim effect.

**TABLE F** 

RACE OF VICTIM			
<u>County</u>	<b>White</b>	African-American	
4 Camden	0/1 (0%)	7/23 (30%)	
6 Cumberland	0/2 (0%)	0/1 (0%)	
9 Hudson	0/3 (0%)	1/8 (12%)	
13 Monmouth	4/4 (100%)	3/3 (100%)	
14 Morris	1/1 (100%)	1/1 (100%)	
20 Union	0/3 (0%)	4/25 (16%)	
All 6 combined	5/14 (36%)	16/61 (26%)	

The White victim effect can also be explained in terms of other factors that influence prosecutors and juries in determining whether a death-eligible case advances to the penalty stage. These influences are described by Professors Weisburd and Naus in their report. They examine specific counties and describe how factors and variables other than race provide a reasonable explanation why some cases proceeded to a penalty trial and others did not. I need not describe this portion of their study in detail. It suffices to say that racial disparities in the rate cases proceed to a penalty trial are significant only if the defendants are similarly situated. Variables other than race, such as the killing of a police officer, other homicides, etc., appear to influence the decisions of prosecutors and juries in deciding which cases proceed to the penalty phase. These variables are not evenly distributed among the races of the defendants and/or the victims. Considering these variables, the race of the victim does not appear

to play a significant role in determining which cases proceed to a penalty trial.			

## V. <u>SUMMARY OF FINDINGS</u>

Our findings can be summarized as follows:

- of the defendant affects the likelihood that he or she will receive the death penalty. The available statistical evidence discloses that minority defendants who commit death-eligible crimes are not more likely than White defendants to receive the death penalty.
- (2) There is a racial disparity in terms of White and African-American defendants proceeding to a penalty trial. A greater percentage of White defendants advance to penalty trial than African-American defendants.
- (3) The statistical evidence does not support the thesis that the race of the victim affects the likelihood that the defendant will receive the death penalty. We add that the available statistical evidence discloses that African-American defendants who kill White victims are no more likely to receive the death penalty than African-American defendants who kill African-American victims.
- (4) Although some of the statistical evidence strongly suggests that defendants who kill White victims are more likely to advance to a penalty trial than defendants who kill African-American victims, this inference is

rebutted by confounding factors – primarily county variability in the rate that cases progress to the penalty stage. The counties in which a large number of African-American victim cases are concentrated have low rates of cases advancing to a penalty trial. Less urban counties with a high concentration of White victim cases have higher rates of capital prosecutions.

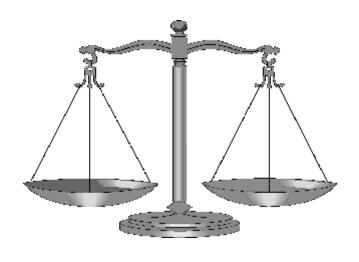
The problem of county variability in the rate cases progress to a penalty trial has never been fully explored, and is beyond the contours of this report. We caution the reader that our methodology was not designed to determine the cause of county variability. New Jersey is a small and densely populated state. It is, nevertheless, a heterogenous one. It is thus not remarkable that the counties do not march in lock-step in the manner in which death-eligible cases are prosecuted.

The Attorney General, as "chief law enforcement officer of the State" under the Criminal Justice Act of 1970 (N.J.S.A. 52:17B-98), is statutorily authorized to "maintain a general supervision over . . . county prosecutors with a view to obtaining effective and uniform enforcement of the criminal laws." In a variety of contexts, the Attorney General has exercised this power. For example, the Attorney General has issued guidelines, adopting essentially a matrix approach, in an effort to enhance

General's Directive to Enhance Uniformity in Sentencing Under the Comprehensive Drug Reform Act (January 15, 1998). In a similar vein, the Attorney General has provided guidelines, again adopting essentially a matrix approach, in an effort to assure uniformity in assigning tiers for sex offenders under Megan's Law. See Attorney General's Registrant Risk Assessment Scale Manual (Oct. 3, 1995).

The Attorney General and the County Prosecutors' Association have established a committee in each County Prosecutor's office to review death-eligible cases. The committees essentially apply the statutory aggravating and mitigating factors to specific death-eligible cases in order to determine whether a capital prosecution is warranted. The goal is to assure similar treatment of similarly situated defendants. Perhaps this approach can be refined. The articulated objective would be to promote uniformity in charging decisions across county lines. I do not know whether a matrix approach would assist in the achievement of this goal. I merely stress that it has been used by the Attorney General in other settings. In any event, I commend the matter to the Attorney General's attention.

# REPORT TO THE NEW JERSEY SUPREME COURT



# Systemic Proportionality Review Project 2000 - 2001 Term

By:

Honorable David S. Baime

**Special Master** 

June 1, 2001

# **Report to Special Master David Baime:**

### **Re Systemic Proportionality Review**

June 1, 2001

Prepared by:

Professor David Weisburd
The Hebrew University of Jerusalem
&
The University of Maryland, College Park

And

Professor Joseph Naus Rutgers University

#### I. Introduction

In our report of November 24<sup>th</sup>, 1999 to Special Master
Judge David Baime, we outlined a monitoring system for
assessing race effects in proportionality review. The
monitoring system we proposed was based on the assumption that
there is no single statistical method that is reliable enough
to provide consistent evidence of a race effect in death
penalty sentencing. Given the limitations of the data
available for proportionality review, each method of analysis
is likely to have specific weaknesses. Accordingly, we
recommended to the Special Master that he include two broad
statistical approaches in the monitoring of race effects.

The first method relies upon multiple regression methods. However, it takes a substantially different approach than was adopted by Special Master David Baldus and applied by the New Jersey Administrative Office of the Courts. The approach used by Professor Baldus sought to develop an overall model that would explain death penalty sentencing. A much more limited goal is set in the regression monitoring system we have suggested. Here the goal is to control for potential confounding of race with other related measures. In this approach, we identify variables for inclusion in the

regression models that are theoretically related to death sentencing outcomes and that are statistically confounded or correlated with race. Accordingly, our system does not require that we fully model death penalty sentencing but only that we identify variables that may be confounded with the race characteristic examined, and thus may bias our view of race effects in death penalty sentencing.

The second method we suggested is very different from the first. It relies upon simple cross tabulations of the data. Various exploratory tools are used to select the combinations that are examined. This approach may be seen as a type of exploratory data analysis, as contrasted with the modeling approach implied in regression analysis. In this approach, we identify factors that have a strong and statistically significant impact upon the outcome measures (e.g. death outcomes or advancement to penalty trial) and then examine how race of defendant and race of victim are distributed within these factors. This approach has the advantage of transparence, in that the numbers within combinations are clear and easy to understand. However, unlike the regression approach it is difficult using these methods to take into account a large number of factors simultaneously.

The use of these two different methods for assessing race effects in death penalty sentencing allows the Special Master and the court to examine the sensitivity of the statistical results through multiple statistical approaches and choices. A similar set of findings using the multiple methods proposed here, each valid and subject to its own limitations, is more reliable than one using only one approach. For a race effect to be consistent, it is our view that it must be documented using more than one method of analysis

Below we present the results of the application of the monitoring system to the data base provided by the Administrative Office of the Courts. However, we first examine the specific decisions taken in response to concerns raised in our earlier report regarding the coding of race, the identification of variables to be examined, and the definition of the data bases to be used. In our previous report we noted that the application of the monitoring system would be flawed until these issues had been addressed.

#### II. The Coding of Race

In previous proportionality reviews, two measures of race were used in proportionality review by the AOC and by the parties. In the case of race of defendant, African American

defendants were compared to all other defendants (Blackd). In the case of race of victim, cases with a White victim were compared to all other cases (Whitvic). Because Special Master Baldus= coding of race includes Hispanics as a racial category, this means that in the case of defendants, Hispanic and other (e.g. Asian) defendants are grouped with White defendants. In the case of victims, Hispanic and other victims are grouped with African American victims.

While seemingly contradictory, this coding approach can have substantive merit if associated with a specific set of hypotheses. For example, if one assumed that discrimination in death penalty sentencing was directed against African American defendants and those who had killed White victims, then it would make good sense to compare African American defendants to all other defendants and White victim cases to all other cases. However, this means that a substantive decision is made regarding the placement of the Hispanic and other category. In regard to discrimination, they are seen as

The coding used here was developed by Special Master Baldus. In this coding white victims are given preference over other racial categories. Thus, if a case includes an African American primary victim and a White victim (who is not listed as primary in the case) Awhitevic@ is coded as 1. African American victim in this scenario is coded as 0. We use Special Master Baldus= approach in the regression method. For the sorting method, we use both this approach and an approach which simply examines the primary victim in a case.

being treated like Whites when they are defendants, but they are treated like African Americans when they are victims.

The combining of race categories in this manner can have the result of confounding race effects if there is a different causal pattern in practice. For example, if Hispanic victim cases are treated at penalty trials more like White victim cases than African American victims (with which they were grouped), the pooling of Hispanic with African American victim cases would average out a showing of race bias (see our analysis of race of defendant and advancement to penalty trial in the November report for an illustration of this potential bias). Similarly, if Hispanic defendants were treated more like African American than White defendants then the pooling of Hispanics with African Americans would bias our understanding of race effects.

In response to this concern, the New Jersey Supreme Court in In Re Proportionality Review Project, 165 N.J. 206 (2000), asked the Special Master to take into account the specific race categories in the statistical monitoring systems employed. Accordingly, in this report we distinguish between White, Hispanic, and African American defendants and White, Hispanic and African American victims. We do not specifically examine the Aother® race categories, as the number of cases

involved is relatively small. There are only a handful of other race defendants (N=4), and only 16 other race victims in the full data base of 490 cases. These cases are excluded from specific analyses as explained below.

Even in the case of Hispanic victims and defendants the number of cases is still relatively small. There are 52
Hispanic defendants in the full data base, and 58 Hispanic victim cases. These numbers become smaller when we examine specific decisions such as death sentencing at penalty trials, and when we take into account the multiple counting of defendants in the data base (see our discussion in Section IV of the report). Because the number of Hispanic defendant and victim cases is relatively small we also examine the race effect comparing only the main race categories (i.e. White defendants with African Defendants, and White Victim cases with African American victim cases).

#### III. Identification of the Set of Relevant Variables

In our previous reports we criticized the data mining techniques employed by the Special Master in State v.

Marshall, 130 N.J. 109 (1992). Our major concern was that after screening literally hundreds of variables for their relationship to death sentencing outcomes, the Special Master

was likely to gain measures that showed a statistical relationship simply by chance. Such an approach is likely to lead to serious misspecification of statistical models. A reliable method of monitoring race effects could not be developed without the identification of a limited set of variables defined as theoretically relevant for explaining death outcomes from which to develop the regression and sorting methods we recommended.

A number of different approaches for defining this limited set of relevant variables were suggested at the time of our earlier report. A simple approach would have been to rely only upon the statutory aggravating and mitigating circumstances as the base set of measures. The advantage of this approach is that it identifies at the outset a clear set of factors that have been defined by statute as relevant to the proportionality review process. We noted in our report that this approach might be seen as too limited, since it may mask race differences that are confounded with non-statutory causes. Accordingly, another method suggested was to use experts to identify non-statutory factors that are relevant to death penalty sentencing.

The procedure for selecting the base set of variables was defined by the Special Master after consulting with

representatives of the Attorney General and the Public Defender. As a first step, the statutory aggravating and mitigating factors were included in the set of relevant factors to be considered in the statistical monitoring approaches. However, the Special Master sought to identify relevant non-statutory factors as well. To do this, the Special Master identified 16 experienced judges who were asked to rate whether non-statutory variables in the data base maintained by the AOC were important factors in predicting death sentencing outcomes.<sup>2</sup>

The Special Master first requested that the Public

Defender—s office and the Attorney General—s office provide a

list of relevant variables coded in the AOC data base. In

order to provide as concise a list as possible to the judges,

the Special Master also requested that we define which of

these specific variables could be excluded from consideration

on statistical grounds. We suggested three rules for excluding

measures for consideration. The first criterion was a basic

one. The measures evaluated by the judges should include

enough variability as to allow minimal statistical

<sup>&</sup>lt;sup>2</sup>The Special Master initially contacted 17 Judges, one of whom was unable to participate in the study.

manipulation. The threshold we suggested and that was used was that there must be 10 or more cases in the less frequent category (or a total of 10 or more cases in all of the categories except one for an ordinal measure) of the measure examined.

We also wanted to prevent unnecessary duplication in the measures assessed. Accordingly, we recommended that variables that overlap considerably with the statutory factors (which would be assumed to have precedence) be excluded from the list provided to the judges. Our logic was both substantive and statistical. Substantively it did not make sense to include variables that measure the same characteristic twice in the same list. Statistically, when two variables are too similar then it may be impossible to distinguish the two in analyses. The problem is defined as multicolinearity. In multivariate modeling, multicolinearity can cause instability in statistical models estimated.

We suggested two rules for preventing unnecessary duplication which were adopted by the Special Master. The first was simply that when the relevant statutory factor was found to be present in 80% or more of the cases where the non-statutory factor was present, then the non-statutory factor should be excluded. Second, if there were less than ten cases

in the Anon-agreement@ category between the statutory factor and the non-statutory factor then the non-statutory variable should be excluded.

In practice we screened any case where a measure violated only one of the two rules. Here we made a case by case decision regarding the inclusion of the non-statutory measures. Overall, we sought in this process to identify variables that were so alike to the statutory factors that it did not make sense to include them in the judge survey.

The sixteen judges identified by the Special Master were each given a Asurvey@ with the 94 variables that remained after the exclusion criteria were applied. In order to prevent "order bias" in the ratings, the order of the 94 questions was randomized with each Judge receiving a different randomization. All 16 judges rated all 94 questions. The judges ranked each item on the following scale:

### 0-Not at all important

<sup>&</sup>lt;sup>3</sup>Order bias refers to the possibility that the clustering of items, or the appearance of items at different places in the questionnaire, may affect the ratings given. In practice, two judges who formed an informal pre-test of the Asurvey<sup>®</sup> received the same random order. These judges were included in the analysis because no changes were made in the administration of the Asurvey<sup>®</sup> as a result of the pre-test.

1-slightly important

2-moderately important

3-very important.

In deciding on a process for selecting items for constructing the "base set" of variables from the judge survey, we consulted with the Special Master and staff of the AOC. We do not think that there is a unique statistical method for identifying a proper set of base variables. Based on our conversation with the Special Master and AOC staff we also do not believe that there is a clear and unique method for identifying a substantive set of criteria for choosing the base set of variables.

Our approach then, was to define a set of criteria that would make statistical and substantive sense and would also leave us with a small enough set of base variables for reliable statistical analysis. We began with a straightforward rule that more than half of the judges would need to score an item as "very important" if it was to be included in the base set of variables. Nineteen items met this criterion. Our logic here was simply that when a majority of judges rate an item as very important it should be seen as relevant for inclusion in our base set of variables.

While we think this criterion a fair one, we examined other items individually to see whether their distribution suggested they were very close to the criterion we established. Accordingly, we examined cases where half of the judges rated the item as very important to see how many also rated the same item as moderately important. In the case of two items, the half of the judges that did not rate the items as very important rated the items as moderately important.

These two items were included in the base set.

This approach led to the inclusion of 21 of the 94 variables that were provided to the judges for their assessment.<sup>4</sup> In practice, 22 non-statutory variables were

One potential problem in the procedure used develops from the fact that judges may have been using different scaling in their evaluation. That is, some judges may have generally given higher scores and others lower ones, irrespective of the questions asked. Because of this, we also looked into the different scalings of the 16 judges. Three of the judges rated more than half the questions as very important (52%, 54%, 59% respectively). Two of the judges rated about 10 percent of the questions as very important (9% and 10 % respectively). The other 11 judges rated between 23 % and 41% of the questions as very important.

To consider the sensitivity of the variable selection process to the very high and very low rating judges, we reanalyzed the data only for the 11 "middle judges." Of the 21 previously selected variables, 20 had a majority of the 11 judges rating them as very important. This result suggests that the selection of the specific indicators was not highly sensitive to strong scaling differences by the judges.

added to the 16 statutory aggravating and mitigating circumstances which led to a base set of 38 variables for analysis not including race of defendant and race of victim (see Appendix A). One measure, the amount of planning involved in the homicide, was excluded from the regression analyses based on the large number of missing values in the AOC data base. Prior criminal record was examined in three ways, taking into account the number of prior convictions, the number of prior felony convictions, and the number of prior homicides.

## IV. Defining the Appropriate Sample

In proportionality reviews, the AOC has used two separate samples in its analyses. The first sample is defined as the Apenalty trial universe@ and is intended to assess death

<sup>&</sup>lt;sup>5</sup> While in practice there are 19 statutory aggravating and mitigating circumstances, factors 4i, 4j and 4k were excluded from consideration. Their exclusion is based on two considerations. First, each of these factors is coded as present in fewer than 10 cases. Second, about forty percent of the cases are missing since coding was only begun after the factor was statutorily defined.

<sup>&</sup>lt;sup>6</sup> When a variable is coded as missing for a specific case in a regression analysis, good statistical practice demands that the entire case be omitted from the analysis. Missing values for Aplanning@ developed both because such information was not available and because it was sometimes difficult to tell how much planning was involved. Eighteen percent of the values for Aplanning@ were missing in the overall data base.

penalty sentencing only among those individuals who have advanced to a penalty trial. The second sample is termed Athe larger universe, and includes all cases that are deemed Adeath eligible by a series of rules initially developed by Special Master Baldus and over time adapted by the Administrative Office of the Courts. We define this latter sample as the Adeath eligible sample in our discussion.

In our November report we noted that specific decisions regarding the selection of cases for inclusion in analyses conducted upon each of these samples should be reconsidered in light of the statistical and substantive issues that they present. In particular we questioned the inclusion in both samples of the same individual multiple times. This occurs for two reasons. In the first case, some individuals were involved in more than one murder. There are 11 such multiple murder case defendants in the data base. That is there are 11 defendants who account for 23 separate cases. More important in terms of the number of cases in the analysis are those individuals who were retried for the same murder. There are 24 defendants who were retried for the same murder in the data base, and these 24 defendants account for 49 cases.

In the case of multiple defendants in different cases we think it reasonable to allow all the cases to be counted in a

single statistical analysis. While such cases involve the same defendant, the victims and circumstances of the cases are different in each case. We are still concerned with the lack of independence of the cases due to the involvement of the same offender, but the number of cases here is not very large and the substantive differences in other characteristics of the cases are substantial enough to convince us that the statistical analyses we conduct will not be strongly affected. Moreover, we conduct separate analyses on this group of cases in our application of the sorting method.

We are much more concerned with the inclusion of the same murder case multiple times in a single sample or analysis. It does not make statistical or substantive sense to count the exact same case multiple times. This problem is exacerbated by the fact that in this situation one of the cases will by definition always be a death outcome (i.e. the first case). Many of the statistical tests employed in analyses we propose, as was the case with earlier statistical analyses conducted by the AOC, assume that the cases examined are independent one from another. This assumption is seriously violated when we include the same murder case tried multiple times in a single analysis.

While it is clear that we cannot use the same murder case more than once in a single analysis, in discussions with the Special Master and AOC staff, we could not find a convincing logic for choosing one case for inclusion in our analyses over another. The problem is that any method that selects a specific murder trial for the same case is by definition making substantive decisions regarding the sample of cases to be used in determining whether race differences exist. It might be argued in this regard that a particular sample presents a biased portrait of death penalty sentencing decisions.

In our previous report we noted that if a reasoned argument could not be found for the primacy of one sample over another, we would recommend that the analyses be conducted under several different assumptions. Based on our discussions with the Special Master we asked the AOC to create two separate samples for each of the two data bases presently used (the penalty trial sample data base, and the death eligible sample data base). The first sample, which is termed in our report the Afirst case sample, includes only the first case for each defendant who was tried multiple times for the same murder. The Alast case sample@includes the last murder trial for each case for each of these defendants.

The first case sample has 146 cases in total in the penalty trial sample, and 445 cases in the death eligible sample. The last case sample has 134 cases in total in the penalty trial sample and 445 cases in total in the death eligible sample. In the first case sample there are fully 46 death outcomes. There are many fewer death outcomes, only 26, This decline in the number of in the last case sample. death outcomes in the last case sample is particularly important in the analyses that follow. The decline develops from the fact that first case outcomes in retrials of the same case are always death outcomes, while the last case often results in a non-death outcome. The practical result for the monitoring system is that we are much more restricted in the number of variables that can be included in regression models estimated for the last case sample than for the first case sample.7

V. Application of the Race Monitoring System: The Regression Method

<sup>&</sup>lt;sup>7</sup> This follows from our rule (see later) that there must be five cases in the less frequent outcome for the dependant variable for each independent variable included in the regression.

In our November report we suggested a systematic approach for defining the regression models used to isolate race effects in death sentencing outcomes. This approach is applied below to each of the three decision points that have been defined as relevant by the New Jersey Supreme Court and the Special Master: 1) death outcomes at penalty trials; 2) death outcomes among all death eligible cases; and 3) advancement to penalty trial. For each of these decision points, we examine the impact of race of victim and race of defendant separately. This is required by our approach, which seeks to isolate specific confounding variables for each of these race factors at each of the decision points defined. We also conduct four separate regression analyses within each of these categories. As noted above we conduct a separate analysis for race including the three racial categories separately, and one comparing only African Americans and Whites excluding Hispanics and other racial groups. Finally, we conduct these analysis both on the first case and last case samples. While there is thus a large set of studies conducted here, we think it significant that there is much consistency even when these different assumptions are applied to these data.

The first step in the regression approach was to identify a theoretically relevant set of variables that are defined as potential factors that influence death penalty sentencing.

This process was described earlier, leading to the list of statutory and non-statutory variables provided in Appendix A.

The next step requires that we examine the bivariate relationships between the race variable and each of the variables in the relevant set of variables in order to identify which should be included in controlling for confounding of race effects.8

<sup>8</sup> This relationship was generally examined through cross tabulations of measures in the relevant set of variables and the race measures. In the one case of an interval variable (prior convictions) such analysis was inappropriate. Here a logistic regression was used.

Following this system we excluded from the regression analyses any statutory or non-statutory measure that did not reach a set threshold of statistical significance defined as reasonable for the particular analysis examined.9 A number of different criteria might have been used for defining a relationship between race and a variable that is sufficiently strong and reliable to be relevant to include as a factor in the proposed regression monitoring approach. We rely upon statistical significance because it is commonly used as a criterion for deciding whether a relationship is sufficiently consistent and strong in a sample that we can reasonably conclude that some type of relationship also exists in the population from which the sample is drawn. However, we think that a different threshold of statistical significance should be used depending on the outcome measure examined. the case because sample size is an important component of statistical significance. All else being equal, larger

For models examining race as a three category variable we used ChiSquare to gain these estimates. However, there were sometimes too few cases to allow for valid statistical tests. In such situations we relied upon the relationships evidenced in comparisons between only African Americans and Whites. In these cases, as well as analyses comparing only African Americans and Whites that relied upon two by two cross tabulations we used exact tests for assessing statistical significance. We note as well that we followed our earlier criterion for exclusion of variables which evidence little variability. Where a measure had fewer than ten cases in the

samples will produce more significant findings. Ordinarily, a significance threshold of .05 is considered reasonable for statistical analysis in the social sciences. In the case of penalty trials, where the number of cases is relatively small we use a less stringent criterion of .10.

Having selected variables appropriate for controlling for confounding of the race variable, we then included these measures and the relevant race variables in logistic multiple regression analyses. We limit the number of potential independent variables in the models estimated based on the criterion suggested by Professor John Tukey that there be a minimum of 5 cases per less frequent category of the dependant variable (e.g. death outcome). In specific cases where there was one or two outcomes less than this we included an additional variable, though we tested the results with a reduced model as well to assess whether the race effect was different in one model as contrasted with another.

less frequent category it was excluded from our analyses.

Where too many variables are identified under this criterion we originally suggested that the significance level of the race/relevant measure relationship be raised. However, as our analyses proceeded it became clear that this approach may not be appropriate for the data base examined. This is the case because a number of the measures defined as theoretically relevant to death penalty sentencing in the judge survey did not seem to strongly impact death outcomes, especially at penalty trials. Given this fact, we thought a fairer approach when faced with too many potential variables to be included in the model would be to examine the relationship between the selected variables and the outcome measure examined. Preference in this situation was given to measures that were both significantly related to the examined racial criterion and to the outcome assessed.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> In this situation, even where the race control characteristic was not significantly related to outcome it was still included in the regression models if the rule of parsimony allowed. Our decision was based on the centrality of race in our monitoring procedure and the very strong

1) Race of Defendant and Death Outcomes at Penalty Trial

The bivariate relationship between race of defendant and death sentences in penalty trials does not indicate a statistically significant relationship. This is the case whether we examine the three main racial groups, only African American defendants and White defendants, and in regard to the first case and last case samples. As Table 1.1 illustrates, there is little difference between White and African American Defendants in terms of outcomes in the first case sample.

About 34% of both racial groups gain death sentences. A much smaller proportion of Hispanics are sentenced to death, about 13 percent, but there are only 16 Hispanic defendants in this sample overall. The overall relationship between race and death outcome is not statistically significant at conventional levels. While the number of death sentences is much smaller in the last case sample (see Table 1.2) the relationships are

confounding between race of victim and race of defendant measures in these analyses. However, variables that were significantly related to race and outcome were given preference in the scenario in which the rule of parsimony did not allow for the inclusion of additional measures.

similar. Again the results do not achieve statistical significance. Looking only at African American and White defendants (see Table 2.1 and Table 2.2) it is clear that the outcomes in the bivariate case are virtually identical for both groups.

Using the selection process described above which was developed to identify measures that may confound our identification of race effects, only two variables from the relevant set of variables are included in the regression approach for the first case sample: WHITVIC and HISPAVIC.

Importantly, there are other measures in the relevant set of variables which are statistically important in predicting death outcomes. But only these two variables were found to be significantly confounded with race of defendant measured as a three category variables for penalty trial cases in the first case sample. Estimating the model with these variables included we can see that African Americans and Hispanic defendants do not differ significantly from White defendants in terms of death outcomes (see Table 3.1). Nor is race of

<sup>&</sup>quot;We exclude other race defendant cases from this analysis. We do not exclude however, other race victim cases. This is because race of victim is only a control measure in our analysis. Nonetheless, in this analysis and each of the following analyses we estimated the equations with these cases excluded as well. In none the analyses we ran did this decision have a meaningful effect on the outcomes examined.

defendant overall a significant factor in this equation. For the last case sample, one additional variable met our significance threshold for inclusion: V5PTY. Nonetheless the results are very similar (see Table 3.2). There are no significant comparisons for the race of defendant measures, and the overall race effect is not statistically significant. 13

Turning to an analysis involving only African American defendants, we find similar results (see Table 4.1). In this case only WHITVIC met our criterion for inclusion in the first case sample. The effect of BLACKD in this analysis is very small and not statistically significant. In the last case sample, two additional variables met our threshold, AMBUSH and

We note as well that sensitivity analyses and multicolinearity tests were performed for each of the regressions reported in this report. These analyses did not suggest significant problems in the models estimated.

<sup>12</sup>Because we include three race measures: Black defendant, Hispanic Defendant and White defendant (which is the excluded comparison category for the regression) we can estimate not only the effect of each comparison but the overall effect of the race variable. We calculated this coefficient using Proc Genmod in SAS specifying race as a class variable and using the logistic function. The observed significance level for the overall race variable is greater than .3555.

<sup>&</sup>lt;sup>13</sup> The observed significance level for the overall race effect is greater than .4280. See note 12 for a description of the method used to gain this estimate.

 $<sup>\,^{14}\!\</sup>text{We}$  remind the reader that Hispanic and other defendants are excluded from this analysis.

V5FPTY. Again, the race effect was close to zero and is not statistically significant (see Table 4.2).

SUMMARY: Our analyses do not provide evidence of a statistically significant effect of race of defendant on death outcomes at the penalty trial stage.

### 2) Race of Victim and Death Outcomes at Penalty Trial

Table 5.1 presents the bivariate distribution of race of victim by death outcomes in penalty trials for the first case sample. Table 5.2 presents this distribution for the last case sample. The results here are similar to those for race of defendant. Race overall, as reflected by the ChiSquare statistics, is not significantly related to death outcomes. Whites and African Americans have once again similar rates, though the number of death outcomes is smaller in the last case sample. Hispanic victim cases have somewhat lower rates of death sentencing, though again the numbers here are small (15 cases overall). Overall, as reinforced in tables 6.1 (first sample cases) and 6.2 (last sample cases) there are not statistically significant difference when we examine White and African American victim cases separately.

Table 7.1 presents regression analyses for the first case sample including the three main race categories (with African American victims as the excluded comparison category). Four additional variables (not including race of victim or race of defendant measures) met the criterion for inclusion: VBEAT, RAGE, V4FPTY, V5CPTY. In this equation neither White victim cases nor Hispanic victim cases are significantly different from the excluded African American victim category. Race of victim overall is also not statistically significant in this analysis. In the last case sample, four additional measures met our criterion: BLACKD, VBEAT V4FPRC, V5CPRC. However, following our rule that there must be five cases in the less frequent category of the dependant variable for each independent measure included, V5CPRC was dropped from the equation. Again there is no evidence of a statistically

<sup>&</sup>lt;sup>15</sup> The observed significance level for the overall race effect is greater than .4997. See note 12 for a description of the method used to gain this estimate.

<sup>&</sup>lt;sup>16</sup>Following our method, we looked at the relationship between the factors related to race and death outcomes. Only one measure, V4FPRC was statistically significant at the .10 level (p=.037). A second variable, VBEAT was close to this threshold (p=.163), while V5CPRC had little statistical relationship to death outcome. BLACKD also did not have a strong nor statistically significant relationship to death outcome. Overall, because of the centrality of race measures in our analyses and the very strong confounding between race of defendant and race of victim in these data bases in such cases we give precedence to race measures (see note 10).

significant race effect in this analysis (see Table 7.2). The overall effect of race of victim is also not statistically significant. 17

Turning to our analysis of only White and African

American victim cases in Table 8.1 (first victim cases), five

additional measures met our criterion: BLACKD, VICPLEAD,

DATKDIEV, RAGE V4FPTY. Again the race effect is very small

and not statistically significant. In the last case sample,

only one variable met our inclusion criterion: BLACKD. Again,

the results are similar and do not suggest a statistically

significant race of victim impact on death outcomes at penalty

trials (see Table 8.2).

Accordingly, BLACKD is included in this regression and V5CPRC is excluded. Nonetheless, we did run this analysis with V5CPRC included and BLACKD excluded. Again, there is not a statistically significant race of victim effect.

<sup>&</sup>lt;sup>17</sup> The observed significance level for the overall race effect is greater than .7131. See note 12 for a description of the method used to gain this estimate.

SUMMARY: These analyses overall do not provide evidence of a statistically significant race of victim effect on death outcomes at penalty trials.

3) Race of Defendant and Death Outcome for Death Eligible Cases

The bivariate distributions for race of defendant and death outcome for death eligible cases does not indicate a significant race of defendant effect. While White defendants appear to be sentenced to death more often than others in both the first case (see Table 9.1) and last case (see Table 9.2) samples, these results are not statistically significant either for the race categories overall (as represented in Tables 9.1 and 9.2) or when White defendants are compared only to African American defendants (see Tables 10.1 and 10.2, for the first and last case sample comparisons respectively).

In Table 11.1 we present results from a regression analysis including the three category victim measure for the first case sample. While in our initial screening seven measures met the criterion set for inclusion, only six additional variables besides the race of defendant measures could be included in the equations based on a split of 44/351

<sup>18</sup> HISPAVIC, WHITVIC, VICPLEAD, INTENT, LONGATAK, V4FPRC,

of the death outcome measure. Five of these measures met our secondary screening criterion of a significant relationship with the dependant variable: WHITVIC, INTENT, VICPLEAD, V4FPRC, V5DPRC. HISPAVIC was also added to the regression model estimated. Neither of the two race of defendant variables are significantly different from the excluded White defendant category. The overall effect of race is also not statistically significant. One of the significant.

and V5DPRC.

<sup>&</sup>lt;sup>19</sup> As noted earlier (see note 10) race control measures were included in the regressions when the rule of parsimony allowed.

<sup>&</sup>lt;sup>20</sup> The observed significance level for the overall race effect is greater than .4697. See note 12 for a description of the method used to gain this estimate.

We were also required to reduce the number of measures in the last case sample, where only three additional variables (besides BLACKD and HISPD) could be included in the analysis (the split here is 26/415).<sup>21</sup> Four of these measures met our secondary criterion of a statistically significant relationship with the outcome measure: WHITVIC, V4FPRC, INTENT AND V5DPRC. We estimated two models, one including WHITVIC, V4FPRC and V5DPRC and one including WHITVIC, INTENT and V5DPRC (see Tables 11.2.1 and 11.2.2).<sup>22</sup> Again there is no evidence of a statistically significant race effect either looking at the specific comparisons between BLACKD and HISPD and the excluded White defendant category, or assessing the race variable overall.<sup>23</sup>

Examining only African American and White defendants the results are similar. For the first case sample, seven measures met our criteria for inclusion: WHITVIC, INTENT, VICPLEAD, DOTHKILS, LONGATAK, V4FPRC, V5DPRC. The effect of

<sup>&</sup>lt;sup>21</sup> Seven measures met out threshold: HISPAVIC, WHITVIC, INTENT, VICPLEAD, LONGATAK, V4FPRC, V5DPRC.

<sup>&</sup>lt;sup>22</sup> INTENT and V4FPRC were related to the outcome measure at about the same significance level. V5DPRC was included in both regressions because it was much more strongly related to the outcome. WHITVIC was included because of our rule that gives precedence to race measures (see note 10).

<sup>&</sup>lt;sup>23</sup> The observed significance level for the overall race effect is greater than .5283 for Table 11.2.1 and greater than .571 for table 11.2.2. See note 12 for a description of the method used to gain these estimates.

race of defendant on death outcomes is once again small and statistically not significant (see Table 12.1). In the case of the last case sample there were once again too many variables that met our initial threshold of a statistical relationship to BLACKD.<sup>24</sup> Using the second threshold of a statistically significant relationship to the outcome measure, four variables were added to the analysis:<sup>25</sup> WHITVIC, INTENT, VICPLEAD, V5DPRC. The effect of BLACKD is once again very small and statistically not significant.

SUMMARY: We do not find evidence suggesting a statistically significant race of defendant effect on death outcomes in the death eligible sample.

<sup>&</sup>lt;sup>24</sup> The measures were: INTENT, VICPLEAD, DOTHKILLS, LONGATAK, WHITVIC, V4FPRC, V5DPRC.

<sup>&</sup>lt;sup>25</sup>This violates our rule of the number of variables to include by one case. We do not think this difference to be meaningful and sensitivity analyses adding and dropping single variables do not suggest a different result for the race variable.

4) Race of Victim and Death Outcomes for the Death Eligible Sample

In the bivariate distribution for the first case sample for death eligible cases, cases involving White victims are more likely to gain death outcomes than cases involving victims of other races (see Table 13.1). The effect here is not statistically significant at the .05 level but is statistically significant at the .10 level. About 14 percent of the White victim cases gain a death outcome, while only 8 percent of Black victim cases and 6 percent of Hispanic victim cases lead to this result. The relationship is similar for the last case sample, but the results are not statistically significant (see Table 13.2). When comparing only Black victim cases and White victim cases, we find results statistically significant at the .10 threshold in both the first case and last case samples (see Tables 14.1 and 14.2). We note that in samples this large scholars generally require a .05 significance threshold.

For analysis of the three category race measure in the first case sample, 11 variables met our initial criterion for inclusion. Five of these-- V5DPRC, V4FPRC, V4BPRC, V1CPLEAD, INTENT--were also significantly related to the outcome

<sup>&</sup>lt;sup>26</sup> These were: BLACKD, HISPD, INTENT, VBEAT, VICPLEAD,

measure. Adding the race of defendant measures, nine variables in total were included in the model estimated.<sup>27</sup> In this analysis we find no statistically significant effect of race whether individual comparisons are made with the excluded category of black victims (see Table 15.1) or whether we examine the overall impact of the race variable.<sup>28</sup>

In the last case sample we could only include five measures overall. Twelve measures met our first threshold for inclusion. Only three of these were significantly related to the outcome measure. Our final set of variables included the race of victim measures as well as V5DPRC, V4FPRC, and INTENT. Again neither White victim nor Hispanic victim cases are significantly different from African American victim cases.

RAGE, LONGATAK, V4BPRC, V4FPRC, V5DPRC, V5EPRC.

<sup>&</sup>lt;sup>27</sup>See note 10 for a discussion of inclusion of the additional race of defendant variables. We also note that we violate the five cases per less frequent rule by two cases here. Sensitivity analyses involving subtracting single variables did not suggest there would be any significant change in the race of victim effect were we to exclude one of the race of defendant measures.

<sup>&</sup>lt;sup>28</sup> The observed significance level for the overall race effect is greater than .5075. See note 12 for a description of the method used to gain this estimate.

<sup>&</sup>lt;sup>29</sup> HISPD, BLACKD, V5DPRC, V4FPRC, V4CPRC, V4BPRC, LONGATAK, RAGE, VICPLEAD, VBEAT, INTENT, and PRIORCON.

Overall, the race variable is not statistically significant in this analysis. $^{30}$ 

<sup>30</sup> The observed significance level for the overall race effect is greater than .3479. See note 12 for a description of the method used to gain this estimate.

Comparing only African American and White victim cases our findings are confirmed. In the first case sample we once again have a larger number of measures meeting our first threshold of a statistical relationship with race. Using the second threshold of a statistical relationship with the dependant variable, six measures are added to the analysis as well as race of defendant: V5DPRC, V4FPRC, V4CPRC, V4BPRC, V1CPLEAD, INTENT. We do not find a statistically significant effect of race on death outcomes in this analysis (see Table 16.1). In the case of the last case sample, only three measures meet our two step selection process: V5DPRC, V4FPRC, INTENT. Once again the analysis including race of victim and race of defendant, does not show a statistically significant race of victim effect (see Table 16.2).

SUMMARY: We find no evidence of a statistically significant race of victim effect on death outcomes for death eligible cases.

These were: BLACKD, HISPD, INTENT, VBEAT, VICPLEAD, RAGE, LONGATAK, V4BPRC, V4CPRC, V4FPRC, V5DPRC.

<sup>&</sup>lt;sup>32</sup> For the first criterion, the measures that met the threshold were: HISPD, BLACKD, V5DPRC, V4FPRC, V4CPRC, V4BPRC, LONGATAK, RAGE, VICPLEAD, VBEAT, INTENT, PRIORCON.

## 5) Race of Defendant and Advancement to Penalty Trial

In the case of advancement to penalty trial we do find consistent and significant bivariate relationships. relationships however, are not in the direction that would be predicted by a discrimination model of sentencing. While 43 percent of White defendants advance to penalty trial in the first case sample, this was true for only twenty eight percent of African American defendants and thirty two percent of Hispanic defendants (see Table 17.1). The result is statistically significant at the .05 level. The results are even more significant in the second case sample (see Table 17.2). Strongly significant results are also found when we compare only African American and White defendants both for the first case (see Table 18.1) and the last case samples (see Table 18.2). However, as documented below, when taking into account confounding variables in the regression models these effects are not found to be sustained.

Seven variables meet our selection criterion of a significant relationship with race of defendant (measured as a three category variable) for the first case sample: WHITVIC, HISPAVIC, INTENT, VICPLEAD, LONGATAK, V4FPRC, V5DPRC. Taking into account these control variables, the effect of race of

defendant is not statistically significant. The comparisons both between African American defendants and White defendants, and Hispanic defendants and White defendants, evidence little difference (see Table 19.1). The observed significance level for overall race of defendant effect is greater than .9913.33 In the case of the last case sample, seven variables met our criterion: WHITVIC, HISPAVIC, INTENT, VICPLEAD, LONGATAK, V4FPRC, V5DPRC. Again the effect of race of defendant is not statistically significant whether we compare the African American or Hispanic defendants to White defendants (see Table 19.2) or we examine the overall significance of the three category race of defendant measure. 34 We caution the reader not to draw conclusions from the strength of the race of victim measures in this analysis. In these regressions we use race of victim only as a control variable. We examine this characteristic systematically using the regression approach in the next section.

Looking at only African American and White defendants, we gain similar findings. For the first case sample seven

<sup>33</sup> See note 12 for a description of the method used to gain this estimate.

<sup>&</sup>lt;sup>34</sup> The observed significance level for the overall race effect is greater than .8454. See note 12 for a description of the method used to gain this estimate.

measures met our criterion for inclusion in the models:
WHITVIC, INTENT, VICPLEAD, DOTHKILS, LONGATAK, V4FPRC, V5DPRC.
In this case BLACKD has a small and not statistically
significant effect on advancement to penalty trials once these
measures are taken into account (see Table 20.1). For the
second case sample, the same measures met our criterion.
Again the results do not suggest a significant race of
defendant effect on advancement to penalty trial (see Table
20.2).

SUMMARY: We find no evidence of a statistically significant effect of race of defendant on advancement to penalty trial.

# 6) Race of Victim and Advancement to Penalty Trial

The bivariate distribution between race of victim and advancement to penalty trial suggests a strong and statistically significant relationship. In the case of the first case sample, about 44 percent of White victim cases advanced to penalty trial (see Table 21.1). This was true for only 22 percent of African American victim cases, and only 28 percent of Hispanic victim cases. The result is statistically significant at the .001 threshold. Similar results are reported in Table 21.2 for the last case sample. And these

results are also confirmed when we compare only White victim and African American victim cases (see Tables 22.1 and 22.2). But are these relationships sustained when we examine the effects of race of victim on advancement to penalty trial using the regression monitoring approach?

Table 23.1 presents the results for the first case sample. Eleven variables meet our criterion for inclusion:
BLACKD, HISPD, V5EPRC, V5DPRC, V4fPRC, V4BPRC, LONGATAK, RAGE,
VICPLEAD, VBEAT, INTENT. Even taking into account this large
number of control variables, White victim cases are found to
differ significantly and strongly from African American victim
cases (p<.01). Hispanic victim cases are not found to differ
significantly from African American victim cases. The overall
race effect is also statistically significant (p<.05).35

<sup>35</sup> See note 12 for a description of the method used to gain this estimate.

Examining the last case sample we gain similar findings (see Table 23.2). In this case 12 measures are added to the analysis: BLACKD, HISPD, V5DPRC, V4FPRC, V4BPRC, V4CPRC, LONGATAK, RAGE, VICPLEAD, VBEAT, INTENT, PRIORCON. The results once again suggest a strong and statistically significant race effect on advancement to penalty trial. White victims cases are again significantly different from African American victim cases (p<.01), though Hispanic victim cases are not significantly different from African American victim cases. The overall race of victim effect in this model is significant at less than the .05 threshold.<sup>36</sup>

Comparing only African American and White victim cases our findings are even stronger. For the first case sample, eleven variables met our inclusion criterion: BLACKD, HISPD, V5DPRC, V4FPRC, V4CPRC, V4BPRC, LONGATAK, RAGE, VICPLEAD, VBEAT, INTENT. In this case we find that White victim cases are about three times as likely to go penalty trial as are African American victim cases (see odds ratio in Table 24.1) and this result is statistically significant at greater than the .005 threshold (see Table 24.1). For the last case sample

 $<sup>^{\</sup>mbox{\tiny 36}}$  See note 12 for a description of the method used to gain this estimate.

twelve measures meet our inclusion criterion. The effect of WHITVIC continues to be significant at the .005 significance threshold (see Table 24.2).

These results suggest a strong and consistent race of victim effect on advancement to penalty trial. However, the Special Master recommended that we also examine the effects of race of victim on advancement to penalty trial taking into account county variation in bringing cases forward to penalty trial. A simple review of the cross tabulation of advancement to penalty trial suggested that there is wide variability in rates at which cases advance to penalty trial in the individual counties (see Tables 25.1 and Table 25.2).

Relating the rate at which counties advance cases to penalty trial with race of victim suggests that these factors are highly intercorrelated. Based on these findings we constructed additional regression analyses that sought to control for county variability in advancement to penalty trial.

The fact that there are a large number of counties represented in the AOC data base (N=21) and they vary widely in the number of cases that they include (from 2 to 98) made

<sup>&</sup>lt;sup>37</sup> They are: PRIORCON, BLACKD, HISPD, V5DPRC, V4FPRC, V4CPRC, V4BPRC, LONGATAK, RAGE, VICPLEAD, VBEAT, and INTENT.

the development of a county control variable complex. While the simplest solution would be to assign a dummy variable for each county that would be included in the analysis - similar to the three category race measure employed in our analyses, the small number of cases in a number of the counties suggested that this might add significant instability to the regression models estimated.

We develop two county measures to overcome this difficulty. The first, which we call ARATE,@ assigns the overall proportion of cases in a defendant-s county advancing to penalty trial to each case. Thus, if a defendant was tried in county 1, he or she would receive a score of .29 for the first case sample for the rate variable corresponding with the overall rate of 29 percent of the cases that advanced to penalty trial in that county (see Table 25.1). While this measure has the advantage of taking into account county variation in a single variable, it confounds county variability with the rate of advancement to penalty trial.

A second measure follows the simple dummy variable approach. However, we collapse all counties with fewer than fifteen cases overall into an Aother county@ measure.

Importantly, as is apparent below, both methods for controlling county variation produce very similar results.

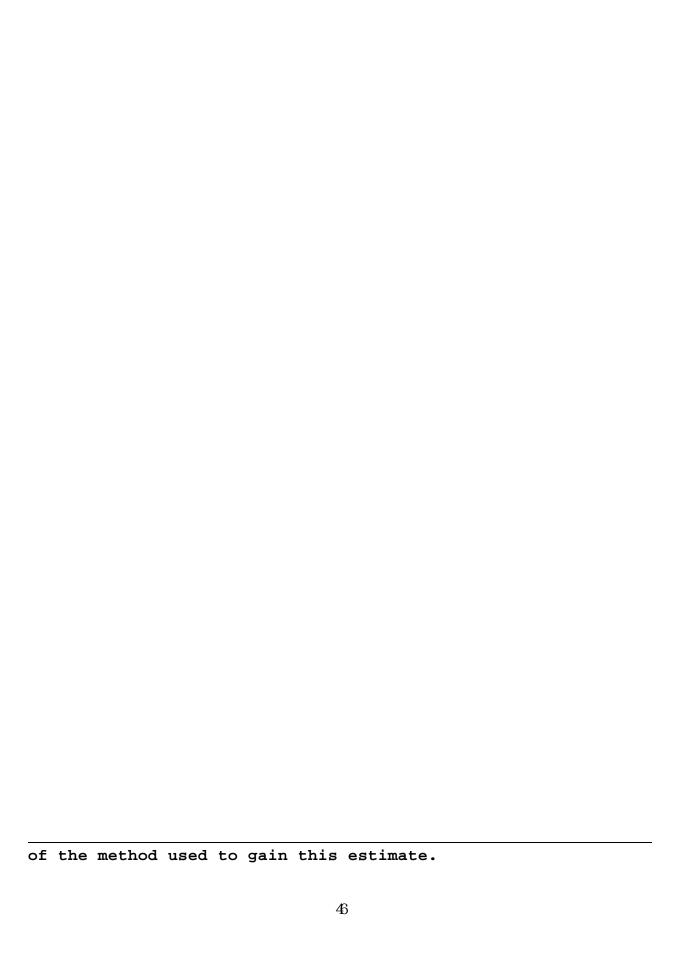
Table 26.1 presents the regression results including the rate measure and 26.1.1 the dummy variables approach, for the three category race variable for the first case sample. 38

Including the county rate variable in the regression, neither White victim cases nor Hispanic victim cases are statistically significant from African American victim cases (see Table 26.1). The overall race measure is also not statistically significant. 39 Using the multi-category dummy variables approach, we find similar results (see Table 26.1.1). Neither White victim nor Hispanic victim cases are significantly different from African American victim cases, and overall the three category race measure is not significantly related to advancement to penalty trial. 40

<sup>&</sup>lt;sup>38</sup> Additional analysis examining the impact of inclusion of country variability on race of victim effects is carried out in the sorting approach that follows.

<sup>&</sup>lt;sup>39</sup> The observed significance level for the overall race effect is greater than .2547. See note 12 for a description of the method used to gain this estimate.

<sup>40</sup> The observed significance level for the overall race effect is greater than .2874. See note 12 for a description



Similar findings are gained when we examine the three category race measure for the last case sample. Neither White victim cases nor Hispanic victim cases are significantly different from African American victim cases, irrespective of whether we use the rate approach or the dummy variables approach (see Tables 26.2 and 26.2.1). Following both approaches we also find that the overall relationship between race of victim and advancement to penalty trial is not statistically significant.<sup>41</sup>

Looking at only African American and White victim cases our findings are mixed. For the first case sample, the race of victim effect continues to maintain statistical significance whether the rate approach (see Table 27.1) or the dummy variable approach is used (see Table 27.1.1). The effect itself suggests that White victim cases are about twice as likely to go to penalty trial as are African American victim cases taking into account the confounding of measures included in the model. For the last case sample, the effect of BLACKD does not achieve statistical significance at the .05 threshold either using the rate approach or the dummy

<sup>&</sup>lt;sup>41</sup> The observed significance level for the overall race effect is greater than .4010 for the rate approach and greater than .4154 for the dummy variables approach. See note 12 for a description of the method used to gain this estimate.

variables approach (see Tables 27.2 and 27.2.1). However, the relationship here straddles statistical significance at the .05 level for both analyses.

SUMMARY: Using only the relevant base set of variables defined by the judges and the statutory factors, we do find a consistent and strong effect of race of victim on advancement to penalty trial. However, taking into account county variability in advancement to penalty trial we find that much of this effect is not sustained. In one set of analyses (comparing only African American and White Victims in the first case sample) statistical significance is maintained. However, in three others race of victim fails to achieve statistical significance at conventional levels.

VI. Application of the Race Monitoring System: The Sorting

Approach

In our previous report, we recommended and described a second approach to analyze the death eligible cases for evidence of racial bias in death sentencing in a way that is clear and that works within and recognizes the limits of

sparse and exceptionally complex data. We call this approach the Asorting method® because it sorts the cases according to specific characteristics of the cases relying on simple cross tabulations of the data. As we noted earlier, the advantage of this approach is that it is transparent, in that the numbers within the sorting of the data are clear and easy to understand. The disadvantage of this approach is that only a limited number of factors can be taken into account at one time. Nonetheless, as illustrated below, one can examine relationships here, especially those involving interaction, in a way that is difficult to examine using the regression approach given the size and nature of the data base.

The method we use relies on four steps. First, we divide the data into different groups of cases recognizing the complex nature of the samples that are examined. Second, we examine the overall relationship between race factors and the outcomes examined. Third, we identify statutory and non-statutory factors that are significantly related to the outcomes examined and that have enough data to allow for adequate sorting of the cases. Fourth, we examine how race factors are related to the different factors we have identified. In this approach, we look at different potential

combinations in order to examine more carefully potential interactions in these data.

The overall data set provided by the AOC consists of 490 death eligible cases, involving 434 different defendants. 42 of the defendants had multiple cases in the data set either because of retrials of a case involving a single victim, or cases corresponding to several victims either of the same incident or separate incidents. The remaining 392 defendants had just one case involving a single victim in the database. The outcomes of multiple cases on the same defendant are related in complex ways. Some of the complexities are due to variables associated with a particular defendant or to aspects of the process. These include the effects of a death sentence or an order for retrial in one of a defendant's cases on plea bargaining in subsequent retrials or cases. involving multiple victims from one incident (sometimes listed as separate death eligible cases in the database) many variables of defendant and case are related.

We apply the sorting approach to the data of 490 death eligible cases, as well as to penalty trial cases. In this approach we look at the full set of 490 death eligible cases, but also analyze the data in terms of the 434 death eligible individual defendants. We will also be looking at a set of 445

cases selected for the regression models to avoid some types of overlap of multiple cases (i.e. the first case sample). 42

In the course of the analyses we will be focusing on various subsets of cases.

Some data sets are more appropriate for certain analyses than other sets, and our report focuses on these. For example, in studying the outcome of penalty trials, we will be looking at the 179 penalty trials among the 490 death eligible cases, and also the 146 penalty trials among the 445 death eligible cases (noted as the first case sample in our analyses above). One of the main results of our analyses, that we emphasize throughout the report is that we get consistent results using different ways of viewing the full data base and various parts of it.

The data are particularly complex because there are multiple victims and or multiple cases corresponding to some of the defendants. For convenience in handling the multiple cases corresponding to a defendant, and to study their impact on the analyses, we divide the 490 cases into three groups, corresponding to three groups of defendants.

<sup>&</sup>lt;sup>42</sup> We do not examine the second case sample because the reduction in the number of death outcomes makes it difficult to apply the sorting approach.

Group 1: Cases involving defendants each with one case

(among the 490 death eligible cases) per defendant. There are

392 defendants each with one death eligible case in data set.

Group 2: Cases involving defendants with multiple cases and multiple victims among the 490 death eligible cases. There are 24 defendants in this group involving 62 death eligible cases. Of the 24 defendants, 15 have multiple victims in one incident, and 9 do not have multiple victims in one case, but do have victims in separate incidents. (One of the 15 defendants, Harris, has five cases in the database, four cases involving 4 victims of one incident, and one case involving a separate murder incident).

Group 3: Defendants with more than one case in the data base, but only involving 1 victim in the database. The multiple cases are due to retrials. There are 18 defendants in this group.

Some of the defendants in Groups 1 and 3 have prior murders that are not in the death eligible data base because

they were before the statute, or committed as a juvenile or for another reason. Group 1 also has some defendants with cases with multiple victims from one incident, but with only one death eligible case listed in the data base.

We will be pooling information from the three groups of cases, but also carrying out analyses within the groups. This will allow us to see if similar patterns occur in terms of race effects, depending on how we handle multiple cases. We look at rates by race at various stages in the process: Going from death eligible to penalty trial, going from penalty trial to death sentence, and combined (going from death eligible to death sentence).

One-third of the 434 defendants had at least one penalty trial, and about one-in-ten received at least one death sentence. We first see how these fractions compare for different races of defendants. For an overall initial view, the approach begins by looking at the breakdown of death eligible cases at two key stages in the process, broken down by race. Tables 28 and 29 combine all three groups of cases and defendants. Table 28 gives, broken down by race, the fraction of the 434 defendants that had at least one case go to penalty trial, the fraction of the 434 defendants that had at least one case result in a death sentence, and the fraction

of defendants with at least one death sentence among the defendants who had at least one penalty trial. Table 29 gives the fraction of the 490 cases that go to Penalty trials, and the fraction of the Penalty trials that go to death sentence, and the fraction of the 490 cases that receive death sentence, broken down by race.

Sorting Analysis of Race of Defendant

The overall analysis of defendants is given in Table 28.

In terms of net impact, a smaller fraction of minority defendants receive death sentences than do White defendants.

Looking at each of the two stages of the process, the same pattern occurs. A smaller fraction of minority death eligible defendants get to penalty trial than do death eligible White defendants. A smaller fraction of minority defendants who get to penalty trial receive death sentences than do White defendants who get to penalty trial. In terms of defendants there is no evidence, from this overall analysis of discrimination against either African American or Hispanic or other minority defendants.

Table 29 gives an overall analysis of the 490 cases. We see a similar pattern to the analysis of Table 28. In terms of cases there is no evidence from this overall analysis, of discrimination against either African American or Hispanic or

other minorities in terms of the chance of cases going either to Penalty Trial or to Death sentence.

In the discussion of the three groups we noted that some defendants had multiple cases in the set of 490 cases, and that there were different types of multiple cases. analyses of Tables 28 and 29 take into account all 490 cases, respectively from a defendant and from a case perspective. The analysis by defendant is one approach to handle the complexity of multiple cases. Another approach to handle the multiple cases, an approach used in the regression analysis (for the first case sample), was to select all the cases for the 392 Group 1 defendants, the first case for the 18 Group 3 defendants, together with certain cases for the 24 Group 2 defendants. For the Group 2 defendants with victims in separate incidents, both cases would be included. For the Group 2 defendants with cases involving multiple victims from one incident, the first case involving a death sentence was included, or if no death sentence, then the first case. This leads to a set of 445 cases. We refer to this set of cases as Set445f. In Table 30 we look at the overall data by race of defendant for these 445 cases. A comparison of Tables 29 and 30 leads to identical conclusions of no overall evidence of discrimination against either African American or Hispanic or

other minority defendants at the different stages of the process.

From Table 28 we see that 33% of the 434 defendants had at least one penalty trial, and 10% received at least one death sentence. If we look at the 24 Group 2 defendants, 79% had at least one penalty trial, and 46% received death sentences. We now explore within Group 2, and within Groups 1 and 3, the outcome patterns for different race defendants.

Tables 32 and 31 show the relationships between outcome and race within these groupings. The tables show that within each of these groupings there is the same pattern of no evidence of discrimination of outcomes (going to penalty trial, or receiving death sentence) against a African American, Hispanic, or other minority defendant.

Tables 28 through 32 looked at the data overall, together with different subsets of the data. All of these viewpoints led to a consistent result of no evidence of discrimination of outcomes (going to penalty trial, or receiving death sentence) against African American, Hispanic, or other minority defendants. We now proceed to look within even smaller subsets of the data to see if this same pattern holds.

We had shown in the previous report how the analysis can be applied to take into account some other combinations of specific statutory aggravating and mitigating factors. this report, we examined both statutory and non-statutory factors, though as in the prior report the emphasis of our analysis is on the statutory variables and their interaction with other factors. 43 We look for combinations that are strongly and significantly associated to the death sentence in the data and that have a reasonable number of observations on which to make comparisons. In selecting combinations, there are many possible approaches. We continue the approach of our previous report that focuses on statutory factors that are associated with death sentence and that also appear in adequate number of cases for further sorting and comparative analyses at various stages. Based on our previous and present analyses, we consider the mitigating statutory variables 5C and 5D and the aggravating statutory variables 4A, 4C, 4D and 4F. Of the non-statutory factors two are identified as particularly strong in predicting the outcomes we examine: execution style homicide (Executon), and prior homicides (Priorhom). These will also be included in our sorting analysis. As our prior analyses suggest the importance of

<sup>&</sup>lt;sup>43</sup> As noted above, in the sorting approach can only look at a limited number of variables at a time. We gave preference in this regard to the statutory aggravating and mitigating factors and their interaction with other variables.

county in advancement of cases to penalty trial, we will also be considering the effects of County variability.

In Table 33 we break down the 445 cases in the First Case data set by death sentence outcome and race of defendant for different combinations of statutory factors 4C and 5D. We see that when factor 4C is absent and 5D is present, that only 2 cases receive death sentences, and both involve White defendants. When both 4C and 5D are absent, 26 % of White defendants receive death sentence as compared to 9% of African American defendants, and 4% of Hispanic defendants. For all the combinations in the table there is no statistically significant evidence that minority defendant cases are more likely to gain a death sentence than White defendant cases.

Table 33 shows the effects of combinations of statutory factors 4C and 5D on the 445 First Case set of death eligible cases. We now carry out a similar analysis on a defendant (rather than case basis) for the 410 defendants in Groups 1 and 3. We carry out the defendant based analysis on this group for the following reasons. Comparing Tables 31 and 32 we see how the Group 2 defendants have a much higher rate of going to penalty trial and receiving a death sentence than the other defendants. The Group 2 defendants all had multiple victims which itself is an important explanatory factor which may

interact with other variables in complex ways. The 24 Group 2 defendants had 62 cases, and in some of a defendant-s cases a statutory variable would be determined by jury to be present and in others not present (even for a variable like 5D associated with the defendant for two victims in the same incident). For these reasons, we will be focusing our next set of analyses using the statutory variables on the 410 non-Group 2 defendants.

We begin by focusing on the mitigating statutory variable Mitigating factor 5D ("defendant's capacity to appreciate 5D. the wrongfulness of his conduct to the requirements of the law was significantly impaired as the result of mental disease, or defect or intoxication, but not to a degree sufficient to constitute a defense to prosecution") had a strong association with sentencing. For the non-multi-victim defendants (groups 1 and 3), 5D was present for 186 defendants, and 7 of these (4%) received death sentences; for the 224 cases where 5D was not present, 27 cases (12 %) received death sentences. Table 34 shows how this breaks down by race of defendant. Table 34 shows that among defendants where 5D is present there is no evidence of discrimination against minorities in receiving death sentences, and the same is true among defendants where 5D is absent. Table 35 carries out a similar analysis in

terms of defendants having a case go to penalty trials. Again, there is no evidence of discrimination against African American, Hispanic, or other minority defendants. Tables 34 and 35 show that whether mitigating factor 5D is present or absent among these defendants, there is no evidence of discrimination against either African American, Hispanic or other minority defendants as compared to White defendants.

In our previous report we found that the combination of aggravating factor 4C ("the murder involved torture, depravity of mind, or an aggravated assault") and mitigating factor 5D had a strong association with sentencing. We found in Table 33, that where 4C was absent and 5D present there were few death sentences. When either 4C was present, or 5D absent much of the death sentences concentrated among the multiplecases. Table 34 shows that of the 34 defendants (out of the 410) who receive death sentences, for 27 of them mitigating factor 5D is absent. There were seven defendants who received death sentences where 5D was present. For the seven defendants who received death sentences where 5D was present, in five of the seven cases the statutory aggravating factor 4C was present. In only 2 cases (out of the 410) was 5D present and 4C absent and the defendant received a death sentence, and both case involved White defendants.

Table 36 gives the detailed breakdown by combination of factors 4C and 5D outcome and race of defendant. For each of the four combinations the proportion of minority defendants receiving death sentences was no higher than that for whites or was not significantly different. In the last combination (4C and 5D both present) where the minority percent for nonwhites is higher (but not significantly so) the difference can be further studied by breaking down that data by whether or not there was a prior homicide (statutory factor 4A). is illustrated in Table 37. Two of the three defendants with prior murder received death sentences, as compared to 3 out of 36 defendants without prior murders. Of the 3 defendants with a prior murder, none were White, 1 was African American, and 2 were Hispanic. Thus, the 20% = 1/5 for Hispanic defendants for the last combination in Table 36, becomes 0 % =0/3 in Table 37, for those without prior murders. This illustrates why one cannot give much weight to observed differences in fractions that can change sharply with a shift of 1 or 2 cases. In all of these analyses there is no statistically significant evidence that either African American, or Hispanic, or other minority defendants go to penalty trials or receive death sentences more than White defendants. This is consistent with the results of the regression analyses.

The conclusions of no evidence of discrimination against either African American, or Hispanic, or other minority defendants are similar to those of our earlier report. This is taking into account 57 new cases added to the data report as well as non-statutory variables identified in the judge=s survey. In terms of a monitoring system, it is useful to observe the pattern of the new data as well. The 57 new cases added since the last report involve 55 defendants. Of these new defendants, 2 out of 14 White defendants, 1 out of 36 African American defendants, and none out of 5 Hispanic defendants received death sentences. Three out of 14 White defendants, 3 out of 36 African American defendants, and none out of 5 Hispanic defendants went to penalty trial. Among the 57 new cases since the 1999 report, there are only two new multiple case defendants each with two cases (Troutman with two victims in separate incidents; and Josephs with two victims in one incident. Both defendants Troutman and Josephs were African American and their victims were African American). Among the new cases, Josephs was the only African American or Hispanic defendant among the new cases to receive a death sentence. Thus among the new cases there is no evidence of discrimination against minority defendants either in terms of cases going to penalty trial, or receiving death

sentence. This is the same conclusion reached looking at the past data, and all the data currently available.

Sorting Analysis of Race of Victim

In this section we analyze whether there is a relation between race of victim and outcome of death eligible case. Among the death eligible cases there are some cases where there are multiple victims of different races. In applying the sorting approach we will analyze the data using two approaches to assign victims race for these multiple race cases. One follows that recommended by Special Master Baldus and is represented in the regression approach by the variable Awhitvic. 44 Here, a White victim case is any case in which a White victim is present (whether the victim was primary or not). The second will be to analyze the data by victims race for the primary victim (first victim in time) associated with the case.

Table 39 compares the rates at which death eligible cases proceed to penalty trial, by victim's race. From Table 39 there is no evidence that penalty trial cases involving African American victims are less likely to receive death sentences than cases involving White victims. Of the 179

<sup>44</sup> We discussed this issue earlier as well, see note 1.

penalty trials, 30% of White victim cases, and 37% of African American victim cases received death sentences. Table 40 shows that the same percents (30% and 37%) result under the second method of handling the multiple race victim cases (treating the victim=s race as White if there is at least one White victim).

We can continue the sorting approach as before. Table 41 breaks down the 445 First Case death eligible cases by combinations of statutory factors 4C and 5D. Table 42 details the approach for the 146 penalty trial cases from the First Case data set. For the 146 penalty trials cases virtually identical percents (31.5%) of White victim and non-White victim penalty trial cases result in a death sentence. 42 shows that when we break down the cases by combinations of statutory factors 4C and 5D, within combinations, the pattern of sentencing is very similar with highest sentencing rates for the combination where 4C is present and 5D absent. (Table 43 shows a similar pattern for the 179 penalty trial cases.) All these analyses come to consistent results, and all come to the same conclusion as the previous sorting and regression analyses. There is no statistically significant evidence either within the combinations, or overall, that White victim penalty trial cases are more likely to result in a death

sentence than do African American victim penalty trial cases.

In the previous analysis, and as explained below, it is also informative to carry out the analysis holding defendant's race fixed. There are not enough White defendant-African American victim cases for such an analysis by White defendant cases. There are enough cases for an analysis by black defendant cases. Table 44 looks at the African American defendant penalty trial cases, by victim's race. (The table is identical for the two approaches for defining race.) From Table 44 there is no evidence that such cases involving African American victims are less likely to receive death sentences than cases involving White victims, and is consistent with the other analyses.

We now look at whether race of victim is associated with a case going to penalty trial. From Table 39 we see that 48% of the White primary victim cases go to penalty trial, as compared to 26% of the African American and 34% of the Hispanic primary victim cases. Tables 45 and 46 illustrate a similar pattern for the 445 death eligible cases (set 445f). From Table 45 for the First Case set of 445 death eligible cases, we see that 45% of the cases where the primary victim is White went to penalty trial, as compared to 22% of the

African American-victim cases. Table 46 shows a similar pattern for the second method of assigning multiple race-victim cases. Table 47 shows a similar result for an analysis based on the 434 defendants.

In further analyzing this relationship using the sorting approach, we show below that when one controls for variables also related to outcome then the race of victim is not statistically related to the case going to penalty trial. Some of these controlling variables include whether the defendant in the case committed another homicide, or whether the case was in a county which sent relatively few cases to penalty trial no matter what the race of victim, or the presence of aggravating factors such as 4C ("The murder was outrageously or wantonly vile, horrible or inhuman.."), or 4F ("The murder was committed for the purpose of escaping detection, apprehension, trial, punishment, or confinement for another offense committed by the defendant or another."), or

As illustrated above using the regression approach, an important variable that is confounded with penalty trial and with race of victim and defendant is the county where the trial took place. The decision to go to penalty trial or to offer or to accept a plea bargain is made at the county level.

Different counties have different proportions of White,
African American and Hispanic victims. The counties also have
quite different proportions of cases that go to penalty
trials. Table 48 shows the proportion of cases (among set
445f) that go to penalty trials for each of the 21 counties.
For County 7 (Essex), 19% of its 98 cases went to penalty
trial. For County 20 (Union), 18% of its 40 cases went to
penalty trial. For Counties 11 (Mercer), 12 (Middlesex), 13
(Monmouth), and 14 (Morris), the percents were, respectively,
48%, 61%, 74%, and 57%.

Table 49 shows the distribution of cases by race of primary victim broken down by counties. The first entry corresponding to a particular row and column (a cell) of the table is the count, or absolute number of cases; below the count is the row percent, and below that is the column percent. Thus, for the row County 1 (Atlantic County), and the column race of primary victim White there are 16 cases, which make up 57% (16/28) of the cases in Atlantic county, and 8% (16/196) of the White victim cases. From Tables 48 and 49 we see that a disproportionate number of African American and Hispanic victim cases are in counties with the lowest rates of cases going to penalty trials. The three counties with the largest number of cases have among the lowest rates of cases

going to penalty trial. In the subset of 445 cases, Camden County(4) has 51 cases of which 25% went to Penalty trial. Essex County(7) has 98 cases of which 19% went to penalty trial. Union County(20) has 40 cases of which 18% went to penalty trial. Adding column percents for these three counties in Table 43 we see that these three low penalty rate counties contain 67% of the African American Victim cases, 53% of the Hispanic victim cases, but only 19% of the White victim cases. Three of the highest penalty rate counties, Gloucester County(8), Middlesex County(12), and Monmouth County(13), with respectively 54%, 61% and 74% of cases going to penalty trials, contain 4% of the African American Victim cases, 9% of the Hispanic victim cases, but 21% of the White victim (Looking at the row percents in Table 40 show that the cases. low penalty rate counties have higher percentages of African American and Hispanic defendants than do the high rate counties.)

Tables 50 and 51 compare the three high caseload counties (Essex, Camden, and Union) with the other 18 counties. The three counties account for 189 out of the 445 cases. Table 50 shows that 21% of the FIRSTCASE data set cases in these 3 counties go to penalty trial as compared to 42% of the cases in the other 18 counties. Table 51 shows that only 20% of the

cases in these 3 counties involve a White victim, as compared to 62% of the cases in the other 18 counties.

The fact that minority victim cases are concentrated within counties with low penalty trial rates could lead to varying overall penalty trial rates for the different victim race cases. This would happen, even if for all counties, within a given county the same proportion of White, African American, Hispanic and other race victim cases went to penalty trials. This is why it is important to analyze the penalty trial data by counties and to investigate whether and how the rates of going to penalty trial vary by race within the counties.

In most cases the race of defendant and race of victim were the same (see Table 52). This implies that the lower rate of going to penalty trial for African American victim cases is confounded with the lower rate going to penalty trial for African American defendant cases (see Table 28). Table 52 shows this relation between race of defendant and primary victim for the First Case data set of 445 death eligible cases. Among the White defendant cases, 124 involved a White victim, only 2 involved an African American victim. From another view, there are 177 cases where the race of the victim is Black; in 170 of those cases the race of the defendant is

African American. This type of strong confounding led us to focus on the following question. Are African American defendants who kill a White victim more likely to go to penalty trial, than similar African American defendants who kill African American victims? For this comparison we will assign White to the victims race in a case if at least one of the victims in the case is White (i.e. the Awhitvice coding used by the AOC). There are 228 African American defendant cases with a White or African American victim; in 61 of the cases there is at least one White victim, and in the other 167 cases the victim is African American and there is no White victim. (Table 52 gives the breakdown based on race of primary victim, and give 58 and 170 instead of 61 and 167). Tables 53 and 54 carry out the analysis for the two methods of assigning race of victim in multiple-race-victim cases.

Table 53 shows the 228 cases from the First Case data set, that involve an African American defendant and an African American or White victim. Of 58 cases involving a White primary victim, 50% went to penalty trial. Of 170 cases involving an African American primary victim, 23% went to penalty trial. Table 54 shows a similar pattern for the second method of assigning victim's race for multi-race victim cases. It might be thought that holding the race of defendant fixed

would control for the different racial composition of death eligible cases among counties. Table 55 shows that this is not the case and that even for comparisons within African American defendant cases one must still take the county effect into consideration. Table 55 analyzes the 228 cases involving an African American defendant, with an African American or White victim. We see that even though all these cases involve an African American defendant, the fraction of cases involving an African American victim (among cases with an African American or White victim) vary from county to county. Table 56 shows the impact by comparing the three high case load (low penalty trial rate) counties (Camden, Essex, and Union) into one group, and the remaining counties into another group. We see that in the low case load counties 45% of the cases involve a White victim, as compared to 10% in the high case load (low penalty trial rate) counties. This shows that there is a county effect that must be taken into account into the analysis, even when we hold race of defendant fixed.

We now proceed to take into account other important variables in our sorting approach analysis to focus on the nature and possible reasons for this observed difference.

Table 57 gives for the 228 African American defendant cases

(from the First Case set) involving an African American or White victim, the fraction of cases going to penalty trial for a given county and race of victim. To illustrate why we must include county in the analysis, we look in Table 58 at a group of six of the counties in Table 57. From Table 58 we see that for the African American defendant cases, every one of the six counties has the fraction of White victim cases going to penalty trials either less than or equal to the fraction of African American victim cases going to penalty trials. Yet when you add up the data for these six counties, 36% of cases involving White victims go to penalty trials as compared to 26% of cases involving African American victims that go to penalty trial. It is remarkable, that for every one of these six individual counties, the White victim percent going to penalty trial is less than or equal to the African American victim percent; yet when you combine the data for the six counties, the White victim percent going to penalty trial is greater than the African American victim percent. This counterintuitive type of result is called Simpson's Paradox. (Simpson, E.H., 1951. AThe interpretation of interaction in contingency tables.@ Journal of the Royal Statistical Society, Series B, Volume 13, pp 238-241.) The explanation for the paradox for this example is what we have said earlier. The

African American victim cases are more heavily concentrated in counties with lower rates of cases (for victims of all races) going to penalty trials. To understand the data properly, we must take this county effect into account.

Looking at Table 57, some of the counties have White victim cases with smaller or equal fractions than African American victim cases. Some counties have no observations for African American defendant/African American or White victim cases, and some have observations for just one race of victim. In a few others, a shift of just 1 observation will change inequality to equality. (For example, the 3/5 versus 1/2 for Burlington; explaining one of the 3 cases, would lead to 2/4=1/2). Several differences based on a small number of observations, together with the somewhat larger differences for Atlantic, Essex, and Mercer Counties, might combine to be significant. One approach to test this is to block on counties using the Cochran-Mantel-Haenszel Test. We apply this test to the African American defendant, White or African American victim subset of the First Case data set, where we assign White victim to a case if there is at least one White victim. To apply the test we eliminate counties with only 1 race victim. This left a subset of 223 cases. Applying the Cochran-Mantel-Haenszel Test to control for county, we find that the

race of victim effect is not statistically significant (p > 0.08). Thus, county is an important confounding variable that explains the difference in rates for African American and White victims observed in Table 53.

Even though the differences are not statistically significant, either by themselves, or when pooled together, given the importance of these issues we decided to explore further the differences observed in Table 57 for Atlantic, Essex and Mercer counties. To illustrate our exploratory analysis we first focus on Essex, which provides the largest data base. Table 59 shows the breakdown for Essex County. The difference between 33 % and 15 % appears large, but is not statistically significant, even not taking into account other variables. However for exploratory analysis to aid our understanding of the process and the data, we will continue our analysis further.

We now break down the data in Table 59 by variables that are strongly related to a case going to penalty trial, the defendant's other homicides and prior criminal convictions. Both of these variables were rated in the Judge's survey as important, are related to outcome over all data sets, and are variables that county decision makers would look at in deciding whether to send the case to penalty trial. In

defining the variable for other homicides, we wanted to count homicides that would be known to the prosecutor and the defense attorney at the time the decision about penalty trial/plea bargain might be made. We defined a variable "Murderall" that was 1 if the defendant had more than one homicide, and zero otherwise. A dichotomous variable was similarly defined for prior convictions (0 if none, 1 if one or more).

From Table 60, we see that for the Essex cases of more than one homicide, or 1 homicide and no prior convictions, the fraction going to penalty trial is greater for African American than for White victims. To understand why the fraction is greater for White victim cases in Table 59, we can focus our attention on the group of cases involving A1 homicide and one or more prior criminal convictions. Table 61 gives a possible explanation for these cases based on the aggravating factor 4F, and whether the case was tried before or after 1988. The reason we look at this last variable, is that Essex County had different rates of cases going to penalty trials before and after 1988. Before 1988 Essex county had 42% (8/19) of cases going to penalty trial. After, 1988 only 9% (5/55) of their cases went to penalty trial. Not

trend to smaller proportions of cases going to penalty trial.

Before 1988, 57 % of (130) cases went to penalty trial, as

compared to 23% of (315) cases after 1988. Among the new cases

added since the 1999 report, about 10% of the (57) cases went

to penalty trial.

In Table 61 we see that for Essex County African American defendant cases, the raw difference observed in Table 59 in rates for White and African American victim cases going to penalty trial has a reasonable explanation that is due to nonracial factors, and that is consistent with the data. In all the rows in Table 61, the African American victim penalty rate is no less than the corresponding White victim rate, with the exception of the last row where one out of two White victim cases went to penalty trials as compared to zero out of three African American victim cases. As noted, differences based on one cases are not reliable. Here, even the one case can be explained based on variables unrelated to race of victim. The one White victim case that went to penalty trial involved a defendant who killed a policeman under unusual circumstances. The defendant, Kamau, had a gun smuggled into court to kill a policeman who was testifying there against a relative. Killing a public servant (Statutory factor 4H) is very strongly associated with the case going to penalty trial. There are 9

cases among the 490 death eligible cases, where 4H occurs, and in 8 of the 9 the case went to penalty trial.

We carry out a similar analysis for Atlantic County in Tables 62 and 63. From Table 62 we see that the only row where any case went to penalty trial was the row corresponding to A1 homicide and prior conviction. For this row, 3 out of 4 White victim cases as compared to 1 out of 7 African American victim cases went to penalty trial. From Table 63 we see that 2 out of the 3 White victim cases that went to penalty trial are explained by the fact that they are the only cases among the 11 cases that involved the statutory factor 4C. The remaining difference in Table 57 involves one case.

We carry out a similar analysis for Mercer County in

Table 64. In looking at the 10 cases involving 1 homicide and

prior convictions, the 1 case involving a White victim was the

only case among the 10 involving an execution style homicide.

We see in Table 64 as in the other tables, how other

controlling variables such as county, and statutory and non
statutory factors can provide reasonable explanations of why

cases go to penalty trials.

A similar analysis can be carried out for all the 490 cases or for the 445 cases in the First Case database. First split the cases into those that involve the statutory factor

4H (killing a police officer or other public official), and those that don=t. We noted before that among the 490 death eligible cases there are 9 cases where 4H is present, and 8 of these cases went to penalty trial. The one case that did not go to penalty trial was unusual (The wrong people were originally arrested and one died in jail) and posed prosecutorial problems that led to a plea bargain in this case. In looking at whether there is a race of victim effect (as distinct from the 4H effect), it is appropriate to separate out the 4H cases. This leaves 481 (non 4H) cases in the death eligible data base. Table 65 summarizes the data by race of victim for these cases, where a case is denoted a White victim case if at least one of the victims in the case is White. Looking at the raw numbers in the table we see that 58% of the White victim cases went to penalty trial, as compared to 39% of the other cases. When we appropriately take into account County, by using the Cochran-Mantel-Haenszel test, the race of victim effect is not significant. (The p value is 0.1256).

In Table 66 we carry out a similar analysis for the 445 First Case data set. We first separate out the 7 cases where 4H is present among the 445 First Cases, and analyze the remaining 438 cases by race of victim. We apply the Cochran-

Mantel-Haenszel Test, blocking on counties, and find the race of victim effect is not significant at the .05 level (p value = .09).

The above analyses show that the higher observed proportions of White victim cases that go to penalty trial, can be explained in large part by the fact that these cases are more heavily concentrated in counties that send a larger proportion of all cases to penalty trial, while the non-White victim cases are more heavily concentrated in counties that send a small proportion of all cases to penalty trial.

### VII. Conclusions

In this report we have applied two distinct approaches for assessing race disparity in death penalty sentencing. In one, we use multiple regression methods that seek to isolate the effects of race variables at specific decision points. In the second we use a sorting method that examines cross tabulations illustrating the relationship between race and death outcomes within different combinations of the data. For both methods, we began with a limited set of variables that were theoretically defined through statute and a judge survey. In the regression method we focused on which of these factors were significantly related to race and then used them to

isolate the impacts of race on selected outcomes. In the sorting method we began by identifying variables from the limited set that have strong relationships with the outcomes and then looked at the interaction between race characteristics, these variables and the outcomes we explored.

Using these very different approaches we come to very similar findings regarding the impacts of race on death penalty sentencing. In neither method do we find evidence that race of defendant or race of victim impacts significantly upon death outcomes, whether we examine penalty trial cases only or all death eligible cases. Our findings here are not ambiguous and provide for a single and strong conclusion. The present data do not support the position that race of defendant or race of victim impacts directly upon death outcomes in New Jersey.

In regard to race of defendant and advancement to penalty trial our analyses also provide a straightforward finding.

There is no evidence in these data, whether applying the regression approach or the sorting approach of a significant impact of race of defendant on advancement to penalty trial.

However, our findings regarding race of victim and advancement to penalty trial are more complex.

Using the regression approach and including only the statutory aggravating and mitigating circumstances, and the relevant non-statutory factors as defined by the judges, we did find that race of victim had a strong and statistically significant effect on advancement to penalty trial. However, when county variability was taken into account the effect of race of victim did not achieve statistical significance at conventional levels in three of the four analyses conducted. Using the sorting approach, the significant relationship of race of victim and advance to penalty trial was not sustained in any of the analyses that controlled for county variability.

We noted in our November report that an effect could not be considered consistent in our analyses unless it was found to be stable across multiple assumptions of analysis.

Accordingly, we cannot conclude here that the effect of race of victim on advance to penalty trial is consistent in our analyses.

In concluding, we think it important to note the observed importance of county variability in understanding advancement to penalty trial in this data base. There is very strong variability across counties in New Jersey in the rate at which cases advance to this stage of death penalty sentencing. At the same time, we want to caution the reader regarding drawing

conclusions about county effects on advancement to penalty trials. The methods we have used were developed to assess race disparities in death penalty sentencing. They were not developed to more generally model death penalty sentencing or to critically assess the impacts of other factors.

# Table 1.1: Race of Defendant By Death Outcome for Penalty Trials (First Case Sample)

TABLE OF RACEDEF BY PTDEATH

RACEDEF								
	PTDEATH(	DEATH/	LIFE	SENT.	AT	A PE	N.	TRIAL)
Frequency,								
Percent ,								
Row Pct ,								
Col Pct ,		),	1,	Tota	1			
fffffffff	`ffffffft	f^fffff	$fff^{}$					
White ,	, 38	,	20 ,	5	8			
	, 26.21	, 13.	79 ,	40.0	0			
,	65.52	, 34.	48 ,					
,	38.38		,					
fffffffff		,,,,,						
African ,		,	,	7	_			
American ,		•		48.9	7			
,	66.20		,					
,		, 52.						
fffffffff								
Hispanic ,			2,	1				
	, 9.66			11.0	3			
,	87.50		,					
	14.14	, 4.	35 ,					
fffffffff		f^fffff						
Total	99		46	14	_			
	68.28	31.	72	100.0	0			

Frequency Missing = 1

### STATISTICS FOR TABLE OF RACEDEF BY PTDEATH

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffff	ffffff	fffffffffff	fffffffff
Chi-Square	2	3.075	0.215
Likelihood Ratio Chi-Square	2	3.562	0.168
Mantel-Haenszel Chi-Square	1	1.621	0.203
Phi Coefficient		0.146	
Contingency Coefficient		0.144	
Cramer's V		0.146	

Effective Sample Size = 145 Frequency Missing = 1

# Table 1.2: Race of Defendant By Death Outcome for Penalty Trials (Last Case Sample)

### TABLE OF RACEDEF BY PTDEATH

RACEDEF						
	PTDEATH(DE	ATH/LIFE	SENT.	AT A	PEN.	TRIAL)
Frequency,						
Percent ,						
Row Pct ,						
Col Pct	, 0,	1,	Total			
fffffffff	^fffffffff^f	fffffff^				
White	, 42 ,	12 ,	54	Į.		
	, 31.58 ,	9.02 ,	40.60	)		
,	, 77.78 ,	22.22 ,				
	, 39.25 ,	46.15 ,				
ffffffff	` ^ffffffff^f	fffffff^				
African	, 50 ,	13 ,	63	3		
American	, 37.59 ,	9.77 ,	47.37	'		
	, 79.37 ,	20.63 ,				
	, 46.73 ,	50.00 ,				
fffffffff	^fffffffff^f	fffffff^				
Hispanic	, 15 ,	1 ,	16	5		
	, 11.28 ,	0.75 ,	12.03	3		
	, 93.75 ,	6.25 ,				
	, 14.02 ,	3.85 ,				
fffffffff	^fffffffff^f	fffffff^				
Total	107	26	133			
	80.45	19.55	100.00	)		

Frequency Missing = 1

### STATISTICS FOR TABLE OF RACEDEF BY PTDEATH

DF	Value	Prob
fffffff	ffffffffff	fffffffff
2	2.092	0.351
2	2.593	0.274
1	1.361	0.243
	0.125	
	0.124	
	0.125	
	fffffff 2 2	ffffffffffffffff 2 2.092 2 2.593 1 1.361 0.125 0.124

Effective Sample Size = 133 Frequency Missing = 1

### Table 2.1: African American/White Defendant By Death Outcome for Penalty Trials (First Case Sample)

#### TABLE OF BLACKD BY PTDEATH

### BLACKD(BLACK DEFENDANT) PTDEATH(DEATH/LIFE SENT. AT A PEN. TRIAL) Frequency Percent Row Pct , 0, 1, Total Col Pct fffffffffffffffffffffffffffffffff 85 44 129 65.89 34.11 100.00

Frequency Missing = 17

### STATISTICS FOR TABLE OF BLACKD BY PTDEATH

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffff	ffffff.	fffffffffff	fffffffff
Chi-Square	1	0.007	0.935
Likelihood Ratio Chi-Square	1	0.007	0.935
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.007	0.936
Fisher's Exact Test (Left)			0.541
(Right)			0.606
(2-Tail)			1.000
Phi Coefficient		-0.007	
Contingency Coefficient		0.007	
Cramer's V		-0 007	

Effective Sample Size = 129

Frequency Missing = 17
WARNING: 12% of the data are missing.

### Table 2.2: African American/White Defendant By Death Outcome for Penalty Trials (Last Case Sample)

### TABLE OF BLACKD BY PTDEATH

BLACKD(BLACK DEFE		,								
	PT	DEATH(	DE.	ATH/LIFE	SENT.	ΑT	Α	PEN.	TRIAL	)
Frequency	,									
Percent	,									
Row Pct	,									
Col Pct	,	(	Ο,	1,	Total	L				
ffffffffffffffffff	$f^{f}$	fffffj	$f^f$	fffffff^						
White	,	42	,	12 ,	54	1				
	,	35.90	,	10.26 ,	46.15	5				
	,	77.78	,	22.22 ,						
	,	45.65	,	48.00 ,						
fffffffffffffffff	-^ff	fffff	$f^f$	fffffff^						
African American	,	50	,	13 ,	63	;				
	,	42.74	,	11.11 ,	53.85	5				
	,	79.37	,	20.63 ,						
	,	54.35	,	52.00 ,						
ffffffffffffffffff	$f^{f}$	fffffj	$f^f$	fffffff^						
Total		92		25	117	7				
		78.63		21.37	100.00	)				

Frequency Missing = 17

### STATISTICS FOR TABLE OF BLACKD BY PTDEATH

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffffffffff	ffffff	fffffffffff	fffffffff
Chi-Square	1	0.044	0.835
Likelihood Ratio Chi-Square	1	0.044	0.835
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.043	0.835
Fisher's Exact Test (Left)			0.506
(Right)			0.669
(2-Tail)			1.000
Phi Coefficient		-0.019	
Contingency Coefficient		0.019	
Cramer's V		-0.019	

Effective Sample Size = 117

Frequency Missing = 17
WARNING: 13% of the data are missing.

### Table 3.1: Logistic Regression Penalty Trial (Race of Defendant, First Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTDEATH DEATH/LIFE SENT. AT A PEN. TRIAL

Response Levels: 2

Number of Observations: 145 Link Function: Logit

### Response Profile

Ordered Value	PTDEATH	Count
1	1	46
2	0	99

WARNING: 1 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	183.184	187.301	
SC	186.161	202.185	•
-2 LOG L	181.184	177.301	3.883 with 4 DF (p=0.4221)
Score			3.404 with 4 DF (p=0.4926)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-0.3698	0.5593	0.4373	0.5084		•
BLACKD	1	-0.1848	0.4676	0.1562	0.6927	-0.051109	0.831
HISPD	1	-1.3436	0.9388	2.0483	0.1524	-0.232895	0.261
WHITVIC	1	-0.2810	0.4983	0.3181	0.5727	-0.075704	0.755
HISPAVIC	1	-0.2042	0.9175	0.0495	0.8239	-0.034403	0.815

## Table 3.2: Logistic Regression Penalty Trial (Race of Defendant, Last Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTDEATH DEATH/LIFE SENT. AT A PEN. TRIAL

Response Levels: 2

Number of Observations: 133 Link Function: Logit

### Response Profile

Ordered Value	PTDEATH	Count
1 2	1	26 107

WARNING: 1 observation(s) were deleted due to missing values for the response or explanatory variables.

### ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	133.426	139.717	
SC	136.317	157.059	
-2 LOG L	131.426	127.717	3.710 with 5 DF (p=0.5919)
Score	ē	•	3.095 with 5 DF (p=0.6854)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-1.1666	0.7160	2.6544	0.1033		
BLACKD	1	-0.1255	0.5597	0.0503	0.8225	-0.034686	0.882
HISPD	1	-1.6667	1.2758	1.7068	0.1914	-0.300068	0.189
WHITVIC	1	0.0984	0.6112	0.0259	0.8721	0.026473	1.103
HISPAVIC	1	0.3989	1.0886	0.1343	0.7140	0.069829	1.490
V5FPTY	1	-0.4854	0.5009	0.9389	0.3326	-0.128403	0.615

### Table 4.1: Logistic Regression Penalty Trial (African American/White Defendant, First Case Sample)

#### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTDEATH DEATH/LIFE SENT. AT A PEN. TRIAL

Response Levels: 2

Number of Observations: 129 Link Function: Logit

### Response Profile

Ordered Value	PTDEATH	Count
1 2	1	44 85

WARNING: 17 observation(s) were deleted due to missing values for the response or explanatory variables.

### ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	167.572	171.527	
SC	170.432	180.107	•
-2 LOG L	165.572	165.527	0.045 with 2 DF (p=0.9778)
Score			0.045 with 2 DF (p=0.9779)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-0.5577	0.5109	1.1914	0.2750		
BLACKD	1	-0.0778	0.4460	0.0304	0.8615	-0.021417	0.925
WHITVIC	1	-0.0905	0.4624	0.0383	0.8448	-0.023998	0.913

### Table 4.2: Logistic Regression Penalty Trial (African American/White Defendant, Last Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTDEATH DEATH/LIFE SENT. AT A PEN. TRIAL

Response Levels: 2

Number of Observations: 117 Link Function: Logit

### Response Profile

Ordered Value	PTDEATH	Count
1	1	25
2	0	92

WARNING: 17 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	123.396	129.242	
SC	126.158	143.053	•
-2 LOG L	121.396	119.242	2.154 with 4 DF (p=0.7074)
Score			2.221 with 4 DF (p=0.6952)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-1.5463	0.7512	4.2376	0.0395		
BLACKD	1	0.0492	0.5701	0.0074	0.9312	0.013580	1.050
WHITVIC	1	0.1922	0.5813	0.1093	0.7409	0.050768	1.212
AMBUSH	1	0.6118	0.5056	1.4644	0.2262	0.147924	1.844
V5FPTY	1	-0.2762	0.5201	0.2820	0.5954	-0.072531	0.759

# Table 5.1: Race of Victim By Death Outcome for Penalty Trials (First Case Sample)

### TABLE OF RACEVIC BY PTDEATH

RACEVIC		
	PTDEATH(DEATH/LIFE	SENT. AT A PEN. TRIAL)
Frequency	,	
Percent	,	
Row Pct	,	
Col Pct	, 0, 1,	Total
ffffffffffffffffff	f^fffffffffffffffff	
White	, 61 , 28 ,	89
	, 42.66 , 19.58 ,	62.24
	, 68.54 , 31.46 ,	
	, 62.24 , 62.22 ,	
fffffffffffffffff	f^fffffffffffffffff	
African American	, 25 , 14 ,	39
	, 17.48 , 9.79 ,	27.27
	, 64.10 , 35.90 ,	
	, 25.51 , 31.11 ,	
ffffffffffffffffff	f^fffffffff^ffffffff	
Hispanic	, 12 , 3 ,	15
	, 8.39 , 2.10 ,	10.49
	, 80.00 , 20.00 ,	
	, 12.24 , 6.67 ,	
ffffffffffffffffff	f^fffffffffffffffff	
Total	98 45	143
	68.53 31.47	100.00

Frequency Missing = 3

### STATISTICS FOR TABLE OF RACEVIC BY PTDEATH

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffff	ffffff.	fffffffffff	fffffffff
Chi-Square	2	1.270	0.530
Likelihood Ratio Chi-Square	2	1.341	0.512
Mantel-Haenszel Chi-Square	1	0.206	0.650
Phi Coefficient		0.094	
Contingency Coefficient		0.094	
Cramer's V		0.094	

Effective Sample Size = 143 Frequency Missing = 3

# Table 5.2: Race of Victim By Death Outcome for Penalty Trials (Last Case Sample)

### TABLE OF RACEVIC BY PTDEATH

RACEVIC					
	PTDEATH (DE	ATH/LIFE	SENT. AT	A PEN.	TRIAL)
Frequency	,				
Percent	,				
Row Pct	,				
Col Pct	, 0,	1,	Total		
fffffffffffffffff	^fffffffff	fffffff^			
White	, 65 ,	17 ,	82		
	, 49.62 ,		62.60		
	, 79.27 ,	20.73 ,			
	, 61.90 ,	65.38 .			
ffffffffffffffffff	^fffffffff^f.	fffffff^			
African American	, 27 ,	7,	34		
	, 20.61 ,	5.34 ,	25.95		
	, 79.41 ,	20.59 ,			
	, 25.71 ,	26.92 ,			
fffffffffffffffff	^fffffffffff.f.	fffffff^			
Hispanic	, 13 ,	2,	15		
	, 9.92 ,	1.53 ,	11.45		
	, 86.67 ,	13.33 ,			
	, 12.38 ,	7.69 ,			
fffffffffffffffff	^fffffffffff	fffffff^			
Total	105	26	131		
	80.15	19.85	100.00		

Frequency Missing = 3

### STATISTICS FOR TABLE OF RACEVIC BY PTDEATH

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffffffffff	ffffff.	ffffffffff.	ffffffff
Chi-Square	2	0.452	0.798
Likelihood Ratio Chi-Square	2	0.492	0.782
Mantel-Haenszel Chi-Square	1	0.288	0.591
Phi Coefficient		0.059	
Contingency Coefficient		0.059	
Cramer's V		0.059	

Effective Sample Size = 131 Frequency Missing = 3

### Table 6.1: African American/White Victim By Death Outcome for Penalty Trials (First Case Sample)

### TABLE OF WHITVIC BY PTDEATH

WHITVIC(ONE	OR MORE W	HITE VI	CTIMS)			
	PTD	EATH(DE	ATH/LIFE	SENT. AT	A PEN.	TRIAL)
Frequency	,					
Percent	,					
Row Pct	,					
Col Pct	,	0,	1,	Total		
ffffffffffff	ffffff^fff	fffff^f	fffffff^			
African Amer	ican ,	25 ,	14 ,	39		
	, 1	9.53 ,	10.94 ,	30.47		
	, 6	4.10 ,	35.90 ,			
	, 2	9.07 ,	33.33 ,			
fffffffffffff	ffffff^fff.	fffff^f	fffffff^			
White	,	61 ,	28 ,	89		
	, 4	7.66 ,	21.88 ,	69.53		
	, 6	8.54 ,	31.46 ,			
	, 7	0.93 ,	66.67 ,			
ffffffffffff	ffffff^fff	fffff^f	fffffff^			
Total		86	42	128		
	6	7.19	32.81	100.00		

Frequency Missing = 18

#### STATISTICS FOR TABLE OF WHITVIC BY PTDEATH

man and a second		7	_ ,
Statistic	DF	Value	Prob
fffffffffffffffffffffffffffffffffff	ffffff	fffffffffff	fffffffff
Chi-Square	1	0.242	0.623
Likelihood Ratio Chi-Square	1	0.240	0.624
Continuity Adj. Chi-Square	1	0.083	0.774
Mantel-Haenszel Chi-Square	1	0.240	0.624
Fisher's Exact Test (Left)			0.384
(Right)			0.758
(2-Tail)			0.684
Phi Coefficient		-0.043	
Contingency Coefficient		0.043	
Cramer's V		-0.043	

Effective Sample Size = 128

Frequency Missing = 18
WARNING: 12% of the data are missing.

### Table 6.2: African American/White Victim By Death Outcome for Penalty Trials (Last Case Sample)

### TABLE OF WHITVIC BY PTDEATH

WHITVIC(ONE OR	MORE	WHITE	VI	CTIMS)					
	P'	TDEATH	(DE	ATH/LIFE	SENT.	ΑT	Α	PEN.	TRIAL)
Frequency	,								
Percent	,								
Row Pct	,								
Col Pct	,		Ο,	1,	Total	L			
ffffffffffffffff	$ff^f$	ffffff.	$f^f$	fffffff^					
African America	ın ,	27	,	7,	34	1			
	,	23.28	,	6.03 ,	29.31	L			
	,	79.41	,	20.59 ,					
	,	29.35	,	29.17 ,					
fffffffffffffff	$ff^f$	ffffff.	$f^f$	fffffff^					
White	,	65	,	17 ,	82	2			
	,	56.03	,	14.66 ,	70.69	9			
	,	79.27	,	20.73 ,					
	,	70.65	,	70.83 ,					
ffffffffffffffff	$ff^f$	ffffff	$f^f$	fffffff^					
Total		92		24	116	5			
		79.31		20.69	100.00	)			

Frequency Missing = 18

### STATISTICS FOR TABLE OF WHITVIC BY PTDEATH

		_	_
Statistic	DF	Value	Prob
fffffffffffffffffffffffffffff	ffffff.	fffffffffff	fffffffff
Chi-Square	1	0.000	0.986
Likelihood Ratio Chi-Square	1	0.000	0.986
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.000	0.986
Fisher's Exact Test (Left)			0.598
(Right)			0.600
(2-Tail)			1.000
Phi Coefficient		0.002	
Contingency Coefficient		0.002	
Cramer's V		0.002	

Effective Sample Size = 116

Frequency Missing = 18
WARNING: 13% of the data are missing.

### Table 7.1: Logistic Regression Penalty Trial (Race of Victim, First Case Sample)

#### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTDEATH DEATH/LIFE SENT. AT A PEN. TRIAL

Response Levels: 2

Number of Observations: 143 Link Function: Logit

### Response Profile

Ordered Value	PTDEATH	Count
1 2	1 0	45 98

WARNING: 3 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	180.120	174.523	•
SC	183.083	201.189	
-2 LOG L	178.120	156.523	21.597 with 8 DF (p=0.0057)
Score			19.942 with 8 DF (p=0.0106)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	0.00875	0.7066	0.0002	0.9901		
WHITVIC	1	-0.6886	0.5951	1.3389	0.2472	-0.184708	0.502
HISPAVIC	1	-0.7989	1.0464	0.5829	0.4452	-0.135443	0.450
BLACKD	1	-0.3134	0.5280	0.3523	0.5528	-0.086680	0.731
HISPD	1	-1.2245	1.0226	1.4337	0.2312	-0.213555	0.294
VBEAT	1	-0.4522	0.4458	1.0290	0.3104	-0.116179	0.636
RAGE	1	0.4861	0.5220	0.8674	0.3517	0.103732	1.626
V4FPTY	1	1.1959	0.4522	6.9927	0.0082	0.305368	3.306
V5CPTY	1	-1.4866	0.4889	9.2452	0.0024	-0.379604	0.226

## Table 7.2: Logistic Regression Penalty Trial (Race of Victim, last case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTDEATH DEATH/LIFE SENT. AT A PEN. TRIAL

Response Levels: 2

Number of Observations: 131 Link Function: Logit

### Response Profile

Ordered Value	PTDEATH	Count
1 2	1	26 105

WARNING: 3 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	132.549	134.242	
SC	135.424	151.493	•
-2 LOG L	130.549	122.242	8.307 with 5 DF (p=0.1401)
Score			8.221 with 5 DF (p=0.1445)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-1.1631	0.7455	2.4340	0.1187		
WHITVIC	1	-0.3824	0.6814	0.3149	0.5747	-0.102410	0.682
HISPAVIC	1	-0.8535	1.0449	0.6672	0.4140	-0.150412	0.426
BLACKD	1	-0.1803	0.6005	0.0901	0.7640	-0.049821	0.835
VBEAT	1	-0.9212	0.5630	2.6771	0.1018	-0.234803	0.398
V4FPRC	1	1.1088	0.4852	5.2223	0.0223	0.284559	3.031

## Table 8.1: Logistic Regression Penalty Trial (White/African American Victim, First Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTDEATH DEATH/LIFE SENT. AT A PEN. TRIAL

Response Levels: 2

Number of Observations: 115 Link Function: Logit

### Response Profile

Ordered Value	PTDEATH	Count
1 2	1	40 75

WARNING: 31 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	150.601	152.667	
SC	153.346	171.882	•
-2 LOG L	148.601	138.667	9.933 with 6 DF (p=0.1275)
Score			9.703 with 6 DF (p=0.1377)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-1.4337	0.7422	3.7312	0.0534	•	
WHITVIC	1	-0.1556	0.6003	0.0672	0.7954	-0.039968	0.856
BLACKD	1	0.2422	0.5371	0.2033	0.6521	0.066842	1.274
VICPLEAD	1	0.5186	0.4968	1.0897	0.2965	0.116705	1.680
DATKDIEV	1	0.5721	0.4422	1.6735	0.1958	0.146899	1.772
RAGE	1	0.2868	0.5515	0.2705	0.6030	0.063532	1.332
V4FPTY	1	1.1127	0.4664	5.6908	0.0171	0.291691	3.043

## Table 8.2: Logistic Regression Penalty Trial White/African American Victim, Second Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTDEATH DEATH/LIFE SENT. AT A PEN. TRIAL

Response Levels: 2

Number of Observations: 116 Link Function: Logit

### Response Profile

Ordered Value	PTDEATH	Count
1 2	1	24 92

WARNING: 18 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	120.277	124.151	
SC	123.031	132.412	•
-2 LOG L	118.277	118.151	0.126 with 2 DF (p=0.9390)
Score	ē	·	0.128 with 2 DF (p=0.9380)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-1.5547	0.7139	4.7424	0.0294		
WHITVIC	1	0.1460	0.6297	0.0537	0.8167	0.036787	1.157
BLACKD	1	0.2048	0.5743	0.1272	0.7214	0.056666	1.227

# Table 9.1: Race of Defendant By Death Outcome for Death Eligible Cases (First Case Sample)

TABLE OF RACEDEF BY DEATH

RACEI	EF						
		DEATH (DEATH	SENTENCE	IMPOSED	AMONG	ALL	CASES)
Frequ	ency	,					
Perce	ent	,					
Row F	ct	,					
Col P	ct	, 0,	1,	Total			
fffff	ffffffffffff	^ffffffff^ff	ffffff <sup>^</sup>				
White	:	, 116 ,	20 ,	136			
		, 26.30 ,	4.54 ,	30.84			
		, 85.29 , 3	14.71 ,				
		, 29.37 , 4	13.48				
fffff	ffffffffffff	^ffffffff^ff	ffffff <sup>^</sup>				
Afric	an American	, 231 ,	24 ,	255			
		, 52.38 ,	5.44 ,	57.82			
		, 90.59 ,					
		, 58.48 , 5	52.17 ,				
fffff	ffffffffffff	^ffffffff^ff	ffffff <sup>^</sup>				
Hispa	mic	, 48 ,	2 ,	50			
-		, 10.88 ,		11.34			
		, 96.00 ,					
		, 12.15 ,	4.35 ,				
fffff	ffffffffffff						
Total		395	46	441			
				.00.00			

Frequency Missing = 4

### STATISTICS FOR TABLE OF RACEDEF BY DEATH

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffff	ffffffj	ffffffffff	fffffffff
Chi-Square	2	5.157	0.076
Likelihood Ratio Chi-Square	2	5.508	0.064
Mantel-Haenszel Chi-Square	1	5.145	0.023
Phi Coefficient		0.108	
Contingency Coefficient		0.108	
Cramer's V		0.108	

Effective Sample Size = 441 Frequency Missing = 4

# Table 9.2: Race of Defendant By Death Outcome for Death Eligible Cases (Last Case Sample)

### TABLE OF RACEDEF BY DEATH

RACEDEF						
	DEATH (DEATH	SENTENCE	IMPOSED	AMONG	ALL	CASES)
Frequency	,					
Percent	,					
Row Pct	,					
Col Pct	, 0,	,	Total			
fffffffffffffffff	<i>`ffffffff^fff</i>	fffff^				
White	, 124 ,	12 ,	136			
	, 28.12 ,	2.72 , 3	30.84			
	, 91.18 , 8	8.82 ,				
	, 29.88 , 46	,				
fffffffffffffffff						
African American			255			
	, 54.88 ,		57.82			
	, 94.90 , !	,				
	, 58.31 , 5					
fffffffffffffffffff		fffff^				
Hispanic	, 49 ,	1 ,	50			
	, 11.11 ,		11.34			
	, 98.00 , 2	2.00 ,				
		3.85 ,				
ffffffffffffffffff						
Total	415	26	441			
	94.10	5.90 10	00.00			

Frequency Missing = 4

### STATISTICS FOR TABLE OF RACEDEF BY DEATH

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffffff	ffffffj	fffffffffff	ffffffff
Chi-Square	2	3.761	0.152
Likelihood Ratio Chi-Square	2	3.957	0.138
Mantel-Haenszel Chi-Square	1	3.736	0.053
Phi Coefficient		0.092	
Contingency Coefficient		0.092	
Cramer's V		0.092	

Effective Sample Size = 441 Frequency Missing = 4

### Table 10.1: African American/White Defendant By Death Outcome for Death Eligible Cases (First Case Sample)

### TABLE OF BLACKD BY DEATH

BLACKD(BLACK DEFENDANT)					
	DEATH (DEATH	H SENTEN	CE IMPOSED	AMONG AL	L CASES)
Frequency	,				
Percent	,				
Row Pct	,				
Col Pct	, 0,	1,	Total		
fffffffffffffffff	`ffffffff^ff	fffffff^			
White	, 116 ,	20 ,	136		
	, 29.67 ,	5.12 ,	34.78		
	, 85.29 ,	14.71 ,			
	, 33.43 ,	45.45 ,			
fffffffffffffffff	`ffffffff^ff	fffffff^			
African American	, 231 ,	24 ,	255		
	, 59.08 ,	6.14 ,	65.22		
	, 90.59 ,	9.41 ,			
	, 66.57 ,	54.55 ,			
fffffffffffffffffffffffffff					
Total	347	44	391		
	88.75	11.25	100.00		

Frequency Missing = 54

#### STATISTICS FOR TABLE OF BLACKD BY DEATH

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffffff	ffffff	fffffffffff	fffffffff
Chi-Square	1	2.489	0.115
Likelihood Ratio Chi-Square	1	2.408	0.121
Continuity Adj. Chi-Square	1	1.987	0.159
Mantel-Haenszel Chi-Square	1	2.483	0.115
Fisher's Exact Test (Left)			0.081
(Right)			0.958
(2-Tail)			0.131
Phi Coefficient		-0.080	
Contingency Coefficient		0.080	
Cramer's V		-0.080	

Effective Sample Size = 391 Frequency Missing = 54 WARNING: 12% of the data are missing.

### Table 10.2: African American/White Defendant By Death Outcome for Death Eligible Cases (Last Case Sample)

### TABLE OF BLACKD BY DEATH

### 

### STATISTICS FOR TABLE OF BLACKD BY DEATH

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffff	fffff	ffffffffff.	fffffffffff
Chi-Square	1	0.602	0.438
Likelihood Ratio Chi-Square	1	0.596	0.440
Continuity Adj. Chi-Square	1	0.327	0.568
Mantel-Haenszel Chi-Square	1	0.601	0.438
Fisher's Exact Test (Left)			0.282
(Right)			0.837
(2-Tail)			0.541
Phi Coefficient		-0.037	
Contingency Coefficient		0.037	
Cramer's V		-0.037	

Sample Size = 445

### Table 11.1: Logistic Regression Death Eligible Cases Race of Defendant, First Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2

Number of Observations: 395 Link Function: Logit

### Response Profile

Ordered Value	DEATH	Count
1 2	1	44 351

WARNING: 50 observation(s) were deleted due to missing values for the response or explanatory variables.

### ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	278.039	251.019	
SC	282.018	286.829	
-2 LOG L	276.039	233.019	43.020 with 8 DF (p=0.0001)
Score	ē	·	44.312 with 8 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
					1		
INTERCPT	1	-1.9627	0.7390	7.0543	0.0079		•
BLACKD	1	-0.1668	0.4592	0.1320	0.7163	-0.045074	0.846
HISPD	1	-1.0852	0.8826	1.5115	0.2189	-0.188467	0.338
WHITVIC	1	0.5788	0.4770	1.4725	0.2250	0.158198	1.784
HISPAVIC	1	0.4168	0.7637	0.2979	0.5852	0.075845	1.517
INTENT	1	-0.1543	0.3260	0.2241	0.6359	-0.046074	0.857
VICPLEAD	1	0.9965	0.4204	5.6178	0.0178	0.184453	2.709
V4FPRC	1	1.0364	0.3712	7.7957	0.0052	0.235124	2.819
V5DPRC	1	-1.6641	0.4471	13.8556	0.0002	-0.455466	0.189

### Table 11.2.1: Logistic Regression Death Eligible Cases Race of Defendant, last Case Sample); with V4fprc

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2

Number of Observations: 441 Link Function: Logit

### Response Profile

		Ordered
Count	DEATH	Value
20	1	1
26	1	1
415	0	2

WARNING: 4 observation(s) were deleted due to missing values for the response or explanatory variables.

### ${\tt Model \ Fitting \ Information \ and \ Testing \ Global \ Null \ Hypothesis \ BETA=0}$

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	199.645	178.056	
SC	203.734	202.590	
-2 LOG L	197.645	166.056	31.589 with 5 DF (p=0.0001)
Score			31.676 with 5 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-2.7217	0.5998	20.5926	0.0001		
BLACKD	1	-0.2368	0.5239	0.2044	0.6512	-0.064559	0.789
HISPD	1	-1.2328	1.0980	1.2606	0.2615	-0.215738	0.291
WHITVIC	1	0.7042	0.5478	1.6527	0.1986	0.193658	2.022
V4FPRC	1	1.1358	0.4465	6.4722	0.0110	0.258709	3.114
V5DPRC	1	-2.1483	0.6322	11.5490	0.0007	-0.591020	0.117

### Table 11.2.2: Logistic Regression Death Eligible Cases Race of Defendant, last Case Sample); with Intent

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2 Number of Observations: 441 Link Function: Logit

### Response Profile

Ordered Value	DEATH	Count
1	1	26
2	0	415

WARNING: 4 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	199.645	181.326	
SC	203.734	205.860	•
-2 LOG L	197.645	169.326	28.320 with 5 DF (p=0.0001)
Score	•	ē	26.076 with 5 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-1.4104	0.8654	2.6561	0.1032		
BLACKD	1	-0.1291	0.5361	0.0579	0.8098	-0.035177	0.879
HISPD	1	-1.2545	1.0979	1.3055	0.2532	-0.219531	0.285
WHITVIC	1	0.9145	0.5458	2.8074	0.0938	0.251489	2.496
INTENT	1	-0.7110	0.4165	2.9141	0.0878	-0.211146	0.491
V5DPRC	1	-2.1232	0.6334	11.2380	0.0008	-0.584116	0.120

### Table 12.1: Logistic Regression Death Eligible Cases African American/White Defendant, First Case Sample)

#### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2 Number of Observations: 349 Link Function: Logit

### Response Profile

Ordered Value	DEATH	Count
1	1	41
2	0	308

WARNING: 96 observation(s) were deleted due to missing values for the response or explanatory variables.

### ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC SC -2 LOG L	254.586 258.441 252.586	227.366 262.062 209.366	
Score			42.755 with 8 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-2.3458	0.8008	8.5813	0.0034		•
BLACKD	1	0.0791	0.4767	0.0275	0.8683	0.020381	1.082
WHITVIC	1	0.7179	0.4792	2.2445	0.1341	0.197070	2.050
INTENT	1	-0.1574	0.3409	0.2132	0.6442	-0.047399	0.854
VICPLEAD	1	0.6526	0.4451	2.1495	0.1426	0.124095	1.921
DOTHKILS	1	0.1249	0.5900	0.0448	0.8323	0.018735	1.133
LONGATAK	1	0.7666	0.3967	3.7336	0.0533	0.185150	2.152
V4FPRC	1	1.0850	0.3928	7.6308	0.0057	0.248400	2.959
V5DPRC	1	-1.8717	0.4859	14.8345	0.0001	-0.512377	0.154

### Table 12.2: Logistic Regression Death Eligible Cases African American/White Defendant, Last Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2

Number of Observations: 391 Link Function: Logit

### Response Profile

Ordered Value	DEATH	Count
1 2	1	25 366

WARNING: 54 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	187.858	165.786	
SC	191.827	189.598	•
-2 LOG L	185.858	153.786	32.072 with 5 DF (p=0.0001)
Score	·	•	32.522 with 5 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-1.8414	0.9147	4.0524	0.0441		
BLACKD	1	-0.0876	0.5315	0.0271	0.8692	-0.023021	0.916
WHITVIC	1	0.7514	0.5729	1.7202	0.1897	0.207110	2.120
INTENT	1	-0.6479	0.4407	2.1611	0.1415	-0.194424	0.523
V4FPRC	1	1.0622	0.4614	5.3007	0.0213	0.245873	2.893
V5DPRC	1	-2.0449	0.6363	10.3290	0.0013	-0.563074	0.129

# Table 13.1: Race of Victim By Death Outcome for Death Eligible Cases (First Case Sample)

### TABLE OF RACEVIC BY DEATH

RACEVIC						
	DEATH (DEATH	SENTENCE	E IMPOSED	AMONG	ALL	CASES)
Frequency	,					
Percent	,					
Row Pct	,					
Col Pct	, 0,	1,	Total			
ffffffffffffffffff	` <i>^ffffffff</i> ^ff.	ffffff^				
White	, 175 ,	28 ,	203			
	, 40.70 ,	6.51 ,	47.21			
	, 86.21 ,					
	, 45.45 ,					
ffffffffffffffffff		ffffff^				
African American		14 ,	174			
	, 37.21 ,		40.47			
	, 91.95 ,					
	, 41.56 , 3					
ffffffffffffffffffff						
Hispanic		3,	53			
	, 11.63 ,		12.33			
	, 94.34 ,	5.66 ,				
	, 12.99 ,	6.67 ,				
fffffffffffffffffff						
Total	385	45	430			
	89.53	10.47 1	L00.00			

Frequency Missing = 15

### STATISTICS FOR TABLE OF RACEVIC BY DEATH

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffffff	ffffffj	fffffffffff	ffffffff
Chi-Square	2	4.792	0.091
Likelihood Ratio Chi-Square	2	4.916	0.086
Mantel-Haenszel Chi-Square	1	4.524	0.033
Phi Coefficient		0.106	
Contingency Coefficient		0.105	
Cramer's V		0.106	

Effective Sample Size = 430 Frequency Missing = 15

## Table 13.2: Race of Victim By Death Outcome for Death Eligible Cases (Last Case Sample)

### TABLE OF RACEVIC BY DEATH

RACEVIC						
DE	ATH ( DEATH	I SENTEN	CE IMPOSED	AMONG	ALL	CASES)
Frequency,	•					
Percent ,						
Row Pct ,						
Col Pct ,	0,	1,	Total			
ffffffffffffffff	fffffff^f	fffffff^				
1 ,	186 ,	17 ,	203			
,	43.26 ,	3.95 ,	47.21			
,	91.63 ,	8.37 ,				
,	46.04 ,	65.38 ,				
fffffffffffffff	fffffff^f;	fffffff^				
	167 ,					
	38.84 ,					
	95.98 ,					
	41.34 ,					
ffffffffff^ff						
	51 ,					
	11.86 ,					
	96.23 ,					
•	12.62 ,					
fffffffffffffff						
Total	404					
	93.95	6.05	100.00			

Frequency Missing = 15

### STATISTICS FOR TABLE OF RACEVIC BY DEATH

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffffffffff	ffffff.	ffffffffff.	fffffffff
Chi-Square	2	3.673	0.159
Likelihood Ratio Chi-Square	2	3.706	0.157
Mantel-Haenszel Chi-Square	1	3.032	0.082
Phi Coefficient		0.092	
Contingency Coefficient		0.092	
Cramer's V		0.092	

Effective Sample Size = 430 Frequency Missing = 15

# Table 14.1: African American/White Victim By Death Outcome for Death Eligible Cases (First Case Sample)

### TABLE OF WHITVIC BY DEATH

WHITVIC(ONE OR M	ORE WHITE VI		CE IMPOSED	AMONG ALI	CASES)
Frequency	,				,
Percent	,				
Row Pct	,				
Col Pct	, 0,	1,	Total		
ffffffffffffffff	f^ffffffffff	fffffff^			
African American	, 160 ,	14 ,	174		
	, 42.44 ,	3.71 ,	46.15		
	, 91.95 ,	8.05 ,			
	, 47.76 ,	33.33 ,			
fffffffffffffffff	f^fffffffffff	fffffff^			
White	, 175 ,				
	, 46.42 ,	7.43 ,	53.85		
	, 86.21 ,				
	, 52.24 ,				
fffffffffffffffff	f^ffffffffffff	fffffff^			
Total	335	42	377		
	88.86	11.14	100.00		

Frequency Missing = 68

### STATISTICS FOR TABLE OF WHITVIC BY DEATH

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffff	ffffff	ffffffffff.	fffffffff
Chi-Square	1	3.126	0.077
Likelihood Ratio Chi-Square	1	3.196	0.074
Continuity Adj. Chi-Square	1	2.572	0.109
Mantel-Haenszel Chi-Square	1	3.118	0.077
Fisher's Exact Test (Left)			0.974
(Right)			0.053
(2-Tail)			0.100
Phi Coefficient		0.091	
Contingency Coefficient		0.091	
Cramer's V		0.091	

Effective Sample Size = 377 Frequency Missing = 68

WARNING: 15% of the data are missing.

### Table 14.2: African American/White Victim By Death Outcome for Death Eligible Cases (last Case Sample)

#### TABLE OF WHITVIC BY DEATH

WHITVIC(ONE OR MORE WHITE VICTIMS) DEATH(DEATH SENTENCE IMPOSED AMONG ALL CASES) Frequency, Percent , Row Pct , Col Pct , 0, 1, Total ffffffff^ffffffffffffffff 353 24 377 93.63 6.37 100.00 Total

Frequency Missing = 68

### STATISTICS FOR TABLE OF WHITVIC BY DEATH

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffff	ffffff	fffffffffff	ffffffff
Chi-Square	1	2.976	0.084
Likelihood Ratio Chi-Square	1	3.087	0.079
Continuity Adj. Chi-Square	1	2.291	0.130
Mantel-Haenszel Chi-Square	1	2.968	0.085
Fisher's Exact Test (Left)			0.975
(Right)			0.063
(2-Tail)			0.094
Phi Coefficient		0.089	
Contingency Coefficient		0.089	
Cramer's V		0.089	

Effective Sample Size = 377

Frequency Missing = 68
WARNING: 15% of the data are missing.

### Table 15.1: Logistic Regression Death Eligible Cases Race of Victim, First Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2 Number of Observations: 388 Link Function: Logit

### Response Profile

Ordered Value	DEATH	Count
1	1	43 345

WARNING: 57 observation(s) were deleted due to missing values for the response or explanatory variables.

### Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	272.231	245.061	•
SC	276.192	284.671	•
-2 LOG L	270.231	225.061	45.170 with 9 DF (p=0.0001)
Score			46.406 with 9 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-2.1067	0.7691	7.5027	0.0062		
WHITVIC	1	0.5744	0.4933	1.3561	0.2442	0.157437	1.776
HISPAVIC	1	0.3442	0.7696	0.2000	0.6547	0.063666	1.411
BLACKD	1	-0.0489	0.4699	0.0108	0.9171	-0.013232	0.952
HISPD	1	-0.8339	0.8885	0.8810	0.3479	-0.143027	0.434
V5DPRC	1	-1.6158	0.4472	13.0568	0.0003	-0.441666	0.199
V4FPRC	1	1.0172	0.3759	7.3237	0.0068	0.230278	2.766
V4BPRC	1	-1.0701	0.7622	1.9708	0.1604	-0.224584	0.343
VICPLEAD	1	1.0200	0.4268	5.7122	0.0168	0.188653	2.773
INTENT	1	-0.0643	0.3293	0.0381	0.8452	-0.019210	0.938

## Table 15.2: Logistic Regression Death Eligible Cases Race of Victim, Last Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2

Number of Observations: 430 Link Function: Logit

## Response Profile

Ordered Value	DEATH	Count
1 2	1	26 404

WARNING: 15 observation(s) were deleted due to missing values for the response or explanatory variables.

## Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	198.291	176.950	
SC	202.355	201.333	•
-2 LOG L	196.291	164.950	31.341 with 5 DF (p=0.0001)
Score			32.091 with 5 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-2.0484	0.8013	6.5340	0.0106		
WHITVIC	1	0.7147	0.5026	2.0221	0.1550	0.196929	2.043
HISPAVIC	1	0.1819	0.8341	0.0476	0.8273	0.033014	1.200
V5DPRC	1	-2.0272	0.6338	10.2285	0.0014	-0.557280	0.132
V4FPRC	1	1.0983	0.4569	5.7768	0.0162	0.248605	2.999
INTENT	1	-0.5839	0.4261	1.8777	0.1706	-0.173822	0.558

## Table 16.1: Logistic Regression Death Elig. Cases White/African American Victim, First Case Sample)

## The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2

Number of Observations: 338 Link Function: Logit

### Response Profile

Ordered Value	DEATH	Count
1 2	1	40 298

WARNING: 107 observation(s) were deleted due to missing values for the response or explanatory variables.

Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	247.801	212.979	
SC	251.624	247.386	
-2 LOG L	245.801	194.979	50.822 with 8 DF (p=0.0001)
Score	•	•	51.811 with 8 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-2.8634	0.8216	12.1462	0.0005		
WHITVIC	1	0.7423	0.5035	2.1733	0.1404	0.204915	2.101
BLACKD	1	0.3255	0.4809	0.4583	0.4984	0.086628	1.385
V5DPRC	1	-1.6942	0.4931	11.8027	0.0006	-0.462973	0.184
V4FPRC	1	1.2003	0.4146	8.3830	0.0038	0.279238	3.321
V4CPRC	1	1.3945	0.4169	11.1884	0.0008	0.306950	4.033
V4BPRC	1	-0.5481	0.7858	0.4865	0.4855	-0.113310	0.578
VICPLEAD	1	0.5414	0.4529	1.4293	0.2319	0.104355	1.718
INTENT	1	-0.0750	0.3552	0.0446	0.8328	-0.022882	0.928

## Table 16.2: Logistic Regression Death Eligible Cases White/African American Victim, Second Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: DEATH DEATH SENTENCE IMPOSED AMONG ALL CASES

Response Levels: 2

Number of Observations: 377 Link Function: Logit

## Response Profile

Ordered Value	DEATH	Count
1	1	24
2	0	353

WARNING: 68 observation(s) were deleted due to missing values for the response or explanatory variables.

## Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	180.640	162.394	
SC	184.572	185.987	
-2 LOG L	178.640	150.394	28.246 with 5 DF (p=0.0001)
Score			28.242 with 5 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-1.9827	0.9370	4.4778	0.0343		
WHITVIC	1	0.8897	0.6075	2.1448	0.1431	0.244860	2.434
BLACKD	1	0.2642	0.5481	0.2323	0.6298	0.071302	1.302
V5DPRC	1	-1.9278	0.6390	9.1002	0.0026	-0.530328	0.145
V4FPRC	1	0.9222	0.4716	3.8238	0.0505	0.214511	2.515
INTENT	1	-0.7654	0.4508	2.8835	0.0895	-0.232537	0.465

## Table 17.1: Race of Defendant By Advance to Penalty Trial (First Case Sample)

## TABLE OF RACEDEF BY PTRIAL

RACEDEF	PTRIAL(CASE	ADVANCE	ED TO PENALTY TRIAL)
Frequency	,		
Percent	,		
Row Pct			
Col Pct	, 0,	1,	Total
fffffffffffffffff	^ffffffffffff	ffffff^	
White		58 ,	136
	, 17.69 ,		
	, 57.35 ,		30.01
	, 26.35 ,	,	
fffffffffffffffff			
African American	, 184 ,	71 ,	255
	, 41.72 ,	16.10 ,	57.82
	, 72.16 ,	27.84 ,	
	, 62.16 ,	48.97 .	
ffffffffffffffffff		,	
Hispanic		16 ,	50
IIIDPAIIIC			~ ~
	, 7.71 ,		11.34
	, 68.00 ,	,	
	, 11.49 ,	11.03 ,	
fffffffffffffffff	^ffffffffffff.	ffffff^	
Total	296	145	441
	67.12	32.88	100.00

Frequency Missing = 4

## STATISTICS FOR TABLE OF RACEDEF BY PTRIAL

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffffff	ffffff.	fffffffffff	ffffffff
Chi-Square	2	8.828	0.012
Likelihood Ratio Chi-Square	2	8.673	0.013
Mantel-Haenszel Chi-Square	1	5.031	0.025
Phi Coefficient		0.141	
Contingency Coefficient		0.140	
Cramer's V		0.141	

Effective Sample Size = 441 Frequency Missing = 4

## Table 17.2: Race of Defendant by Advance to Penalty Trial (Last Case Sample)

## TABLE OF RACEDEF BY PTRIAL

RACEDEF	PTRIAL(CASE AD	VANCED TO PE	ENALTY TRIAL)
Frequency	,		
Percent	,		
Row Pct			
Col Pct	, 0,	1, Total	
ffffffffffffffff	^fffffffff^fffff	$fff^{}$	
White	, 82 ,	54 , 136	
	, 18.59 , 12.	24 , 30.84	
	, 60.29 , 39.		
	, 26.62 , 40.		
fffffffffffffffff	f^fffffffffffff	fff^	
African American		63 . 255	
	, 43.54 , 14.	29 . 57.82	
	, 75.29 , 24.		
	, 62.34 , 47.		
fffffffffffffffff		,	
Hispanic		16 , 50	
-	, 7.71 , 3.	63 , 11.34	
	, 68.00 , 32.	00 .	
		03 ,	
fffffffffffffffff		,	
Total		33 441	
	69.84 30.	16 100.00	

Frequency Missing = 4

## STATISTICS FOR TABLE OF RACEDEF BY PTRIAL

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffffff	ffffff	fffffffffff.	fffffffff
Chi-Square	2	9.565	0.008
Likelihood Ratio Chi-Square	2	9.415	0.009
Mantel-Haenszel Chi-Square	1	4.073	0.044
Phi Coefficient		0.147	
Contingency Coefficient		0.146	
Cramer's V		0.147	

Effective Sample Size = 441 Frequency Missing = 4

## Table 18.1: African American/White Defendant By Advance to Penalty Trial (First Case Sample)

## TABLE OF BLACKD BY PTRIAL

BLACKD(BLACK DEF	ENDANT)			
	PTRIAL(CA	SE ADVANC	ED TO PENA	ALTY TRIAL)
Frequency	,			
Percent	,			
Row Pct	,			
Col Pct	, 0,	1,	Total	
fffffffffffffffff	f^ffffffff^	ffffffff^		
White	, 78,	58 ,	136	
	, 19.95 ,	14.83 ,	34.78	
	, 57.35 ,	42.65 ,		
	, 29.77 ,	44.96 ,		
fffffffffffffffff	f^ffffffff^	ffffffff^		
African American	184 ,	71 ,	255	
	, 47.06 ,	18.16 ,	65.22	
	, 72.16 ,	27.84 ,		
	, 70.23 ,	55.04 ,		
fffffffffffffffff	f^ffffffff^	ffffffff^		
Total	262	129	391	
	67.01	32.99	100.00	

Frequency Missing = 54

### STATISTICS FOR TABLE OF BLACKD BY PTRIAL

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffff	ffffff	ffffffffff.	fffffffff
Chi-Square	1	8.793	0.003
Likelihood Ratio Chi-Square	1	8.654	0.003
Continuity Adj. Chi-Square	1	8.136	0.004
Mantel-Haenszel Chi-Square	1	8.770	0.003
Fisher's Exact Test (Left)			2.31E-03
(Right)			0.999
(2-Tail)			3.40E-03
Phi Coefficient		-0.150	
Contingency Coefficient		0.148	
Cramer's V		-0.150	

Effective Sample Size = 391 Frequency Missing = 54 WARNING: 12% of the data are missing.

## Table 18.2: African American/White Defendant By Advance to Penalty Trial (Last Case Sample)

## TABLE OF BLACKD BY PTRIAL

BLACKD(BLACK DE	FENDANT)			
	PTRIAL(CA	SE ADVANCI	ED TO PENA	LTY TRIAL)
Frequency	,			
Percent	,			
Row Pct	,			
Col Pct	, 0,	1,	Total	
fffffffffffffff	ff^ffffffff?	ffffffff^		
White	, 82 ,	54 ,	136	
	, 20.97 ,	13.81 ,	34.78	
	, 60.29 ,	39.71 ,		
	, 29.93 ,	46.15 ,		
ffffffffffffffff	ff^fffffff?	ffffffff^		
African America		,	255	
	, 49.10 ,	16.11 ,	65.22	
	, 75.29 ,	24.71 ,		
	, 70.07 ,	53.85 ,		
fffffffffffffff	ff^ffffffff?	ffffffff^		
Total	274	117	391	
	70.08	29.92	100.00	

Frequency Missing = 54

## STATISTICS FOR TABLE OF BLACKD BY PTRIAL

Statistic ffffffffffffffffffffffffffffffffffff	DF ffffff	Value	Prob
Chi-Square	1	9.517	0.002
Likelihood Ratio Chi-Square	1	9.325	0.002
Continuity Adj. Chi-Square	1	8.815	0.003
Mantel-Haenszel Chi-Square	1	9.493	0.002
Fisher's Exact Test (Left) (Right) (2-Tail)			1.63E-03 0.999 2.54E-03
Phi Coefficient		-0.156	
Contingency Coefficient Cramer's V		0.154 -0.156	

Effective Sample Size = 391

Frequency Missing = 54 WARNING: 12% of the data are missing.

## Table 19.1: Logistic Regression Advance to Penalty Trial (Race of Defendant, First Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 393 Link Function: Logit

## Response Profile

Ordered Value	PTRIAL	Count
1	1	13:

WARNING: 52 observation(s) were deleted due to missing values for the response or explanatory variables.

## ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	502.300	472.180	
SC	506.274	511.919	•
-2 LOG L	500.300	452.180	48.120 with 9 DF (p=0.0001)
Score			46.889 with 9 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-0.5813	0.5102	1.2981	0.2546		
BLACKD	1	-0.0423	0.3181	0.0177	0.8942	-0.011426	0.959
HISPD	1	-0.0230	0.4422	0.0027	0.9585	-0.004010	0.977
WHITVIC	1	1.0602	0.3205	10.9437	0.0009	0.289762	2.887
HISPAVIC	1	0.6569	0.4287	2.3477	0.1255	0.119801	1.929
INTENT	1	-0.4988	0.2166	5.3028	0.0213	-0.148894	0.607
VICPLEAD	1	0.6807	0.3288	4.2867	0.0384	0.126271	1.975
LONGATAK	1	0.3071	0.2637	1.3563	0.2442	0.074089	1.360
V4FPRC	1	0.5270	0.2715	3.7678	0.0522	0.119272	1.694
V5DPRC	1	-0.3152	0.2416	1.7023	0.1920	-0.086269	0.730

## Table 19.2: Logistic Regression Advance to Penalty Trial (Race of Defendant, Last Case Sample)

## The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2

Number of Observations: 393 Link Function: Logit

## Response Profile

Ordered Value	PTRIAL	Count
1 2	1	119 274

WARNING: 52 observation(s) were deleted due to missing values for the response or explanatory variables.

## Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	483.989	459.900	
SC	487.963	499.638	
-2 LOG L	481.989	439.900	42.089 with 9 DF (p=0.0001)
Score	•	•	40.964 with 9 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-0.5764	0.5204	1.2265	0.2681		
BLACKD	1	-0.1559	0.3195	0.2381	0.6256	-0.042105	0.856
HISPD	1	0.0330	0.4414	0.0056	0.9404	0.005742	1.034
WHITVIC	1	0.9556	0.3240	8.6998	0.0032	0.261172	2.600
HISPAVIC	1	0.7110	0.4332	2.6942	0.1007	0.129672	2.036
INTENT	1	-0.5601	0.2223	6.3489	0.0117	-0.166642	0.571
VICPLEAD	1	0.4103	0.3313	1.5338	0.2155	0.076122	1.507
LONGATAK	1	0.1163	0.2701	0.1855	0.6667	0.028145	1.123
V4FPRC	1	0.6117	0.2700	5.1326	0.0235	0.139027	1.844
V5DPRC	1	-0.0716	0.2441	0.0861	0.7692	-0.019673	0.931

## Table 20.1: Logistic Regression Advance to Penalty Trial (African American/White Def., First Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 349 Link Function: Logit

## Response Profile

Ordered Value	PTRIAL	Count
1	1	116 233

WARNING: 96 observation(s) were deleted due to missing values for the response or explanatory variables.

## ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	445.823	418.331	
SC	449.678	453.026	
-2 LOG L	443.823	400.331	43.493 with 8 DF (p=0.0001)
Score	_	_	42.732 with 8 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	0dds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-0.7942	0.5335	2.2158	0.1366	•	
BLACKD	1	-0.0812	0.3221	0.0635	0.8011	-0.020918	0.922
WHITVIC	1	1.0010	0.3170	9.9708	0.0016	0.274777	2.721
INTENT	1	-0.3271	0.2269	2.0777	0.1495	-0.098465	0.721
VICPLEAD	1	0.6535	0.3374	3.7523	0.0527	0.124269	1.922
DOTHKILS	1	0.4027	0.4276	0.8866	0.3464	0.060392	1.496
LONGATAK	1	0.1827	0.2796	0.4270	0.5135	0.044128	1.200
V4FPRC	1	0.5940	0.2867	4.2936	0.0383	0.136003	1.811
V5DPRC	1	-0.2859	0.2547	1.2600	0.2617	-0.078264	0.751

# Table 20.2: Logistic Regression Advance to Penalty Trial (African American/White Defendant, Last Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2

Number of Observations: 349 Link Function: Logit

## Response Profile

Ordered Value	PTRIAL	Count
1 2	1	104 245

WARNING: 96 observation(s) were deleted due to missing values for the response or explanatory variables.

## Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	427.190	405.540	•
SC	431.045	440.236	•
-2 LOG L	425.190	387.540	37.650 with 8 DF (p=0.0001)
Score			37.314 with 8 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-0.7688	0.5455	1.9859	0.1588		
BLACKD	1	-0.2163	0.3243	0.4452	0.5046	-0.055761	0.805
WHITVIC	1	0.8718	0.3202	7.4112	0.0065	0.239308	2.391
INTENT	1	-0.3801	0.2331	2.6589	0.1030	-0.114011	0.684
VICPLEAD	1	0.3619	0.3409	1.1272	0.2884	0.068820	1.436
DOTHKILS	1	0.3898	0.4317	0.8154	0.3665	0.058462	1.477
LONGATAK	1	-0.0482	0.2883	0.0280	0.8672	-0.011685	0.953
V4FPRC	1	0.6926	0.2861	5.8617	0.0155	0.159305	1.999
V5DPRC	1	-0.0185	0.2581	0.0051	0.9429	-0.005078	0.982

# Table 21.1: Race of Victim By Advance to Penalty Trial First Case Sample)

## TABLE OF RACEVIC BY PTRIAL

RACEVIC	PTRIAL(CAS	E ADVANCI	ED TO PE	NALTY TRIAL)
Frequency	,			
Percent	,			
Row Pct				
Col Pct	, 0,	1.	Total	
fffffffffffffffff				
White			203	
WIIILE		89 ,		
		20.70 ,	4/.21	
	, 56.16 ,			
	, 39.72 ,	62.24 ,		
ffffffffffffffffff	^fffffffffff	fffffff^		
African American	, 135 ,	39 ,	174	
	, 31.40 ,	9.07 ,	40.47	
	, 77.59 ,			
	, 47.04 ,			
ffffffffffffffff				
			E 2	
Hispanic	, 38 ,		53	
	, 8.84 ,		12.33	
	, 71.70 ,	28.30 ,		
	, 13.24 ,	10.49 ,		
ffffffffffffffffff	^fffffffff^f	fffffff^		
Total	287	143	430	
	66.74	33.26	100.00	

Frequency Missing = 15

## STATISTICS FOR TABLE OF RACEVIC BY PTRIAL

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffff	ffffff.	fffffffffff	ffffffff
Chi-Square	2	20.051	0.001
Likelihood Ratio Chi-Square	2	20.286	0.001
Mantel-Haenszel Chi-Square	1	12.835	0.001
Phi Coefficient		0.216	
Contingency Coefficient		0.211	
Cramer's V		0.216	

Effective Sample Size = 430 Frequency Missing = 15

## Table 21.2: Race of Victim By Advance to Penalty Trial Last Case Sample)

TABLE OF RACEVIC BY PTRIAL

RACEVIC	PTRIAL(CAS	E ADVANC	ED TO PE	NALTY TRIAL)
Frequency	,			
Percent				
Row Pct	,			
Col Pct.	, 0,	1.	Total	
		,	IUCAI	
ffffffffffffffffff			000	
White		82 ,	203	
	, 28.14 ,	19.07 ,	47.21	
	, 59.61 ,	40.39 ,		
	, 40.47 ,	62.60 ,		
ffffffffffffffff	^ffffffff^f	fffffff^		
African American			174	
	, 32.56 ,			
	, 80.46 ,		10.17	
		,		
	, 46.82 ,			
fffffffffffffffff				
Hispanic	, 38 ,	15 ,	53	
	, 8.84 ,	3.49 ,	12.33	
	, 71.70 ,	28.30 ,		
	, 12.71 ,	11.45 ,		
fffffffffffffffff	`^ffffffff^f.	fffffff <sup>^</sup>		
Total	299	131	430	
	69.53	30.47	100.00	

Frequency Missing = 15

## STATISTICS FOR TABLE OF RACEVIC BY PTRIAL

Statistic	DF	Value	Prob
fffffffffffffffffffffffffffff	ffffff.	ffffffffff	ffffffff
Chi-Square	2	19.368	0.001
Likelihood Ratio Chi-Square	2	19.758	0.001
Mantel-Haenszel Chi-Square	1	10.493	0.001
Phi Coefficient		0.212	
Contingency Coefficient		0.208	
Cramer's V		0.212	

Effective Sample Size = 430 Frequency Missing = 15

## Table 22.1: African American/White Victim By Advance to Penalty Trials (First Case Sample)

## TABLE OF WHITVIC BY PTRIAL

WHITVIC(ONE OR MORE WHITE VICTIMS)				
	PTRIAL(CA	SE ADVANC	ED TO PENA	LTY TRIAL)
Frequency	,			
Percent	,			
Row Pct	,			
Col Pct	, 0,	1,	Total	
fffffffffffffff.	ff^ffffffff.	ffffffff^		
African America	n, 135,	39 ,	174	
	, 35.81 ,	10.34 ,	46.15	
	, 77.59 ,	22.41 ,		
	, 54.22 ,	30.47 ,		
fffffffffffffff.	ff^ffffffff.	ffffffff^		
White	, 114 ,	89 ,	203	
	, 30.24 ,	23.61 ,	53.85	
	, 56.16 ,	43.84 ,		
	, 45.78 ,	69.53 ,		
fffffffffffffff.	ff^ffffffff.	ffffffff^		
Total	249	128	377	
	66.05	33.95	100.00	

Frequency Missing = 68

## STATISTICS FOR TABLE OF WHITVIC BY PTRIAL

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffff	ffffff	ffffffffff	fffffffff
Chi-Square	1	19.185	0.001
Likelihood Ratio Chi-Square	1	19.601	0.001
Continuity Adj. Chi-Square	1	18.241	0.001
Mantel-Haenszel Chi-Square	1	19.134	0.001
Fisher's Exact Test (Left)			1.000
(Right)			8.06E-06
(2-Tail)			1.20E-05
Phi Coefficient		0.226	
Contingency Coefficient		0.220	
Cramer's V		0.226	

Effective Sample Size = 377

Frequency Missing = 68
WARNING: 15% of the data are missing.

# Table 22.2: African American/White Victim By Advance to Penalty Trial (Last Case Sample)

### TABLE OF WHITVIC BY PTRIAL

WHITVIC(ONE OR MORE WHITE VICTIMS)				
:	PTRIAL(CAS	SE ADVANCI	ED TO PEN	ALTY TRIAL)
Frequency ,				
Percent ,				
Row Pct ,				
Col Pct ,	0,	1,	Total	
fffffffffffffffff	ffffffffff	ffffffff^		
African American ,	140 ,	34 ,	174	
,	37.14 ,	9.02 ,	46.15	
,	80.46 ,	19.54 ,		
,	53.64 ,	29.31 ,		
fffffffffffffffff	ffffffffff	fffffff^		
White ,	121 ,	82 ,	203	
,	32.10 ,	21.75 ,	53.85	
,	59.61 ,	40.39 ,		
,	46.36 ,	70.69 ,		
ffffffffffffffffff	ffffffff^f	fffffff^		
Total	261	116	377	
	69.23	30.77	100.00	

Frequency Missing = 68

## STATISTICS FOR TABLE OF WHITVIC BY PTRIAL

Statistic	DF	Value	Prob
ffffffffffffffffffffffffffffff	, , , , , ,	1111111111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Chi-Square	1	19.128	0.001
Likelihood Ratio Chi-Square	1	19.623	0.001
Continuity Adj. Chi-Square	1	18.161	0.001
Mantel-Haenszel Chi-Square	1	19.077	0.001
Fisher's Exact Test (Left)			1.000
(Right)			8.12E-06
(2-Tail)			1.19E-05
Phi Coefficient		0.225	
Contingency Coefficient		0.220	
Cramer's V		0.225	

Effective Sample Size = 377 Frequency Missing = 68

WARNING: 15% of the data are missing.

## Table 23.1: Logistic Regression Advance to Pen. Trial Race of Victim, First Case Sample)

### The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 385 Link Function: Logit

Response Profile

Ordered
770 7

Value	PTRIAL	Count
1	1	130
2	Λ	255

WARNING: 60 observation(s) were deleted due to missing values for the response or explanatory variables.

 ${\tt Model \ Fitting \ Information \ and \ Testing \ Global \ Null \ Hypothesis \ BETA=0}$ 

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	494.394	465.820	
SC	498.347	521.166	
-2 LOG L	492.394	437.820	54.574 with 13 DF (p=0.0001)
Score			52.580 with 13 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-0.5918	0.5317	1.2387	0.2657		
WHITVIC	1	0.9414	0.3379	7.7599	0.0053	0.257900	2.564
HISPAVIC	1	0.4208	0.4482	0.8812	0.3479	0.078089	1.523
BLACKD	1	-0.0375	0.3291	0.0130	0.9093	-0.010125	0.963
HISPD	1	0.1599	0.4567	0.1226	0.7262	0.027524	1.173
V5EPRC	1	1.0949	0.6427	2.9021	0.0885	0.109181	2.989
V5DPRC	1	-0.2316	0.2463	0.8842	0.3471	-0.063307	0.793
V4FPRC	1	0.5597	0.2815	3.9540	0.0468	0.126510	1.750
V4BPRC	1	-0.7725	0.3858	4.0081	0.0453	-0.161678	0.462
LONGATAK	1	0.0892	0.2875	0.0963	0.7564	0.021449	1.093
RAGE	1	0.3002	0.3073	0.9543	0.3286	0.065973	1.350
VICPLEAD	1	0.7568	0.3368	5.0492	0.0246	0.140449	2.131
VBEAT	1	-0.0888	0.2725	0.1063	0.7444	-0.022275	0.915
INTENT	1	-0.4236	0.2198	3.7145	0.0539	-0.126674	0.655

## Table 23.2: Logistic Regression Advance to Penalty Trial (Race of Victim, Last Case Sample)

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2

Number of Observations: 379 Link Function: Logit

## Response Profile

Ord	er	ed

Value PTRIAL Count

> 114 1 1 2 0 265

WARNING: 66 observation(s) were deleted due to missing values for the response or explanatory

 ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$ 

Criterion	Intercept Only	and Covariates	Chi-Square for Covariates
AIC	465.542	446.439	
SC	469.480	505.502	
-2 LOG L	463.542	416.439	47.103 with 14 DF (p=0.0001)
Score			45.620 with 14 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-0.5583	0.5515	1.0251	0.3113		
WHITVIC	1	0.8927	0.3440	6.7342	0.0095	0.244962	2.442
HISPAVIC	1	0.4269	0.4633	0.8490	0.3568	0.076956	1.532
BLACKD	1	-0.1902	0.3314	0.3295	0.5659	-0.051299	0.827
HISPD	1	0.0280	0.4702	0.0035	0.9526	0.004637	1.028
V5DPRC	1	-0.0560	0.2531	0.0490	0.8248	-0.015354	0.946
V4FPRC	1	0.6424	0.2939	4.7769	0.0288	0.144719	1.901
V4BPRC	1	-0.5666	0.4004	2.0025	0.1570	-0.117898	0.567
V4CPRC	1	0.8123	0.3569	5.1816	0.0228	0.168000	2.253
LONGATAK	1	-0.1376	0.3045	0.2042	0.6514	-0.033148	0.871
RAGE	1	0.0384	0.3287	0.0136	0.9071	0.008309	1.039
VICPLEAD	1	0.1262	0.3616	0.1218	0.7271	0.023163	1.134
VBEAT	1	-0.2399	0.2944	0.6641	0.4151	-0.060428	0.787
INTENT	1	-0.4861	0.2306	4.4436	0.0350	-0.145426	0.615
PRIORCON	1	0.00386	0.0246	0.0247	0.8752	0.010262	1.004

# Table 24.1: Logistic Regression Advance to Penalty Trial (White/African American Victim, First Case Sample)

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 335 Link Function: Logit

## Response Profile

Ordered Value	PTRIAL	Count
1 2	1	115 220

WARNING: 110 observation(s) were deleted due to missing values for the response or explanatory variables.

 ${\tt Model \ Fitting \ Information \ and \ Testing \ Global \ Null \ Hypothesis \ BETA=0}$ 

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	432.937	399.011	•
SC	436.751	448.595	
-2 LOG L	430.937	373.011	57.926 with 12 DF (p=0.0001)
Score	•	ē	55.704 with 12 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-1.1115	0.5836	3.6272	0.0568		
WHITVIC	1	1.1037	0.3547	9.6801	0.0019	0.304680	3.015
BLACKD	1	0.0445	0.3558	0.0157	0.9004	0.011832	1.046
HISPD	1	-0.4860	0.6070	0.6410	0.4233	-0.060507	0.615
V5DPRC	1	-0.2292	0.2716	0.7123	0.3987	-0.062663	0.795
V4FPRC	1	0.6931	0.3032	5.2244	0.0223	0.161014	2.000
V4CPRC	1	1.3097	0.3600	13.2340	0.0003	0.287637	3.705
V4BPRC	1	-0.4887	0.4140	1.3938	0.2378	-0.100685	0.613
LONGATAK	1	-0.1297	0.3240	0.1602	0.6889	-0.031514	0.878
RAGE	1	0.2490	0.3309	0.5663	0.4517	0.055001	1.283
VICPLEAD	1	0.3661	0.3623	1.0213	0.3122	0.070833	1.442
VBEAT	1	-0.2778	0.3072	0.8181	0.3657	-0.070790	0.757
INTENT	1	-0.2549	0.2350	1.1760	0.2782	-0.077860	0.775

# Table 24.2: Logistic Regression Advance to Penalty Trial (White/African American Victim, Last Case Sample)

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 333 Link Function: Logit

## Response Profile

Ordered Value	PTRIAL	Count
1 2	1	102 231

WARNING: 112 observation(s) were deleted due to missing values for the response or explanatory variables.

Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	412.331	399.698	
SC	416.140	453.012	
-2 LOG L	410.331	371.698	38.634 with 13 DF (p=0.0002)
Score			37.512 with 13 DF (p=0.0003)

		Parameter	Standard	Wald	Pr >	Standardized	0dds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-1.0189	0.5806	3.0799	0.0793		
WHITVIC	1	1.0426	0.3543	8.6579	0.0033	0.287812	2.837
BLACKD	1	-0.0144	0.3491	0.0017	0.9671	-0.003826	0.986
HISPD	1	-0.3790	0.5973	0.4025	0.5258	-0.047315	0.685
V5DPRC	1	-0.0748	0.2703	0.0766	0.7819	-0.020529	0.928
V4FPRC	1	0.6460	0.3034	4.5342	0.0332	0.149700	1.908
V4CPRC	1	0.7220	0.3776	3.6560	0.0559	0.151202	2.059
V4BPRC	1	-0.3204	0.4111	0.6072	0.4358	-0.066162	0.726
LONGATAK	1	-0.1122	0.3264	0.1183	0.7309	-0.027329	0.894
RAGE	1	0.0745	0.3416	0.0476	0.8273	0.016306	1.077
VICPLEAD	1	0.0772	0.3668	0.0443	0.8332	0.014847	1.080
VBEAT	1	-0.0854	0.3049	0.0785	0.7794	-0.021799	0.918
INTENT	1	-0.3320	0.2385	1.9371	0.1640	-0.101212	0.718
PRIORCON	1	-0.00118	0.0260	0.0021	0.9636	-0.003195	0.999
LONGATAK RAGE VICPLEAD VBEAT INTENT	1 1 1 1	-0.1122 0.0745 0.0772 -0.0854 -0.3320	0.3264 0.3416 0.3668 0.3049 0.2385	0.1183 0.0476 0.0443 0.0785 1.9371	0.7309 0.8273 0.8332 0.7794 0.1640	-0.027329 0.016306 0.014847 -0.021799 -0.101212	0.894 1.077 1.080 0.918 0.718

## Table 25.1: County by Advance to Penalty Trial (First Case Sample)

## TABLE OF COUNTY BY PTRIAL

```
COUNTY(COUNTY OF CONVICTION)
  PTRIAL(CASE ADVANCED TO PENALTY TRIAL)
Percent ,
Row Pct ,
5 , 9 , 3 , 12
, 2.02 , 0.67 , 2.70
, 75.00 , 25.00 ,
, 3.01 , 2.05 ,
ffffffff^{f}ffffffffffffffffff
6 , 8 , 1 , 9
, 1.80 , 0.22 , 2.02
, 88.89 , 11.11 ,
, 2.68 , 0.68 ,
ffffffffffffffffffff
      7 , 79 , 19 , 98
, 17.75 , 4.27 , 22.02
, 80.61 , 19.39 ,
, 26.42 , 13.01 ,
                            98
ffffffff^fffffffffffffffff
Total 299 146 445 67.19 32.81 100.00
(Continued)
```

## TABLE OF COUNTY BY PTRIAL (Continued)

14 , 6 , 8 , 14 , 1.35 , 1.80 , 3.15 , 42.86 , 57.14 ,

Total 299 146 445 67.19 32.81 100.00 (Continued)

## TABLE OF COUNTY BY PTRIAL(Continued)

Total 299 146 445 67.19 32.81 100.00

Table 25.2: County by Advance to Penalty Trial (Last Case Sample)

TABLE OF COUNTY BY PTRIAL

```
COUNTY(COUNTY OF CONVICTION)
      PTRIAL(CASE ADVANCED TO PENALTY TRIAL)
Frequency,
Percent ,
3 , 7 , 6 , 13 , 1.57 , 1.35 , 2.92 , 53.85 , 46.15 ,
4, 41, 10, 51
, 9.21, 2.25, 11.46
, 80.39, 19.61,
, 13.18, 7, 46
7 , 80 , 18 , 98
, 17.98 , 4.04 , 22.02
, 81.63 , 18.37 ,
, 25.72 , 13.43 , fffffffff^ffffffffff
Total 311 134 445 69.89 30.11 100.00
(Continued)
```

## TABLE OF COUNTY BY PTRIAL (Continued)

COUNTY(COUNTY OF CONVICTION) PTRIAL(CASE ADVANCED TO PENALTY TRIAL) Frequency, Percent , Row Pct , 8 , 7 , 6 , 13 , 1.57 , 1.35 , 2.92 , 53.85 , 46.15 , , 2.25 , 4.48 , fffffffffffffffffffffff 9, 23, 8, 31 , 5.17, 1.80, 6.97 , 74.19, 25.81, , 7.40, 5.97, fffffffffffffffffffffff 10 , 1 , 1 , 2 , 0.22 , 0.22 , 0.45 , 50.00 , 50.00 , , 0.32 , 0.75 , ffffffffffffffffffffff 11 , 14 , 9 , 23 , 3.15 , 2.02 , 5.17 , 60.87 , 39.13 , , 4.50 , 6.72 , fffffffffffffffffff 14 , 6 , 8 , 14 , 1.35 , 1.80 , 3.15 , 42.86 , 57.14 , 

Total 311 134 445 69.89 30.11 100.00

(Continued)

445

## TABLE OF COUNTY BY PTRIAL (Continued)

Total 311 134 445 69.89 30.11 100.00

# Table 26.1: Logistic Regression Advance to Penalty Trial (Race of Victim, First Case); With County Rate Control

## The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 385

Link Function: Logit

Response Profile

Ordered

0100100		
Value	PTRIAL	Count
1	1	130
2	0	255

WARNING: 60 observation(s) were deleted due to missing values for the response or explanatory variables.

 ${\tt Model \ Fitting \ Information \ and \ Testing \ Global \ Null \ Hypothesis \ BETA=0}$ 

Intercept

Criterion	Intercept Only	and Covariates	Chi-Square for Covariates
AIC	494.394	443.756	
SC	498.347	503.055	
-2 LOG L	492.394	413.756	78.638 with 14 DF (p=0.0001)
Score			76.224 with 14 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-1.9152	0.6227	9.4593	0.0021		
WHITVIC	1	0.5871	0.3595	2.6673	0.1024	0.160851	1.799
HISPAVIC	1	0.4352	0.4618	0.8882	0.3460	0.080771	1.545
BLACKD	1	0.1766	0.3486	0.2567	0.6124	0.047719	1.193
HISPD	1	0.3820	0.4757	0.6448	0.4220	0.065737	1.465
V5EPRC	1	0.9184	0.6580	1.9482	0.1628	0.091577	2.505
V5DPRC	1	-0.1399	0.2548	0.3012	0.5831	-0.038239	0.869
V4FPRC	1	0.5037	0.2952	2.9119	0.0879	0.113844	1.655
V4BPRC	1	-0.6103	0.3928	2.4147	0.1202	-0.127737	0.543
LONGATAK	1	0.1827	0.2967	0.3795	0.5379	0.043943	1.200
RAGE	1	0.2080	0.3192	0.4247	0.5146	0.045710	1.231
VICPLEAD	1	0.8271	0.3491	5.6126	0.0178	0.153490	2.287
VBEAT	1	-0.2682	0.2876	0.8695	0.3511	-0.067246	0.765
INTENT	1	-0.3774	0.2308	2.6734	0.1020	-0.112869	0.686
RATE	1	3.7375	0.7830	22.7828	0.0001	0.343870	41.994

# Table 26.1.1: Logistic Regression Advance to Penalty Trial (Race of Victim, First Case Sample); with Dummy Variable County Control

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2

Number of Observations: 385

Link Function: Logit

Response Profile

Value	PTRIAL	Count
1	1	130 255

WARNING: 60 observation(s) were deleted due to missing values for the response or explanatory variables.

Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	494.394	464.243	
SC	498.347	559.120	
-2 LOG L	492.394	416.243	76.151 with 23 DF (p=0.0001)
Score			73.527 with 23 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-1.0809	0.6274	2.9685	0.0849	•	•
WHITVIC	1	0.5902	0.3743	2.4860	0.1149	0.161682	1.804
HISPAVIC	1	0.3518	0.4681	0.5649	0.4523	0.065293	1.422
BLACKD	1	0.1038	0.3548	0.0855	0.7699	0.028032	1.109
HISPD	1	0.1809	0.4859	0.1386	0.7097	0.031131	1.198
V5DPRC	1	-0.1763	0.2565	0.4723	0.4919	-0.048189	0.838
V5EPRC	1	1.1320	0.6675	2.8756	0.0899	0.112875	3.102
V4FPRC	1	0.5246	0.2986	3.0866	0.0789	0.118565	1.690
V4BPRC	1	-0.6067	0.3940	2.3712	0.1236	-0.126979	0.545
LONGATAK	1	0.1533	0.2999	0.2612	0.6093	0.036860	1.166
RAGE	1	0.1922	0.3249	0.3497	0.5543	0.042222	1.212
VICPLEAD	1	0.8818	0.3492	6.3758	0.0116	0.163632	2.415
VBEAT	1	-0.2591	0.2906	0.7950	0.3726	-0.064972	0.772
INTENT	1	-0.4280	0.2314	3.4219	0.0643	-0.128000	0.652
OCOUNTY	1	0.6878	0.4438	2.4021	0.1212	0.147266	1.989
COUNTY1	1	0.2705	0.5909	0.2096	0.6471	0.035393	1.311
COUNTY2	1	1.3119	0.6613	3.9348	0.0473	0.135566	3.713
COUNTY4	1	0.4005	0.4547	0.7756	0.3785	0.073034	1.493
COUNTY9	1	0.4146	0.5567	0.5546	0.4565	0.058449	1.514
COUNTY11	1	0.9001	0.5734	2.4640	0.1165	0.112844	2.460
COUNTY12	1	1.5643	0.6609	5.6027	0.0179	0.167103	4.779
COUNTY13	1	2.3155	0.6290	13.5528	0.0002	0.290281	10.130
COUNTY16	1	0.6658	0.5973	1.2428	0.2649	0.081572	1.946
COUNTY20	1	0.0502	0.5294	0.0090	0.9245	0.007963	1.051

# Table 26.2: Logistic Regression Advance to Penalty Trial (Race of Victim, Last Case Sample); with County Rate Control

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 379

Link Function: Logit

Response Profile

Ordered

Value	PTRIAL	Count
1	1	114
2	0	265

WARNING: 66 observation(s) were deleted due to missing values for the response or explanatory variables

 ${\tt Model \ Fitting \ Information \ and \ Testing \ Global \ Null \ Hypothesis \ BETA=0}$ 

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	465.542	423.138	
SC	469.480	486.138	
-2 LOG L	463.542	391.138	72.405 with 15 DF (p=0.0001)
Score	•		71.719 with 15 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-1.9051	0.6432	8.7740	0.0031		•
WHITVIC	1	0.4909	0.3672	1.7878	0.1812	0.134720	1.634
HISPAVIC	1	0.3651	0.4836	0.5698	0.4503	0.065812	1.441
BLACKD	1	0.0423	0.3534	0.0143	0.9047	0.011412	1.043
HISPD	1	0.2551	0.4978	0.2627	0.6083	0.042301	1.291
V5DPRC	1	0.0118	0.2636	0.0020	0.9642	0.003244	1.012
V4FPRC	1	0.5997	0.3091	3.7627	0.0524	0.135094	1.822
V4BPRC	1	-0.4054	0.4114	0.9712	0.3244	-0.084371	0.667
V4CPRC	1	0.8120	0.3711	4.7873	0.0287	0.167946	2.253
LONGATAK	1	-0.0373	0.3147	0.0140	0.9057	-0.008978	0.963
RAGE	1	-0.0714	0.3430	0.0433	0.8352	-0.015455	0.931
VICPLEAD	1	0.1932	0.3742	0.2665	0.6057	0.035474	1.213
VBEAT	1	-0.3770	0.3092	1.4866	0.2227	-0.094961	0.686
INTENT	1	-0.4187	0.2429	2.9697	0.0848	-0.125256	0.658
PRIORCON	1	0.00351	0.0256	0.0188	0.8909	0.009337	1.004
RATE	1	4.0238	0.8283	23.5997	0.0001	0.356645	55.916

# Table 26.2.1: Logistic Regression Advance to Penalty Trial (Race of Victim, Last Case Sample); with Dummy Variable County Control

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2

Number of Observations: 379 Link Function: Logit

Response Profile

Ordered Value	PTRIAL	Count
1	1	114 265

WARNING: 66 observation(s) were deleted due to missing values for the response or explanatory variables.

Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	465.542	441.648	
SC	469.480	540.087	
-2 LOG L	463.542	391.648	71.894 with 24 DF (p=0.0001)
Score	•		70.309 with 24 DF (p=0.0001)

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-1.1436	0.6562	3.0372	0.0814		
WHITVIC	1	0.5121	0.3864	1.7561	0.1851	0.140523	1.669
HISPAVIC	1	0.2910	0.4910	0.3514	0.5533	0.052469	1.338
BLACKD	1	-0.0111	0.3603	0.0009	0.9755	-0.002988	0.989
HISPD	1	0.0443	0.5053	0.0077	0.9301	0.007353	1.045
V5DPRC	1	-0.0192	0.2655	0.0052	0.9423	-0.005263	0.981
V4FPRC	1	0.6170	0.3130	3.8850	0.0487	0.138997	1.853
V4BPRC	1	-0.3897	0.4152	0.8809	0.3479	-0.081098	0.677
V4CPRC	1	0.9050	0.3761	5.7890	0.0161	0.187177	2.472
LONGATAK	1	-0.1091	0.3192	0.1168	0.7326	-0.026282	0.897
RAGE	1	-0.0858	0.3498	0.0602	0.8061	-0.018589	0.918
VICPLEAD	1	0.2464	0.3756	0.4304	0.5118	0.045247	1.279
VBEAT	1	-0.3911	0.3141	1.5502	0.2131	-0.098516	0.676
INTENT	1	-0.4719	0.2444	3.7279	0.0535	-0.141172	0.624
PRIORCON	1	0.00260	0.0260	0.0100	0.9204	0.006906	1.003
COUNTY1	1	0.0215	0.6649	0.0010	0.9742	0.002832	1.022
COUNTY2	1	1.4155	0.6501	4.7407	0.0295	0.147386	4.118
COUNTY4	1	0.3075	0.5002	0.3780	0.5387	0.055960	1.360
COUNTY9	1	0.4790	0.5976	0.6426	0.4228	0.066846	1.614
COUNTY11	1	0.8519	0.5963	2.0414	0.1531	0.107596	2.344
COUNTY12	1	1.4015	0.6710	4.3620	0.0367	0.150847	4.061
COUNTY13	1	2.5517	0.6474	15.5358	0.0001	0.322273	12.829
COUNTY16	1	0.9951	0.6095	2.6658	0.1025	0.122822	2.705
COUNTY20	1	0.1570	0.5467	0.0825	0.7740	0.025095	1.170
OCOUNTY	1	0.8528	0.4612	3.4186	0.0645	0.182697	2.346

Table 27.1: Logistic Regression Advance to Penalty Trial (White/African American Victim, First Case Sample); with County Rate Control

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 335 Link Function: Logit

Ordered Value	PTRIAL	Count
1 2	1 0	115 220

WARNING: 110 observation(s) were deleted due to missing values for the response or explanatory variables.

Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	432.937	384.548	
SC	436.751	437.946	•
-2 LOG L	430.937	356.548	74.389 with 13 DF (p=0.0001)
Score			71.345 with 13 DF (p=0.0001)

Variable	DF	Parameter Estimate	Standard Error	Wald Chi-Square	Pr > Chi-Square	Standardized Estimate	Odds Ratio
INTERCPT	1	-2.2378	0.6738	11.0287	0.0009		
WHITVIC	1	0.7624	0.3740	4.1557	0.0415	0.210465	2.143
BLACKD	1	0.2155	0.3740	0.3321	0.5644	0.057259	1.240
HISPD	1	-0.1372	0.6333	0.0469	0.8285	-0.017081	0.872
V5DPRC	1	-0.1941	0.2804	0.4791	0.4888	-0.053049	0.824
V4FPRC	1	0.6557	0.3143	4.3511	0.0370	0.152328	1.927
V4CPRC	1	1.2926	0.3706	12.1682	0.0005	0.283885	3.642
V4BPRC	1	-0.3847	0.4217	0.8325	0.3616	-0.079262	0.681
LONGATAK	1	-0.0442	0.3332	0.0176	0.8944	-0.010751	0.957
RAGE	1	0.1325	0.3407	0.1513	0.6973	0.029270	1.142
VICPLEAD	1	0.4302	0.3698	1.3532	0.2447	0.083219	1.538
VBEAT	1	-0.4417	0.3194	1.9127	0.1667	-0.112550	0.643
INTENT	1	-0.1993	0.2464	0.6540	0.4187	-0.060875	0.819
RATE	1	3.2553	0.8180	15.8384	0.0001	0.307983	25.927

# Table 27.1.1: Logistic Regression Advance to Penalty Trial (White/African American Victim, First Case Sample); with Dummy Variables County Control

## The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2 Number of Observations: 335

Number of Observations: 335 Link Function: Logit

### Response Profile

Ordered Value	PTRIAL	Count
1	1	115
2	0	220

WARNING: 110 observation(s) were deleted due to missing values for the response or explanatory variables.

## ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	432.937	401.919	
SC	436.751	489.644	
-2 LOG L	430.937	355.919	75.018 with 22 DF (p=0.0001)
Score			71.361 with 22 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
T170000 CD0	1	1 6001	0.6020	F F200	0.0106		
INTERCPT	1	-1.6081	0.6832	5.5398	0.0186	•	•
WHITVIC	1	0.7992	0.3988	4.0165	0.0451	0.220635	2.224
BLACKD	1	0.1657	0.3843	0.1859	0.6664	0.044021	1.180
HISPD	1	-0.4216	0.6404	0.4334	0.5103	-0.052489	0.656
V5DPRC	1	-0.2101	0.2837	0.5484	0.4590	-0.057436	0.810
V4FPRC	1	0.7058	0.3181	4.9226	0.0265	0.163956	2.025
V4CPRC	1	1.4209	0.3808	13.9235	0.0002	0.312060	4.141
V4BPRC	1	-0.3624	0.4268	0.7210	0.3958	-0.074658	0.696
LONGATAK	1	-0.0813	0.3436	0.0559	0.8130	-0.019747	0.922
RAGE	1	0.1205	0.3496	0.1188	0.7304	0.026606	1.128
VICPLEAD	1	0.4729	0.3713	1.6221	0.2028	0.091478	1.605
VBEAT	1	-0.4831	0.3276	2.1744	0.1403	-0.123085	0.617
INTENT	1	-0.2475	0.2486	0.9912	0.3194	-0.075618	0.781
COUNTY1	1	0.2507	0.6174	0.1648	0.6848	0.034997	1.285
COUNTY2	1	1.1527	0.7042	2.6796	0.1016	0.118284	3.167
COUNTY4	1	0.3699	0.5205	0.5050	0.4773	0.063254	1.448
COUNTY9	1	0.5639	0.6510	0.7505	0.3863	0.072024	1.758
COUNTY11	1	0.9839	0.5911	2.7707	0.0960	0.131687	2.675
COUNTY12	1	1.2222	0.7202	2.8801	0.0897	0.135045	3.395
COUNTY13	1	2.1535	0.6569	10.7481	0.0010	0.281733	8.615
COUNTY16	1	1.1696	0.7140	2.6838	0.1014	0.124728	3.221
COUNTY20	1	0.00193	0.5571	0.0000	0.9972	0.000308	1.002
OCOUNTY	1	0.6313	0.4734	1.7784	0.1823	0.139422	1.880

# Table 27.2: Logistic Regression Advance to Penalty Trial (White/African American Victim, Last Case Sample); with County Rate Control

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2

Number of Observations: 333 Link Function: Logit

Response Profile

Ordered Value	PTRIAL	Count
1	1	102
		221

WARNING: 112 observation(s) were deleted due to missing values for the response or explanatory variables.

 ${\tt Model\ Fitting\ Information\ and\ Testing\ Global\ Null\ Hypothesis\ BETA=0}$ 

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	412.331	383.372	•
SC	416.140	440.495	
-2 LOG L	410.331	353.372	56.959 with 14 DF (p=0.0001)
Score			56.649 with 14 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	Odds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-2.2065	0.6731	10.7471	0.0010		
WHITVIC	1	0.6843	0.3750	3.3299	0.0680	0.188913	1.982
BLACKD	1	0.1903	0.3690	0.2660	0.6060	0.050636	1.210
HISPD	1	-0.0117	0.6276	0.0003	0.9852	-0.001458	0.988
V5DPRC	1	-0.0401	0.2791	0.0206	0.8859	-0.010989	0.961
V4FPRC	1	0.6076	0.3158	3.7028	0.0543	0.140807	1.836
V4CPRC	1	0.7099	0.3914	3.2895	0.0697	0.148666	2.034
V4BPRC	1	-0.1894	0.4209	0.2025	0.6527	-0.039118	0.827
LONGATAK	1	0.0163	0.3358	0.0023	0.9614	0.003959	1.016
RAGE	1	-0.0553	0.3540	0.0244	0.8758	-0.012111	0.946
VICPLEAD	1	0.1232	0.3778	0.1064	0.7442	0.023693	1.131
VBEAT	1	-0.2235	0.3180	0.4937	0.4823	-0.057031	0.800
INTENT	1	-0.2596	0.2502	1.0769	0.2994	-0.079145	0.771
RATE	1	3.5247	0.8445	17.4175	0.0001	0.321314	33.942
PRIORCON	1	-0.00186	0.0270	0.0047	0.9451	-0.005010	0.998

# Table 27.2.1: Logistic Regression Advance to Penalty Trial (White/African American Victim, Last Case Sample); with Dummy Variables County Control

The LOGISTIC Procedure

Data Set: WORK.NEW

Response Variable: PTRIAL CASE ADVANCED TO PENALTY TRIAL

Response Levels: 2

Number of Observations: 333 Link Function: Logit

### Response Profile

Ordered Value	PTRIAL	Count
1	1	102 231

WARNING: 112 observation(s) were deleted due to missing values for the response or explanatory variables.

## Model Fitting Information and Testing Global Null Hypothesis BETA=0

Criterion	Intercept Only	Intercept and Covariates	Chi-Square for Covariates
AIC	412.331	400.928	
SC	416.140	492.323	
-2 LOG L	410.331	352.928	57.403 with 23 DF (p=0.0001)
Score			56.424 with 23 DF (p=0.0001)

		Parameter	Standard	Wald	Pr >	Standardized	0dds
Variable	DF	Estimate	Error	Chi-Square	Chi-Square	Estimate	Ratio
INTERCPT	1	-1.5012	0.6887	4.7515	0.0293		•
WHITVIC	1	0.7802	0.4011	3.7840	0.0517	0.215376	2.182
BLACKD	1	0.1466	0.3800	0.1489	0.6996	0.039012	1.158
HISPD	1	-0.3362	0.6359	0.2795	0.5971	-0.041974	0.714
V5DPRC	1	-0.0654	0.2811	0.0541	0.8160	-0.017948	0.937
V4FPRC	1	0.6411	0.3203	4.0067	0.0453	0.148555	1.898
V4CPRC	1	0.7937	0.3991	3.9542	0.0468	0.166209	2.212
V4BPRC	1	-0.1510	0.4256	0.1259	0.7227	-0.031184	0.860
LONGATAK	1	-0.0125	0.3436	0.0013	0.9711	-0.003032	0.988
RAGE	1	-0.0762	0.3644	0.0438	0.8343	-0.016685	0.927
VICPLEAD	1	0.1784	0.3786	0.2221	0.6375	0.034297	1.195
VBEAT	1	-0.2227	0.3270	0.4638	0.4959	-0.056835	0.800
INTENT	1	-0.3112	0.2526	1.5172	0.2180	-0.094871	0.733
PRIORCON	1	-0.00317	0.0276	0.0131	0.9088	-0.008550	0.997
COUNTY1	1	-0.2735	0.6751	0.1641	0.6854	-0.038295	0.761
COUNTY 2	1	0.8102	0.7098	1.3030	0.2537	0.083379	2.248
COUNTY4	1	0.0793	0.5561	0.0204	0.8866	0.013434	1.083
COUNTY9	1	0.5293	0.6502	0.6628	0.4156	0.067791	1.698
COUNTY11	1	0.6823	0.5993	1.2961	0.2549	0.091572	1.978
COUNTY12	1	1.0436	0.6963	2.2463	0.1339	0.115641	2.839
COUNTY13	1	2.2498	0.6567	11.7375	0.0006	0.295150	9.485
COUNTY16	1	1.0044	0.7104	1.9988	0.1574	0.107413	2.730
COUNTY20	1	0.1734	0.5526	0.0985	0.7537	0.027822	1.189
OCOUNTY	1	0.5839	0.4766	1.5010	0.2205	0.129252	1.793

Table 28: Breakdown of 434 Death Eligible defendants by outcome and Race of Defendant.

Defendant's Race	White	Black	Hispanic	Other	TOTAL
number of defendants	131	249	50	4	434
Fraction of defendants who have at least one Penalty Trial	56/131 0.43	70/249 0.28	16/50 0.32	1/4 0.25	143/434 0.33
Among defendants with at least one penalty trial, the fraction that got at least one death sentence	20/56 0.36	23/70 0.33	2/16 0.12	0/1 0	45/143 0.31
Fraction of defendants that got at least one death sentence	20/131 0.15	23/249 0.09	2/50 0.04	0/4 0	45/434 0.10

Table 29: Breakdown of 490 Death Eligible cases by outcome and Race of Defendant.

Defendant's Race	White	Black	Hispanic	Other	TOTAL
number of cases	151	283	52	4	490
fraction of	69/151	91/283	18/52	1/4	179/490
cases that went to Penalty Trial	0.46	0.32	0.35	0.25	0.37
Fraction of	22/151	30/283	2/52	0/4	54/490
cases that got death sentence	0.15	0.11	0.04	0	0.11
fraction of penalty	22/69	30/91	2/18	0/1	54/179
trial cases that got death sentence	0.32	0.33	0.11	0	0.30

Table 30: Breakdown of Selected 445 Death Eligible cases (Set445f) by outcome and Race of Defendant.

Defendant's Race	White	Black	Hispanic	Other	TOTAL
number of cases	136	255	50	4	445
fraction of	58/136	71/255	16/50	1/4	146/445
cases that went to Penalty Trial	0.43	0.28	0.32	0.25	0.33
Fraction of cases that got death sentence	20/136 0.15	24/255 0.09	2/50 0.04	0/4 0	46/445 0.10
fraction of penalty	20/58	24/71	2/16	0/1	46/146
trial cases that got death sentence	0.34	0.34	0.13	0	0.32

Table 31: Breakdown of 410 Death Eligible defendants by outcome and Race of Defendant, for defendants in Groups 1 and 3.

Defendant's Race	White	Black	Hispanic	Other	TOTAL
number of defendants	122	235	49	4	410
Fraction of	48/122	60/235	15/49	1/4	124/410
defendants who have at least one Penalty Trial	0.39	0.26	0.31	0.25	0.30
Among defendants	15/48	17/60	2/15	0/1	34/124
with at least one penalty trial, the fraction that got at least one death sentence	0.31 ce	0.28	0.13	0	0.27
Fraction of	15/122	17/235	2/49	0/4	34/410
defendants that got at least one death sentence	0.12	0.07	0.04	0	0.08

Table 32: Breakdown of 24 Death Eligible defendants by outcome and Race of Defendant, for Group 2 defendants.

Defendant's Race	White	Black	Hispanic	TOTAL
number of defendants	9	14	1118panic 1	24
number of defendants	,	17	1	<b>27</b>
Fraction of	8/9	10/14	1/1	19/24
defendants who	0.89	0.71	1.00	0.79
have at least one Penalty Trial				
Among defendants	5/8	6/10	0/1	11/19
with at least one	0.62	0.60	0	0.58
penalty trial, the fraction				
that got at least one death sentence				
Fraction of	5/9	6/14	0/1	11/24
defendants that	0.56	0.43	0	0.46
got at least one death sentence				

\_\_\_\_\_

Table 33: Breakdown of 445 First Case Death Eligible cases by Death Sentence outcome and Race of Defendant by combinations of presence or absence of statutory mitigating factor 5D and

aggravating factor 4C

Defendant's Race	White	Black	Hispanic	Other	TOTAL
number of cases	136	255	50	4	445

Among defendants with race and combination listed of factors 4C and 5D, the fraction that got at least one death sentence

Combination 4C 5D					
absent present	2/58	0/84	0/16	-	2/158
-	0.03	0	0	-	0.01
absent absent	12/47	11/126	1/25	0/3	24/201
	0.26	0.09	0.04	0	0.12
present absent	4/14	10/27	0/4	0/1	14/46
	0.29	0.37	0	0	0.30
present present	2/17	3/18	1/5	-	6/40
	0.12	0.17	0.20	-	0.15

Table 34: Breakdown of 410 Death Eligible defendants by Death Sentence outcome and Race of Defendant, for defendants in Groups 1 and 3, by presence or absence of statutory mitigating factor 5D

Defendant's Race	White	Black	Hispanic	Other	TOTAL
number of defendants	122	235	49	4	410
Among defendants	3/69	3/97	1/20	0/0	7/186
with 5D present, the fraction that got at least one death sentence	0.04	0.03	0.05	-	0.04
Among defendants	12/53	14/138	1/29	0/4	27/224
with 5D absent, the fraction that got at least one death sentence	0.23	0.10	0.03	0.00	0.12

Table 35: Breakdown of 410 Death Eligible defendants by penalty trial outcome and Race of Defendant, for defendants in Groups 1 and 3, by presence or absence of statutory mitigating factor 5D

Defendant's Race	White	Black	Hispanic	Other	TOTAL
number of defendants	122	235	49	4	410
Among defendants	23/69	28/97	5/20	0/0	56/186
with 5D present the fraction that got at least one penalty tria	0.33 al	0.29	0.25	-	0.30
Among defendants	25/53	32/138	10/29	1/4	68/224
with 5D absent the fraction that got at least one penalty tria	0.47 al	0.23	0.34	0.25	0.30

Table 36: Breakdown of 410 Death Eligible defendants by Death Sentence outcome and Race of Defendant, for defendants in Groups 1 and 3, by combinations of presence or absence of statutory mitigating factor 5D and aggravating factor 4C.

mitigating factor 5D and aggravating factor 4C							
Defendant's Race	White	Black	Hispanic	Other	TOTAL		
number of defendants	(122)	(235)	(49)	(4)	(410)		
	•		nd combination l		C and 5D		
	the fraction tha	at got at least one	e death sentence				
Combination							
4C 5D							
absent present	2/53	0/79	0/15	0/0	2/147		
1	0.04	0.00	0.00	_	0.01		
	0.01	0.00	0.00		0.01		
absent absent	9/41	6/114	1/25	0/3	16/183		
absent absent	0.22	0.05	0.04	0.00	0.09		
	0.22	0.03	0.04	0.00	0.09		
	2/12	0/24	0/4	0/1	11//1		
present absent	3/12	8/24	0/4	0/1	11/41		
	0.25	0.33	0	0	0.27		
present present	1/16	3/18	1/5	0/0	5/39		
	0.06	0.17	0.20	-	0.13		

Table 37: Breakdown of 39 defendants in Groups 1 and 3, with factors 4C and 5D both present by Death Sentence outcome, Race of Defendant, and aggravating factor 4A (prior murder)

Defendant's Race	White	Black	Hispanic	Other	TOTAL
4A present	-	1/1	1/2	-	2/3
4A absent	1/16 0.06	2/17 0.12	0/3 0.00	-	3/36 0.08

Table 38: Breakdown of 445 First Case Death Eligible cases by Death Sentence outcome and Race of Defendant by combinations of presence or absence of statutory mitigating factor 5D and aggravating factor 4C

Defendant's Race	White	Black	Hispanic	Other	TOTAL
number of cases	136	255	50	4	445

Among defendants with race and combination listed of factors 4C and 5D, the fraction that got at least one death sentence

Combination 4C 5D					
absent present	2/58	0/84	0/16	-	2/158
	0.03	0	0	-	0.01
absent absent	12/47	11/126	1/25	0/3	24/201
	0.26	0.09	0.04	0	0.12
present absent	4/14	10/27	0/4	0/1	14/46
F	0.29	0.37	0	0	0.30
prosont prosont	2/17	3/18	1/5		6/40
present present	0.12	0.17	0.20	-	0.15
	0.12	0.17	0.20	_	0.15

Table 39: Breakdown of 490 Death Eligible cases by outcome and race of primary victim -

Victim's Race	White	Black	Hispanic	Other	Total
Number of cases	220	192	61	17	490
Fraction of Cases that Went to penalty trial	105/220 0.48	49/192 0.26	21/61 0.34	4/17 0.24	179/490 0.37
Fraction of Cases that Got death sentence	32/220 0.15	18/192 0.09	3/61 0.05	1/17 0.06	54/490 0.11
Fraction of penalty Trial cases that Got death sentence	32/105 0.30	18/49 0.37	3/21 0.14	1/4 0.25	54/179 0.30

Table 40: Breakdown of 490 Death Eligible cases by outcome and race of victim, where for multiple race victim cases involving at least one white victim the victim's race assigned to the case is white

Victim's Race	White	Black	Hispanic	Other	Total
Number of cases	227	189	58	16	490
Fraction of Cases that Went to penalty trial	106/227 0.47	49/189 0.26	20/58 0.34	4/16 0.25	179/490 0.37
Fraction of Cases that Got death sentence	32/227 0.14	18/189 0.10	3/58 0.05	1/16 0.06	54/490 0.11
Fraction of penalty Trial cases that Got death sentence	32/106 0.30	18/49 0.37	3/20 0.15	1/4 0.25	54/179 0.30

Table 41: Breakdown of 445 First Case Death Eligible cases by Death Sentence outcome and Race of Primary Victim by combinations of presence or absence of statutory mitigating factor 5D and aggravating factor 4C

Primary					
Victim's Race	White	Black	Hispanic	Other	TOTAL
number of cases	197	177	55	16	445

Among cases with primary victim's race and combination listed of factors 4C and 5D, the fraction that got at least one death sentence

Combination 4C 5D					
absent present	2/84	0/50	0/19	0/5	2/158
	0.02	0	0	0	0.01
absent absent	16/65	5/100	2/29	1/7	24/201
	0.25	0.05	0.07	0.14	0.12
present absent	7/24	7/19	0/1	0/2	14/46
	0.29	0.37	0	0	0.30
present present	3/24	2/8	1/6	0/2	6/40
	0.12	0.25	0.17	0	0.15

Table 42: Fraction of 146 Penalty Trial cases from the First Case data that receive death sentence by Race of Victim (where race is white if at least one victim is white), by combinations of presence or absence of statutory mitigating factor 5D and aggravating factor 4C

Victim's race in Fraction of case death sentence	es receiving	no whi	te victims	at least	one white victim
4C absent		8/37	(0.22)	18/62	(0.29)
4C Present	5D present	3/9	(0.33)	3/11	(0.27)
4C present	5D absent	7/11	(0.64)	7/16	(0.44)
total		18/57	(0.32)	28/89	(0.31)

Table 43: Fraction of 179 Penalty Trial cases from the 490 death eligible data that receive death sentence by Race of Victim (where race is white if at least one victim is white), by combinations of presence or absence of statutory mitigating factor 5D and aggravating factor 4C

Victim's race in Fraction of case death sentence	es receiving	no whi	te victims	at least	one white victim
4C absent		10/47	(0.21)	21/74	(0.28)
4C Present	5D present	3/11	(0.27)	4/13	(0.31)
4C present	5D absent	9/15	(0.60)	7/19	(0.37)
total		22/73	(0.30)	32/106	(0.30)

<u>Table 44: For 91 Black defendant penalty trial cases, Fraction receiving death sentence by race of Primary victim.</u>

race of victim

	white	black	Hispanic	other	total
number	36	49	5	1	91
fraction receiving					
death sentence	12/36	18/49	0/5	0/5	30/91
	0.33	0.37	0	0	0.33

Table 45: For 445 cases (set445f) Fraction going to Penalty trial by race of primary victim

## race of primary victim

number	white	black	Hispanic	other	total
	196	177	56	16	445
fraction going to	88/196	39/177	16/56	3/16	146/455
penalty trial	0.45	0.22	0.29	0.19	0.32

Table 46. For 445 cases (set445f) Fraction going to Penalty trial by race of victim, where for multiple race victim cases involving at least one white victim the victim's race assigned to the case is white

## race of victim

	white	black	Hispanic	other	total
number	203	174	53	15	445
fraction going to penalty trial	89/203 0.44	39/174 0.22	15/53 0.28	3/15 0.20	146/455 0.32

Table 47: For 434 defendants, Fraction going to Penalty trial by race of primary victim\*

## race of primary victim

	white	black	Hispanic	other	total
number					
fraction going to	86/190	38/172	16/56	3/16	143/434
penalty trial	0.45	0.22	0.29	0.19	0.33

<sup>\*</sup>Some defendants had separate cases in the 445 First Case set. For all of these defendants but two, the race of the primary victim was the same in both cases. For two defendants there were two primary victims of different races. Table 41a is tabulated on the following basis. The reader can easily see that the fractions for white, Black, and Hispanic will not change much however these two cases are handled. Harris had two cases both resulting in death sentence, one involving a white victim, the other a black victim. (In this table we included the white victim case.) Koedatich had two cases both going to penalty trial, one involving a white victim, and one involving an "other" race victim. Only the latter case received death, and we included that in Table 41a.

Table 48: For 445 cases(set445f) a breakdown of Penalty trial by Count	Table 48: For 444	5 cases(set445f)	a breakdown o	of Penalty trial	by County
--	-------------------	------------------	---------------	------------------	-----------

county	number of cases	fraction to penalty trial	(percent)
-		-	<u>.</u>
1 Atlantic	28	8/28	29%
2 Bergen	20	9/20	45%
3 Burlington	13	6/13	46%
4 Camden	51	13/51	25%
5 Cape May	12	3/12	25%
6 Cumberland	9	1/9	11%
7 Essex	98	19/98	19%
8 Gloucester	13	7/13	54%
9 Hudson	31	8/31	26%
10 Hunterdon	2	1/2	50%
11 Mercer	23	11/23	48%
12 Middlesex	18	11/18	61%
13 Monmouth	23	17/23	74%
14 Morris	14	8/14	57%
15 Ocean	12	5/12	42%
16 Passaic	22	6/22	27%
17 Salem	2	1/2	50%
18 Somerset	2	0/2	0%
19 Sussex	7	2/7	29%
20 Union	40	7/40	18%
21 Warren	5	3/5	60%
combined	445	146/445	33%

Table 49. For 445 cases(set445f)a breakdown of Race of Primary Victim by County:

race of primary victim county white black hispanic asian other total 16 11 0 1 0 28 1 count 39.29 0.00 0.00 Row % 57.14 3.57 Col % 8.16 6.21 0.00 12.50 0.00 2 3 2 2 2 20 11 15.00 10.00 10.00 55.00 10.00 5.61 1.69 3.57 25.00 25.00 3 0 0 0 12 1 13 7.69 0.00 0.00 0.00 92.31 6.12 0.56 0.00 0.00 0.00 4 12 25 13 0 1 51 49.02 25.49 0.00 1.96 23.53 6.12 14.12 23.21 12.50 0.00 5 10 1 0 1 0 12 83.33 8.33 0.00 8.33 0.00 0.56 12.50 5.10 0.00 0.00 6 5 1 3 0 0 9 0.00 0.00 55.56 11.11 33.33 2.55 0.56 5.36 0.00 0.00 7 0 17 68 12 1 98 69.39 12.24 17.35 0.00 1.02 38.42 21.43 0.00 12.50 8.67 8 10 2 0 0 13 1 76.92 7.69 15.38 0.00 0.00 5.10 0.56 3.57 0.00 0.00 9 14 8 8 1 0 31 45.16 25.81 25.81 3.23 0.00 7.14 4.52 14.29 12.50 0.00 10 2 0 0 0 0 2 100.00 0.00 0.00 0.00 0.00 1.02 0.00 0.00 0.00 0.00 8 0 0 0 11 15 23 0.00 0.00 0.00 34.78 65.22 4.08 8.47 0.00 0.00 0.00

<u>Table 49 (**Continued**) For 445 cases(set445f)a breakdown of Race of Primary Victim by County:</u>

			ce of primary vict			
county	white	black	hispanic	asian	other	total
12 count	12	3	3	0	0	18
row %	66.67	16.67	16.67	0.00	0.00	10
col %	6.12	1.69	5.36	0.00	0.00	
CO1 /0	0.12	1.09	5.50	0.00	0.00	
13	18	3	1	0	1	23
	78.26	13.04	4.35	0.00	4.35	
	9.18	1.69	1.79	0.00	12.50	
14	12	1	0	1	0	14
1-7	85.71	7.14	0.00	7.14	0.00	1-7
	6.12	0.56	0.00	12.50	0.00	
	0.12	0.50	0.00	12.50	0.00	
15	10	0	1	0	1	12
	83.33	0.00	8.33	0.00	8.33	
	5.10	0.00	1.79	0.00	12.50	
16	5	9	7	1	0	22
10	22.73	40.91	31.82	4.55	0.00	22
	2.55	5.08	12.50	12.50	0.00	
	2.33	2.00	12.50	12.50	0.00	
17	2	0	0	0	0	2
	100.00	0.00	0.00	0.00	0.00	
	1.02	0.00	0.00	0.00	0.00	
18	1	1	0	0	0	2
10	50.00	50.00	0.00	0.00	0.00	2
	0.51	0.56	0.00	0.00	0.00	
	0.51	0.00	0.00	0.00	0.00	
19	7	0	0	0	0	7
	100.00	0.00	0.00	0.00	0.00	
	3.57	0.00	0.00	0.00	0.00	
20	8	25	4	1	2	40
	20.00	62.50	10.00	2.50	5.00	
	4.08	14.12	7.14	12.50	25.00	
21	4	1	0	0	0	5
<b>41</b>	80.00	20.00	0.00	0.00	0.00	5
	<u>2.04</u>	0.56	0.00	0.00	0.00	
total	196	177	56	8	8	445
wai	170	1//	50	U	U	773

Table 50: A comparison of percent going to penalty trial for three highest case load counties versus other counties: For 445 First Case data set

Penalty	County (	Case Load		
Trial	18 lowest	3 highest	total	
no	149	150	299	
	58%	79%		
yes	107	39	146	
	42%	21%		
total	256	189	445	

Table 51: A comparison of race of primary victim for three highest case load counties versus other counties: For 445 First Case Data set. (3 highest are Essex, Camden, and Union Counties) .

Race of	County	Case Load	
Primary	·		
Victim	18 lowest	3 highest	total
White	159	37	196
	62%	20%	
Black	59	118	177
	23%	62%	
Hispanic	27	29	56
•	11%	15%	
Other	11	5	16
	4%	3%	
total	256	189	445

<u>Table 52: Crosstabs for 445 cases (set 445f), Race of Primary Victim by Race of Defendant</u> .

	defenda	nt's race		
white	black	Hispanic	asian	other
		_		
124	58	14	0	0
2	170	5	0	0
7	19	29	0	1
1	4	1	1	1
2	4	1	0	1
136	255	50	1	3
	124 2 7 1	white         black           124         58           2         170           7         19           1         4           2         4	124     58     14       2     170     5       7     19     29       1     4     1       2     4     1	white         black         Hispanic         asian           124         58         14         0           2         170         5         0           7         19         29         0           1         4         1         1           2         4         1         0

Table 53: For 228 Black Defendant cases, Fraction going to Penalty Trial by race of Primary victim

	race of pr		
	white	black	total
number of cases	58	170	228
fraction of cases going			
to penalty trial	29/58	39/170	68/228
percent	50%	23%	30%

Table 54: For 228 Black Defendant cases, Fraction going to Penalty Trial by race of victim, where for multiple race victim cases involving at least one white victim the victim's race assigned to the case is

white

	race o	of victim		
	white	black	total	
number of cases	61	167	228	
fraction of cases going				
to penalty trial	29/61	39/167	68/228	
percent	48%	23%	30%	

Table 55. For 228 Black defendant cases involving a black or white primary victim, the percent of cases corresponding to a given primary victim race by county. (In parentheses we show the numbers for the method where if a case has at least one white victim the victim's race assigned to the case is white

## Race of Victim

County	White Victim	1	Black Victim		total number of cases
Atlantic	7	(8)	11	(10)	18
	39%		61%		
Bergen	4		3		7
	57%		43%		
Burlington	5		1		6
	83%		17%		
Camden	1		23		24
	4%		96%		
Cape May	2		1		3
	67%		33%		
Cumberland	2		1		3
	67%		33%		
Essex	8	(9)	66	(65)	74
	11%		89%		
Gloucester	3		1		4
	75%		25%		
Hudson	3		8		11
	27%		73%		
Mercer	3	(4)	15	(14)	18
	17%		83%		
Middlesex	6		3		9
	67%		33%		
Monmouth	4		3		7
	57%		43%		
Morris	1		1		2
	50%		50%		
Ocean	3		0		3
	100%		0%		
Passaic	2		7		9
	22%		78%		
Somerset	0		1		1
	0%		100%		
Union	3		25		28
	11%		89%		
Warren	1		0		1
	100%		0%		
total	58		170		228
	25%		75%		

\_\_\_\_\_

Table 56. A comparison of primary victim's race for the three high case load (low rate of going to penalty trial) counties (Camden, Essex, and Union) in one group, and the remaining counties into another group, for 228 Black defendant cases involving a black or white primary victim. .

Primary Victim's Race	Low case load Counties	High Case load counties (Camden, Essex and Union)	<u>Total</u>
White	46	12	58
	45%	10%	
Black	56	114	170
	55%	90%	
Total	102	126	228

Table 57: For 228 cases involving black defendant and black or white primary victims, fraction going to penalty trial by race of primary victim and county. (In parentheses for race of victim where the victim assignment of multiple-race-victim cases is white if at least one of victims is white.)

	race of primary victim	
County	White	Black
1 Atlantic	3/7 (3/8) *	1/11 (1/10)
2 Bergen	2/4	1/3
3 Burlington	3/5	1/2
4 Camden	0/1	7/23
5 Cape May	2/2	0/1
6 Cumberland	0/2	0/1
7 Essex	3/8 (3/9) *	10/66 (10/65)
8 Gloucester	2/3	0/1
9 Hudson	0/3	1/8
10 Hunterdon	-	-
11 Mercer	3/3 (3/4) *	6/15 (6/14)
12 Middlesex	3/6	1/3
13 Monmouth	4/4	3/3
14 Morris	1/1	1/1
15 Ocean	1/3	-
16 Passaic	1/2	3/7
17 Salem	-	-
18 Somerset	-	1/4
19 Sussex	-	-
20 Union	0/3	4/25
21 Warren	1/1	-

\_\_\_\_\_

Table 58: fraction going to penalty trial by race of victim (under either assignment method) and county (cases involving Black defendants and Black or White Victims, 6 counties from Table 51)

	race of victim	
county	white	black .
4 Camden	0/1 (0%)	7/23 (30%)
6 Cumberland	0/2 (0%)	0/1 (0%)
9 Hudson	0/3 (0%)	1/8 (12%)
13 Monmouth	4/4 (100%)	3/3 (100%)
14 Morris	1/1 (100%)	1/1 (100%)
20 Union	0/3 (0%)	4/25 (16%)
All 6 combined	5/14 (36%)	16/61(26%)

\_\_\_\_\_\_

Table 59: Essex County Black Defendant, First445f cases by Race of Victim (B or W) and Penalty Trial Outcome (where a case's race of victim is white if at least one victim is white)

Fraction going to penalty trial

Primary Victim's Race

White
Black
Black
Total

3/9
10/65
13/74
33%
15%

Table 60: fraction going to penalty trial: Essex County Black Defendant, First445f cases by Race of Victim (B or W) and Penalty Trial Outcome broken down by Murdrall, and Prior, (where a case's race of victim is white if at least one victim is white

	Victim's	s Race
More than one Hamiside	White	Black
More than one Homicide	0/3	7/12
1 Homicide and prior conviction	3/5	1/27
1 Homicide and no prior conviction	0/1	2/26

Table 61: Essex County Black Defendant with no other homicides but prior conviction cases by Race of Victim (B or W) and Penalty Trial Outcome broken down by aggravating factor 4F, and whether case was before 1988. Fraction going to penalty trial. (Either method of assigning victim's

White Black
4F Not Present 0/1 1/24
4F Present, Before 1988 2/2 -
4F Present, After 1988 1/2 0/3

Table 62: Atlantic County Black Defendant, First445f cases by Race of Victim (assigned white if at least one case is white) and Penalty Trial Outcome broken down by Murdrall, and PriorCon. Fraction going to penalty trial.

	Victim's White	Race <u>Black</u>
More than one Homicide	0/2	0/1
1 Homicide and prior conviction	3/4	1/7
1 Homicide and no prior conviction	0/2	0/2

Table 63: Atlantic County Black Defendant with no other homicides but prior conviction cases by Race of Victim (either method of assignment) and Penalty Trial Outcome broken down by aggravating factor 4C. Fraction going to penalty trial

	Victim's Race	
	White	<u>Black</u>
4C Absent	1/2	1/7
4C Present	2/2	-

Table 64: Mercer County Black Defendant, First445f cases by Race of Victim (white if at least one victim is white)and Penalty Trial Outcome broken down by Murdrall, and PriorCon. Fraction going to penalty trial.

penalty trui.	Primary Victim's Race	
More than one Homicide	White 2/3	Black -
1 Homicide and prior conviction Execution style homicide	1/1	_
not execution style homicide	-	4/9
1 Homicide and no prior conviction	-	2/5

Table 65: White Victim by Penalty Trial for 490 Death Eligible cases, with 9 statutory factor 4H (killing a public official) removed. Race of victim of a case is white if at least one victim in case is white

#### Race of victim

Penalty trial	other	white	
No	189	72	261
	60.97	42.11	
Yes	121	99	220
	39.03	57.89	
	310	171	481

### **Cochran-Mantel-Haenszel Tests**

Stratified by COUNTY

0001111		
CMH Test	ChiSquare	Prob>Chisq
Correlation of Scores	2.3456	0.1256
Row Score by Col Categories	2.3456	0.1256
Col Score by Row Categories	2.3456	0.1256
General Assoc. of Categories	2.3456	0.1256

Table 66: White Victim by Penalty Trial for 445 First Case Death Eligible cases, with 7 statutory factor 4H (killing a public official) removed. Race of victim of a case is white if at least one victim in case is white

#### Race of Victim

Penalty trial	other	White vio	
No	184	56	240
	62 %	40 %	
Yes	114	84	198
	38 %	60 %	
	298	140	438

## **Cochran-Mantel-Haenszel Tests** Stratified by

county

ChiSquare	Prob>Chisq
2.9245	0.0872
2.9245	0.0872
2.9245	0.0872
2.9245	0.0872
	2.9245 2.9245

## **INSTRUCTIONS**

The purpose of this survey is to explore which features of a murder case are important in determining case outcomes. Attached is a list of factors on which the AOC collects data for each death-eligible case. We would like to draw on your experience to measure how strongly particular circumstances are related to the outcome (whether a case proceeds to penalty trial, and whether the defendant receives a death sentence).

Please carefully review the entire list before rating any of the factors. Try to consider each factor on its own merits, and do not be concerned with any overlap between factors. Similarly, you should not focus on the order of presentation of the factors, as they are in random order. Rate each factor without considering its formal admissibility under the Rules of Evidence.

Rate each factor according to your assessment of its impact on case outcomes as follows:

0 - not at all important

1 - slightly important

2 - moderately important

3 - very important

If there are any factors that you believe to be important in determining outcome, but which do not appear in this survey, please list those factors in the space provided. After you have rated each of the factors, please review the list one more time and determine whether you would like to change any of your responses.

The factors should be rated according to their influence in either direction, i.e., for or against the defendant. Focus objectively on what you think is the actual impact of each factor, rather than on what you personally would consider important if you were deciding a case.

Please note that the statutory aggravating and mitigating factors have been included among the list of factors. Do not rate the statutory factors, as the Legislature has already deemed them to be important in determining case outcomes.

Finally, this survey is intended to be completed in a single sitting. Please do not confer with <u>anyone</u> in developing your responses.

## **STATUTORY FACTORS**

- 1. Aggravating factor (c)(4)(a) the defendant has been convicted, at any time, of another murder.
- 2. Aggravating factor (c)(4)(b) in the commission of the murder, the defendant purposely or knowingly created a grave risk of death to another person in addition to the victim.
- 3. Aggravating factor (c)(4)(c) the murder was outrageously or wantonly vile, horrible or inhuman in that it involved torture, depravity of mind, or an aggravated assault to the victim.
- 4. Aggravating factor (c)(4)(d) the defendant committed the murder as consideration for the receipt, or in expectation of the receipt of anything of pecuniary value.
- 5. Aggravating factor (c)(4)(e) the defendant procured the commission of the offense by payment or promise of payment of anything of pecuniary value.
- 6. Aggravating factor (c)(4)(f) the murder was committed for the purpose of escaping detection, apprehension, trial, punishment or confinement for another offense committed by the defendant or another.
- 7. Aggravating factor (c)(4)(g) the offense was committed while the defendant was engaged in the commission of, or an attempt to commit, or flight after committing or attempting to commit murder, robbery, sexual assault, arson, burglary or kidnaping or the crime of contempt in violation of N.J.S.A. 2C:29-9b.
- 8. Aggravating factor (c)(4)(h) the defendant murdered a public servant . . . while the victim was engaged in the performance of his official duties, or because of the victim's status as a public servant.
- 9. Mitigating factor (c)(5)(a) the defendant was under the influence of extreme mental or emotional disturbance.
- 10. Mitigating factor (c)(5)(b) the victim solicited, participated in or consented to the conduct which resulted in his death.
- 11. Mitigating factor (c)(5)(c) the age of the defendant at the time of the murder.
- 12. Mitigating factor (c)(5)(d) the defendant's capacity to appreciate the wrongfulness of his conduct or to conform his conduct to the requirements of the law was significantly impaired as the result of mental disease or defect or intoxication.

13. Mitigating factor (c)(5)(e) - the defendant was under unusual and substantial	13.	Mitigating factor	(c)(5)(e)	) - the defendant wa	as under unusual an	d substantial duress
---	-----	-------------------	-----------	----------------------	---------------------	----------------------

- 14. Mitigating factor (c)(5)(f) the defendant has no significant history of prior criminal activity.
- 15. Mitigating factor (c)(5)(g) the defendant rendered substantial assistance to the State in the prosecution of another person for the crime of murder.
- 16. Mitigating factor (c)(5)(h) any other factor which is relevant to the defendant's character or record or to the circumstances of the offense.

## **NON-STATUTORY FACTORS**

17. The defendant was not the principal initiator of the murder. 0 : not at all 1: slightly 2: moderately 3 : very important important important important 18. The defendant previously underwent long-term specialized care or treatment for drug or alcohol abuse. 0: not at all 2: moderately 1: slightly 3 : very important important important important 19. The defendant was ever classified by a medical doctor or psychologist as mentally retarded. 0 : not at all 2: moderately 3: very 1: slightly important important important important

At the time of the cared about.	homicide, the victim attacl	ked, threatened or abused a	person that the defendant
0 : not at all	1 : slightly	2 : moderately	3 : very
<del></del>	_ ,	•	important
The victim experie	enced severe physical suffe	ering as a result of the dura	ntion of the attack.
0 : not at all	1 : slightly	2 : moderately	3 : very
		•	important
The year that the of the office of the content of the office of th	case was pled or tried1 : slightly important	2 : moderately important	3 : very important
The victim was en 0 : not at all important	gaged in an illegal activity1: slightly important	at the time of homicide (e.g2 : moderately important	g., drug dealer, prostitute) 3 : very important
•	-		
	cared about.  _ 0 : not at all important  The victim experience 0 : not at all important  The year that the experience 0 : not at all important  The victim was end 0 : not at all important.  The defendant use 0 : not at all	cared about.  _ 0 : not at all	

25.	The victim experie	enced severe physical suffe	ering because of the location	on of his/her wounds.
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important
26.	The defendant suf	fered a serious head injury	in the past.	
	_ 0 : not at all	1 : slightly	2: moderately	3 : very
	important	important	important	important
27.	The defendant was 0 : not at all	s previously institutionalize	d for mental illness.  2 : moderately	3 : very
	_ 0 : not at an important	1 : slightly important	important	important
28.		enced severe physical suffe		
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important
29.	-	not show remorse for the		1
	_ 0 : not at all	1 : slightly	2: moderately	3 : very
	important	important	important	important
30	The defendant mis	stakenly believed that the k	illing was morally justified	

0 : not at all important	1 : slightly important	2: moderately important	3 : very important			
The victim experienced severe physical suffering because of the number of his/her wounds.						
0 : not at all important	1 : slightly important	2 : moderately important	3 : very important			
32. The intent of the d	The intent of the defendant in committing the murder, i.e., purposely/knowingly/SBI.					
0 : not at all important	1 : slightly important	2 : moderately important	3 : very important			
33. The defendant condying.  0: not at all	dying.					
important	important	important	important			
34. The defendant had	The defendant had problems in school as a child.					
0 : not at all important	1 : slightly important	2 : moderately important	3 : very important			
35. Whether the defendant was a New Jersey resident at the time of the offense. 0: not at all   1: slightly   2: moderately   3: very						
important	important	important	important			

36.	The amount of planning involved in the homicide.						
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important			
37.	The motive for the	e homicide was immediate	rage or frustration (provo	ked rage).			
	_ 0 : not at all	1 : slightly	2 : moderately	3 : very			
	important	important	important	important			
38.		s born outside the United					
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important			
39.	While in the victim's presence, the defendant threatened to kill the victim's family members or close friends.						
	_ 0 : not at all	1 : slightly	2 : moderately	3 : very			
	important	important	important	important			
40. The victim experienced severe physical pain as a result of the number of people taking part in the attack.							
	_ 0 : not at all	1 : slightly	2: moderately	3: very			
	important	important	important	important			

41. The length of the	aggregate sentence consec	utive to the death-eligible	sentence.			
0 : not at all	1 : slightly	2 : moderately	3 : very			
important	important	important	important			
42. The defendant ha	d a history of psychiatric p	roblems, as evidenced by	prior care or treatment.			
0 : not at all	1 : slightly	2 : moderately	3 : very			
important	important	important	important			
43. Bodily harm to a	person other than the victin	n.				
0 : not at all	1 : slightly	2 : moderately	3 : very			
important	important	important	important			
44. The victim pleaded for his/her life.						
0 : not at all	1: slightly	2 : moderately	3 : very			
important	important	important	important			
45. The victim physically injured the defendant at the time of the homicide.						
0 : not at all	1 : slightly	2 : moderately	3 : very			
important	important	important	important			

46.	The defendant otherwise cooperated with the authorities in the prosecution against him/her, such as by directing police to the murder weapon.					
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important		
47.	The motive for the	e homicide is known or su	ggested.			
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important		
48.	The type of murdo	er weapon used by the def	endant2: moderately	3 : very		
	important	important	important	important		
49. The defendant announced to a third person, other than a co-defendant, an intention to kill the victim (does not include a lovers' quarrel or lovers' triangle).						
	_ 0 : not at all	1 : slightly	2: moderately	3 : very		
50.	important  The victim arouse	important d the defendant's fear for h	important nis/her own life.	important		
	_ 0 : not at all important	1 : slightly important	2: moderately important	3 : very important		

51. While growing up on another family	•	of physical or sexual assa	ults by one family member
0 : not at all important	1 : slightly important	2: moderately important	3 : very important
52. The victim used of	lrugs or alcohol immediatel	y prior to the homicide.	
0 : not at all	1 : slightly	2 : moderately	3 : very
important	important	important	important
0 : not at all	s the result of a lovers' trian	2: moderately	3 : very
important	important	important	important
54. The victim's thro	at was slashed.		
0 : not at all	1 : slightly	2: moderately	3 : very
important	important	important	important
55. The defendant int	ended to cause the victim o	or a third person extreme s	suffering.
0 : not at all	1 : slightly	2 : moderately	3 : very
important	important	important	important

6. The defendant was implicated in other killings, even though he/she was not convicted of them.				
1 : slightly important	2 : moderately important	3 : very important		
e defendant's enemy, e.g., me woman.	defendant and victim were	e competitors for the		
1 : slightly important	2 : moderately important	3 : very important		
1 : slightly	2 : moderately	and around the time of the  3: very important		
-	· · · · · ·	шропан		
1 : slightly important	2: moderately important	3: very important		
aber of defendant's prior cr	iminal convictions.			
1 : slightly	2: moderately	3 : very		
	1: slightly important  e defendant's enemy, e.g., me woman. 1: slightly important  as addicted to, or a heavy 1: slightly important  sexpelled or suspended from the	1: slightly important2: moderately important2: moderately important2: moderately important2: moderately important		

61. The vi	1. The victim physically attacked the defendant at the time of the homicide.				
0 : not impo		1 : slightly important	2 : moderately important	3 : very important	
62. The de	efendant spe	ent some of his childhood i	in foster care.		
0 : not impo		1 : slightly important	2 : moderately important	3 : very important	
63. The ki	illing involve	ed a beating with the hands	s or feet.		
0 : not impo		1 : slightly important	2 : moderately important	3 : very important	
64. The h	64. The homicide was precipitated by a dispute between spouses or ex-spouses.				
0 : not impo		1 : slightly important	2: moderately important	3 : very important	
65. The victim had at hand a deadly weapon.					
0 : not impo		1 : slightly important	2 : moderately important	3 : very important	
66. The m	umber of pe	rsons physically injured ot	her than the deceased victi	m.	

	0 : not at all important	1 : slightly important	2 : moderately important	3 : very important
67.	The victim and dee	fendant were involved in a	longstanding feud or had a	long-term hostility toward
	0 : not at all important	1 : slightly important	2 : moderately important	3 : very important
58.	The defendant serv	ved in the military.		
	0: not at all important	1 : slightly important	2 : moderately important	3 : very important
69.	The defendant pre	viously attempted to kill th	e victim.	
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important
70.	The defendant pa	nicked or became frighte other crime.	ned when he/she was su	rprised in the course of a

71. The defendant committed or is alleged to have committed additional crimes between the time of the homicide and the time of his/her arrest (whether or not charged) that were not part of the transaction that resulted in the homicide.

0 : not at all	1 : slightly	2 : moderately	3 : very
important	important	important	important

72. The motive for the homicide was retaliation for sexual refusal.					
0 : not at all important	1 : slightly important	2 : moderately important	3: very important		
73. The defendant turn	ned himself/herself in to la	w enforcement authorities.			
0 : not at all important	1 : slightly important	2 : moderately important	3 : very important		
74. The number of pe	74. The number of people, other than the victim, who were exposed to the risk of death.				
0 : not at all important	1 : slightly important	2 : moderately important	3 : very important		
75. The defendant was	75. The defendant was a fugitive from a prior crime.				
0 : not at all important	1 : slightly important	2: moderately important	3 : very important		
76. The defendant resisted or avoided arrest by flight or going into hiding (does not include fleeing from the scene of the homicide).					
0 : not at all important	1 : slightly important	2: moderately important	3: very important		

77.	7. The victim accused the defendant of misconduct.				
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important	
78.	The homicide was property.	s precipitated by a dispute l	between the victim and the	e defendant over money or	
	_ 0 : not at all	1 : slightly	2 : moderately	3 : very	
	important	important	important	important	
79.	The victim suffere	d multiple stab wounds.			
l	_ 0 : not at all	1 : slightly	2: moderately	3 : very	
	important	important	important	important	
80.	The defendant had	l a history of physical illne	ss.		
l	_ 0 : not at all	1 : slightly	2 : moderately	3 : very	
	important	important	important	important	
81.	The defendant free	ely admitted his/her guilt to	o the crime charged.		
<b> </b>	_ 0 : not at all	1 : slightly	2: moderately	3 : very	
	important	important	important	important	

The defendant lured or ambushed the victim, or lied in wait for the victim.				
0 : not at all	1 : slightly	2 : moderately	3: very	
important	important	important	important	
83. The defendant wa	is abused or neglected as a	ı child.		
0 : not at all	1 : slightly	2 : moderately	3 : very	
important	important	important	important	
84. The murder was e	extremely bloody.			
0 : not at all	1 : slightly	2: moderately	3 : very	
important	important	important	important	
85. The victim was ki	lled in the presence of fam:	ily members or close friend	ds.	
0 : not at all	1 : slightly	2: moderately	3 : very	
important	important	important	important	
86. The victim was be	eaten before the killing, or	beaten to death.		
0 : not at all	1 : slightly	2 : moderately	3 : very	
important	important	important	important	

87.	The killing was the alarm.	e result of the victim resistin	g or threatening the defend	ant, including setting off an
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3: very important
88.	On an earlier occa	sion, the victim physically	attacked the defendant.	
	_ 0 : not at all	1 : slightly	2 : moderately	3 : very
	important	important	important	important
89.	The defendant has 0 : not at all important	been in military combat. 1: slightly important	2 : moderately important	3 : very important
90.	_ 0 : not at all	ved a brutal clubbing with1: slightly	2 : moderately	3 : very
91.	The defendant waneglect.	important s removed from the custo	important  dy of his/her parents or fa	important amily because of abuse or
	_ 0 : not at all	1 : slightly	2: moderately	3 : very
	important	important	important	important

92.	92. The motive for the homicide was long-term hatred of the victim.				
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important	
93.	The victim suffere	d multiple gunshot wounds	s.		
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important	
94.	The homicide was	s precipitated by a dispute	between lovers or ex-love	ers.	
	_ 0 : not at all important	1 : slightly important	2 : moderately important	3 : very important	
95.	95. The defendant abandoned a dying victim under circumstances in which it was apparent that the victim would die.				
	_ 0 : not at all important	1 : slightly important	2: moderately important	3 : very important	
96. The defendant showed remorse for the homicide.					
	_ 0 : not at all important	1 : slightly important	2: moderately important	3 : very important	

ispose of or conceal the victim's body.	needi die vienni 5 55	empted to dispose of or ec	97. The defendant atte
	•	1 : slightly important	0 : not at all important
vas jealousy or retaliation for a sexual rivalry.	retaliation for a sexu	e homicide was jealousy o	98. The motive for the
	•	1 : slightly important	0 : not at all important
ed by a dispute while the victim or the defendant was u	e while the victim o		99. The homicide wa influence of drugs
	•	1 : slightly important	0 : not at all important
ctim verbally threatened to attack the defendant.	nreatened to attack th	asion, the victim verbally t	100. On an earlier occa
	•	1 : slightly	0 : not at all
vas to obtain revenge against the victim for prior harm to the	•	e homicide was to obtain r	
	•	1 : slightly important	0 : not at all important
ightly 2 : moderately important 3 : very important	2: moderately important  nreatened to attack the2: moderately important  evenge against the vice2: moderately important	asion, the victim verbally to the control of the co	influence of drugs  0 : not at all important  100. On an earlier occa  0 : not at all important  101. The motive for the defendant or anoth  0 : not at all

102.	2. The defendant hid or moved a dying victim, reducing the chance that someone would come to the victim's aid.				
	0 : not at all important	1 : slightly important	2 : moderately important	3 : very important	
103.	The homicide wa ex-spouses.	s precipitated by a dispu	te between family membe	ers other than spouses or	
	0 : not at all important	1 : slightly important	2 : moderately important	3 : very important	
104.			rt) or forced to disrobe at t		
	0 : not at all important	1 : slightly important	2 : moderately important	3 : very important	
105.	105. The killing was an execution-style homicide, e.g., the victim was bound and gagged and/or shot in the head at close range while subdued or unaware, or an organized crime killing.				
	0 : not at all important	1 : slightly important	2 : moderately important	3 : very important	
106.	The defendant into suborning perjury.		ocess by threatening witne	esses or jurors, or by	
	0 : not at all important	1 : slightly important	2: moderately important	3 : very important	

107.	The homicide was precipitated by another type of dispute or fight (other than spouses, lovers, or family).								
	0 : not at all important	1 : slightly important	2 : moderately important	3 : very important					
108.	8. The defendant was under criminal justice supervision at the time of the offense.								
	0 : not at all	1 : slightly	2 : moderately	3 : very					
	important	important	important	important					
109.	On an earlier occasion, the victim physically injured the defendant.								
	0: not at all	1 : slightly	2 : moderately	3 : very					
	important	important	important	important					
110.	10. The victim had a criminal record.								
	0: not at all	1: slightly	2: moderately	3 : very					
111.	important important important important  111. Any other factor that is important in determining case outcome (please specify).								
	0 : not at all	1 : slightly	2 : moderately	3 : very					
	important	important	important	important					

І ШІОЛІАН І ПІПОЛІАН І ПІПОЛІАН	0 : not at all	1 : slightly	2 : moderately	3 : very importan
inportant inportant	important	important	important	ımı
	4 .1 .0 .			
	Any other factor	or that is important in determ	uning case outcome (please	specity).
that is important in determining case outcome (please specify).	my outer racio	i mai is important in acterni	ming case outcome (picase	spechy).

# List of Non-Statutory Factors Included From the Judge Survey

- 1. DINTENDS Defendant intended to cause victim or 3rd party suffering
- 2. MULSTAB Victim suffered multiple stab wounds
- 3. STRANGLE Victim experienced severe suffering as a result of being strangled
- 4. EXECUTON Execution-style homicide
- 5. VBEAT Victim beaten before the killing, or beaten to death
- 6. VICPLEAD Victim pleaded for his/her life
- 7. PLACEWND Victim experienced severe suffering as a result of the location of his/her wounds
- 8. MULWOUND Victim experienced severe suffering as a result of the number of his/her wounds
- 9. DATKDIEV Defendant continued/resumed a painful attack when it was apparent victim was dying
- 10. VATTACK Victim physically attacked defendant at time of homicide
- 11. INTENT Defendant's intent in committing the murder
- 12. RAGE motive for homicide was (provoked) rage or frustration
- 13. AMBUSH Defendant lured or ambushed the victim, or lied in wait
- 14. DTHRWIT Defendant interfered w/ judicial process by threatening witnesses or jurors, or by suborning perjury
- 15. DOTHKILS Defendant implicated in other killings, even though not convicted of them
- 16. DPREVTRY Defendant previously attempted to kill the victim
- 17. HIDEBODY Defendant hid/moved dying victim, reducing chance that someone would come to victim's aid
- 18. VATKOTHR At time of homicide, victim attacked, threatened, or abused a person defendant cared about
- 19. LONGATAK Victim experienced severe suffering as a result of the duration of the attack
- 20. PRIORCON- Number of defendant's prior convictions.
- 21. PRIORHOM- Defendant had a prior homicide conviction.
- 22. BADPRIOR- Defendant had a prior serious felony conviction.